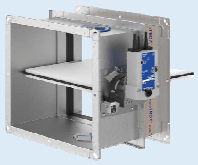
Fire Dampers

Includes both Fire damper (Mechanical spring close damper with thermal link) and Fire & smoke damper or MSFD (motorised some leakage rated fire damper with integrated electrical thermal release)

Product Standard: BS EN 15650
EXAP Standard: BS EN 15882-2
Classification Standard: BS EN 13501-3
Test Standard: BS EN 1366-2

FKA2-EU



FK-EU

FKRS-EU

FKR-EU

Installation Type	Fire Stop method	Size	W < 800 H < 400	W > 800 H > 400	W < 800 H < 400	W > 800 H > 400	W < 800 H < 400	W > 800 H > 400	W=200-1500 H=200-800			Ø 100 to Ø 200			Ø 100 to Ø 315			Ø 315 to Ø 800		
			Mortar		Inst Kit		Fire Batt		Mortar	Inst Kit	Fire Batt	Mortar	Inst Kit	Fire Batt	Mortar	Inst Kit	Fire Batt	Mortar	Inst Kit	Fire Batt
WALL - SOLID	gross density ≥ 350 kg/m³.	wall t min.																		
	In	98																		
	In	100	EI 120 S	EI 120 S			EI 120 S	EI 90 S	EI 120 S	EI 120 S	EI 120 S	EI 120 S	EI 90 S	EI 120 S	EI 120 S	EI 90 S	EI 120 S	EI 120 S		
	In - Below flexible ceiling joint	100							EI 90 S			EI 90 S			EI 90 S					
	Remote From	100			EI 90 S	EI 90 S				EI 90 S			EI 90 S			EI 90 S				
	In - Array (1 x 2)	100	EI 120 S	EI 120 S					EI 90 S		EI 90 S			EI 90 S			EI 90 S			
	In - Array FK/FKRS (2 x 2)	100							EI 90 S											
	In - Array FKA2/FKRS (2 x 2)	100	EI 120 S	EI 120 S																
WALL-DRYWALL																				
	Metal studding																			
2x cladding 2 sides	In	98							EI 120 S	EI 90 S	EI 120 S	EI 120 S	EI 90 S	EI 120 S	EI 120 S	EI 90 S	EI 120 S	EI 90 S	EI 90 S	
2x cladding 2 sides	In	94	EI 120 S	EI 120 S	EI 90 S	EI 120 S	EI 120 S	EI 90 S												
	In	75																EI 30 S	EI 30 S	
2x cladding 2 sides	Remote From	94			EI 90 S	EI 90 S														
2x cladding 2 sides	Remote From	98										EI 90 S			EI 90 S					
2x cladding 2 sides	In - Array (1 x 2)	94	EI 120 S	EI 120 S																
2x cladding 2 sides	In - Array (1 x 2)	98							EI 90 S		EI 90 S	EI 90 S		EI 90 S	EI 90 S		EI 90 S			
2x cladding 2 sides	In - Array FKA2/FKRS (2 x 2)	94	EI 90 S	EI 90 S																
2x cladding 2 sides	In - Array FK/FKRS (2 x 2)	98							EI 90 S											
2x cladding 2 sides	In - Below flexible ceiling joint	94	EI 90 S	EI 90 S	EI 90 S	EI 120 S														
2x cladding 2 sides	In - Below flexible ceiling joint	98							EI 90 S	EI 90 S								EI 90 S	EI 90 S	
1x cladding 2 sides	In	94	EI 30 S	EI 30 S	EI 30 S	EI 30 S	EI 30 S	EI 30 S												
1x cladding 2 sides	In	80*	EI 60 S	EI 60 S	EI 60 S	EI 60 S	EI 60 S	EI 60 S												
	Timber studding																			
2x cladding 2 sides	In	130	EI 120 S	EI 120 S	EI 120 S	EI 120 S	EI 120 S	EI 90 S	EI 90 S	EI 120 S	EI 120 S	EI 120 S	EI 120 S	EI 120 S	EI 120 S	EI 120 S	EI 120 S	EI 90 S	EI 90 S	
2x cladding 2 sides	In - Array (1 x 2)	130	EI 120 S	EI 120 S					EI 90 S		EI 90 S							EI 90 S		
1x cladding 2 sides	In	105	EI 30 S	EI 30 S	EI 30 S	EI 30 S	EI 30 S	EI 30 S	EI 30 S	EI 30 S	EI 30 S							EI 30 S	EI 30 S	
	Half-Timbered																			
2x cladding 2 sides	In	140	EI 90 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S						EI 120 S			EI 120 S	EI 90 S		
2x cladding 2 sides	In - Array (1 x 2)	140	EI 120 S	EI 120 S										EI 90 S			EI 90 S			
WALL-SHAFT WALL																				
	Metal studding																			
2x cladding 1 side	In	90	EI 90 S	EI 90 S	EI 90 S	EI 90 S			EI 90 S	EI 90 S		EI 90 S	EI 90 S		EI 90 S	EI 90 S		EI 90 S		
2x cladding 1 side	In - Array (1 x 2)	90	EI 90 S	EI 90 S					EI 90 S											
2x cladding 1 side	In - Array FKA2/FKRS (2 x 2)	90	EI 90 S	EI 90 S																
2x cladding 1 side	In - Array FK/FKRS (2 x 2)	90							EI 90 S											
	Without metal studding																			
2x cladding 1 side	In	40							EI 90 S	EI 90 S										
2x cladding 1 side	In	50										EI 90 S			EI 90 S			EI 90 S		
WALL - CLT / SOLID WOOD																				
	In	95	EI 90 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S	EI 90 S			
FLOOR - SOLID SLAB	gross density ≥ 600 kg/m³.																			
	In	600 kg/m	EI 120 S	EI 120 S					EI 90 S			EI 120 S	EI 90 S	EI 120 S	EI 120 S	EI 90 S	EI 120 S	EI 120 S		
	In	150									EI 180 S									
	Remote From - Under	125			EI 90 S	EI 90 S				EI 90 S										
	Remote From - Under	150											EI 90 S			EI 90 S				
	Remote-above with concrete plinth ≤750 high	100	EI 120 S	EI 120 S					EI 90 S			EI 120 S			EI 120 S			EI 120 S		
	In - Array (1 x 2)	100*	EI 120 S	EI 120 S					EI 90 S		EI 90 S							EI 120 S		
FLOOR - WOOD BEAM																				
	In Concrete plinth ≥125mm	100																EI 90 S		
	In Concrete plinth ≥125mm	125	EI 90 S	EI 90 S					EI 90 S									EI 90 S		
	In Concrete plinth ≥150mm	150										EI 90 S			EI 90 S					
FLOOR - SOLID WOOD																				
	In Concrete plinth ≥125mm	125	EI 90 S	EI 90 S					EI 90 S											

Smoke Control Dampers

Product Standard: BS EN 12101-8
Classification Standard: BS EN 13501-4
Test Standard: BS EN 1366-10 & 2

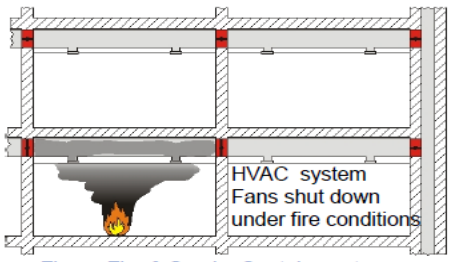
EK-JZ

EK-EU

EKA-EU

Installation Type		Size	W=200-1200 H=430-2030	W=200-1500 H=200-800	W=400-1500 H=200-800
WALL - SOLID	In	100	EI 120 (vew, i↔o) S 1000 Cmod HOT400/30 MA multi	EI 90 (vew, i↔o) S 1500 Cmod HOT400/30 MA multi	EI 120 (vew i↔o) S1500 C10 000 AA multi
WALL-DRYWALL ·Metal studding					
	In	100	EI 90 (vew, i↔o) S 1000 Cmod HOT400/30 MA multi		
SHAFT WALL - Drywall Metal studding					
	In	90	EI 90 (vedw, i↔o) S 1000 Cmod HOT400/30 MA multi		
SHAFT WALL - SOLID wall					
	In	100	EI 120 (ved, i↔o) S 1000 Cmod HOT400/30 MA multi		
VERTICAL smoke extract duct					
	On face of	35	EI 120 (ved, i↔o) S 1000 Cmod HOT400/30 MA multi		
HORIZONTAL smoke extract duct					
	On face of	35	EI 120 (ved, i↔o) S 1000 Cmod HOT400/30 MA multi	EI 90 (vew, i↔o) S 1500 Cmod HOT400/30 MA multi	
	Across	35	EI 120 (ved, i↔o) S 1000 Cmod HOT400/30 MA multi	EI 90 (vew, i↔o) S 1500 Cmod HOT400/30 MA multi	
	At end of	35	EI 120 (ved, i↔o) S 1000 Cmod HOT400/30 MA multi		
	On top of	35		EI 120 (hod, i↔o) S 1500 Cmod HOT400/30 MA multi	
FLOOR - SOLID SLAB	gross density ≥ 600 kg/m³				
	In	150		EI 120 (how, i↔o) S 1500 Cmod HOT400/30 MA multi	

Fire Dampers & Smoke Control Dampers … Understand the Difference



Fire or Fire & Smoke Containment

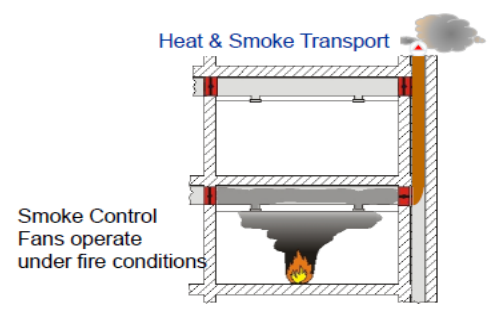
Fire Damper - To maintain COMPARTMENTATION Maintain fire (& smoke) integrity of the support construction

CLOSE & remain closed

For use in HVAC systems
Evaluated to
- close & remain closed on thermal activation or from external signal
- be fire resisting to the standard time temperature test curve
- Maintain leakage performance at elevated temperatures and positive pressure

– 3rd party (Notified Body) accredited
CE marked to
Product Standard - BS EN 15650
- BS EN 15882-2
Test Standard - BS EN 1366-2
Classification Std. - BS EN 13501-3

Fire Damper components
- Fire resistant movable barrier
- Thermal release device
- Automatic **Closing** device



Smoke Control Damper - To form a PATH from fire compartment to the open air as **part of a SYSTEM**

OPEN and maintain opening or
CLOSE & remain closed

For use in - Pressurisation systems
- Pressure relief systems
- Extraction systems
- Ductwork systems
- Cold smoke removal after fire

– 3rd party (Notified Body) accredited
CE marked to
Product Standard - BS EN 12101-8
Test Standard - BS EN 1366-10 & 2
Classification Std. - BS EN 13501-4

Evaluated to
- be heat resisting at elevated temperatures (single compartment) or fire resisting to the standard time temperature test curve (multi compartment)
- be applied to automatic or manual intervention systems
- open then close or close then open at elevated temperature
- when open maintain cross section area at elevated temperature
- when closed maintain leakage performance at elevated temperature and negative pressure. …. known maximum leakage to allow sensible fan selection and give a guide to smoke not leaking back through.

Suitable for **combined** HVAC and smoke extract (accommodated in classificatio code)

Options
- Elevated temperature - Single compartment classified
- Full fire resistance - Multi compartment classified
- Classified to match intended system requirements

Function - Create a path
- Failsafe – stay in position
  - OPEN or CLOSED
- Permanent power supply
- NO devices to cause uncontrolled operation
  NO Thermal release
  NO spring return

CLOSED
- Fire Integrity
- Leakage integrity

OPENED
- Open against force
- Maintain open area
- Stay in position