



Intumescent Fire Dampers

IFD Series Products

Never before has a fire damper offered so much flexibility!



Kilargo IFD Series Intumescent Fire Dampers

IFDs are designed to seal penetrations provided for movement of air via ducted or naturally ventilated means.

Kilargo's IFDs have no moving parts providing a reliability unmatched by conventional mechanical type fire dampers.

The operation of the Kilargo IFDs is by heat activation of the intumescent material. The intumescent material swells many times its original thickness to form a solid barrier to fire.

This mode of operation means that the Kilargo IFD series intumescent fire dampers are bi-directional and cannot rust or open. In addition they are not affected by building movement or thermal expansion.

Kilargo Website

Check out www.kilargo.com.au for:

- Catalogue information
- Product technical data sheets
- Applications and approvals
- Latest news



Kilargo Technical Support

Kilargo provides free technical support for the design, specification and installation of its intumescent fire damper products and systems.

Contact Kilargo to ensure the most effective and economical solution is specified and installed.



Standards & Codes

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

- AS 1668.1 Design
- AS 1530.4 Fire test methodology
- AS 1682.1 Air leakage testing / design
- AS 1682.2 Installation
- AS 1851 Maintenance

Regulatory Requirements

To comply with the Building Code of Australia and referenced standard AS 1668.1. Kilargo IFDs are fully fire tested in accordance with AS 1530.4 and the air leakage test detailed in AS 1682.1.

Comprehensive approvals provide users with confidence to specify Kilargo intumescent fire dampers for standard and “performance based alternative solutions”.



Kilargo Approvals

Approved installations and applications for Kilargo intumescent products is growing all the time, and includes a number of recent approvals such as:

- CSR hebel wall systems
- Pyropanel constructed fire door systems
- E-Core fire door assemblies
- Firecore fire door assemblies
- CSR security wall

Testing is carried out by independent laboratories throughout Australia, New Zealand and other overseas locations.

Kilargo Intumescent Mastic

Designed for use in fire damper installation plus uses where other intumescent material may be impractical.

When exposed to fire, our intumescent mastic swells to many times its original volume while maintaining adhesion to all common construction materials.

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 ONLY Kilargo Intumescent Mastic.

FRL (Fire Resistance Level)

FRL refers to the time in minutes as determined in accordance with the AS 1530.4 laboratory test methods for:

- **Structural Adequacy** – The ability to maintain both stability and load bearing capacity. Fire dampers have no requirement for this criterion.
- **Integrity** – The ability to prevent the passage of flame and hot gases as specified in AS 1530.4.
- **Insulation** – The ability to maintain a surface temperature below that specified in AS 1530.4.

FRL is expressed in order of:

Structural Adequacy / Integrity / Insulation

Generally, fire dampers require an FRL for integrity only. Thus a fire damper may have a fire resistance level of FRL - / 120 / - giving a two hour fire rating.

Note that where a dash appears – there is no requirement for that criterion.

System Selector

PENETRATION	SYSTEM	BUILDING ELEMENT	FRL	PRODUCT	APPLICATION / MOUNTING DETAIL
WALL	WM1	Masonry	-/120/-	IFD44	Mounted in steel casing in penetration
	WM2	Masonry	-/240/-	IFD44	Cased steel casing in penetration
	WM3	Masonry	-/120/-	IFD44	NO casing in penetration
	WM4	Masonry	-/120/-	IFD44	NO casing - surface mounted over p
	WM5	Masonry	-/120/-	IFD-O	Steel sleeve in penetration
	WM6	Masonry	-/240/-	IFD-O	Steel sleeve in penetration
	WM7	Masonry	-/120/-	IFD-OSS	Stainless steel sleeve in penetratio
	WM8	Masonry	-/120/-	IFD-O	Spiral duct sleeve grouted into pen
	WM10	Masonry	-/120/-	IFD-O	Hi-Flo steel sleeve in penetration
	WM11	Masonry	-/120/-	IFD44	NO casing with various fixing brack
	WH1	CSR Hebel75SS	-/120/-	IFD44	Mounted in steel casing in penetrat
	WH2	CSR Hebel75SS	-/120/-	IFD-O	Steel sleeve in penetration
	WH5	CSR Hebel75SW	-/120/-	IFD44	Mounted in steel casing in penetrat
	WH4	CSR Hebel75SW	-/120/-	IFD-O	Steel sleeve in penetration
	WH5	CSR Hebel75SW	-/120/-	IFD44	Mounted in steel casing to undersid
	WH6	CSR Hebel75SW	-/120/-	IFD-O	Steel sleeve positioned tight to unc
	WH7	CSR Hebel75SW	-/120/-	IFD44	Mounted in steel casing to undersid
	WS1	CSR Security wall	-/90/90	IFD44	Mounted in steel casing in penetrat
	WS2	CSR Security wall	-/90/-	IFD-O	Steel sleeve in penetration
	WP1	FRP/Board 2 x 1 layer	-/120/-	IFD44	Mounted in steel casing in penetrat
	WP2	FRP/Board 3 layers	-/120/-	IFD44	Mounted in steel casing in penetrat
	WP3	FRP/Board 2 x 2 layers	-/120/-	IFD-O	Steel sleeve in penetration
	WP4	FRP/Board 25mm liner+ 2 layers	-/120/-	IFD-O	Steel sleeve in penetration
	WP5	FRP/Board 3 layers + 1 layer pad	-/120/-	IFD-O	Steel sleeve in penetration
	WP6	FRP/Board 3 layers	-/120/-	IFD-O	Steel sleeve in penetration
	WP7	FRP/Board 2 x 2 ~rs	-/120/-	IFD44	NO casing in penetration
	SHAFTWALL DUCT	WSW1	Masonry	-/120/-	IFD44
WSW2		Masonry	-/120/-	IFD44	Mounted in riser branch tight to sla
WSW3		Masonry	-/120/-	IFD-O	Mounted in riser branch (angle free
WSW4		FRP/Board 3 layers	-/120/-	IFD44	Mounted in riser branch tight to sla
WSW5		FRP/Board 3 layers	-/120/-	IFD44	Mounted in riser branch tight to sla
WSW6		FRP/Board 3 layers	-/120/-	IFD-O	Mounted in riser branch (angle free
WSW7		FRP/Board 3 layers	-/120/-	IFD44	Mounted in riser branch (angle free
WSW8		FRP/Board 2 x 2 layers	-/120/-	IFD44	Mounted in riser branch (angle free
WSW9		FRP/Board 2 x 2 layers	-/120/-	IFD-O	Mounted in riser branch (angle free
WSRF1		Retrofit shaftwall option	-/120/-	IFD44	Retrofit fixing tabs in existing dam
FLOOR / SLAB	FL1	Concrete slab	-/120/-	IFD44	No casing in penetration
	FL2	Concrete slab	-/240/180	IFD44	Cased steel casing in penetration
	FL3	Concrete slab	-/120/120	IFD44	Mounted in steel casing in penetrat
	FL4	Concrete slab	-/120/-	IFD-O	Steel sleeve in penetration
	FL5	Concrete slab	-/120/-	IFD44	NO casing - surface mounted over c
	FL6	Concrete slab	-/120/-	IFD-O	NO steel sleeve in penetration
	FL7	Concrete slab	-/120/-	IFD44	Steel casing, modular banked toget
CEILING	CE1	FRP/Board 2 ply ceiling	-/60/60	IFD44	P/Board clad encl. (60 min RISF Inc
	CE2	FRP/Board 2 ply ceiling	-/60/60	IFD44	P/Board clad encl. open end (60 mi
	CE3	FRP/Board 2 ply ceiling	-/90/90	IFD-O	P/Board panel & IFD (90 min RISF I
	CE4	FRP/Board 2 ply ceiling	-/90/90	IFD Hi-Flo	P/Board clad 3 way enclosure (90 r
DOOR	FD1	IFD-D in Firecore fire doors	-/120/30	IFD-D	Fitted to maxi & mini fire doors
	FD2	IFD-D in Pyropanel fire doors	-/120/30	IFD-D	Fitted to pandor, FR & pyrolite fire
	FD3	IFD-D in Trafalgar E-core doors	-/120/30	IFD-D	Fitted to maxi & mini fire doors

DESCRIPTION	APPROVAL REF.	MAX. SIZE	CONDITION
Penetration	FC02643, FC017	1200mm x >10m, >10m x 1200mm	
	C91525	250 x 250mm	
	FC02643	600mm x >10m, >10m x 600mm	
Penetration	FC01740	600 x 600mm	max hole size 500mm x 500mm
	22774-01	350mm diameter	
	22774-01	150mm diameter	
	22774-01	350mm diameter	
Penetration (angle free)	FC02008	300mm diameter	
	FC02588	250mm diameter	
Penetration	FC01854/FC02512	600mm x >10m	
Penetration	FC02525	1200 H x 600mm W *dual panel	400mm max if single in panel
	FC02525	350mm dia. *dual panel	350mm max if single in panel
Penetration	FC02525	1200 H x 600mm W *dual panel	400mm max if single in panel
	FC02525	350mm dia. *dual panel	350mm max if single in panel
Edge of slab	FC02495	300mm x 300mm	
Underside of slab	FC02495	150mm diameter	
Edge of slab with S angles	FC02495	300mm x 300mm	
Penetration	WFRA45955	600 x 600mm	
	WFRA45955	300mm diameter	
Penetration	FC01870	600mm x 600mm	
Penetration	FC01870	600mm x 600mm	
	FC02205	350mm diameter	
	FC02205	350mm diameter	
	FC02205	350mm diameter	
	FC02205	350mm diameter	
	FC01854/FC02512	600mm x 600mm	
Penetration (system)	FC01869	300 x 300mm or 90,000mm ²	
Penetration with packer	FC02436	90,000mm ²	
Penetration (system)	FC02455	300mm diameter	
Penetration with packer	FC02436	300 x 300mm or 90,000mm ²	
Penetration with IBS rod & mastic	FC02436	300 x 300mm or 90,000mm ²	
Penetration (system)	FC02455	300mm diameter	
Penetration (system)	FC01869	300 x 300mm or 90,000mm ²	
Penetration (system)	FC01869	300 x 300mm or 90,000mm ²	
Penetration (system)	FC02455	300mm diameter	
Penetration (system)	FC02101	300 x 300mm	
Penetration	FC02643/FC01963	Up to 1200mm x >10m or >10m x 1200mm	
	FSP0687	300 x 300mm	
Penetration	FC01796	600 x 600mm	
	FC01866	300mm diameter	
Penetration or under penetration	FC01740	600 x 600mm	max hole size 500mm x 500mm
	F91687	250mm diameter	
Penetration	FC01963	1200mm x 1200mm	
Penetration (Incipient rated)	40904	600 x 600mm	
Penetration (min RISF Incipient rated)	C91474	300mm x 300mm	exhausting into ceiling void
Penetration (Incipient rated)	FP3572	150mm diameter	
Penetration (min RISF Incipient rated)	FAR2925	Incorporates 150mm HI-Fio	
Penetration	COT388	600 x 300mm or 450 x 450mm	
Penetration	COT442	600 x 600mm, 600 x 300mm, 450 x 450mm	
Penetration	FC01211	600 x 300mm or 450 x 450mm (up to 2 off per leaf)	

Intumescent Fire Dampers

IFD Series Products



IFD44

Features

- Innovative, slimline design
- Simple installation
- Suitable retrofit solution for seized mechanical fire dampers
- Approvals for wall, floor & ceiling mounting
- No thermal expansion clearances required during installation
- Reduced maintenance & resultant cost savings

Technical Data

- Integrity fire rating - up to 4 hours
- Damper depth 44mm
- Sizes available from 45mm to over 10,000mm



IFD44 CASED

Features

- Insulating wall & floor mount
- Includes sleeve & flanges
- No hazardous fibrous packing required
- No thermal expansion clearances during installation
- Reduced maintenance & resultant cost savings

Technical Data

- Integrity fire rating - 4 hours
- Insulation fire rating - 2 hours plus
- Sizes available up to 600 x 600mm



IFD-C

Features

- Moisture resistant
- Innovative light weight design
- Space savings compared to old 'rat trap' designs
- Suitable for use with supply grilles & return air diffusers
- Reduced maintenance & resultant cost savings
- Ideal as a retrofit solution in fire safety upgrades

Technical Data

- Integrity fire rating - up to 1 ½ hours
- Insulation fire rating - up to 1 ½ hours
- Sizes available up to 600 x 600mm



IFD-O

Features

- Cost effective solution
- Innovative & easy to install lightweight design
- Suitable for extract and supply systems in commercial, industrial and residential projects
- No hazardous fibrous packing required
- No thermal clearances required in installation
- Reduced maintenance & resultant cost savings
- Also available as IFD-OSS for aggressive environments

Technical Data

- Integrity fire rating – up to 4 hours
- Sizes available from 100mm up to 350mm Dia
- Galvanised sleeve (spigot) 360mm long



IFD-O HI FLO

Features

- Clever new Hi Flo design with significantly reduced pressure drop
- Suitable for exhaust systems where every Pa saved can mean reduced fan sizing & resultant power savings
- System acoustic benefits
- No thermal clearances required in installation
- Reduced maintenance & resultant cost savings

Technical Data

- Integrity fire rating – up to 2 hours
- Sizes available 150mm & 200mm Dia
- Galvanised sleeve (spigot) 360mm long



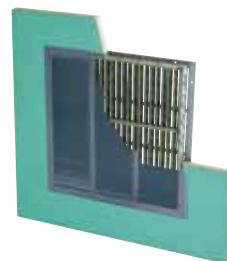
IFD-OSS

Features

- Cost effective solution
- Stainless steel sleeve
- No hazardous fibrous packing required
- No thermal clearances required in installation
- Reduced maintenance & resultant cost savings
- Available with halar coating for hazardous environments

Technical Data

- Integrity fire rating – up to 2 hours
- Sizes available from 100mm up to 350mm Dia
- Stainless Steel sleeve (spigot) 360mm long
- Halar coating option



IFD-D

Features

- Innovative slimline design
- Suitable for both mini & maxi fire doors
- All in one Kit includes 1 x IFD, 2 x cover grilles, Kilargo Mastic & fixings
- No moving parts result in a robust trouble free installation which will not rattle or vibrate
- Easy installation in new or existing doors

Technical Data

- Integrity fire rating - 2 hours
- Insulation fire rating ½ hour
- Sizes available 600 x 300mm, 450 x 450mm & 600 x 600mm (Pyropanel doors only)
- Suits nom. 35mm and 45mm thick fire doors
- Decorative finish cover grilles are suitable for internal use only.



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