



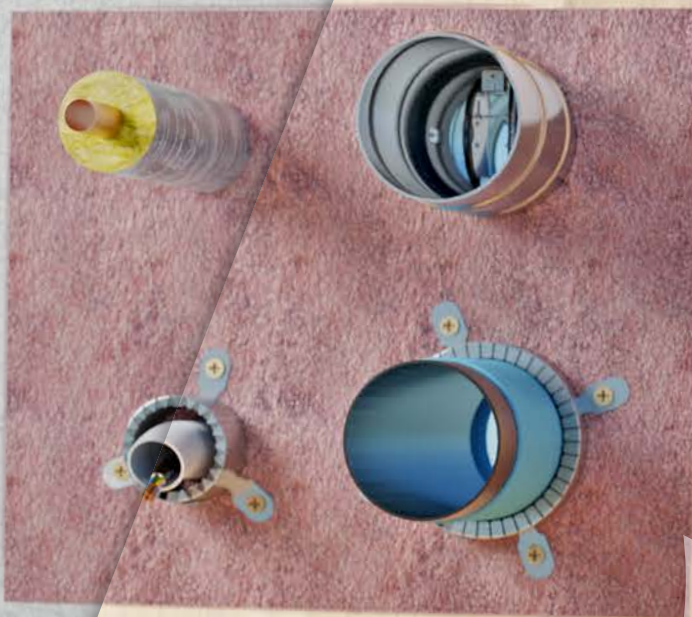
AIR FIRE TECH

Fire protection systems

Light – Fast – Safe

TIROTECH® Mixed penetration seal

according to ETA-17/0586



www.airfiretech.at

TIROTECH® - Fire protective mortar

according to ETA-17/0586



CE 1139
 GOIDINGER
 Bau- und Leichtbeton GmbH
 40 Salzburger Street
 6112 Wattens, AUSTRIA
 17
 1139-CPR-0668/17
 ETA-17/0586
 EAD 350454-00-1104
 DOP 2023/TIROTECH
 Pipe, cable and/or
 combination partitioning
 "TIROTECH"
 Usage category Y₁
 Further relevant
 For properties, see
 ETA-17/0586



Advantages

- Low weight with high volume – 10 kg/30 liter bag
- Simple and safe processing
- High yield – 30 liters wet mortar/bag
- Use condition X

With its low weight of just **10 kg per 30 liter bag** and **high yield**, **TIROTECH® fire protective mortar** is the indispensable choice for **efficient installation** on the construction site. Whether in flexible walls, rigid walls, rigid floors or cross-laminated timber constructions - the lightweight mortar impresses with its **simple and time-saving application**, without the need for complex formwork.

Article number

Art.-No.	Matchcode	Contents
9900950	BSM/S30	30 litres

„Because
 fire seals simply must
 be safe!“

Properties

TIROTECH® - Fire protective mortar			
	Flexible walls Thickness ≥ 100 mm	Rigid walls & Cross laminated timber walls Thickness ≥ 100 mm	Rigid floors & Cross laminated timber floors Thickness ≥ 140 mm
Maximum bulkhead size	1000x600 mm	1200x1000 mm	1200x800 mm bzw. 820x8200 mm
Minimum mortar thickness	100 mm		140 mm
Dry bulk density	450 kg/m ³		
Utilization category	X		
Thermal conductivity	0,12 W/mK		
Delivery form	30 liter bag – Weight 10 kg		
Water requirement	approx. 5 liters/bag		
Mixing time	approx. 1 minute		
Processing temperature	min. 8 °C		
Paintable	Yes		
Storage	Store in a dry place. Protect from moisture. Shelf life approx. 6 months		

Not all wood is the same!

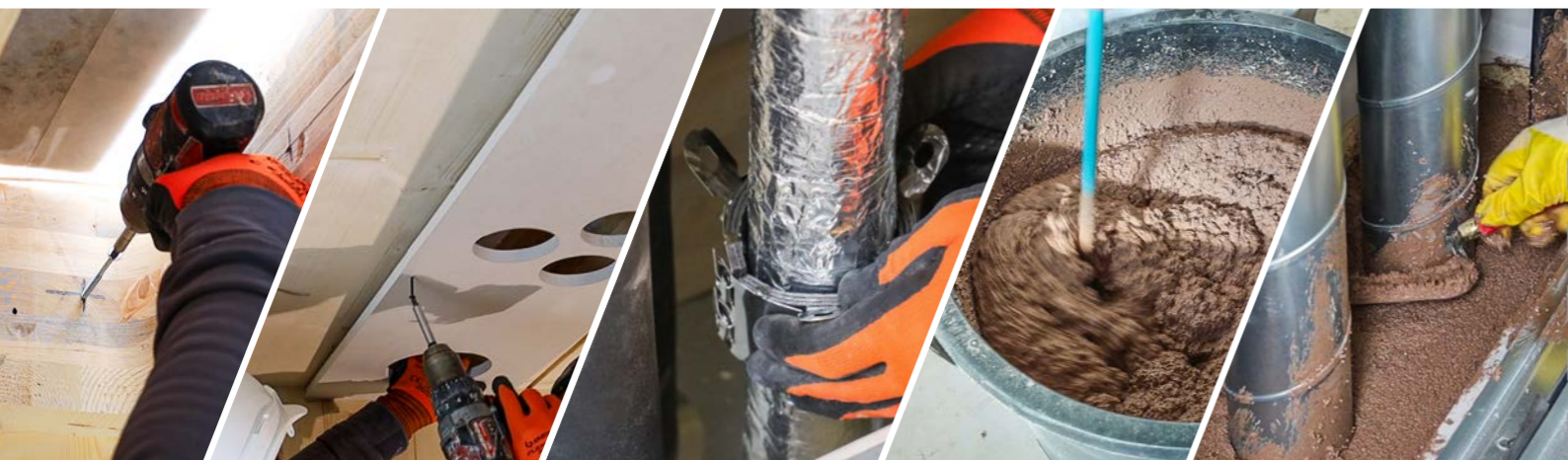
Each manufacturer of cross laminated timber has its own European Technical Assessment (ETA) for its timber structures. According to EN 1366-3:2022 point 7.2.1, these belong to the so-called specific load-bearing structures.

Single and mixed penetration seals must therefore be tested and approved with the cross laminated timber construction of the respective manufacturer in the system and listed in the penetration seal manufacturer's declaration of performance. This declaration of performance and installation instructions must be made available to the installer according to the EU Construction Products Regulation (Regulation (EU) No. 305/2011).

Approved cross-laminated timber constructions

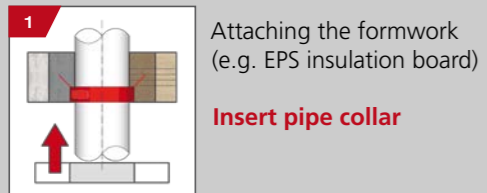
- **KLH Massivholz GmbH** – KLH Kreuzlagenholz (KLH® - CLT) according to ETA-06/0138
- **Mayr-Melnhof Holz Holding AG** – MM crosslam according to ETA-09/0036
- **MMK Holz-Beton-Fertigteile GmbH** – XC® living
- **Stora Enso Wood Products GmbH** – CLT Cross Laminated Timber according to ETA-14/0349
- **HASSLACHER Holding GmbH** – HASSLACHER CROSS LAMINATED TIMBER according to ETA-12/0281
- **Brüder Theurl GmbH** – CLTPLUS according to ETA-20/0843
- **Binderholz Group** – CLT BBS according to ETA-06/0009*
- **Thoma Holz** – Holz100 according to ETA-13/0785*

*Derzeit in ETA-17/0586 nicht enthalten. Zur Verwendung in Österreich laut Baustoffliste erforderlich. Prüfberichte vorhanden bzw. in Ausarbeitung durch die MA39 - Prüf-, Inspektions- und Zertifizierungsstelle der Stadt Wien.



Processing

Installation with flush-mounted pipe collar



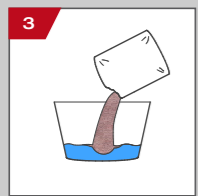
Attaching the formwork (e.g. EPS insulation board)

Insert pipe collar

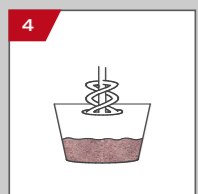


Provide mortar trough (min. 50 liters)

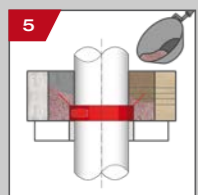
Fill with clean water, approx. 5 liters/bag



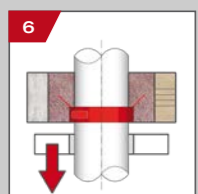
Add the entire contents of the bag to TIROTECH® fire protective mortar



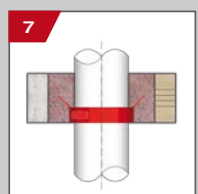
Mix with agitator



Use immediately after mixing

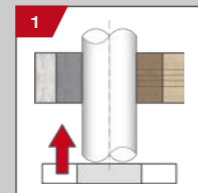


Remove formwork after solidification (Plasterboard \geq 15 mm or steel sheets \geq 1 mm can remain as permanent formwork)

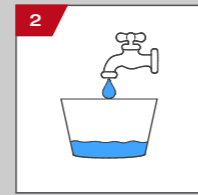


No additional fastening of the pipe collar required

Installation with surface mounted pipe collar

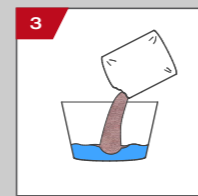


Attaching the formwork (e.g. EPS insulation board)

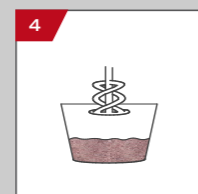


Provide mortar trough (min. 50 liters)

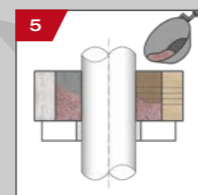
Fill with clean water, approx. 5 litres/bag



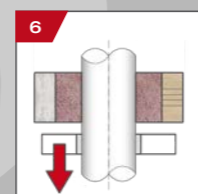
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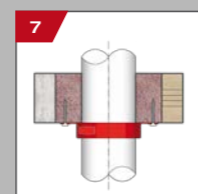
Mix with agitator



Use immediately after mixing

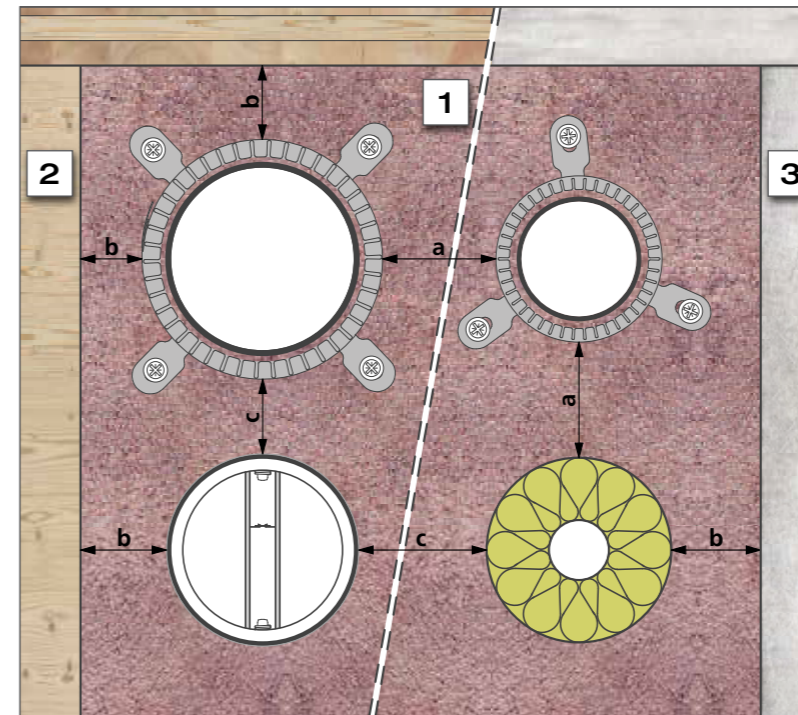


Remove formwork after solidification



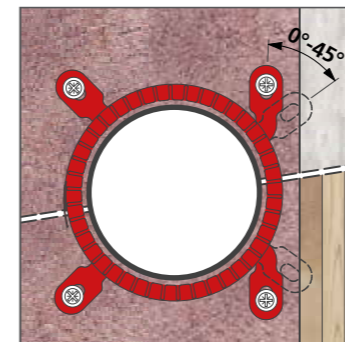
Installing the pipe collar

Working clearance



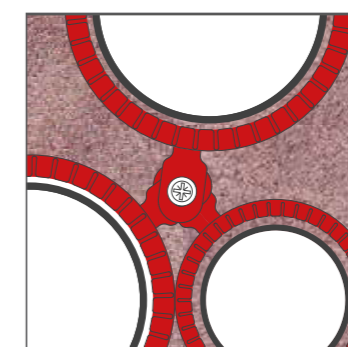
Legend	
1	Mixed penetration seal TIROTECH®
2	Cross-laminated timber wall or floor
3	Flexible walls, rigid walls or rigid floors
a	Minimum distance 0 mm
b	Minimum distance 30 mm
c	Minimum distance 50 mm

Twistable mounting lugs



Up to four mounting lugs can be rotated at any angle between 0° and 45°.

Common screw fastening



Up to three mounting lugs of three adjacent fire collars can be fastened with just one screw fastening.

„Save on installation time, not on safety!“

RORCOL pipe collars

RORCOL V30



- Installation depth: 30 mm
- For sewage pipes up to Ø135 mm

RORCOL V60



- Installation depth: 60 mm
- For sewage pipes and thick-walled plastic pipes up to Ø160 mm
- U-application

RORCOL AV60



- Installation depth: 60 mm
- For multi-layer composite pipes up to Ø63 mm
- For metal pipes Ø76 mm
- Bundles of conduits and cables up to Ø100 mm

Product description

RORCOL pipe collars are used to seal off plastic pipes, aluminum composite pipes, metal pipes, conduits and cables. They consist of a stainless steel housing with an internal intumescent layer. The different serration of the stainless steel housing enable the RORCOL V30/V60 fire protection sleeves to be distinguished from RORCOL AV60 and assigned to the intended area of application. The mounting lugs, which can be extended by 15 mm and can be rotated by up to 45° if space is limited, are used to attach the pipe collar. The RORCOL pipe collars are closed using a locking system. The integrated positioning aids of the RORCOL V60 and RORCOL AV60 pipe collars make it easier to insert them into ceiling formwork.

Integrated positioning aid for ceiling formwork



Fold out the positioning aids and insert the pipe collar into the hole in the formwork.



The pipe collar is optimally positioned in the formwork.

FIRE PROOF pipe section

Product description

FIRE PROOF is a precisely cut, non-combustible (melting point >1000 °C) rock wool pipe shell for use as a pipe penetration seal for metal pipes. The shell is wrapped in a scrim-reinforced aluminum foil and packaged in quantities suitable for the construction site. For easy installation, the shell is slit on one side and has a foil overlap so that it can be easily unfolded and installed.

Foil overlap

- For easy installation
- With self-adhesive strips

Short insulation length

- 1 m for metal pipes ≤ Ø54 mm
- No subsequent cutting required

Standard thicknesses

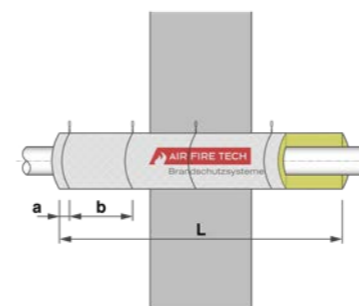
- Same EnEV insulation thicknesses as standard pipe shells



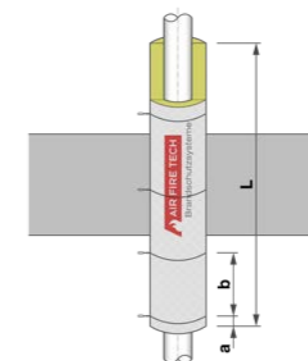
Processing

For quick and easy installation, unfold FIRE PROOF, place it over the metal pipe and close the longitudinal seam by gently pressing it together. Remove the masking tape and press the overlap with adhesive tape firmly onto the surface. Use the squeegee to ensure secure adhesion. Each pipe shell must close tightly along the longitudinal joint. Push the subsequent pipe shells together at the ends and glue them with aluminum adhesive tape with an overlap of at least 25 mm. Finally, fix the pipe shells in place using binding wire (6 coils / running meter). **No spiral winding!**

Installation in walls



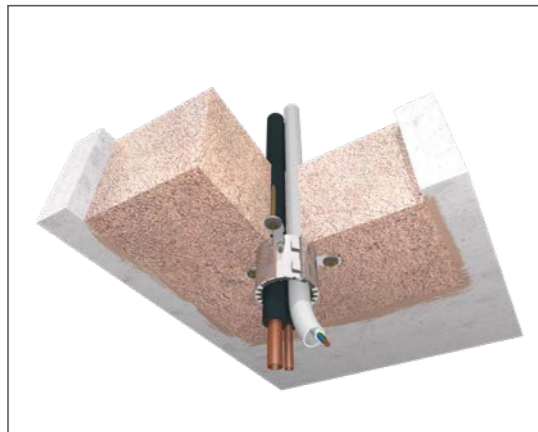
Installation in floors



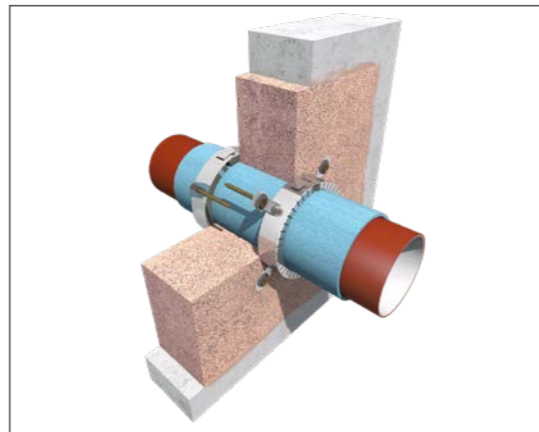
Pipe diameter [mm]	Insulating length [mm]	Binding wire distances [mm]	
		a	b
≤ Ø 54	≥ 1000	≤ 10	≤ 200
> Ø 54	≥ 2000	≤ 10	≤ 200

Application examples

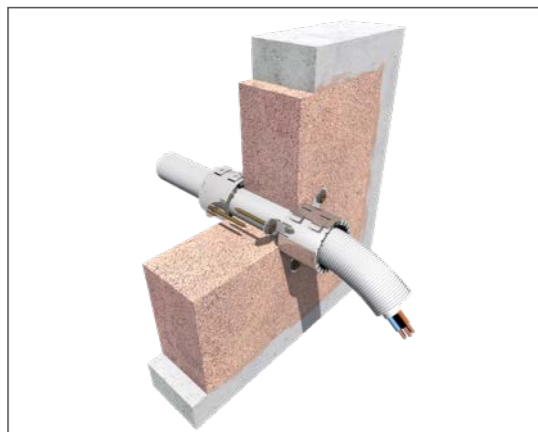
Rigid walls & rigid floors



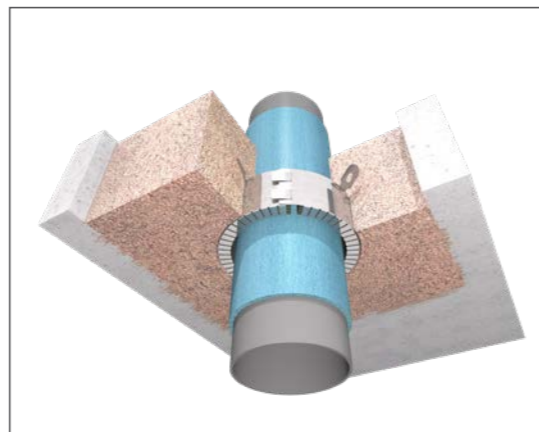
Air condition pipes sealed off with RORCOL AV60



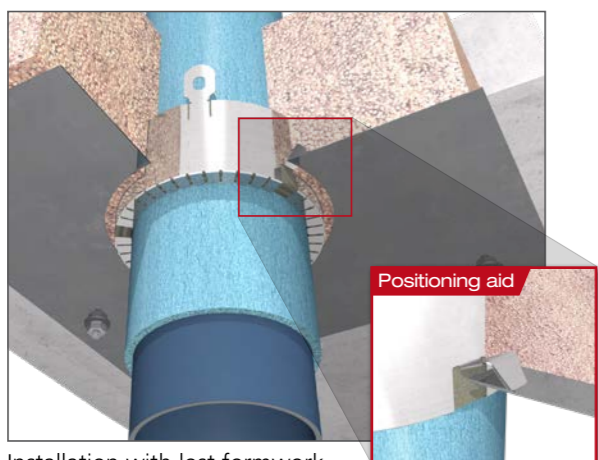
Sewage pipes sealed off with RORCOL V30



Conduits and cables sealed off with RORCOL AV60



Flush-mounted installation of RORCOL V60

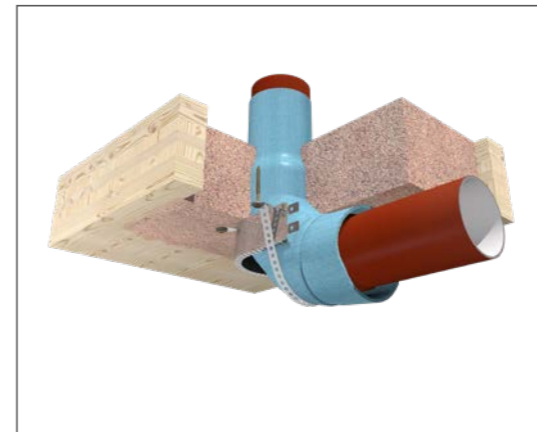


Installation with lost formwork using RORCOL V60

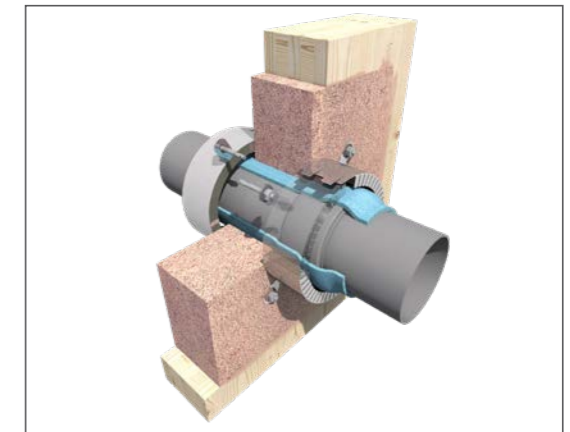


Air ducts sealed off with PRODEC fire damper air vents

Cross laminated timber walls & cross laminated timber floors



Pipe bends sealed off with RORCOL V60 used as U-application



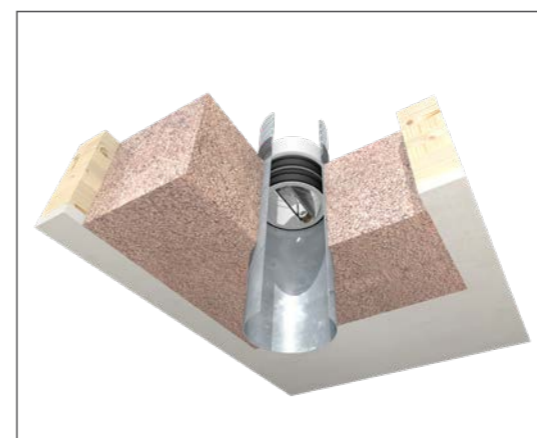
Plug-in sleeves sealed off with RORCOL V60



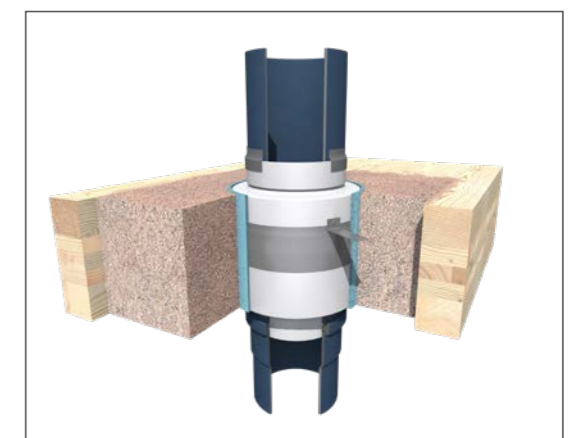
Electrical installation pipes and cables sealed off with RORCOL AV60



Metal pipes sealed off with FIRE PROOF



Air ducts sealed off with INLAP fire dampers or FSAeco fire damper air vents



Plastic air ducts sealed off with PRODEC fire damper air vents



Fire protection systems

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Telephone: +43 1 982 01
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E: office@airfiretech.at



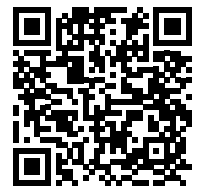
Fire protection in timber construction

Sanitary – Heating – Ventilation – Electrical



Penetration seals for pipes and cables

AIR FIRE TECH System RORCOL



INLAP & INLAP-ST fire dampers

Fire protection for ventilation ducts



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