

Fire Stopping Compartmentation Systems

FLAMOCOUSTIC



TRIA

description

FLAMOCOUSTIC Sealant is an acrylic based sealant used to reinstate the fire resistance performance of wall and floor constructions where they have been provided with apertures for the penetrations of multiple services, also to form linear gap seals where gaps are present within the wall and floor constructions and linear joints where wall and floor constructions abutt.

FLAMOCOUSTIC Sealant has slight intumescent properties that cause it to swell upon heating. The FLAMOCOUSTIC Sealant is supplied in liquid form contained within 310ml foils or in 20kg pails. The sealant is either gunned or trowelled into the aperture in or between the separating element/elements to a specific depth utilizing various backing materials.

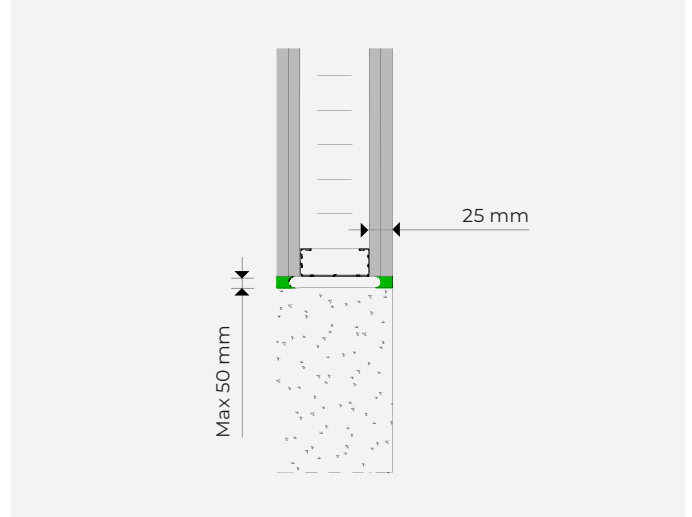
intended use

The specific elements of construction for the system FLAMOCOUSTIC Sealant are:

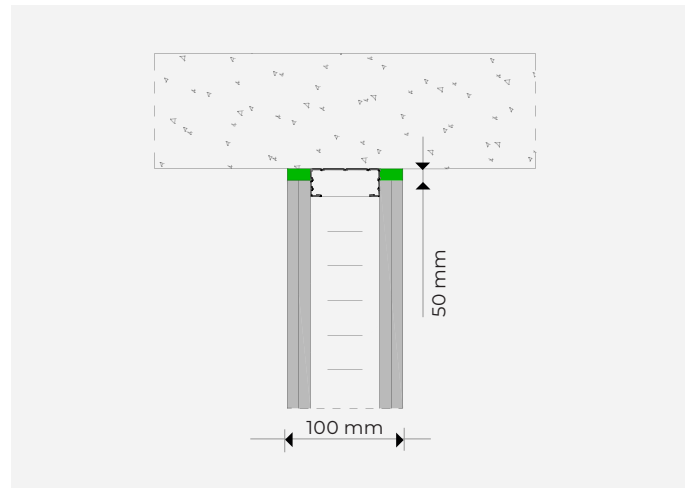
- Fire resistance testing to EN 1366-3 EI 120, EN 1366-4 EI 240 and BS 476 300mins.
- Fire resistance testing to ASTM-E 1966, UL 2079. CAN/UL 115-11 - ULus & ULc Listed.
- Resistance to Fire Classification EN 13501-2.
- Reaction to Fire Classification EN 13501-1
- VOC Tested - ASTM D2369-10, LEED 2009-EQ041 SCAQMD.
- Acoustic Isolation to EN 10140 to 48dB.
- Air Permeability testing to EN 1026 to 600Pa - 100Pa 0.0/0.0 m³/h/m².

key product points

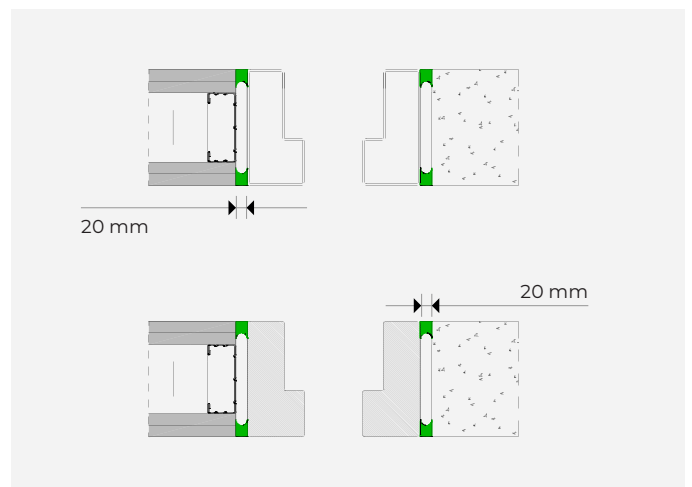
- Mechanical Adhesion, Tensile testing & Shore Hardness to ISO 9046:2005, ISO 8339:2005 & ISO 7619-1:2011.
- Fire resistance tested in flexible walls, rigid walls and floors.
- Tested in Linear Joints up to 50mm wide.
- Tested in large service openings up to 490 x 150mm.
- Tested with Metallic Pipes, Cables, Cable Bunches, Cable Trays and Cable Ladders.
- Causes no known effects to plastic pipes, plastic cables, sheathing or metallic components.
- For use in low movement joints, remains flexible.
- Halogen free, resists fungi and vermin.
- Shelf Life 18 months.



Typical flexible and rigid walls seal



Typical head of wall seal flexible wall to concrete soffit.



Softwood and hardwood timber door frame seals

PRODUCT TECHNICAL DATA

Description	Result	Test Standards
Packaging	310ml cartridges 25 per box, 20kg pails	
Colour	White or Grey (other colours by request)	
Slump	5mm after 1hr in 30mm joints	
Shrinkage	Approximately 12%	
Cure Rate	3mm per day at 50% relative humidity 23°C	
Specific Gravity	1.56 - 1.66 g/cm ³	ISO 2811-1:2011
Application temperature	+5°C to +40°C	
Tack Free	30 mins at 23°C, 50% RH	
Water Resistance	Good when fully cured	
U.V. Resistance	Good	
Joint Movement	Remains flexible	
VOC % Nonaqueous volatiles (105°C)	3,6	EN 1366-4:2006 + A1:2010
Acoustic	Up to Rw(C;Ctr) :63(-2;-7) dB	LEED
Expected Shelf Life	18 months unopened	Stored in accordance with packaging instructions

backing material

Mineral wool (min. 80kg/m³) or PE backing rod where required can be used as backing materials, though the FLAMOCOUSTIC Sealant should be installed correctly to achieve the performance needed.

key installation points

FLAMOCOUSTIC Sealant to be used installing TRIA Flamoseal 50 and 60.

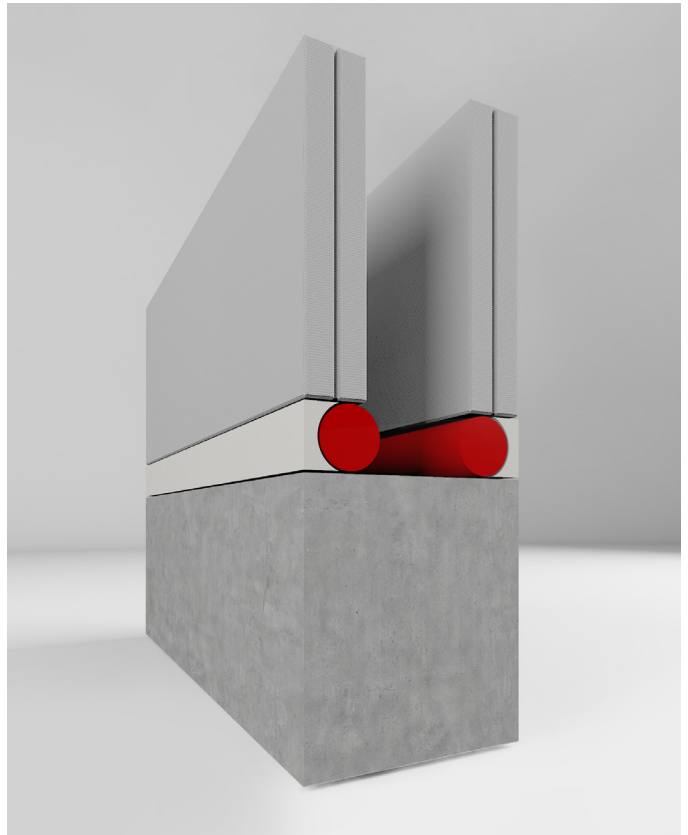
For good adhesion the surfaces of the building elements shall be free of any dust or grease and may need to be primed on good clean, virgin concrete & masonry, no priming required.

Ensure that the aperture and services in question are tested with FLAMOCOUSTIC Sealant and the site conditions are within the application specification. An annular space needs to be present around the service to apply sufficient installation depth.

All services and apertures need to be clean and clear of all dust and loose particles. The aperture temperature needs to be at 5°C or above at time of installation.

Upon installation make sure that you install the FLAMOCOUSTIC Sealant around all services needed.

Once compacted, smooth off the FLAMOCOUSTIC Sealant to produce a professional finish.



substrates

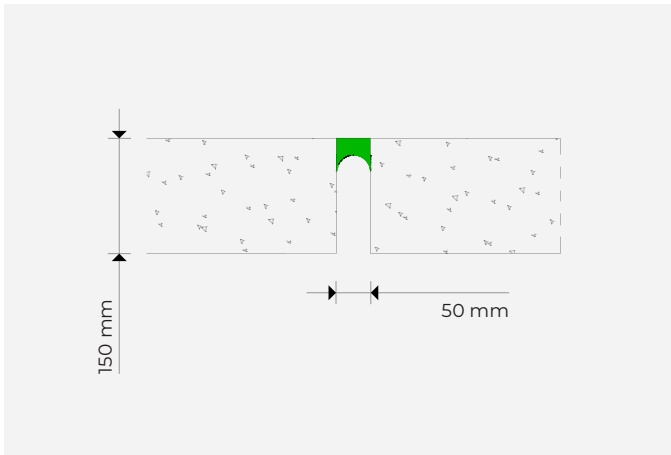
All walls shall have at least the same fire resistance as that required for the sealing system.

linear joint seals - rigid wall

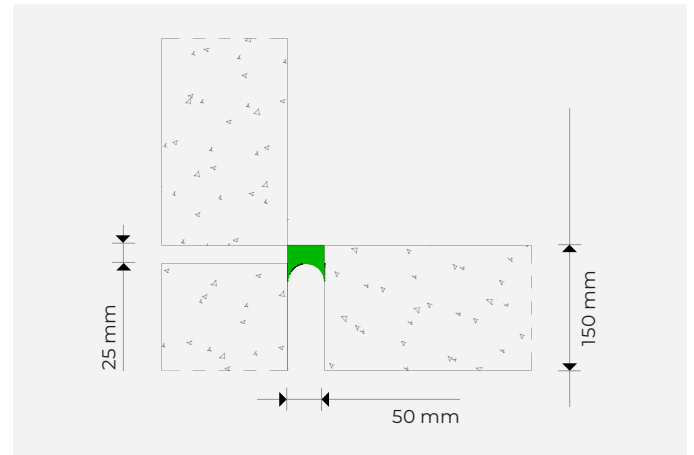
WALL INSTALLATIONS : DOUBLE SIDED SEALS						
Configuration	Max. joint width (mm)	Minimum seal depth (mm)	Backing Material	Integrity (mins)	Insulation (mins)	
Walls with same fire resistance as that required for the sealing system	Autoclaved aerated concrete to autoclaved aerated concrete.	20	10	Polyethylene 30mm diameter.	300	300
	Autoclaved aerated concrete to autoclaved aerated concrete.	30	15	Polyethylene 40mm diameter.	300	210
	Autoclaved aerated concrete to autoclaved aerated concrete.	40	20	Polyethylene 50mm diameter.	300	210
	Autoclaved aerated concrete to autoclaved aerated concrete.	50	25	Polyethylene 60mm diameter.	300	210
	Brick to autoclaved aerated concrete.	15	10	Polyethylene 20mm diameter.	240	0
	Brick to autoclaved aerated concrete.	25	10	Polyethylene 30mm diameter.	240	30
	Steel to aerated blockwork.	30	15	Polyethylene 40mm diameter.	300	90
	Steel to aerated blockwork.	50	25	Ethafoam rod 50mm diameter.	60	30
	Hardwood to aerated blockwork.	50	25	Ethafoam rod 50mm diameter.	60	60
	Softwood to aerated blockwork.	25	12	Ethafoam rod 30mm diameter.	30	30

linear joint seals - rigid wall

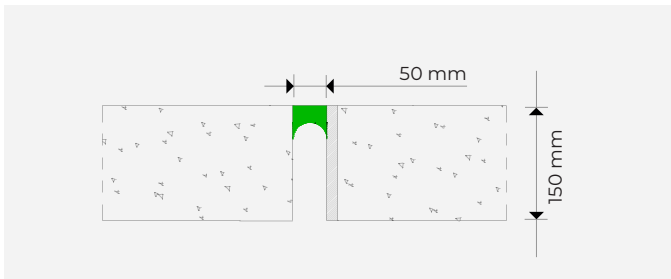
Wall Installations : Single Sided Seals - Sealant installed to either side of wall						
Configuration	Max. joint width (mm)	Minimum seal depth (mm)	Backing Material	Integrity (mins)	Insulation (mins)	
Walls with same fire resistance as that required for the sealing system	Autoclaved aerated concrete to autoclaved aerated concrete.	50	25	Polyethylene 50mm diameter.	120	60
	Autoclaved aerated concrete to autoclaved aerated concrete.	20	10	Polyethylene 20mm diameter.	120	45
	Autoclaved aerated concrete to autoclaved aerated concrete.	50	50	Polyethylene 50mm diameter.	45	45
	Autoclaved aerated concrete to autoclaved aerated concrete.	20	10	Polyethylene 20mm diameter.	30	20
	Autoclaved aerated concrete to steel.	50	50	Polyethylene 50mm diameter.	45	30
	Autoclaved aerated concrete to steel.	20	10	Polyethylene 20mm diameter.	120	20
	Autoclaved aerated concrete to autoclaved aerated concrete.	50	25	Polyethylene 50mm diameter.	120	60
	Autoclaved aerated concrete to autoclaved aerated concrete.	40	20	Polyethylene 40mm diameter.	120	30
	Autoclaved aerated concrete to autoclaved aerated concrete.	30	15	Polyethylene 30mm diameter.	120	30
	Autoclaved aerated concrete to autoclaved aerated concrete.	20	10	Polyethylene 20mm diameter.	120	30
	Autoclaved aerated concrete to softwood.	50	25	Polyethylene 50mm diameter.	45	30
	Autoclaved aerated concrete to softwood.	40	20	Polyethylene 40mm diameter.	30	15
	Autoclaved aerated concrete to softwood.	30	15	Polyethylene 30mm diameter.	30	15
	Autoclaved aerated concrete to softwood.	20	10	Polyethylene 20mm diameter.	30	15
	Autoclaved aerated concrete to steel.	50	25	Polyethylene 50mm diameter.	45	30
	Autoclaved aerated concrete to steel.	40	20	Polyethylene 40mm diameter.	45	30
	Autoclaved aerated concrete to steel.	30	15	Polyethylene 30mm diameter.	45	30
Autoclaved aerated concrete to steel.	20	10	Polyethylene 20mm diameter.	120	15	



Rigid floor single seal from above



Rigid floor to wall seal from above



Rigid floor single seal with steel from above

linear joint seals - rigid wall

WALL INSTALLATIONS : DOUBLE SIDED SEALS						
Configuration		Max. joint width (mm)	Minimum seal depth (mm)	Backing Material	Integrity (mins)	Insulation (mins)
Walls with same fire resistance as that required for the sealing system	Drywall to autoclaved aerated concrete.	20	12.5 (both faces)	Polyethylene 20mm diameter.	120	120
Walls with same fire resistance as that required for the sealing system	Autoclaved aerated concrete to autoclaved aerated concrete.	20	12.5 (both faces)	Polyethylene 20mm diameter.	120	120

flexible and rigid wall

SEALING OF DRYWALL HEAD & FLEXIBLE WALL TO RIGID WALL - DOUBLE SIDED SEALS						
Configuration		Max. joint width (mm)	Minimum seal depth (mm)	Seal Orientation	Integrity (mins)	Insulation (mins)
Walls with same fire resistance as that required for the sealing system	Gypsum plasterboard + steel head track/Rigid floor.	20	25 (both faces)	horizontal	120	120
	Gypsum plasterboard + steel vertical edged tracks/Rigid floor.	20	25 (both faces)	vertical	120	120

linear joint seals - rigid floor

FLOOR INSTALLATIONS :- SINGLE SIDED SEALS						
Configuration		Max. joint width (mm)	Minimum seal depth (mm)	Backing Material	Integrity (mins)	Insulation (mins)
Floors with same fire resistance as that required for the sealing system	Autoclaved aerated concrete to autoclaved aerated concrete.	50	25	Polyethylene 50mm diameter.	240	90
	Autoclaved aerated concrete to autoclaved aerated concrete.	40	20	Polyethylene 40mm diameter.	240	45
	Autoclaved aerated concrete to autoclaved aerated concrete.	30	15	Polyethylene 30mm diameter.	240	45
	Autoclaved aerated concrete to autoclaved aerated concrete.	20	10	Polyethylene 20mm diameter.	240	45
	Autoclaved aerated concrete to softwood.	50	25	Polyethylene 50mm diameter.	45	45
	Autoclaved aerated concrete to softwood.	40	20	Polyethylene 40mm diameter.	30	30
	Autoclaved aerated concrete to softwood.	30	15	Polyethylene 30mm diameter.	30	30
	Autoclaved aerated concrete to softwood.	20	10	Polyethylene 20mm diameter.	30	30
	Autoclaved aerated concrete to steel.	50	25	Polyethylene 50mm diameter.	240	90
	Autoclaved aerated concrete to steel.	40	20	Polyethylene 40mm diameter.	240	30
	Autoclaved aerated concrete to steel.	30	15	Polyethylene 30mm diameter.	240	30
	Autoclaved aerated concrete to steel.	20	10	Polyethylene 20mm diameter.	240	30

rigid floor

FLOOR INSTALLATIONS :- SINGLE SIDED SEALS - SEAL INSTALLED FLUSH WITH UPPER FACE OF THE FLOOR						
Configuration		Max. joint width (mm)	Minimum seal depth (mm)	Backing Material	Integrity (mins)	Insulation (mins)
Floors with same fire resistance as that required for the sealing system	Autoclaved aerated concrete to autoclaved aerated concrete.	50	25	Polyethylene 50mm diameter.	240	90
	Autoclaved aerated concrete to autoclaved aerated concrete.	20	10	Polyethylene 20mm diameter.	240	45
	Autoclaved aerated concrete to softwood.	50	50	Polyethylene 50mm diameter.	45	45
	Autoclaved aerated concrete to softwood.	20	10	Polyethylene 20mm diameter.	30	30
	Autoclaved aerated concrete to steel.	50	50	Polyethylene 50mm diameter.	240	90
	Autoclaved aerated concrete to steel.	20	10	Polyethylene 20mm diameter.	120	120

FLOOR INSTALLATIONS - DOUBLE SIDED SEALS

Configuration		Max. joint width (mm)	Minimum seal depth (mm)	Backing Material	Integrity (mins)	Insulation (mins)
Floors with same fire resistance as that required for the sealing system	Aerated concrete to aerated concrete.	50	25	Polyethylene 30mm diameter.	300	120
	Aerated concrete to aerated concrete.	20	10	Polyethylene 40mm diameter.	300	60
	Aerated concrete to aerated concrete.	50	50	Polyethylene 50mm diameter.	300	60
	Aerated concrete to aerated concrete.	20	10	Polyethylene 60mm diameter.	300	210
	Softwood to aerated concrete.	50	50	Ethafoam 30mm diameter.	30	30
	Hardwood to aerated concrete.	20	10	Ethafoam 50mm diameter.	30	30
	Steel to aerated concrete.	50	25	Ethafoam 50mm diameter.	60	60

movement rigid wall and floor

FLOOR INSTALLATIONS :- SINGLE SIDED SEALS - SEAL INSTALLED FLUSH WITH UPPER FACE OF THE FLOOR							
Configuration		Max. joint width (mm)	Minimum seal depth (mm)	Backing Material	Integrity (mins)	Insulation (mins)	Movement %
Walls with same fire resistance as that required for the sealing system	autoclaved aerated concrete.	60*	20 (both faces)	Polyethylene 20mm & 50mm diameter.	240	120	25 shear 8.3 Lateral
		60*	5 (either face)	75mm deep, compressed 15%, stonewool 60kg/m ³ .	240	60	25 Shear 12.5 Lateral
*Pre movement							

rigid floor

FLOOR CONSTRUCTIONS							
Configuration		Max. joint width (mm)	Minimum seal depth (mm)	Backing Material	Integrity (mins)	Insulation (mins)	Movement %
Floor with same fire resistance as that required for the sealing system	autoclaved aerated concrete.	60*	20 (both faces)	Polyethylene 20mm & 50mm diameter.	180	60	16 Lateral
		60*	5 (upper face)	100mm deep, compressed 15%, stonewool 60kg/m ³ .	240	240	25 Lateral
*Pre movement							

penetration seals flexible and rigid wall

WALL INSTALLATIONS: DOUBLE SIDED SEALS						
Configuration		Cut Out (mm)	Minimum seal depth (mm)	Backing Material	Integrity (mins)	Insulation (mins)
Walls with same fire resistance as that required for the sealing system	Cables < to 21mm.	60	25 (both faces)	70mm x 80kg/m ³ stone wool.	120	90
	Perforated Cable Tray 450mm x 50mm.	490mm long x 100mm high	25 (both faces)	70mm x 80kg/m ³ stone wool.	120	90
	Cables > 21 - 50mm.	200mm long x 100mm high	25 (both faces)	N/A	90	60

SEALING OF DRYWALL HEAD & FLEXIBLE WALL TO RIGID WALL - DOUBLE SIDED SEALS						
Configuration		Annular Seal Width (mm)	Minimum seal depth (mm)	Backing Material	Integrity (mins)	Insulation (mins)
Walls with same fire resistance as that required for the sealing system	Copper/Steel pipe 15mm dia.	10	25 (both faces)	N/A	120	20
	Copper/Steel pipe 40mm dia.	10	25 (both faces)	N/A	120	15
	Copper/Steel pipe 15mm dia with Thermal Defence Wrap 30mm long to the unexposed face.	10	25 (both faces)	N/A	120	90
	Copper/Steel pipe 15mm dia with Thermal Defence Wrap 30mm long to the unexposed face.	10	25 (both faces)	N/A	120	20

FLAMOSEAL 50 IN RIGID & FLEXIBLE WALLS WITH SAME FIRE RESISTANCE AS THAT REQUIRED FOR THE SEALING SYSTEM				
Aperture Size	Seal Composition	Services	Capping	Classification
180mm x 180mm Walls with same fire resistance as that required for the sealing system	20mm Depth of FLAMOCOUSTIC Sealant both sides of wall using 20mm of stone fibre backing minimum 45kg/m ³ both faces.	Electrical cables up to 21mm dia.	N/A	EI 120
		Electrical cables 33mm to 61mm dia.		E 120 , EI 60
		100mm diameter bundle telecommunication cable type "F".		EI 120
		Single cables up to 27mm dia.		E 120 , EI 60
		Steel or Copper Conduits up to 16mm.		E 120 , EI 15
		Plastic conduits up to 16mm.		EI 120

**FLAMOSEAL 50 IN RIGID & FLEXIBLE WALLS WITH SAME FIRE RESISTANCE
AS THAT REQUIRED FOR THE SEALING SYSTEM**

Aperture Size	Seal Composition	Services	Classification
180mm x 180mm Walls with same fire resistance as that required for the sealing system	20mm Depth of FLAMOCOUSTIC Sealant both sides of wall using 20mm of stone fibre backing minimum 45kg/m ³ both faces.	Blank Seal.	EI 120

**FLEXIBLE WALLS WITH SAME FIRE RESISTANCE
AS THAT REQUIRED FOR THE SEALING SYSTEM**

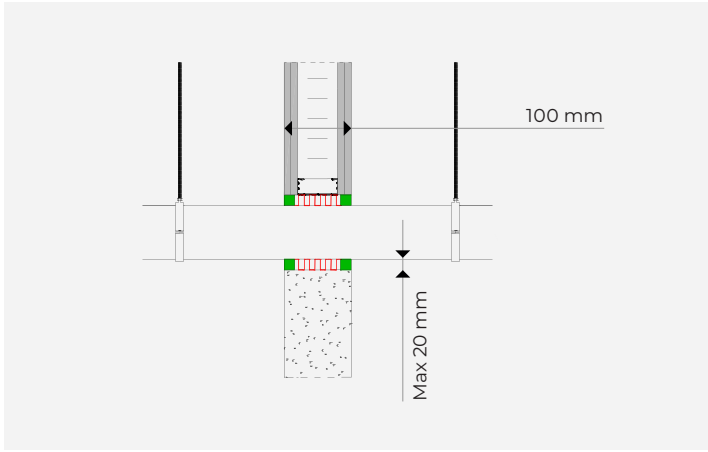
Aperture Size	Seal Composition	Services	Capping	Classification
180mm x 180mm	20mm Depth of FLAMOCOUSTIC Sealant applied flush with both faces of the wall and a 20mm deep infill of friction fitted rock wool insulation at a 45kg/m ³ density	Electrical cables up to 21mm dia	N/A	EI 120
		Electrical cables 33mm to 61mm dia		E 90, EI 60
		Single Electrical Cable up to 27mm dia		E 120, EI 60
		100mm diameter bundle telecommunication cable type "F"		EI 120
		Not Penetrated (Blank Penetration)		EI 120
		Steel or Copper Conduits up to 16mm		EI 120
		Plastic conduits up to 16mm		E 120, EI 15

**FLEXIBLE WALLS WITH SAME FIRE RESISTANCE
AS THAT REQUIRED FOR THE SEALING SYSTEM**

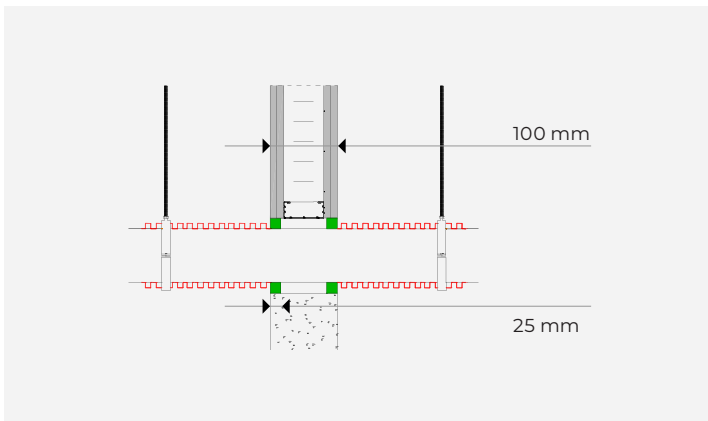
Aperture Size	Seal Composition	Services	Capping	Classification
Annular Space of 10mm	Annular space filled with FLAMOCOUSTIC Sealant flush to each face of the supporting construction to a depth of 25mm.	114mm diameter mild steel pipe.	C/U	E 120, EI 15
		42mm diameter mild steel pipe.		E 120, EI 45

FLEXIBLE WALLS WITH SAME FIRE RESISTANCE AS THAT REQUIRED FOR THE SEALING SYSTEM

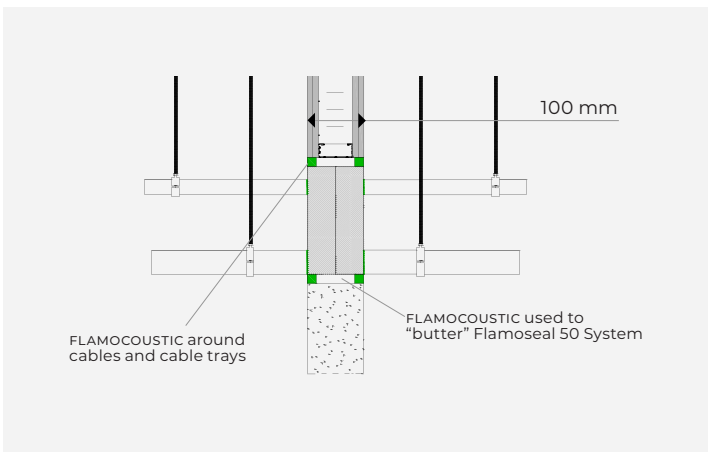
Aperture Size (mm)	Services	Seal	Classification
25mmø	21mm Cable (95mm ²)	Annular gap around service sealed with FLAMOCOUSTIC Sealant at a depth of 12mm. 10mm of 45kg/m ² stone wool was used as backing for the sealant	EI 60 - E 90
10mm annular space around service	54mm Copper/ Steel Pipe		E 90
10mm annular space around service	76mm Steel Pipe		E 90
25mmø	15mm steel pipe		EI 90
25mmø	15mm copper/steel pipe		EI 60 - E 90



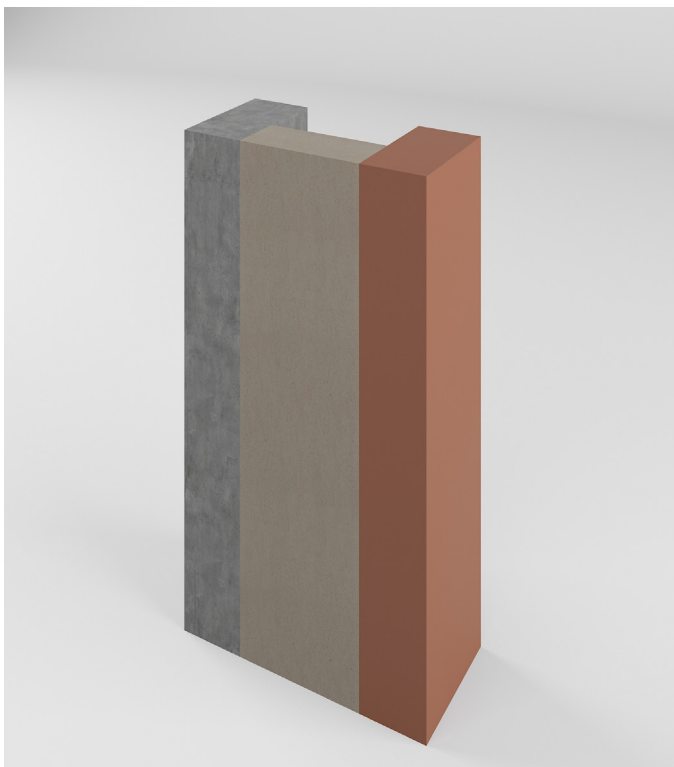
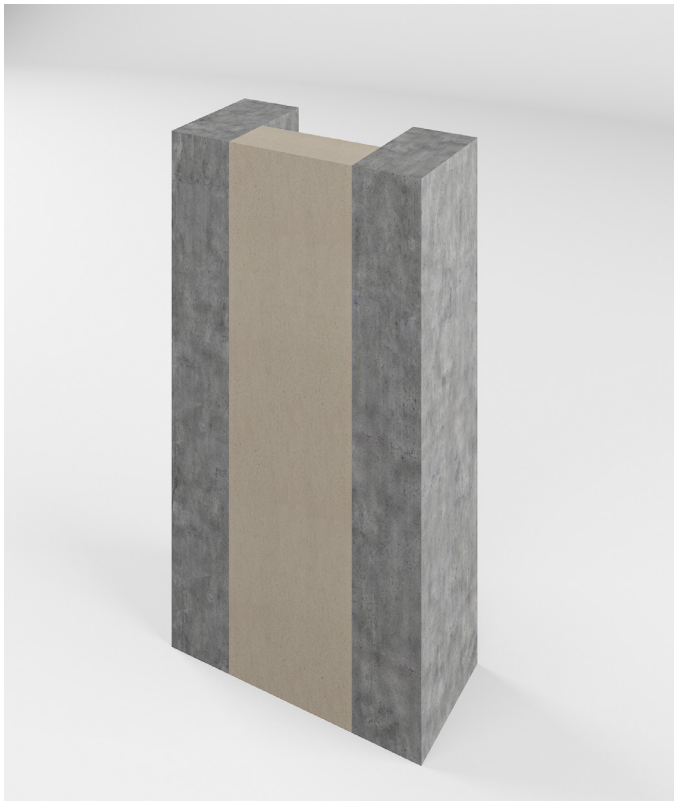
Copper/ metal/ steel pipes through rigid and flexible wall.



Cooper/ metal/ steel insulated pipes through rigid and flexible wall.



Seal around cable and cable trays in TRIA Flamoseal 50 and 60 system and "butter up" using FLAMOCOUSTIC sealant the Flamoseal installation.



information

TRIA has Technical Representatives who provide assistance in the selection and specification of TRIA products. For more information, specification and technical advice please call our Head Office geral@tria.pt. Guarantee / Warranty: TRIA products are manufactured to rigid standards of quality. Any product which has been applied in accordance with TRIA's written instructions and in any application

recommended by TRIA, but which is proved to be defective in product quality, will be replaced free of charge. No liability can be accepted for the information provided in this document although it is published in good faith and believed to be correct. TRIA reserves the right to alter product specifications without prior notice, in line with our Company policy of continuous development and improvement.

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