

# INTUMESCENT FIRE DAMPERS



**IFD Series Products** 





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Kilargo does its utmost to ensure that all technical information and recommendations given in this publication are based on factual research, backed up by a wealth of practical experience. Published data is given in good faith but we urge users to determine for themselves the suitability of the products offered, for their own particular application.

Images are not necessarily to scale, please use measurements given as a guide only. Kilargo reserves the right to alter specifications, or make obsolete any of its products, without prior notice. © Kilargo 2022



Our innovative products are designed to contain the spread of fire, smoke and sound with many also providing weather protection and energy savings. We deliver integrated and cost-effective systems that are ideal for any commercial building, high-rise complex, health or education facility.

Kilargo is built on a 30-year commitment to be the best. We stand proudly at the forefront of the industry, driving standards and delivering products that lead the way in design, manufacturing and quality.

At Kilargo, we're respected experts in the principles of fire, smoke and sound. Our straight-talking approach makes it easy for clients to meet and exceed building regulations, knowing they've chosen the right system to ensure building integrity.

We know that our work can protect lives and influence reputations, so we don't just sell products. We build solid partnerships through understanding, flexibility, seamless service and genuine enthusiasm.

Kilargo is a proud Australian company with a global presence. The vast majority of our products are manufactured and sourced in Australia, meaning fast turnaround and short lead times. We also enjoy direct links to suppliers, partners and customers in the United Kingdom, Asia, the Middle East and New Zealand. Our products are rigorously, independently and regularly tested and all come with the Kilargo Integrity Seal: your guarantee that they're backed by our passion for excellence, innovation, service, partnership, expertise and sustainability.

For us, it's about providing exceptional products for great buildings: helping you to meet regulations, protect people and property, and enhance well-being. Choosing Kilargo simply means choosing the best solution for your project, every time.

## **Intumescent Fire Damper System Selector**

PENETRATION	SYSTEM	BUILDING ELEMENT	FRL	PRODUCT	APPLICATION / MOUNTING DETAIL	MAX. SIZE	CONDITION
WALL	WM1	Masonry / Concrete	-/120/-	IFD44C-LL	Mounted in casing DD / DG	1200 x 1200	
	WM1i	Masonry / Concrete	-/120/120	IFD44C-LL	Mounted in casing DD with insulated rating	250 x 250 or 0.0625m <sup>2</sup>	
	WM2	Masonry / Concrete	-/240/-	IFD44C-LL	Mounted in casing DD / DG	300 x 300	
	WM3i	Masonry / Concrete	-/120/120	IFD44-LL	Cell only - Air Transfer with grilles or flat vermin proof mesh 12		
	WM4	Masonry / Concrete	-/120/-	IFD44C-LL	Mounted hard up to slab with 30mm fire board packer - angles 3 side only	300 x 300	
	WM5	Masonry / Concrete	-/120/120	IFDO-LL	Duct to duct / duct to grille	350 DIA	
	WM5i	Masonry / Concrete	-/120/120	IFDO-LL	Transfer Air with mesh guard	350 DIA	
	WM6	Masonry / Concrete	-/120/-	IFD44C-LL	Mounted hard up to slab (with no packer) - angles 3 sides only	300 x 300	
	WM6i	Masonry / Concrete	-/120/120	IFD44C-LL	Mounted hard up to slab (with no packer) - angles 3 sides only	250 x 250 or 0.0625m <sup>2</sup>	
	WD1i	Dincel	-/120/120	IFD44-LL	Cell only - Air Transfer with grilles or flat vermin proof mesh	600 x 600	
	WD2	Dincel	-/120/-	IFD44C-LL	Mounted in casing DD / DG	600 x 600	
	WH1	Hebel	-/120/-	IFD44C-LL	Mounted in casing DD / DG in 75SS system hebel wall	300 x 300	without build up
	WH1i	Hebel	-/120/120	IFD44C-LL	Mounted in casing DD with insulation 75SS system hebel wall	250 x 250 or 0.0625m <sup>2</sup>	
	WH2	Hebel	-/120/120	IFDO-LL	DD / DG in 75SS system hebel wall	350 DIA	
	WH2i	Hebel	-/120/120	IFD44C-LL	Mounted in casing DD with insulation 75SS system hebel wall	250 x 250 or 0.0625m <sup>2</sup>	
	WH3i	Hebel	-/120/120	IFD44-LL	Cell only - Air Transfers with grilles or flat vermin proof mesh in 75SS hebel wall	300 x 300	without build up
	WH4	Hebel	-120/120	IFDO-LL	DD / DG in 75mm hebel wall with FR plasterboard liner on one side	350 DIA	
	WH4i	Hebel	-120/120	IFDO-LL	Transfer Air with mesh guard in 75mm hebel wall with FR plasterboard liner on one side 350 Di		
	WH5	Hebel	-/120/-	IFD44C-LL	Mounted in casing DD / DG in 75mm hebel wall with plasterboard lining 300 x 300		without build up
	WH6i	Hebel	-/120/120	IFD44-LL	Cell only - Air Transfer with grilles or flat vermin proof mesh in 75mm hebel wall with plasterboard lining	300 x 300	without build up
	WH7	Hebel	-/120/-	IFD44C-LL	Mounted in casing tight to underside of slab with 30mm thick packer and angles on 3 side of the IFD on 1 side of the wall	300 x 300	
	WH7i	Hebel	-/120/120	IFD44C-LL	Mounted in casing DD with insulation rating in 75mm hebel wall with FR plasterboard lining	250 x 250 or 0.0625m <sup>2</sup>	
	WH8i	Hebel	-120/120	IFD44-LL	Cell only - Air Transfer with grilles or flat vermin proof mesh in 75SW hebel wall	300 x 300	without build up
	WH9	Hebel	-/120/120	IFDO-LL	DD / DG in 75 hebel wall lined with plasterboard	350 DIA	
	WH9i	Hebel	-/120/120	IFDO-LL	Transfer Air with mesh guard in 75mm hebel wall lined with plasterboard	350 DIA	
	WH10	Hebel	-120/120	IFDO-LL	DD / DG in 75 hebel wall	350 DIA	
	WH10i	Hebel	-120/120	IFDO-LL	Transfer Air with mesh guard in 75mm hebel wall	350 DIA	
	WH11	Hebel	-/120/-	IFD44C-LL	Mounted in casing DD / DG in 75SW system hebel wall	300 x 300	without build up
	WP1	FR Plasterboard 1 x 16	-/90/-	IFD44C-LL	Mounted in casing DD / DG	300 x 300	without build up
	WPli	FR Plasterboard 1 x 16	-/90/90	IFD44-LL	Cell only - Air Transfer with grilles or flat vermin proof mesh	300 x 300	without build up
	WP2	FR Plasterboard 3 x 16	-/120/-	IFD44C-LL	Mounted in casing DD / DG	1200 x 1200	
	WP2i	FR Plasterboard 3 x 16	-/120/120	IFD44-LL	Cell only - Air Transfer with grilles or flat vermin proof mesh	1200 x 1200	
	WP3	FR Plasterboard 2 x 16	-/120/120	IFDO-LL	Duct to duct / Duct to grille	350 DIA	
	WP3i	FR Plasterboard 2 x 16 + 1	-/120/120	IFDO-LL	Transfer Air with mesh guard	350 DIA	
	WP4	FR Plasterboard 25 + 2	-/120/120	IFDO-LL	Duct to duct / Duct to grille	350 DIA	
	WP4i	FR Plasterboard 25 + 2 + 1	-/120/120	IFDO-LL	Transfer Air with mesh guard	350 DIA	
	WP5	FR Plasterboard 3 x 16 + 1	-/120/120	IFDO-LL	Duct to duct / Duct to grille	350 DIA	
	WP5i	FR Plasterboard 3 x 16 + 1	-/120/120	IFDO-LL	Transfer Air with mesh guard	350 DIA	
	WP6	FR Plasterboard 3 x 16	-/120/120	IFDO-LL	Duct to duct / Duct to grille	350 DIA	

PENETRATION	SYSTEM	BUILDING ELEMENT	FRL	PRODUCT	APPLICATION / MOUNTING DETAIL MAX	C. SIZE COND	NDITION
	WP7	FR Plasterboard 2 x 16	-/120/-	IFD44C-LL	Mounted in casing DD / DG 1200	x 1200	
	WP7i	FR Plasterboard 2 x 16	-/120/120	IFD44-LL	Cell only - Air Transfer with grilles or flat vermin proof mesh 1200	x 1200	
	WP8	FR Plasterboard 1 x 13	-/60/-	IFD44C-LL	Mounted in casing DD / DG 300	x 300 without	ut build up
	WP8i	FR Plasterboard 1 x 13	-/60/60	IFD44-LL	Cell only - Air Transfer with grilles or flat vermin proof mesh 300	x 300 without	ut build up
	WP9	FR Plasterboard 2 x 13	-/120/-	IFD44C-LL	Mounted in casing DD / DG 1200	x 1200	
	WP9i	FR Plasterboard 2 x 13	-/120/120	IFD44-LL	Cell only - Air Transfer with grilles or flat vermin proof mesh 1200	x 1200	
	WP10	Plasterboard 1 x 25 liner + 2 x 13 or 16 layers	-/120/-	IFD44C-LL	Mounted in casing DD / DG 1200	x 1200	
	WP12	FR Plasterboard 1 x 13	-/60/60	IFDO-LL	Duct to duct / Duct to grille 35	O DIA	
	WP12i	FR Plasterboard 1 x 13	-/60/60	IFDO-LL	Transfer Air with mesh guard 35	O DIA	
	WP13	FR Plasterboard 1 x 16	-/90/90	IFDO-LL	Duct to duct / Duct to grille 35	O DIA	
	WP13i	FR Plasterboard 1 x 16	-/90/90	IFDO-LL	Transfer Air with mesh guard 35	O DIA	
	WP14	FR Plasterboard 2 x 13	-/120/120	IFDO-LL	Duct to duct / Duct to grille 35	O DIA	
	WP14i	FR Plasterboard 2 x 13	-/120/120	IFDO-LL	Transfer Air with mesh guard 35	O DIA	
	WP15i	FR Plasterboard 1 x 16 + 1	-/90/90	IFD44C-LL	Mounted in casing DD with insulation rating 250 x 250	or 0.0625m <sup>2</sup>	
	WP16i	FR Plasterboard 2 x 16 + 1	-/120/120	IFD44C-LL	Mounted in casing DD with insulation rating 250 x 250	or 0.0625m <sup>2</sup>	
	WP17i	FR Plasterboard 1 x 13 + 1	-/60/60	IFD44C-LL	Mounted in casing DD with insulation rating 250 x 250	or 0.0625m <sup>2</sup>	
	WP18i	FR Plasterboard 2 x 13 + 1	-/120/120	IFD44C-LL		or 0.0625m <sup>2</sup>	
	WRF1	Masonry	-/120/-	IFD44-LL		x 600	
	WRF2	Hebel	-/120/-	IFD44-LL			ut build up
	WRF3	Plasterboard 3 x 16	-/120/-	IFD44-LL		x 600	
	WRF4	Plasterboard 2 x 16	-/120/-	IFD44-LL		x 600	
	WRF5	Plasterboard 2 x 13	-/120/-	IFD44-LL		x 600	
	WRF6	Plasterboard 1 x 25 liner + 2 x 13 or 16 layers	-/120/-	IFD44-LL		x 600	
	WRF7	Plasterboard 1 x 16	-/90/-	IFD44-LL			ut build up
	WRF8	Plasterboard 1 x 13	-/60/-	IFD44-LL			ut build up
	WRF9	Dincel	-/120/-	IFD44-LL		x 600	it build up
	WRF1s		-/120/-	IFD44-LL		x 300	
	WRF2s	Masonry Hebel	-/120/-	IFD44-LL		x 300	
	WRF2s		-/120/-				
		Plasterboard 3 x 16		IFD44-LL		x 300	
	WRF4s	Plasterboard 2 x 16	-/120/-	IFD44-LL		x 300	
	WRF5s	Plasterboard 2 x 13	-/120/-	IFD44-LL		x 300	
	WRF6s	Plasterboard 1 x 25 liner + 2 x 13 or 16 layers	-/120/-	IFD44-LL		x 300	
	WRF7s	Plasterboard 1 x 16	-/90/-	IFD44-LL		x 300	
	WRF8s	Plasterboard 1 x 13	-/60/-	IFD44-LL		x 300	
	WRF9s	Dincel	-/120/-	IFD44-LL		x 300	
	WFB1	Fire Rated Board	-/120/-	IFD44C-LL		x 300	
	WFB1i	Fire Rated Board	-/120/120	IFD44-LL		x 300	
	WFB3	Fire Rated Board + 2 x PB	-/120/-	IFD44C-LL		x 300	
	WFB3i	Fire Rated Board + 2 x PB	-/120/120	IFD44-LL	Cell only - Air Transfer with grilles or flat vermin proof mesh 300	x 300	
SHAFTWALL	WSRF1	Masonry	-/120/-	IFD44-LL	Retrofit cell only in ductwork riser branch 600	x 600	
	WSRF2	Hebel	-/120/-	IFD44-LL	Retrofit cell only in ductwork riser branch 600	x 600	
	WSRF3	Plasterboard 3 x 16	-/120/-	IFD44-LL	Retrofit cell only in ductwork riser branch 600	x 600	
	WSRF4	Plasterboard 2 x 16	-/120/-	IFD44-LL	Retrofit cell only in ductwork riser branch 600	x 600	
	WSRF5	Plasterboard 2 x 13	-/120/-	IFD44-LL	Retrofit cell only in ductwork riser branch 600	x 600	
	WSRF6	Plasterboard 1 x 25 liner + 2 x 13 or 16 layers	-/120/-	IFD44-LL	Retrofit cell only in ductwork riser branch 600	x 600	
		Plasterboard 1 x 16	-/90/-	IFD44-LL	Retrofit cell only in ductwork riser branch 600		

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PENETRATION	SYSTEM	BUILDING ELEMENT	FRL	PRODUCT	APPLICATION / MOUNTING DETAIL MAX. S	ZE CONDITION
	WSRF8	Plasterboard 1 x 13	-/60/-	IFD44-LL	Retrofit cell only in ductwork riser branch 600 x 6	00
	WSRF9	Dincel	-/120/-	IFD44-LL	Retrofit cell only in ductwork riser branch 600 x 6	10
	WSRF1s	Masonry	-/120/-	IFD44-LL	Retrofit cell only in ductwork riser branch hard to slab 300 x 3	10
	WSRF2s	Hebel	-/120/-	IFD44-LL	Retrofit cell only in ductwork riser branch hard to slab 300 x 3	10
	WSRF3s	Plasterboard 3 x 16	-/120/-	IFD44-LL	Retrofit cell only in ductwork riser branch hard to slab 300 x 3	0
	WSRF4s	Plasterboard 2 x 16	-/120/-	IFD44-LL	Retrofit cell only in ductwork riser branch hard to slab 300 x 3	10
	WSRF5s	Plasterboard 2 x 13	-/120/-	IFD44-LL	Retrofit cell only in ductwork riser branch hard to slab 300 x 3	00
	WSRF6s	Plasterboard 1 x 25 liner + 2 x 13 or 16 layers	-/120/-	IFD44-LL	Retrofit cell only in ductwork riser branch hard to slab 300 x 3	10
	WSRF7s	Plasterboard 1 x 16	-/90/-	IFD44-LL	Retrofit cell only in ductwork riser branch hard to slab 300 x 3	JO
	WSRF8s	Plasterboard 1 x 13	-/60/-	IFD44-LL	Retrofit cell only in ductwork riser branch hard to slab 300 x 3	10
	WSRF9s	Dincel	-/120/-	IFD44-LL	Retrofit cell only in ductwork riser branch hard to slab 300 x 3	00
	WSW1	Masonry	-/120/-	IFD44C-LL	Mounted in casing - angle free riser connection 600 x 600 or	0.36 m2 without build up
	WSW2	Masonry	-/120/-	IFD44C-LL	Mounted in casing - angle free riser connection tight to slab with packer 300 x 3	
	WSW3	Masonry	-/120/-	IFD44C-LL	Mounted in casing - angle free riser connection tight to slab with IBS rod & mastic 300 x 3	10
	WSW4	Plasterboard 3 x 16	-/120/-	IFD44C-LL	Mounted in casing - angle free riser connection tight to slab with packer 300 x 3	
	WSW5	Plasterboard 3 x 16	-/120/-	IFD44C-LL	Mounted in casing - angle free riser connection tight to slab with IBS rod & mastic 300 x 3	
	WSW6	Hebel	-/120/-	IFD44C-LL	Mounted in casing - angle free riser connection 300 x 3	
	WSW7	Hebel	-/120/-	IFD44C-LL	Mounted in casing - angle free riser connection tight to slab with packer 300 x 3	
	WSW8	Hebel	-/120/-	IFD44C-LL	Mounted in casing - angle free riser connection tight to slab with IBS rod & mastic 300 x 3	
	WSW9	Plasterboard 3 x 16	-/120/-	IFD44C-LL	Mounted in casing - angle free riser connection ugit to slab with last out a mastic 300 x 600 or 600 x 600 or	
	WSW10	Plasterboard 2 x 16	-/120/-	IFD44C-LL	Mounted in casing - angle free riser connection 600 x 600 or	
	WSW11	Plasterboard 1 x 13	-/60/-	IFD44C-LL	Mounted in casing - angle free riser connection 300 x 3	
	WSW12	Plasterboard 2 x 13	-/120/-	IFD44C-LL	Mounted in casing - angle free riser connection 600 x 600 or	
	WSW13	Plasterboard 1 x 16	-/90/-	IFD44C-LL	Mounted in casing - angle free riser connection 300 x 3	
	WSW14	Plasterboard 1 x 25 liner + 2 x 13 or 16 layers	-/120/-	IFD44C-LL	Mounted in casing - angle free riser connection 600 x 600 or	
	WSW15	Dincel	-/120/-	IFD44C-LL	Mounted in casing - angle free riser connection 600 x 8	
	WSW23	Masonry	-/120/-	IFD44-LL	Cell only installed in riser with grille on one side $600 \times 600 \text{ or}$	
	WSW24	Hebel	-/120/-	IFD44-LL	Cell only installed in riser with grille on one side 300 x 3	·
	WSW25	Dincel	-/120/-	IFD44-LL	Cell only installed in riser with grille on one side 600 x 6	
	WSW27	Plasterboard 1 x 16	-/90/-	IFD44-LL	Cell only installed in riser with grille on one side 300 x 3	
	WSW28	Plasterboard 2 x 16	-/120/-	IFD44-LL	Cell only installed in riser with grille on one side $600 \times 600 \text{ or}$	
	WSW29	Plasterboard 3 x 16	-/120/-	IFD44-LL	Cell only installed in riser with grille on one side 600 x 600 or	.36 m2
	WSW30	Plasterboard 1 x 13	-/60/-	IFD44-LL	Cell only installed in riser with grille on one side 300 x 3	
	WSW31	Plasterboard 2 x 13	-/120/-	IFD44-LL	Cell only installed in riser with grille on one side 600 x 600 or	.36 m2
	WSW32	Plasterboard 1 x 25 liner + 2 x 13 or 16 layers	-/120/-	IFD44-LL	Cell only installed in riser with grille on one side 600 x 600 or	.36 m2
FLOOR	FL1i	Concrete Slab	-/120/120	IFD44-LL	Cell only - Air Transfer with grilles or flat vermin proof mesh 1200 x 1	00
	FL2	Concrete Slab	-/120/-	IFD44C-LL	Mounted in casing DD / DG 1200 x 1	00
	FL3i	Concrete Slab	-/120/120	IFD44C-LL	Mounted in casing DD with insulation rating 250 x 250 or 0	0625m <sup>2</sup>
	FL4	Concrete Slab	-/120/-	IFDO-LL	Steel sleeve in penetration 350 DIA	
	FFB1	Retrofit Fire board systems	-/120/-	IFD44-LL	Mounted in casing DD / DG 300 x	
	FFB2i	Retrofit Fire board systems	-/120/120	IFD44-LL	Cell only - Air Transfer with grilles or flat vermin proof mesh 300 x 3	
CEILING	CE1-60	13 & 16mm layer FR P/Board	-/60/60	IFD-CE1-LL	P/Board clad plenum box (60min RISF Incipient rated) 600 x 6	0
	CE1-90	2 x 16mm FR P/Board	-/90/90	IFD-CE1-LL	P/Board clad plenum box (up to 90min RISF Incipient rated) 600 x 600	
	CE1-120	3 x 16mm FR P/Board	-/120/120	IFD-CE1-LL	P/Board clad plenum box (up to 120min RISF Incipient rated) 600 x 6	10
	CE4-60	13 & 16mm layer FR P/Board	-/60/60	IFD-CE4-LL	P/Board clad plenum box (60min RISF Incipient rated) 405 x 4	15
	CE4-90	2 x 16mm layer FR P/Board	-/90/90	IFD-CE4-LL	P/Board clad plenum box (up to 90min RISF Incipient rated) 405 x 4	15
	CE4-120	3 x 16mm layer FR P/Board	-/120/120	IFD-CE4-LL	P/Board clad plenum box (up to 120min RISF Incipient rated) 405 x 4	)5

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#### Excellence, Every Time

Our products perform and last. We subject every Kilargo product to tough, independent and regular testing. We have earned a reputation for exceptional quality and reliability in commercial and multi-occupancy buildings across Australia and around the world.

#### The Latest and Best

With Kilargo, you know you're getting the latest thinking in building safety, comfort and energy efficiency. We create, innovate and update. We are industry leaders in research and product development – and we're constantly involved in new developments internationally.

#### Superb Service, No Fuss

We keep our promises, tackle challenges with gusto, and deliver on time and on budget. Most of our products are manufactured and sourced domestically, meaning fast turnaround and short lead times. We pride ourselves on being technical specialists with a straight-talking approach. We make it quick and easy for you: from selection to installation.

#### **Real Partnership**

We know that our work can influence reputations and protect lives. That's why we don't sell products and walk away. We strive to truly understand our clients' needs and build enduring partnerships. That way, we see things through your eyes – so we're proactive, resourceful and always ready when you need us.

#### Great Team, Unbeatable Experience

With Kilargo, you get a great team that knows its stuff. We employ the best people and we're respected experts in the principles of fire, smoke and sound. We've been an internationally respected leader in the commercial building industry for more than 30 years – and we're proud to drive standards and quality further every day.

#### **Bigger Commitment**

We see the bigger picture ... and our passion for the built environment extends to the natural environment. We continue to meet and exceed all relevant environmental legal requirements, reduce and manage our waste and emissions, and use resources as efficiently as possible.

## Intumescent Fire Dampers

Fire resistant walls and floors in a building play an important part in containing the spread of fire and smoke. However, a building also needs to be well ventilated for the health and comfort of its occupants.

Systems of natural and mechanical ventilation often require ducting to pass through fire resistant walls and floors, and this can compromise the fire containment in the building.

Generally, any fire rated door, wall, floor or ceiling penetrated by a supply air or return air duct or associated inlet or outlet, requires a fire damper - except for smoke spill fire rated ducting, ducting contained within a fire rated shaft, or supply air ducts used for pressurisation or purging systems.

The Kilargo solution is to fit intumescent fire dampers / air transfer grilles at the point where the fire resistant wall or floor is breached. Under normal circumstances these dampers / grilles allow air to pass freely through the building. However, in the event of fire, the slats swell to many times their original thickness, fusing together to form a non-combustible mass which provides fire resistance to match the surrounding construction.



#### **Ventilation through Ducting**

Designers recognise the need for buildings to be well ventilated for the health and comfort of occupants. Frequent changes of air flush out airborne infections, plus warm and cool air need to be circulated to maintain comfortable temperatures

Experience has shown that ducting can provide a conduit for fire & hot smoke in the event of fire. Intumescent fire dampers / air transfer grilles, fitted into the duct, at the point where they penetrate fire resistant constructions, prevent the passage of fire and hot smoke. They have been shown by specific testing to be equivalent to a conventional damper in fire and smoke barrier properties, but exhibit high insulation properties as well.

#### What are Intumescent Fire Dampers?

The Kilargo intumescent fire damper incorporates a designated number of parallel intumescent slats, reinforced with impact resistant steel edging, housed in a rigid steel frame. In a fire situation, increasing temperature causes the slats to swell (intumesce) to many times their original thickness, fusing together to provide a barrier to the passage of fire & hot smoke.

Their lightweight and slim-line design provides for quick, easy, trouble-free installation.

Unlike mechanical type fire dampers, the Kilargo intumescent fire damper does not incorporate any moving components, hence do not require any commissioning release tests or ongoing physical mechanism operation checks.

## Standards and Regulations

The Kilargo intumescent low loss fire damper range have been fully fire tested in accordance with AS1530.4-2014 Sections 10 & 11 and comply with the requirements of AS/NZS1668.1-2015 & AS1682.1-2015.

Kilargo intumescent fire dampers are tested to ensure compliance with the 'deemed-to-satisfy' requirements of the Building Code of Australia Section 2019: C3.15 & 2022: C4D15 Openings for service installations 'ventilation & air-conditioning', plus 2019: C3.12 & 2022: C4D13 Openings in floors and ceilings for services.

The installation of these services must be in accordance with AS/NZS1668: The use of mechanical ventilation & air-conditioning in buildings, Part 1: Fire & Smoke Control in buildings.

This requires fire damper applications to be tested to AS1530.4: Fire resistance tests of elements of building construction, and designed and manufactured to AS1682.1: Fire, smoke and air dampers Part 1: Specification.

#### AS/NZS1668.1

### The use of ventilation & air-conditioning in buildings. Part 1: Fire & smoke control in buildings.

This standard sets out the minimum requirements for the design, construction, installation and commissioning of mechanical smoke control systems in buildings.

### Section 3 - Fire Protection of Openings in Fire-Resistant Flements

#### 3.1 Scope of Section

This Section sets out requirements intended to maintain the fire integrity or building elements, which may otherwise be compromised by mechanical ventilation or air-conditioning ducts, openings or equipment.

#### 3.2.1 General Requirements

Except where excluded or exempt by Clauses 3.3.2 and 3.3.3, openings in building elements that are required to have an FRL shall be protected with fire dampers, such that the required FRL of the building element is maintained as follows:

- (a) The structural adequacy component of the FRL for the building element shall be maintained by the building element, independent of the fire damper.
- (b) The integrity component of the FRL for the building element shall be maintained by providing a fire damper that has an integrity performance equal to that required of the building element.
- (c) The insulation component of the FRL for the building element shall comply with Clause 3.2.3

#### 3.2.3 Insulation

#### 3.2.3.1 Vertically mounted

The following apply to the insulation of vertically mounted (e.g. wall) fire dampers:

- (a) For a shaft-mounted fire damper, insulation is not required
- (b) For a fire damper that is connected to ductwork conforming with Clause 2.3.2 and with a minimum total duct length of 2m (with or without breakaway joints), insulation shall not be required.
- (c) In all other instances, insulation shall be not less than the insulation required of the FRL of the building element in which the fire damper is mounted.

#### 3.2.3.2 Horizontally mounted

The following apply to the insulation of horizontally mounted (e.g. floor) fire dampers:

- (a) For a fire damper mounted at the bottom of a shaft, insulation is not required.
- (b) For a fire damper that is mounted at the top of a shaft and connected to ductwork that is insulated with or surrounded by materials that are not deemed to be combustible and not less than 2m in length and complying with Clause 2.3.2, insulation is not required.
- (c) For a fire damper mounted in a floor without a shaft and connected to ductwork that is insulated with or surrounded by materials that are not deemed to be combustible and not less than 2m in length and complying with Clause 2.3.2, insulation is not required.
- (d) In all other instances, insulation shall be not less than the insulation performance required of the FRL of the building element in which the fire damper is mounted.

### **Fire Testing**

The NCC has concluded the grandfather clause with a grace period allowing fire stopping products tested to previous editions of AS1530.4 to remain valid until the 1st of May 2022. Once the grace period ends, fire dampers must be fire tested to AS1530.4-2014:

#### Section 10 - Service Penetrations and Control Joints

This Section set out the procedure for determining the fire resistance of elements of construction penetrated by services such as electrical and plumbing services, pipes, conduits, control joints and air transfer grilles (fire dampers) not fitted to ducts.

#### Section 11 - Fire Dampers and Air Transfer Grille Assemblies in Ducts

This Section specifies the procedure for determining the fire resistance of fire dampers and air transfer grilles in ducts that are used to prevent the passage of fire from one fire compartment to another. The tightness of the damper system is measured by direct flow measurements whilst maintaining a constant pressure differential across the closed damper of 300 Pa while maintaining a leakage rate of no more than 360 m3 /(h/m2).

Kilargo Intumescent Fire Dampers have been tested and assessed to AS1530.4-2014 Sections 10 (Air Transfer systems not fitted to ducts) & 11 (ducted system) covering the following applications:

- Walls
  - Masonry
  - Concrete
  - Dincel - Hebel
  - Plasterboard
- Shaftwall
  - -Masonry
  - Concrete
  - Dincel
  - Hebel
- Plasterboard
- Concrete Floors
- Plasterboard Ceilings
- Fire Doors
- Fire rated board
- Duct to duct or duct to grille systems
- Integrity & Insulation rated Air Transfer Systems with either grilles, louvres or flat vermin-proof mesh
- Retro fitting
- Hard to wall or slab installations

(See System Tables for each application in their relevant section for full details).







## **Maintenance Requirements**

## Maintenance provisions for intumescent fire dampers are clearly identified in AS1851.

#### AS1851-2012:

#### Maintenance of fire protection systems and equipment

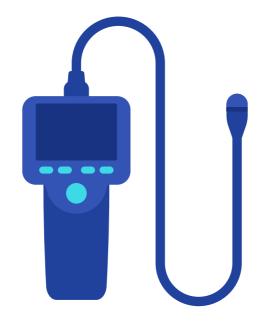
This standard sets out requirements for the inspection, test, preventive maintenance and survey of fire protection systems and equipment.

Routine inspections (functional checks by visual means) are mandatory and required to be performed on 20% of fire dampers (within a building) yearly - so that all fire dampers will have been inspected by the end of the fifth year.

#### Inspections include:

- Check and ensure that the fire damper is in place, free from obstruction and is capable of operation
- Check fire dampers, including casings and mounting flanges for corrosion
- Check for signs of tampering or modification

Maintenance should be completed at the specified intervals and scheduled in the project's operation and maintenance manuals.



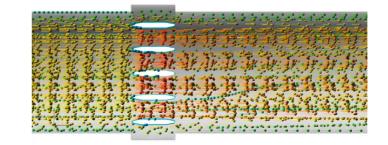
## Other Performance **Testing**

#### **Other Performance Testing**

At Kilargo we have acknowledged the requirement for specifiers and contractors to have reliable design data to design and commission mechanical service systems. A designer must have confidence that their installation will perform within the boundaries of their calculated design.

#### **Pressure Drop Testing**

To ensure confidence when specifying Kilargo fire dampers, our entire range of IFD series intumescent fire dampers have been tested at Vipac to ANSI/ASHRAE 70-2006. Our dampers have been optimised with the latest intumescent technology to provide minimal pressure loss to maximise energy efficiency. Data from our tests can be found on our website.



## Proudly Australian Made

#### **Locally Manufactured Products**

Kilargo is proud to locally manufacture it's range of intumescent fire dampers here in Australia. This provides us with the flexibility to offer quality compliant products with a trusted reputation and an unparalleled level of service and support.



#### **New & Custom Made Products**

Adopting an innovative approach, Kilargo is continually developing new technology and expanding it's comprehensive range of products. If you do not find your exact requirement within this catalogue, please contact our office. We may be able to supply an existing nonstandard item or develop a customised solution for you.

#### **Technical Services & Support**

Kilargo is always happy to provide specialist advice on Fire Dampers and their application, for both refurbishment and new projects.

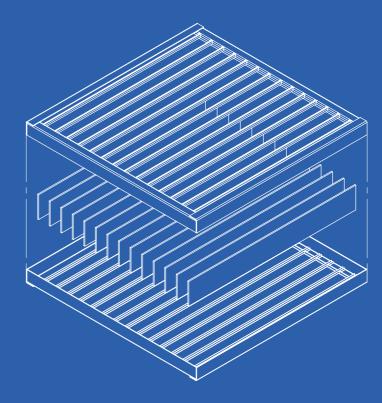
#### We offer:

- Technical helpline
- Advice on installations
- Copies of relevant test approvals
- Product Samples
- Technical & performance specifications
- Advice on meeting Building Regulations & Standards

#### Ordering, Supply & Delivery

Readily available and stocked throughout Australasia by our exciting network of Distributors, offering a wide range of standard stocked sizes, with non-standard and modular products made-to-order. Please contact Kilargo for details on your nearest local distributor.

To find out more about the advantages of intumescent dampers, and to ensure you are up to date with the latest standards and requirements, go on line to download our complete Kilargo IFD Catalogue or contact Kilargo on 1300 858 010.



## **PRODUCT TECHNICAL DATA**

### **IFD44-LL General Datasheet**



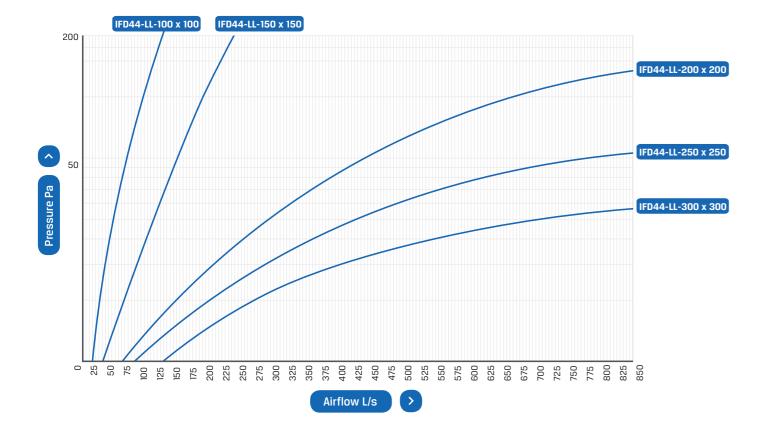
#### **Features**

- Tested to AS1530.4 2014 Section 10 & 11
- Insulation up to 120 min
- Fire Integrity up to 120 min
- Peel off Installers Label included for AS1682.2 compliance
- AS 1682.1 2015 compliant
- Wider range of flexible & compliant wall, slab & retro-fit systems
- High Performance Design
- Low-Loss = Reduced Pressure & Lowered Acoustic Transmission
- Potential energy efficiency savings

#### **Technical Data**

- Fire Integrity Rating: 60 / 90 / 120 minutes
- Insulation Rating: 60 / 90 / 120 minutes
- Pressure Data See Curves
- Sleeve Z275 Galvanised Steel

#### **Pressure Data**



#### **Suggested Specifications**

All fire dampers shall be Kilargo intumescent IFD-LL series, with no moving parts and allow for bi-directional airflow.

Intumescent fire dampers shall be tested for Fire Resistance Level (FRL)requirements in accordance with AS 1530.4:2014 Section 11 & Section 10.

Fire Damper installation shall be strictly in accordance with the relevant requirements of AS1682.2, and Kilargo System Installation details including the use of Kilargo Intumescent Mastic.

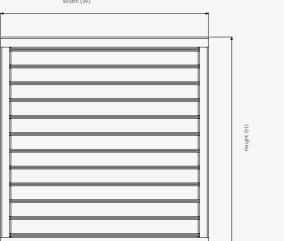
#### Standards & Codes

Relevant standards and codes relating to fire damper performance, fire resistance, installation and maintenance include:

AS 1668.1 2015	Fire & Smoke Control in Buildings
AS 1530.4 2014 Section 10 & 11	Fire test methodology
AS 1682.1 2015	Fire Damper Specification /
	Design
AS1682.2 2015	Fire Damper Installation
AS 1851:2012	Fire Protection Systems
	Maintenance

#### Dimensions

-J+L 0A0



#### How to order

#### Cell Only:

IFD44-LL Width X Height e.g. IFD44-LL 1200 x 1200

#### Cased:

IFD44C-LL Width X Height DD or DG Casing Length

e.g. IFD44C-LL 1200 x 1200 DD 360

Select IFD size to suit aperture ensuring adequate clearance.

Must be ordered at its exact size in mm.

For more product information please visit: www.kilargo.com.au

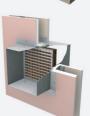












### **IFDO-LL General Datasheet**



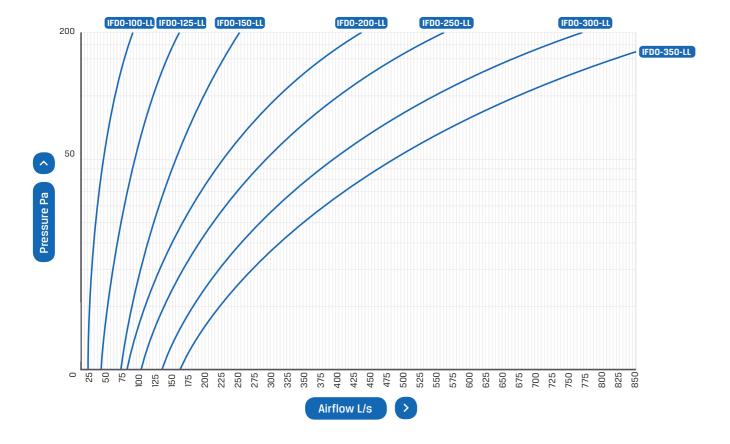
#### **Features**

- Tested to AS1530.4 2014 Section 10 & 11
- Insulation up to 120 min
- Fire Integrity up to 120 min
- Peel off Installers Label included for AS1682.2 compliance
- AS 1682.1 2015 compliant
- Wider range of flexible & compliant wall, slab & retro-fit systems
- High Performance Design
- Low-Loss = Reduced Pressure & Lowered Acoustic Transmission
- Potential energy efficiency savings

#### **Technical Data**

- Fire Integrity Rating: 60 / 90 / 120 minutes
- Insulation Rating: 60 / 90 / 120 minutes
- Pressure Data See Curves
- Sleeve Z275 Galvanised Steel

#### **Pressure Data**



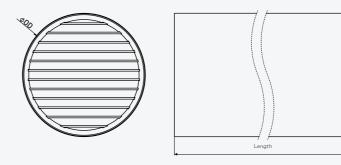
#### **Suggested Specifications**

All fire dampers shall be Kilargo intumescent IFD-LL series, with no moving parts and allow for bi-directional airflow.

Intumescent fire dampers shall be tested for Fire Resistance Level (FRL)requirements in accordance with AS 1530.4:2014 Section 11 & Section 10.

Fire Damper installation shall be strictly in accordance with the relevant requirements of AS1682.2, and Kilargo System Installation details including the use of Kilargo Intumescent Mastic.

#### **Dimensions**



Nominal Size	Sleeve OD	Sleeve Length
100	104mm	360mm
125	129mm	360mm
150	154mm	360mm
200	204mm	360mm
250	254mm	360mm
300	304mm	360mm
350	354mm	360mm

#### Standards & Codes

Relevant standards and codes relating to fire damper performance, fire resistance, installation and maintenance include:

AS 1668.1 2015	Fire & Smoke Control in Buildings
AS 1530.4 2014 Section 10 & 11	Fire test methodology
AS 1682.1 2015	Fire Damper Specification /
	Design
AS1682.2 2015	Fire Damper Installation
AS 1851:2012	Fire Protection Systems
	Maintenance

#### How to order

#### Standard 360mm Long

IFDO- \_\_\_\_-LL e.g. IFDO-150-LL

#### **Extended Sleeve Length**

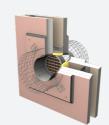
IFDO- \_\_\_\_-LL e.g. IFDO-150-LL-800 (for 800mm long)

For more product information please visit: www.kilargo.com.au







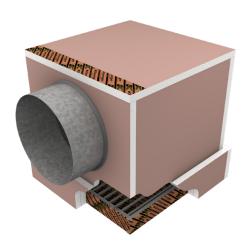






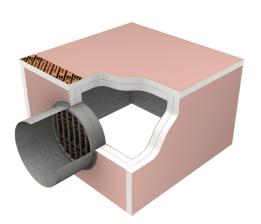
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## IFDCE1-LL & IFDCE4-LL General Datasheet



### FeaturesHigh Perfo

- High Performance Design
- Low-Loss = Reduced Pressure & Lowered
- Acoustic Transmission
- · Potential energy efficency savings
- Tested to AS1530.4 2014 Section 2 & 4
- Insulation up to 120 min
- Fire Integrity up to 120 min
- RISF rating up to 120 min
- Peel off Installers Label included for
- AS1682.2 compliance
- AS 1682.1 2015 compliant
- Wider range of flexible & compliant installations & FRLs



#### **Technical Data**

- Fire Integrity Rating: 60 / 90 / 120 minutes
- Insulation Rating: 60 / 90 / 120 minutes
- Pressure Data See Curves
- Sleeve Z275 Galvanised Steel

#### Standards & Codes

Relevant standards and codes relating to fire damper performance, fire resistance, installation and maintenance include:

AS 1668.1 2015	Fire & Smoke Control in Buildings
AS 1530.4 2014 Section 10 & 11	Fire test methodology
AS 1682.1 2015	Fire Damper Specification / Design
AS 1682.2 2015	Fire Damper Installation
AS 1851:2012	Fire Protection Systems Maintenance

#### Suggested Specifications

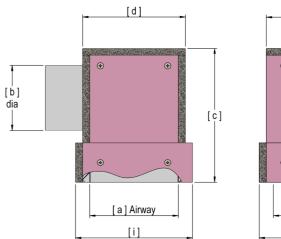
Ceiling Fire dampers shall be Kilargo IFD-CE-LL series intumescent fire dampers. The installation shall be in accordance with approved Kilargo systems installation details and must comply with the requirements AS/NZS 1668.1 and the air leakage test of AS 1682.1.

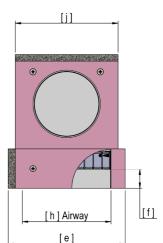
Fire dampers must allow bi-directional airflow and have no moving parts.

Intumescent fire dampers shall be tested for Fire Resistance Level (FRL) requirements in accordance with AS 1530.4:2014 Section 2 & Section 4.

Fire Damper installation shall be strictly in accordance with the relevant requirements of AS 1682.2, and Kilargo System Installation details including the use of Kilargo Intumescent Mastic

#### **IFD-CE1-LL Dimensions**





Model				Dir	nensions		
		(a)	(b)	(c)	(d)	(e)	(f)
IFD-CE1-LL	150 150	150	147	301	182	214	43
IFD-CE1-LL	200 150	200	147	301	232	264	43
IFD-CE1-LL	200 200	200	197	351	232	264	43
IFD-CE1-LL	250 250	250	247	401	282	314	43
IFD-CE1-LL	300 300	300	297	451	332	364	43
IFD-CE1-LL	350 350	350	347	501	382	414	43
IFD-CE1-LL	400 400	400	397	551	432	464	43
IFD-CE1-LL	450 400	450	397	551	482	514	43
IFD-CE1-LL	500 400	500	397	551	532	564	43
IFD-CE1-LL	550 400	550	397	551	582	614	43
IFD-CE1-LL	600 400	600	397	551	632	664	43

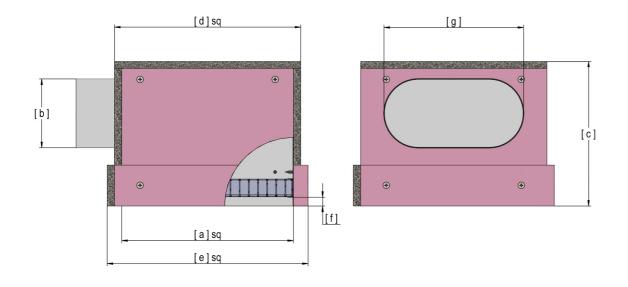
#### How to order

#### IFD-CE1-LL:

IFD-CE1-LL Width x Height + spigot Dia (mm) e.g. IFD-CE1-LL 600 x 600 + 400

For more product information please visit: www.kilargo.com.au

#### IFD-CE1-Lo-LL Dimensions



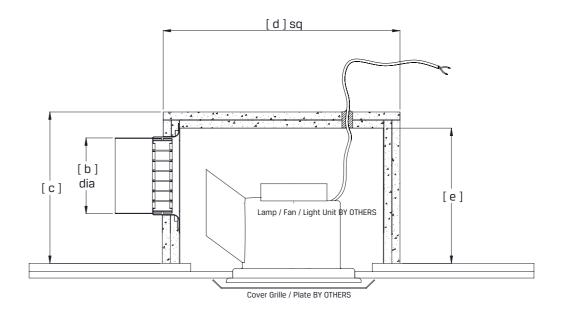
				Dimensio	ns		
Equivalent Spigot Dia	(a)	(b)	(c)	(d)	(e)	(f)	(g)
50 150	200	100	267	232	264	43	178.5
50 150	250	100	267	282	314	43	178.5
200 200	300	100	267	332	364	43	257
250 250	350	100	267	382	414	43	335.5
250 250	400	100	267	432	464	43	335.5
300 300	450	100	267	482	514	43	414
350 350	500	100	267	532	564	43	492.5
350 350	550	100	267	582	614	43	492.5
400 400	600	100	267	632	664	43	571
	Spigot Dia           50         150           50         150           200         200           250         250           250         250           300         300           350         350           350         350	Spigot Dia           50         150         200           50         150         250           200         200         300           250         250         350           250         250         400           300         300         450           350         350         500           350         350         550	Spigot Dia           50         150         200         100           50         150         250         100           200         200         300         100           250         250         350         100           250         250         400         100           300         300         450         100           350         350         500         100           350         350         550         100	Spigot Dia           50         150         200         100         267           50         150         250         100         267           200         200         300         100         267           250         250         350         100         267           250         250         400         100         267           300         300         450         100         267           350         350         500         100         267           350         350         550         100         267	Spigot Dia           50         150         200         100         267         232           50         150         250         100         267         282           200         200         300         100         267         332           250         250         350         100         267         382           250         250         400         100         267         432           300         300         450         100         267         482           350         350         500         100         267         532           350         350         550         100         267         582	Spigot Dia           50         150         200         100         267         232         264           50         150         250         100         267         282         314           200         200         300         100         267         332         364           250         250         350         100         267         382         414           250         250         400         100         267         432         464           300         300         450         100         267         482         514           350         350         500         100         267         532         564           350         350         550         100         267         582         614	Spigot Dia           50         150         200         100         267         232         264         43           50         150         250         100         267         282         314         43           200         200         300         100         267         332         364         43           250         250         350         100         267         382         414         43           250         250         400         100         267         432         464         43           300         300         450         100         267         482         514         43           350         350         500         100         267         532         564         43           350         350         550         100         267         582         614         43

#### How to order

IFD-CE1-Lo-LL:
IFD-CE1-Lo-LL Width x Height + spigot Dia (mm)
e.g.IFD-CE1-Lo-LL 600 x 600 + 400

For more product information please visit: www.kilargo.com.au

#### **IFD-CE1-LL Dimensions**



Model	Dimensions						
	(a)	(b)	(c)	(d)	(e)		
IFD-CE4-LL-200	205	150	300	270	268		
IFD-CE4-LL-250	255	150	300	320	268		
IFD-CE4-LL-300	305	150	300	370	268		
IFD-CE4-LL-400	405	150	300	470	268		

#### How to order

#### IFD-CE4-LL:

IFD-CE4-LL \_\_\_\_\_Model Size e.g. IFD-CE4-LL-400

For more product information please visit: www.kilargo.com.au

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## **Kilargo Intumescent Mastic**

Kilargo Intumescent Mastic is designed for fire damper perimeter sealing. It is specially formulated for adhesion to metal, plastic, concrete, masonry and plasterboard materials.

Kilargo Intumescent Mastic is water based for easy clean up, and offering smooth gunnability, Kilargo Mastic is flexible, paintable and has acoustic properties. Kilargo approvals specify the use of Kilargo Intumescent Mastic.

#### **Availability**

Supplied in 310ml cartridges. Grey colour standard.



#### Method of Use

- 1. Surfaces should be free from oil and dust.
- 2. Apply mastic to both sides of perimeter gaps to a depth of at least that of the gap width.
- 3. The surface will be tack free in approximately 20 minutes in dry conditions or about 2 hours in a humid environment.
- 4. Large joints (not exceeding 25 mm) can be built up with additional applications after initial drying, in order to avoid It may also be necessary to use a non-combustible material or backing rod in such applications.
- 5. Any tools can be cleaned with water.

#### **Suggested Specifications**

The Intumescent Mastic shall be Kilargo water based type, supplied in 310 ml cartridges.

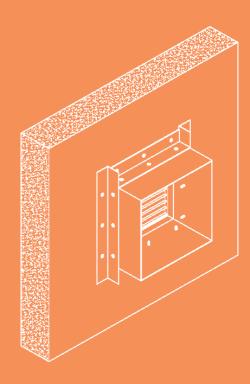
Mastic shall be Kilargo Intumescent type to conform with the Kilargo approved methods of installation.



#### How to order

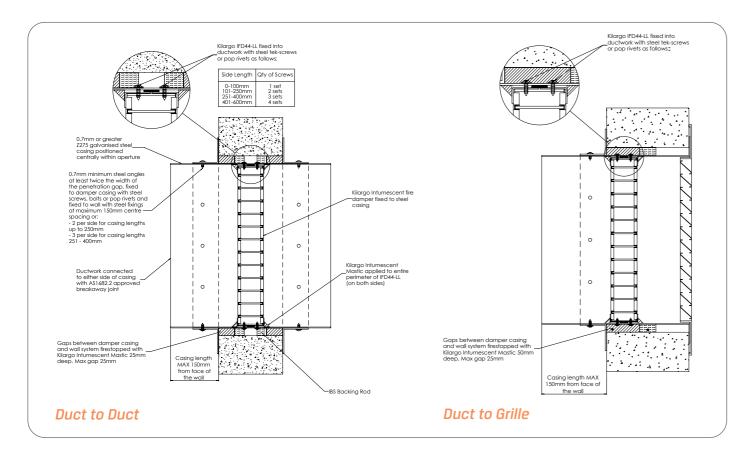
310 ml CARTRIDGE KIM-310 GREY

Supplied in 310 ml tubes individually or in carton quantity.



## WALL MOUNTED SYSTEMS

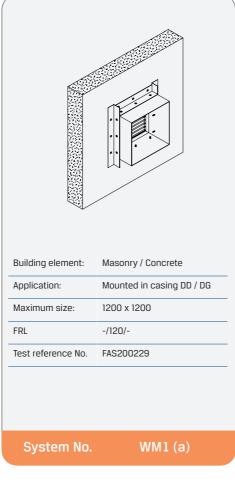
Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

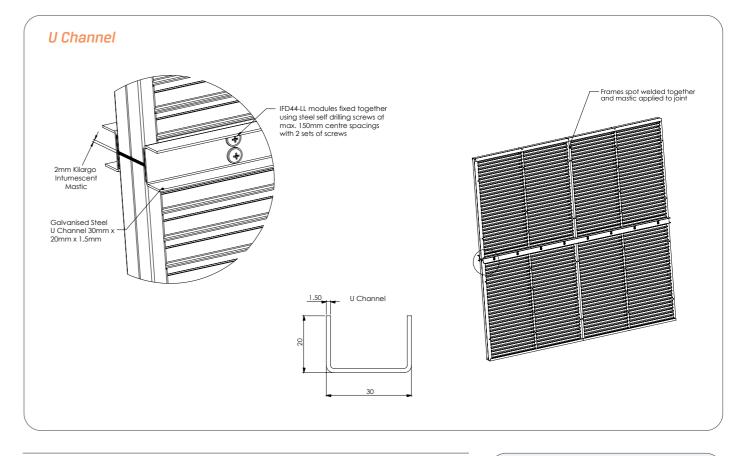
#### System Notes

- $\bullet$   $\,$  Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

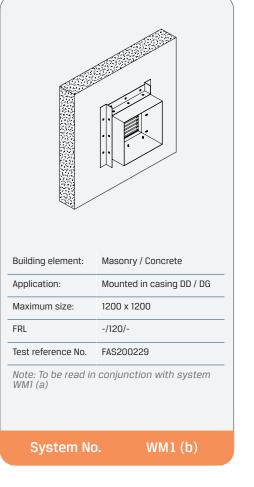
Ducted - Modular



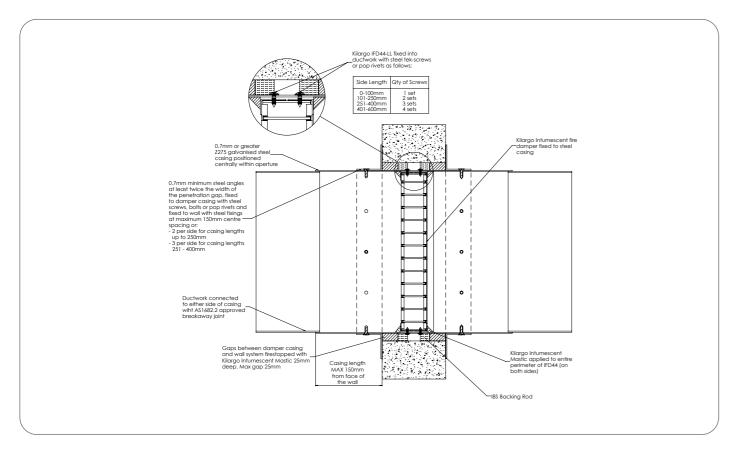
- **Step 1** Apply Kilargo Intumescent Mastic to the opposing module
- Step 2 Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides
- **Step 3** Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

#### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



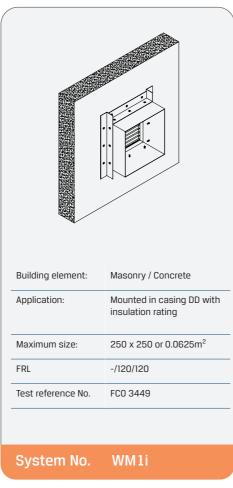
Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers.
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing.
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing.
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections.
Step 5	Connect ductwork to the damper casing with AS 1682.2 compliant breakaway joint.

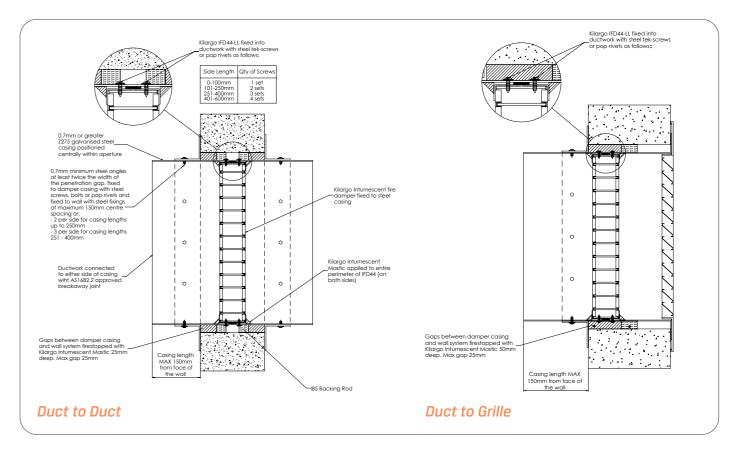
#### System Notes

- IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied



#### Installation Instructions:

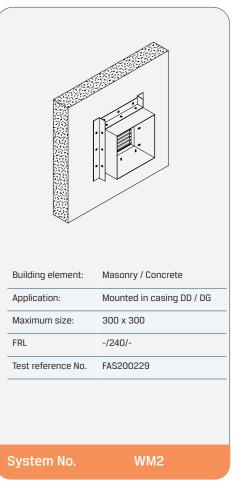
Ducted



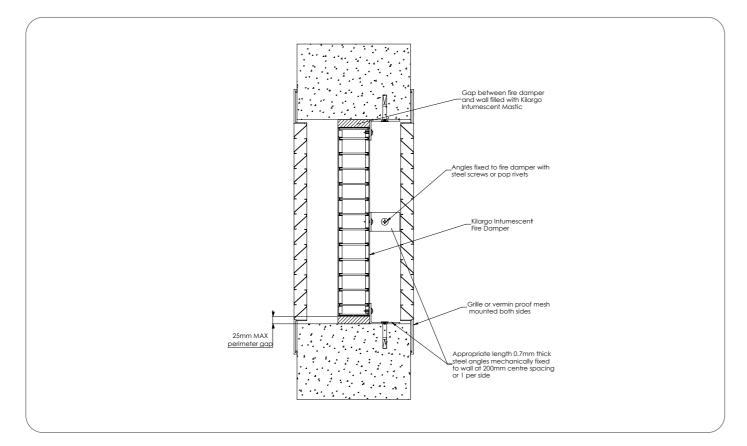
Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
	With Bo Backing float and temporary Supports of packers
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper ${\mathfrak A}$ building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

#### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



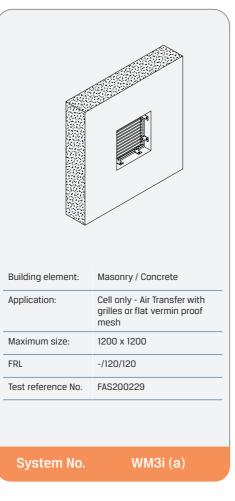
Air-Transfer



Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper ${\tt \&}$ building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grilles, louvres or vermin proof mesh independently to each side of the building element

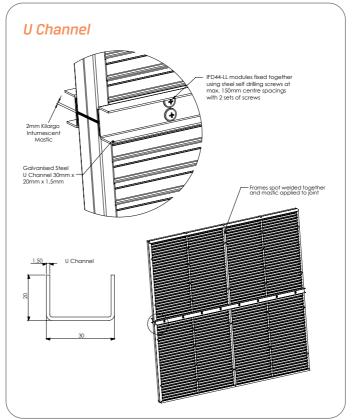
#### System Notes

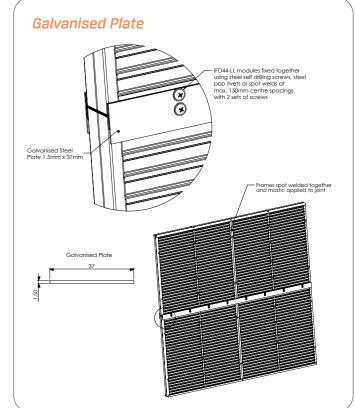
- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grilles to be fixed independently to the building element and shall not be fixed to the fire damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

Air-Transfer - Modular





Step 1	Apply Kilargo Intumescent Mastic to the opposing module
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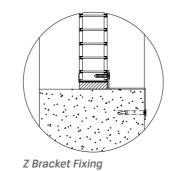
Step 2 Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

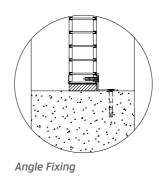
**Step 3** Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

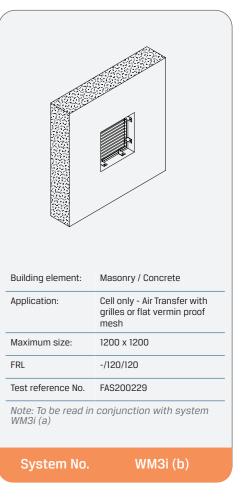
#### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.

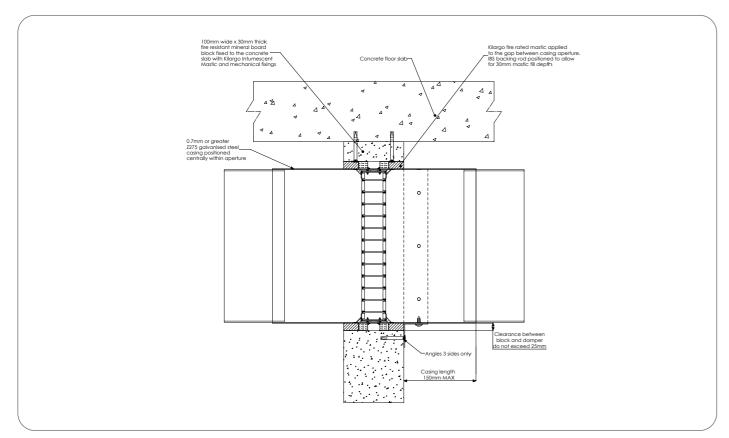
#### Alternative Fixing Methods







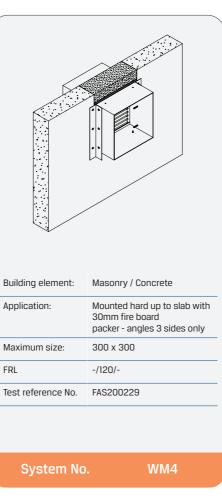
Ducted



Step 1	Measure and cut 100mm wide x 30mm thick fire-resistant mineral board packer (supplied by others) to match the damper width
Step 2	Mechanically fix $100 \text{mm}$ wide x $30 \text{mm}$ thick fire-resistant mineral board packer to concrete slab, with Kilargo Intumescent Mastic in between, and steel anchors as per system drawings
Step 3	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
Step 4	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 5	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Step 6	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 7	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

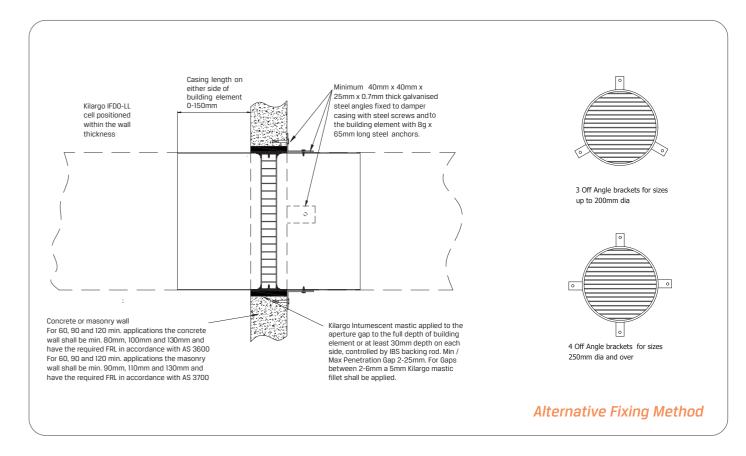
#### System Notes

- Fire-resistant mineral board packer, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

Ducted



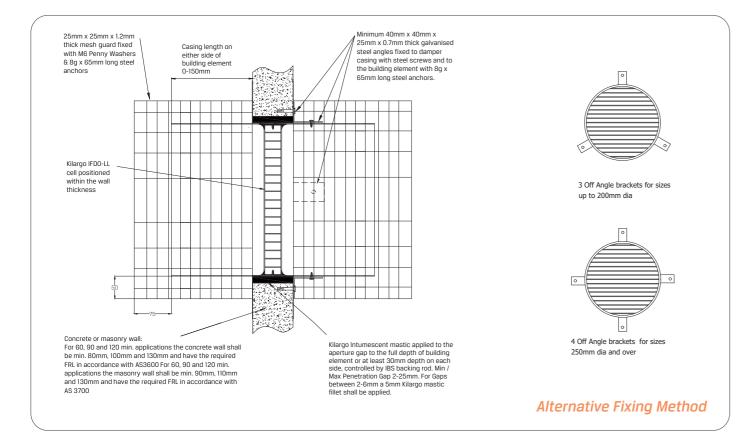
Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and packers
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

#### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Air Transfer



	3
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix $25 \times 25 \times 1.2$ mm thick mesh guards to each side of the building element with M6 penny washers & appropriate 8g x 65 fixings to suit as shown

Position damper centrally in penetration aperture as per system drawing

#### System Notes

Step 1

Mesh guards, IBS backing rod & fixings are to be supplied by others.

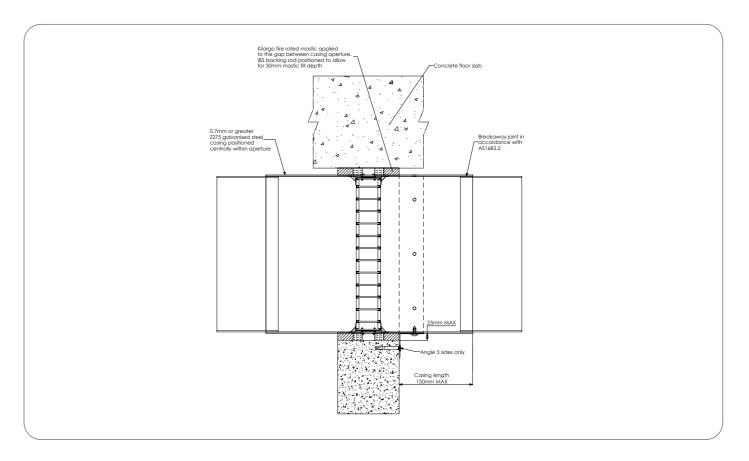
with IBS Backing Rod

- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

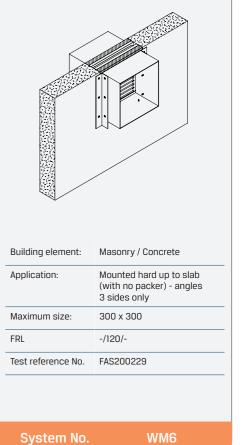
Ducted



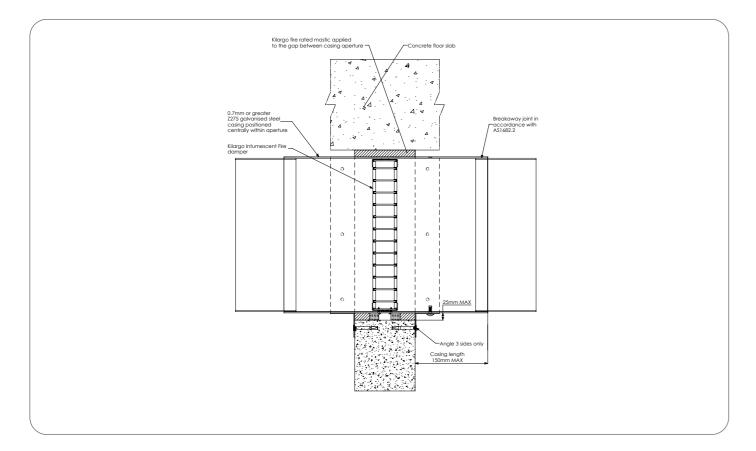
those detailed in the system drawing  Step 3  Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing		
between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing  Step 3 Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing  Step 4 Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections  Step 5 Connect ductwork to the damper casing with AS1682.2 compliant	Step 1	
pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing  Step 4 Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections  Step 5 Connect ductwork to the damper casing with AS1682.2 compliant	Step 2	between the damper & building element. Ensure fill depth corresponds with
identification during subsequent maintenance inspections  Step 5 Connect ductwork to the damper casing with AS1682.2 compliant	Step 3	pop rivets and, if detailed, to the building element with appropriate
OLCD O	Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
	Step 5	, ,

#### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



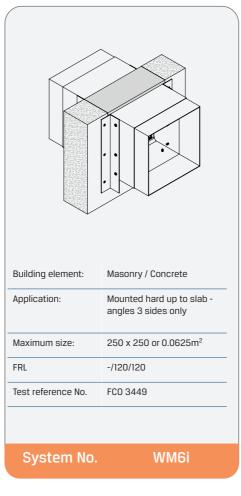
Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers.
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing.
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing.
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections.
Step 5	Connect ductwork to the damper casing with AS 1682.2 compliant breakaway joint.

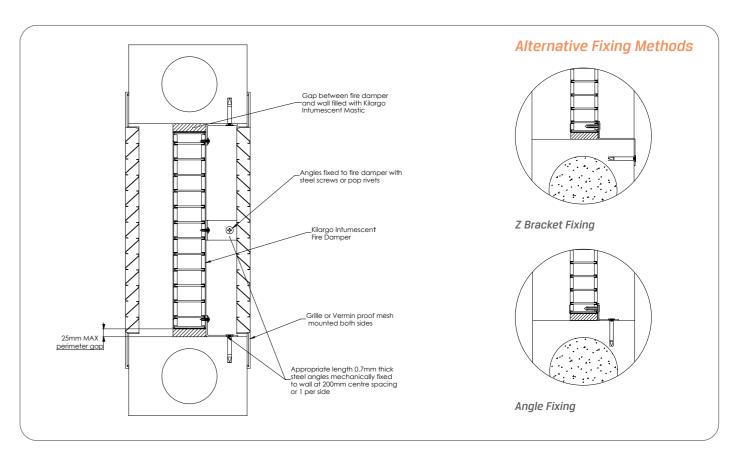
#### System Notes

- IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied



#### Installation Instructions:

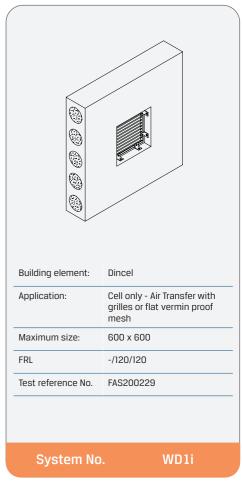
Air-Transfer



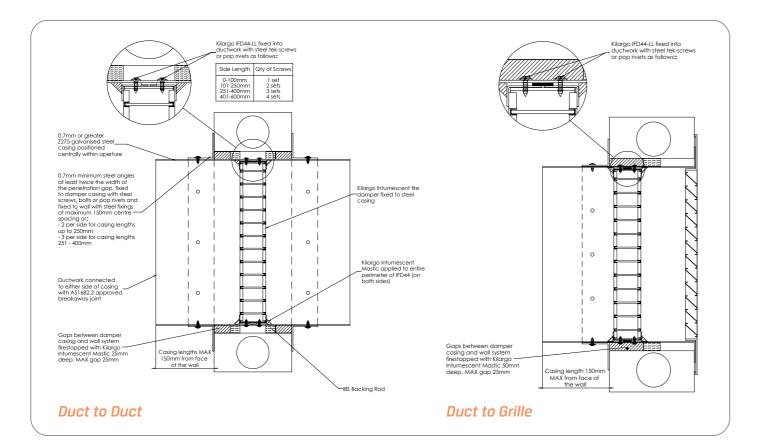
Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grilles, louvres or vermin proof mesh independently to each side of the

#### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grilles to be fixed independently to the building element and shall not be fixed to the fire damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



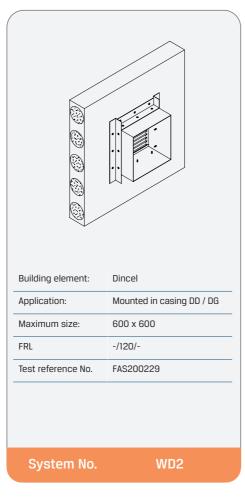
Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

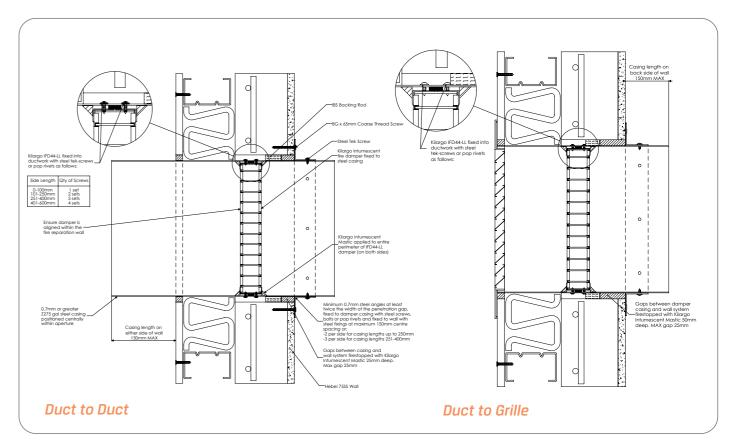
#### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

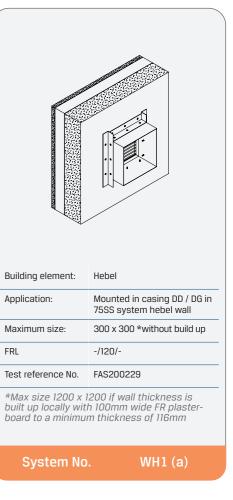
Ducted



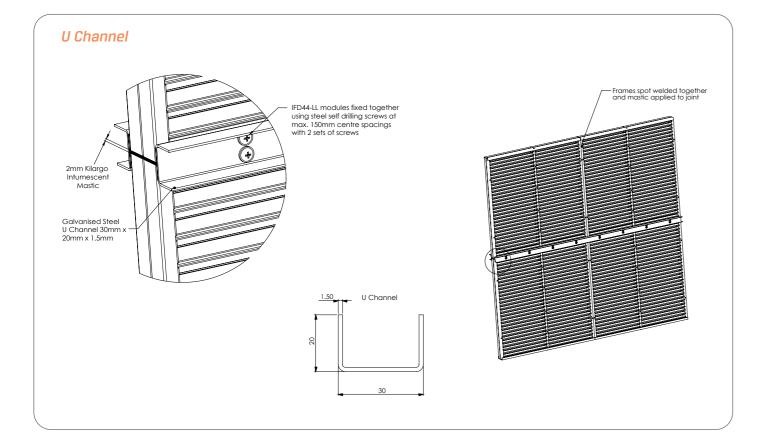
Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

#### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



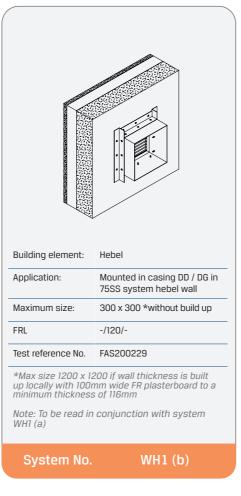
Ducted - Modular



Step 1	Apply Kilargo Intumescent Mastic to the opposing module
Step 2	Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides
Step 3	Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

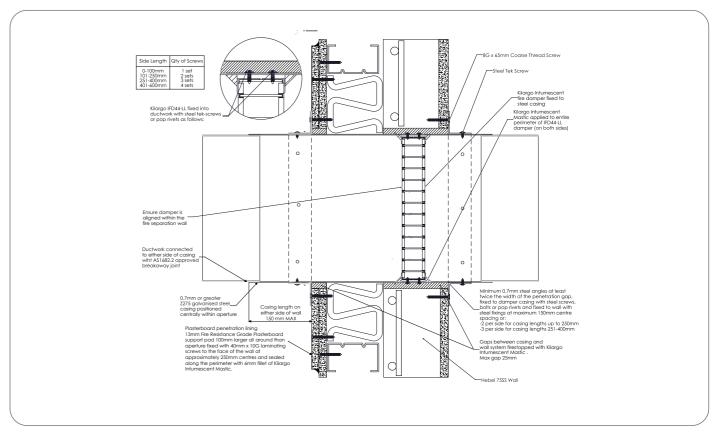
#### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



#### Installation Instructions:

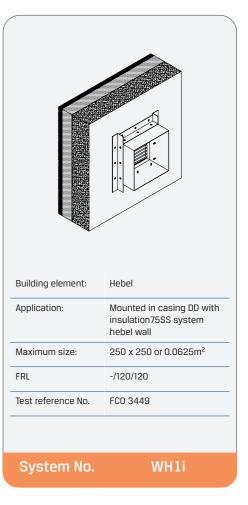
Ducted



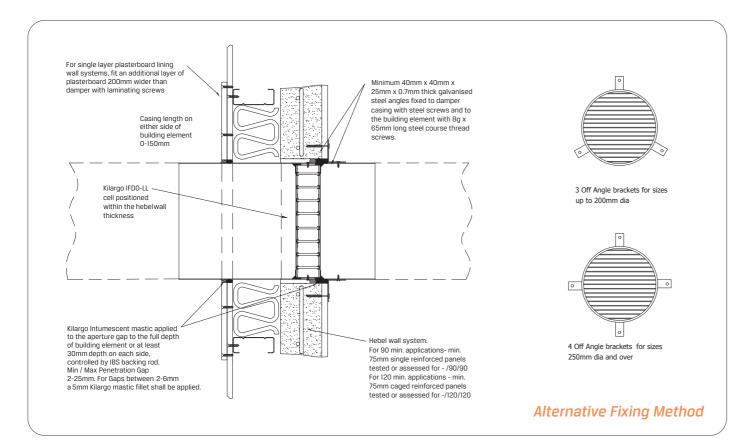
Step 1	Install additional 100mm wide plasterboard pad around aperture as per system drawing.
Step 2	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers.
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element & to perimeter of additional plasterboard pad. Ensure fill depth corresponds with those detailed in the system drawing.
Step 4	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing.
Step 5	Ensure product and certification labels are in a prominent position for easidentification during subsequent maintenance inspections.
Step 6	Connect ductwork to the damper casing with AS 1682.2 compliant breakaway joint.

#### System Notes

- IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied



Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and packers
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

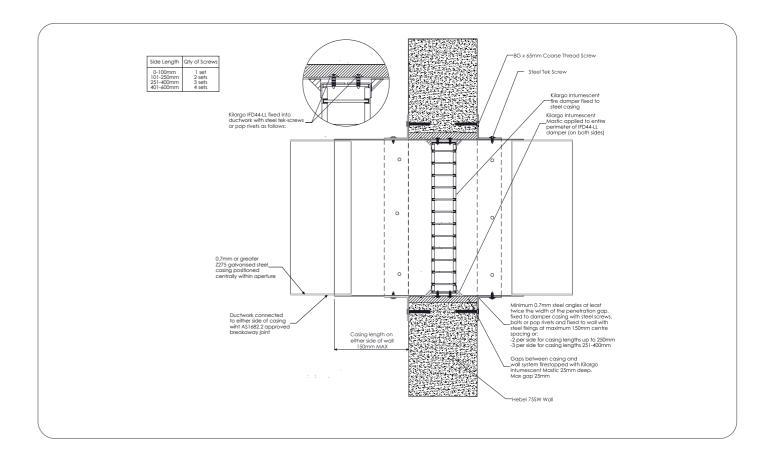
#### System Notes

- $\bullet \hspace{0.5cm}$  Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

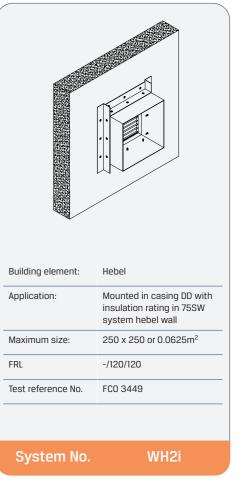
Ducted



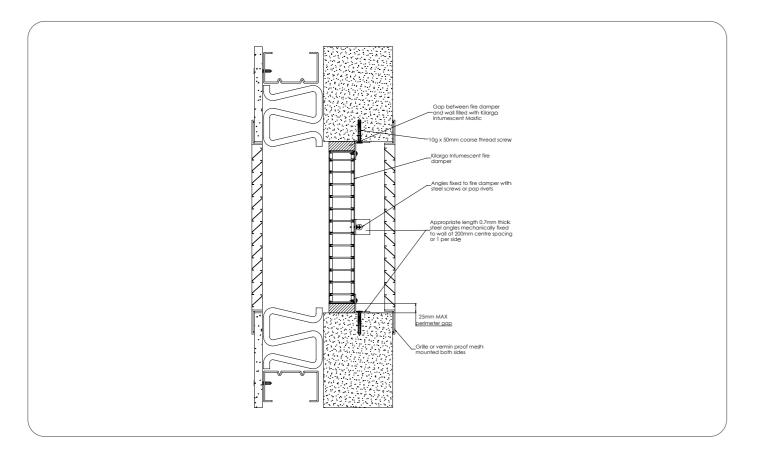
Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers.
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing.
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing.
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections.
Step 5	Connect ductwork to the damper casing with AS 1682.2 compliant breakaway joint.

#### System Notes

- IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied



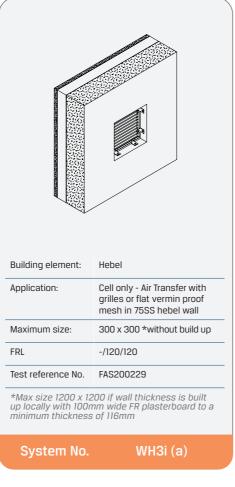
Air-Transfer



Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper ${\mathfrak L}$ building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grilles, louvres or vermin proof mesh independently to each side of the building element

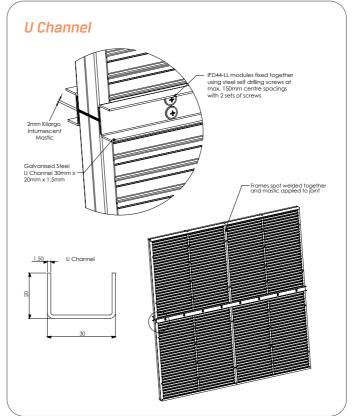
#### System Notes

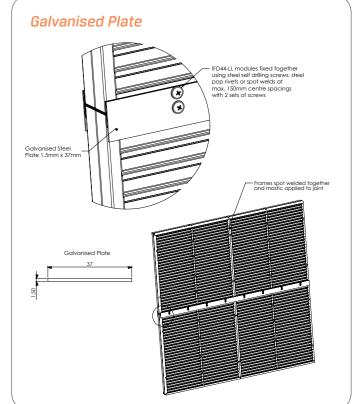
- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others
- Grilles to be fixed independently to the building element and shall not be fixed to the fire damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

Air-Transfer - Modular





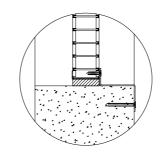
## Step 2 Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

**Step 3** Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

#### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.

#### **Alternative Fixing Methods**





Z Bracket Fixing Angle Fixing

Building element: Hebel

Application: Cell only - Air Transfer with grilles or flat vermin proof mesh in 75SS hebel wall

Maximum size: 300 x 300 \*without build up

FRL -/120/120

Test reference No. FAS200229

\*Max size 1200 x 1200 if wall thickness is built up locally with 100mm wide FR plasterboard to a minimum thickness of 116mm

Note: To be read in conjunction with system WH3i (a)

System No. WH3i (b)

Ducted

#### Casing length on Minimum 40mm x 40mm x either side of building element 25mm x 0.7mm thick galvanised steel angles fixed to damper 0-150mm to the building element with 8g x 65mm long steel course thread screws Kilargo IFDO-LL cell 3 Off Angle brackets for sizes up to 200mm dia hebel wall thickness Hebel wall system: Kilargo Intumescent mastic applied to For 90 min. applications- min. 75mm the aperture gap to the full depth of building element or at least 30mm depth on each side, controlled by IBS backing single reinforced panels tested or assessed for - /90/90. For 120 min. applications - min. 75mm caged reinforced panels tested or 4 Off Angle brackets for sizes Min / Max Penetration Gap 2-25mm. For Gaps between 2-6mm a 5mm Kilargo mastic fillet shall be applied. 250mm dia and over assessed for -/120/120 Alternative Fixing Method

Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and packers
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

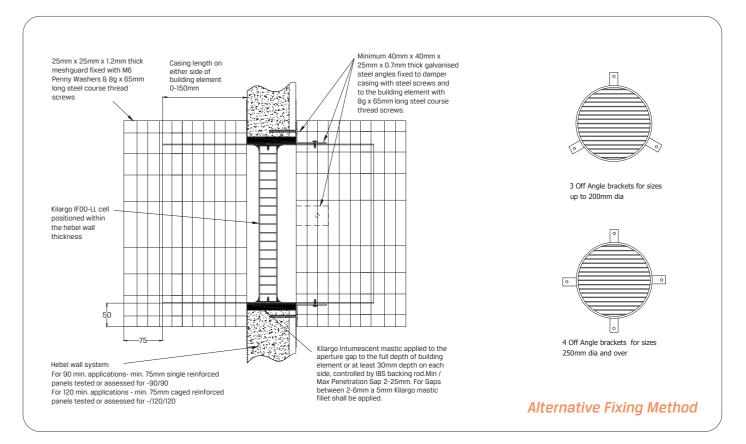
#### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

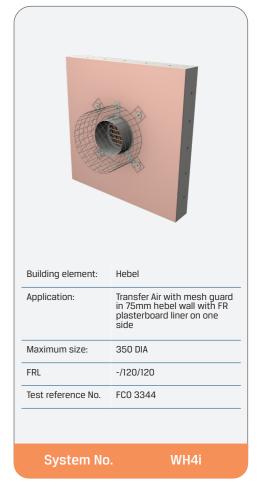
Air Transfer



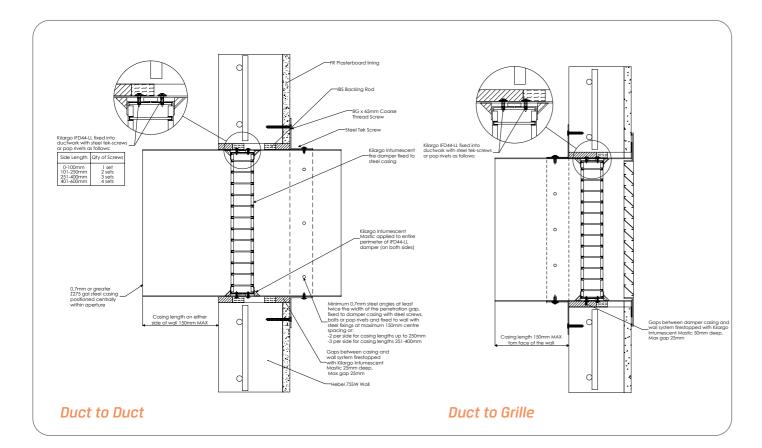
Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix 25 x 25 x 1.2mm thick mesh guards to each side of the building elemen with M6 penny washers & appropriate 8g x 65 fixings to suit as shown

#### System Notes

- Mesh guards, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



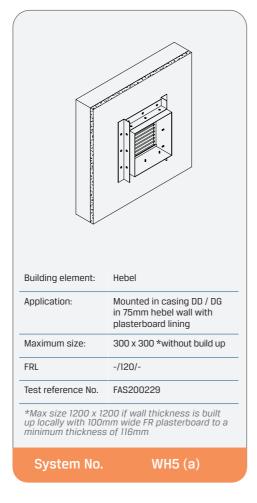
Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

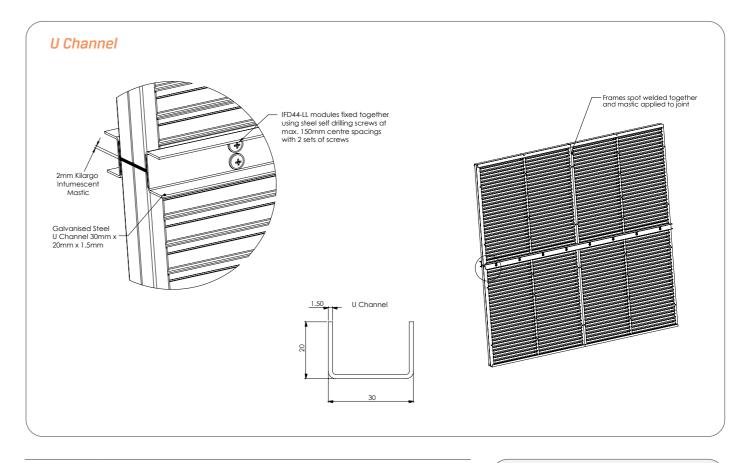
#### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

Ducted - Modular



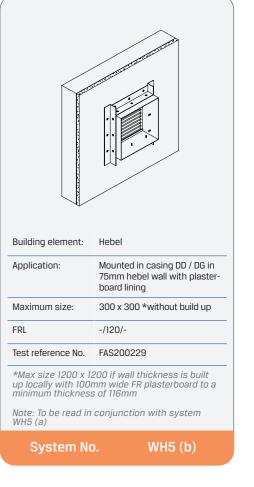
Step 2

Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

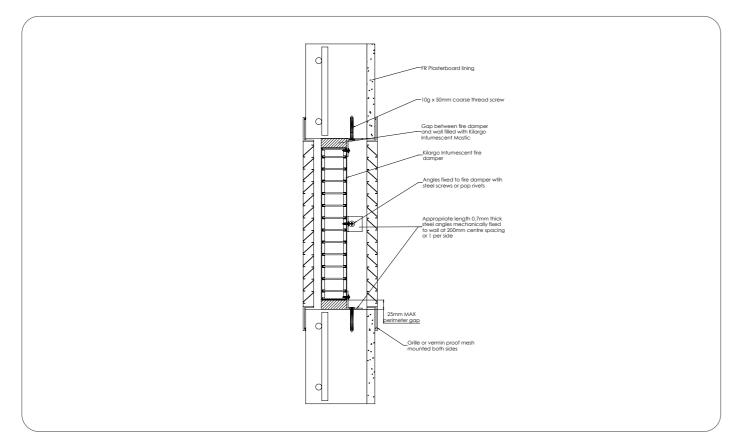
**Step 3** Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

#### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



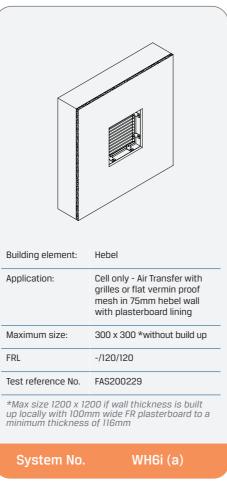
Air-Transfer



Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper $\&$ building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grilles, louvres or vermin proof mesh independently to each side of the building element

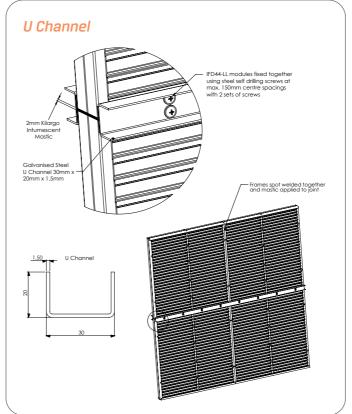
#### System Notes

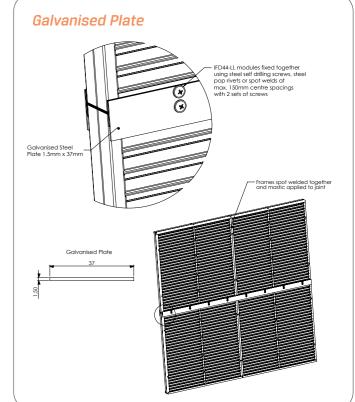
- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others
- Grilles to be fixed independently to the building element and shall not be fixed to the fire damper
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of ASI682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

Air-Transfer - Modular





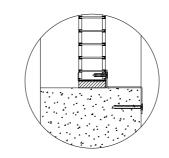
Step 2 Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

**Step 3** Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

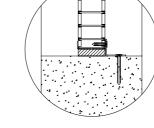
#### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.

#### Alternative Fixing Methods



Z Bracket Fixing



Angle Fixing

Building element: Hebel

Application: Cell only - Air Transfer with grilles or flat vermin proof mesh in 75mm hebel wall with plasterboard lining

Maximum size: 300 x 300 \*without build up

FRL -/120/120

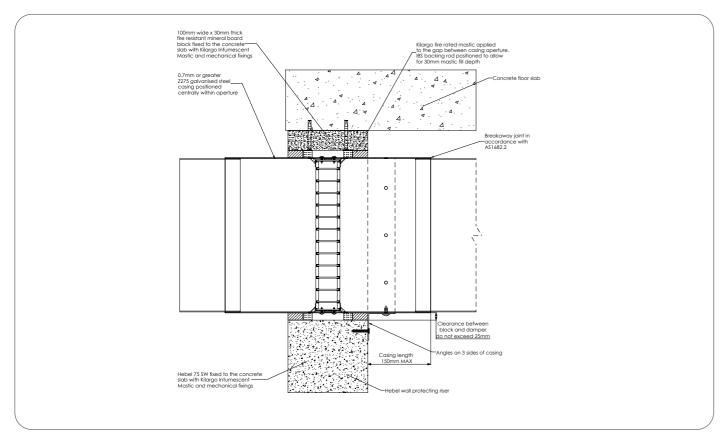
Test reference No. FAS200229

\*Max size 1200 x 1200 if wall thickness is built up locally with 100mm wide FR plasterboard to a minimum thickness of 116mm

Note: To be read in conjunction with system WH6i (a)

System No. WH6i (b)

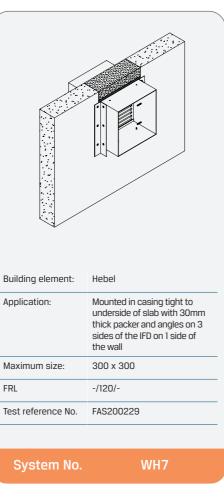
Ducted



Step 1	Measure and cut 100mm wide x 30mm thick fire-resistant mineral board packer (supplied by others) to match the damper width
Step 2	Mechanically fix 100mm wide x 30mm thick fire-resistant mineral board packer to concrete slab, with Kilargo Intumescent Mastic in between, and steel anchors as per system drawings
Step 3	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
Step 4	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 5	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Step 6	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 7	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

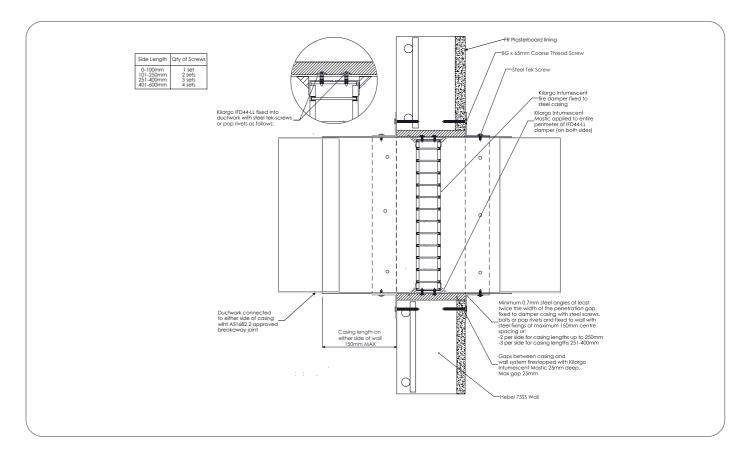
#### System Notes

- Fire-resistant mineral board packer, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers.
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing.
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing.
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections.

Connect ductwork to the damper casing with AS 1682.2 compliant

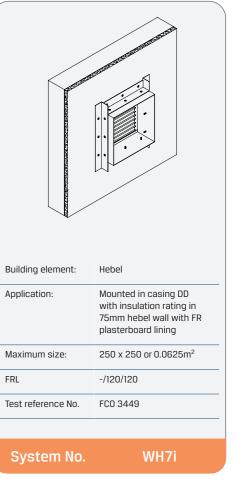
#### System Notes

Step 5

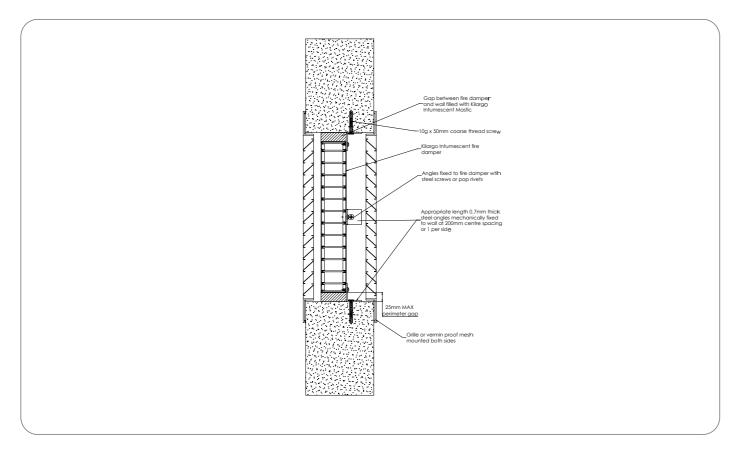
• IBS backing rod & fixings are to be supplied by others.

breakaway joint.

- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied



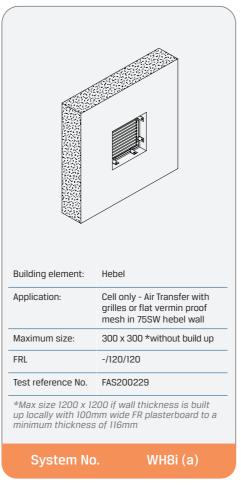
Air-Transfer



Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper ${\tt \&}$ building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grilles, louvres or vermin proof mesh independently to each side of the building element

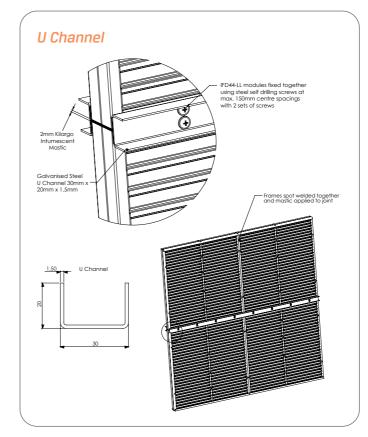
#### System Notes

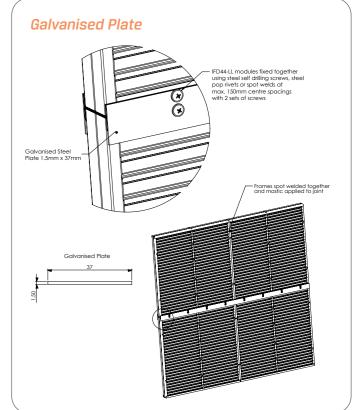
- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied
- Grilles to be fixed independently to the building element and shall not be fixed to
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

Air-Transfer - Modular





Step 1	Apply Kilargo Intumescent Mastic to the opposing module
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#### Align and bring modules together and mechanically fix together using $\ensuremath{\mathsf{U}}$ Step 2 channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

Fix modular damper to aperture or casing as shown in the appropriate Step 3 system drawing and installation instructions

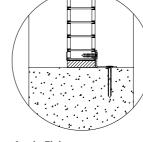
#### System Notes

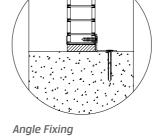
- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.

#### Alternative Fixing Methods



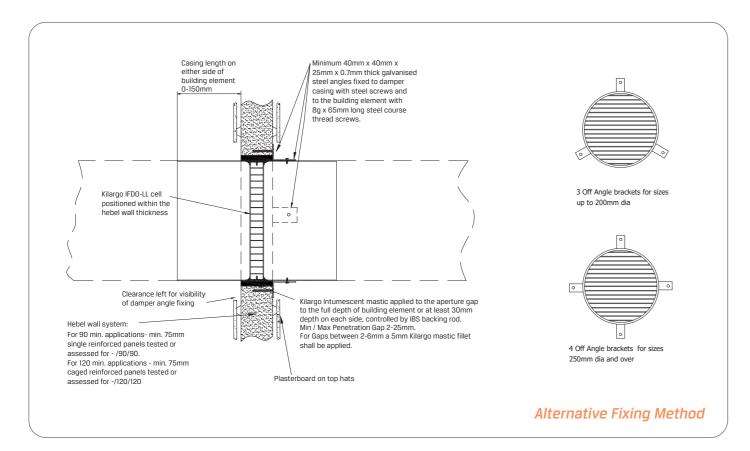
Z Bracket Fixing





Building element: Cell only - Air Transfer with grilles or flat vermin proof Application: mesh in 75SW hebel wall Maximum size: 300 x 300 \*without build up FRL -/120/120 Test reference No. FAS200229 \*Max size 1200 x 1200 if wall thickness is built up locally with 100mm wide FR plasterboard to a minimum thickness of 116mm Note: To be read in conjunction with system WH8i (a) System No. WH8i (b)

Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and packers
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

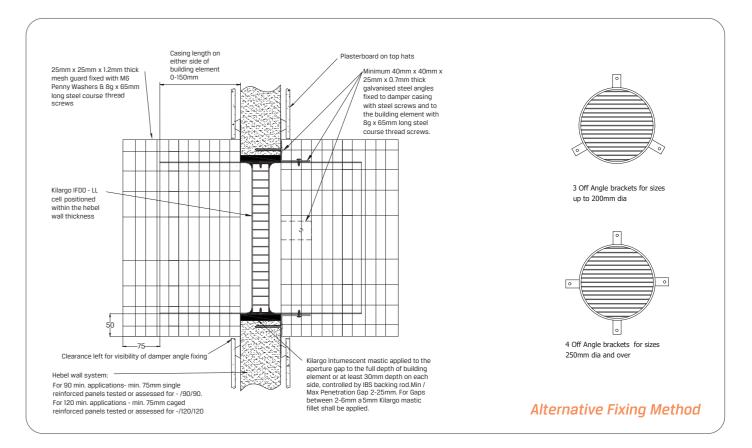
#### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

Air Transfer



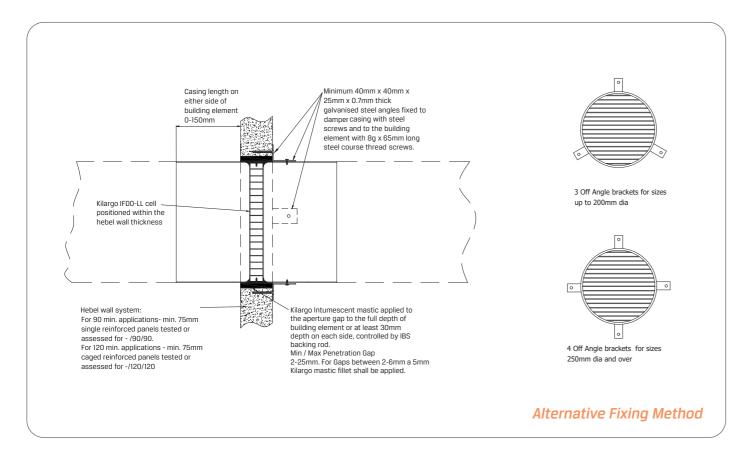
Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix 25 x 25 x 1.2mm thick mesh guards to each side of the building element with M6 penny washers & appropriate 8g x 65 fixings to suit as shown

#### System Notes

- Mesh guards, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and packers
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

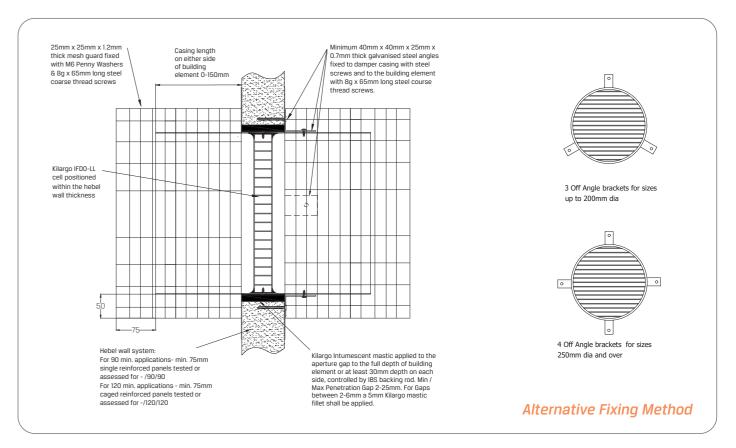
#### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

Air Transfer



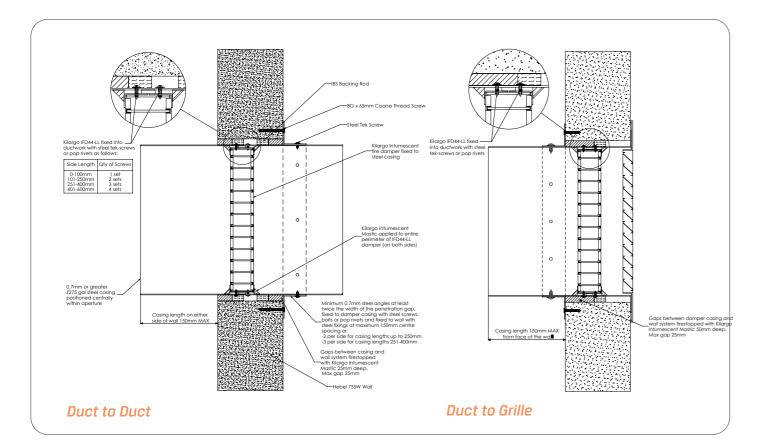
Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix 25 x 25 x 1.2mm thick mesh guards to each side of the building element with M6 penny washers & appropriate 8g x 65 fixings to suit as shown

#### System Notes

- Mesh guards, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



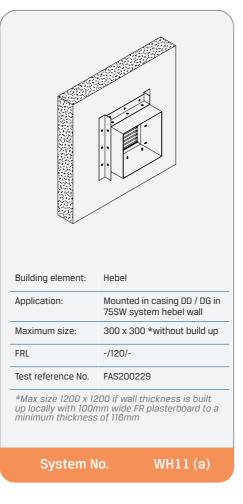
Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

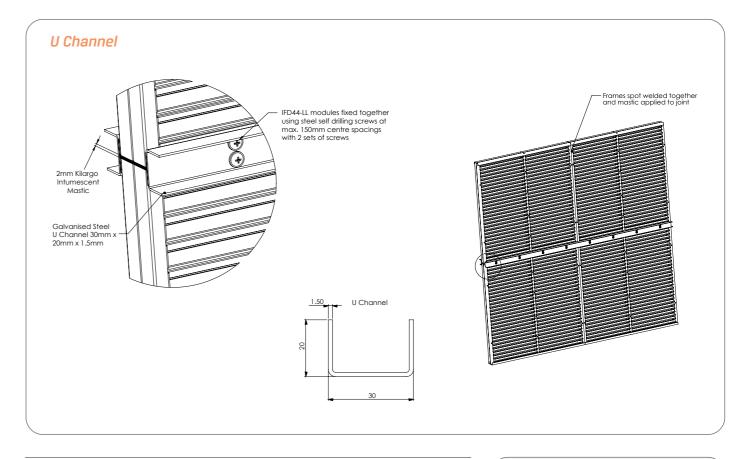
#### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

Ducted - Modular

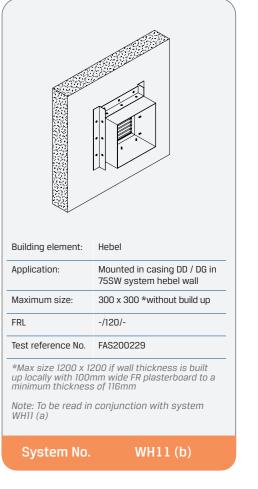


Step 2 Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

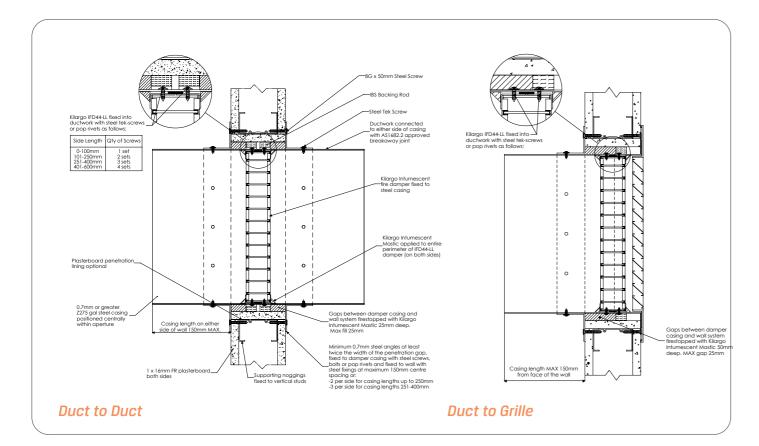
**Step 3** Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

#### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



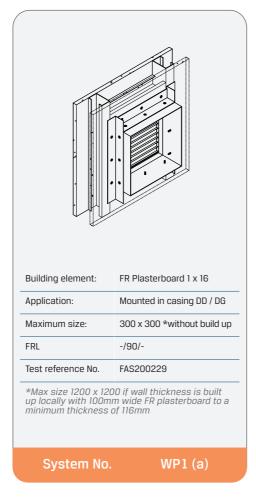
Ducted



Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

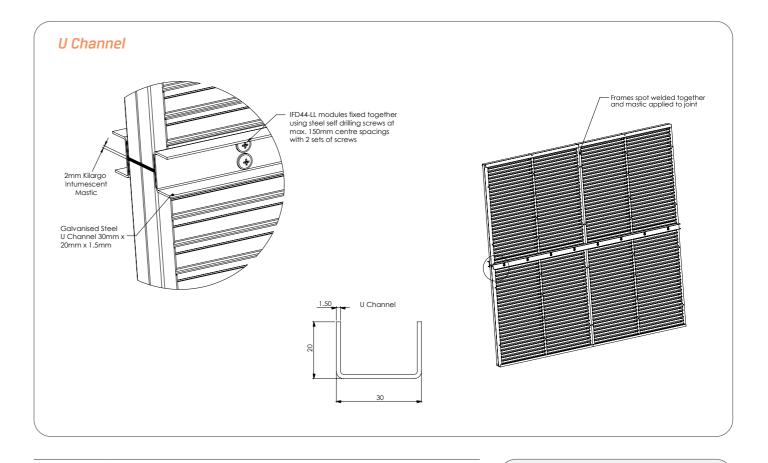
#### System Notes

- $\bullet$   $\,$  Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

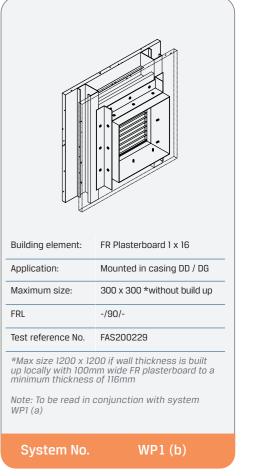
Ducted - Modular



	Step 1	Apply Kliargo Intumescent Mastic to the opposing module
	Step 2	Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides
	Step 3	Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

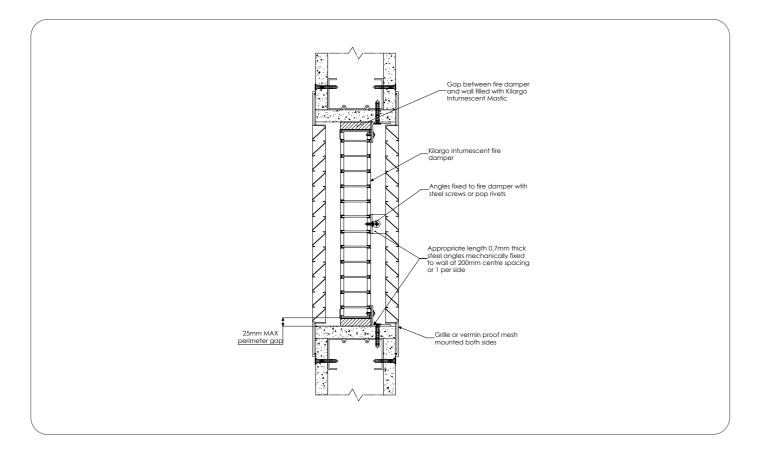
#### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



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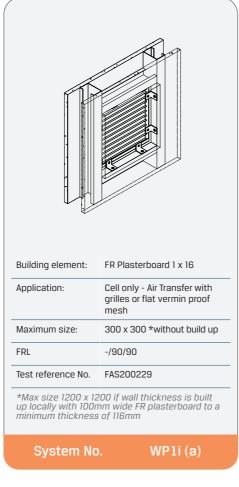
Air-Transfer



Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper $\&$ building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grilles, louvres or vermin proof mesh independently to each side of the building element

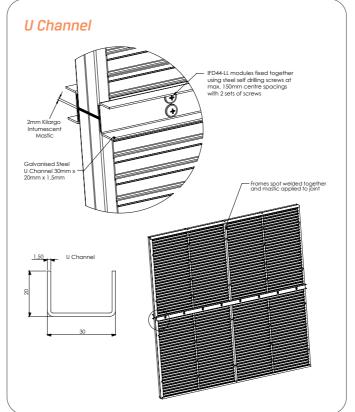
#### System Notes

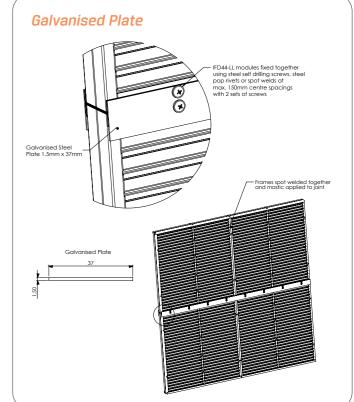
- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grilles to be fixed independently to the building element and shall not be fixed to
  the fire damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

Air-Transfer - Modular





Step 2

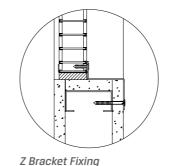
Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

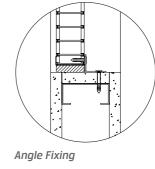
**Step 3** Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

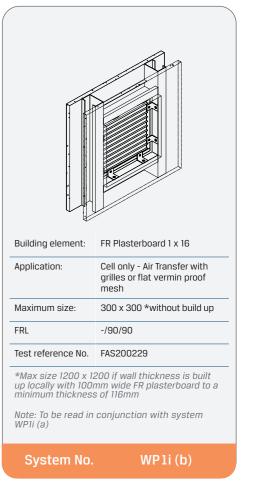
#### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.

#### Alternative Fixing Methods

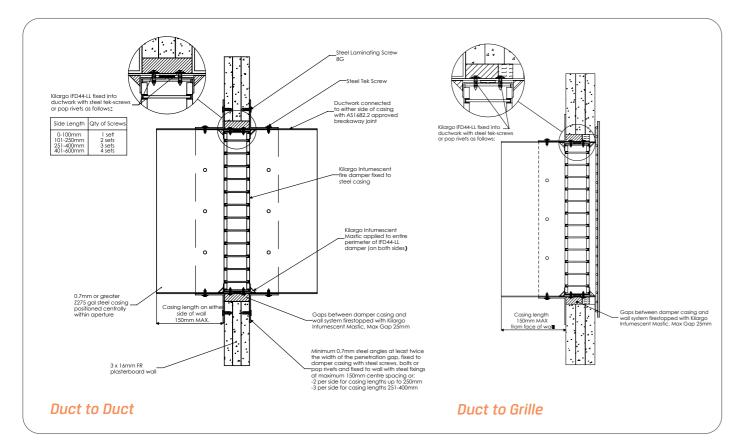






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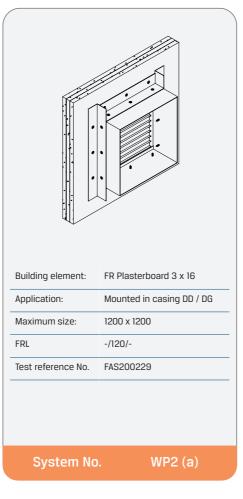
Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

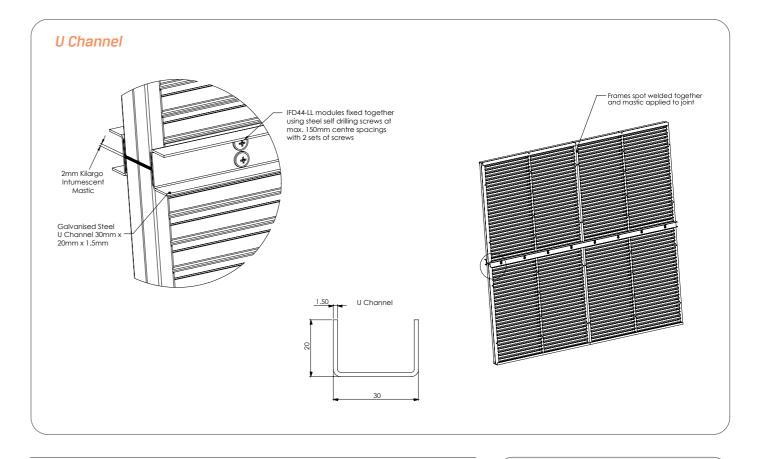
#### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



#### Installation Instructions:

Ducted - Modular



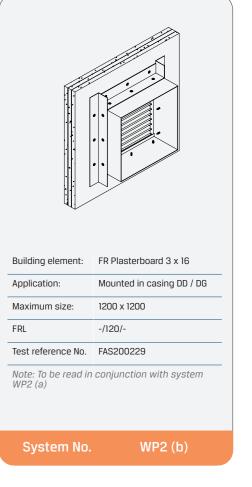
Step 1	Apply Kilargo Intumescent Mastic to the opposing module

Step 2 Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

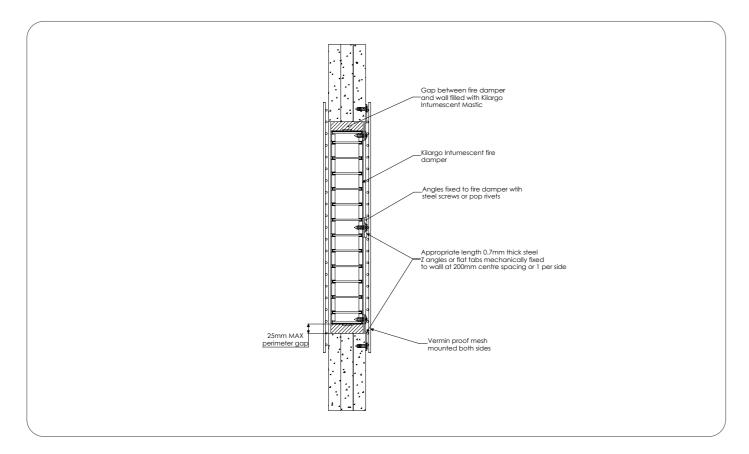
**Step 3** Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

#### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



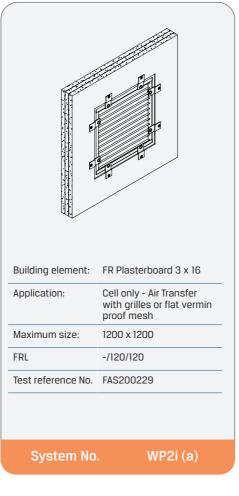
Air-Transfer



Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper $\&$ building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grilles, louvres or vermin proof mesh independently to each side of the building element

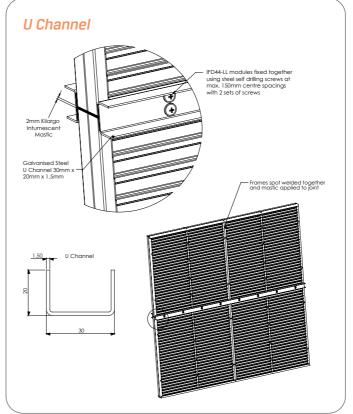
### System Notes

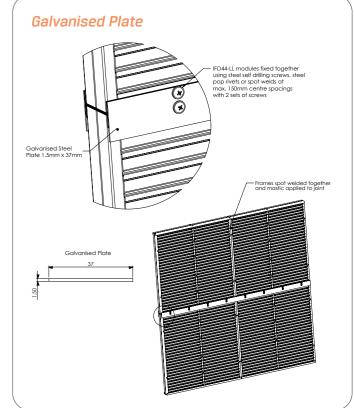
- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grilles to be fixed independently to the building element and shall not be fixed to
  the fire damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

Air-Transfer - Modular

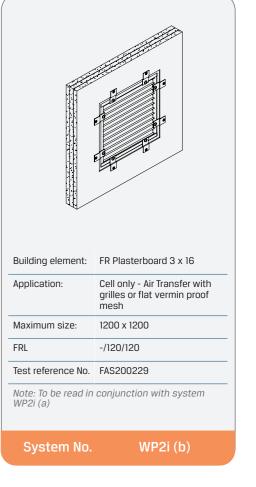




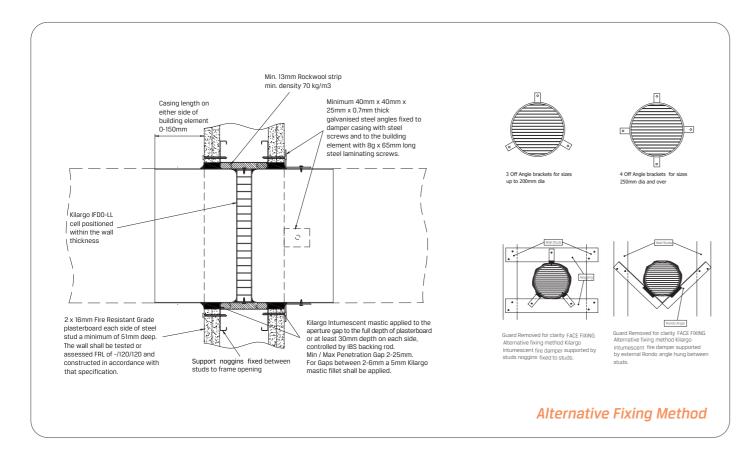
	Step 1	Apply Kilargo Intumescent Mastic to the opposing module
	Step 2	Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides
	Step 3	Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and packers
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

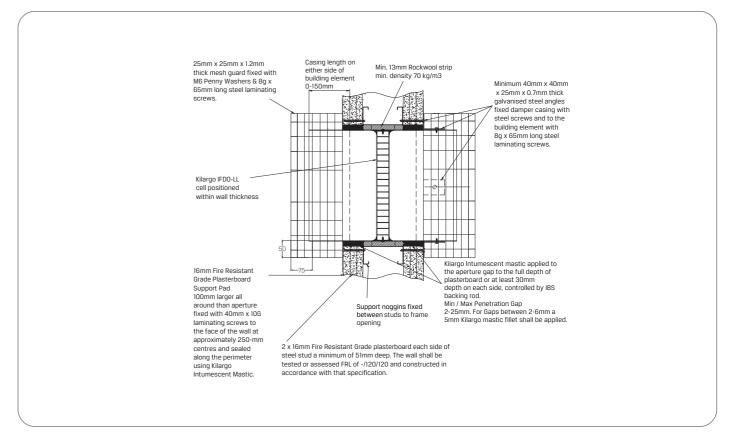
### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

Air Transfer



Step 1	Fix additional plasterboard pads to each side of wall and apply Kilargo Intumescent Mastic to the edges as per system drawing
Step 2	Position damper centrally in penetration aperture as per system drawing with 70kg/m3 rockwool
Step 3	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 4	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 5	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 6	Fix $25 \times 25 \times 1.2$ mm thick mesh guards to each side of the building element with M6 penny washers & appropriate $8g \times 65$ fixings to suit as shown

### System Notes

- Mesh guards, additional plasterboard pads, rockwool & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Building element:	FR Plasterboard 2 x 16 + 1
Application:	Transfer Air with mesh guard
Maximum size:	350 DIA
FRL	-/120/120
Test reference No.	FC0 3344

System No. WP3i

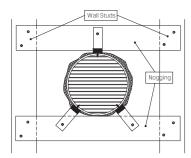
Air Transfer

### 16mm Fire Resistant Grade Plasterboard support pad 100mm larger all around than aperture fixed with 40mm x 10G laminating screws to face of the wall at approximately 250mm centres and sealed along the perimeter with 6mm fillet of Kilargo Intumescent Mastic.

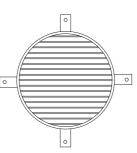
### Alternative Fixing Method



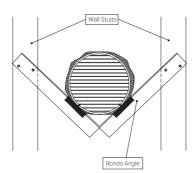
3 Off Angle brackets for sizes up to 200mm dia



Guard Removed for clarity FACE FIXING Alternative fixing method Kilargo Intumescent fire damper supported by studs noggins fixed to studs.



4 Off Angle brackets for sizes 250mm dia and over

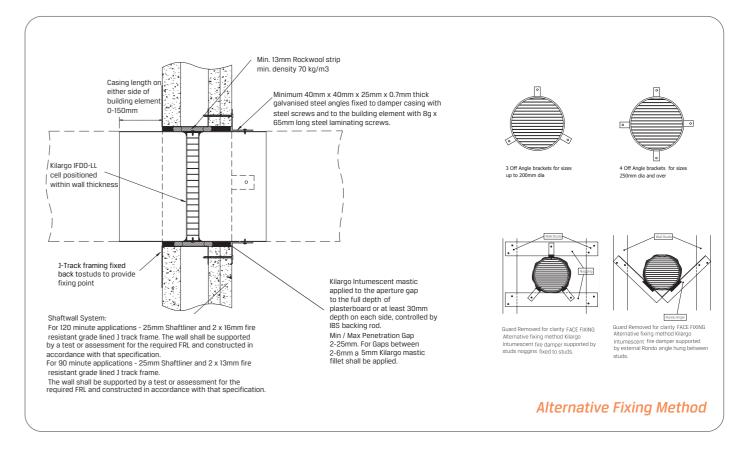


Guard Removed for clarity FACE FIXING Alternative fixing method Kilargo Intumescent fire damper supported by external Rondo angle hung between studs.



### Installation Instructions:

Ducted



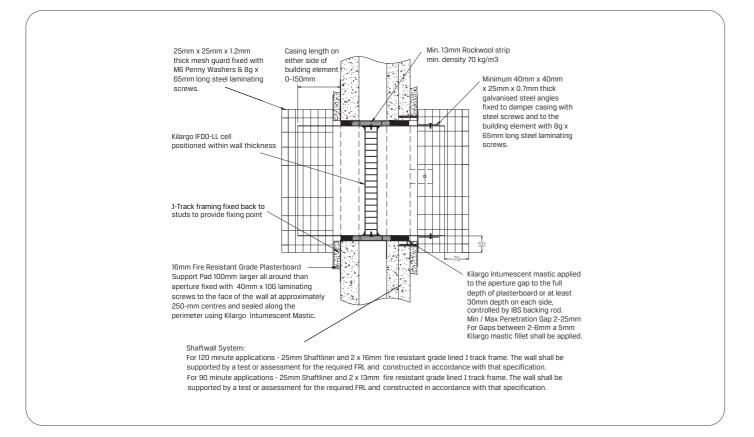
Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and packers
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

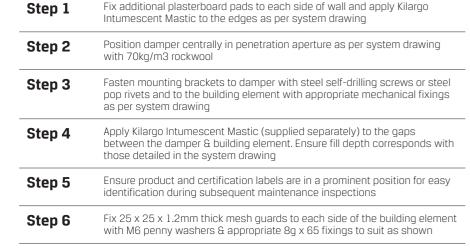
### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



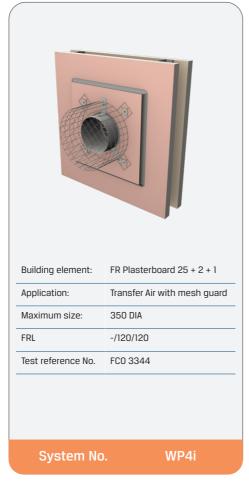
Air Transfer





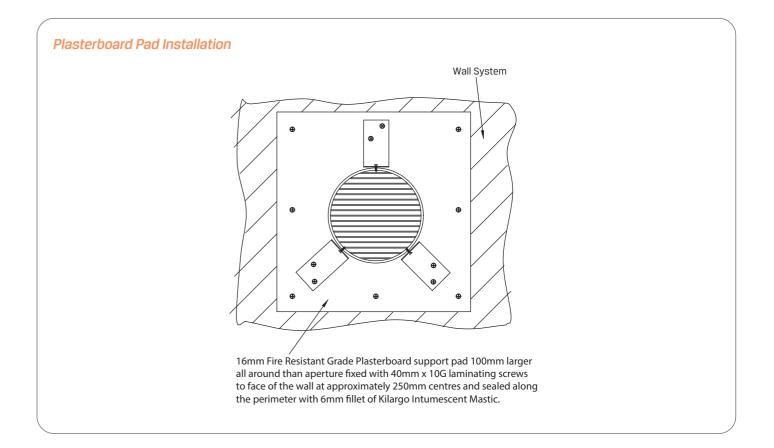
### System Notes

- Mesh guards, additional plasterboard pads, rockwool & fixings are to be supplied by others
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

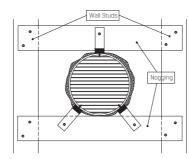
Air Transfer



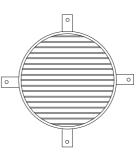
### Alternative Fixing Method



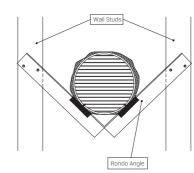
3 Off Angle brackets for sizes up to 200mm dia



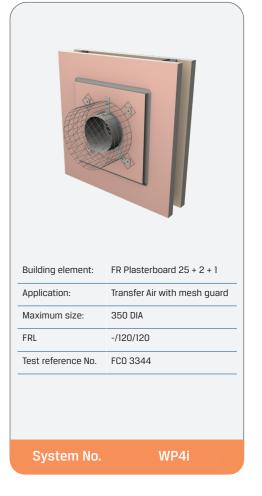
Guard Removed for clarity FACE FIXING Alternative fixing method Kilargo Intumescent fire damper supported by studs noggins fixed to studs.



4 Off Angle brackets for sizes 250mm dia and over



Guard Removed for clarity FACE FIXING Alternative fixing method Kilargo Intumescent fire damper supported by external Rondo angle hung between studs.



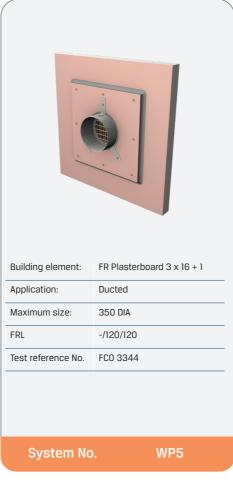
Ducted

### Casing length on either side of building element Minimum 40mm x 40mm x 25mm x 0.7mm 0-150mm thick galvanised steel angles fixed to damper casing with steel screws and to the building element with 8g x 65mm long steel laminating screws. Kilargo Intumescent Kilargo IFDO-LL mastic applied to the cell positioned aperture gap to the full within wall thickne depth of plasterboard or at least 30mm depth on each side, controlled by IBS backing rod. Min / Max Penetration Gap 2-25mm. For Gaps between 2-6mm a 5mm Kilargo mastic fillet shall be applied. 3 x 16mm Fire Resistant Grade plasterboard. The wall shall be tested or assessed FRL of -/120/120 and constructed in accordance with that specification. 16mm Fire Resistant Grade Plasterboard Support Pad 100mm larger all around than aperture fixed with 40mm x 10G laminating screws to the face of the wall at approximately 250-mm centres and sealed along the perimeter using Kilargo Intumescent Mastic.



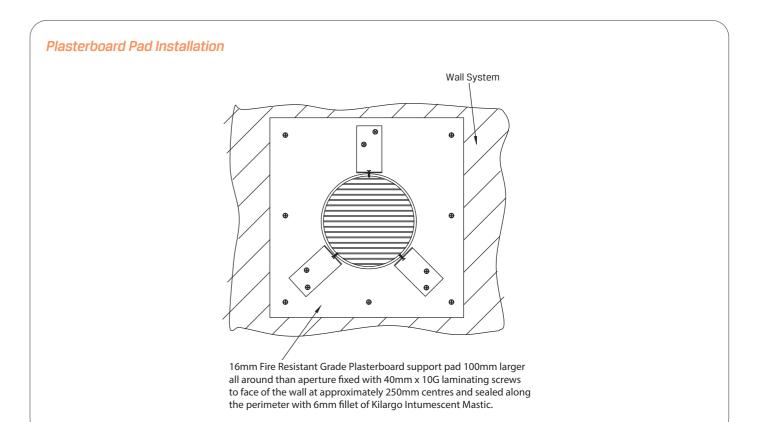
### System Notes

- Mesh guards, additional plasterboard pads, rockwool & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

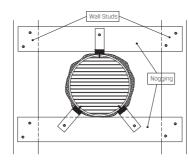
Air Transfer



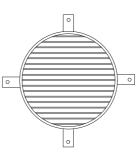
### Alternative Fixing Method



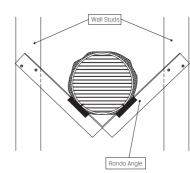
3 Off Angle brackets for sizes up to 200mm dia



Guard Removed for clarity FACE FIXING Alternative fixing method Kilargo Intumescent fire damper supported by studs noggins fixed to studs.



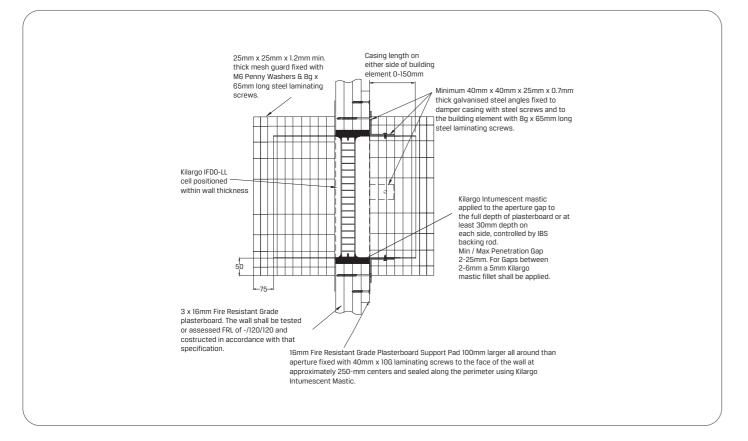
4 Off Angle brackets for sizes 250mm dia and over

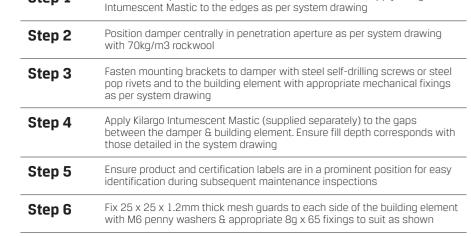


Guard Removed for clarity FACE FIXING Alternative fixing method Kilargo Intumescent fire damper supported by external Rondo angle hung between studs.



Air Transfer



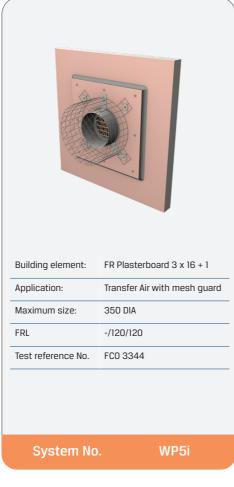


Fix additional plasterboard pads to each side of wall and apply Kilargo

### **System Notes**

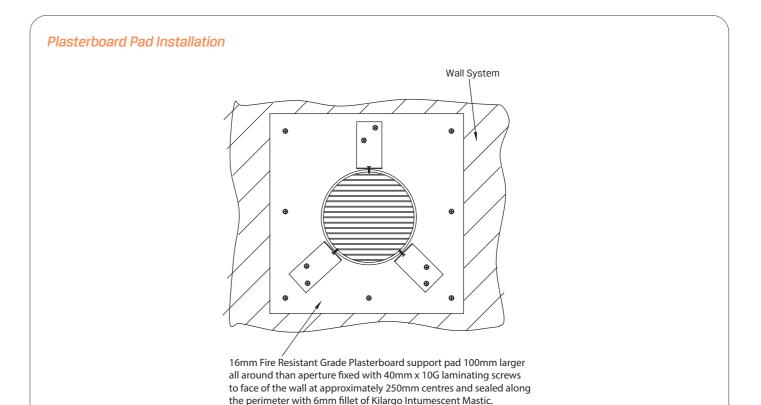
Step 1

- Mesh guards, additional plasterboard pads, rockwool & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

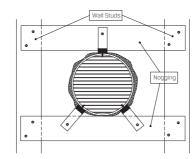
Air Transfer



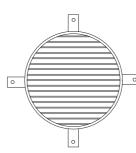
### Alternative Fixing Method



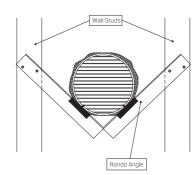
3 Off Angle brackets for sizes up to 200mm dia



Guard Removed for clarity FACE FIXING Alternative fixing method Kilargo Intumescent fire damper supported by studs noggins fixed to studs.



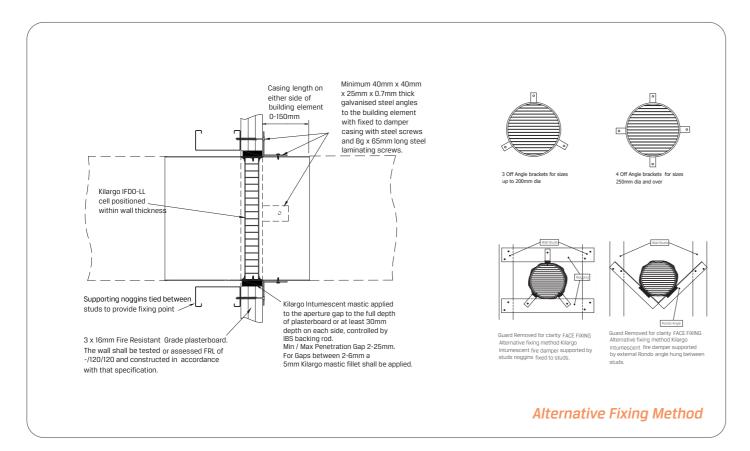
4 Off Angle brackets for sizes 250mm dia and over



Guard Removed for clarity FACE FIXING Alternative fixing method Kilargo Intumescent fire damper supported by external Rondo angle hung between studs.



Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and packers
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

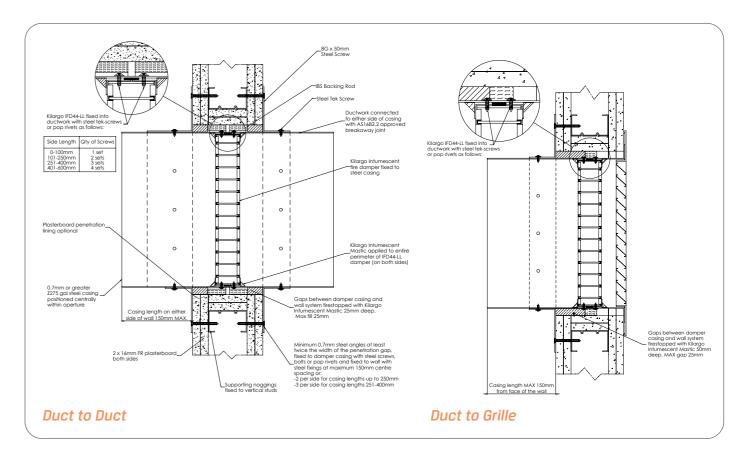
### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

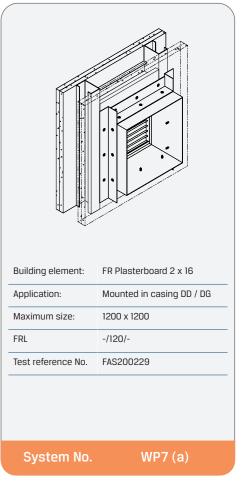
Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Ducted - Modular

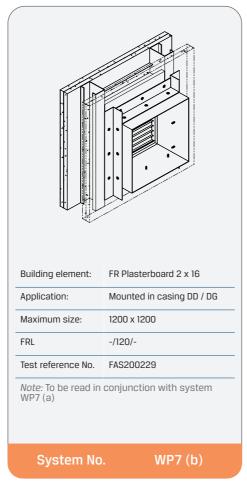
### U Channel IFD44-LL modules fixed together using steel self drilling screws at max. 150mm centre spacings with 2 sets of screws Galvanised Steel U Channel 30mm x 20mm x 1.5mm U Channel

Step 1	Apply Kilargo Intumescent Mastic to the opposing module
Step 2	Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides
Step 3	Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

Apply Kilargo Intumescent Mastic to the opposing module

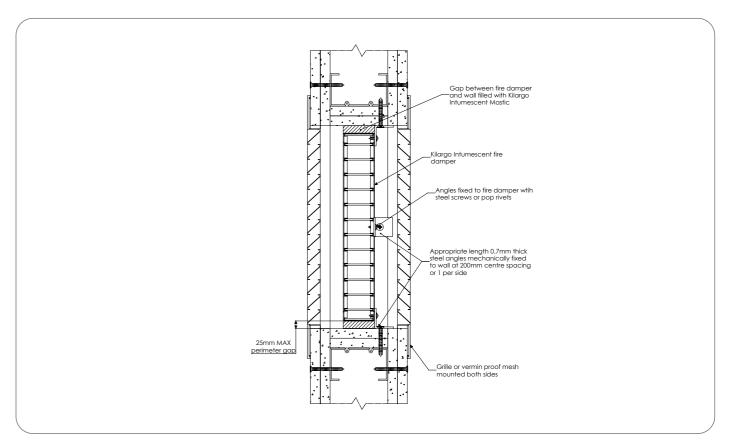
### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



### Installation Instructions:

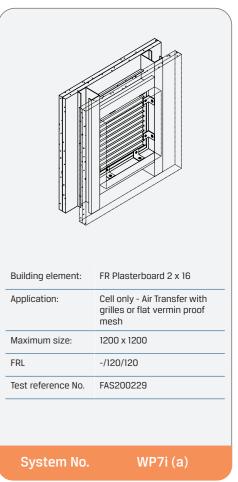
Air-Transfer



Step	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step :	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step	Fix grilles, louvres or vermin proof mesh independently to each side of the building element

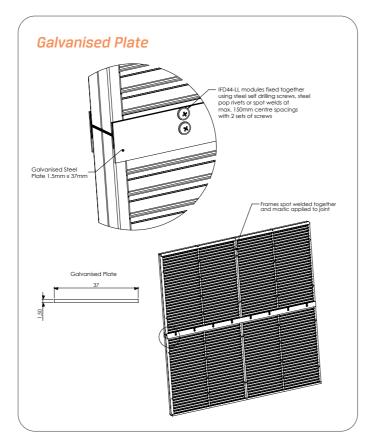
### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied
- Grilles to be fixed independently to the building element and shall not be fixed to
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Air-Transfer - Modular

# U Channel IFD44-LL modules fixed together using stell set dilling screws at mox. ISomm centre spacings with 2 sets of screws Amaliar and the spacing with 2 sets of screws Galvanised Steel U Channel 30mm x 1.5mm Frames spot welded together and modific applied to joint 1.50 U Channel





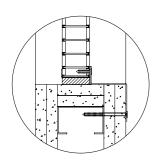
Step 2 Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

**Step 3** Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

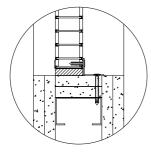
### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.

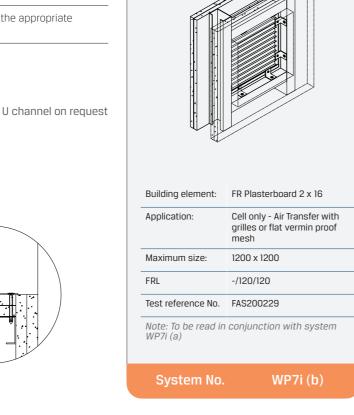
### **Alternative Fixing Methods**



Z Bracket Fixing

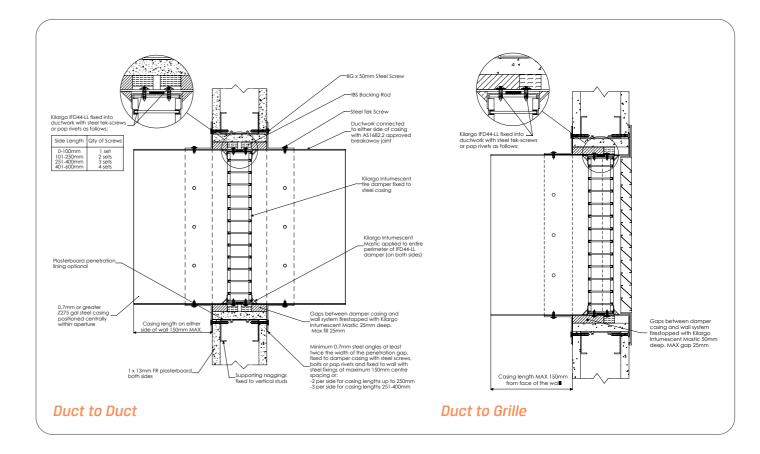


Angle Fixing



### Installation Instructions:

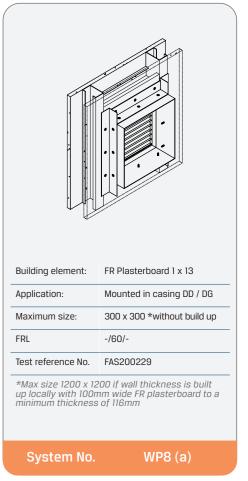
Ducted



	Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
	Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
	Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
	Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
	Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Ducted - Modular

## U Channel Fromes spot welded together using steel self drilling screws of max. (50mm centre spocings with 2 sels of screws Amount of the steel self drilling screws of max. (50mm centre spocings with 2 sels of screws) U Channel 30mm x 1.5mm U Channel

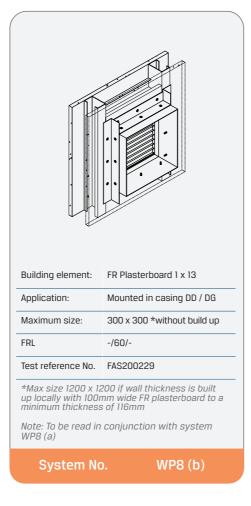
•	
Step 2	Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides
Step 3	Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

Apply Kilargo Intumescent Mastic to the opposing module

### System Notes

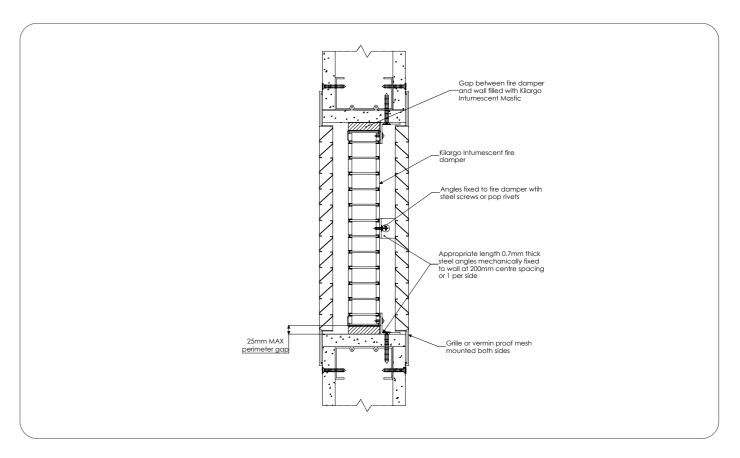
Step 1

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



### Installation Instructions:

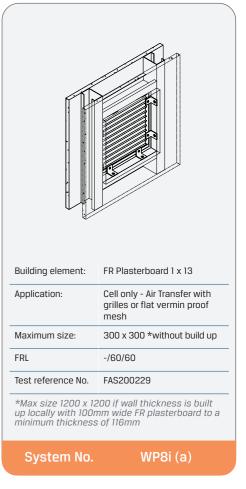
Air-Transfer



Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grilles, louvres or vermin proof mesh independently to each side of the building element

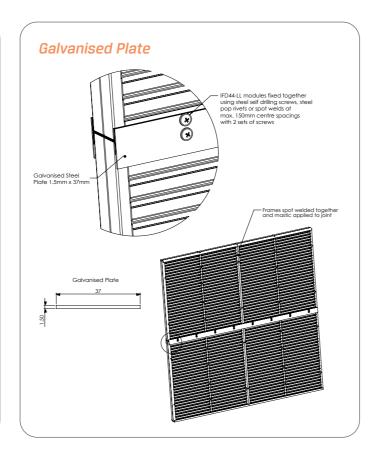
### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grilles to be fixed independently to the building element and shall not be fixed to the fire damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Air-Transfer - Modular

# U Channel 2mm Klargo Information Steel U Channel 30mm x 20mm x 1.5mm U Channel 30mm x 20mm x 1.5mm Trames spot welded together and market opplied to pint



Step 2 Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

**Step 3** Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

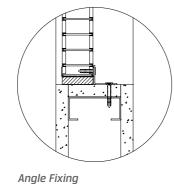
### System Notes

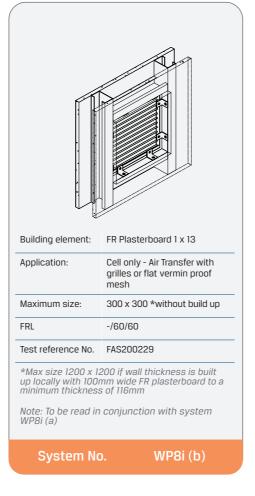
- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.

### **Alternative Fixing Methods**



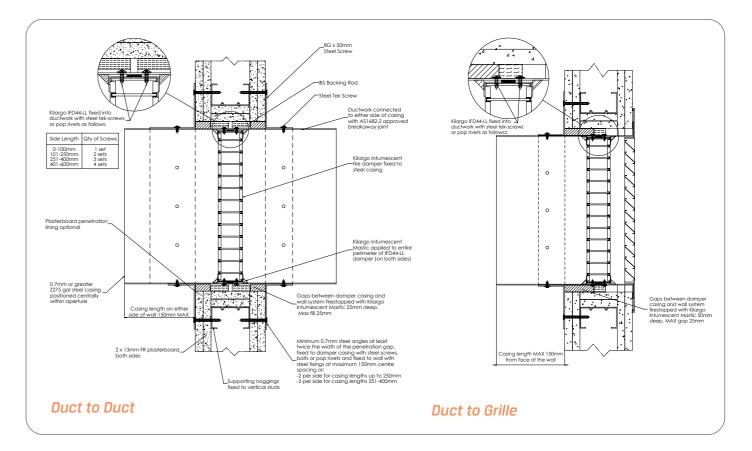
Z Bracket Fixing





### Installation Instructions:

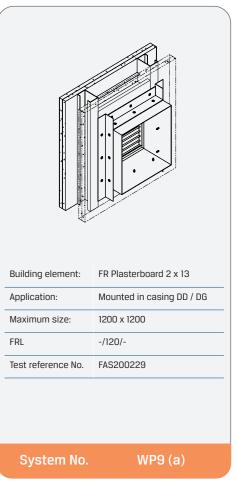
Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



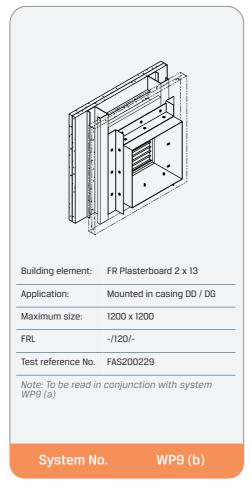
Ducted - Modular

### U Channel IFD44-LL modules fixed together using steel self drilling screws at max. 150mm centre spacings with 2 sets of screws Galvanised Steel U Channel 30mm x 20mm x 1.5mm U Channel

Step 1	Apply Kilargo Intumescent Mastic to the opposing module
Step 2	Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides
Step 3	Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

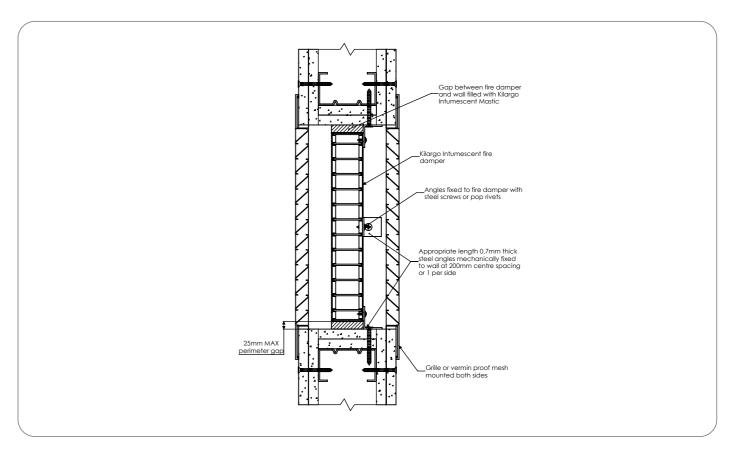
### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



### Installation Instructions:

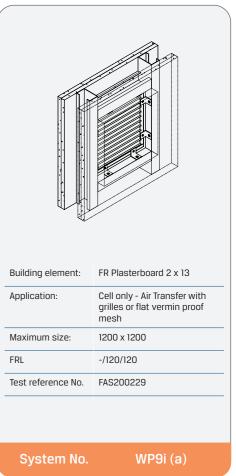
Air-Transfer



Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grilles, louvres or vermin proof mesh independently to each side of the building element

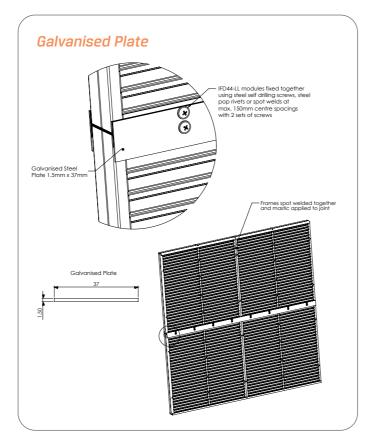
### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied
- Grilles to be fixed independently to the building element and shall not be fixed to
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Air-Transfer - Modular

# U Channel IFD44-LL modules fixed together using stells drilling screws at max. Is 50mm centre spacings with 2 sets of screws Amount of the stell o



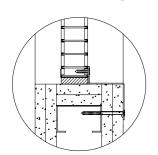
### Step 2 Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

**Step 3** Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

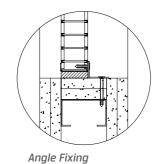
### System Notes

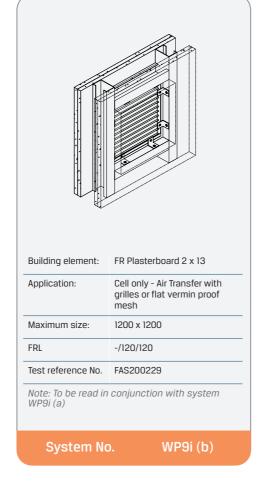
- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.

### **Alternative Fixing Methods**



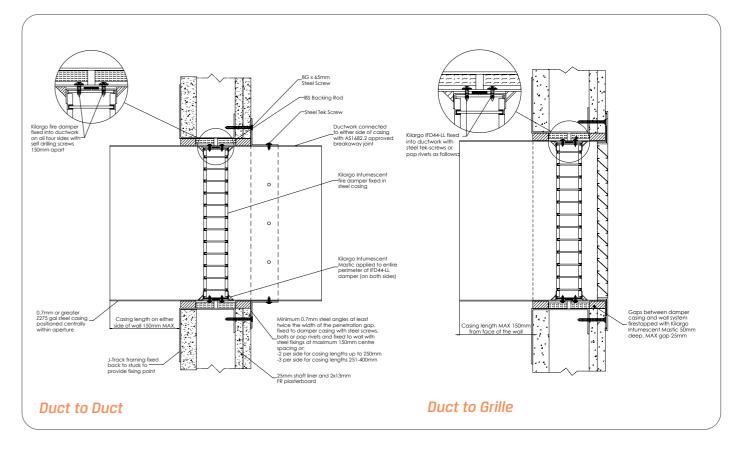
Z Bracket Fixing





### Installation Instructions:

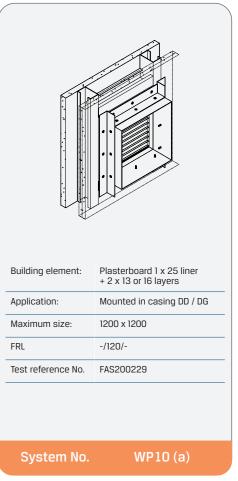
Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Ducted - Modular

## U Channel Fromes spot welded together using steel self drilling screws of max. (50mm centre spocings with 2 sels of screws Amount of the steel self drilling screws of max. (50mm centre spocings with 2 sels of screws) U Channel 30mm x 1.5mm U Channel

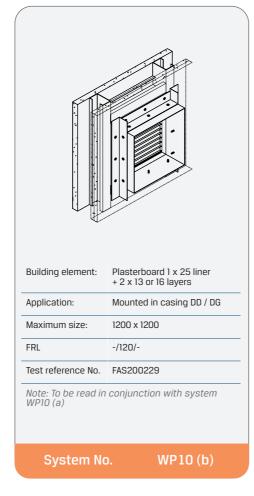
•	
Step 2	Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides
Step 3	Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

Apply Kilargo Intumescent Mastic to the opposing module

### System Notes

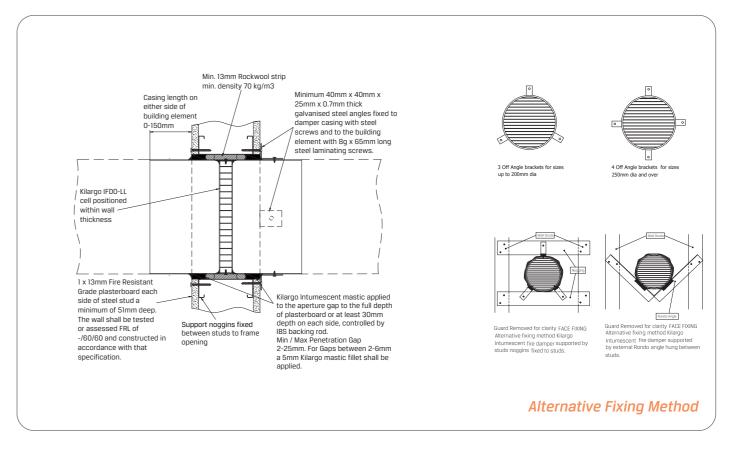
Step 1

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



### Installation Instructions:

Ducted



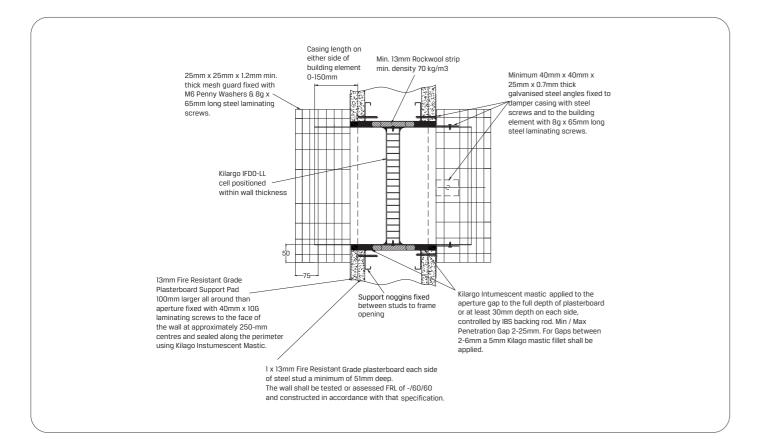
Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and packers
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper $\&$ building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

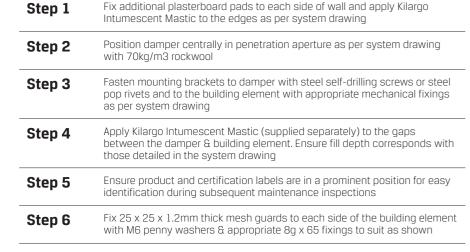
### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Air Transfer





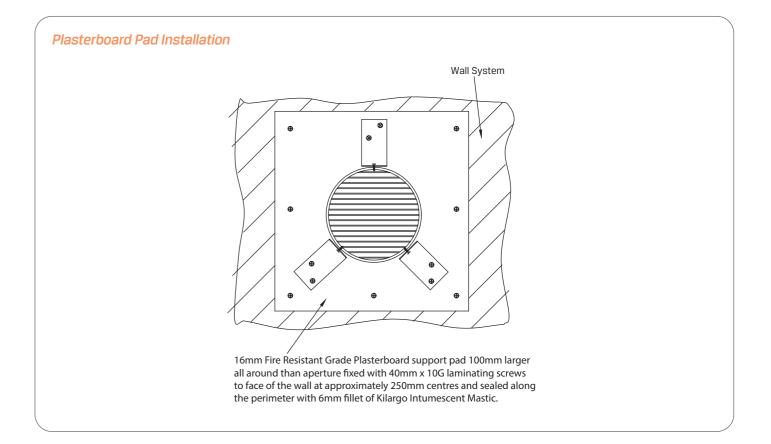
### System Notes

- Mesh guards, additional plasterboard pads, rockwool & fixings are to be supplied by others
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

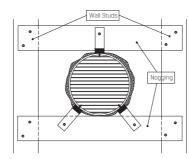
Air Transfer



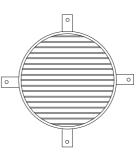
### Alternative Fixing Method



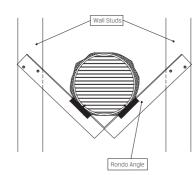
3 Off Angle brackets for sizes up to 200mm dia



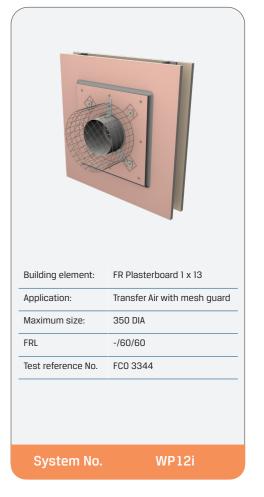
Guard Removed for clarity FACE FIXING Alternative fixing method Kilargo Intumescent fire damper supported by studs noggins fixed to studs.



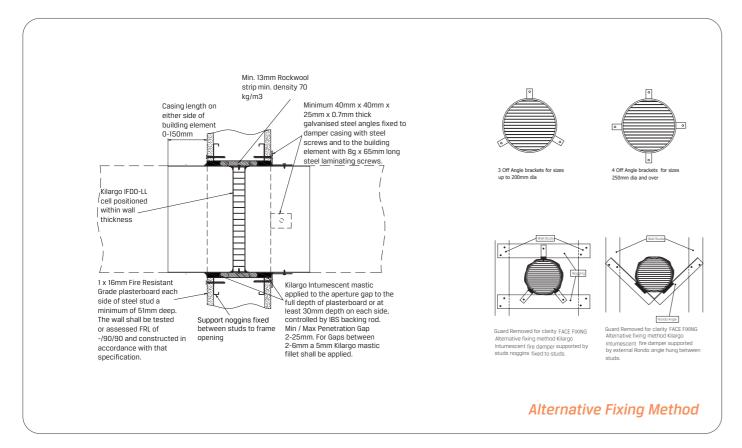
4 Off Angle brackets for sizes 250mm dia and over



Guard Removed for clarity FACE FIXING Alternative fixing method Kilargo Intumescent fire damper supported by external Rondo angle hung between studs.



Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and packers
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

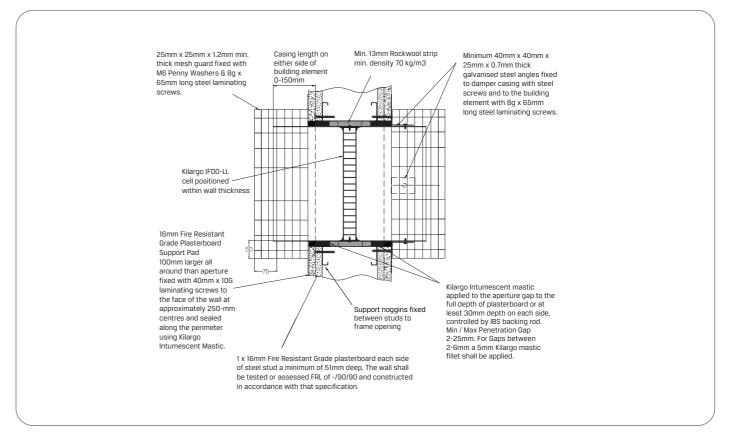
### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

Air Transfer



Step 1	Fix additional plasterboard pads to each side of wall and apply Kilargo Intumescent Mastic to the edges as per system drawing
Step 2	Position damper centrally in penetration aperture as per system drawing with 70kg/m3 rockwool
Step 3	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 4	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 5	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 6	Fix 25 x 25 x 1.2mm thick mesh guards to each side of the building element with M6 penny washers & appropriate 8g x 65 fixings to suit as shown

### System Notes

- Mesh guards, additional plasterboard pads, rockwool & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



FR Plasterboard 1 x 16
Transfer Air with mesh guard
350 DIA
-/90/90
FC0 3344

System No. WP13i

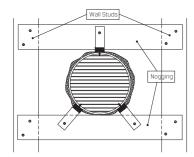
Air Transfer

### Plasterboard Pad Installation Wall System 16mm Fire Resistant Grade Plasterboard support pad 100mm larger all around than aperture fixed with 40mm x 10G laminating screws to face of the wall at approximately 250mm centres and sealed along

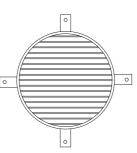
### Alternative Fixing Method



3 Off Angle brackets for sizes up to 200mm dia

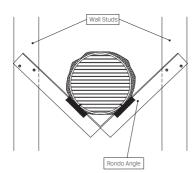


Guard Removed for clarity FACE FIXING Alternative fixing method Kilargo Intumescent fire damper supported by studs noggins fixed to studs.



the perimeter with 6mm fillet of Kilargo Intumescent Mastic.

4 Off Angle brackets for sizes 250mm dia and over

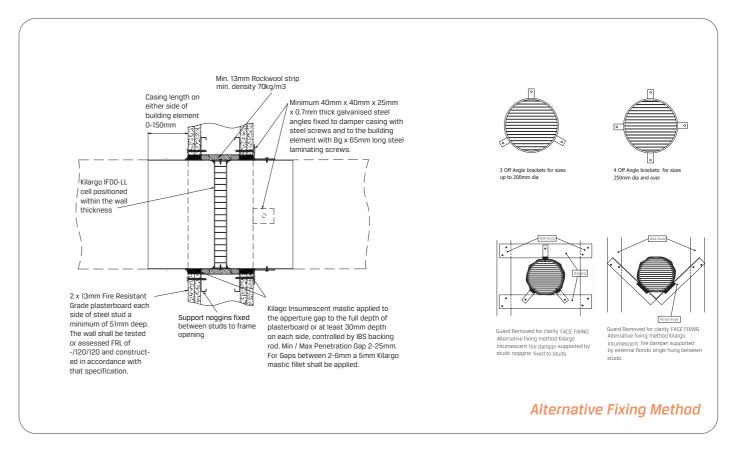


Guard Removed for clarity FACE FIXING Alternative fixing method Kilargo Intumescent fire damper supported by external Rondo angle hung between studs.



### Installation Instructions:

Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and packers
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper $\&$ building element. Ensure fill depth corresponds with those detailed in the system drawing

**Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections

Connect ductwork to the damper casing with AS1682.2 compliant

### System Notes

Step 5

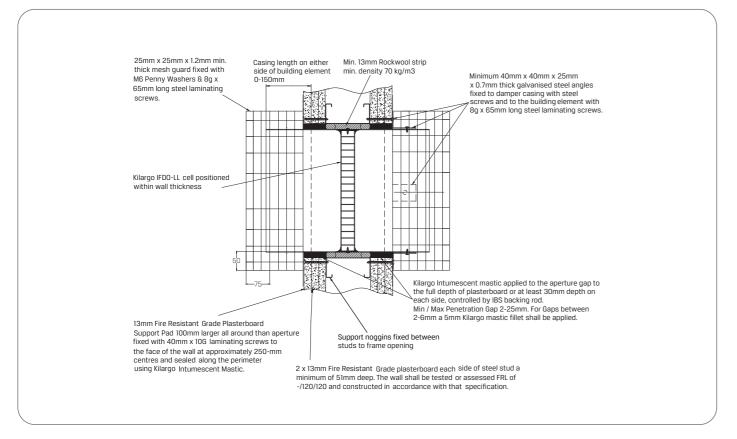
Grilles, louvres, IBS backing rod & fixings are to be supplied by others.

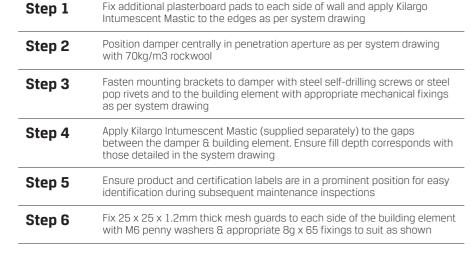
breakaway joint

- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



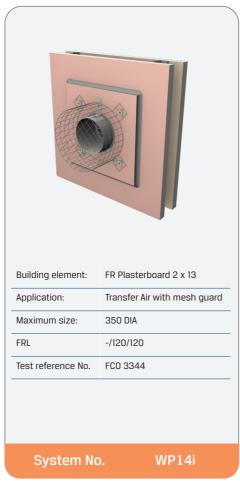
Air Transfer





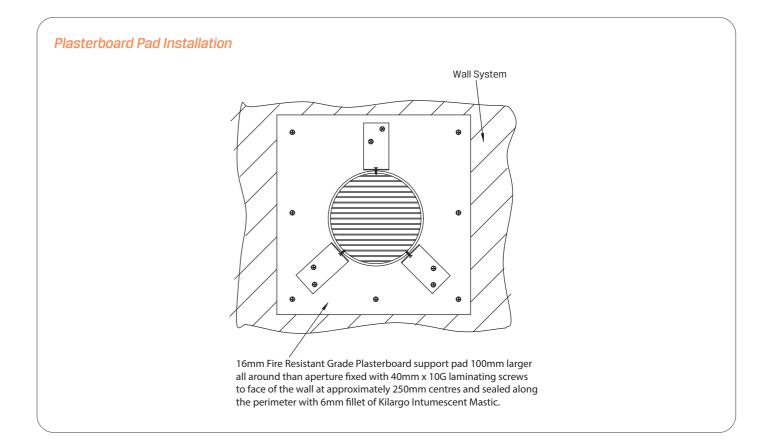
### System Notes

- Mesh guards, additional plasterboard pads, rockwool & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

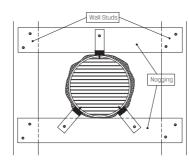
Air Transfer



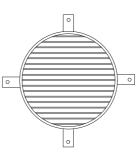
### Alternative Fixing Method



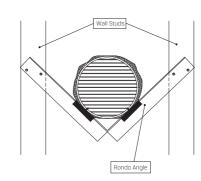
3 Off Angle brackets for sizes up to 200mm dia



Guard Removed for clarity FACE FIXING Alternative fixing method Kilargo Intumescent fire damper supported by studs noggins fixed to studs.



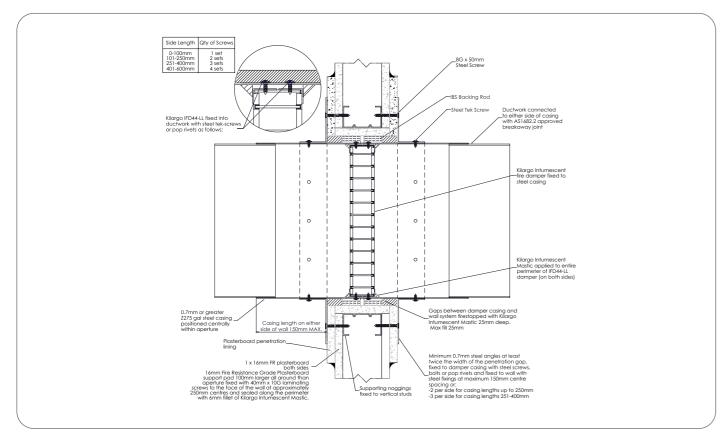
4 Off Angle brackets for sizes 250mm dia and over



Guard Removed for clarity FACE FIXING Alternative fixing method Kilargo Intumescent fire damper supported by external Rondo angle hung between studs.



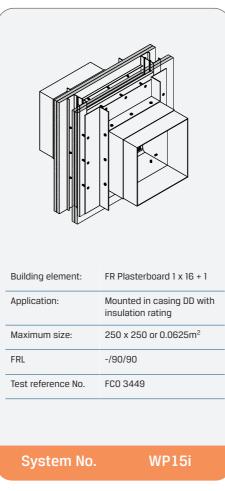
Ducted



Step 1	Install additional 100mm wide plasterboard pad around aperture as per system drawing.
Step 2	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers.
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper $\&$ building element $\&$ to perimeter of additional plasterboard pad. Ensure fill depth corresponds with those detailed in the system drawing.
Step 4	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing.
Step 5	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections.
Step 6	Connect ductwork to the damper casing with AS 1682.2 compliant breakaway joint.

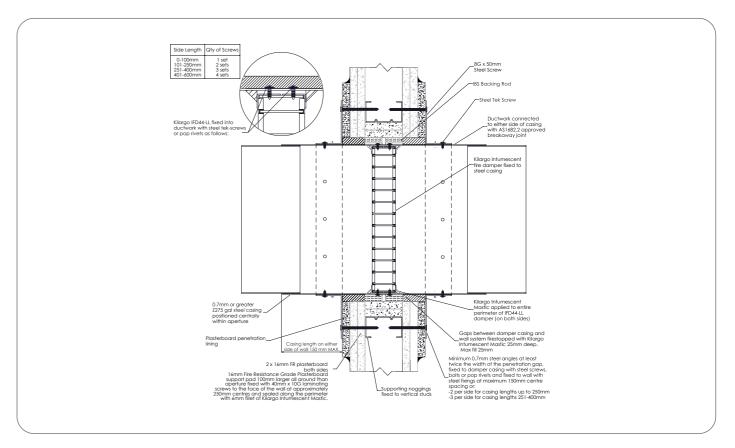
### System Notes

- IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied



### Installation Instructions:

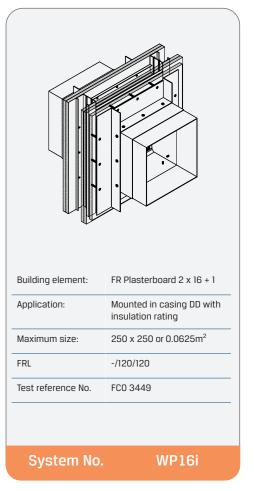
Ducted



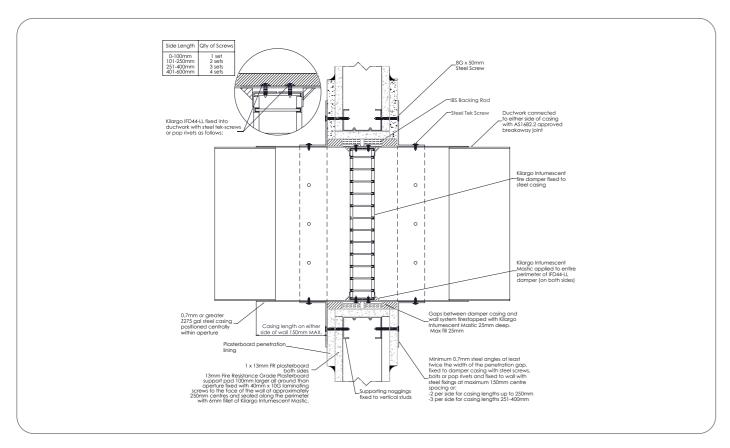
Step 1	Install additional 100mm wide plasterboard pad around aperture as per system drawing.
Step 2	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers.
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element & to perimeter of additional plasterboard pad. Ensure fill depth corresponds with those detailed in the system drawing.
Step 4	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing.
Step 5	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections.
Step 6	Connect ductwork to the damper casing with AS 1682.2 compliant breakaway joint.

### System Notes

- IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied



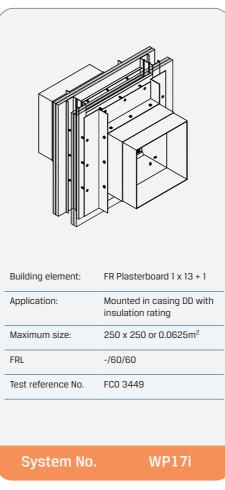
Ducted



Step 1       Install additional 100mm wide plasterboard pad around aperture as per system drawing.         Step 2       Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers.         Step 3       Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element & to perimeter of additional plasterboard pad. Ensure fill depth corresponds with those detailed in the system drawing.         Step 4       Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing.         Step 5       Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections.         Step 6       Connect ductwork to the damper casing with AS 1682.2 compliant breakaway joint.		
with IBS Backing Rod and temporary supports or packers.  Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element & to perimeter of additional plasterboard pad. Ensure fill depth corresponds with those detailed in the system drawing.  Step 4 Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing.  Step 5 Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections.  Step 6 Connect ductwork to the damper casing with AS 1682.2 compliant	Step 1	
between the damper & building element & to perimeter of additional plasterboard pad. Ensure fill depth corresponds with those detailed in the system drawing.  Step 4 Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing.  Step 5 Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections.  Step 6 Connect ductwork to the damper casing with AS 1682.2 compliant	Step 2	
pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing.  Step 5  Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections.  Step 6  Connect ductwork to the damper casing with AS 1682.2 compliant	Step 3	between the damper & building element & to perimeter of additional plasterboard pad. Ensure fill depth corresponds with those detailed in the
identification during subsequent maintenance inspections.  Step 6 Connect ductwork to the damper casing with AS 1682.2 compliant	Step 4	pop rivets and, if detailed, to the building element with appropriate
OLCH O	Step 5	1 1 2
	Step 6	, ,

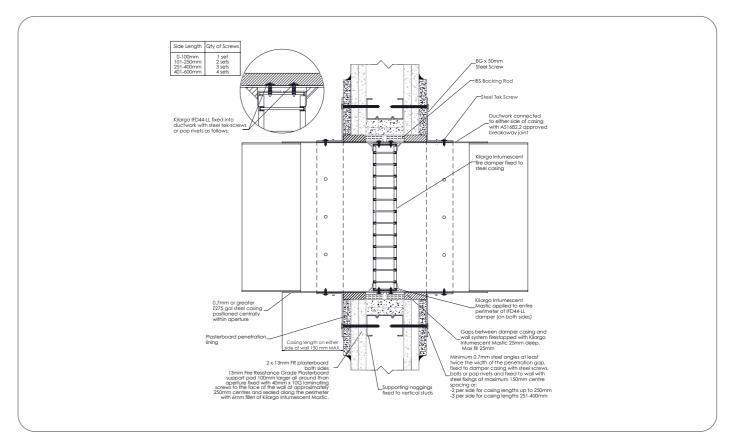
### System Notes

- IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied



### Installation Instructions:

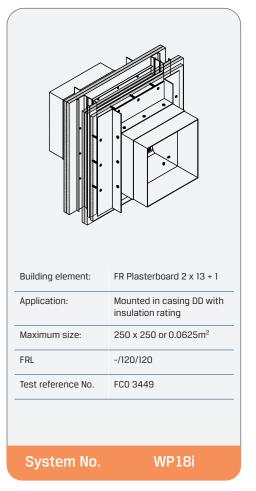
Ducted



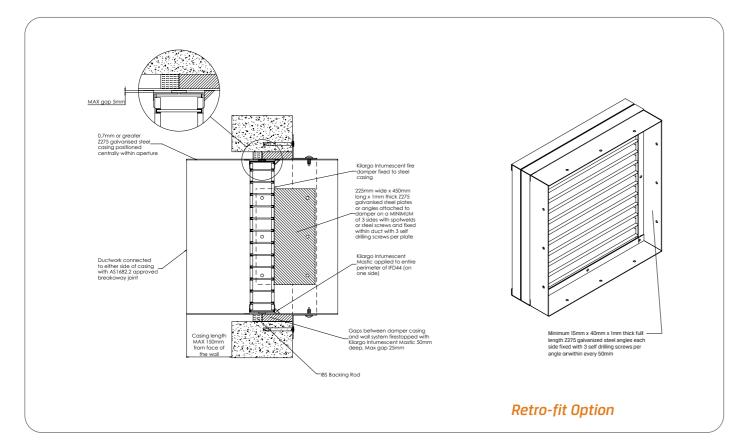
Step 1	Install additional 100mm wide plasterboard pad around aperture as per system drawing.
Step 2	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers.
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element & to perimeter of additional plasterboard pad. Ensure fill depth corresponds with those detailed in the system drawing.
Step 4	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing.
Step 5	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections.
Step 6	Connect ductwork to the damper casing with AS 1682.2 compliant breakaway joint.

### System Notes

- IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied



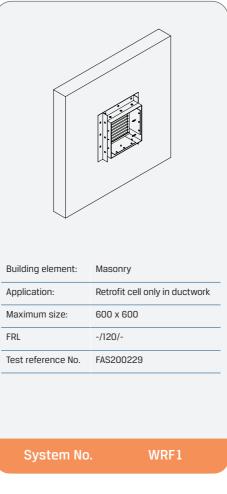
Ducted - Retro-fit



Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
Step 2	Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

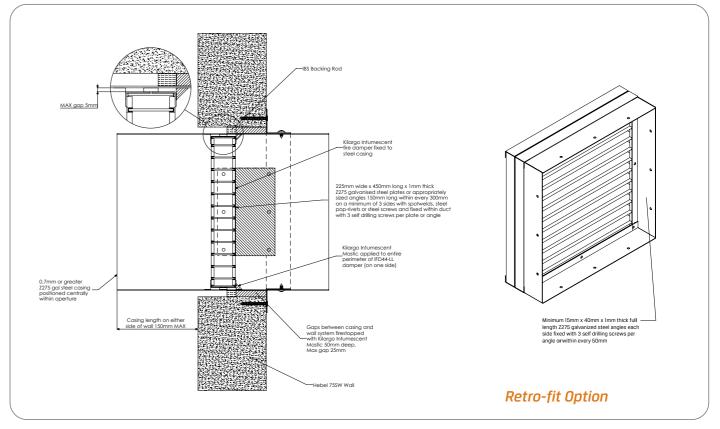
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

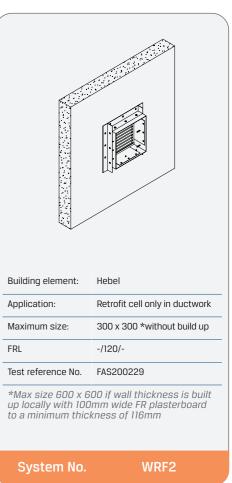
Ducted - Retro-fit



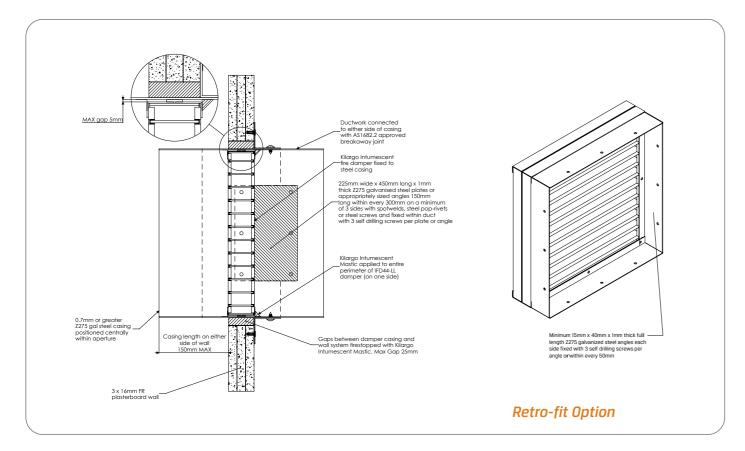
- Step 1 Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



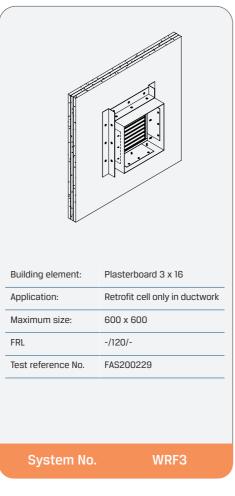
Ducted - Retro-fit



Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
Step 2	Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

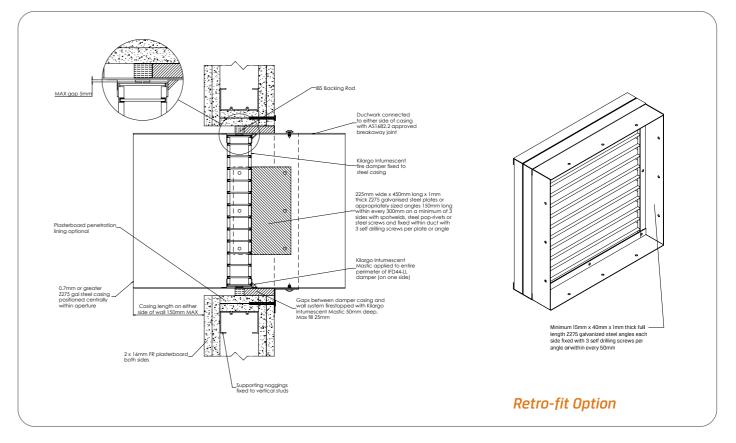
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

Ducted - Retro-fit

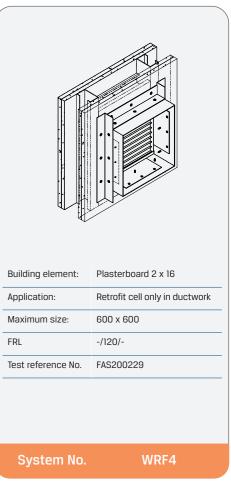


Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws
-	or steel pop rivets as per the system drawing

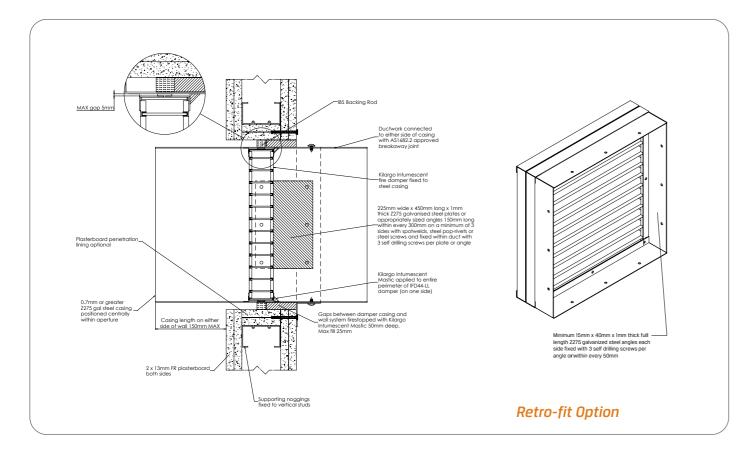
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



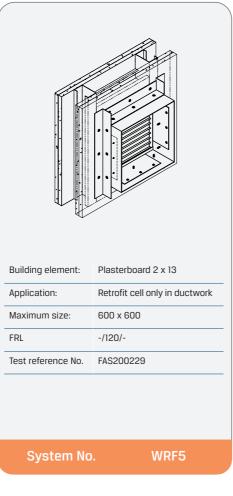
Ducted - Retro-fit



Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
Step 2	Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

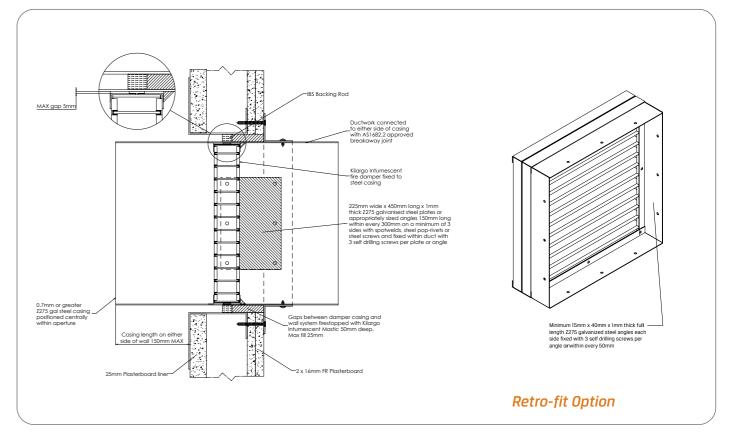
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

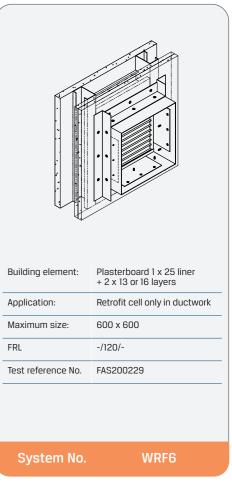
Ducted - Retro-fit



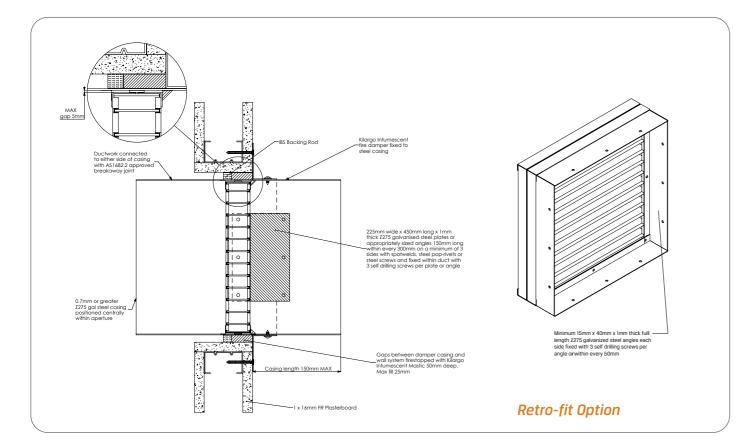
- Step 1 Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



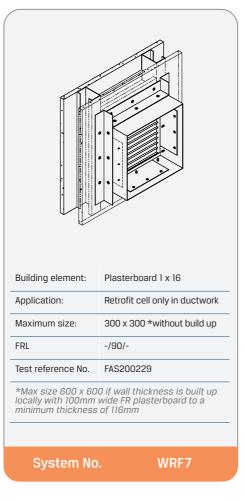
Ducted - Retro-fit



Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
Step 2	Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

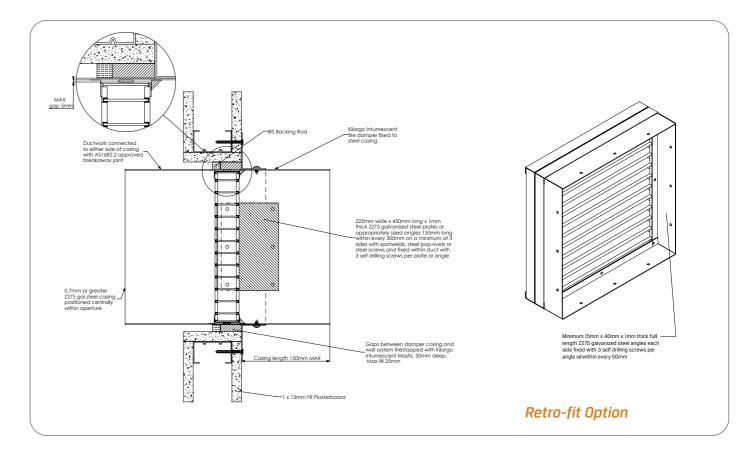
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

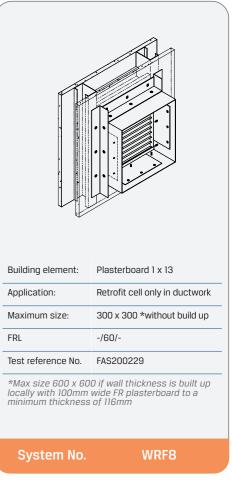
Ducted - Retro-fit



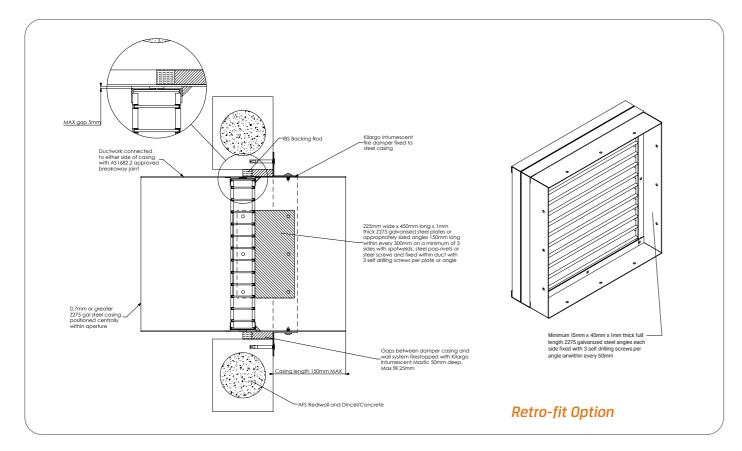
- Step 1 Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



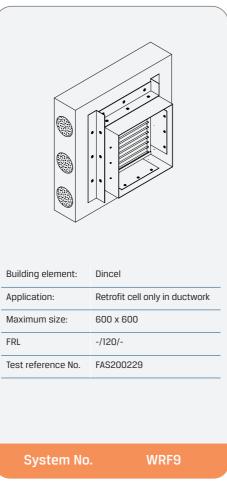
Ducted - Retro-fit



Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
Step 2	Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

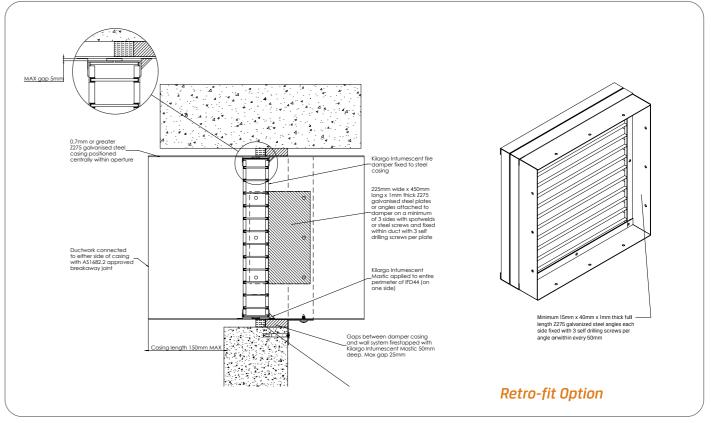
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

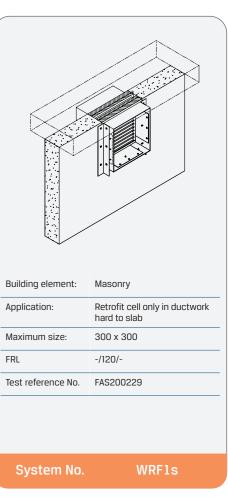
Ducted - Retro-fit



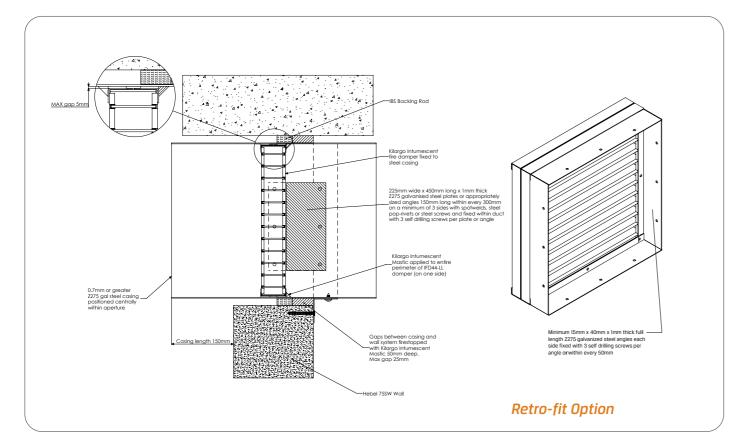
- Step 1 Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



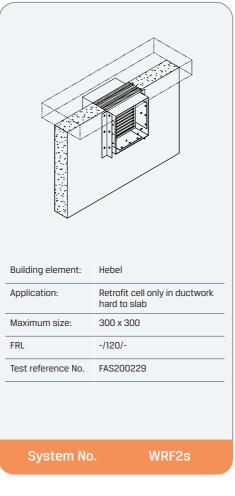
Ducted - Retro-fit



Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
Step 2	Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

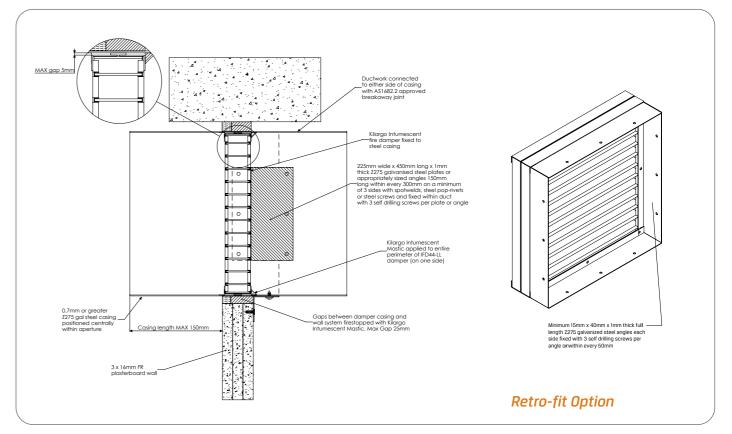
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

Ducted - Retro-fit

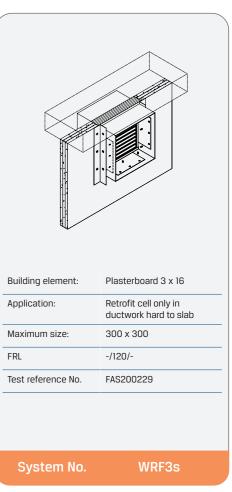


Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing

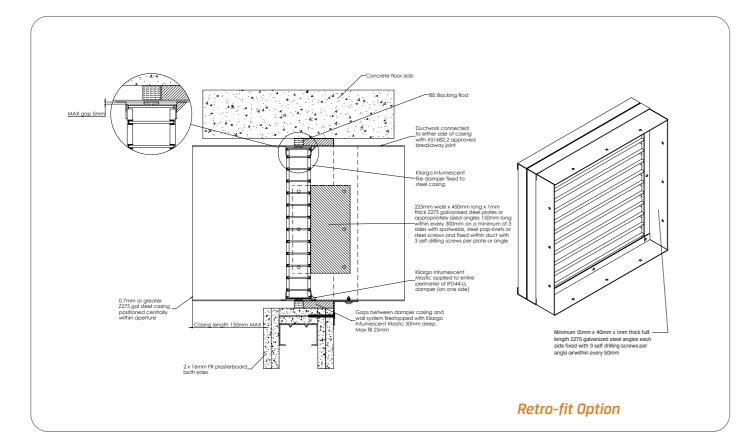
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of ASI682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



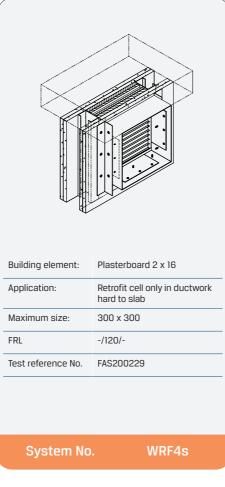
Ducted - Retro-fit



Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
Step 2	Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

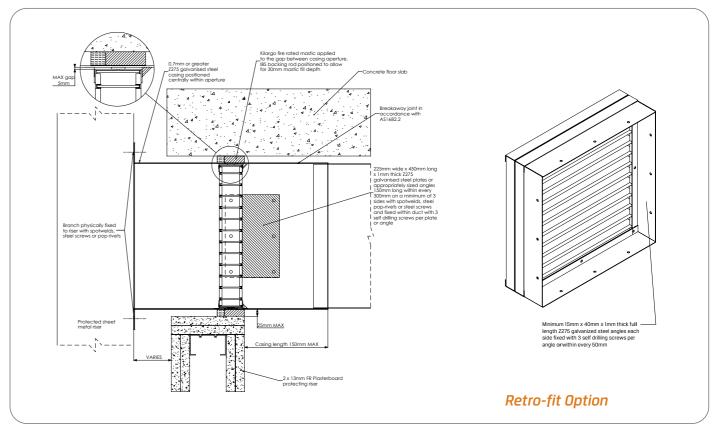
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

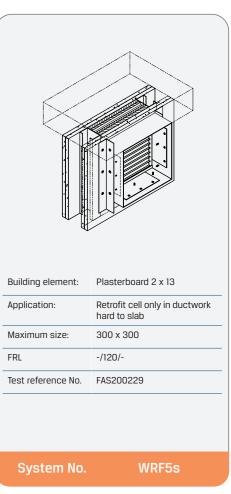
Ducted - Retro-fit



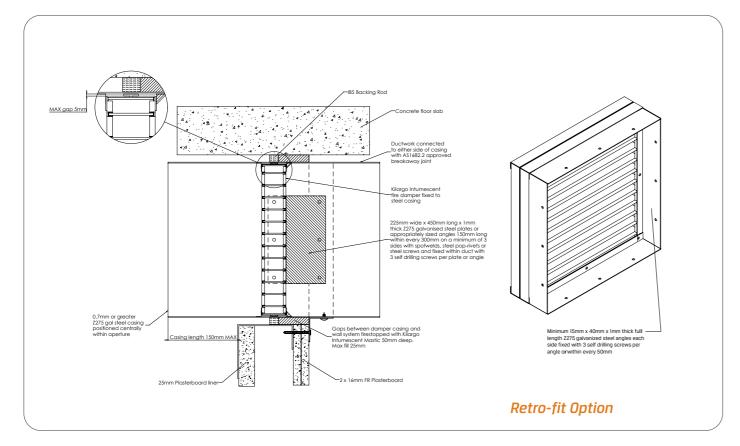
- Step 1 Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



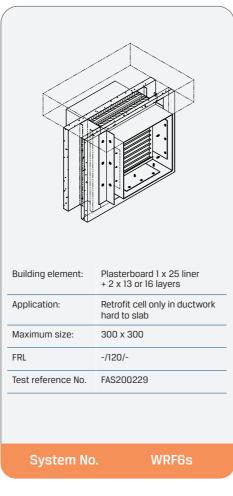
Ducted - Retro-fit



Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
Step 2	Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

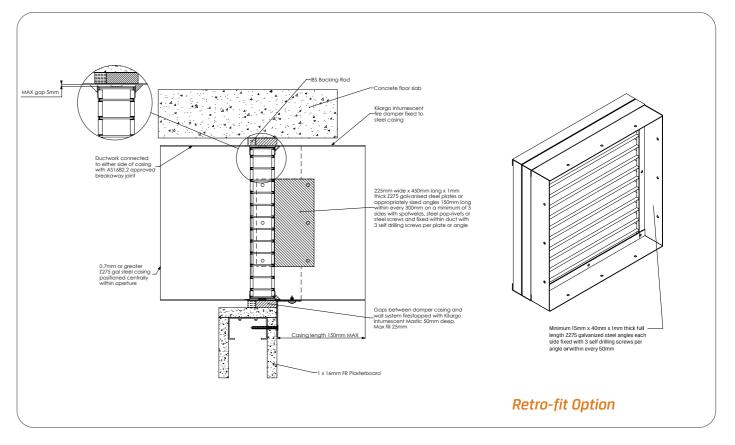
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

Ducted - Retro-fit

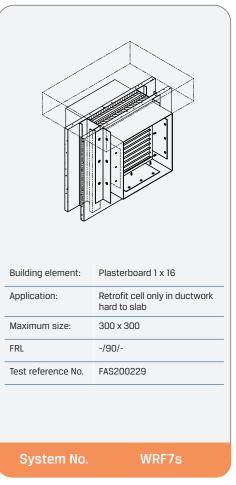


Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing

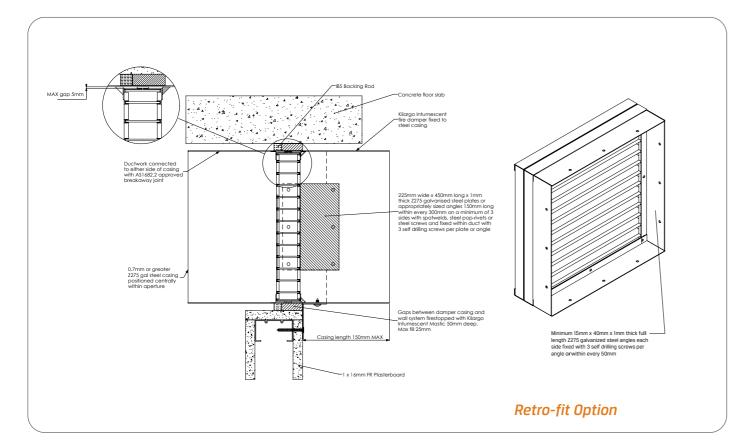
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- **Step 5** Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Ducted - Retro-fit

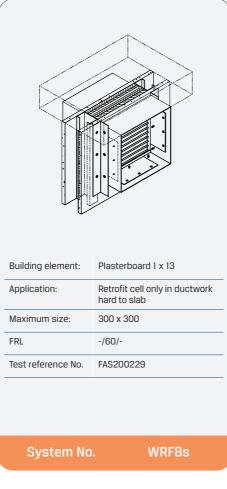


Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
Step 2	Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

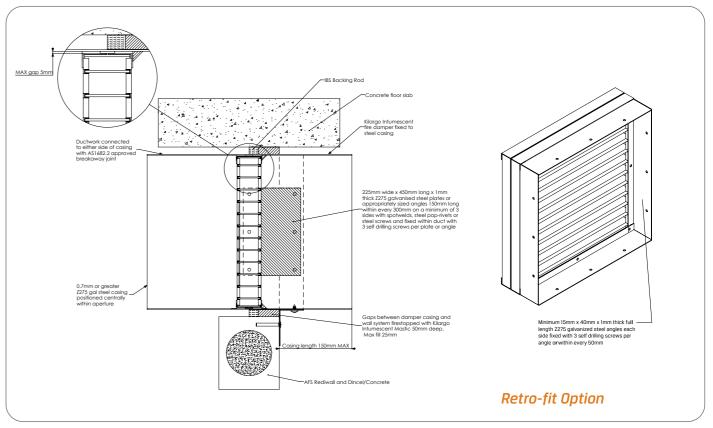
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- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

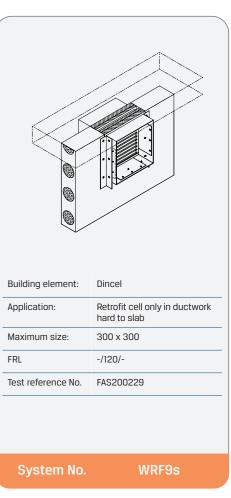
Ducted - Retro-fit



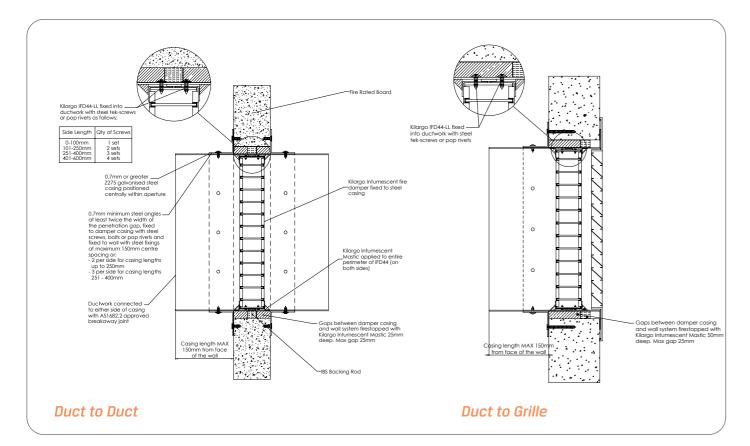
- Step 1 Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



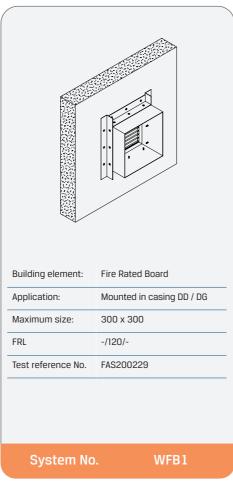
Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

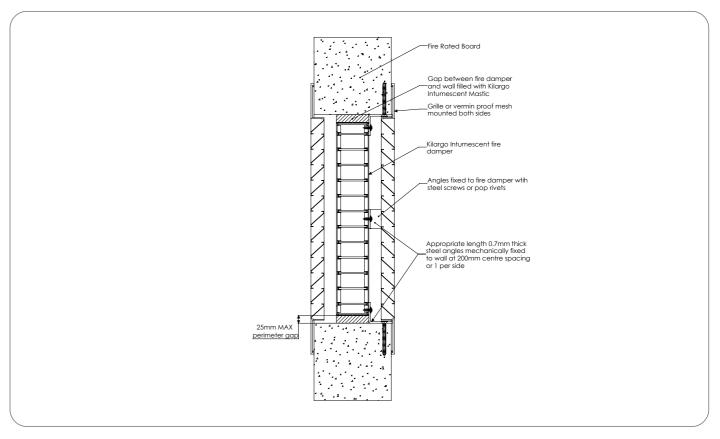
### System Notes

- $\bullet \hspace{0.5cm}$  Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

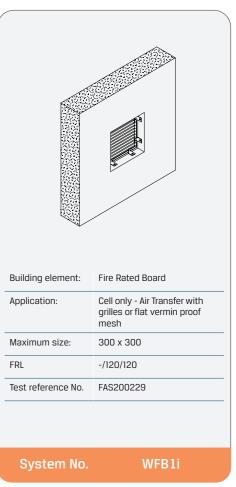
Air-Transfer



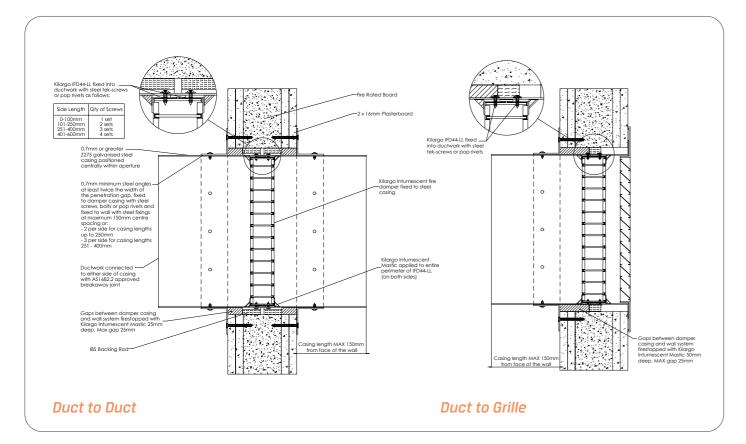
Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grilles, louvres or vermin proof mesh independently to each side of the building element

### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grilles to be fixed independently to the building element and shall not be fixed to the fire damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



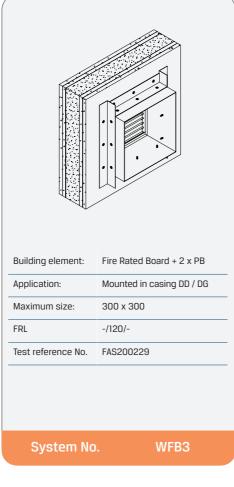
Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

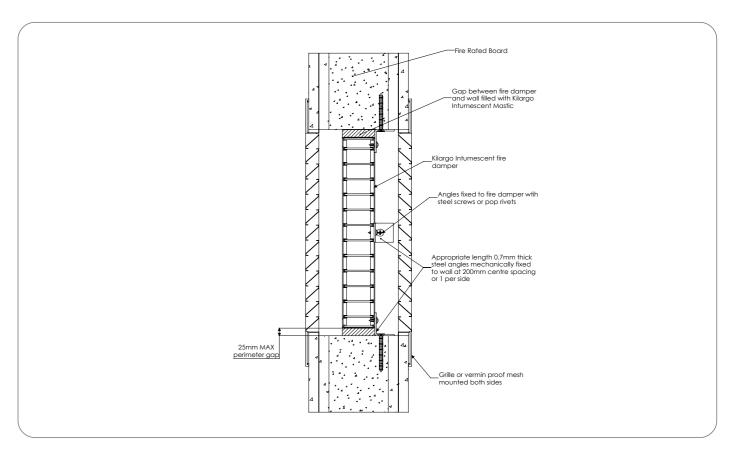
### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

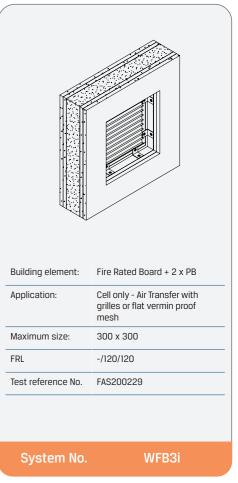
Air-Transfer

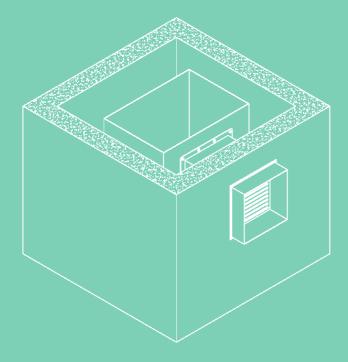


Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grilles, louvres or vermin proof mesh independently to each side of the building element

### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grilles to be fixed independently to the building element and shall not be fixed to the fire damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.

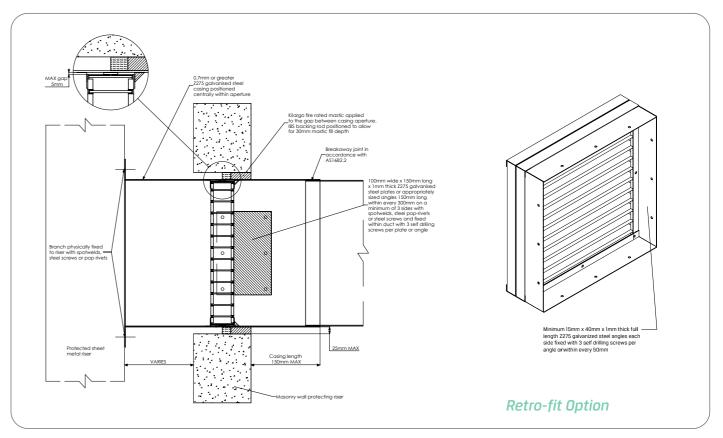




### **SHAFT WALL SYSTEMS**

### Installation Instructions:

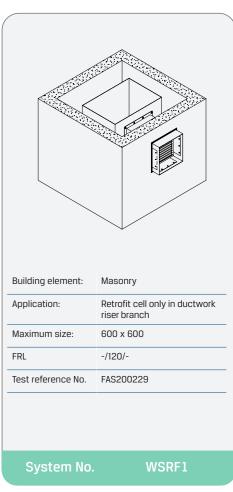
Ducted - Retro-fit



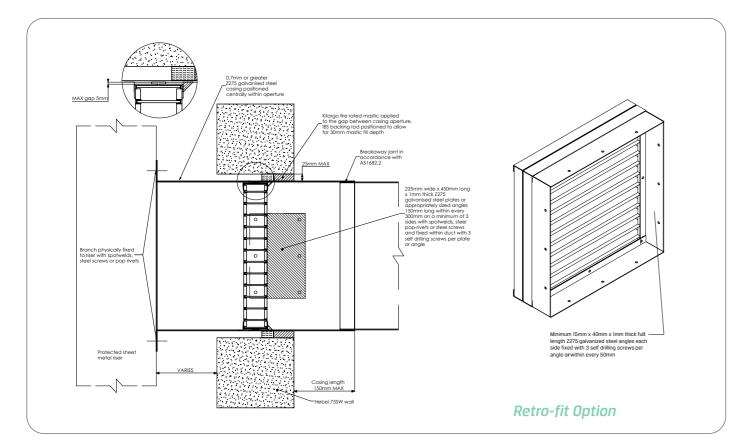
Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
Step 2	Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



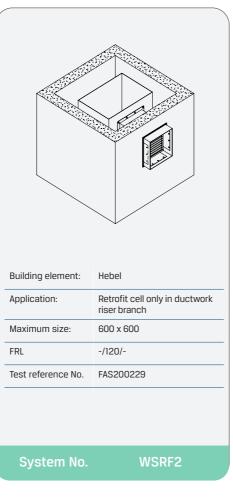
Ducted - Retro-fit



- **Step 1** Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

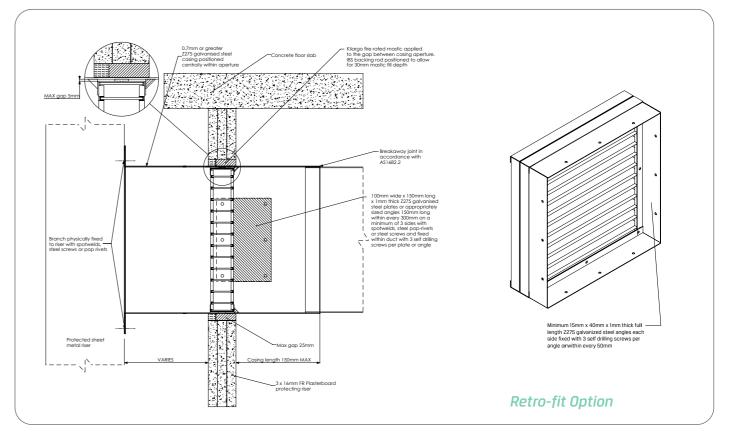
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

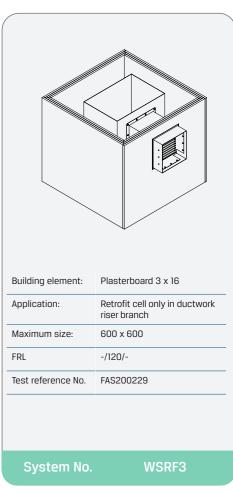
Ducted - Retro-fit



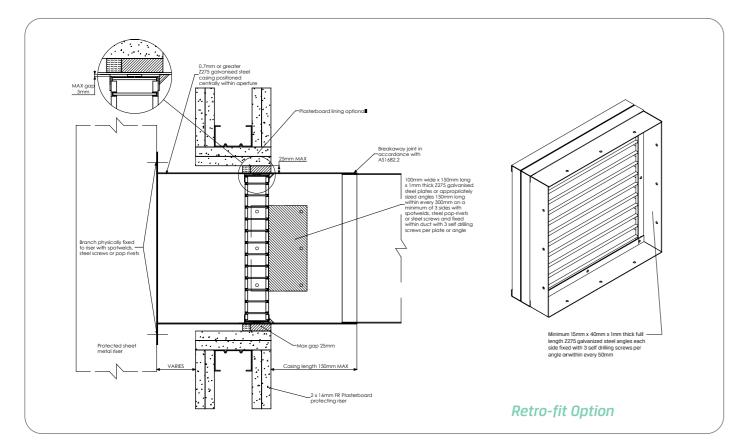
- Step 1 Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



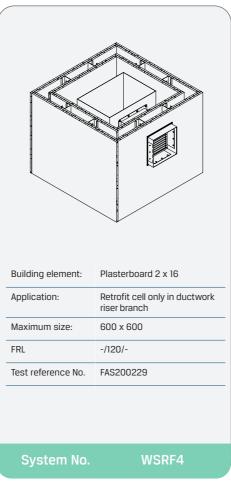
Ducted - Retro-fit



- Step 1 Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

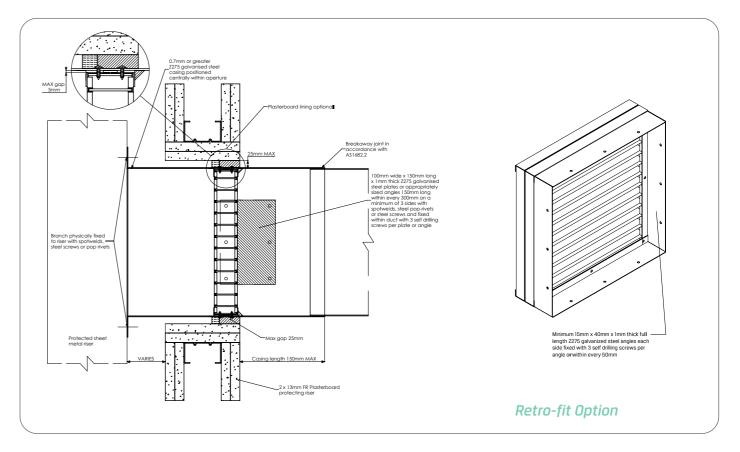
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

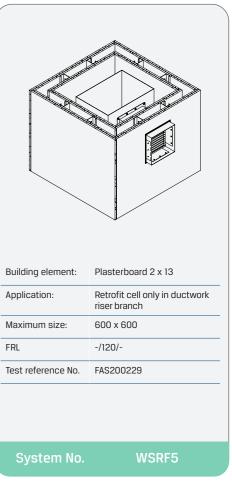
Ducted - Retro-fit



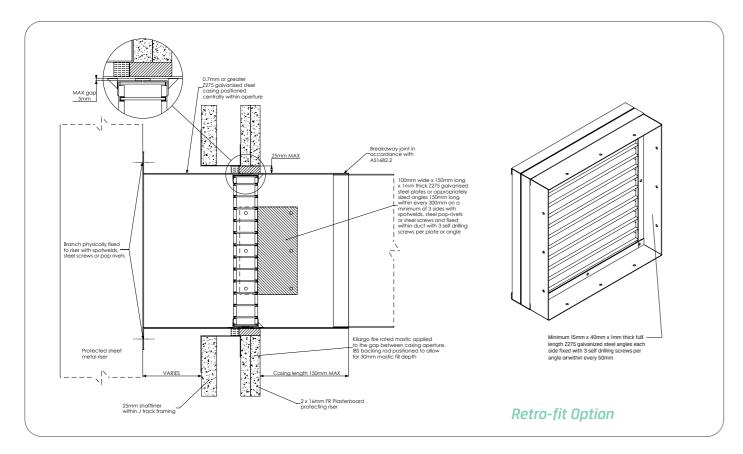
- Step 1 Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Ducted - Retro-fit

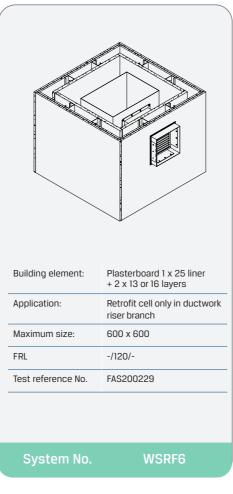


- Step 1
   Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing

   Step 2
   Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

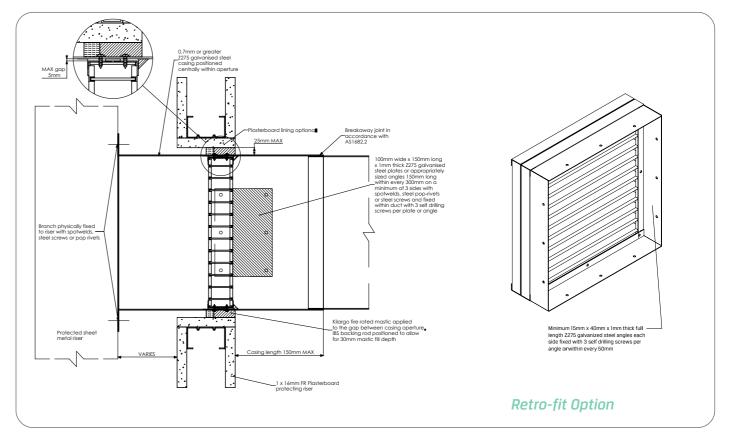
### **System Notes**

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

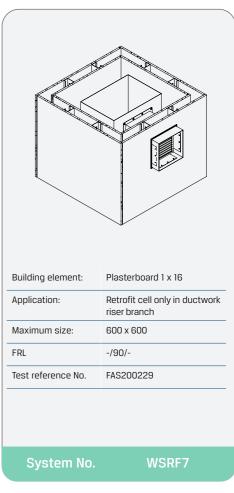
Ducted - Retro-fit



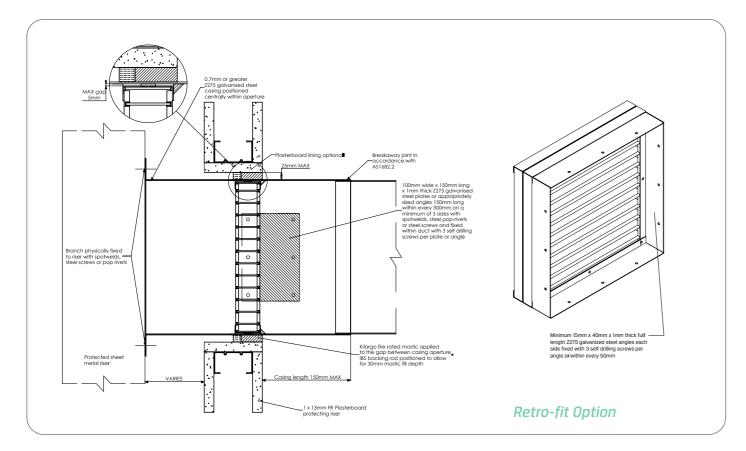
- **Step 1** Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



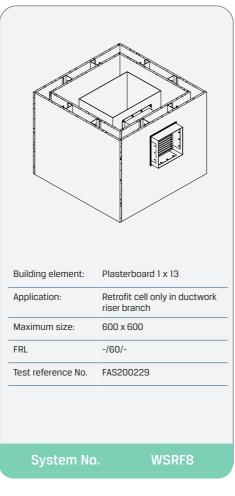
Ducted - Retro-fit



- Step 1 Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

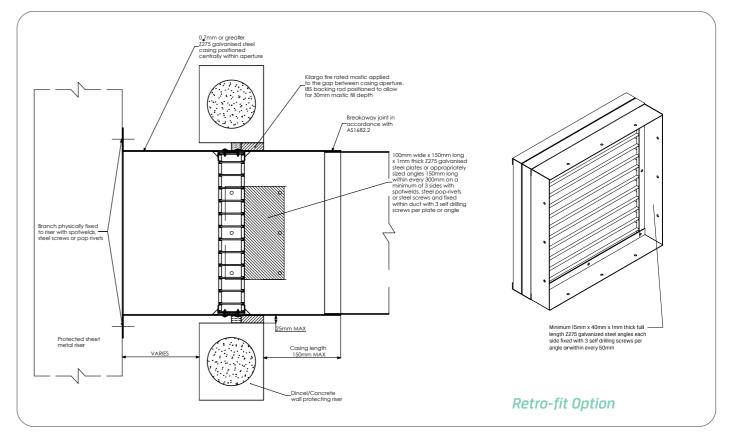
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

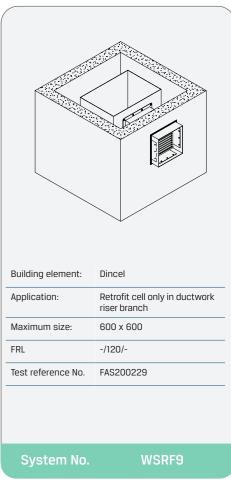
Ducted - Retro-fit



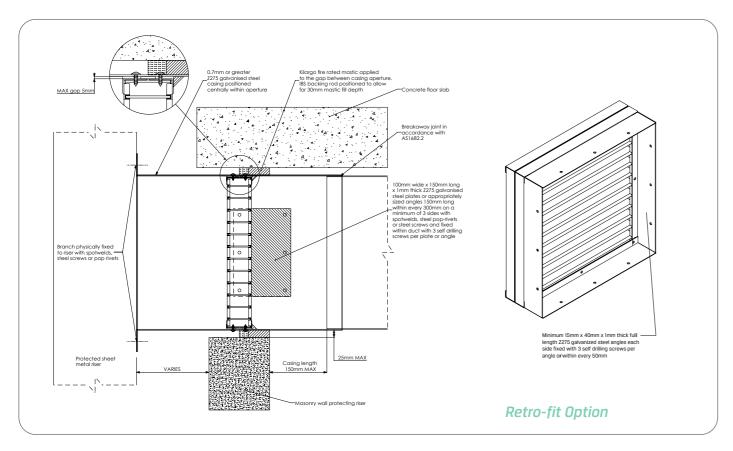
- Step 1 Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Ducted - Retro-fit



OLCD I	Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
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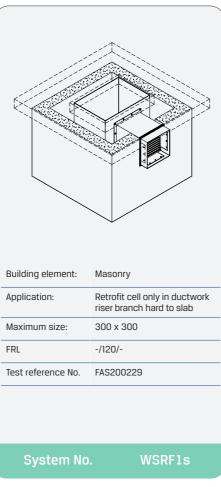
## Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds

# Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod

- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

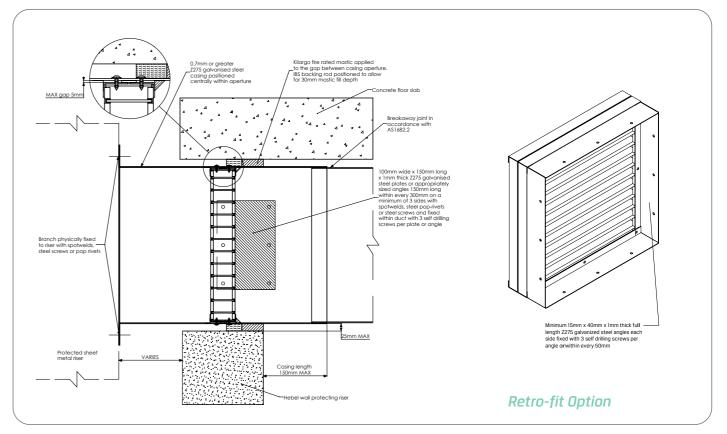
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

Ducted - Retro-fit



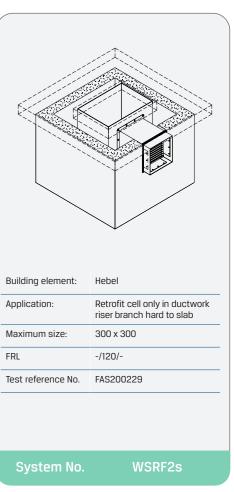
Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws
- 1-p	or steel non rivets as ner the system drawing

Step 2	Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws,
	non rivete or enot welde

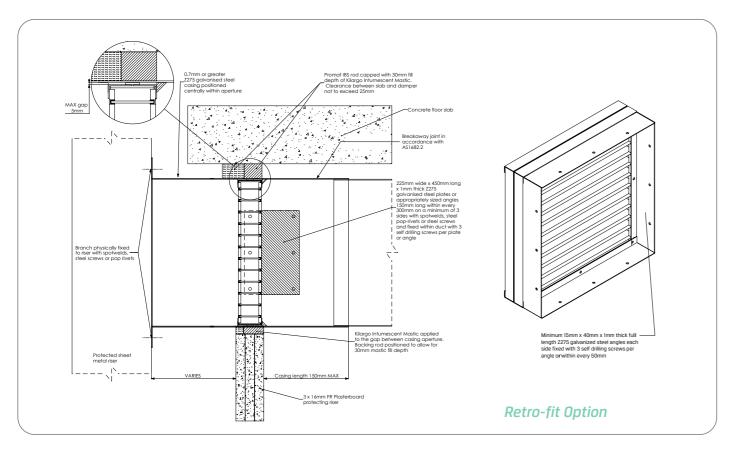
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Ducted - Retro-fit



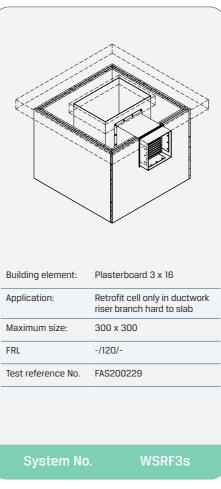
# Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds

# Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod

- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

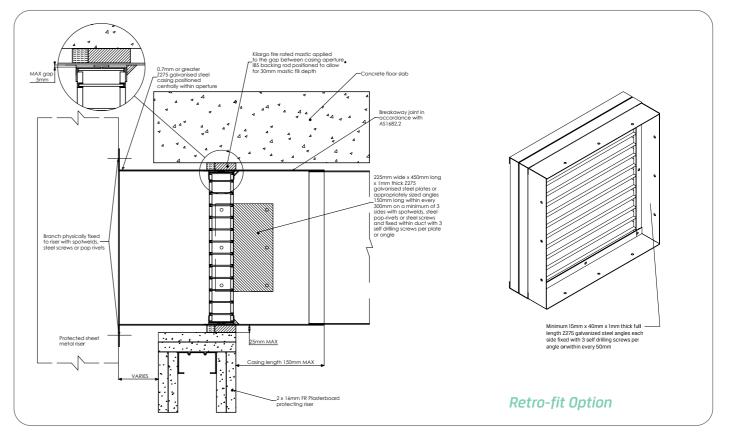
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

Ducted - Retro-fit



Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws
отор -	or steel pop rivets as per the system drawing

Step 2	Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws,
	pop rivets or spot welds

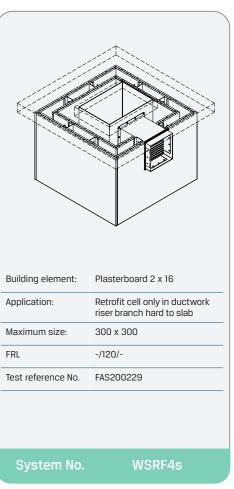
Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod

**Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections

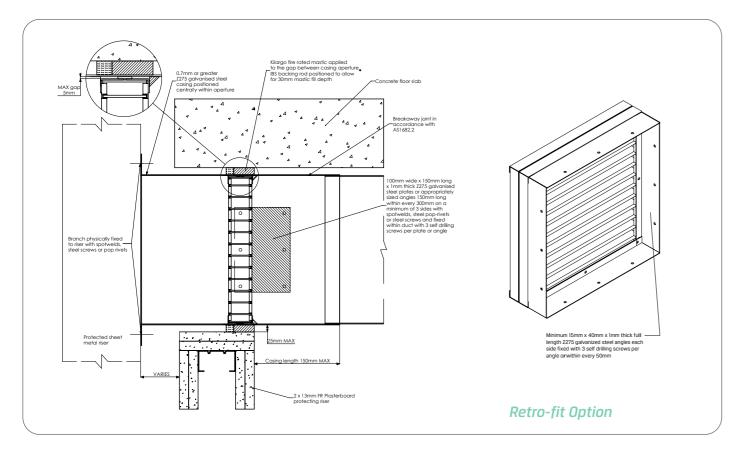
Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Ducted - Retro-fit

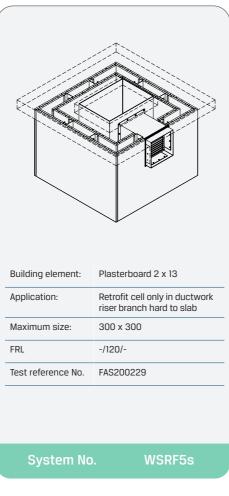


<b>Step 1</b> Fasten mounting angles or plates to damper with steel self-drilling so or steel pop rivets as per the system drawing	crews
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- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

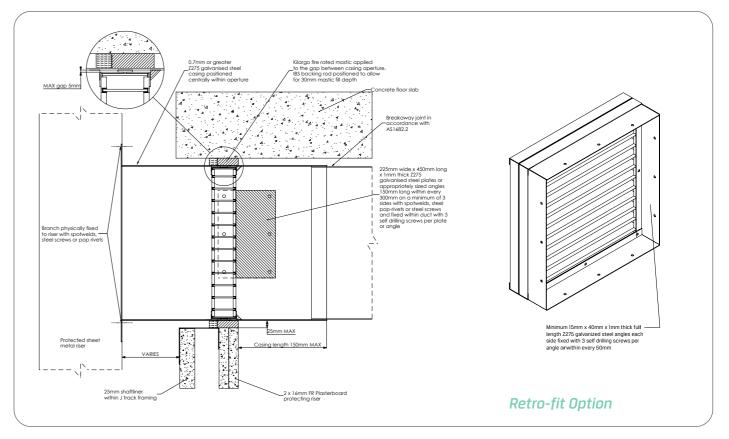
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

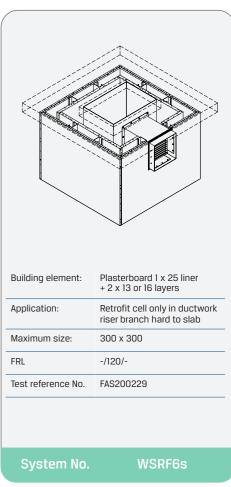
Ducted - Retro-fit



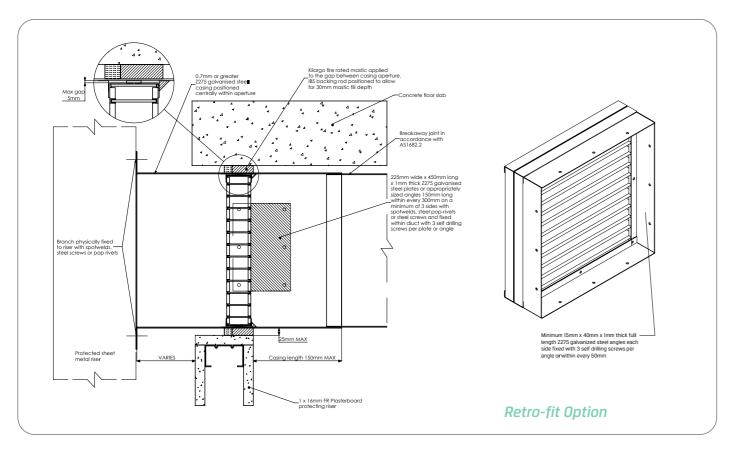
- **Step 1** Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Ducted - Retro-fit



Step 1	Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
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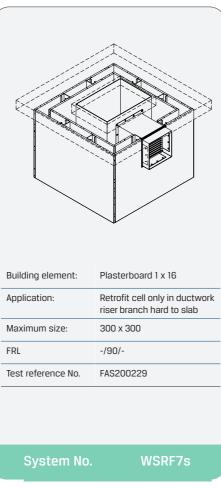
# Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds

# Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod

- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint.

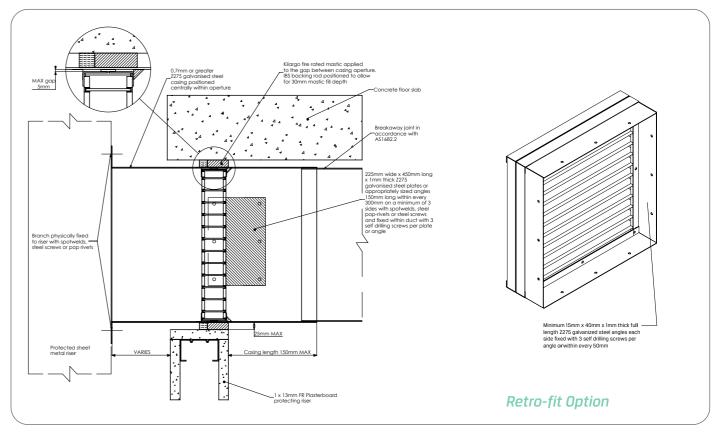
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

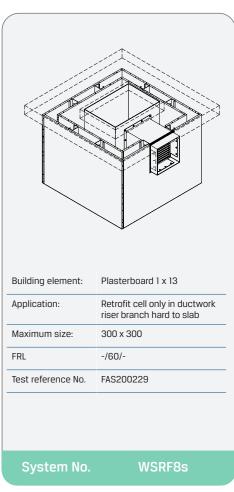
Ducted - Retro-fit



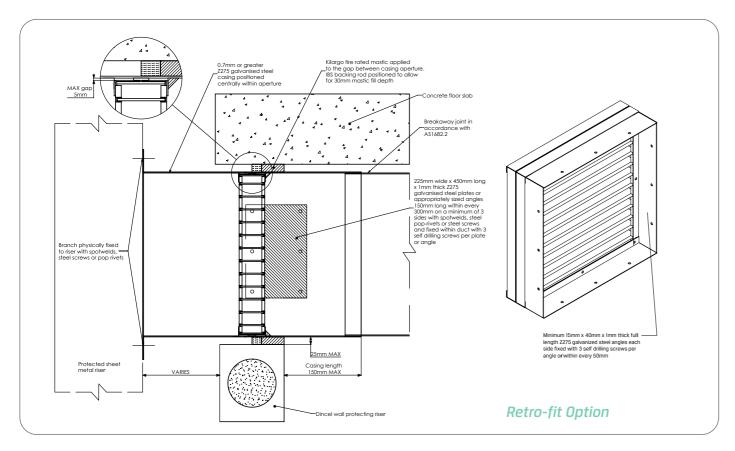
- **Step 1** Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing
- Step 2 Position damper inside ductwork within the wall thickness as per system drawing and fix mounting angles or plates with steel self-drilling screws, pop rivets or spot welds
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS backing rod
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Ducted - Retro-fit



 Step 1
 Fasten mounting angles or plates to damper with steel self-drilling screws or steel pop rivets as per the system drawing

 Step 2
 Position damper inside ductwork within the wall thickness as per system

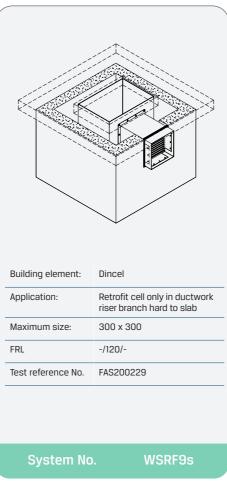
drawing and fix mounting angles or plates with steel self-drilling screws,

- pop rivets or spot welds

  Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper, damper casing & building element. Ensure fill depth corresponds with those detailed in the system drawing by using IBS
- Step 4 Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- Step 5 Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

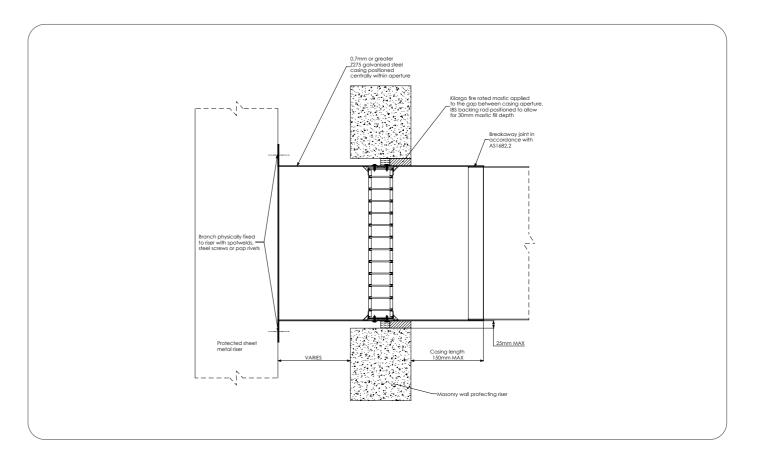
### System Notes

- Angles, brackets, plates, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

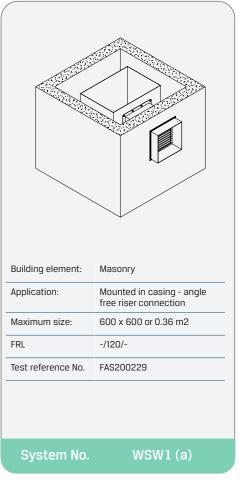
Ducted



- Step 1 Position and fix damper into ductwork with steel screws or pop rivets as per system drawing ensuring that the damper will be aligned and within the fire separating shaft wall once the duct is attached to the riser.
- Step 2 Seal internal gap between damper and duct with Kilargo Intumescent Mastic as per system drawing.
- **Step 3** Mechanically connect duct to riser with steel screws or steel pop rivets.
- Once shaftwall has been constructed, firestop gaps between the duct and shaftwall with Kilargo Intumescent Mastic (supplied separately). Ensure fill depth corresponds with those detailed in the system drawing. Note: A maximum perimeter clearance of 25mm applies. Use IBS backing rod to control fill depth.
- **Step 5** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections.
- **Step 6** When connecting ductwork to the damper casing, use AS1682.2 compliant breakaway joint.

### System Notes

- Fixings & IBS backing rod are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of ASI682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



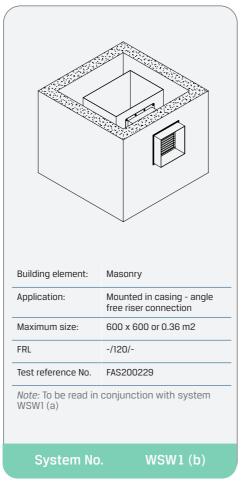
Ducted - Modular

# Figures spot weisland together using steel self drilling screws of max. I Somm centre spocings with 2 sets of screws Calvanised Steel U Channel 3/mm x 1.5/mm 20mm x 1.5/mm U Channel

Step 1	Apply Kilargo Intumescent Mastic to the opposing module
Step 2	Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides
Step 3	Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

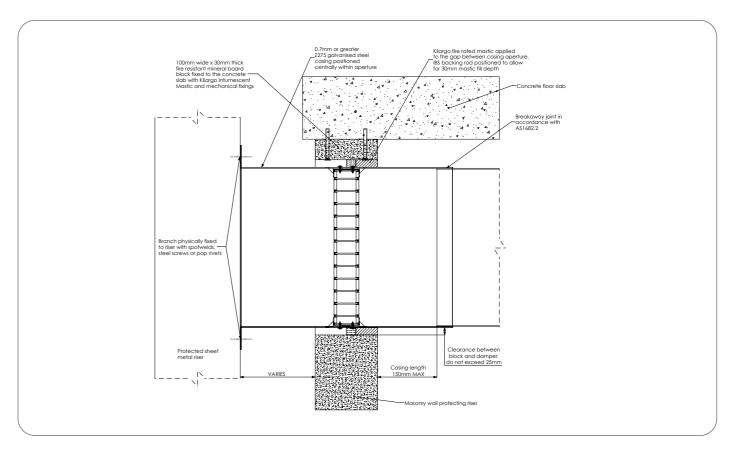
### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



### Installation Instructions:

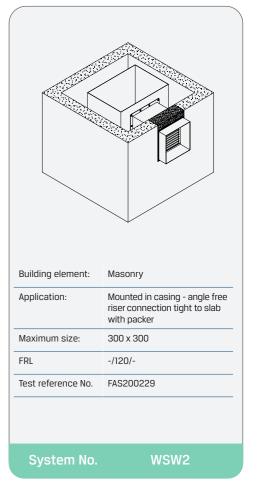
Ducted



Step 1	Position and fix damper into ductwork with steel screws or pop rivets as per system drawing ensuring that the damper will be aligned and within the fire separating shaft wall once the duct is attached to the riser
Step 2	Seal internal gap between damper and duct with Kilargo Intumescent Mastic as per system drawing
Step 3	Measure and cut 100mm wide x 30mm thick fire-resistant mineral board packer (supplied by others) to match the damper width
Step 4	Mechanically fix 100mm wide x 30mm thick fire-resistant mineral board packer to concrete slab, with Kilargo Intumescent Mastic in between, and steel anchors as per system drawings
Step 5	Mechanically connect duct to riser with steel screws or steel pop rivets
Step 6	Once shaftwall has been constructed, firestop gaps between the duct and shaftwall with Kilargo Intumescent Mastic (supplied separately). Ensure fill depth corresponds with those detailed in the system drawing. <b>Note:</b> A maximum perimeter clearance of 25mm applies. Use IBS backing rod to control fill depth
Step 7	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 8	When connecting ductwork to the damper casing, use AS1682.2 compliant breakaway joint

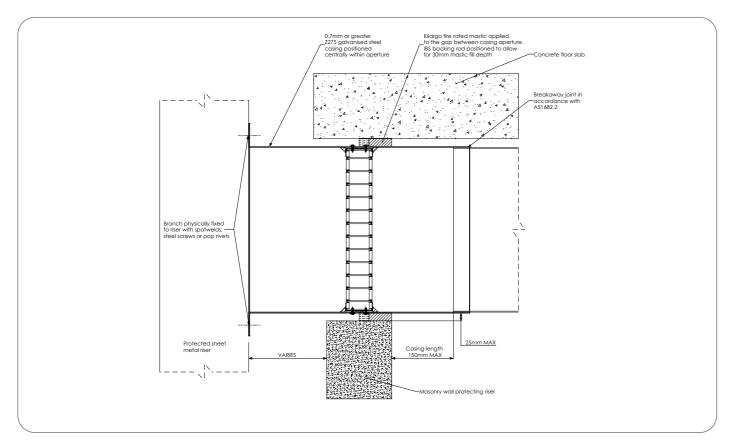
### System Notes

- Casing, fire-resistant mineral board packer, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



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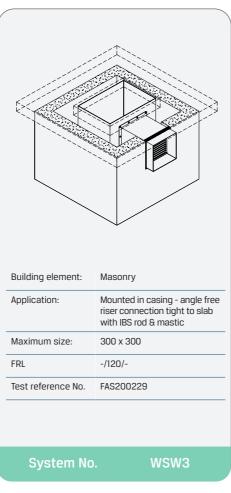
Ducted



Step 1	Position and fix damper into ductwork with steel screws or pop rivets as per system drawing ensuring that the damper will be aligned and within the fire separating shaft wall once the duct is attached to the riser
Step 2	Seal internal gap between damper and duct with Kilargo Intumescent Mastic as per system drawing
Step 3	Mechanically connect duct to riser with steel screws or steel pop rivets
Step 4	Once shaftwall has been constructed, firestop gaps between the duct and shaftwall with Kilargo Intumescent Mastic (supplied separately). Ensure fill depth corresponds with those detailed in the system drawing. Note: A maximum perimeter clearance of 25mm applies. Use IBS backing rod to control fill depth
Step 5	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 6	When connecting ductwork to the damper casing, use AS1682.2 compliant breakaway joint.

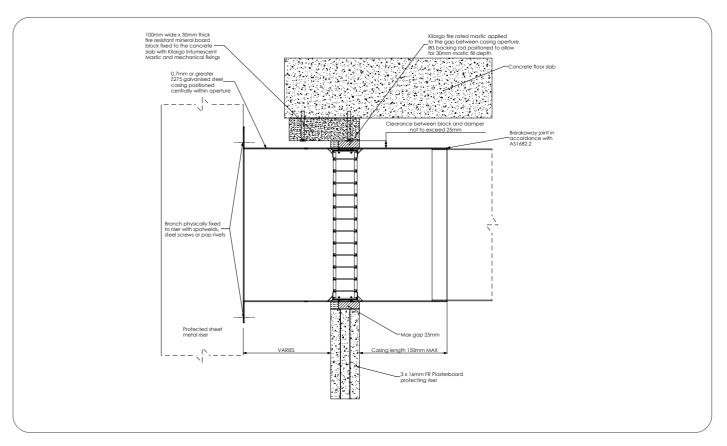
### System Notes

- Fixings & IBS backing rod are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



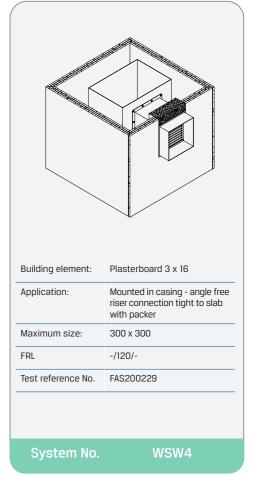
### Installation Instructions:

Ducted

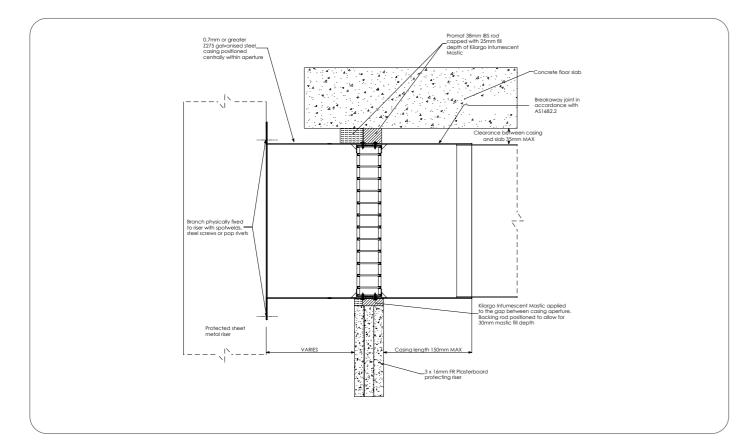


Step 1	Position and fix damper into ductwork with steel screws or pop rivets as pe system drawing ensuring that the damper will be aligned and within the fire separating shaft wall once the duct is attached to the riser
Step 2	Seal internal gap between damper and duct with Kilargo Intumescent Mastic as per system drawing
Step 3	Measure and cut 100mm wide x 30mm thick fire-resistant mineral board packer (supplied by others) to match the damper width
Step 4	Mechanically fix 100mm wide x 30mm thick fire-resistant mineral board packer to concrete slab, with Kilargo Intumescent Mastic in between, and steel anchors as per system drawings
Step 5	Mechanically connect duct to riser with steel screws or steel pop rivets
Step 6	Once shaftwall has been constructed, firestop gaps between the duct and shaftwall with Kilargo Intumescent Mastic (supplied separately). Ensure fill depth corresponds with those detailed in the system drawing. <b>Note:</b> A maximum perimeter clearance of 25mm applies. Use IBS backing rod to control fill depth
Step 7	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 8	When connecting ductwork to the damper casing, use AS1682.2 compliant breakaway joint

- Casing, fire-resistant mineral board packer, IBS backing rod & fixings are to be supplied
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Ducted



Step 1	Position and fix damper into ductwork with steel screws or pop rivets as per system drawing ensuring that the damper will be aligned and within the fire separating shaft wall once the duct is attached to the riser
Step 2	Seal internal gap between damper and duct with Kilargo Intumescent Mastic as per system drawing
Step 3	Mechanically connect duct to riser with steel screws or steel pop rivets

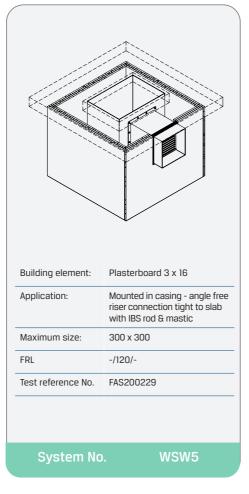
Once shaftwall has been constructed, firestop gaps between the duct and shaftwall with Kilargo Intumescent Mastic (supplied separately). Ensure fill depth corresponds with those detailed in the system drawing. Note: A maximum perimeter clearance of 25mm applies. Use IBS backing rod to control fill depth

**Step 5** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections

**Step 6** When connecting ductwork to the damper casing, use AS1682.2 compliant breakaway joint

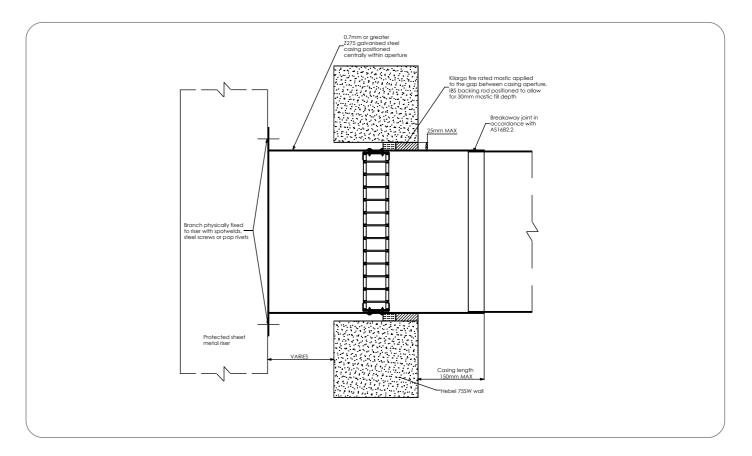
### System Notes

- Fixings & IBS backing rod are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this
  detail, including the use of Kilargo Intumescent Mastic and in accordance with the
  requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

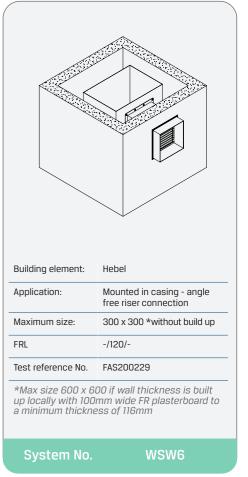
Ducted



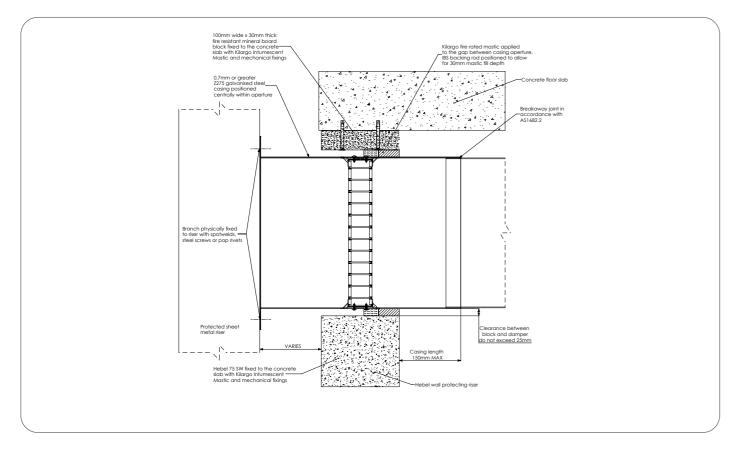
Step 1	Position and fix damper into ductwork with steel screws or pop rivets as per system drawing ensuring that the damper will be aligned and within the fire separating shaft wall once the duct is attached to the riser
Step 2	Seal internal gap between damper and duct with Kilargo Intumescent Mastic as per system drawing
Step 3	Mechanically connect duct to riser with steel screws or steel pop rivets
Step 4	Once shaftwall has been constructed, firestop gaps between the duct and shaftwall with Kilargo Intumescent Mastic (supplied separately). Ensure fill depth corresponds with those detailed in the system drawing. Note: A maximum perimeter clearance of 25mm applies. Use IBS backing rod to control fill depth
Step 5	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 6	When connecting ductwork to the damper casing, use AS1682.2 compliant breakaway joint

### System Notes

- Fixings & IBS backing rod are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Ducted



Step 1	Position and fix damper into ductwork with steel screws or pop rivets as per system drawing ensuring that the damper will be aligned and within the fire separating shaft wall once the duct is attached to the riser
Step 2	Seal internal gap between damper and duct with Kilargo Intumescent Mastic as per system drawing

Step 3	Measure and cut 100mm wide x 30mm thick fire-resistant mineral board packer (supplied by others) to match the damper width

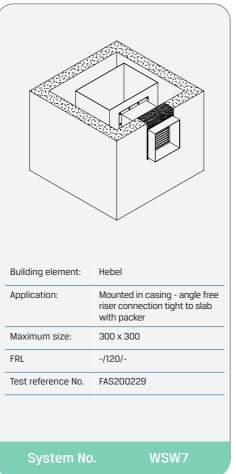
Step 4	Mechanically fix 100mm wide x 30mm thick fire-resistant mineral board packer to concrete slab, with Kilargo Intumescent Mastic in between, and
	steel anchors as per system drawings

# Once shaftwall has been constructed, firestop gaps between the duct and shaftwall with Kilargo Intumescent Mastic (supplied separately). Ensure fill depth corresponds with those detailed in the system drawing. **Note:** A maximum perimeter clearance of 25mm applies. Use IBS backing rod to control fill depth

01 0	When appropriate distribute the demonstration and ACICOO O compliant
Step 8	When connecting ductwork to the damper casing, use AS 1682.2 compliant
	breakaway inint

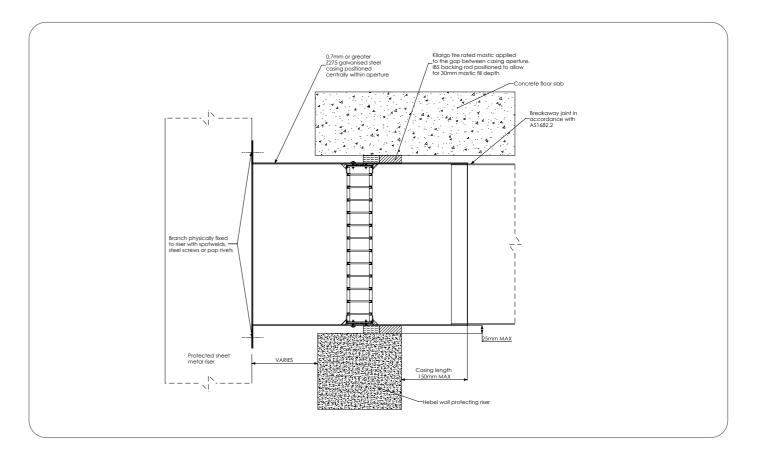
### System Notes

- Casing, fire-resistant mineral board packer, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
   Fire damper insulation requirements are not required for shaft mounted fire damper as per
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

Ducted



Step 1	Position and fix damper into ductwork with steel screws or pop rivets as per system drawing ensuring that the damper will be aligned and within the fire separating shaft wall once the duct is attached to the riser
	separating shaft wall once the duct is attached to the riser

Step 2	Seal internal gap between damper and duct with Kilargo Intumescent
	Mastic as per system drawing

**Step 3** Mechanically connect duct to riser with steel screws or steel pop rivets

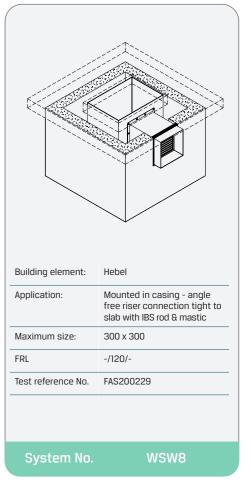
Once shaftwall has been constructed, firestop gaps between the duct and shaftwall with Kilargo Intumescent Mastic (supplied separately). Ensure fill depth corresponds with those detailed in the system drawing. Note: A maximum perimeter clearance of 25mm applies. Use IBS backing rod to control fill depth

**Step 5** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections

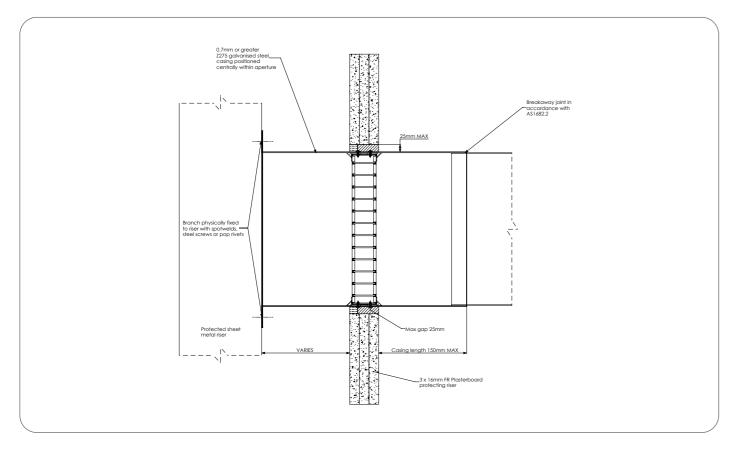
**Step 6** When connecting ductwork to the damper casing, use AS1682.2 compliant breakaway joint

### System Notes

- Fixings & IBS backing rod are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



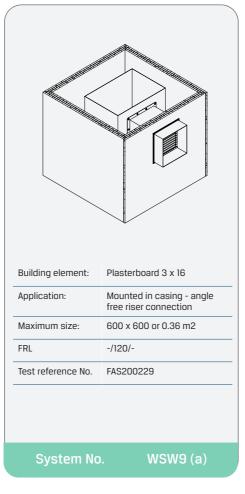
Ducted



Step 1	Position and fix damper into ductwork with steel screws or pop rivets as per system drawing ensuring that the damper will be aligned and within the fire separating shaft wall once the duct is attached to the riser
Step 2	Seal internal gap between damper and duct with Kilargo Intumescent Mastic as per system drawing
Step 3	Mechanically connect duct to riser with steel screws or steel pop rivets
Step 4	Once shaftwall has been constructed, firestop gaps between the duct and shaftwall with Kilargo Intumescent Mastic (supplied separately). Ensure fill depth corresponds with those detailed in the system drawing. Note: A maximum perimeter clearance of 25mm applies. Use IBS backing rod to control fill depth
Step 5	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 6	When connecting ductwork to the damper casing, use AS1682.2 compliant breakaway joint

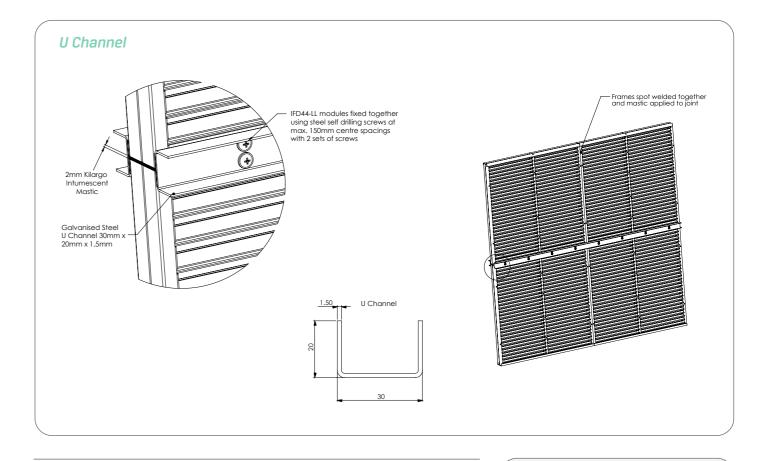
### System Notes

- Fixings & IBS backing rod are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

Ducted - Modular

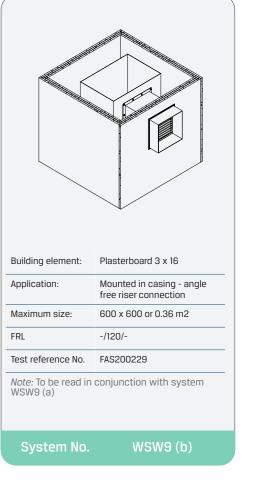


	Step 1	Apply Kilargo Intumescent Mastic to the opposing module
	Step 2	Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides
	Step 3	Fix modular damper to aperture or casing as shown in the appropriate

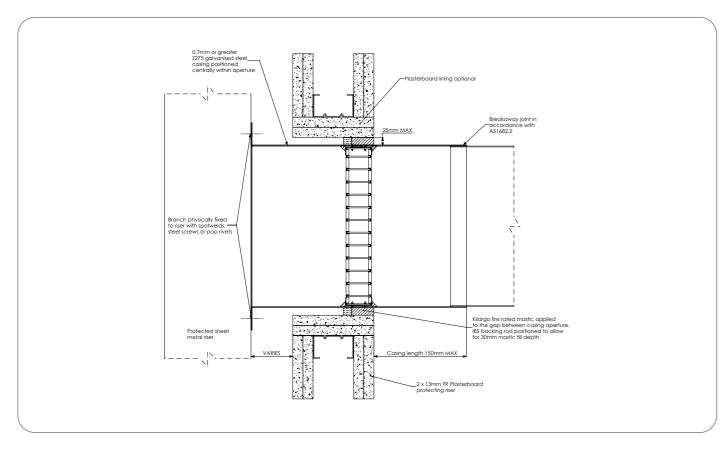
system drawing and installation instructions

### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



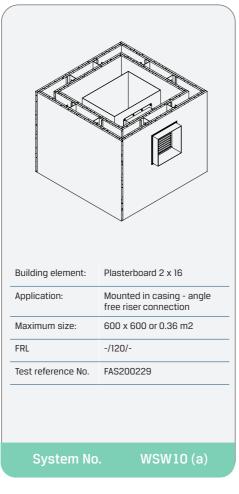
Ducted



Step 1	Position and fix damper into ductwork with steel screws or pop rivets as per system drawing ensuring that the damper will be aligned and within the fire separating shaft wall once the duct is attached to the riser
Step 2	Seal internal gap between damper and duct with Kilargo Intumescent Mastic as per system drawing
Step 3	Mechanically connect duct to riser with steel screws or steel pop rivets
Step 4	Once shaftwall has been constructed, firestop gaps between the duct and shaftwall with Kilargo Intumescent Mastic (supplied separately). Ensure fill depth corresponds with those detailed in the system drawing. Note: A maximum perimeter clearance of 25mm applies. Use IBS backing rod to control fill depth
Step 5	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 6	When connecting ductwork to the damper casing, use AS1682.2 compliant breakaway joint

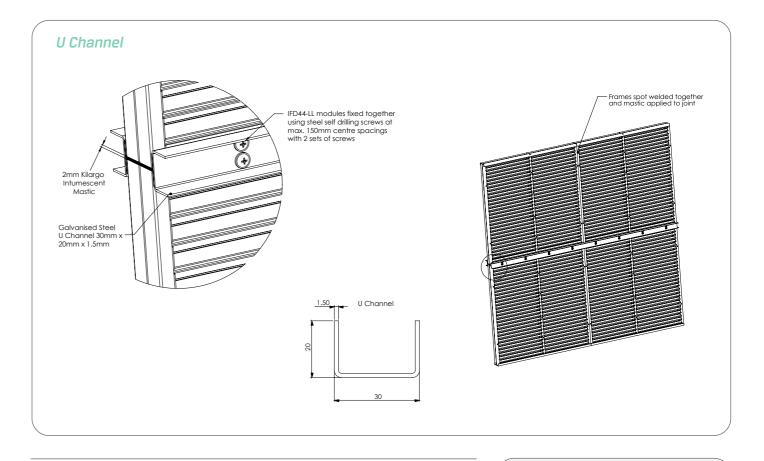
### System Notes

- Fixings & IBS backing rod are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

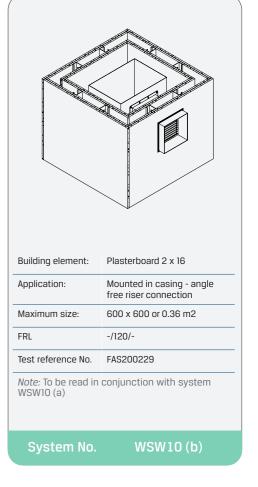
Ducted - Modular



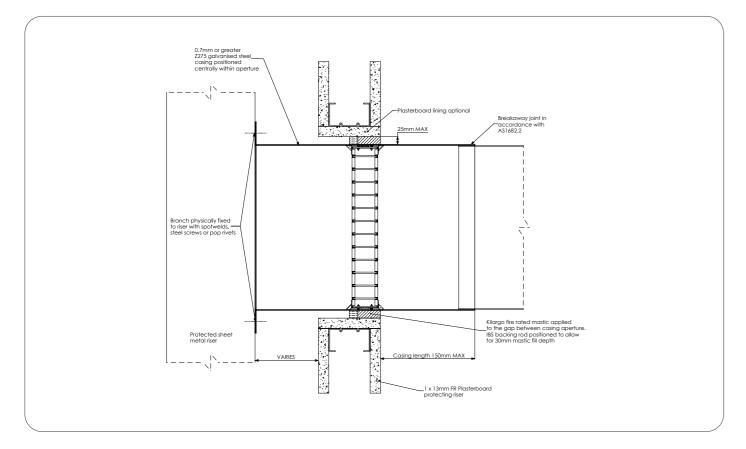
Step 1	Apply Kilargo Intumescent Mastic to the opposing module
Step 2	Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides
Step 3	Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



Ducted

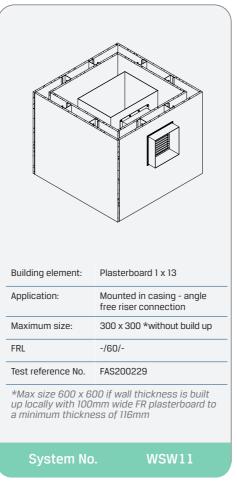


- Step 1
   Position and fix damper into ductwork with steel screws or pop rivets as per system drawing ensuring that the damper will be aligned and within the fire separating shaft wall once the duct is attached to the riser

   Step 2
   Seal internal gap between damper and duct with Kilargo Intumescent Mastic as per system drawing.
- Step 3 Mechanically connect duct to riser with steel screws or steel pop rivets
- Once shaftwall has been constructed, firestop gaps between the duct and shaftwall with Kilargo Intumescent Mastic (supplied separately). Ensure fill depth corresponds with those detailed in the system drawing. Note: A maximum perimeter clearance of 25mm applies. Use IBS backing rod to control fill depth
- **Step 5** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- **Step 6** When connecting ductwork to the damper casing, use AS1682.2 compliant breakaway joint

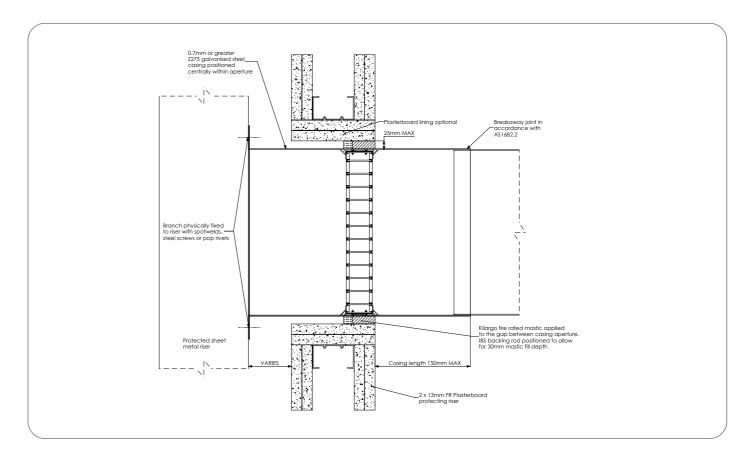
### System Notes

- Fixings & IBS backing rod are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

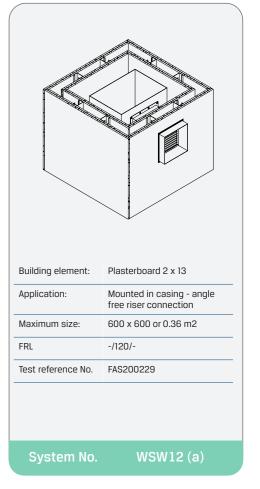
Ducted



- Step 1 Position and fix damper into ductwork with steel screws or pop rivets as per system drawing ensuring that the damper will be aligned and within the fire separating shaft wall once the duct is attached to the riser
- Step 2 Seal internal gap between damper and duct with Kilargo Intumescent Mastic as per system drawing
- **Step 3** Mechanically connect duct to riser with steel screws or steel pop rivets
- Once shaftwall has been constructed, firestop gaps between the duct and shaftwall with Kilargo Intumescent Mastic (supplied separately). Ensure fill depth corresponds with those detailed in the system drawing. Note: A maximum perimeter clearance of 25mm applies. Use IBS backing rod to control fill depth
- **Step 5** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- **Step 6** When connecting ductwork to the damper casing, use AS1682.2 compliant breakaway joint

### System Notes

- Fixings & IBS backing rod are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Ducted - Modular

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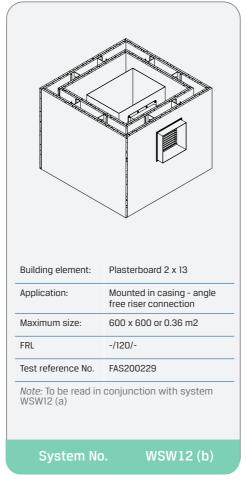
Step 2 Align and bring modules together and mechanically fix together using channels and steel self-drilling screws or steel pop rivets with 2 sets screws at 150mm centres as per the modular system drawing on both	
Step 3	Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

Apply Kilargo Intumescent Mastic to the opposing module

### System Notes

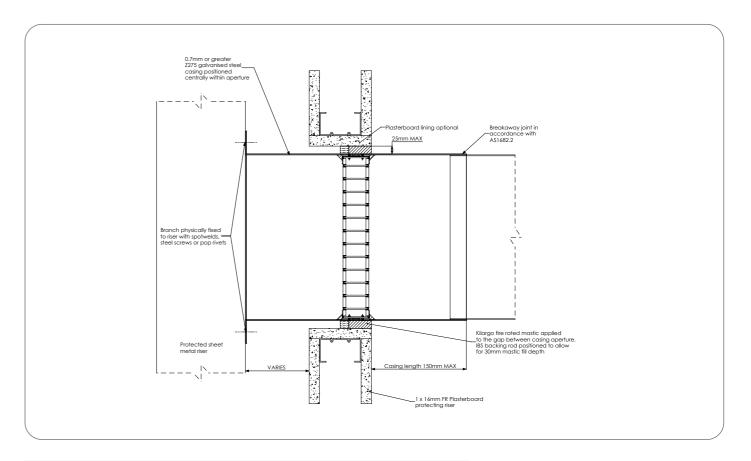
Step 1

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



### Installation Instructions:

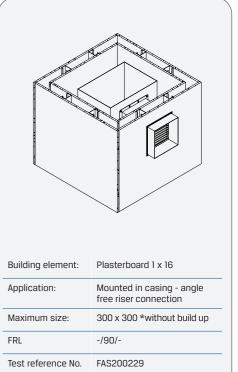
Ducted



- Step 1 Position and fix damper into ductwork with steel screws or pop rivets as per system drawing ensuring that the damper will be aligned and within the fire separating shaft wall once the duct is attached to the riser
- Step 2 Seal internal gap between damper and duct with Kilargo Intumescent Mastic as per system drawing
- **Step 3** Mechanically connect duct to riser with steel screws or steel pop rivets
- Once shaftwall has been constructed, firestop gaps between the duct and shaftwall with Kilargo Intumescent Mastic (supplied separately). Ensure fill depth corresponds with those detailed in the system drawing. Note: A maximum perimeter clearance of 25mm applies. Use IBS backing rod to control fill depth
- **Step 5** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- **Step 6** When connecting ductwork to the damper casing, use AS1682.2 compliant breakaway joint

### System Notes

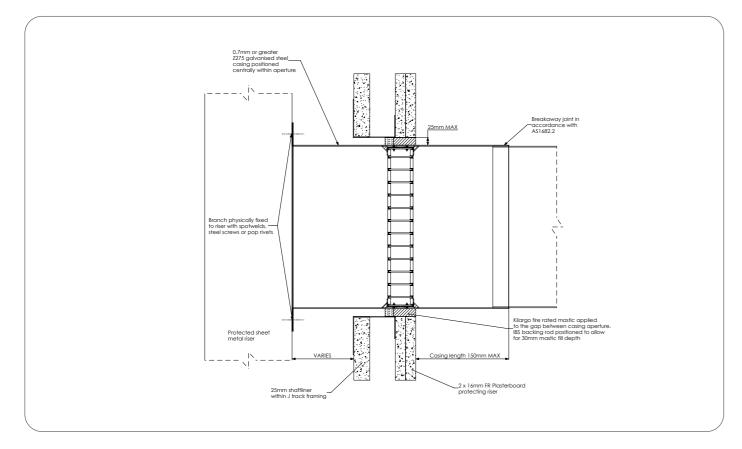
- Fixings & IBS backing rod are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



\*Max size 600 x 600 if wall thickness is built up locally with 100mm wide FR plasterboard to a minimum thickness of 116mm

System No. WSW13

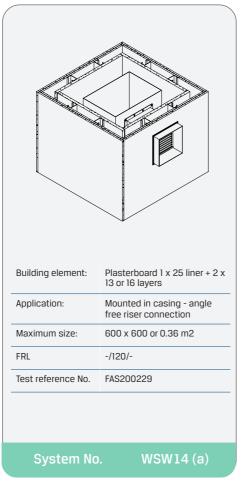
Ducted



Step 1	Position and fix damper into ductwork with steel screws or pop rivets as per system drawing ensuring that the damper will be aligned and within the fire separating shaft wall once the duct is attached to the riser
Step 2	Seal internal gap between damper and duct with Kilargo Intumescent Mastic as per system drawing
Step 3	Mechanically connect duct to riser with steel screws or steel pop rivets
Step 4	Once shaftwall has been constructed, firestop gaps between the duct and shaftwall with Kilargo Intumescent Mastic (supplied separately). Ensure fill depth corresponds with those detailed in the system drawing. Note: A maximum perimeter clearance of 25mm applies. Use IBS backing rod to control fill depth
Step 5	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 6	When connecting ductwork to the damper casing, use AS1682.2 compliant breakaway joint

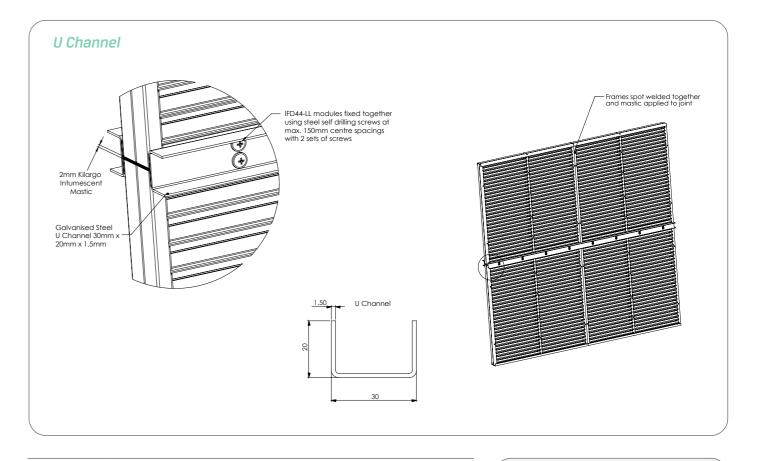
### System Notes

- Fixings & IBS backing rod are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

Ducted - Modular



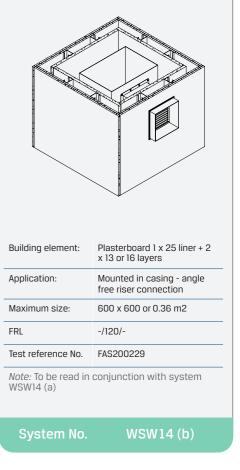
Step 1	Apply Kilargo Intumescent Mastic to the opposing module
•	

Step 2 Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

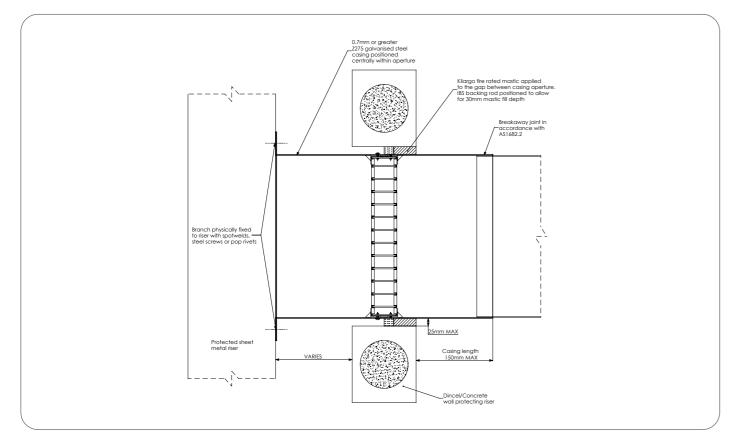
**Step 3** Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



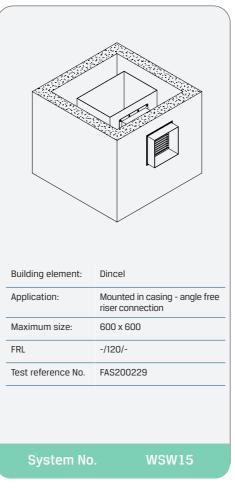
Ducted



Step 1	Position and fix damper into ductwork with steel screws or pop rivets as per system drawing ensuring that the damper will be aligned and within the fire separating shaft wall once the duct is attached to the riser
Step 2	Seal internal gap between damper and duct with Kilargo Intumescent Mastic as per system drawing
Step 3	Mechanically connect duct to riser with steel screws or steel pop rivets
Step 4	Once shaftwall has been constructed, firestop gaps between the duct and shaftwall with Kilargo Intumescent Mastic (supplied separately). Ensure fill depth corresponds with those detailed in the system drawing. Note: A maximum perimeter clearance of 25mm applies. Use IBS backing rod to control fill depth
Step 5	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 6	When connecting ductwork to the damper casing, use AS1682.2 compliant breakaway joint

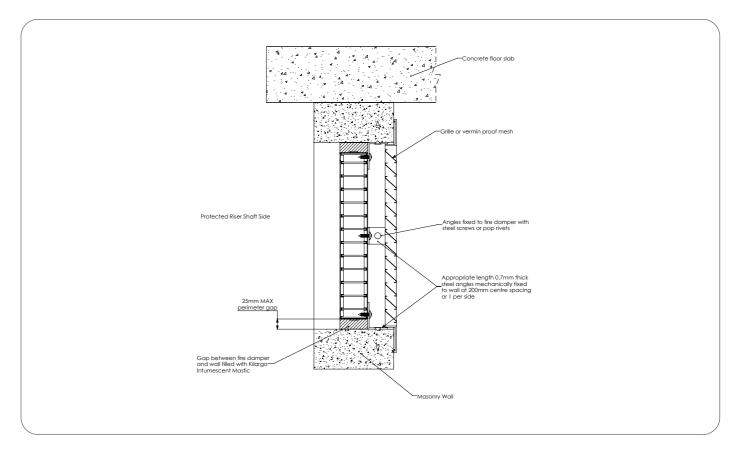
### System Notes

- Fixings & IBS backing rod are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

Air-Transfer



Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grille independently to the building element

### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grille to be fixed independently to the building element and shall not be fixed to the fire damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.

Building element:	Masonry
Application:	Cell only installed in riser with grille on one side
Maximum size:	600 x 600 or 0.36 m2
FRL	-/120/-
Test reference No.	FAS200229
System No.	WSW23 (a)

Air-Transfer - Modular

# Fromes spot welded together using steel self drilling screws of max. ISomm centre spocings with 2 sels of screws Golvenised Steel U Channel 30mm x 1.5mm 20mm x 1.5mm



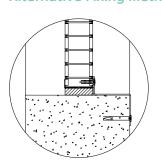
# Step 2 Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

**Step 3** Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

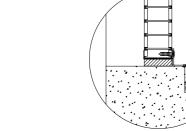
### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.

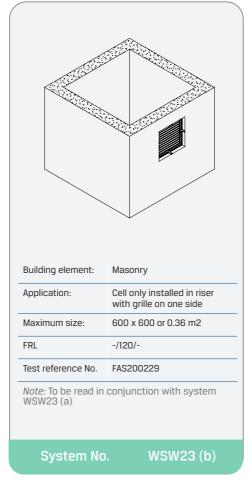
### **Alternative Fixing Methods**



Z Bracket Fixing

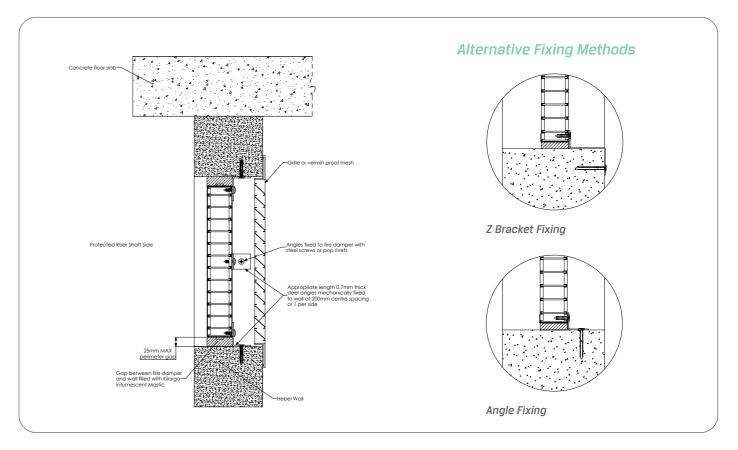


Angle Fixing



### Installation Instructions:

Air-Transfer

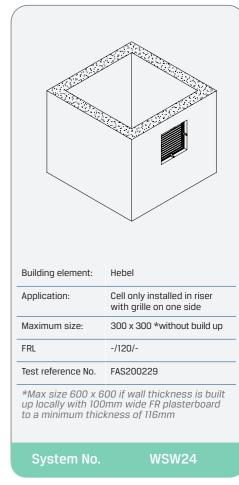


Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
with temporary supports or packers

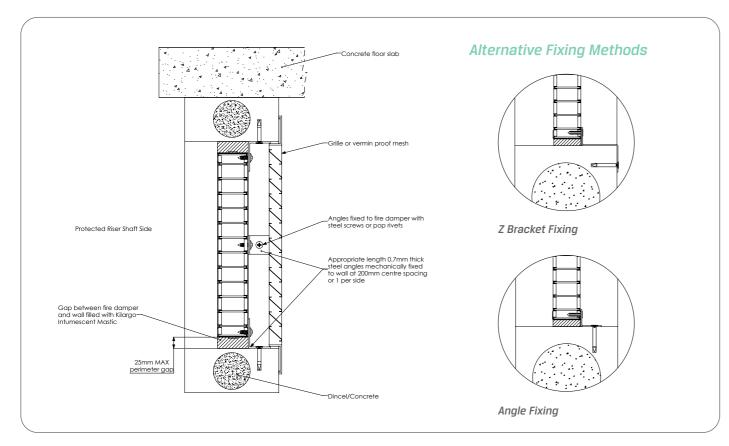
- Step 2 Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
- Step 3 Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
- **Step 4** Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
- **Step 5** Fix grille independently to the building element

### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grille to be fixed independently to the building element and shall not be fixed to the fire damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



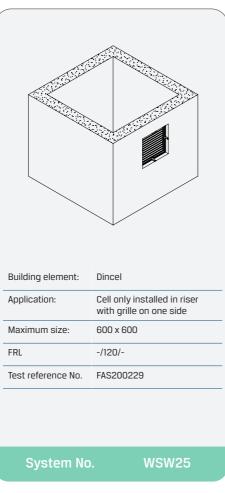
Air-Transfer



Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grille independently to the building element

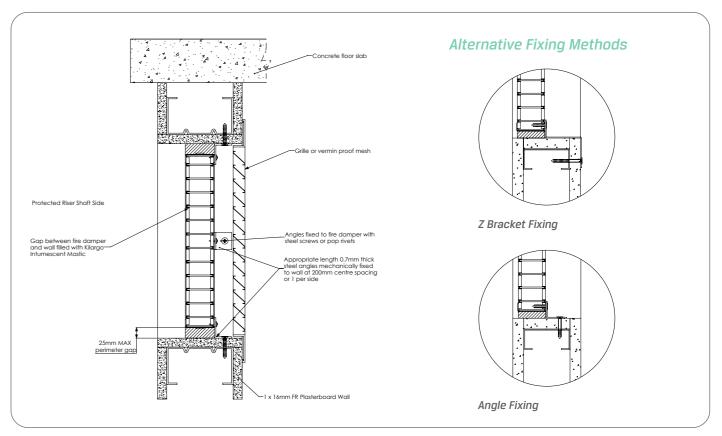
### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grille to be fixed independently to the building element and shall not be fixed to the fixed damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

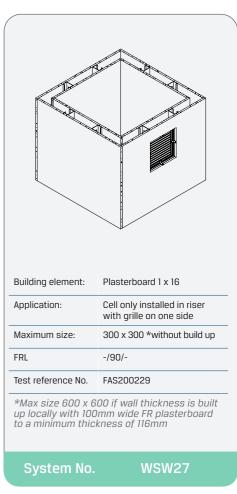
Air-Transfer



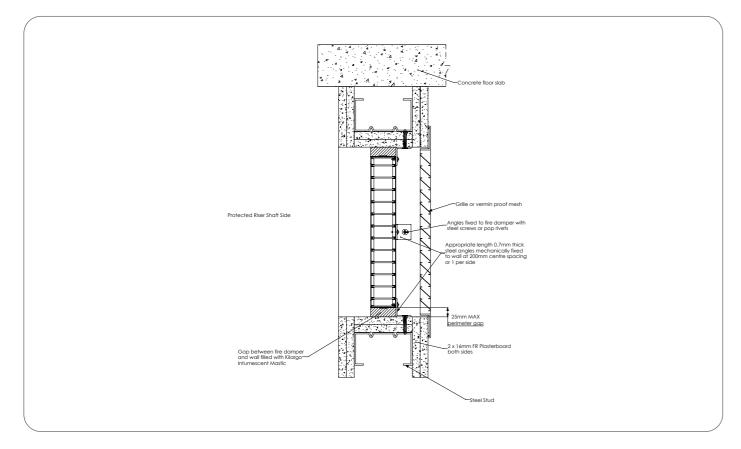
Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grille independently to the building element

### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grille to be fixed independently to the building element and shall not be fixed to the fire damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



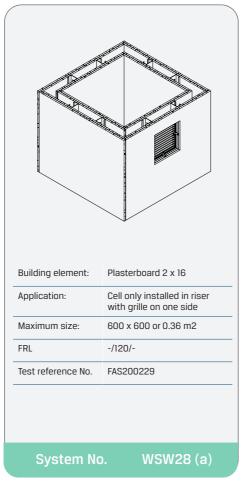
Air-Transfer



Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grille independently to the building element

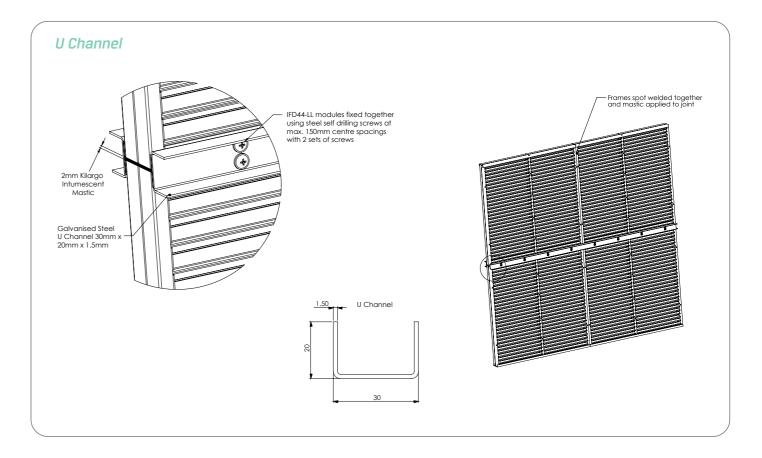
### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied
- Grille to be fixed independently to the building element and shall not be fixed to the
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

Air-Transfer - Modular



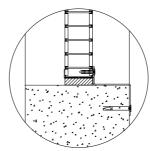
Align and bring modules together and mechanically fix together using U Step 2 channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

Step 3 Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

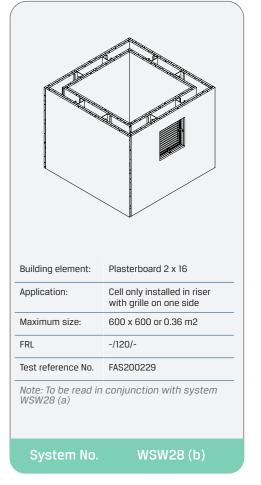
### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.

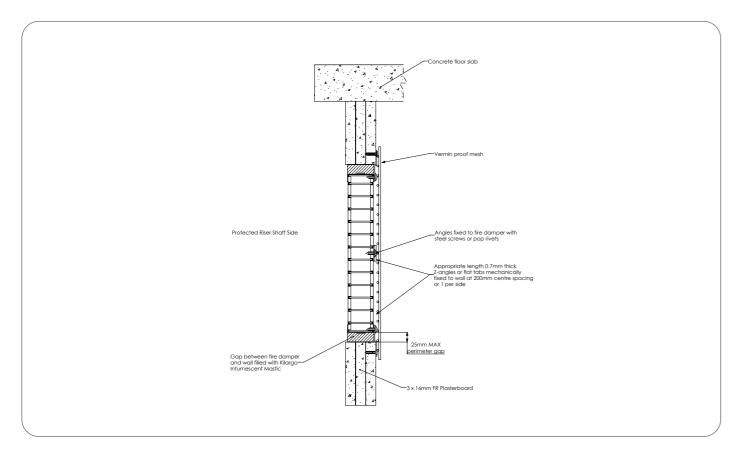
### Alternative Fixing Methods







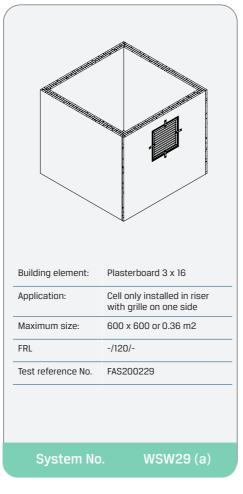
Air-Transfer



Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grille independently to the building element

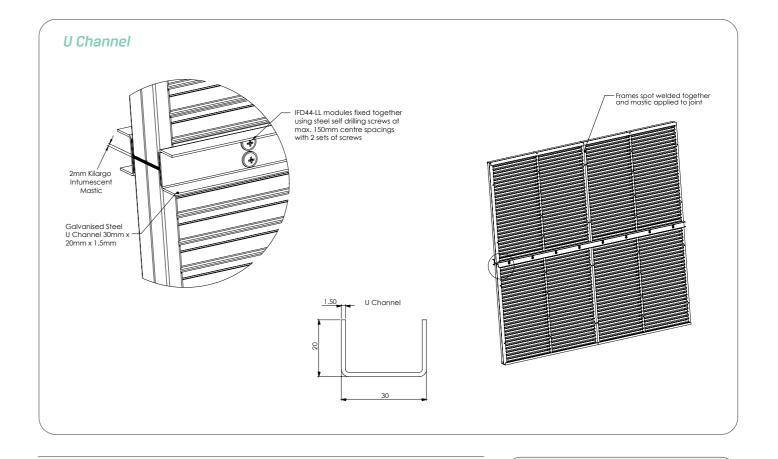
### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grille to be fixed independently to the building element and shall not be fixed to the fire damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

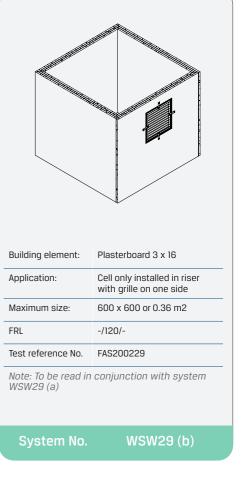
Air-Transfer - Modular



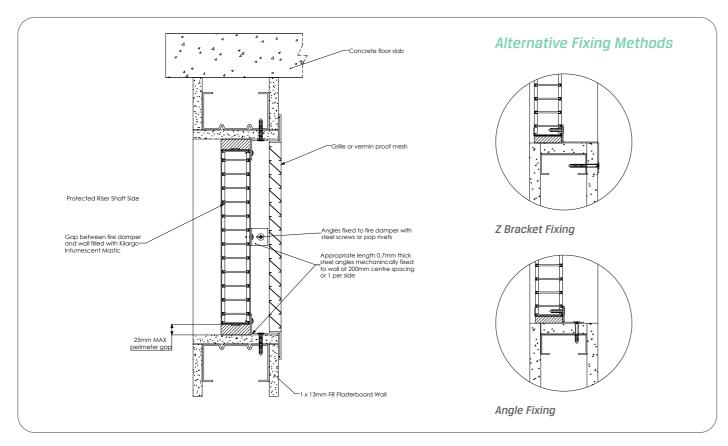
	Step 1	Apply Kilargo Intumescent Mastic to the opposing module
	Step 2	Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides
	Step 3	Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



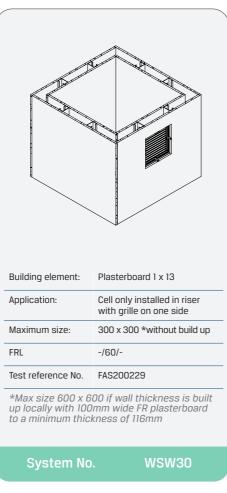
Air-Transfer



Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grille independently to the building element

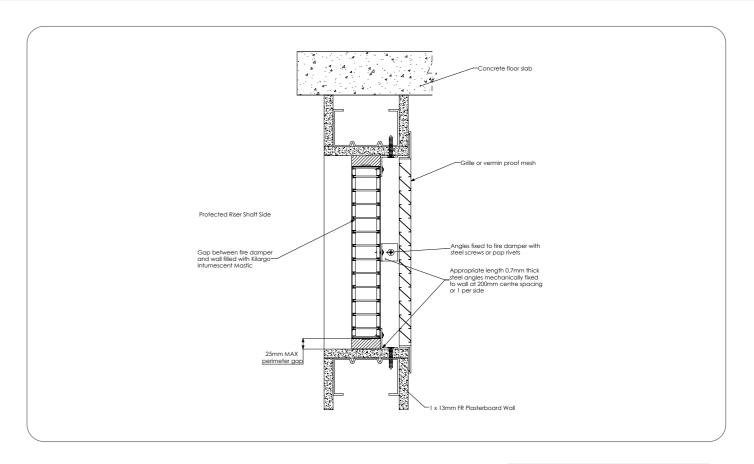
### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grille to be fixed independently to the building element and shall not be fixed to the fire damper
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

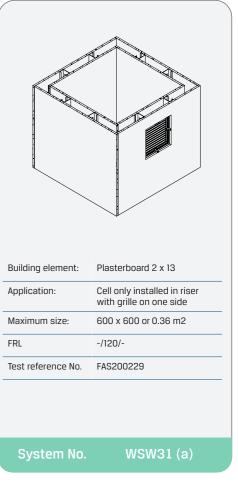
Air-Transfer



Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grille independently to the building element

### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grille to be fixed independently to the building element and shall not be fixed to the fire damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Air-Transfer - Modular

# U Channel IFD44LL modules fixed together using steel self drilling screws of max. ISomn centre spocings with 2 sels of screws Galvanised Steel U Channel 30mm x 1.5mm 20mm x 1.5mm U Channel



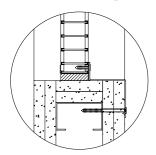
# Step 2 Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

**Step 3** Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

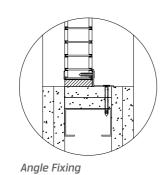
### System Notes

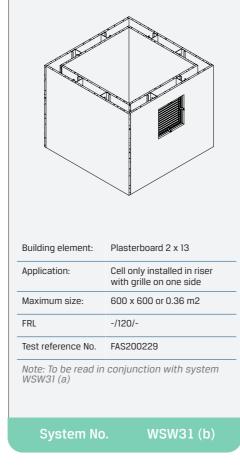
- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.

### **Alternative Fixing Methods**



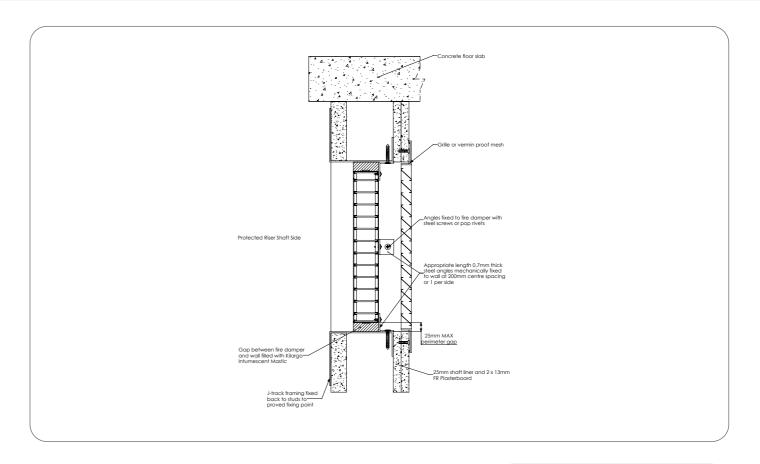
Z Bracket Fixing





### Installation Instructions:

Air-Transfer



	with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with

Position damper centrally in penetration aperture as per system drawing

those detailed in the system drawing

Step 4

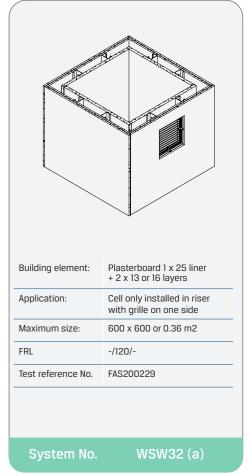
Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections

**Step 5** Fix grille independently to the building element

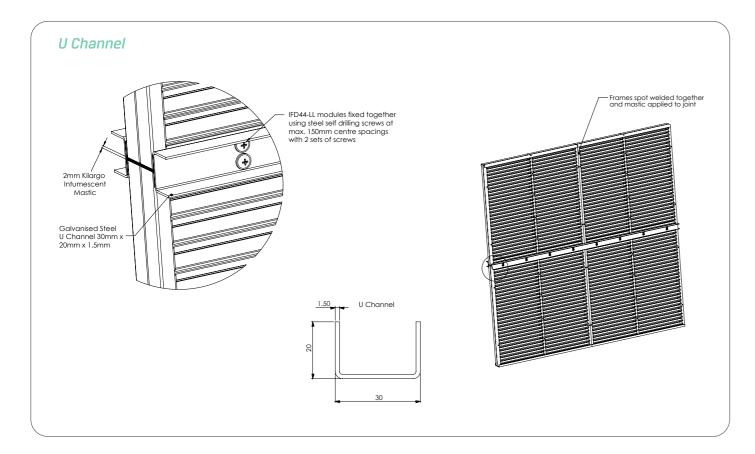
### System Notes

Step 1

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grille to be fixed independently to the building element and shall not be fixed to the fire damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- $\bullet \qquad \hbox{Ensure convenient access is provided for visual inspection and cleaning as necessary}.$
- Fire damper insulation requirements are not required for shaft mounted fire damper as per AS 1668.1:2015 cl 3.2.3.1 (a).
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



Air-Transfer - Modular





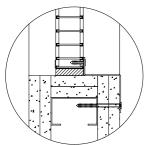
Step 2 Align and bring modules together and mechanically fix together using  $\ensuremath{\mathsf{U}}$ channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

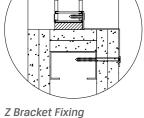
Fix modular damper to aperture or casing as shown in the appropriate Step 3 system drawing and installation instructions

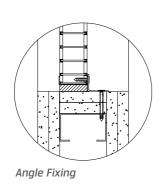
### System Notes

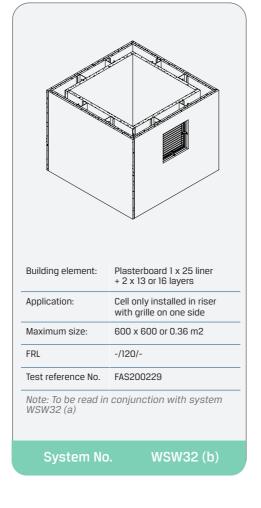
- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.

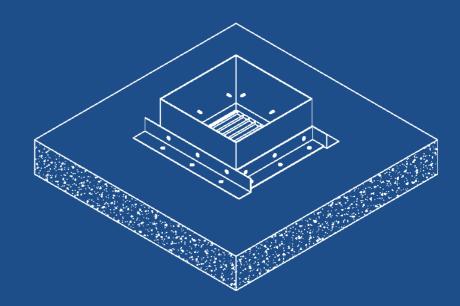
### **Alternative Fixing Methods**







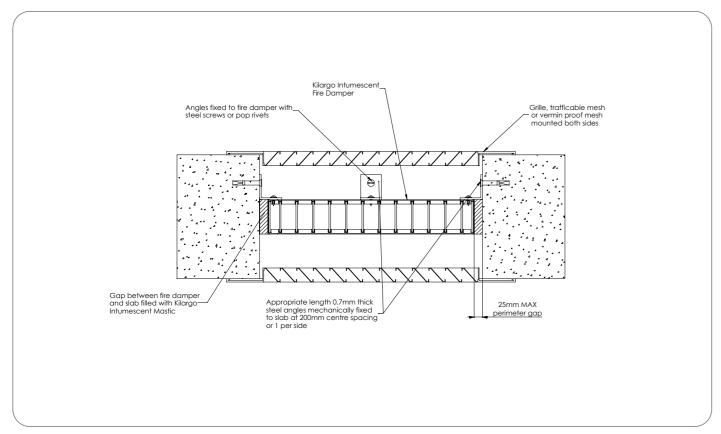




# **FLOOR SLAB SYSTEMS**

Air-Transfer

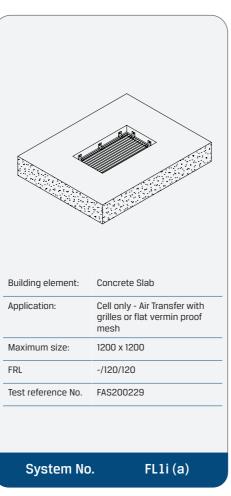
## Installation Instructions: Air-Transfer - Modular

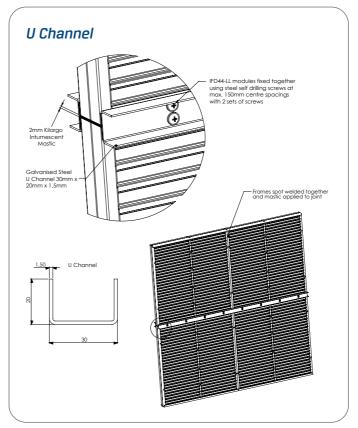


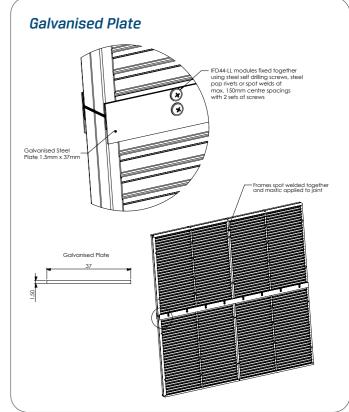
Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grilles, louvres or vermin proof mesh independently to each side of the building element

### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied
- Grilles to be fixed independently to the building element and shall not be fixed to
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.







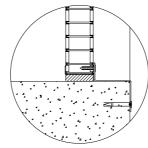
Align and bring modules together and mechanically fix together using U Step 2 channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

Step 3 Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

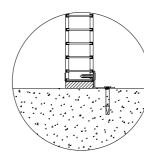
### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.

### Alternative Fixing Methods



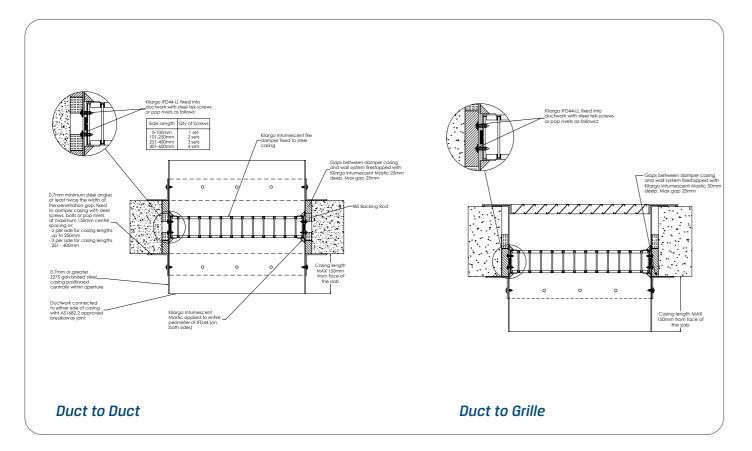




Angle Fixing

Building element:	Concrete Slab
Application:	Cell only - Air Transfer with grilles or flat vermin proof mesh
Maximum size:	1200 x 1200
FRL	-/120/120
Test reference No.	FAS200229
Note: To be read in FL1i (a)	conjunction with system
System No.	FL1i (b)

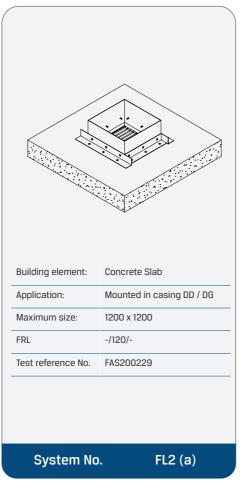
Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

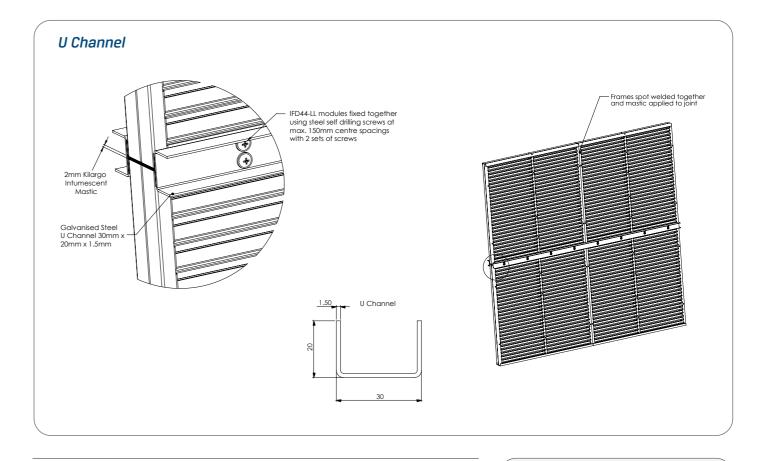
### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

Ducted - Modular



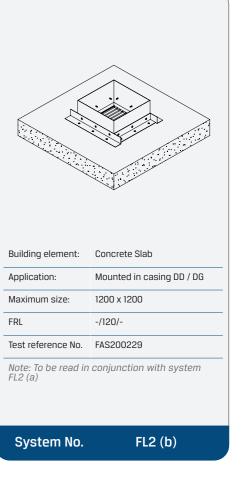
Step 1	Apply Kliargo Intumescent Mastic to the opposing module

Step 2 Align and bring modules together and mechanically fix together using U channels and steel self-drilling screws or steel pop rivets with 2 sets of screws at 150mm centres as per the modular system drawing on both sides

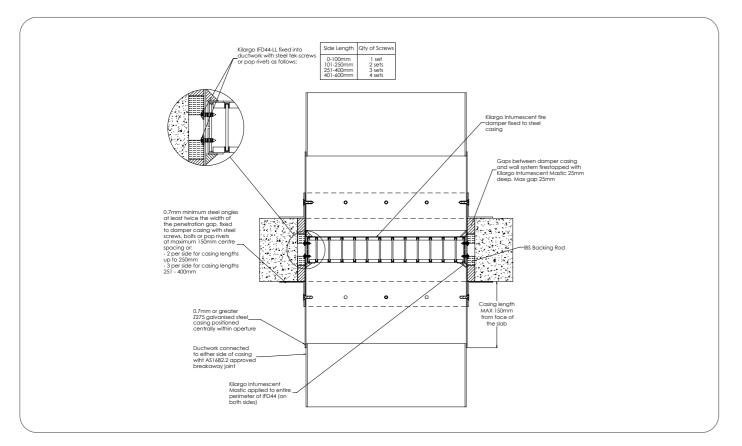
**Step 3** Fix modular damper to aperture or casing as shown in the appropriate system drawing and installation instructions

### System Notes

- Fixings are to be supplied by others.
- Optional flat joining strips supplied at the time of order in lieu of U channel on request for air transfer systems only.



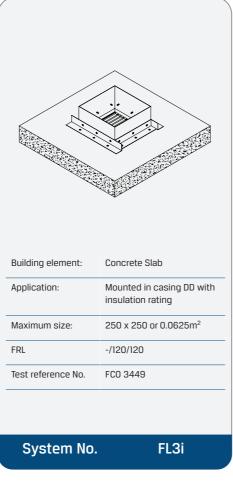
Ducted



Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and temporary supports or packers.
Step 2	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing.
Step 3	Fasten mounting angles to damper with steel self-drilling screws or steel pop rivets and, if detailed, to the building element with appropriate mechanical fixings as per system drawing.
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections.
Step 5	Connect ductwork to the damper casing with AS 1682.2 compliant breakaway joint.

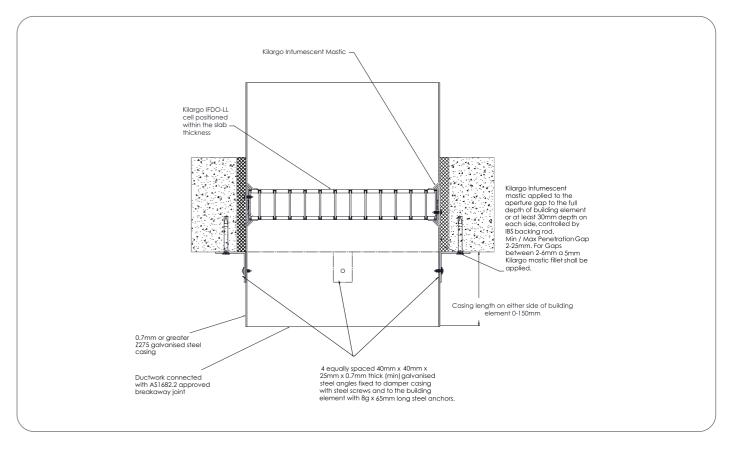
### System Notes

- IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- 2mm Minimum gap allowable between damper and aperture. For gaps between 2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied



### Installation Instructions:

Ducted



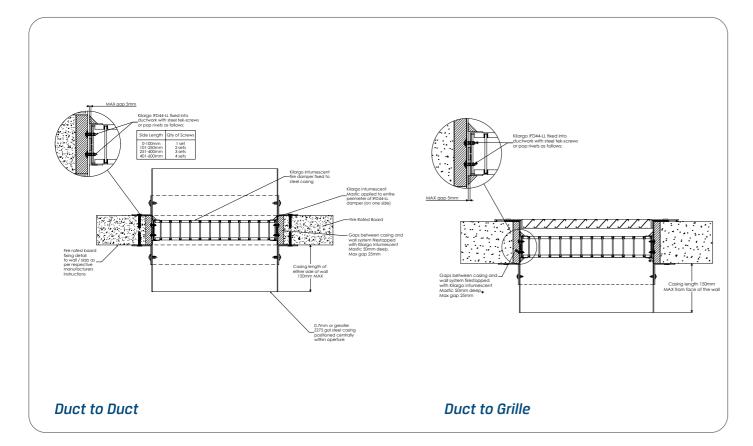
Step 1	Position damper centrally in penetration aperture as per system drawing with IBS Backing Rod and packers
Step 2	Fasten mounting brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Connect ductwork to the damper casing with AS1682.2 compliant breakaway joint

### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-6mm, a fillet of Kilargo Intumescent Mastic shall be applied..

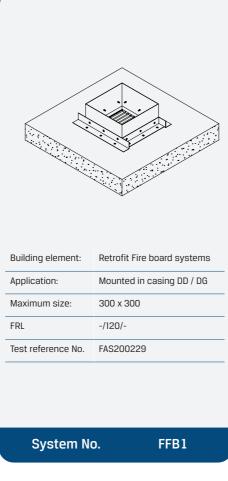


Ducted



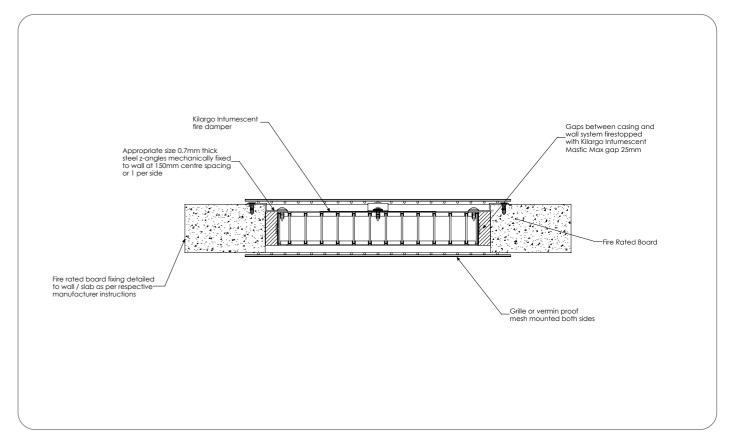
### System Notes

- Grilles, louvres, IBS backing rod & fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2.
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.



### Installation Instructions:

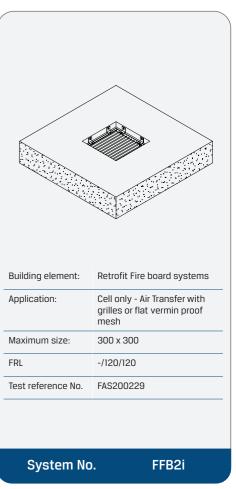
Air-Transfer

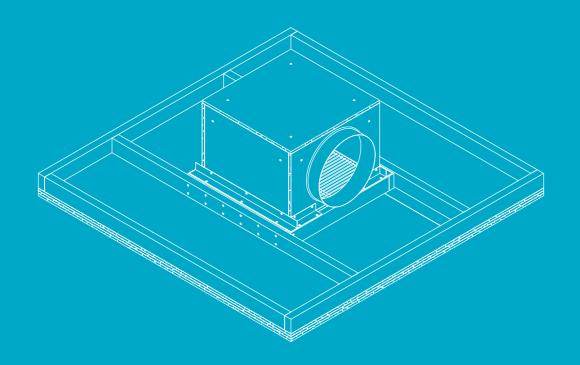


Step 1	Position damper centrally in penetration aperture as per system drawing with temporary supports or packers
Step 2	Fasten mounting angles or brackets to damper with steel self-drilling screws or steel pop rivets and to the building element with appropriate mechanical fixings as per system drawing
Step 3	Apply Kilargo Intumescent Mastic (supplied separately) to the gaps between the damper & building element. Ensure fill depth corresponds with those detailed in the system drawing
Step 4	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance inspections
Step 5	Fix grilles, louvres or vermin proof mesh independently to each side of the building element

### System Notes

- Grilles, louvres, vermin proof mesh, angles, brackets & fixings are to be supplied by others.
- Grilles to be fixed independently to the building element and shall not be fixed to the fire damper.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary.
- 2mm Minimum gap allowable between damper and aperture. For gaps between
   2-5mm, a fillet of Kilargo Intumescent Mastic shall be applied.

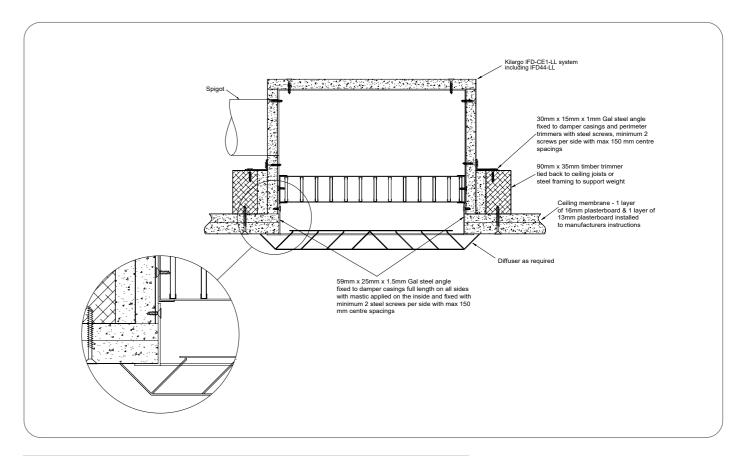




# **CEILING SYSTEMS**

### Installation Instructions:

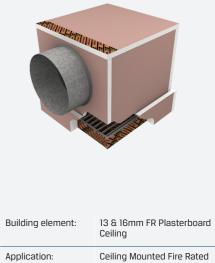
Ceiling Under Floor & Ceiling Under Roof Systems



Step 1	If ceiling is in framing stage, start at step 2 below. For existing fire rated ceilings, mark and cut out to suit internal IFD-CE1-LL plenum dimensions.
Step 2	Fix timber trimmers to ceiling joists to fully support weight of system as per system drawing.
Step 3	Fix IFD-CE1-LL box to framing with angles as per system drawing and attach ductwork to spigot
Step 4	Apply mastic to the inside of angles and fix to the inside of penetration $\&$ IFD-CE1 plenum as per system drawing.
Step 5	Fit register / diffuser as required.
Step 6	Ensure convenient access is provided for visual inspection and cleaning as necessary.
Step 7	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance routines.

### System Notes

- Grilles, diffuser, trimmers, angles and fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic (supplied separately) and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- Where the RISF is different between the fire rated floor/ceiling or roof/ceiling and the Kilargo IFD-CE1-LL, the lower RISF shall apply to both.

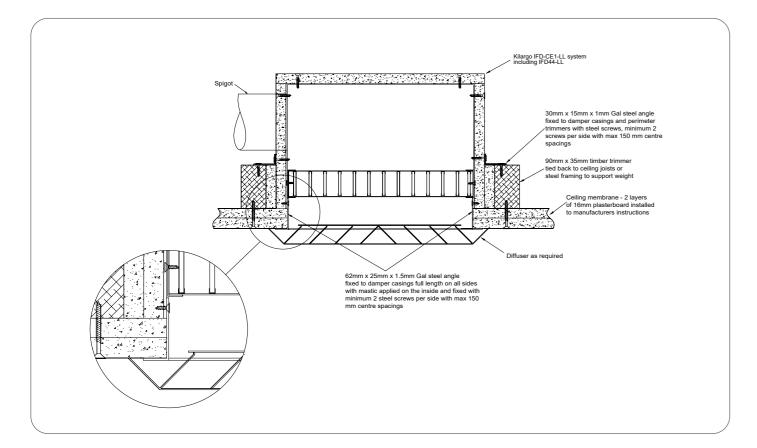


	Plenum Box (60 mi Incipient rated)
Maximum size:	600 x 600
FRL	-/60/60
Test reference No.	FC16550

System No.

CE1-60

Ceiling Under Floor & Ceiling Under Roof Systems



Step 1	If ceiling is in framing stage, start at step 2 below. For existing fire rated ceilings, mark and cut out to suit internal IFD-CE1-LL plenum dimensions.
Step 2	Fix timber trimmers to ceiling joists to fully support weight of system as per system drawing.
Step 3	Fix IFD-CE1-LL box to framing with angles as per system drawing and attach ductwork to spigot
Step 4	Apply mastic to the inside of angles and fix to the inside of penetration & IFD-CE1 plenum as per system drawing.
Step 5	Fit register / diffuser as required.
Step 6	Ensure convenient access is provided for visual inspection and cleaning as necessary.
Step 7	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance routines.

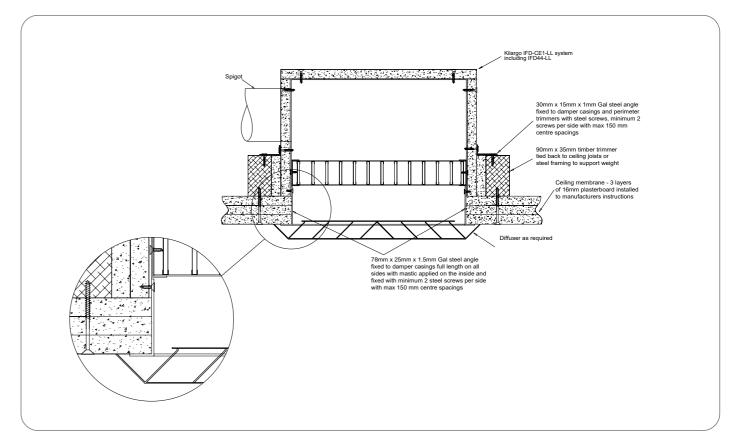
### System Notes

- Grilles, diffuser, trimmers, angles and fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic (supplied separately) and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- Where the RISF is different between the fire rated floor/ceiling or roof/ceiling and the Kilargo IFD-CE1-LL, the lower RISF shall apply to both.



### Installation Instructions:

Ceiling Under Floor & Ceiling Under Roof Systems



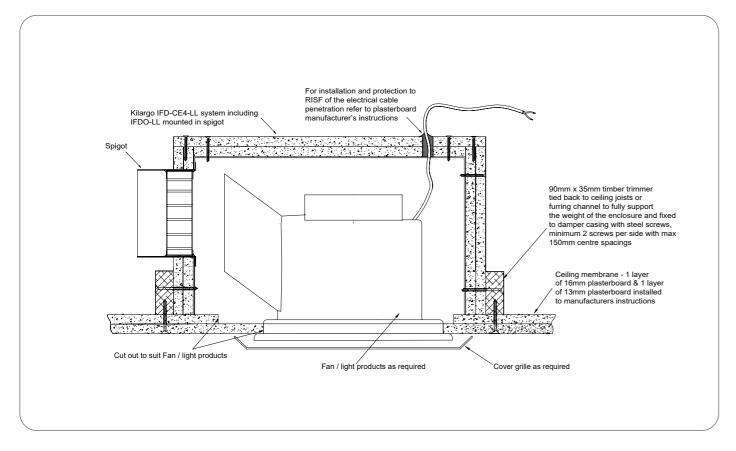
Step 1	If ceiling is in framing stage, start at step 2 below. For existing fire rated ceilings, mark and cut out to suit internal IFD-CE1-LL plenum dimensions.
Step 2	Fix timber trimmers to ceiling joists to fully support weight of system as per system drawing.
Step 3	Fix IFD-CE1-LL box to framing with angles as per system drawing and attach ductwork to spigot
Step 4	Apply mastic to the inside of angles and fix to the inside of penetration $\&$ IFD-CE1 plenum as per system drawing.
Step 5	Fit register / diffuser as required.
Step 6	Ensure convenient access is provided for visual inspection and cleaning as necessary.
Step 7	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance routines.

### System Notes

- Grilles, diffuser, trimmers, angles and fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail, including the use of Kilargo Intumescent Mastic (supplied separately) and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
   Where the RISF is different between the fire rated floor/ceiling or roof/ceiling and the
- Where the RISF is different between the fire rated floor/ceiling or roof/ceiling and the Kilargo IFD-CE1-LL, the lower RISF shall apply to both.



Ceiling Under Floor & Ceiling Under Roof Systems



Step 1	If ceiling is in framing stage, start at step 2 below. For existing fire rated ceilings, mark and cut out to suit fan / light dimensions.
Step 2	Fix timber trimmers to ceiling joists to fully support weight of system as per system drawing.
Step 3	Install fan / light to ceiling cut out.
Step 4	Fix IFD-CE4-LL box to framing as per system drawing ensuring fan's supply / exhaust location is the same side as the IFD-CE4-LL spigot.
Step 5	Drill electrical cable hole in top of IFD-CE4-LL box and install as per ceiling plasterboard manufacturer's instructions to maintain ceilings RISF rating.
Step 6	Fit cover grille as required.
Step 7	Ensure convenient access is provided for visual inspection and cleaning as necessary.
Step 8	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance routines.

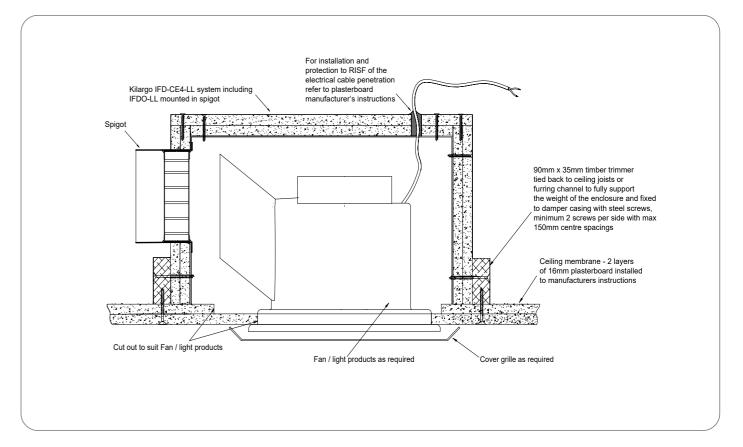
### System Notes

- Trimmers, fan / light unit, cover grille and fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- Where the RISF is different between the fire rated floor/ceiling or roof/ceiling and the Kilargo IFD-CE4-LL, the lower RISF shall apply to both.



### Installation Instructions:

Ceiling Under Floor & Ceiling Under Roof Systems



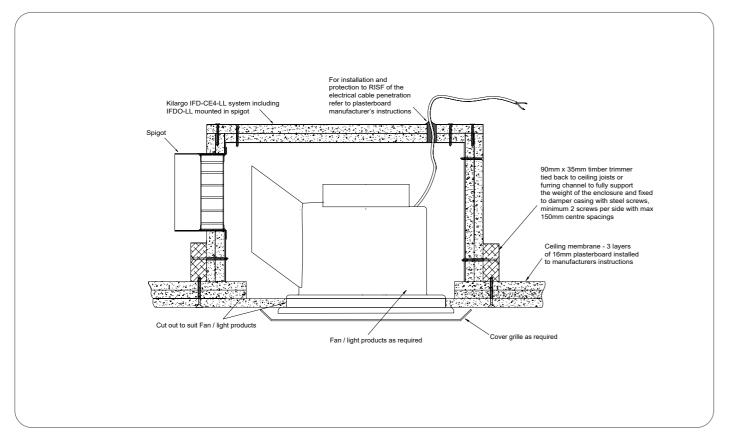
Step 1	If ceiling is in framing stage, start at step 2 below. For existing fire rated ceilings, mark and cut out to suit fan / light dimensions.
Step 2	Fix timber trimmers to ceiling joists to fully support weight of system as per system drawing.
Step 3	Install fan / light to ceiling cut out.
Step 4	Fix IFD-CE4-LL box to framing as per system drawing ensuring fan's supply $\prime$ exhaust location is the same side as the IFD-CE4-LL spigot.
Step 5	Drill electrical cable hole in top of IFD-CE4-LL box and install as per ceiling plasterboard manufacturer's instructions to maintain ceilings RISF rating.
Step 6	Fit cover grille as required.
Step 7	Ensure convenient access is provided for visual inspection and cleaning as necessary.
Step 8	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance routines.

### System Notes

- Trimmers, fan / light unit, cover grille and fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- Where the RISF is different between the fire rated floor/ceiling or roof/ceiling and the Kilargo IFD-CE4-LL, the lower RISF shall apply to both.



### Ceiling Under Floor & Ceiling Under Roof Systems



Step 1	If ceiling is in framing stage, start at step 2 below. For existing fire rated ceilings, mark and cut out to suit fan / light dimensions.
Step 2	Fix timber trimmers to ceiling joists to fully support weight of system as per system drawing.
Step 3	Install fan / light to ceiling cut out.
Step 4	Fix IFD-CE4-LL box to framing as per system drawing ensuring fan's supply / exhaust location is the same side as the IFD-CE4-LL spigot.
Step 5	Drill electrical cable hole in top of IFD-CE4-LL box and install as per ceiling plasterboard manufacturer's instructions to maintain ceilings RISF rating.
Step 6	Fit cover grille as required.
Step 7	Ensure convenient access is provided for visual inspection and cleaning as necessary.
Step 8	Ensure product and certification labels are in a prominent position for easy identification during subsequent maintenance routines.

### System Notes

- Trimmers, fan / light unit, cover grille and fixings are to be supplied by others.
- Kilargo Intumescent Fire Dampers shall be installed in accordance with this detail and in accordance with the requirements of AS1682.2
- Ensure convenient access is provided for visual inspection and cleaning as necessary
- Where the RISF is different between the fire rated floor/ceiling or roof/ceiling and the Kilargo IFD-CE4-LL, the lower RISF shall apply to both.





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