

# BindEx

## FIRE AND ACOUSTIC SEALANT



## TECH DATA

**BindEx Fire and Acoustic Sealant** is an acrylic based sealant designed to stop sound, smoke and fire from passing through gaps in fire rated walls and ceilings. It has been fire tested in Australia for control joints, perimeter seals and penetration seals around cables and metal pipes. When it is exposed to heat, it provides a fire barrier by expanding and forming a solid charred material. The acrylic formulation means water wash up, easier application, a paintable surface and low volatile chemical content for a low odour product. BindEx Fire Sealant can be used instead of MastaBase and paper tape to joint sheets in multi-layer systems.



### Performance

#### Fire

Fire performance of up to 3 hours in plasterboard walls.

#### Acoustics

Maintains the acoustic rating of Knauf wall and ceiling systems.

### Product Information

SIZE	310 ml cartridge or 600 ml foil tube
COLOUR	Blue for easy identification
DRYING TIME	▶ Tack Free Time: 60 minutes maximum    ▶ Skin Time: 20 minutes maximum
DENSITY	1.60 - 1.64 g/cm <sup>3</sup>
SOLIDS CONTENT	80% minimum
VOC (VOLATILE ORGANIC CHEMICALS)	2.5 g/l
SHELF LIFE	Up to 12 months when stored in unopened cartridges under cool dry conditions
MAXIMUM JOINT MOVEMENT	12.5%
SYSTEM USAGE	Junctions between fire rated elements such as walls and ceilings Sealing fire rated penetrations
CLEAN UP	Wash with water before cured
FIRE PERFORMANCE	Refer to fire reports EWFA 2752800 and EWFA 28139*

\*For more information, contact Knauf Plasterboard on AU 1300 724 505 / NZ 0800 884 326.

### Benefits

- ▶ Excellent slump resistance
- ▶ Easy to apply and tool off
- ▶ Excellent adhesion to most common building materials

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### Fire rated penetrations tested or assessed to AS1530.4.

Service penetrations tested include the standard configurations for cables and pipes according to Appendix D and E from AS1530.4. FRLs (Fire Resistance Levels) below are based on a test in a 51mm steel stud wall lined on both sides with 2 layers of 13mm FireShield (Knauf System KSW312)<sup>1</sup>. Refer to fire reports EWFA 2752800 and EWFA 28139 for details.

	PENETRATION	SIZE (MM)	BACKING MATERIAL	BINDEX FIRE AND ACOUSTIC SEALANT	FRL	FRL WITH MINERAL WOOL <sup>6</sup>
A	Copper or Ferrous pipe	Ø = 150	None <sup>2</sup>	5mm to 15mm wide, 26mm deep with a 20mm fillet	-/180/-	-/180/120
B	Copper or Ferrous pipe	Ø = 150	22mm polyurethane backing rod	5mm to 15mm wide, 26mm deep with no fillet	-/180/-	-/180/120
C	Brass pipe	Ø = 100	None <sup>2</sup>	5mm to 15mm wide, 26mm deep with a 20mm fillet <sup>2</sup>	-/180/-	-/180/120
D	Copper or Ferrous pipe	Ø = 32	None <sup>2</sup>	5mm to 15mm wide, 26mm deep with a 20mm fillet <sup>2</sup>	-/180/30	-/180/120
E	Power cables <sup>3</sup> on tray, opening lined with steel track	325X50X1	51mm wide strips of polyethylene foam	5mm to 15mm wide, 26mm deep	-/120/-	-/120/120
F	Communication cables <sup>4</sup> on tray, opening lined with steel track	175X50X1	51mm wide strips of polyethylene foam	5mm to 15mm wide, 26mm deep	-/120/-	-/120/120
G	Control joint through two layers of FireShield <sup>5</sup>		22mm polyurethane backing rod	20mm wide, 26mm deep, finished flush with surface	-/120/120	-
H	Control joint through one layer of FireShield <sup>5</sup>		22mm polyurethane backing rod	20mm wide, 13mm deep, finished flush with surface	-/120/90	-
I	Deflection Head		Steel deflection head track	20mm high, 26mm deep, finished flush with surface	-/180/120	-

<sup>1</sup> BindEx Fire and Acoustic Sealant was installed at all gaps in the wall perimeter and all outer layer butt and recess joints.

<sup>2</sup> Installed using the 'no backing rod' installation technique. See Installation section.

<sup>3</sup> According to AS1530.4 – 2005 D1 Group A.

<sup>4</sup> According to AS1530.4 – 2005 D2 Group B.

<sup>5</sup> Control joint installed on both sides of the wall and filled with BindEx Fire and Acoustic Sealant.

<sup>6</sup> 38mm Bradford Fibretex 450 Rockwool wrapped around the pipe or cable 600mm both sides of the wall and secured with metal pipe clamps.

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### Application

All surfaces must be clean and free from dirt and grease. Use a brush to remove loose material. Lightly apply water or diluted BindEx Fire and Acoustic Sealant to porous materials to improve bonding. The surfaces may be damp but not running wet. For the best bond, overlap BindEx Fire and Acoustic Sealant onto the material surfaces. The application range is in temperatures between +5°C and +40°C.

Outer layer recessed and butt joints can be jointed with BindEx Fire Sealant and maintain the fire rating of Knauf multi-layer wall systems. A bead of sealant is applied along the edge of a face layer sheet of plasterboard, then the next sheet is butted up against the first sheet. Sealant must squeeze out of the joint. Excess sealant may be scraped off or left as is.

### Backing materials

The best way to accurately control sealant depth is to use backing material (e.g. Polyethylene foam or Polyurethane backing rod). Cable tray openings are lined with steel track and the cavity may be stuffed with a backing material the same depth as the stud, such as Polyethylene foam. Control joints must use a backing material such as Polyethylene foam or Polyurethane backing rod. Penetrations for pipes can be backed with a foam rod or by using the 'no backing rod' technique. To apply Polyurethane backing rod to a pipe penetrating a cavity wall or ceiling;

- Cut a piece of rod to the length of the circumference of the pipe
- Join the rod around the pipe using tape
- Push the circle of foam rod past the plasterboard, just until it enters the wall cavity.

To seal around a pipe without a backing material;

- Use a nozzle cut to a diameter which is appropriate for the gap. For example, use a 5mm diameter nozzle for a small gap of 5mm to 10mm.
- Apply sealant, attempt to fill gap to the full depth of plasterboard by filling outwards
- Apply an extra bead of sealant 10mm high
- Push this bead into the gap with a small tool
- Apply a 20mm fillet as shown in the construction details.

Fill a gap by applying the sealant from the back of the cavity or joint, filling outwards in a smooth and continuous action. Strike off the sealant flush with the joint sides within five minutes of application, before surface skinning occurs. A small amount of shrinkage will occur on curing. If a flush finish is required, fill the joint slightly proud of the surface to allow for shrinkage.

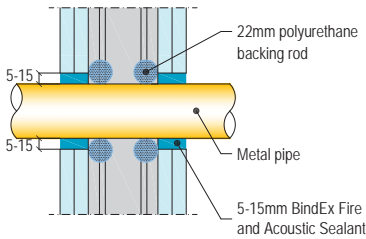
### Optimise product performance by:

- Storing under cool dry conditions.
- Avoid storage temperatures above 30°C and below 5°C.

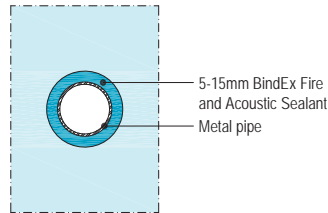


# TECH DATA

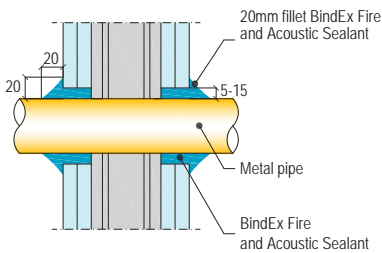
## Construction details



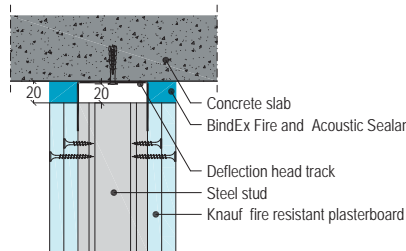
**KBS-MTP-01S** Metal pipe penetration with backing rod  
Section view



**KBS-MTP-01E** Metal pipe penetration  
Elevation view

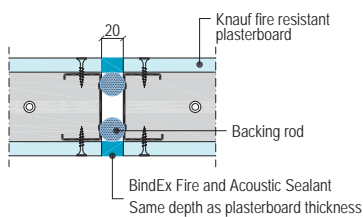


**KBS-MTP-02S** Metal pipe penetration with fillet  
Section view

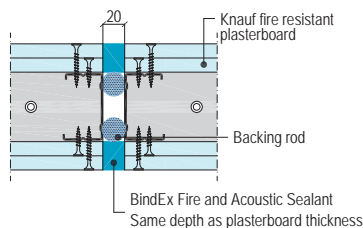


**KBS-DFH-01E** Deflection head

Pipe Material	Max. Pipe Ø (mm)	Min. Wall Thickness (mm)
Copper, Brass or Ferrous	32-65	1.1
	75-100	1.4
Copper or Ferrous	125	2.15
	150	2.15



**KBS-CTJ-01P** Control Joint in one layer wall



**KBS-CTJ-02P** Control Joint in two layer wall

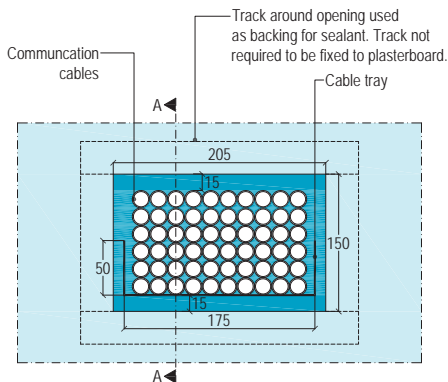


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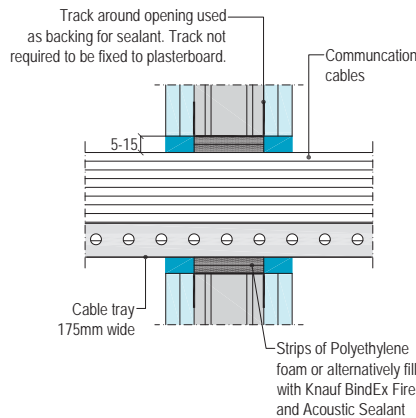


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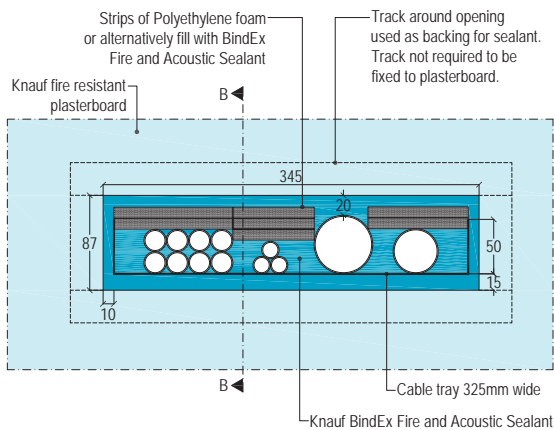


Cable tray through fire wall FRL -/120/-

**KBS-CMC-01E** Communication cables  
Elevation view

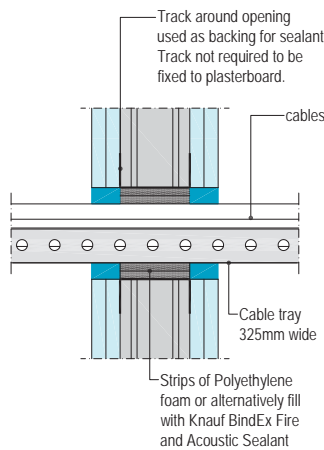


**KBS-CMC-01S** Communication cables  
Section A-A view

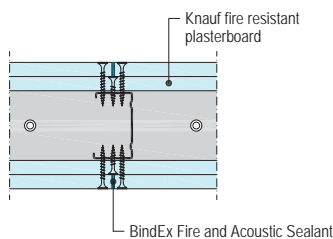


Cable tray through fire wall FRL -/120/-

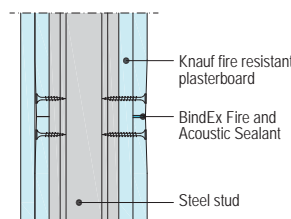
**KBS-PWC-01E** Various Power cables on tray  
Elevation view



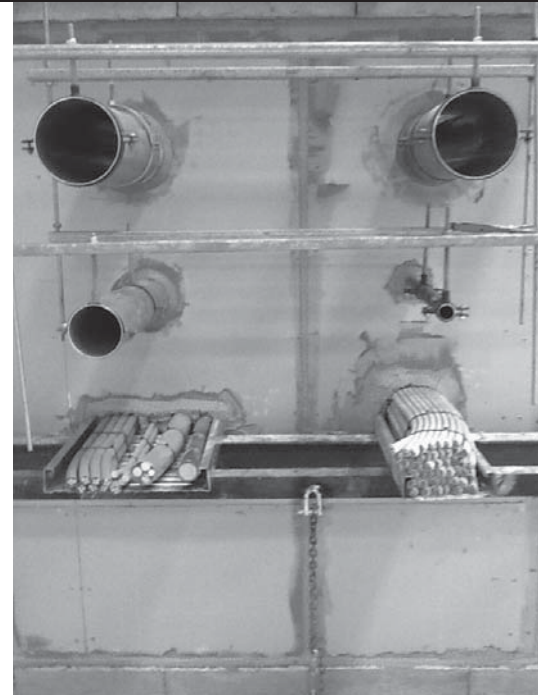
**KBS-PWC-01S** Various Power cables on tray  
Section B-B view



**KBS-BTJ-01P** Butt joint  
in multi layer wall



**KBS-RDJ-01S** Recessed joint  
in multi layer wall



### Warranty

Knauf's products are guaranteed by a 10 Year Warranty. Visit [knaufplasterboard.com.au](http://knaufplasterboard.com.au) [knaufplasterboard.co.nz](http://knaufplasterboard.co.nz) for details.

### Technical Advice

For technical advice, please call Knauf technical services on

**AU 1300 724 505**  
**NZ 0800 884 326.**