

Installation instructions and Declaration of Performance

Air Fire Tech System RORCOL

According to the European Technical
Assessment ETA-13/0758

RORCOL V30

EI120
EI90



For plastic pipes

RORCOL V60

EI120
EI90



For plastic pipes, extended
field of application

Fire protective gap filler



For closing the ring
gap and residual gap

RORCOL AV60

EI120
EI90



For multi-layer composite
pipes, cables and metal pipes

RORCOL M

EI120
EI90



For metal pipes

Ceiling- formwork box



Formwork aid
for rigid ceilings

PRODUCT DESCRIPTION

RORCOL pipe collars are used to seal plastic pipes, multi-layer composite pipes, metal pipes, electrical installation pipes and cables.

They consist of a stainless steel casing with an internal intumescent coating.

The innovative design of the housing offers many advantages during installation:

- **Different thread pitches for stainless steel casings**
 - ✓ Easy assignment of the area of application:
 - RORCOL V30/V60 – Plastic pipes
 - RORCOL AV60 – Aluminium composite, metal and electrical installation pipes as well as cables
- **Innovative mounting tabs**
 - ✓ Easy attachment of the pipe collar
 - ✓ Can be rotated up to 45° if space is limited
 - ✓ Extension of up to 15 mm possible thanks to integrated mounting tab extension
- **Closure system**
 - ✓ Secure closure of RORCOL pipe collars
 - ✓ Used as an Omega-application for fastening during installation
- **Positioning aids**
 - Facilitates installation when using formwork in ceilings

OPERATING PRINCIPLE

RORCOL V30 and V60 pipe collars

At temperatures above 150°C, the intumescent coating begins to expand. At the same time, plastic pipes soften and melt away in the event of a fire. The cross-section that is freed up in the process is securely sealed by the pipe collar, limiting heat transfer to the side facing away from the fire.

RORCOL AV60 pipe collars

The intumescent coating begins to expand at temperatures above 190°C. This limits heat transfer to the side away from the fire in multi-layer composite pipes, metal pipes and cables.

Important:

Please read these installation instructions and performance specifications carefully and keep them for future reference.

Installation must be carried out exclusively according to these installation instructions and the declaration of performance. Deviations from the installation instructions can lead to a significant reduction in fire resistance. Typographical and printing errors as well as technical changes cannot be ruled out. Partition variants and classifications not listed in these installation instructions must be requested from Air Fire Tech. Please note the currently valid General Terms and Conditions at www.airfiretech.at. This document is protected by copyright. All rights, in particular the right of reproduction, distribution and translation, are reserved. Violations may result in criminal prosecution.

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DECLARATION OF PERFORMANCE

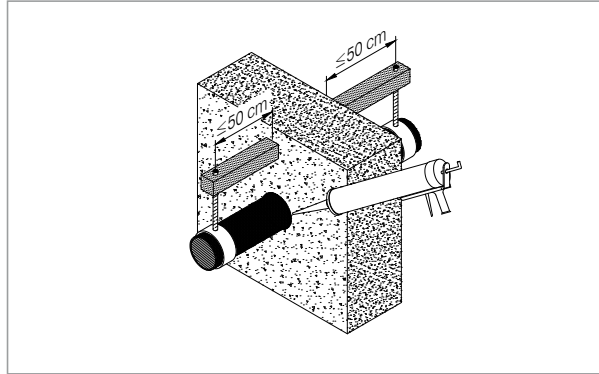
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Installation steps

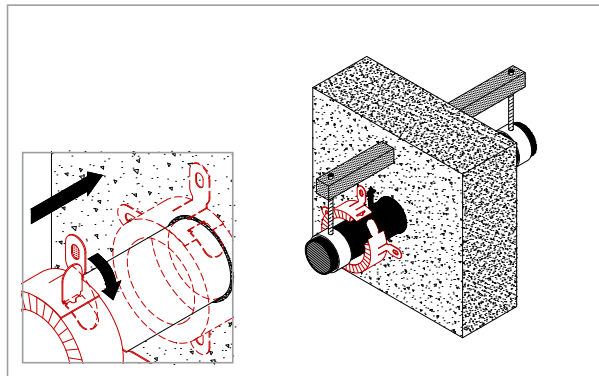
The RORCOL pipe collars are opened at the closure system, positioned on the pipe and fastened to the separating element of the feedthrough.



1

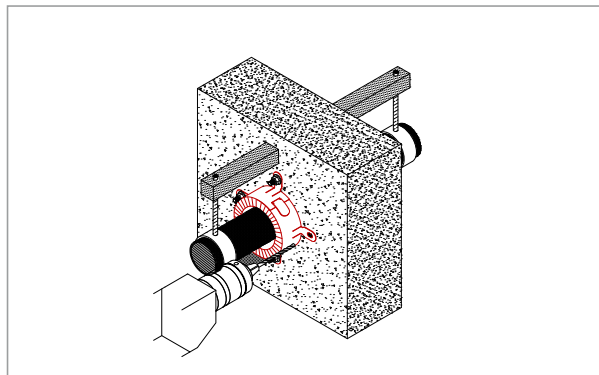
Ring gap $\leq 10\text{ mm}$ using BFM/K310 fire protective gap filler or according to the installation details.

Install non-combustible fixing max. 50 cm on both sides of the wall or above the ceiling. In ceilings, the second non-combustible mounting must be installed at least 50 cm above the ceiling.



2

Open the RORCOL pipe collar and position it around the pipe or insulated pipe.

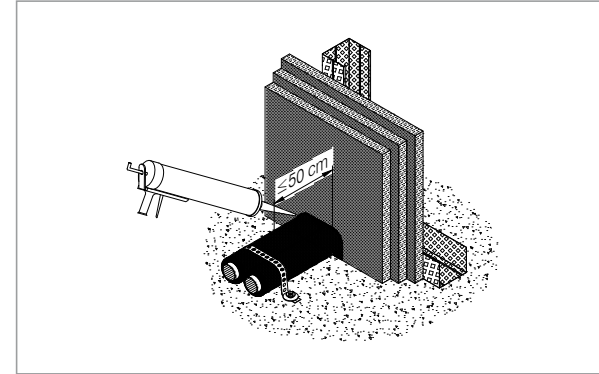


3

Fix the RORCOL pipe collar according to the separating element and installation details.

Installation steps – Omega-application

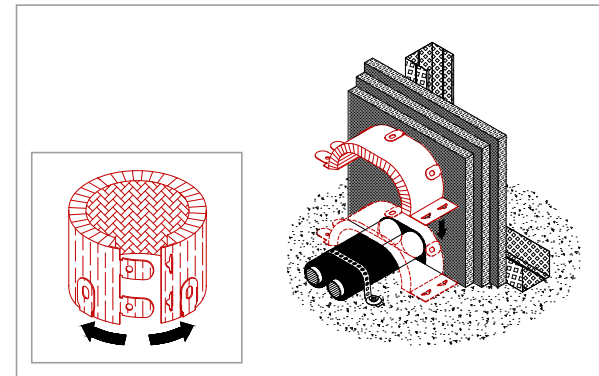
The RORCOL V60 and AV60 pipe collars, used as an Omega-application, are opened at the closure system and positioned around the pipe(s) at the separating element of the feedthrough. It is attached to the adjacent component (wall, ceiling or floor).



1

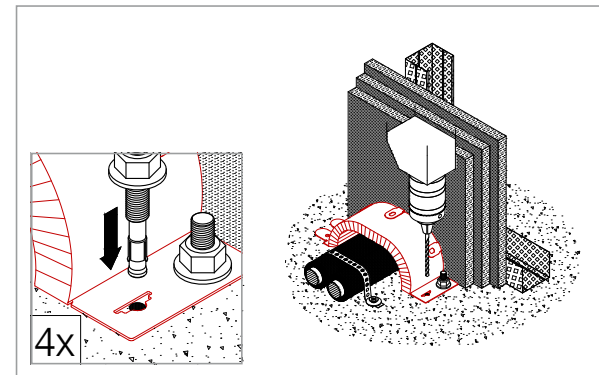
Ring gap and residual gap sealed using BFM/K310 fire protection gap filler or according to the installation details.

Install non-combustible fixing max. 50 cm on both sides of the wall or above the ceiling. In ceilings, the second non-combustible mounting must be installed at least 50 cm above the ceiling.



2

Open the RORCOL pipe collar and position it over the pipe(s) or insulated pipe(s).



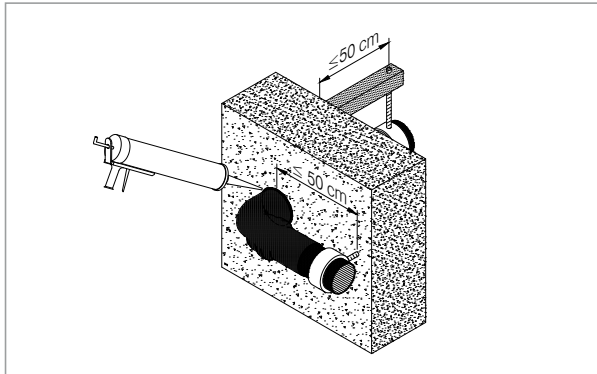
3

Fix the RORCOL pipe collar with four screws according to the separating element and installation details.

Installation steps – U-application wall

The RORCOL V60 pipe collar, used as a U-application, is opened at the closure system, positioned around the waste pipe elbow and secured to the wall of the feedthrough.

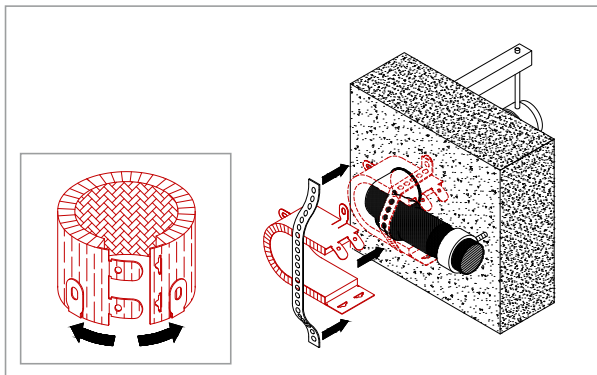
Important: The pipe collar must be one size larger than the waste water pipe!



1

Ring gap and residual gap using BFM/K310 fire protective gap filler or according to the installation details.

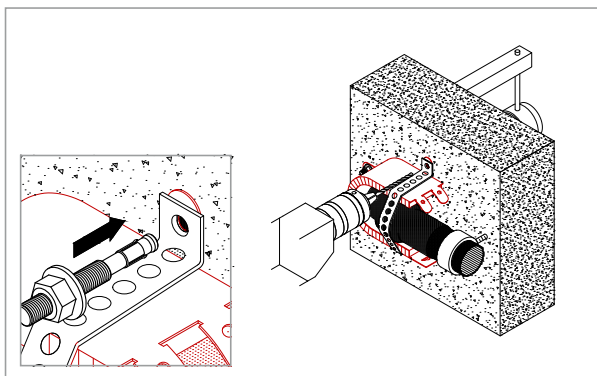
Install non-combustible mounting max. 50 cm on both sides of the wall.



2

Open the RORCOL pipe collar and place it around the insulated waste water elbow on the wall.

Position the perforated tape (provided by the customer) as tightly as possible over the waste water pipe and the mounting lugs on the closure system of the pipe collar.



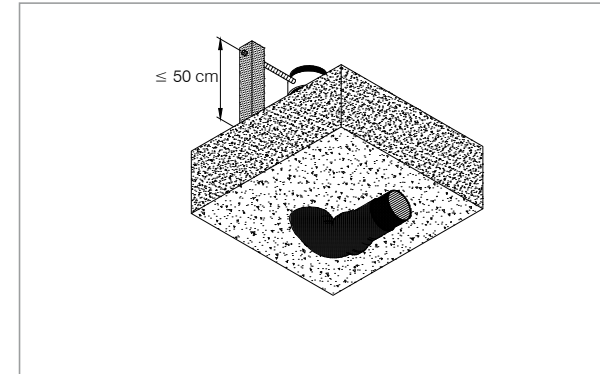
3

Fix the RORCOL pipe collar and the perforated tape according to the separating element and installation details.

Installation steps – U-application ceiling

The RORCOL V60 pipe collar, used as a U-application, is opened at the closure system, positioned around the waste pipe elbow and fastened to the ceiling of the feedthrough.

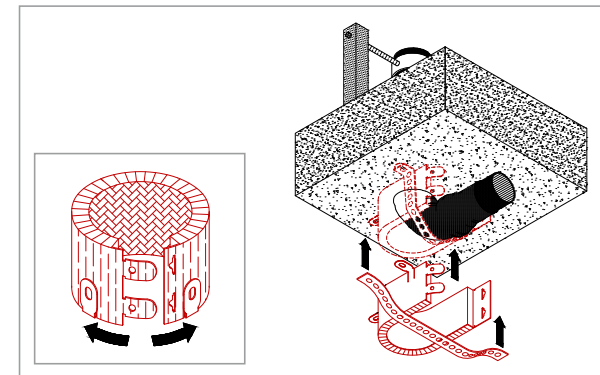
Important: The pipe collar must be one size larger than the waste water pipe!



1

Ring gap and residual gap using BFM/K310 fire protective gap filler or according to the installation details.

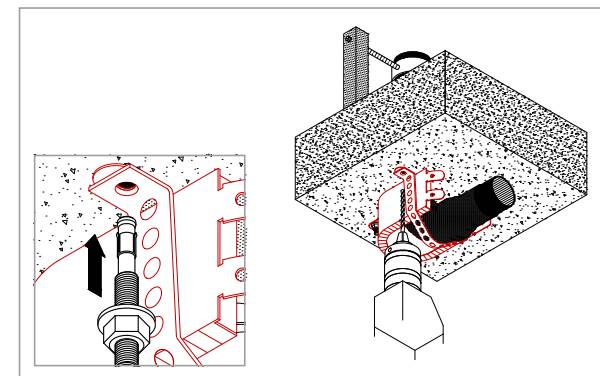
Install the non-combustible mounting max. 50 cm above the ceiling.
Install the second non-combustible mounting min. 50 cm above the ceiling.



2

Open the RORCOL pipe collar and place it around the insulated waste water bends on the ceiling.

Position the perforated tape (provided by the customer) as tightly as possible over the waste water pipe and the mounting lugs on the closure system of the pipe collar.

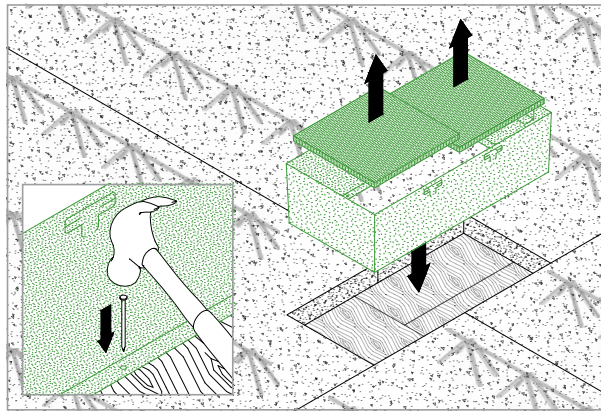


3

Fix the RORCOL pipe collar and the perforated tape according to the separating element and installation details.

Installation steps – Ceiling-formwork box C-FB

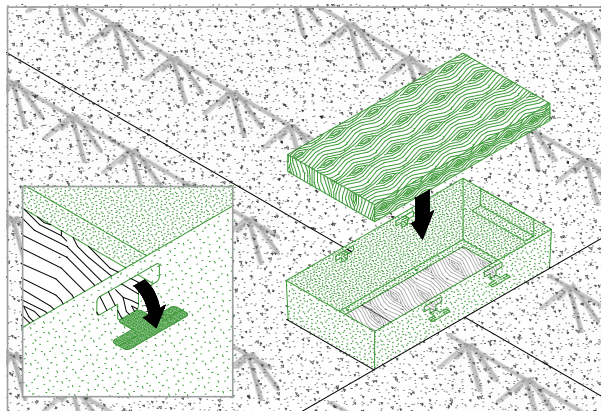
Precast slabs



1a

Position the ceiling-formwork box on the support.

Remove the lost formwork and secure the ceiling-formwork box to the formwork using steel nails.

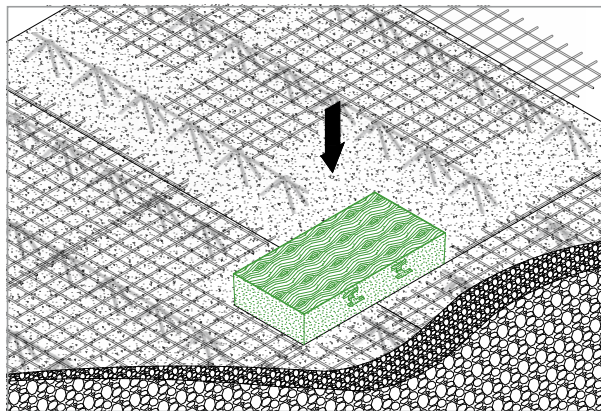


2a

Insert lost formwork.

Unfold the wall claws.

Cut the passage protection to size and insert it.
(Wooden post, thickness = 5 cm)

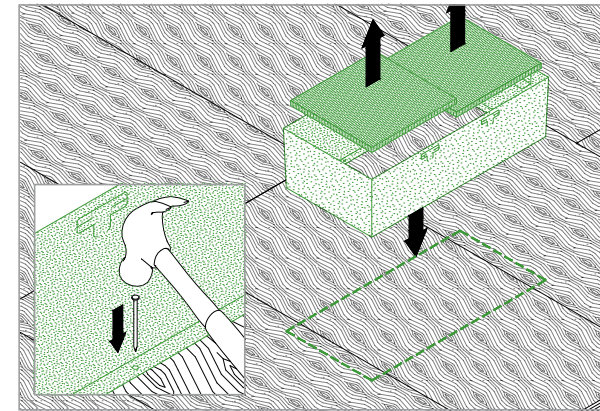


3a

Lay reinforcement according to the reinforcement plan and concrete the ceiling.

Installation steps – Ceiling-formwork box C-FB

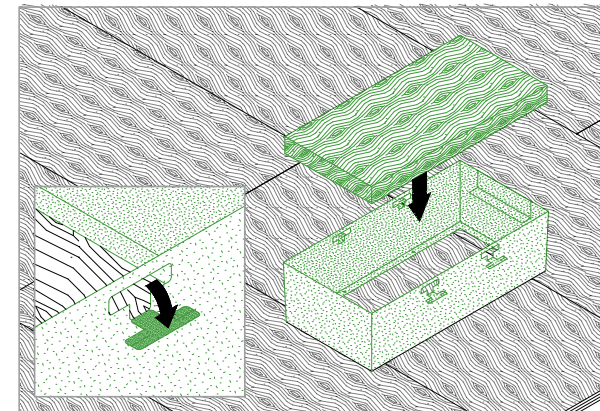
In-situ concrete slabs



1b

Position the ceiling-formwork box on the support.

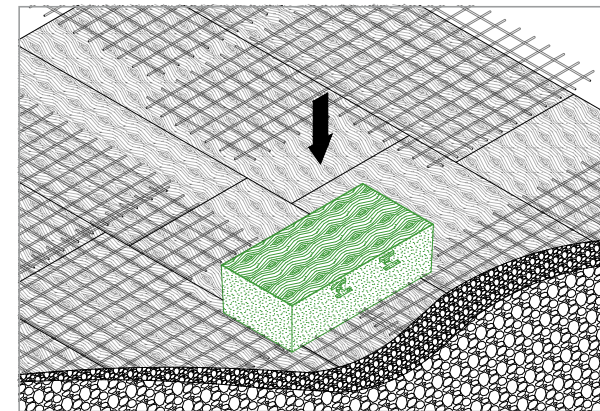
Remove the lost formwork and secure the ceiling-formwork box to the formwork using steel nails.



2b

Unfold the wall claws.

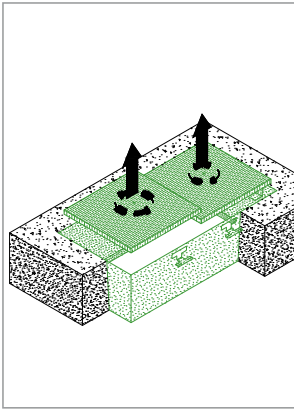
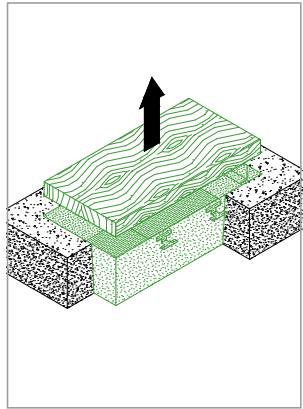
Cut the passage protection to size and insert it.
(Wooden post, thickness = 5 cm)



3b

Lay reinforcement according to the reinforcement plan and concrete the ceiling.

Installation steps – Ceiling-formwork box C-FB



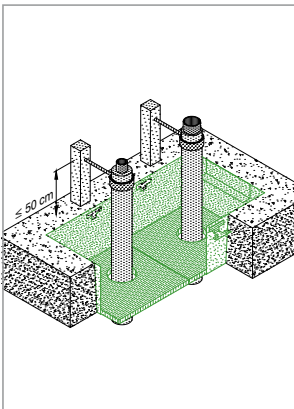
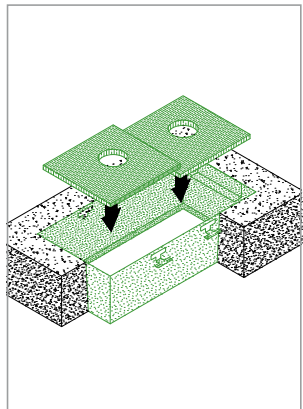
4

Remove the access protection and lost formwork from the ceiling-formwork box.

Attention:

Fall protection no longer provided!

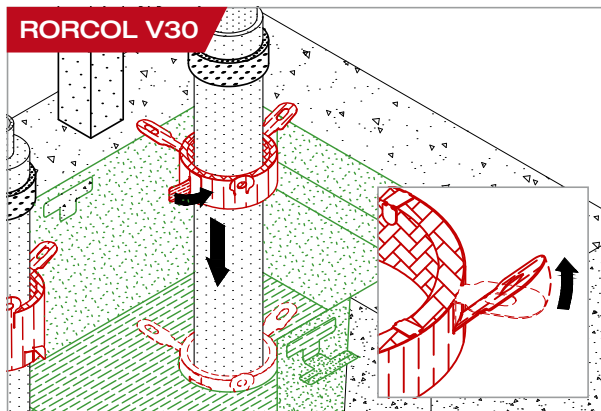
Measure the pipe positions and drill the corresponding holes in the permanent formwork using, for example, a can drill.



5

Place the lost formwork in the ceiling-formwork box.

Install pipes and mount them to the ceiling using non-combustible fasteners at a maximum distance of 50 cm from the ceiling surface. Mount the second non-combustible fastener at least 50 cm above the ceiling.



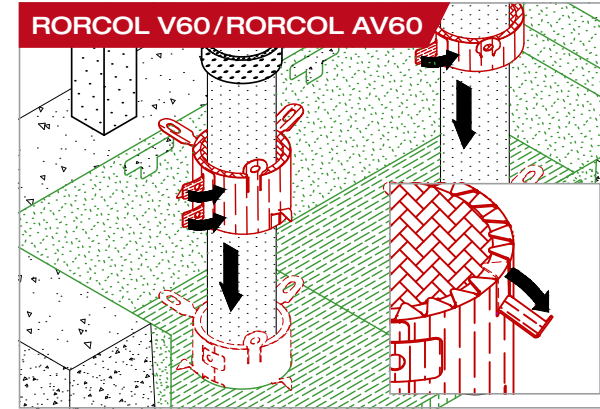
RORCOL V30

6a

Align mounting lugs using integrated mounting lugs extension. (45-90° to the pipe collar housing)

Open the RORCOL V30 pipe collar, position the pipe and close it using the locking system.

Installation steps – Ceiling-formwork box C-FB



RORCOL V60/RORCOL AV60

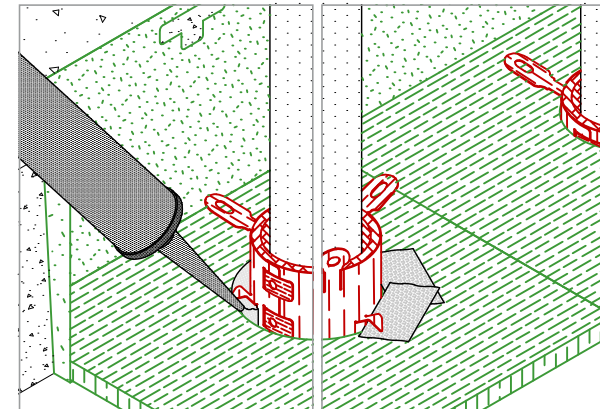
6b

Align integrated positioning aids.

Open the RORCOL V60 or AV60 pipe collar, position the pipe and close it using the locking system.

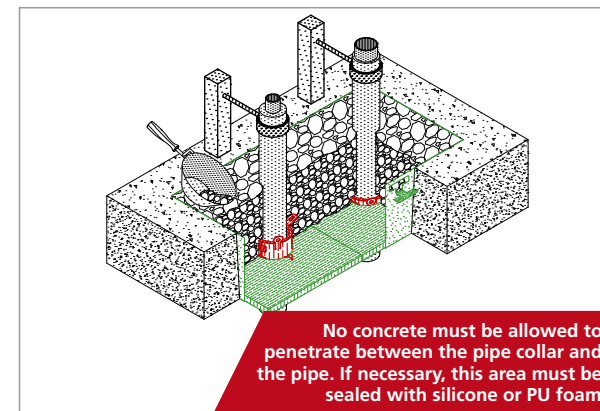
Attention:

The mounting lugs must be aligned at an angle between 45-90°.



7

Large ring gaps between the pipe collar and the permanent formwork using adhesive tape or silicone.



8

Fill the ceiling-formwork box with concrete.

Attention:

Avoid hollow areas and air pockets.

No concrete must be allowed to penetrate between the pipe collar and the pipe. If necessary, this area must be sealed with silicone or PU foam.

Note

Pipe collars must be installed on both sides of walls and on the underside of ceilings. Local national building regulations must be observed during use and installation. The product must not be modified or subjected to mechanical stress. The spread of fire downwards caused by burning dripping material dripping through a pipe to lower floors is not assessed in the European Technical Assessment. Installation must only be carried out by authorised personnel. The suitability of our products, for the specific requirements in each case must be checked by the user.

Partitioning variants and classifications not listed in these installation instructions should be requested from Air Fire Tech.

Insulation

Continuous insulation (CS) must have a minimum length of 500 mm in both directions, measured from the surface of the separating element; local insulation (LS) must have a minimum length of 100 mm; local PE soft foam insulation (structure-borne sound insulation) must have a minimum length of 40 mm. For detailed insulation materials and thicknesses, see the table "Permissible insulation" on page 12 and installation details.

Pipe end configurations

Plastic pipes are U/U (open/open) tested for ventilated pipe systems (e.g. sewage pipes, rainwater pipes).

Multi-layer composite pipes and thick-walled plastic pipes are U/C (open/closed) tested for closed pipe systems (e.g. water pipes, heating pipes).

Metal pipes are U/C (open/closed) tested.

Pellet conveyor hoses are U/U (open/open) tested.

Electrical installation pipes are U/U (open/open) tested.

Pipe fixing

Plastic pipes, multi-layer composite pipes, metal pipes, pellet conveyor hoses, electrical installation pipes and cables must be secured using non-combustible suspension systems at a maximum distance of 50 cm from both sides of the wall or above the ceiling. In ceilings, the second non-combustible suspension must be fixed at least 50 cm above the ceiling.

The fastening must be chosen so that the pipe clamp encloses the pipe as little as possible and ensures a rigid suspension. Simply placing or laying the pipe in the pipe clamp is not permitted.

Pipe collar fixing

Fire protection collars must be fixed using non-combustible screws and non-combustible wall plugs.

For detailed information on fixing materials, see the table 'Permitted partition components' – pages 16–19.

Storage and transport

Store in a frost-free, dry place at temperatures between +3°C and +35°C.

Use condition

The "Air Fire Tech System RORCOL" pipe penetration seal is designed for use at temperatures below 0°C with UV exposure but without rain exposure, and can therefore be classified as type Y₁ according to EAD 350454-00-1104, section 2.2.9.3.1. As the requirements for Type Y₁ are met, the requirements for Types Y₂, Z₁ and Z₂ are also met. Although the partition is only intended for use inside the building, it may be exposed to the weather to a certain extent during the construction period for a certain period of time before the building envelope is closed. In this case, measures must be taken to temporarily protect the partitions from the effects of the weather.

Service life

The provisions of the European Technical Assessment of 'Air Fire Tech System RORCOL' are based on an assumed service life of 10 years, provided that the conditions specified in the manufacturer's technical literature regarding packaging, transport, storage, installation, use and repair are met. However, the above information regarding the service life cannot be interpreted as a guarantee given by the manufacturer or the Technical Assessment Body, but should only be considered as an aid in selecting the right product in terms of the expected economically reasonable service life of the structure. Under normal conditions, the actual service life may be significantly longer without any significant reduction in performance in relation to the basic requirements for structures.

It is assumed that...

- ...Damage to the partition must be repaired accordingly.
- ...the installation of the partition does not compromise the stability of the adjacent component – even in the event of a fire.
- ...the lintel or ceiling above the partition is dimensioned in terms of statics and fire protection so that the partition (apart from its own weight) is not subjected to any additional vertical load.
- ...the thermal length change in the pipe is absorbed in such a way that it does not exert any load on the partition.
- ...the pipes are fixed to the adjacent component (not to the partition) according to the relevant regulations, so that in the event of a fire, no additional mechanical load can be exerted on the partition.
- ...the fixing of the pipes remains intact during the classification period. (melting point ≥ 1006°C for EI90 or ≥ 1049°C for EI120)
- ...pneumatic conveyor systems, compressed air pipes, etc. are shut down in the event of a fire by means of additional measures.

Safety

Keep out of reach of children.

Keep away from food, drink and animal feed.

To prevent accidents involving falls, it must be ensured throughout the entire construction period that a load-bearing and immovable fall protection device is inserted in the ceiling formwork box. The fall protection device may only be removed immediately before the construction and installation work begins. From this point onwards, there is no fall protection and appropriate measures must be taken to prevent accidents.

No.01/2026/RORCOL according to Annex III of Regulation (EU) No. 305/2011
(Construction Products Regulation)

Zertifikat



der Leistungsbeständigkeit 1139-CPR-0523/13 (4. Neufassung)

Gemäß der Verordnung (EU) Nr. 305/2011 des Europäischen Parlaments und des Rates vom 9. März 2011 (Bauprodukteverordnung - CPR), gilt dieses Zertifikat für das Bauprodukt

Brandschutzprodukte zum Abdichten und Verschießen von Fugen und Öffnungen und zum Aufhalten von Feuer im Brandfall: Abschottungen mit der Handelsbezeichnung „Air Fire Tech System RORCOL“

in Verkehr gebracht unter dem Namen oder der Handelsmarke von

**Air Fire Tech Brandschutzsysteme GmbH
A-2540 Bad Vöslau, Hanuschgasse 1/Top 4A**

und hergestellt im Herstellungsbetrieb

**Air Fire Tech Brandschutzsysteme GmbH, Werk Bad Vöslau
A-2540 Bad Vöslau, Hanuschgasse 1**

Dieses Zertifikat bescheinigt, dass alle Vorschriften über die Bewertung und Überprüfung der Leistungsbeständigkeit beschrieben in der

ETA-13/0758, herausgegeben am 01.07.2025
und
EAD 350454-00-1104

entsprechend System 1 für die in der ETA ausgewiesene Leistung angewendet werden und dass die vom Hersteller durchgeführte werkseigene Produktionskontrolle bewertet wurde zur Sicherstellung der

Leistungsbeständigkeit des Bauprodukts.

Dieses Zertifikat wurde erstmals am 7. Mai 2014 ausgestellt. Die vorliegende 4. Neufassung des Zertifikates 1139-CPR-0523/13 ersetzt die 3. Neufassung des Zertifikates vom 2. Juli 2020 und bleibt gültig, solange weder die ETA, das EAD, das Bauprodukt, das AVCP-Verfahren noch die Herstellungsbedingungen im Werk wesentlich geändert werden und sofern es nicht von der notifizierten Produkt-zertifizierungsstelle ausgesetzt oder zurückgezogen wird.

Martin Fehringer
cn=Martin Fehringer,
c=AT, o=Stadt Wien,
ou=MA 39
04.02.2026 08:29

Leiter der Zertifizierungsstelle
Dipl.-Ing. Martin Fehringer
Oberstadtbaurat

26-00788

Dieter Werner
cn=Dieter Werner, c=AT,
o=Stadt Wien, ou=MA 39
04.02.2026 13:07

Leiter der Prüf-, Inspektions- und Zertifizierungsstelle
Dipl.-Ing. Dieter Werner, MSc
Oberstadtbaurat

Wien, 29. Jänner 2026



**Stadt
Wien**

Prüf-, Inspektions- und
Zertifizierungsstelle

1110 Wien, Rennböckstraße 15/2
Tel. (+43) 0 4000-8039
post@ma39.wien.gv.at
ma39.wien.gv.at

1. Unique identification code of the product type:

Pipe collar RORCOL V30
Pipe collar RORCOL V60
Pipe collar RORCOL AV60
Pipe collar RORCOL M
Fire protective gap filler BFM/K310
Mounting tool MH/RORCOL
Reinforcement bracket VW
Ceiling-formwork box C-FB

2. Intended use:

Sealing off combustible pipes,
non-combustible pipes and cables
through walls and ceilings according to
installation instructions for ETA-13/0758

3. Manufacturer:

AIR FIRE TECH Brandschutzsysteme GmbH
Hanuschgasse 1/ Top 4A
2540 Bad Vöslau
AUSTRIA

4. System(s) for assessing and verifying performance consistency:

System 1

5. European Assessment Document:

EAD 350454-00-1104,
September 2017 edition
ETA-13/0758 dated 01.07.2025

European Technical Assessment:

Technical assessment body:

Austrian Institute of
Construction Engineering (OIB)

Notified body:

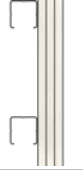
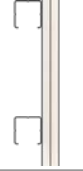

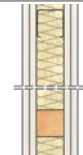



NB 1139 – Magistrate Department 39 –
Testing, Monitoring and Certification
Body of the City of Vienna

6. Declared power:

Key features	Power	Harmonised technical specification
Fire behaviour	Class E	EN 13501-1
Hazardous substances	None	Council Directive 67/548/EEC, Regulation (EC) No 1272/2008 and EOTA Technical Report TR 034
Durability and serviceability	Usage category Y ₁	EOTA Technical Report TR 024

DECLARATION OF PERFORMANCE

Permissible separating elements/fixing






Separating element	
SW EI90	 <p>Shaft walls ≥ EI90 (flexible walls with single-sided panelling) Single-sided planking with 2x20, 3x15 or 2x25 mm Plasterboard DF or DFR according to EN 520 or GM-FH2 according to EN 15283-1 Minimum width of steel uprights (CW profiles): 50 mm With or without mineral wool</p>
SW EI60	 <p>Shaft walls ≥ EI60 (flexible walls with single-sided panelling) Single-sided cladding with 2x15 mm Plasterboard DF according to EN 520 or GM-FH2 according to EN 15283-1 Minimum width of steel studs (CW profiles): 50 mm With or without mineral wool</p>
RW	 <p>Rigid walls Thickness ≥ 100 mm Density ≥ 500 kg/m³ Concrete and masonry components</p>
FW100	 <p>Flexible walls Thickness ≥ 94 mm Steel posts (CW profiles) or wooden posts*, Planked on both sides with at least 2x12.5 mm plasterboard DF or DFR according to EN 520, GM-FH2 according to EN 15283-1 or calcium silicate boards with ETA <small>*Minimum distance between wooden studs and partitions 100 mm, gap filled with mineral wool (melting point ≥ 1000°C)</small></p>
FW190	 <p>Flexible walls Thickness ≥ 190 mm Wooden studs, clad on both sides with 1x15 mm plasterboard "Riduro" according to ETA-16/0657 Gap filled with mineral wool "ULTIMATE HBF-034" or "ULTIMATE HBF-039"</p>
TW100	 <p>Cross-laminated timber walls according to ETA-06/0009 (Binderholz Bausysteme GmbH), ETA-06/0138 (KLH Massivholz GmbH), ETA-09/0036 (Mayr-Melnhof Holz Holding AG), ETA-12/0281 (HASSLACHER Holding AG), ETA-14/0349 (Stora Enso Wood Products GmbH), ETA-20/0843 (Theurl Timber Structures GmbH), Thickness ≥ 100 mm</p>
TW130	 <p>Cross-laminated timber walls according to ETA-06/0138 (KLH Massivholz GmbH), Thickness ≥ 130 mm (100 mm wood + 15 mm plasterboard DF on both sides according to EN 520)</p>

DECLARATION OF PERFORMANCE

Pipe collar fixing	Ring gap / Residual gap	Page
<ul style="list-style-type: none"> ■ Drywall screws ≥ Ø3.5 x 45 mm with Ø20 mm washers (Exclusively for shaft walls 3x15, 2x25 mm) ■ Chipboard screws ≥ Ø6.0 x 40 mm (Exclusively for shaft walls 3x15, 2x25 mm) ■ Cavity dowels ≥ M6 with Ø20 mm washers 	<ul style="list-style-type: none"> ■ 1-10 mm with fire protective gap filler BFM/K310 or gypsum joint filler over the entire thickness of the separating element ■ <u>Inserted assembly:</u> 1-5 mm with fire protective gap filler BFM/K310 or gypsum joint filler over the entire thickness of the separating element 	34
<ul style="list-style-type: none"> ■ Cavity dowels ≥ M6 with Ø20 mm washers 	<ul style="list-style-type: none"> ■ 1-10 mm with fire protective gap filler BFM/K310 or gypsum joint filler over the entire thickness of the separating element 	42
<ul style="list-style-type: none"> ■ Metal anchors or metal dowels with screws ≥ M6 with Ø20 mm washers ■ Chipboard screws ≥ Ø6.0 x 55 mm (Exclusively for rigid walls made of aerated concrete) 	<ul style="list-style-type: none"> ■ 1-20 mm with fire protective gap filler BFM/K310 ■ ≤ 70 mm with non-combustible material over the entire thickness of the separating element ■ <u>Inserted mounting:</u> 1-10 mm with fire protective gap filler BFM/K310 ■ ≤ 70 mm with non-combustible material over the entire thickness of the separating element ■ <u>Installation with mounting tool MH/RORCOL:</u> ≤ 20 mm with mineral wool over the entire thickness of the separating element 	44
<ul style="list-style-type: none"> ■ Surface mounting: Threaded rods ≥ M6 with Ø20 mm washers and nuts ■ <u>Inserted mounting:</u> Drywall screws ≥ Ø3.5 x 35 mm with Ø20 mm washers 	<ul style="list-style-type: none"> ■ 1-10 mm with fire protective gap filler BFM/K310 or gypsum joint filler 	50
<ul style="list-style-type: none"> ■ <u>Inserted mounting:</u> Drywall screws ≥ Ø3.5 x 35 mm with Ø20 mm washers 	<ul style="list-style-type: none"> ■ 1-10 mm with fire protective gap filler BFM/K310 or gypsum joint filler ■ ≤ 70 mm with non-combustible material over the entire thickness of the separating element 	54
<ul style="list-style-type: none"> ■ Chipboard screws ≥ Ø6.0 x 90 mm 	<ul style="list-style-type: none"> ■ 1-20 mm with fire protective gap filler BFM/K310 or ≤ 70 mm with non-combustible material over the entire thickness of the separating element 	56
<ul style="list-style-type: none"> ■ Chipboard screws ≥ Ø6.0 x 90 mm 	<ul style="list-style-type: none"> ■ 5-10 mm with fire protective gap filler BFM/K310 or non-combustible material over the entire thickness of the separating element ■ 5-20 mm filled with mineral wool and additionally sealed with ≥ 10 mm fire protective gap filler BFM/K310, 25 mm deep 	60

DECLARATION OF PERFORMANCE

Permissible separating elements/fixing

Separating element	
RC	<p>Rigid ceilings Thickness ≥ 150 mm Density ≥ 500 kg/m³</p> 
TC140	<p>Cross-laminated timber ceilings according to ETA-06/0009 (Binderholz Bausysteme GmbH), ETA-06/0138 (KLH Massivholz GmbH), ETA-09/0036 (Mayr-Melnhof Holz Holding AG), ETA-12/0281 (HASSLACHER Holding AG), ETA-14/0349 (Stora Enso Wood Products GmbH), ETA-20/0843 (Theurl Timber Structures GmbH), Thickness ≥ 140 mm</p> 
TC163	<p>Cross-laminated timber ceilings according to ETA-13/0785 (Ing. Erwin Thoma Holz GmbH), Thickness ≥ 163 mm (155 mm wood + 8 mm wood fibre board)</p> 
TC152	<p>Cross-laminated timber ceilings according to ETA-06/0138 (KLH Massivholz GmbH), Thickness ≥ 152.5 mm (140 mm wood + 12.5 mm GKF plasterboard DF according to EN 520)</p> 
TC120	<p>Cross-laminated timber ceilings according to ETA-06/0138 (KLH Massivholz GmbH), Thickness ≥ 120 mm (90 mm + 2x15 mm plasterboard DF according to EN 520)</p> 

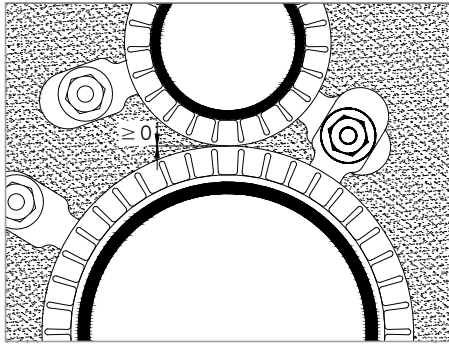
DECLARATION OF PERFORMANCE

Pipe collar fixing	Ring gap / Residual gap	Page
<ul style="list-style-type: none"> ■ Metal anchors or metal dowels with screws \geq M6 with $\varnothing 20$ mm washers ■ Chipboard screws \geq $\varnothing 6.0 \times 55$ mm (Exclusively for rigid ceilings made of aerated concrete) 	<ul style="list-style-type: none"> ■ 1-20 mm with fire protective gap filler BFM/K310 or non-combustible material covering the top, at least 20 mm deep ■ ≤ 30 mm with mineral wool over the entire thickness of the separating element ■ ≤ 70 mm with non-combustible material over the entire thickness of the separating element ■ Inserted mounting: 5-30 mm filled with mineral wool and additionally sealed with ≥ 10 mm fire protective gap filler BFM/K310 	62
<ul style="list-style-type: none"> ■ Chipboard screws \geq $\varnothing 6.0 \times 90$ mm with $\varnothing 20$ mm washers 	<ul style="list-style-type: none"> ■ 1-20 mm with fire protective gap filler BFM/K310 on the top and bottom of the ceiling, at least 20 mm deep ■ Inserted mounting: 5-30 mm filled with mineral wool and additionally sealed with ≥ 10 mm fire protective gap filler BFM/K310 	68
<ul style="list-style-type: none"> ■ Chipboard screws \geq $\varnothing 6.0 \times 90$ mm with $\varnothing 20$ mm washers 	<ul style="list-style-type: none"> ■ 1-10 mm with fire protective gap filler BFM/K310 on the top and bottom of the ceiling, at least 20 mm deep ■ 5-20 mm filled with mineral wool and additionally sealed with ≥ 10 mm fire protective gap filler BFM/K310 	72
<ul style="list-style-type: none"> ■ Chipboard screws \geq $\varnothing 6.0 \times 90$ mm with $\varnothing 20$ mm washers 	<ul style="list-style-type: none"> ■ 5-15 mm filled with mineral wool and additionally sealed with ≥ 10 mm fire protective gap filler BFM/K310 	76
<ul style="list-style-type: none"> ■ Chipboard screws \geq $\varnothing 6.0 \times 90$ mm with $\varnothing 20$ mm washers 	<ul style="list-style-type: none"> ■ 1-5 mm with fire protective gap filler BFM/K310 top side of ceiling, at least 30 mm deep ■ 5-30 mm filled with mineral wool and additionally sealed with ≥ 10 mm fire protective gap filler BFM/K310 	76

DECLARATION OF PERFORMANCE

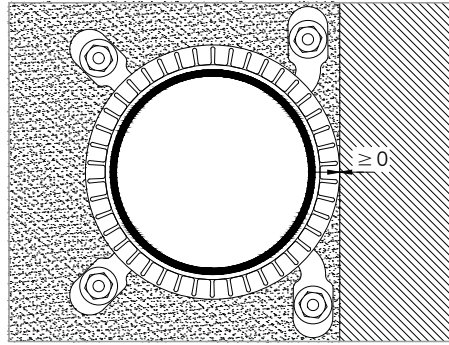
Working clearance

Pipe collars



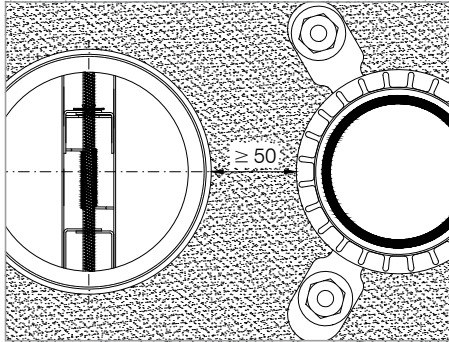
Joint screw fixing of up to four pipe collars

Adjacent separating element



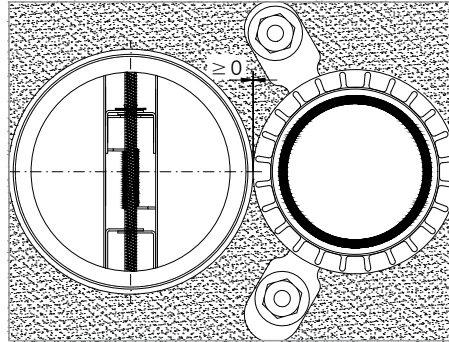
Distance to adjacent separating element
- Twisted mounting lugs

Fire dampers



Distance to AIR FIRE TECH fire dampers (1139-CPR-1046/12) or AIR FIRE TECH fire damper air vents (R-14.3.3-18-7925) ≥ 50 mm.

Fire damper air vents

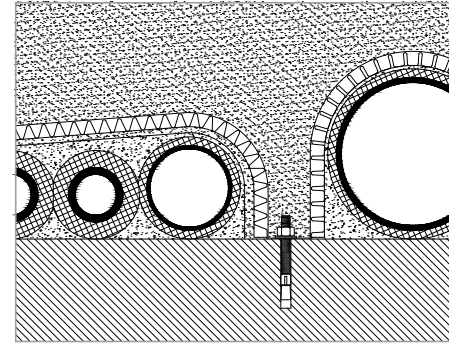


Distance to AIR FIRE TECH fire damper air vents (R-14.3.3-18-7925) in rigid ceilings ≥ 0 mm.

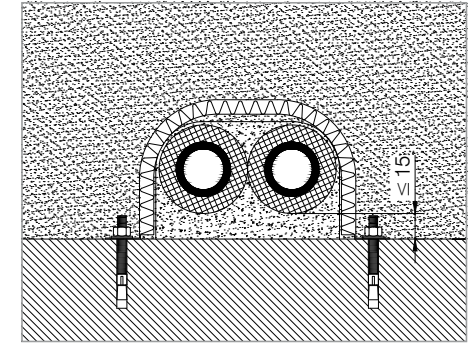
DECLARATION OF PERFORMANCE

Working clearance Omega-application

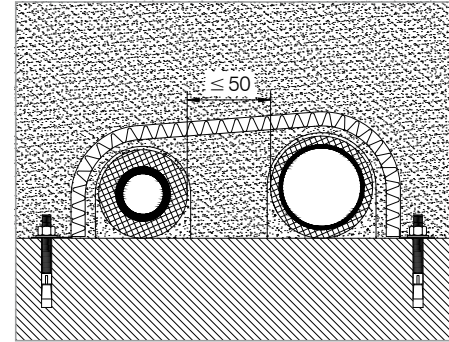
Omega-application



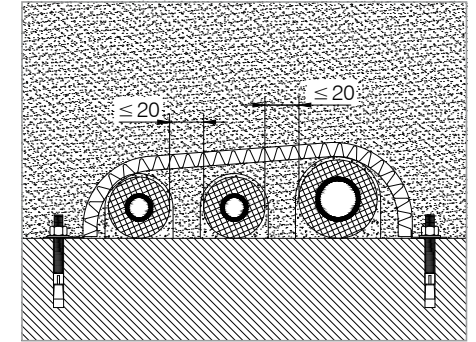
Joint screw fixing



Distance between adjacent separating element and pipe(s)



Distance between two pipes



Distance between pipes in multiple feedthroughs

DECLARATION OF PERFORMANCE

Permissible pipe types

RORCOL	Material/Fabricate	Standard/Manufacturer		
RORCOL V30 or RORCOL V60	PVC-U	EN 1329-1		
		EN 1401-1		
		EN 1452-2, DIN 8062		
		EN 1453-1		
	PVC-C	EN ISO 15493		
		EN 1566-1		
		EN ISO 15493		
		EN 15877-2		
	PE-HD	Pipelife PE100	Standard tubes with wall thickness 1.8-7.7 mm	
		Geberit PE		
	PE-HD	Geberit Silent-db20		
		Wavin PE		
		PE		
		PE		
		ABS		
		SAN+PVC		
	PP	Ostendorf HT		EN 1451-1, DIN 8077/DIN 8078
		RAUPIANO LIGHT		
		Rehau HT		
		Valsir PP		
		PP		EN ISO 15494
		PP		EN ISO 15874-2, DIN 8077/DIN 8078
		"Aquatherm firestop"	aquatherm GmbH Kunststoff-Extrusions- und Spritzgießtechnik	
		"Blackfire®"	Valsir S.p.A.	
		"CONEL Drain"	CONEL GmbH	
		"DYKASTil®"	DYKA B.V.	
		"Geberit Silent-PP"	Geberit Vertriebs GmbH & Co KG	
	"Geberit Silent-Pro"			
	"HT PLUS"	REHAU Gesellschaft m.b.H		
	"PhonEX® AS-PLUS"	KE KELIT Kunststoffwerk GmbH		
	"PhonEX® ST"			
	"Pipelife Master 3 PLUS"	Pipelife Austria GmbH & Co KG		
	"POLO-KAL 3S"	POLOPLAST GMBH & CO KG		
	"POLO-KAL NG"			
	"POLO-KAL XS"			
	"RAUPIANO PLUS"	REHAU Gesellschaft m.b.H		
	"RAUSILENTO"			
	"RAUTITAN flex"			
	"SANHA Master 3 PLUS"			
	"Ultra Silent"	SANHA GmbH & Co KG		
	"Uponor PE-Xa"	Huliot A.C.S. Ltd.		
	"Valsir Silere"	Uponor Vertriebs GmbH		
	"Wavin AS-PLUS"	Valsir S.p.A.		
	"Wavin SiTech+"	Wavin GmbH		
RORCOL V60	"Pellflex/AS"	HY-POWER Produktions und Handels GmbH		
	"Pellflex PU/AS"			
	"PP MASTER SN12"	Pipelife Austria GmbH & Co KG		

⁽¹⁾ Cross-laminated timber constructions according to ETA-12/0281 (HASSLACHER Holding AG) or ETA-20/0843 (Theurl Timber Structures)

⁽²⁾ Cross-laminated timber constructions according to ETA-06/0009 (Binderholz Bausysteme GmbH)

⁽³⁾ Except for cross-laminated timber structures according to ETA-06/0009 (Binderholz Bausysteme GmbH)

DECLARATION OF PERFORMANCE

Permissible separating elements/Outer pipe diameter

SW		RW	FW		TW		RC	TC			
Ei90	Ei60		100	190	100	130		140	163	152	120
≤ 110		≤ 160	≤ 160		≤ 160		≤ 160	≤ 160	≤ 160		
110-125		≤ 250	110-200		≤ 250 ⁽¹⁾		110-125	110-125 ⁽¹⁾			
≤ 110		≤ 160	≤ 160		≤ 160		≤ 160	≤ 160	≤ 160		
≤ 110		≤ 160	≤ 160		≤ 160		≤ 160	≤ 160	≤ 160		
≤ 110	≤ 110	≤ 200	≤ 200		≤ 200 ^(1,2)		≤ 160	≤ 160	≤ 160		≤ 110
≤ 110		≤ 160	≤ 160		≤ 160		≤ 160	≤ 160	≤ 160		
≤ 110		≤ 160	≤ 160		≤ 160		≤ 160	≤ 160	≤ 160		
≤ 110		≤ 160	≤ 160		≤ 160		≤ 160	≤ 160	≤ 160		
≤ 110		≤ 160	≤ 160		≤ 160		≤ 160	≤ 160	≤ 160		
≤ 110	≤ 110	≤ 160	≤ 160		≤ 160		≤ 160	≤ 160	≤ 160		
≤ 110		≤ 160	≤ 160		≤ 160		≤ 160	≤ 160	≤ 160		
		110									
		≤ 160			≤ 160 ^(1,2)						
		≤ 110	≤ 110		≤ 110						
≤ 110	≤ 110	≤ 160	≤ 160		≤ 160	≤ 110	≤ 160	≤ 160	≤ 160	50	
≤ 110		≤ 160	≤ 160		≤ 160 ⁽²⁾		≤ 160	≤ 160	≤ 160		
							110-160	110-160	110-160		
≤ 110		≤ 160	≤ 160		≤ 160 ⁽²⁾		≤ 160	≤ 160	≤ 160		
≤ 110	≤ 110	≤ 160	≤ 160	110	≤ 200		≤ 160	≤ 160	≤ 160		
		≤ 160	≤ 160	110	≤ 160		≤ 160	≤ 160	≤ 160		
≤ 110	≤ 110	≤ 160	≤ 160		≤ 160		≤ 160	≤ 160	≤ 160	125	
		≤ 110	≤ 110		≤ 110		≤ 160	≤ 160	≤ 160		
≤ 25		50	50		50 ^(1,2)		≤ 63	≤ 63	≤ 63		
≤ 110		≤ 160	≤ 160		≤ 160		≤ 160	≤ 160	≤ 160	50	
		125	125		125 ^(1,2)						
		16									
≤ 110	≤ 110	≤ 160	≤ 160		≤ 160		≤ 160	≤ 160	≤ 160		
≤ 110		≤ 160	≤ 160		≤ 160 ⁽²⁾		≤ 160	≤ 160	≤ 160		
		58	58								
		58	58								
		200-250			200-250						

DECLARATION OF PERFORMANCE

Permissible pipe types

RORCOL	Material/Fabricate	Standard/Manufacturer	
RORCOL AV60	Metal pipes	Class A1 fire behaviour in accordance with EN 13501-1, with a Melting point \geq steel and thermal conductivity \leq steel	
		Class A1 fire behaviour according to EN 13501-1, with a melting point \geq copper and thermal conductivity \leq copper	
	"alplex Mehrschichtverbundrohr"	FRÄNKISCHE ROHRWERKE Gebr. Kirchner GmbH & Co. KG	
	"aquatec®-Aluflex 5-Schicht-Modulrohr"	Jäger Sanitär- und Heizungstechnik Systemvertrieb GmbH	
	"CLEVERFIT Radial"	Purmo Group Poland sp. z o. o.	
	"CONEL Connect MV"	CONEL GmbH	
	"EASYTEC Installationsrohr"	PG Austria GmbH	
	"Geberit Mepla Systemrohr"	Geberit Vertriebs GmbH	
	"Geberit Systemrohr ML"		
	"Henco Mehrschichtverbundrohr"	Henco Industries NV	
	"JRG Sanipex MT"	Georg Fischer JRG AG	
	"K06 KELIT ALU-Verbundrohr PN20"	KE KELIT Kunststoffwerk GmbH	
	"KELOX® Modulrohr"		
	"MT-Verbundrohr"	Winkler GmbH	
	"PERTAL ² "	KAN-term GmbH	
	"Polysan/Revi-ALU-Verbundrohr"	Polysan HandelsgesmbH & Co KG	
	"PRINETO Stabil-Rohr"	IVT Installations- und Verbindungstechnik GmbH & Co. KG	
	"PRIPRESS®"		
	"RADOPRESS"	Pipeline Austria GmbH & Co KG	
	"RAUTITAN stabil"	REHAU Gesellschaft m.b.H	
	"Raxofix-Mehrschichtverbundrohr"	Viega GmbH	
	"Roth Systemrohr Alu-Laserplus®"	ROTH WERKE GMBH	
	"STEELOX® Mehrschichtverbundrohr"	KE KELIT Kunststoffwerk GmbH	
	"TECEflex Verbundrohr"	TECE GmbH	
	"TECElogo Verbundrohr"		
	"Uponor Verbundrohr"	Uponor Vertriebs GmbH	
	"PYTHON Getränkeleitung"	Python Systems AG	
		Plastic Electrical conduits with an external diameter \leq 40mm (with/without cables with an external diameter \leq 21 mm)	
		Tightly bound bundles with a total diameter \leq 100mm consisting of plastic electrical installation pipes with an external diameter \leq 40mm (with/without cables with an external diameter \leq 21 mm)	
		All types of sheathed cables currently in use in the European construction industry (with the exception of hollow cables), with an external diameter \leq 21 mm	
	Tightly bound cable bundles with a total diameter of \leq 100 mm consisting of sheathed cables currently in use in the European construction industry (with the exception of hollow conductors), with an outer diameter of \leq 21 mm		
RORCOL M	Metal pipes	Class A1 fire behaviour according to EN 13501-1, with a melting point \geq steel and thermal conductivity \leq steel	

⁽¹⁾ Cross-laminated timber constructions according to ETA-06/0009 (Binderholz Bausysteme GmbH), ETA-12/0281 (HASSLACHER Holding AG) and ETA-20/0843 (Theurl Timber Structures)

DECLARATION OF PERFORMANCE

Permissible separating elements/Outer pipe diameter											
SW		RW	FW		TW		RC	TC			
Ei90	Ei60		100	190	100	130		140	163	152	120
≤ 28	≤ 28	$\leq 76,1$	$\leq 76,1$		$\leq 76,1$		$\leq 76,1$	$\leq 76,1$	$\leq 76,1$		≤ 35
		≤ 54	≤ 54		≤ 54		≤ 28	≤ 28	≤ 28		
≤ 26		≤ 63	≤ 63		$\leq 63^{(1)}$						
≤ 32		≤ 40	≤ 40		$\leq 40^{(1)}$		≤ 63	≤ 63	≤ 63	20	
≤ 32		≤ 63	≤ 63		$\leq 63^{(1)}$		≤ 63	≤ 63	≤ 63		
≤ 26		≤ 63	≤ 63		$\leq 63^{(1)}$						
≤ 32		≤ 63	≤ 63		$\leq 63^{(1)}$		≤ 63	≤ 63	≤ 63		
≤ 32	≤ 26	≤ 63	≤ 63		≤ 63	≤ 32	≤ 63	≤ 63	≤ 63	26	
≤ 32		≤ 40	≤ 40		$\leq 40^{(1)}$		≤ 63	≤ 63	≤ 63	20	
≤ 32	≤ 26	≤ 40	40		$\leq 40^{(1)}$		≤ 63	≤ 63	≤ 63		
		20, 75-90			20, 75-90 ⁽¹⁾						
≤ 32	≤ 25	≤ 75	≤ 75		≤ 75		≤ 75	≤ 75	≤ 75		
≤ 32		≤ 40	≤ 40		$\leq 40^{(1)}$		≤ 63	≤ 63	≤ 63	20	
≤ 32		≤ 63	≤ 63		$\leq 63^{(1)}$		≤ 20	≤ 20	≤ 20		
≤ 32		≤ 40	≤ 40		$\leq 40^{(1)}$		≤ 63	≤ 63	≤ 63	20	
≤ 33		≤ 63	≤ 63		$\leq 63^{(1)}$		≤ 63	≤ 63	≤ 63		
≤ 32		≤ 40	≤ 40		$\leq 40^{(1)}$		≤ 40	≤ 40	≤ 40	20	
≤ 32		≤ 40	≤ 40		$\leq 40^{(1)}$		≤ 63	≤ 63	≤ 63	20	
≤ 25		≤ 63	≤ 63		$\leq 63^{(1)}$		≤ 63	≤ 63	≤ 63		
≤ 32		≤ 63	≤ 63		≤ 63		≤ 63	≤ 63	≤ 63		
≤ 26		≤ 63	≤ 63		$\leq 63^{(1)}$		≤ 63	≤ 63	≤ 63		
≤ 25		≤ 25	≤ 25		≤ 25		≤ 25	≤ 25	≤ 25		
≤ 32	≤ 26	≤ 63	≤ 63	40	$\leq 63^{(1)}$		≤ 63	≤ 63	≤ 63	26	
≤ 25		≤ 63	≤ 63				≤ 63	≤ 63	≤ 63		
≤ 32		≤ 63	≤ 63		$\leq 63^{(1)}$		≤ 63	≤ 63	≤ 63		
40											
		✓	✓		✓		✓	✓	✓		
		✓	✓		✓		✓	✓	✓		
			✓	✓		✓	✓	✓			
			✓	✓		✓	✓	✓			
		$\leq 76,1$					$\leq 76,1$				

DECLARATION OF PERFORMANCE

Permissible pipe types - Omega-application

RORCOL	Material/Fabricate	Standard/Manufacturer
RORCOL V60 attached to the floor, wall or ceiling	PVC-U	EN 1329-1 EN 1452-2, DIN 8062 EN 1453-1 EN ISO 15493 EN 1566-1
	PVC-C	EN ISO 15493 EN 15877-2
	PE-HD Pipelife PE100	Standard tubes with wall thickness 1.8-7.7 mm
	Geberit PE	
	PE-HD Geberit Silent-db20	
	Wavin PE	
	PE	
	PE	
	ABS	
	SAN+PVC	
	PP Ostendorf HT RAUPIANO LIGHT Rehau HT Valsir PP	
	PP	
	PP	
	"DYKASstil®"	EN 12201-2, DIN 8074/DIN 8075
	"Geberit Silent-PP"	EN 1519-1, DIN 8074/DIN 8075
	"PhonEX® AS-PLUS"	EN ISO 15494 EN 12666-1 EN 1455-1 EN 15493 ISO 19220
	"PhonEX® ST"	EN 1451-1, DIN 8077/DIN 8078
	"Pipelife Master 3 PLUS"	EN ISO 15494
	"POLO-KAL 3S"	EN ISO 15874-2, DIN 8077/DIN 8078
	"POLO-KAL NG"	DYKA B.V.
	"POLO-KAL XS"	Geberit Vertriebs GmbH & Co KG
	"RAUPIANO PLUS"	KE KELIT Kunststoffwerk GmbH
	"SANHA Master 3 PLUS"	Pipelife Austria GmbH & Co KG
	"Ultra Silent"	REHAU Gesellschaft m.b.H
	"Valsir Silere"	SANHA GmbH & Co KG
	"Wavin AS-PLUS"	Huliot A.C.S. Ltd.
"Wavin SiTech+"	Valsir S.p.A.	
	Wavin GmbH	

DECLARATION OF PERFORMANCE

Permissible separating elements/Outer pipe diameter				
SW EI90	RW	FW100	RC	
≤ 110				
		50	50	≤ 110
50-110				
50-75				
50-75				
50-75				
50-75				
50-110	50	50	110	
50-110			110	
50-75				
58-110	110	110		
50-75				

DECLARATION OF PERFORMANCE

Permissible pipe types - Omega-application

RORCOL	Material/Fabricate	Standard/Manufacturer
RORCOL AV60 attached to the floor, wall or ceiling	PVC-U	EN 1452-2, DIN 8062
	PP	
	Ostendorf HT	
	RAUPIANO LIGHT	EN 1451-1, DIN 8077/DIN 8078
	Rehau HT	
	Valsir PP	
	PP	EN ISO 15874-2, DIN 8077/DIN 8078
	"Geberit Silent-PP"	Geberit Vertriebs GmbH & Co KG
	"Pipelife Maser 3 PLUS"	Pipelife Austria GmbH & Co KG
	"POLO-KAL 3S"	POLOPLAST GMBH & CO KG
	"POLO-KAL NG"	
	"POLO-KAL XS"	
	"RAUPIANO PLUS"	
	"SANHA Master 3 PLUS"	
	"Valsir Silere"	
	Metal pipes	Class A1 fire behaviour according to EN 13501-1, with a melting point \geq steel and thermal conductivity \leq steel
		Class A1 fire behaviour according to EN 13501-1, with a melting point \geq copper and thermal conductivity \leq copper
	"alplex Mehrschichtverbundrohr"	FRÄNKISCHE ROHRWERKE Gebr. Kirchner GmbH & Co. KG
	"aquatec®-Aluflex-5-Schicht-Modulrohr"	Jäger Sanitär- und Heizungstechnik Systemvertrieb GmbH
	"CLEVERFIT Radial"	Purmo Group Poland sp. z o. o.
	"CONEL Connect MV"	CONEL GmbH
	"EASYTEC Installationsrohr"	PG Austria GmbH
	"Geberit Mepla Systemrohr"	Geberit Vertriebs GmbH
	"Geberit Systemrohr ML"	
	"Henco Mehrschichtverbundrohr"	Henco Industries NV
	"JRG Sanipex MT"	Georg Fischer JRG AG
	"KELOX® Modulrohr"	KE KELIT Kunststoffwerk GmbH
	"MT-Verbundrohr"	Winkler GmbH
	"PERTAL ² "	KAN-term GmbH
	"Polysan/Revi-ALU-Verbundrohr"	Polysan HandelsgesmbH & Co KG
	"PRINETO Stabil-Rohr"	IVT Installations- und Verbindungstechnik GmbH & Co. KG
	"PRIPRESS®"	
	"RADOPRESS"	
"RAUTITAN stabil"	REHAU Gesellschaft m.b.H	
"Raxofix-Mehrschichtverbundrohr"	Viéga GmbH	
"Roth Systemrohr Alu-Laserplus®"	ROTH WERKE GMBH	
"TECEflex Verbundrohr"	TECE GmbH	
"TECElogo Verbundrohr"		
"Uponor Verbundrohr"	Uponor Vertriebs GmbH	
Electrical installation pipe	EN 61386-21	
	EN 61386-22	
All types of sheathed cables currently in use in the European construction industry (with the exception of hollow cables), with an external diameter \leq 21 mm		

DECLARATION OF PERFORMANCE

Permissible separating elements/Outer pipe diameter				
SW		RW	FW	RC
Ei90	Ei60		100	
50-75	50	32	32	
25				
50-75				
50		50	50	
	75			
50-75	50	75	75	
50-75		75	75	
50		50	50	
58-78	78			
	≤ 28	≤ 16	≤ 16	
		26	26	
≤ 26				
≤ 26		26	26	
≤ 26				
≤ 32	≤ 26		26	
≤ 25				
≤ 26				
≤ 26				
≤ 26				
≤ 32	26			
≤ 32	20-25			
≤ 26				
≤ 20				
≤ 26				
≤ 32	21-26	26	26	
≤ 25			26	
≤ 25				
≤ 50	≤ 50	≤ 25	≤ 25	≤ 50
		≤ 50	≤ 50	
				$\leq 10 \text{ mm}^2$

DECLARATION OF PERFORMANCE

Permissible pipe types - U-application

RORCOL	Material/Fabricate	Standard/Manufacturer
RORCOL V60	PP Ostendorf HT RAUPIANO LIGHT Rehau HT Valsir PP	EN 1451-1, DIN 8077/DIN 8078
	"DYKASstil®"	DYKA B.V.
	"Geberit Silent-PP"	Geberit Vertriebs GmbH & Co KG
	"HT PLUS"	REHAU Gesellschaft m.b.H
	"Pipelife Master 3 PLUS"	Pipelife Austria GmbH & Co KG
	"POLO-KAL 3S"	POLOPLAST GMBH & CO KG
	"POLO-KAL NG"	
	"POLO-KAL XS"	
	"RAUPIANO PLUS"	REHAU Gesellschaft m.b.H
	"SANHA Master 3 PLUS"	SANHA GmbH & Co KG
	"Valsir Silere"	Valsir S.p.A.

DECLARATION OF PERFORMANCE

Permissible separating elements/Outer pipe diameter

SW EI90	RW	FW100	RC
≤ 110	≤ 110	≤ 110	≤ 110
≤ 110	≤ 110	≤ 110	
≤ 110			110
			125
≤ 110	75, 110	75, 110	
≤ 110	≤ 110	50, 75	≤ 125
≤ 110	≤ 110	≤ 110	
≤ 110	≤ 110	≤ 110	
58, 110	58, 110	58, 110	≤ 135

DECLARATION OF PERFORMANCE

Permissible insulation

Material	Fabricate
Structure-borne sound insulation	Thickness ≤ 5 (Classification E/E _c , density 27-55 kg/m ³)
	PE soft foam insulation for structure-borne sound decoupling e.g. Astroflex Stabil Thin Wall, Austroflex Stabil Drainage, steinoflex® 405 R, steinoflex® 445, Tubolit AR Fonoblok
PE soft foam insulation	Factory-pre-insulated aluminium composite pipes
	"alplex Mehrschichtverbundrohr"
	"Roth Systemrohr Alu-Laserplus®"
	"Astraflex PE"
	"aquatec®-Aluflex-5-Schicht-Modulrohr"
	"CLEVERFIT Radial"
	"EASYTEC Installationsrohr"
	"Geberit Mepla Systemrohr"
	"Geberit Systemrohr ML"
	"Henco Mehrschichtverbundrohr"
	"JRG Sanipex MT"
	"KELOX Modulrohr®"
	"MT-Verbundrohr"
	"PERTAL ² "
	"Polysan/Revi-ALU-Verbundrohr"
	"PRINETO Stabil-Rohr"
	"PRIPRESS®"
	"RADOPRESS"
"RAUTITAN stabil"	
"Raxofix-Mehrschichtverbundrohr"	
"STEELOX® Mehrschichtverbundrohr"	
"TECEflex Verbundrohr"	
"TECElogo Verbundrohr"	
"Uponor Verbundrohr"	
Elastomeric foam	AF/Armaflex (Classification B-s3,d0/B _c -s3,d0)
	Armaflex ACE plus (Classification B-s3,d0/B _c -s2,d0)
	Kaiflex-ST (Classification B-s3,d0/B _c -s3,d0)
	K-FLEX ST (Classification B-s3,d0/B _c -s3,d0)
Polyester fleece	Austrovlies® Drainage (Classification E)
	Austrovlies® Thin Wall (Classification E)
Mineral wool	ISOVER Climcover Lamella Mat
	AUSTROFLEX glass wool lamella mat
	ROCKWOOL Climate Rock
Stuffing wool	Classification A1, melting point $\geq 1000^{\circ}\text{C}$, minimum bulk density 40 kg/m ³
	e.g. B. ISOVER Universal wool insulation
Soundproofing	Astrophon sound insulation mat type ST GK 070 (Classification B-s3,d0)
	Geberit Isol Flex (Classification E,d2)
PE protective pipes	PROTECTION HOSE (Outer diameter ≤ 34 mm, wall thickness ≤ 2.25 mm, Classification F)
	Protective tube (Outer diameter ≤ 34 mm, wall thickness ≤ 2.5 mm, Classification F)
	Protective tube PE black (Outer diameter ≤ 34 mm, wall thickness ≤ 2.5 mm, Classification F)
	TECE well protection pipe (Outer diameter ≤ 34 mm, wall thickness ≤ 2.5 mm, Classification F)
	Uponor protective pipe (Outer diameter ≤ 35 mm, wall thickness ≤ 3 mm, Classification E)

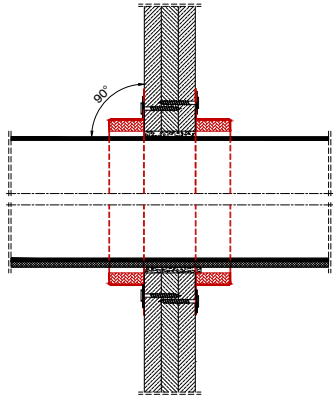
DECLARATION OF PERFORMANCE

Manufacturer	Standard
Manufacturer-independent	EN 14313
e.g. Austroflex Rohr-Isolierte Systeme GmbH, Steinbacher Dämmstoff GmbH, Armacell GmbH	
FRÄNKISCHE ROHRWERKE Gebr. Kirchner GmbH & Co. KG	EN 14313
ROTH WERKE GMBH	
Armacell Austria GmbH	
Jäger Sanitär- und Heizungstechnik Systemvertrieb GmbH	
Purmo Group Poland sp. z o. o.	
PG Austria GmbH	
Geberit Vertriebs GmbH & Co KG	
Henco Industries NV	
Georg Fischer JRG AG	
KE KELIT Kunststoffwerk GesmbH	
Winkler GmbH	
KAN-therm GmbH	
Polysan HandelsgesmbH & Co KG	
IVT Installations- und Verbindungstechnik GmbH & Co. KG	
Pipeline Austria GmbH & Co KG	
REHAU Gesellschaft m.b.H	
Viega GmbH	
KE KELIT Kunststoffwerk GesmbH	
TECE GmbH	
Uponor Vertriebs GmbH	
Armacell GmbH, Armacell Poland Sp.zo.o. oder Armacell Iberia, S.L.	-
Armacell GmbH	
Kaimann GmbH	
L'ISOLANTE K-FLEX S.p.A.	
Armacell Austria GmbH	-
Armacell Austria GmbH	
Saint-Gobain ISOVER Austria GmbH	EN 14303
Austroflex Rohr-Isolierte Systeme GmbH	
ROCKWOOL Handelsgesellschaft m.b.H.	
Manufacturer-independent	EN 14303
Saint-Gobain ISOVER Austria GmbH	
Armacell Austria GmbH	-
Geberit Vertriebs GmbH & Co KG	
HENCO Industries NV	-
REHAU GmbH	
Georg Fischer JRG AG	
TECE GmbH	
Uponor Vertriebs GmbH	

DECLARATION OF PERFORMANCE

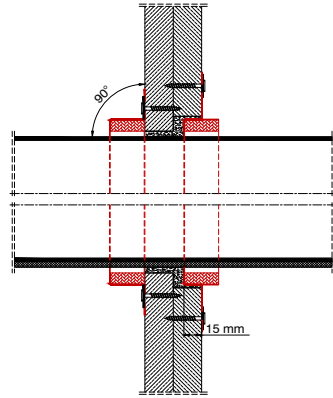
Installation details for shaft walls \geq EI90

1



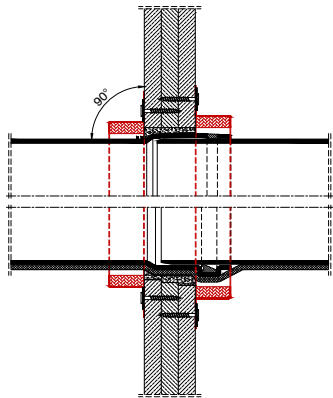
RORCOL V30 or RORCOL V60
for plastic pipes
without/with insulation

2



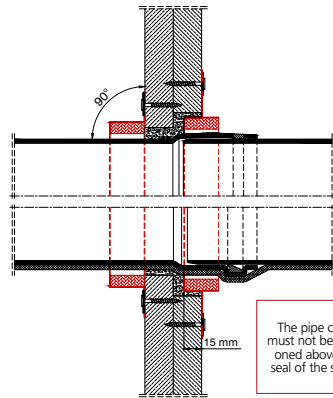
RORCOL V30 or RORCOL V60
for plastic pipes
without/with insulation

3



RORCOL V30 or RORCOL V60
for plastic pipes with socket
without/with insulation

4



RORCOL V30 or RORCOL V60
for plastic pipes with socket
without/with insulation

DECLARATION OF PERFORMANCE

Areas of application shaft walls \geq EI90

SW EI90	Pipe insulation Shaft walls \geq EI90, Panelling 3x15, 2x20 or 2x25 mm				SW		
	RORCOL	Material / Manufacturer	Pipe Diameter [mm]	Insulation [mm]			
Without				PE			
V30 / V60	Standard pipes according to table "Permissible pipe types" Page 35-35	PVC-U	≤ 110	✓	≤ 5	RW	
		PVC-C					
		PE					
		ABS					
		SAN+PVC					
		PP					
	EN 1401-1	PVC-U	110-125		5		FW
	"DYKASTil®"	≤ 110			5		
	"Geberit Silent-PP/Silent-Pro"						
	"PhonEX® AS-PLUS/ST"						
"Pipelife Master 3 PLUS"							
"POLO-KAL 3S/NG/XS"							
"RAUPIANO PLUS"	16			4			
"SANHA Master 3 PLUS"							
"Uponor PE-Xa"							
"Valsir Silere"	≤ 110		✓	5	TW		
"Wavin AS-PLUS/SiTech+"							
V60	"RAUTITAN flex"	≤ 25			9		

SW

RW

FW

TW

RC

TC

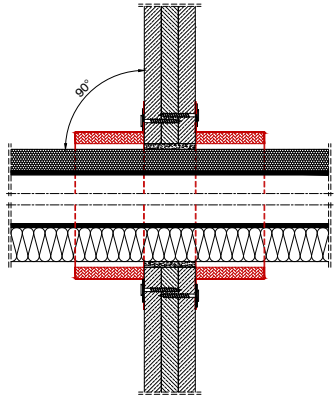
Electrical

CFB

DECLARATION OF PERFORMANCE

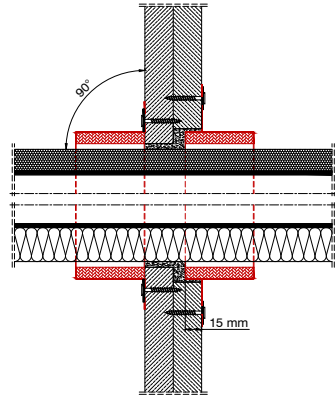
Installation details for shaft walls \geq EI90

5



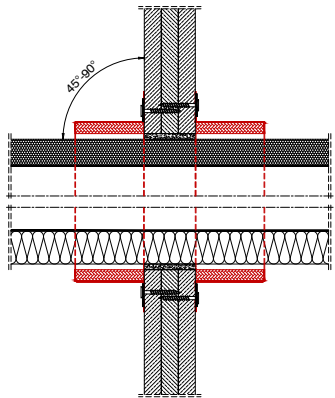
RORCOL AV60
for multi-layer composite pipes
with insulation

6



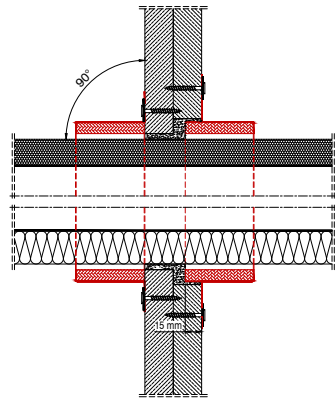
RORCOL AV60
for multi-layer composite pipes
with insulation

7



RORCOL AV60
for metal pipes
with insulation

8



RORCOL AV60
for metal pipes
with insulation

DECLARATION OF PERFORMANCE

Areas of application shaft walls \geq EI90

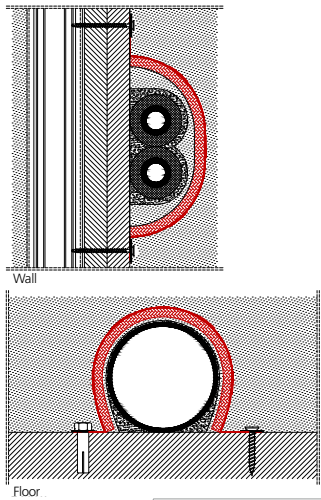
SW EI90	Pipe insulation Shaft walls \geq EI90, panelling 3x15, 2x20 or 2x25 mm					EI90
RORCOL	Material / Manufacturer	Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]		
				PE	Elastomer	Mineral wool
AV60	Metal pipes	Copper/Steel	1	≤ 12 ≤ 28		9 13-19 ⁽¹⁾ ≥ 30
	"alplex Mehrschichtverbundrohr" "CONEL Connect MV" "Geberit Systemrohr ML" "RAUTITAN stabil" "Roth Systemrohr Alu-Laserplus®" "STEELOX® Mehrschichtverbundrohr" "TECElogo Verbundrohr"		1	≤ 26	9-10	9
	"aquatec®-Aluflex-5-Schicht-Modulrohr" "CLEVERFIT Radial" "EASYTEC Installationsrohr" "Geberit Mepla Systemrohr" "Henco Mehrschichtverbundrohr" "JRG Sanipex MT" "KELOX® Modulrohr" "MT-Verbundrohr" "PERTAL 2" "Polysan/Revi-ALU-Verbundrohr" "PRINETO Stabil-Rohr" "PRIPRESS®" "RADOPRESS" "Raxofix-Mehrschichtverbundrohr" "TECEflex Verbundrohr" "Uponor Verbundrohr"		1	≤ 33	9-10	9
	"PYTHON Getränkeleitung"			40 ⁽¹⁾		19

⁽¹⁾ Exclusively 2x25mm planking

DECLARATION OF PERFORMANCE

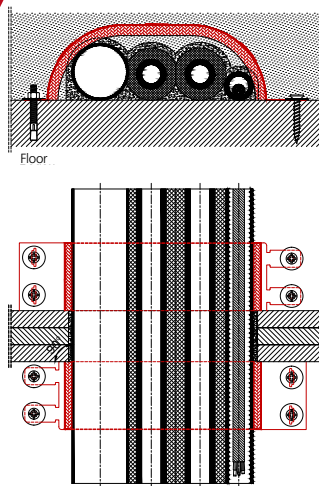
Installation details for shaft walls \geq EI90

9



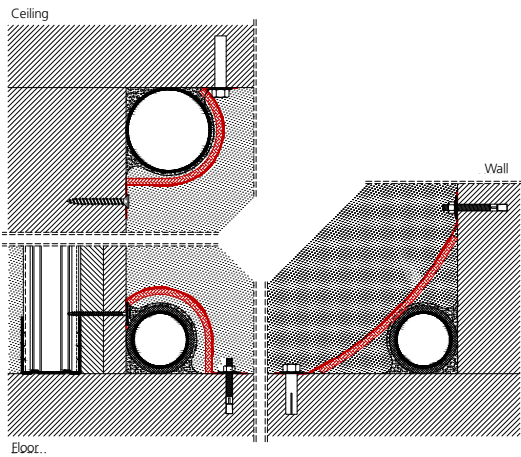
RORCOL V60
as an Omega-application
for pipes with insulation

10



RORCOL AV60
as an Omega-application
for pipes with insulation

11



RORCOL V60
as an Omega-application
installation examples

Working clearance
see page 9

DECLARATION OF PERFORMANCE

Areas of application shaft walls \geq EI90

SW EI90		Pipe insulation – Omega-application Shaft walls \geq EI90, panelling 3x15, 2x20 or 2x25 mm							EI90							
RORCOL	Max. DN	Standard / Material / Manufacturer		Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]			Multiple passage							
						Without	PE	Elastomer								
V60	110	Standard pipes according to table "Permissible pipe types" Page 39-39	PVC-U	1	≤ 110	✓	≤ 5		-							
			PVC-C													
			PE													
			ABS													
			SAN+PVC													
			PP													
			"DYKASTil®"													
			"Geberit Silent-PP"													
			"PhonEX® AS-PLUS/ST"							5	-					
			"Pipelife Master 3 PLUS"													
			"POLO-KAL 3S"													
			"POLO-KAL NG/XS"													
"RAUPIANO PLUS"																
"SANHA Master 3 PLUS"																
"Valsir Silere"																
"Wavin AS-PLUS/SiTech+"																
"Geberit Systemrohr ML"	1	≤ 25	9-10	-												
"Geberit Mepla Systemrohr"																
"JRG Sanipex MT"					2	32	9-10	MP ⁽¹⁾								
"KELOX® Modulrohr"																
"TECEflex"																
Multi-layer composite pipes according to table "Permissible pipe types" Page 39-39									2	≤ 26	10	MP ⁽¹⁾				
EN 1451-1													PP	5		
Metal pipes													Copper		≤ 78	
															≤ 22	13
EN 1452-2													PVC-U		≤ 18	13
															32	MP ⁽¹⁾
Electrical conduit													1		≤ 32	with 1 piece of cable max. 5x10.0mm ²
Metal pipes	Copper	1	19	MP ⁽¹⁾												
		1	13													

⁽¹⁾ Multiple passage; the number of pipes within the multiple passage may be reduced

DECLARATION OF PERFORMANCE

Installation details for shaft walls \geq EI90

12

Pipe	RORCOL
Ø50	DN63
Ø75	DN110
Ø90	DN110
Ø110	DN125

RORCOL V60
as a U-application
for insulated pipe bends

13

Steel perforated belt with plastic coating
Width \geq 17 mm
Thickness \geq 1 mm
Hole diameter \leq 7 mm

RORCOL V60
as a U-application
for insulated pipe bends

14

\geq 100 mm

10-20 mm deep gap filled with silicone

RORCOL V60 – Centrally inserted
for plastic pipes
without/with insulation

15

\geq 100 mm

10-20 mm deep gap filled with silicone

RORCOL V60 – Centrally installed
for plastic pipes with socket
without/with insulation

DECLARATION OF PERFORMANCE

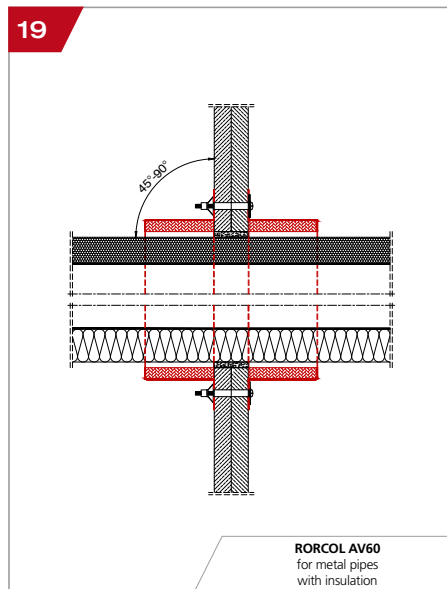
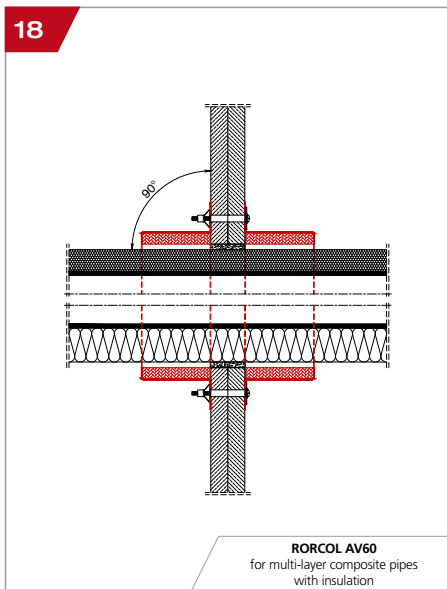
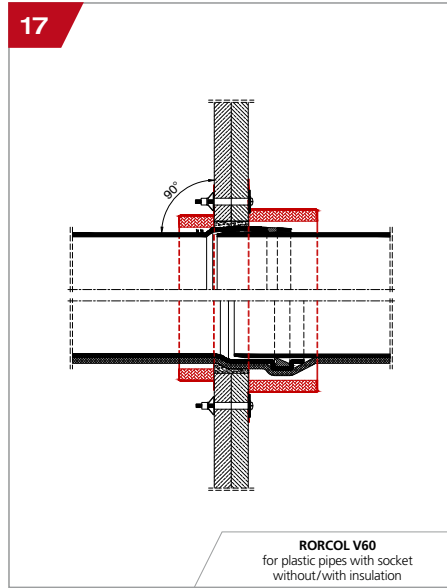
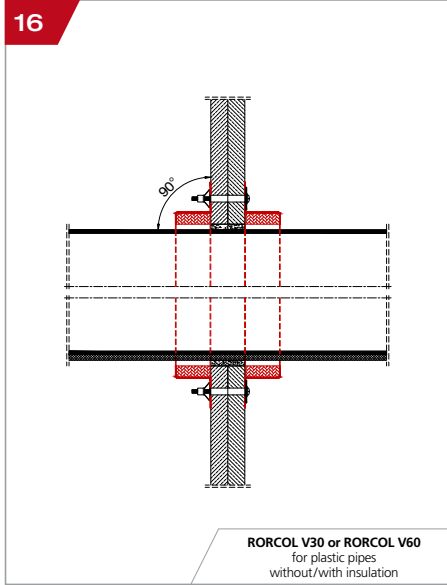
Areas of application shaft walls \geq EI90

SW EI90	Pipe insulation – U-application				EI90	
RORCOL	Max. DN	Standard / Material / Manufacturer		Pipe Diameter [mm]	Insulation [mm]	
					Without	PE
V60	125	EN 1451-1	PP	\leq 110		5
		"DYKASstil®"		\leq 110		5
		"Geberit Silent-PP"				
		"Pipelife Master 3 PLUS"				
		"POLO-KAL NG/XS"				
		"RAUPIANO PLUS"				
		"SANHA Master 3 PLUS"				
			58, 110			

SW EI90	Pipe insulation – Centrally positioned				EI90	
RORCOL	Material / Manufacturer		Pipe Diameter [mm]	Insulation [mm]		
				Without	PE	
V60	Standard pipes according to table "Permissible pipe types" Page 41-41	PVC-U	\leq 110	✓	\leq 5	
		PVC-C	\leq 110			
		PE				
		ABS				
		SAN+PVC				
	PP					
	EN 1401-1	PVC-U	110-125		5	
		"DYKASstil®"		\leq 110	✓	5
	"Geberit Silent-PP/Silent-Pro"		\leq 110			
	"PhonEX® AS-PLUS/ST"		\leq 110			
	"Pipelife Master 3 PLUS"		\leq 110			
	"POLO-KAL 3S/NG/XS"		\leq 110			
	"RAUPIANO PLUS"		\leq 110			
	"RAUTITAN flex"		\leq 25	9		
	"SANHA Master 3 PLUS"		\leq 110	5		
	"Uponor PE-Xa"		16	4		
	"Valsir Silere"		\leq 110		5	
	"Wavin AS-PLUS/SiTech+"		\leq 110	✓		

DECLARATION OF PERFORMANCE

Installation details for shaft walls \geq EI60



DECLARATION OF PERFORMANCE

Areas of application shaft walls \geq EI60

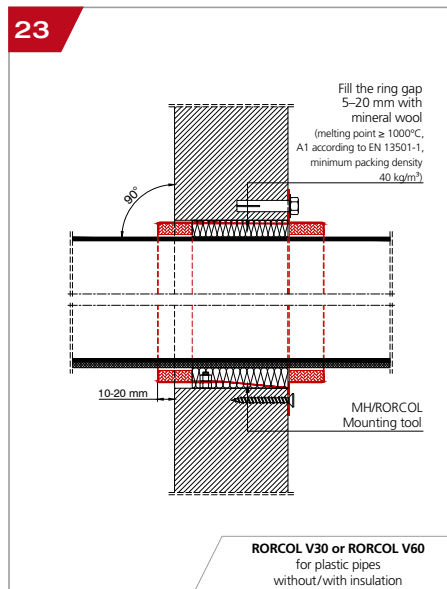
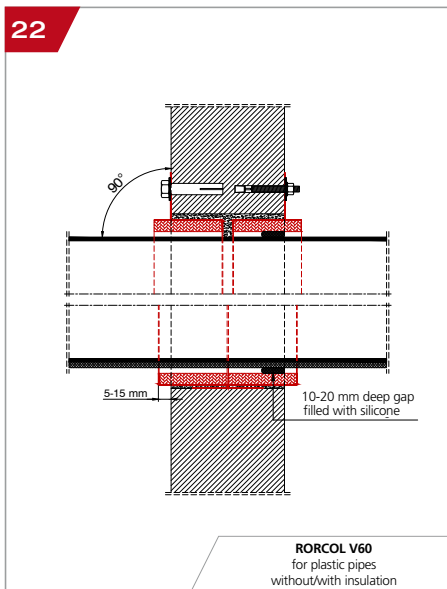
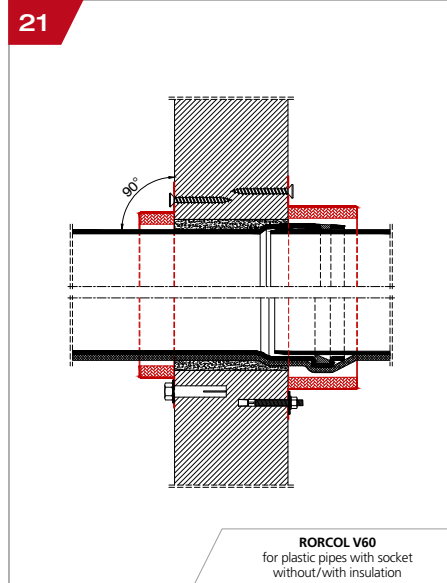
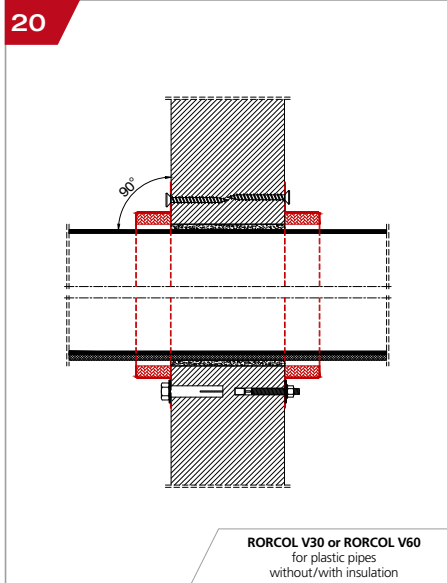
SW EI60	Pipe insulation Shaft walls \geq EI60, panelling 2x15 mm				EI90		
	RORCOL	Standard / Material / Manufacturer	Pipe Diameter [mm]	Insulation [mm]			
With-out				PE	Elastomer	Mineral wool	
V30 / V60	EN 1519-1	PE	≤ 110		5		
	EN 1451-1	PP	≤ 110		5		
	"DYKASTil®"						
	"POLO-KAL 3S/NG/XS"				5		
	"RAUPIANO PLUS"		≤ 110				
AV60	Metal pipes		≤ 28				20
	Copper/Steel		≤ 26				
	"Geberit Mepla Systemrohr"		≤ 26				
	"JRG Sanipex MT"		≤ 26		9-10	9 ⁽¹⁾	
	"KELOX® Modulrohr"		≤ 25				
"TECEflex Verbundrohr"		≤ 26					

⁽¹⁾ Only pipe diameters 25 mm or 26 mm

SW
RW
FW
TW
RC
TC
Electrical
CFB

DECLARATION OF PERFORMANCE

Installation details for rigid walls



DECLARATION OF PERFORMANCE

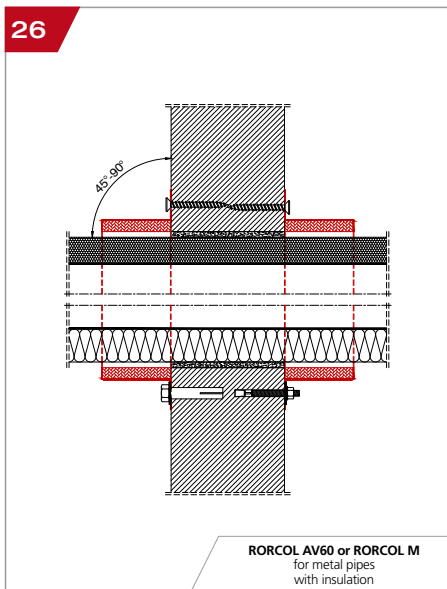
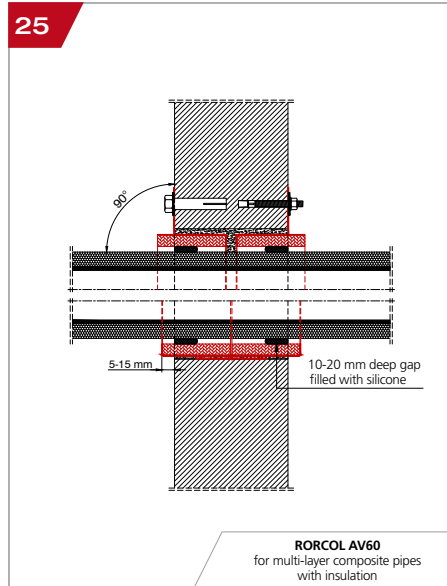
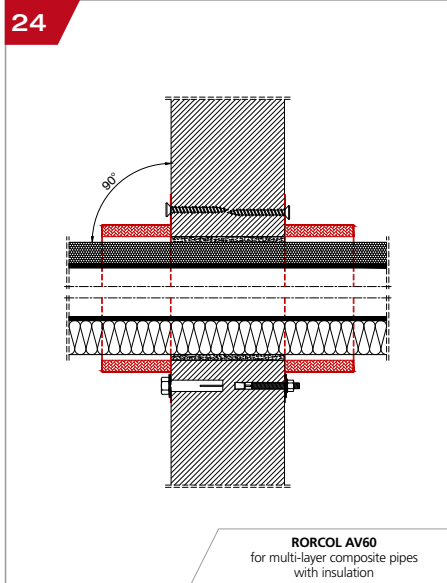
Areas of application rigid walls

RW	Pipe insulation Rigid walls, thickness ≥ 100 mm					EI90	
	RORCOL	Standard / Material / Manufacturer	Pipe Diameter [mm]	Insulation [mm]			
With-out				PE	Elastomer ⁽¹⁾	Mineral wool	
V30 / V60	Standard pipes according to table "Permissible pipe types" Page 45-45	PVC-U	≤ 160	✓	≤ 5		
		PVC-C					
		PE					
		ABS					
		SAN+PVC PP					
	EN 1401-01	PVC-U	≤ 250		5		
	EN 1519-1	PE-HD	≤ 110	✓	5-10	25	
			≤ 125		5	9	
			≤ 200		5		
	EN ISO 15874-2	PP	≤ 110	✓	5	43	50
	"Aquatherm firestop" ⁽¹⁾		110				
	"Blackfire®"		≤ 160				
	"CONEL Drain"		≤ 110				
	"DYKASTil®"						
	"Geberit Silent-PP"						
	"Geberit Silent-Pro"		≤ 160		5		
	"PhonEX® AS-PLUS/ST"			✓			
"Pipelife Master 3 PLUS"							
"POLO-KAL 3S/XS"							
"POLO-KAL NG"		≤ 200					
"PP MASTER SN12"		200-250					
"RAUPIANO PLUS"		≤ 160	✓				
"RAUSILENTO"		≤ 110					
"SANHA Master 3 PLUS"		≤ 160	✓	5			
"Ultra Silent"		125					
"Valsir Silere"				5			
"Wavin AS-PLUS/SiTech+"		≤ 160	✓				
V60	"Pellflex/AS and PU/AS"	58					
	"RAUTITAN flex"	50			25-32		

⁽¹⁾ RORCOL V60 only

DECLARATION OF PERFORMANCE

Installation details for rigid walls



DECLARATION OF PERFORMANCE

Areas of application rigid walls

RW		Pipe insulation Rigid walls, thickness ≥ 100 mm				EI90		
RORCOL	Material / Manufacturer	Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]				
				PE	Elastomer	Mineral wool		
AV60	Metal pipes	1	≤ 18	9-10	9	≥ 20		
			≤ 22		13			
	"aquatec®-Aluflex-5-Schicht-Modulrohr" "Henco Mehrschichtverbundrohr" "MT-Verbundrohr"	4	≤ 21	9-10	9	≥ 30		
			26		9-13			
			32		9-25			
	"Polysan/Revi-ALU-Verbundrohr" "PRIPRESS®" "RADOPRESS"	1	40		9-32	20-50		
			"CLEVERFIT Radial" "EASYTEC Installationsrohr" "Geberit Mepla Systemrohr" "Geberit Systemrohr ML" "KELOX® Modulrohr" "PRINETO Stabil-Rohr" "RAUTITAN stabil" "Raxofix-Mehrschichtverbundrohr" "Roth Systemrohr Alu-Laserplus®" "TECEflex Verbundrohr" "TECElogo Verbundrohr" "Uponor Verbundrohr"	4	≤ 21	9-10	9	≥ 30
	25/26				9-13			
	32/33				9-25			
	40/42				9-32			
	50/52				13-32			
	63				13-43			
	75 ⁽¹⁾				43			
	"alpeX Mehrschichtverbundrohr" "CONEL Connect MV" "PERTAL ² "	1			≤ 32	9-10		
40						19		
50						32		
"JRG Sanipex MT"	1	26	9-10	9	≥ 20			
		40		9-32				
"STEELOX® Mehrschichtverbundrohr"	1	16	9-10	9	≥ 20			
		20	9-13	9				
		25	9-13	9-13				
		≤ 54						
M	Metal pipes	1	$\leq 76,1$			≥ 30		
			$\leq 108^{(2)}$					

⁽¹⁾ Exclusively "KELOX® Modulrohr"

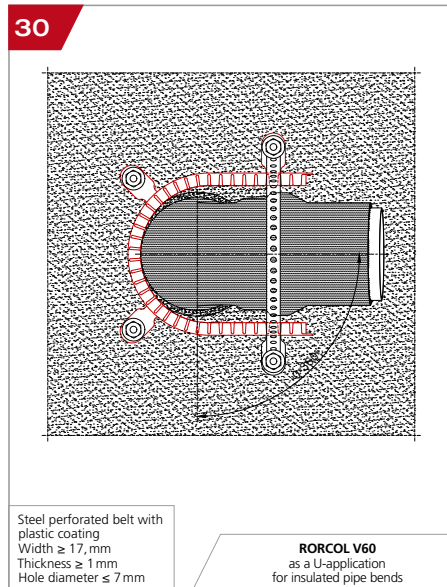
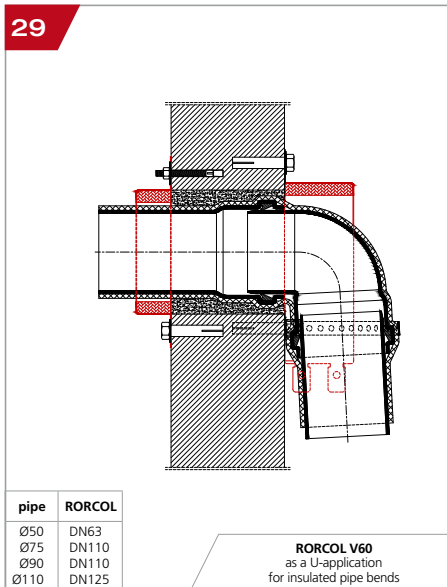
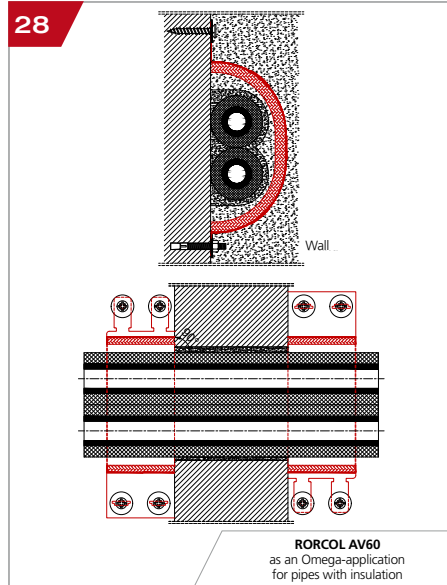
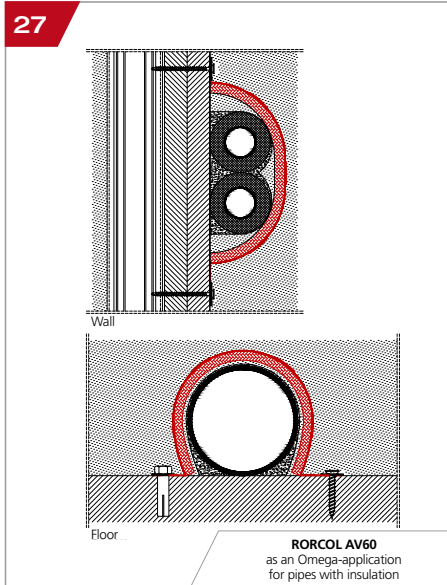
⁽²⁾ Exclusively EI60 U/C

MW		Pipe insulation - Multiple penetrations Rigid walls, thickness ≥ 100 mm					EI90		
RORCOL	Max. DN	Standard / Material		Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]			Multiple passage
						With-out	PE	Elastomer	
AV60	63	Pre-insulated climate pipes	Copper	1	≤ 18		10	9	MP ⁽¹⁾
				1	≤ 10		10	9	
		1	≤ 25		with 1 cable max. 5x2.5 mm ²				

⁽¹⁾ Multiple passage; the number of pipes within the multiple passage may be reduced

DECLARATION OF PERFORMANCE

Installation details for rigid walls



DECLARATION OF PERFORMANCE

Areas of application rigid walls

RW		Pipe insulation – Omega-application Rigid walls, thickness ≥ 100 mm						EI90
RORCOL	Max. DN	Standard / Material / Manufacturer	Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]			Multiple passage
					Without	PE	Elastomer	
AV60	80	"alpex Mehrschichtverbundrohr"	2	26		9-10		MP ⁽¹⁾
		"CONEL Connect MV"						MP ⁽¹⁾
		"Geberit Mepla Systemrohr"						MP ⁽¹⁾
		"Roth Systemrohr Alu Laserplus®"						MP ⁽¹⁾
		"TECEflex"	2	≤ 26		10		MP ⁽¹⁾
		Multi-layer composite pipes according to table "Permissible pipe types" Page 49-49						
		EN 1451-1	PP	1	≤ 78		5	MP ⁽¹⁾
		Metal pipes	Copper	1	≤ 16		10	
				1	≤ 10		8	
		EN 1451-1	PP	1	32	✓		MP ⁽¹⁾
Electrical conduit			1	≤ 25	with 1 cable max. 5x2.5 mm ²			

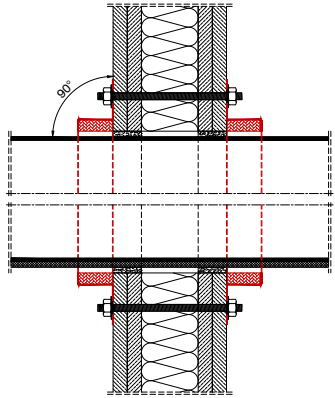
⁽¹⁾ Multiple passage; the number of pipes within the multiple passage may be reduced

RW		Pipe insulation – U-application Rigid walls, thickness ≥ 100 mm				EI120
RORCOL	Max. DN	Standard / Material / Manufacturer	Pipe Diameter [mm]	Insulation [mm]		
				Without	PE	
V60	125	EN 1451-1	PP	≤ 110		5
		"DYKASstil®"		≤ 110		5
		"POLO-KAL 3S"		75, 110		
		"POLO-KAL NG"		≤ 110		
		"RAUPIANO PLUS"		≤ 110		
		"Valsir Silere"		58, 110		

DECLARATION OF PERFORMANCE

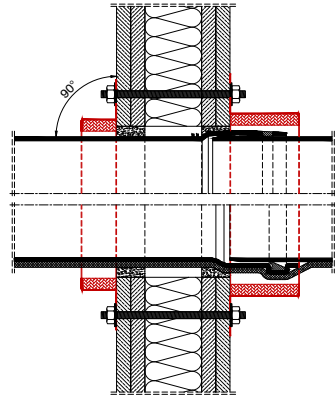
Installation details for flexible walls

31



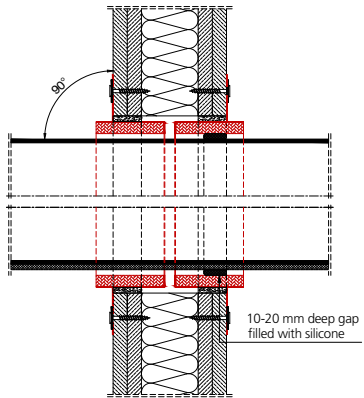
RORCOL V30 or RORCOL V60
for plastic pipes
without/with insulation

32



RORCOL V60
for plastic pipes with socket
without/with insulation

33



RORCOL V60
for plastic pipes
without/with insulation

10-20 mm deep gap
filled with silicone

DECLARATION OF PERFORMANCE

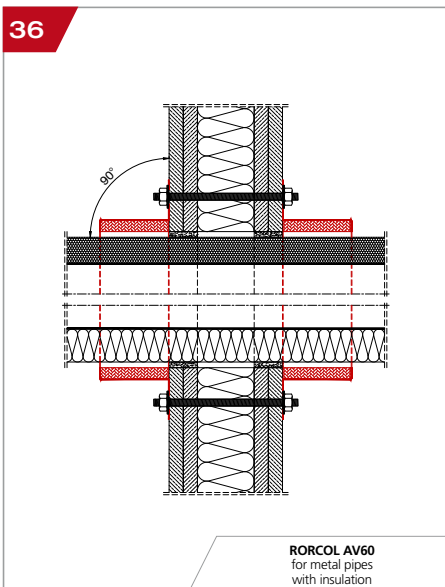
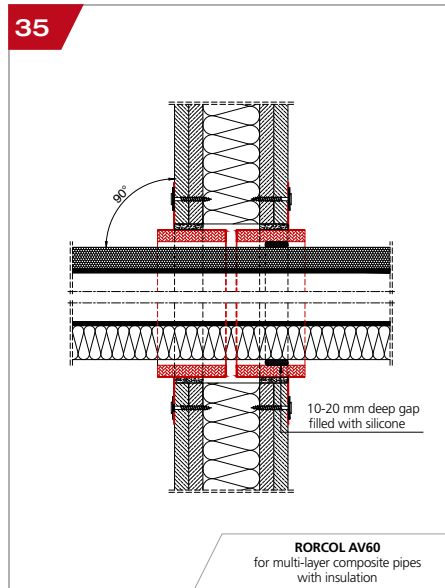
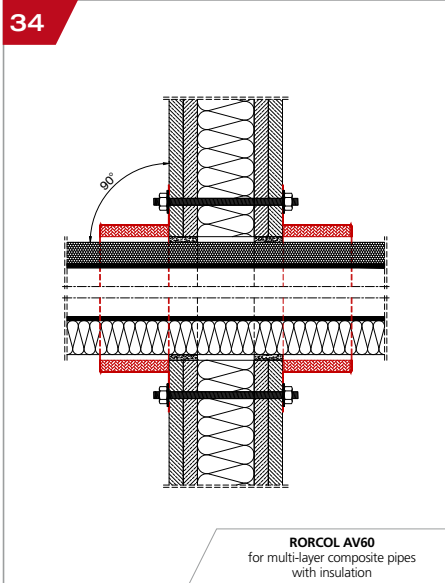
Areas of application flexible walls

FW100	Pipe insulation Flexible walls, thickness ≥ 94 mm				EI90		
	RORCOL	Material / Manufacturer	Pipe Diameter [mm]	Insulation [mm]			
With-out				PE	Elastomer ⁽¹⁾	Mineral wool	
V30 / V60	Standard pipes according to table "Permissible pipe types" Page 51-51	PVC-U	≤ 160	✓	≤ 5		
		PVC-C					
		PE					
		ABS					
		SAN+PVC PP					
	EN 1401-01	PVC-U	≤ 200		5		
	EN 1519-1	PE-HD	≤ 200		5		
	EN ISO 15874-2	PP	≤ 110	✓	5	43	50
	"CONEL Drain"		≤ 110				
	"DYKASTi®"						
	"Geberit Silent-PP"		≤ 160		5		
	"Geberit Silent-Pro"			✓			
	"PhonEX® AS-PLUS/ST"			✓			
	"Pipelife Master 3 PLUS"						
	"POLO-KAL 3S/XS"			✓			
	"POLO-KAL NG"		≤ 200	✓			
	"RAUPIANO PLUS"		≤ 160				
"RAUSILENTO"		≤ 110					
"SANHA Master 3 PLUS"		≤ 160					
"Ultra Silent"		125	✓				
"Valsir Silere"		≤ 160		5			
"Wavin AS-PLUS/SiTech+"		≤ 160	✓				
V60	"RAUTITAN flex"	50	✓		32		

⁽¹⁾ RORCOL V60 only

DECLARATION OF PERFORMANCE

Installation details for flexible walls



DECLARATION OF PERFORMANCE

Areas of application flexible walls

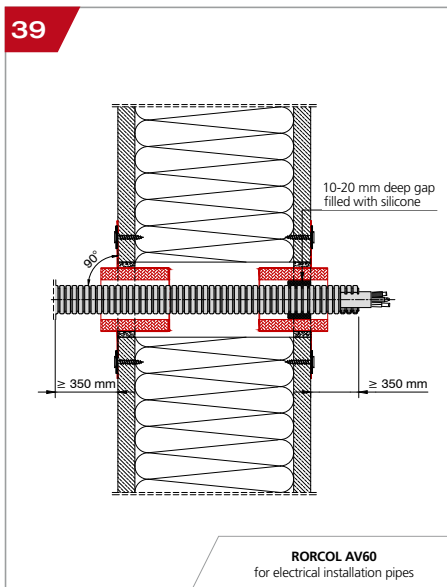
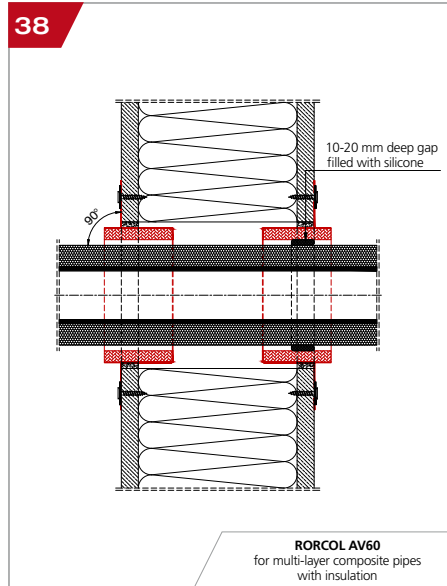
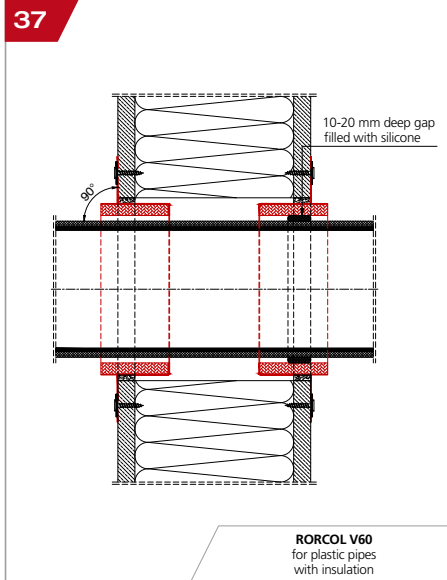
FW100	Pipe insulation Flexible walls, thickness ≥ 94 mm					EI90	
	RORCOL	Material / Manufacturer	Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]		
PE					Elastomer	Mineral wool	
AV60	Metal pipes	Copper/Steel	1	≤ 16	9-10	9	≥ 20
		Steel		≤ 22		13	
	≤ 42				19-32		
	"aquatec®-Aluflex-5-Schicht-Modulrohr" "Henco Mehrschichtverbundrohr" "MT-Verbundrohr"		4	≤ 20	9-10	9	≥ 30
				26		9-13	
	"Polysan/Revi-ALU-Verbundrohr" "PRIPRESS®" "RADOPRESS"		1	32		9-25	20-40
				40		9-32	20-50
	"CLEVERFIT Radial" "EASYTEC Installationsrohr" "Geberit Mepla Systemrohr" "Geberit Systemrohr ML" "KELOX® Modulrohr" "PRINETO Stabil-Rohr" "RAUTITAN stabil" "Raxofix-Mehrschichtverbundrohr" "Roth Systemrohr Alu-Laserplus®" "TECEflex Verbundrohr" "TECElogo Verbundrohr" "Uponor Verbundrohr"		4	≤ 21	9-10	9	
				25/26		9-13	20-30
					32/33		9-25
				40/42		9-32	20-50
				50/52		13-32	20-60
				63		13-43	20-50
				75 ⁽¹⁾		43	50
	"alpeX Mehrschichtverbundrohr" "CONEL Connect MV" "PERTAL ² "		1	≤ 32	9-10		
40					19		
50					32		
"JRG Sanipex MT"		1	26	9-10	9		
			40		9-32	20-50	
"STEELOX® Mehrschichtverbundrohr"		1	16	9-10	9		
			20	9-13	9		
			25	9-13	9-13	20-30	

⁽¹⁾ Exclusively "KELOX® Modulrohr"

⁽²⁾ Exclusively EI60 U/C

DECLARATION OF PERFORMANCE

Installation details for flexible walls



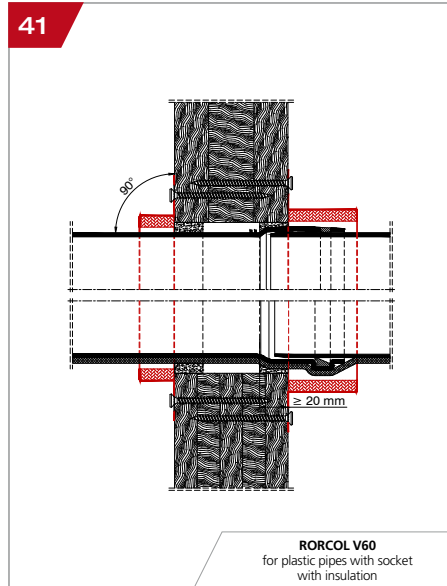
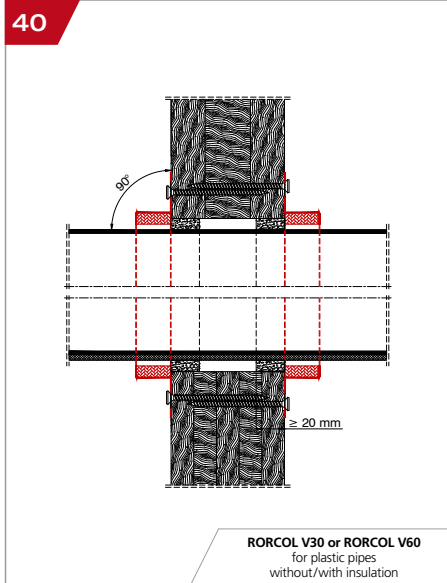
DECLARATION OF PERFORMANCE

Areas of application flexible walls

FW190	Pipe insulation				E120		
	Standard / Manufacturer		Pipe Diameter [mm]	Flexible walls, thickness ≥ 190 mm			
RORCOL				Insulation [mm]			
				With-out	PE	Elastomer	Mineral wool
V60	"POLO-KAL NG"		110		5		
AV60	"TECEflex Verbundrohr"		40			25	
	EN 61386-22	Electrical conduit	≤ 50	with 1 cable max. 5x16.0mm ²			

DECLARATION OF PERFORMANCE

Installation details for cross-laminated timber walls



DECLARATION OF PERFORMANCE

Areas of application for cross-laminated timber walls

TW100	Pipe insulation					EI90
	Cross-laminated timber walls, thickness ≥ 100 mm					
RORCOL	Material / Manufacturer	Pipe Diameter [mm]	Insulation [mm]			
			With-out	PE	Elastomer ⁽³⁾	Mineral wool
V30 / V60	Standard pipes according to table "Permissible pipe types" Page 57-57	PVC-U	≤ 160	✓	≤ 5	
		PVC-C				
		PE				
		ABS				
		SAN+PVC PP				
	EN 1401-01	PVC-U	≤ 250 ⁽¹⁾		5	
	EN 1519-1	PE-HD	≤ 110		5-10	25
			≤ 125			9
			≤ 200 ^(1,2)		5	
		"Blackfire®"	≤ 160 ^(1,2)		5	
		"CONEL Drain"	≤ 110			
		"DYKASTi®"	≤ 160			
		"Geberit Silent-PP"	≤ 160			
		"Geberit Silent-Pro"	≤ 160 ⁽²⁾	✓		
		"PhonEX® AS-PLUS"	≤ 160 ⁽²⁾	✓		
		"Pipelife Master 3 PLUS"	≤ 160			
		"POLO-KAL 3S"	≤ 160 ^(1,2)			
		"POLO-KAL NG"	≤ 200	✓		
		"POLO-KAL XS"	≤ 160			
		"PP MASTER SN12"	200-250			
	"RAUPIANO PLUS"	≤ 160	✓			
	"RAUSILENTO"	≤ 110				
	"SANHA Master 3 PLUS"	≤ 160 ⁽²⁾				
	"Valsir Silere"	≤ 160				
	"Wavin AS-PLUS"	≤ 160 ⁽²⁾				
V60	"RAUTITAN flex"	50 ^(1,2)	✓		25	

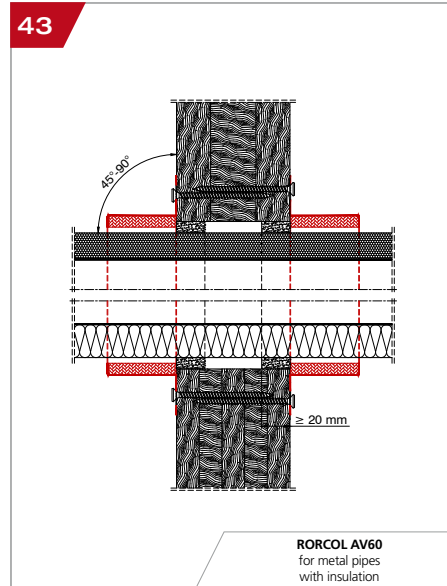
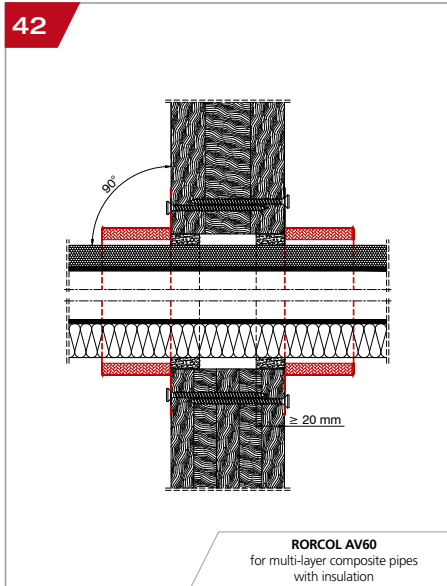
⁽¹⁾ Cross-laminated timber constructions according to ETA-12/0281 (HASSLACHER Holding AG) or ETA-20/0843 (Theurl Timber Structures)

⁽²⁾ Cross-laminated timber constructions according to ETA-06/0009 (Binderholz Bausysteme GmbH)

⁽³⁾ Exclusively RORCOL V60

DECLARATION OF PERFORMANCE

Installation details for cross-laminated timber walls



DECLARATION OF PERFORMANCE

Areas of application for cross-laminated timber walls

TW100		Pipe insulation Cross-laminated timber walls, thickness ≥ 100 mm					EI90
RORCOL	Material / Manufacturer	Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]			
				PE	Elastomer	Mineral wool	
AV60	Metal pipes	1	≤ 18	9-10	9	≥ 20	
			≤ 22		13		
	Copper/Steel	1	≤ 42		19-32	≥ 30	
			$\leq 76,1$		25-32		
	"aquatec®-Aluflex-5-Schicht-Modulrohr ⁽¹⁾ " "Henco Mehrschichtverbundrohr ⁽¹⁾ " "MT-Verbundrohr ⁽¹⁾ " "Polysan/Revi-ALU-Verbundrohr ⁽¹⁾ " "PRIPRESS ^{®(1)} " "RADOPRESS ⁽¹⁾ "	4	1	≤ 20	9-10	9	20-30
				26		9-13	20-40
				32		9-25	20-50
				40		9-32	20-50
	"CLEVERFIT Radial ⁽¹⁾ " "EASYTEC Installationsrohr ⁽¹⁾ " "Geberit Mepla Systemrohr" "Geberit Systemrohr ML" "KELOX® Modulrohr" "PRINETO Stabil-Rohr ⁽¹⁾ " "RAUTITAN stabil ⁽¹⁾ " "Raxofix-Mehrschichtverbundrohr" "Roth Systemrohr Alu-Laserplus ^{®(1)} " "TECEflex Verbundrohr" "TECElogo Verbundrohr" "Uponor Verbundrohr ⁽¹⁾ "	4	1	≤ 21	9-10	9	
				25/26		9-13	20-30
				32/33		9-25	20-40
				40/42		9-32	20-50
				50/52		13-32	20-60
				63		13-43	20-50
				75 ⁽²⁾		43	50
				"alpex Mehrschichtverbundrohr ⁽¹⁾ " "CONEL Connect MV ⁽¹⁾ " "PERTAL ²⁽¹⁾ "	1	1	≤ 32
	40		19				
	50		32				
63		13-43					
"JRG Sanipex MT ⁽¹⁾ "	1	1	16	4	6		
			26	9-10	9		
			40		9-32	20-50	
"STEELOX® Mehrschichtverbundrohr"	1	1	16	9-10	9		
			20	9-13	9		
			25	9-13	9-13	20-30	

⁽¹⁾ Cross-laminated timber constructions according to ETA-06/0009 (Binderholz Bausysteme GmbH), ETA-12/0281 (HASSLACHER Holding AG) or ETA-20/0843 (Theurl Timber Structures)

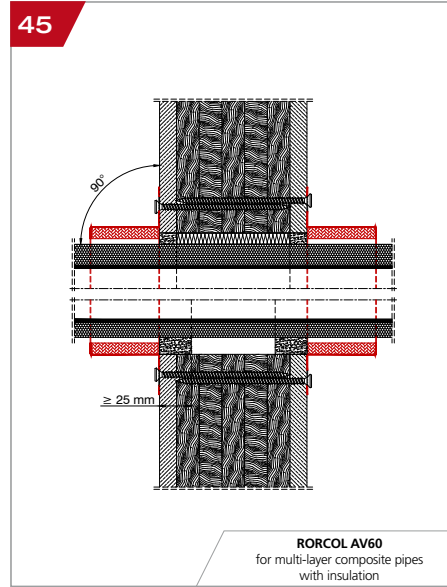
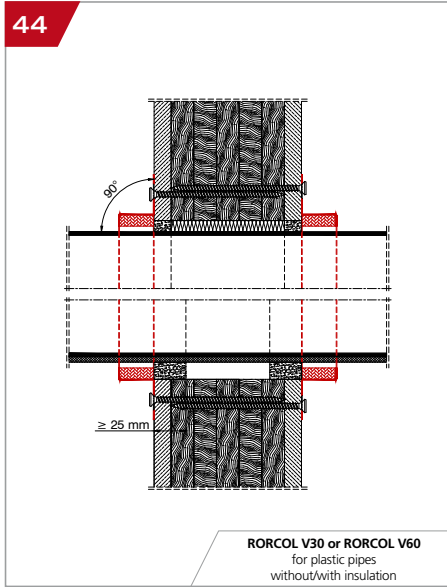
⁽²⁾ Exclusively "KELOX® Modulrohr"

TW100		Pipe insulation - Multiple penetrations Cross-laminated timber walls, thickness ≥ 100 mm					EI90	
RORCOL	Max. DN	Standard / Material	Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]		Multiple passage	
					PE	Elastomer		
AV60	63	Pre-insulated climate pipes	Copper	1	≤ 18	10	9	MP ⁽¹⁾
				1	≤ 10	10	9	
		1	≤ 25	with 1 cable max. 5x2.5mm ²				

⁽¹⁾ Multiple passage; the number of pipes within the multiple passage may be reduced

DECLARATION OF PERFORMANCE

Installation details for cross-laminated timber walls



DECLARATION OF PERFORMANCE

Areas of application for cross-laminated timber walls

RORCOL	Make	Pipe Diameter [mm]	Insulation [mm]			
			With-out	PE	Elastomer	Mineral wool
V60	"Geberit Silent-PP"	≤ 110	✓			
AV60	"Geberit Mepla Systemrohr"	16			6-13	
		20			9	
		26			13	
		32			19	

SW

RW

FW

TW

RC

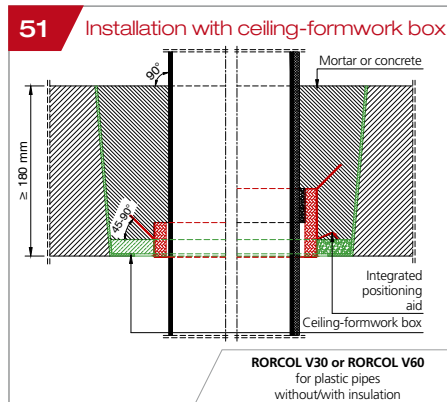
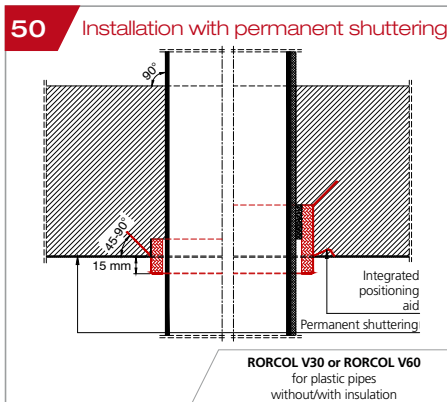
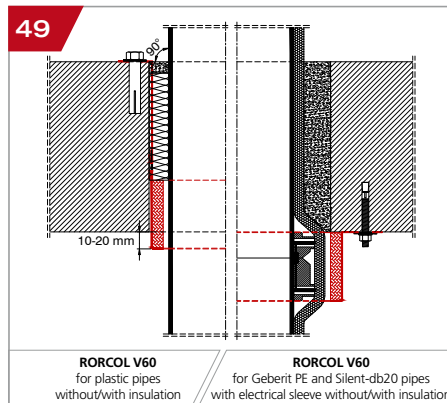
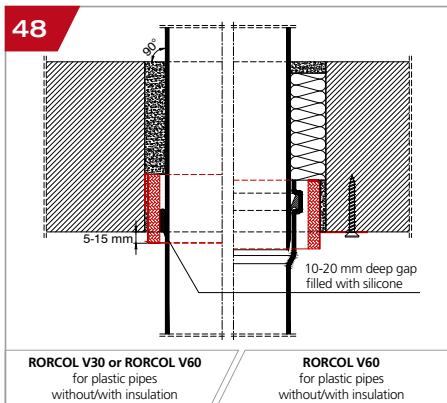
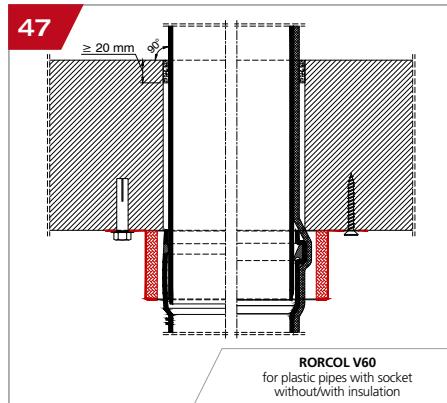
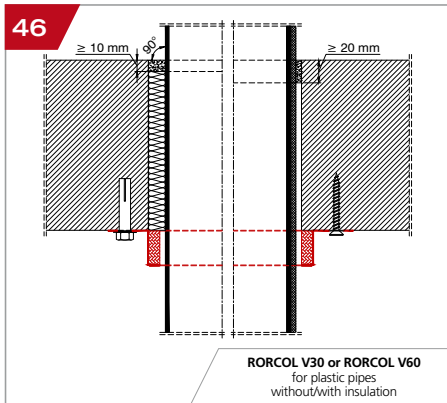
TC

Electrical

CFB

DECLARATION OF PERFORMANCE

Installation details for rigid ceilings



DECLARATION OF PERFORMANCE

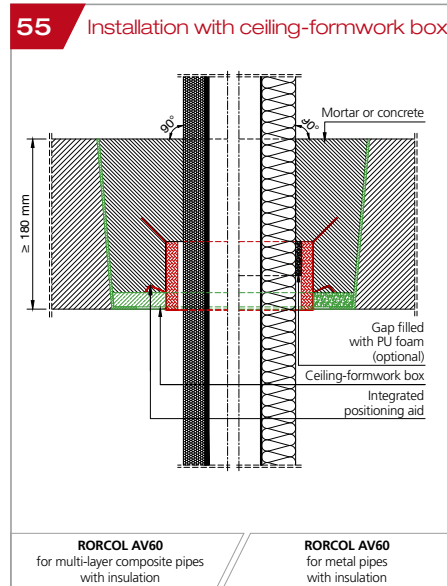
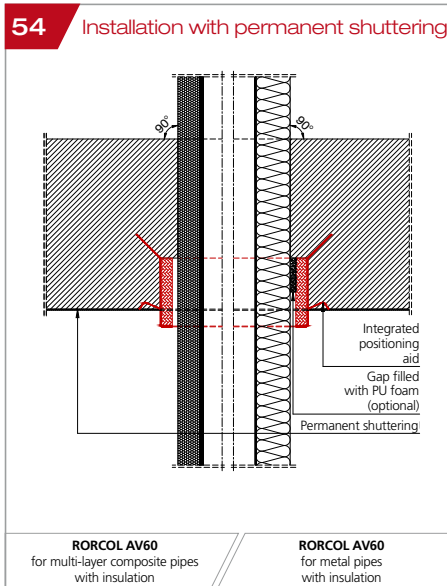
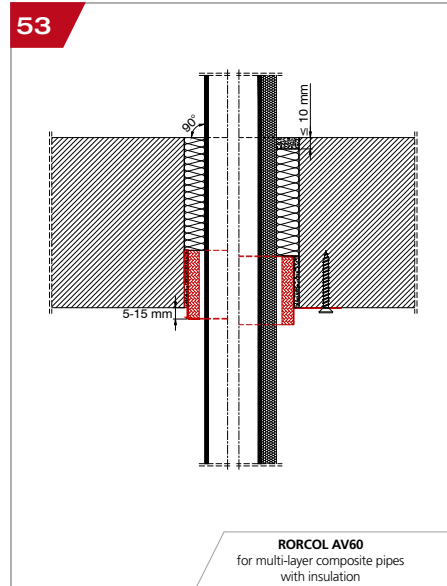
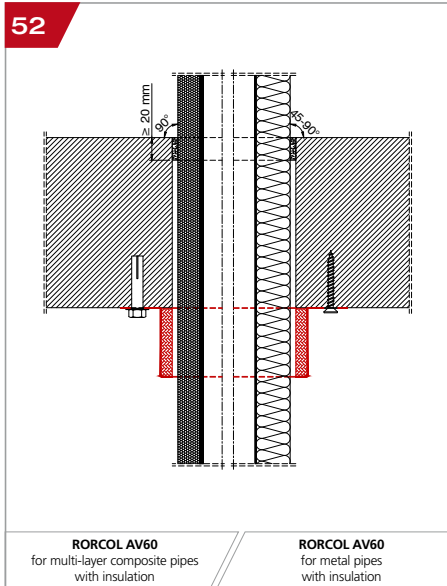
Areas of application rigid ceilings

RC	Pipe insulation Rigid ceilings, thickness ≥ 150 mm or ≥ 180 mm with ceiling-formwork box					EI90		
RORCOL	Standard / Material / Manufacturer	Pipe Diameter [mm]	Insulation [mm]					
			With-out	PE	Elastomer ⁽¹⁾	Mineral wool		
V30 / V60	Standard pipes according to table "Permissible pipe types" Page 63-63	PVC-U	✓	≤ 5				
		PVC-C						
	PE							
	ABS							
	SAN+PVC							
	EN 1401-01	PVC-U	110-125		5			
		"DYKASTil®"		✓		13 (Ø110) 19 (Ø125)		
		"Geberit Silent-PP"	≤ 160					
		"Geberit Silent-Pro"						
		"HT PLUS"	110-160					
		"PhonEX® AS-PLUS/ST"	≤ 160		5			
		"Pipelife Master 3 PLUS"	≤ 160					
		"POLO-KAL 3S/XS"	≤ 160	✓		13 (Ø110) 19 (Ø125)		
		"POLO-KAL NG"	≤ 200					
	"RAUPIANO PLUS"	≤ 160						
V60		"SANHA Master 3 PLUS"			13 (Ø110) 19 (Ø125)			
		"Valsir Silere"	≤ 160	✓	5			
		"Wavin AS-PLUS/SiTech+"				13 (Ø110) 19 (Ø125)		
		EN 1519-1	50			6		
			110			9-13		
		EN 1451-1	125			19		
			125			25		
		EN ISO 15874-2	50			25	20-50	
			110			13-43		
			"RAUTITAN flex"	16			9	
				20		9-10	9-13	20-30
				25				
				32			9-25	20-40
				40				20-50
50					9-10	9-32	40-60	
63					13-43	20-50		

⁽¹⁾ RORCOL V60 only

DECLARATION OF PERFORMANCE

Installation details for rigid ceilings



DECLARATION OF PERFORMANCE

Areas of application rigid ceilings

RC		Pipe insulation Rigid ceilings, thickness ≥ 150 mm or ≥ 180 mm with ceiling-formwork box				EI20	
RORCOL	Material / Manufacturer	Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]			
				PE	Elastomer	Mineral wool	
AV60	Metal pipes	1	≤ 16	9-10	6	≥ 20	
			≤ 22		9-13		
	≤ 28		13-32				
	≤ 42		19-43				
	≤ 54		25-43	≥ 30			
			4	16/17	9		
			1	9-10	9		
			4	20/21	9		
			1	25/26	9-10	9-13	20-30
		32/33		9-25	20-40		
		40/42		13-25	20-50		
		50/52		13-32	20-60		
		63		13-43	20-50		
			4	≤ 20	9-10	9	
		16		9-10	9		
		1	20	9-13	9		
			25	9-13	9-13	20-30	
M	Metal pipes	Steel	1	≤ 54	19	≥ 30	
				$\leq 76,1$	43		

⁽¹⁾ Only individual compartmentalisation (1 pipe per sleeve)

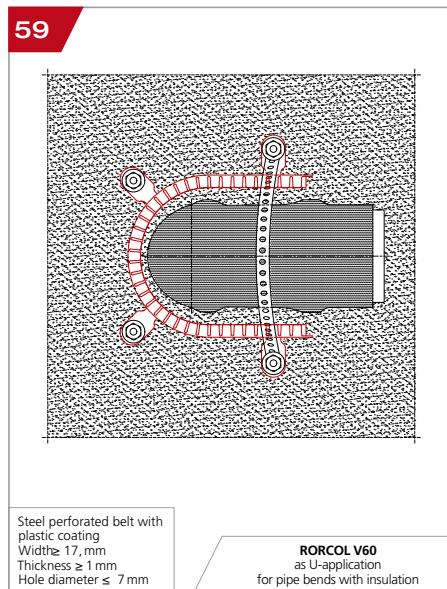
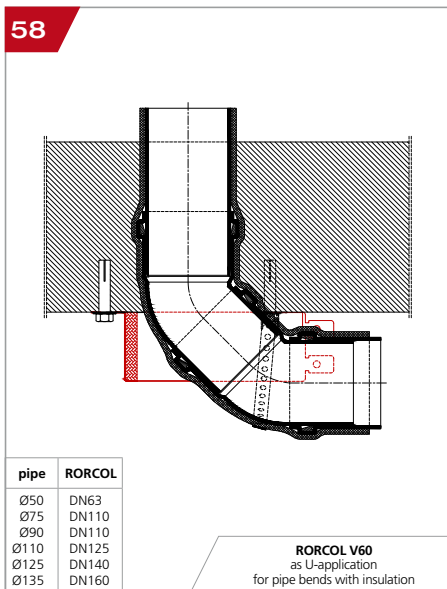
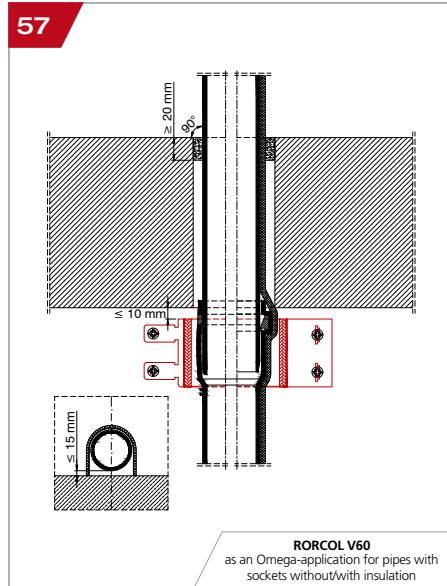
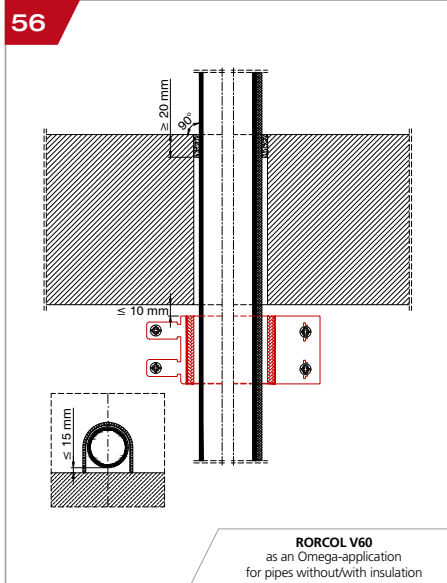
⁽²⁾ Exclusively "KELOX® Modulrohr"

RC		Pipe insulation - Multiple penetrations Rigid ceilings, thickness ≥ 150 mm				EI20	
RORCOL	Max. DN	Standard / Material	Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]		Multiple passage
					PE	Elastomer	
AV60	63	Pre-insulated climate pipes	Copper	1	≤ 16	9	6
				1	≤ 10	9	6
		1	≤ 25	with 1 cable max. 5x2.5 mm ²		MP ⁽¹⁾	

⁽¹⁾ Multiple passage; the number of pipes within the multiple passage may be reduced

DECLARATION OF PERFORMANCE

Installation details for rigid ceilings



DECLARATION OF PERFORMANCE

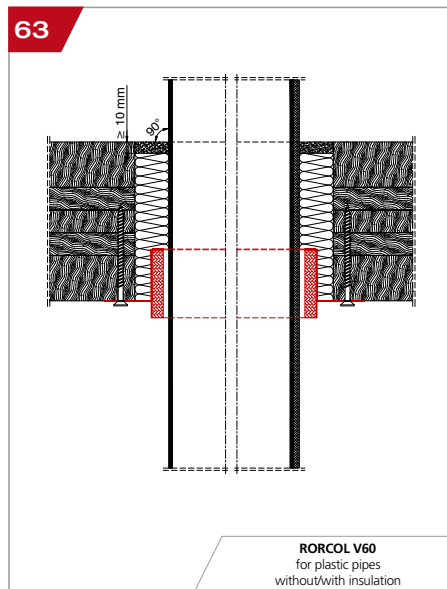
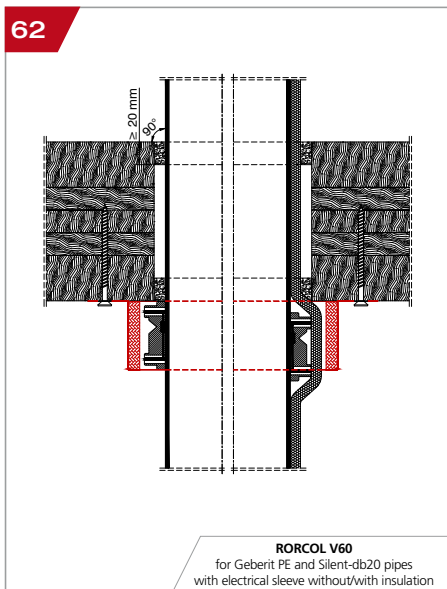
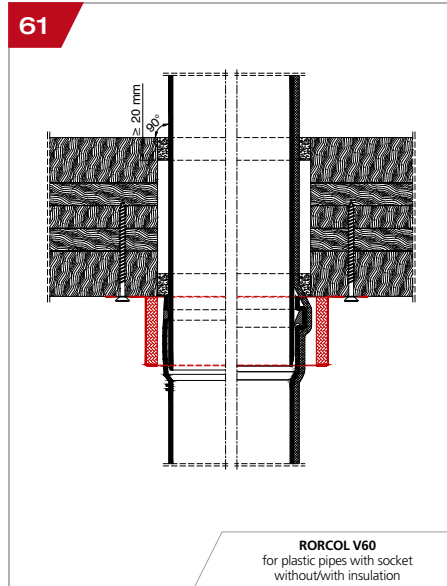
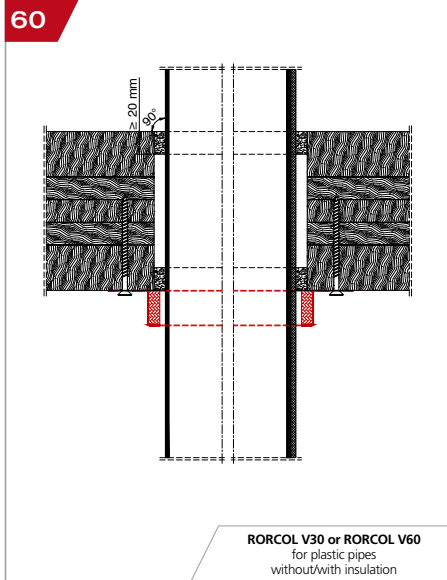
Areas of application rigid ceilings

RC	Pipe insulation – Omega-application Rigid ceilings, thickness ≥ 150 mm							EI120	
RORCOL	Max. DN	Standard / Material / Manufacturer		Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]			Multiple passage
						Without	PE	Elastomer	
V60	110	EN 1451-1	PP	1	50-110		5		-
		"DYKASTil®"							
		"POLO-KAL NG/XS" "RAUPIANO PLUS"		1	110		5		-

RC	Pipe insulation – U-application Rigid ceilings, thickness ≥ 150 mm					EI120
RORCOL	Max. DN	Standard / Manufacturer		Pipe Diameter [mm]	Insulation [mm]	
					Without	PE
V60	160	EN 1451-1	PP	≤ 125		5
		"HT PLUS"		110		
		"Pipelife Master 3 PLUS"		125		
		"POLO-KAL NG/XS"		≤ 125		
		"SANHA Master 3 PLUS"		125		
"Valsir Silere"		≤ 135				

DECLARATION OF PERFORMANCE

Installation details for cross-laminated timber ceilings



DECLARATION OF PERFORMANCE

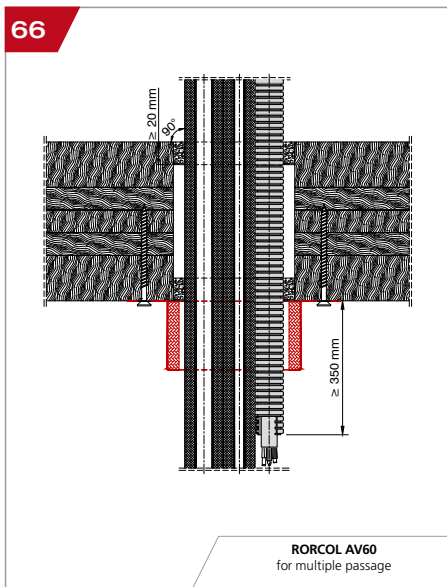
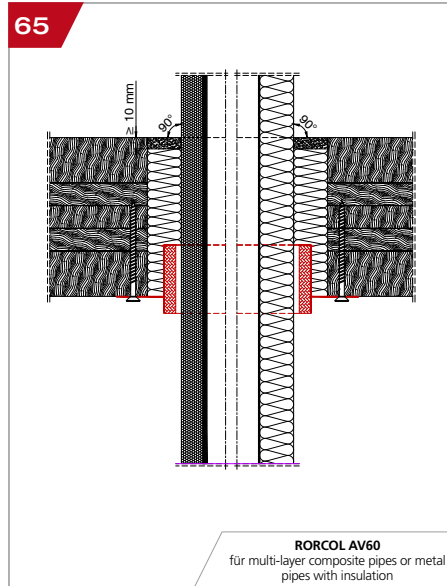
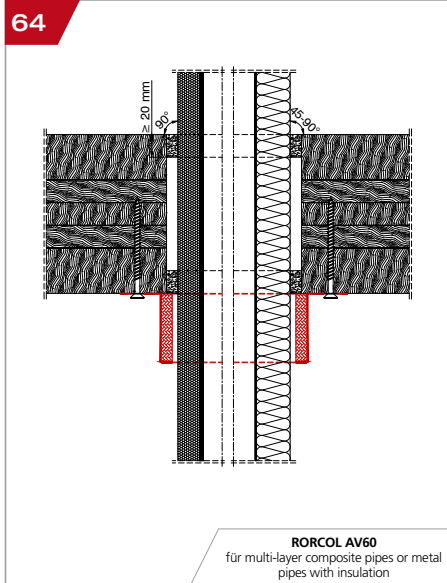
Areas of application for cross-laminated timber ceilings

TC140	Pipe insulation					EI90	
	Cross-laminated timber ceilings, thickness ≥ 140 mm						
RORCOL	Material / Manufacturer	Pipe Diameter [mm]	Insulation [mm]				
			With-out	PE	Elastomer ⁽¹⁾	Mineral wool	
V30 / V60	Standard pipes according to table "Permissible pipe types" Page 69-69	PVC-U	✓	≤ 5			
		PVC-C					
	PE						
	ABS						
	SAN+PVC						
	EN 1401-01	PVC-U	110-125		5		
		"DYKASTil®"		✓		13 (Ø110) 19 (Ø125)	
		"Geberit Silent-PP"	≤ 160				
		"Geberit Silent-Pro"					
		"HT PLUS"	110-160				
		"PhonEX® AS-PLUS"					
		"Pipelife Master 3 PLUS"	≤ 160		5	13 (Ø110) 19 (Ø125)	
		"POLO-KAL 3S/XS"					
		"POLO-KAL NG"	≤ 200				
	"RAUPIANO PLUS"		✓				
	"SANHA Master 3 PLUS"	≤ 160			≤ 13 (Ø110) ≤ 19 (Ø125)		
	"Valsir Silere"						
	"Wavin AS-PLUS"				≤ 13 (Ø110) ≤ 19 (Ø125)		
V60	EN 1519-1	50				6	
		110				9-13	
		125				19	
	EN 1451-1	125					25
		EN ISO 15874-2	50				≤ 25
			110				13-43
			16				9
			20		9-10		9-13
			25				
			32				9-25
			40				20-40
			50		9-10		9-32
		63				20-50	
	"RAUTITAN flex"					13-43	

⁽¹⁾ RORCOL V60 only

DECLARATION OF PERFORMANCE

Installation details for cross-laminated timber ceilings



DECLARATION OF PERFORMANCE

Areas of application for cross-laminated timber ceilings

TC140		Pipe insulation Cross-laminated timber ceilings, thickness ≥ 140 mm					EI90
RORCOL	Material / Manufacturer	Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]			
				PE	Elastomer	Mineral wool	
AV60	Metal pipes	1	≤ 16	9-10	6	≥ 20	
			≤ 22		9-13		
	≤ 28		13-32				
	≤ 42		19-43				
	≤ 54		25-43				
	"aquatec®-Aluflex-5-Schicht-Modulrohr" "CLEVERFIT Radial" "EASYTEC Installationsrohr" "Geberit Mepla Systemrohr" "Geberit Systemrohr ML" ⁽¹⁾ "Henco Mehrschichtverbundrohr" "JRG Sanipex MT" "KELOX® Modulrohr" "MT-Verbundrohr" "Polysan/Revi-ALU-Verbundrohr" "PRINETO Stabil-Rohr" ⁽¹⁾ "PRIPRESS®" "RADOPRESS®" "RAUTITAN stabil" "Raxofix-Mehrschichtverbundrohr" "Roth Systemrohr Alu-Laserplus®" "TECEflex Verbundrohr" "TECElogo Verbundrohr" ⁽¹⁾ "Uponor Verbundrohr"	4	≤ 21	9-10	9	≥ 30	
			1	25/26	9-10		9-13
		32/33			9-25	20-40	
		40/42			9-32	20-50	
		50/52			13-32	20-60	
		63			13-43	20-50	
		75 ⁽²⁾			19-43	30-50	
		"PERTAL ² "		4	≤ 20	9-10	9
		"STEELOX® Mehrschichtverbundrohr"	1	≤ 16	9-10	9	
20	9-13			9			
25	9-13			13	20-30		

⁽¹⁾ Only individual compartmentalisation (1 pipe per sleeve)

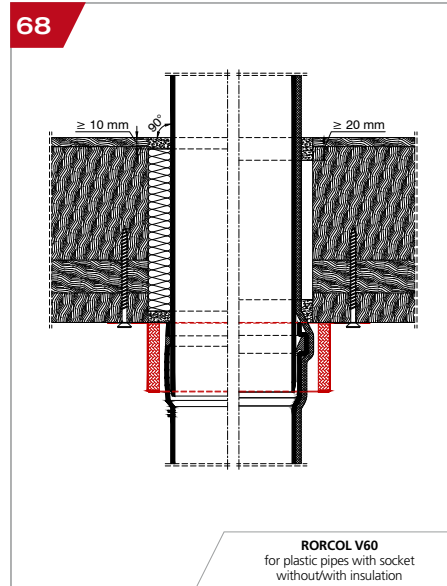
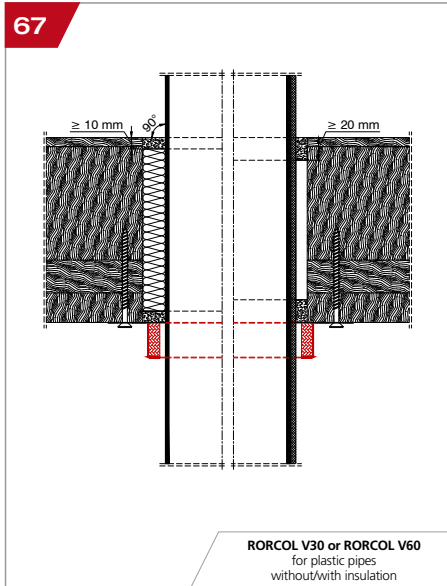
⁽²⁾ Exclusively "KELOX® Modulrohr"

TC140		Pipe insulation - Multiple penetrations Cross-laminated timber ceilings, thickness ≥ 140 mm					E90	
RORCOL	Max. DN	Standard / Material	Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]		Multiple passage	
					PE	Elastomer		
AV60	63	Pre-insulated climate pipes	Copper	1	≤ 16	9	6	MP ⁽¹⁾
				1	≤ 10	9	6	
		1	≤ 25	with 1 cable max. 5x2.5mm ²				

⁽¹⁾ Multiple passage; the number of pipes within the multiple passage may be reduced

DECLARATION OF PERFORMANCE

Installation details for cross-laminated timber ceilings



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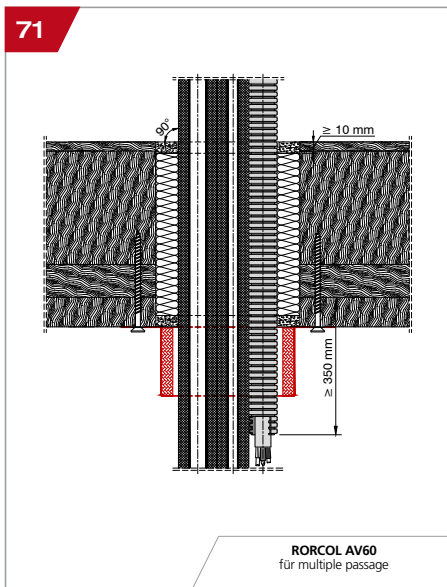
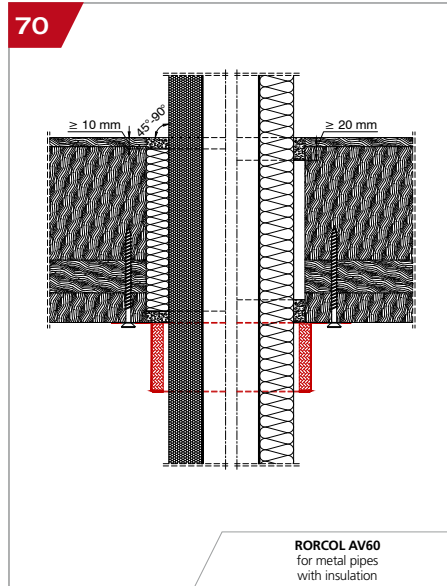
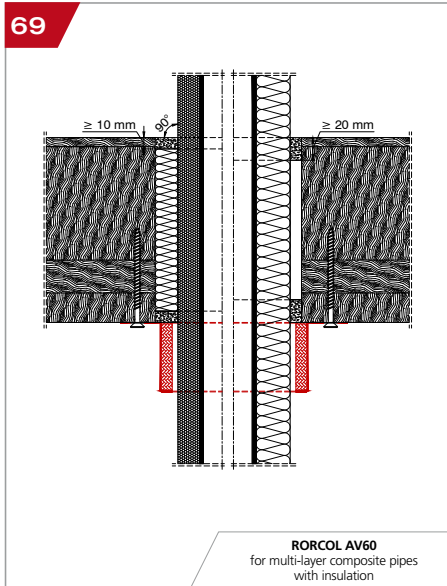
Areas of application for cross-laminated timber ceilings

TC163	Pipe insulation				EI90	
	Cross-laminated timber ceilings, thickness ≥ 163 mm (155 mm wood + 8 mm wood fibre board)					
RORCOL	Standard / Material / Manufacturer	Pipe Diameter [mm]	Insulation [mm]			
			With-out	PE	Elastomer ⁽¹⁾ Mineral wool	
V30 / V60	Standard pipes according to table "Permissible pipe types" Page 73-73	PVC-U	✓	≤ 5		
		PVC-C				
		PE				
		ABS				
		SAN+PVC				
	EN 1401-01	PVC-U	110-125		5	
		"DYKASTil®"		✓		13 (Ø110) 19 (Ø125)
		"Geberit Silent-PP"	≤ 160			
		"Geberit Silent-Pro"				
		"HT PLUS"	110-160			
		"PhonEX® AS-PLUS"				
		"Pipelife Master 3 PLUS"	≤ 160		5	13 (Ø110) 19 (Ø125)
		"POLO-KAL 3S/XS"				
		"POLO-KAL NG"	≤ 200			
	"RAUPIANO PLUS"		✓		13 (Ø110) 19 (Ø125)	
	"SANHA Master 3 PLUS"					
	"Valsir Silere"	≤ 160				
	"Wavin AS-PLUS"				13 (Ø110) 19 (Ø125)	
V60	EN 1519-1	50			6	
		110			9-13	
		125			19	
	EN 1451-1	125			25	
		50			25	20-50
	EN ISO 15874-2	110			13-43	20-50
		16			9	
	"RAUTITAN flex"	20		9-10	9-13	20-30
		25				
		32			9-25	20-40
40						
50			9-10	9-32	20-50	
50					40-60	
63					13-43	20-50

⁽¹⁾ RORCOL V60 only

DECLARATION OF PERFORMANCE

Installation details for cross-laminated timber ceilings



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Areas of application for cross-laminated timber ceilings

TC163		Pipe insulation				EI90				
		Cross-laminated timber ceilings, thickness ≥ 163 mm (155 mm wood + 8 mm wood fibre board)								
RORCOL	Material / Manufacturer	Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]						
				PE	Elastomer	Mineral wool				
	Metal pipes	1	≤ 16	9-10	6	≥ 20				
			≤ 22		9-13					
	Steel	1	≤ 28	9-10	13-32	≥ 30				
			≤ 42		19-43					
		4	≤ 54	9-10	25-43	≥ 30				
			$\leq 76,1$		25-43					
AV60	"aquatec®-Aluflex-5-Schicht-Modulrohr"		1	≤ 21	9-10	9				
	"CLEVERFIT Radial"									
	"EASYTEC Installationsrohr"									
	"Geberit Mepla Systemrohr"									
	"Geberit Systemrohr ML" ⁽¹⁾									
	"Henco Mehrschichtverbundrohr"									
	"JRG Sanipex MT"									
	"KELOX® Modulrohr"									
	"MT-Verbundrohr"									
	"Polysan/Revi-ALU-Verbundrohr"									
	"PRINETO Stabil-Rohr" ⁽¹⁾		1	25/26	9-10	9-13	20-30			
	"PRIPRESS"									
	"RADOPRESS"									
	"RAUTITAN stabil"									
	"Raxofix-Mehrschichtverbundrohr"									
	"Roth Systemrohr Alu-Laserplus®"									
	"TECEflex Verbundrohr"									
	"TECElogo Verbundrohr" ⁽¹⁾									
	"Uponor Verbundrohr"									
	"PERTAL ² "							4	≤ 20	9-10
	"STEELOX® Mehrschichtverbundrohr"		1	20	9-13	9	20-30			
								≤ 16	9-10	9
								≤ 25	9-13	13
								≤ 25	9-13	13

⁽¹⁾ Only individual compartmentalisation (1 pipe per sleeve)

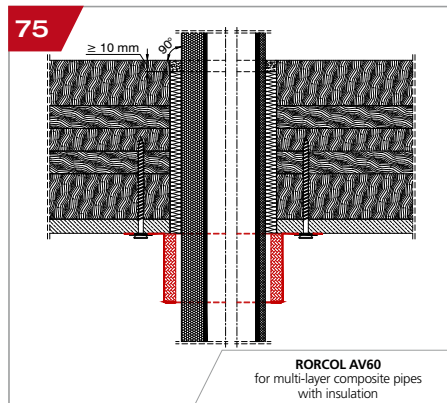
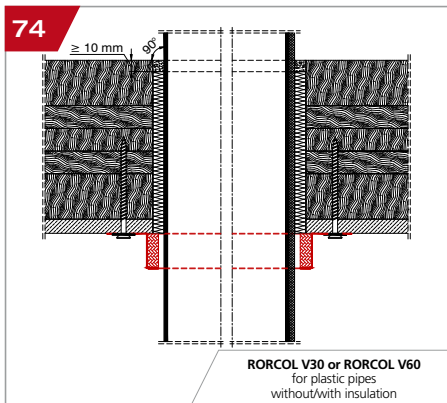
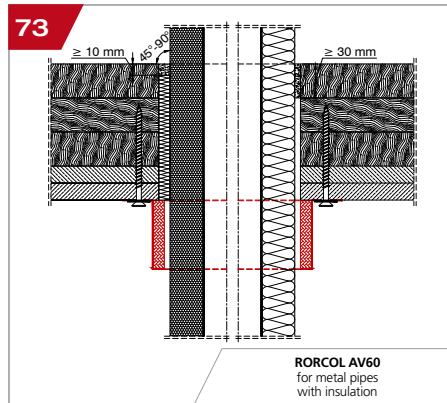
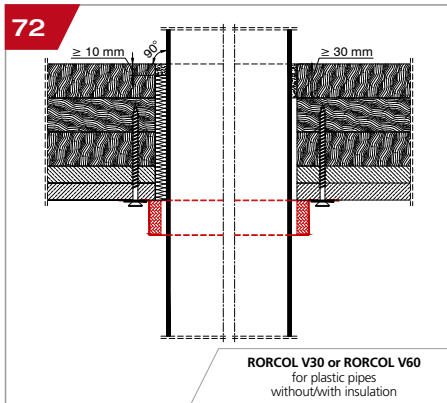
⁽²⁾ Exclusively "KELOX® Modulrohr"

TC163		Pipe insulation - Multiple penetrations				E90			
		Cross-laminated timber ceilings, thickness ≥ 163 mm (155 mm wood + 8 mm wood fibre board)							
RORCOL	Max. DN	Standard / Material		Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]		Multiple passage	
						PE	Elastomer		
AV60	63	Pre-insulated climate pipes		Copper	1	≤ 16	9	6	MP ⁽¹⁾
					1	≤ 10	9	6	
		Electrical conduit		1	≤ 25	with 1 cable max. 5x2.5 mm ²			

⁽¹⁾ Multiple passage; the number of pipes within the multiple passage may be reduced

DECLARATION OF PERFORMANCE

Installation details for cross-laminated timber ceilings



DECLARATION OF PERFORMANCE

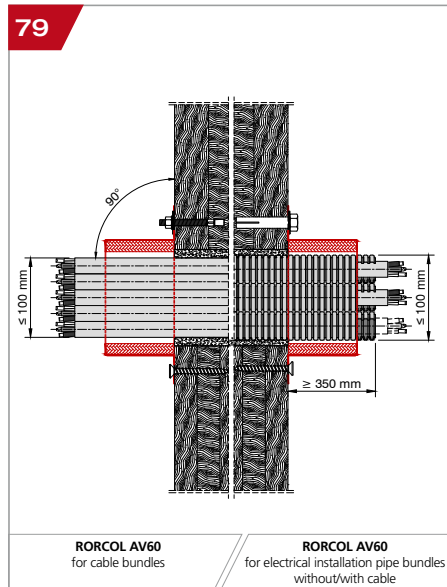
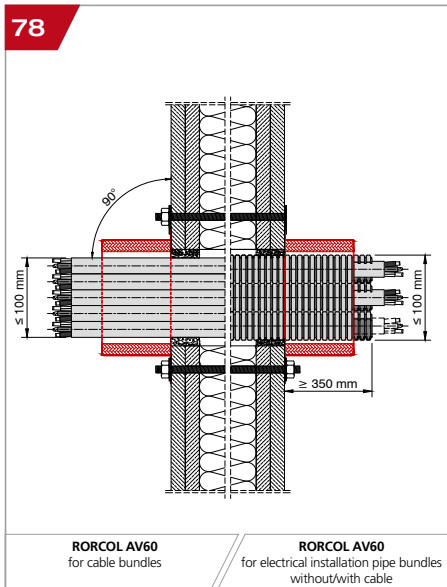
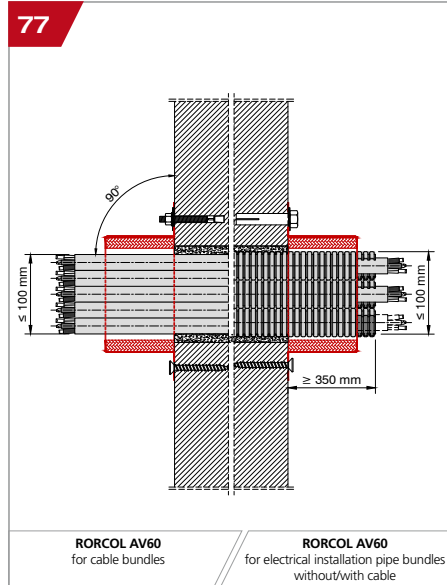
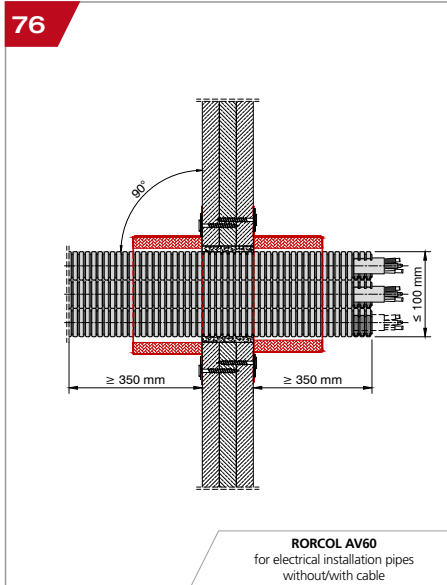
Areas of application for cross-laminated timber ceilings

TC120		Pipe insulation				EI90
		Cross-laminated timber ceilings, thickness ≥ 120 mm (90 mm wood + 2x15 mm GKF)				
RORCOL	Standard / Material / Manufacturer	Pipe Through Gauge [mm]	Insulation [mm]			
			With-out	PE	Elastomer	Mineral wool
V30 / V60	EN 1519-1	PE	≤ 110	✓		
	Metal pipes	Steel	≤ 28		19	
			≤ 35		13	≥ 30
AV60	EN 61386-22	1x Electrical conduit	≤ 32	with 1 cable max. 3x2.5 mm ²		
		Max 8x Electrical conduit	≤ 25			

TC152		Pipe insulation				EI90
		Cross-laminated timber ceilings, thickness ≥ 152.5 mm (140 mm wood + 12.5 mm GKF)				
RORCOL	Standard / Manufacturer	Pipe Through Gauge [mm]	Insulation [mm]			
			With-out	PE	Elastomer	Mineral wool
V30 / V60	"DYKASTil®"	50		5		
	"Pipelife Master 3 PLUS"	50		4		
	"RAUPIANO PLUS"	125	✓			
	"SANHA Master 3 PLUS"	50		4		
AV60	"aquatec®-Aluflex-5-Schicht-Modulrohr"	20				
	"Geberit Mepla Systemrohr"	26				
	"Henco Mehrschichtverbundrohr"					
	"MT-Verbundrohr"			4	6	
	"Polysan/Revi-ALU-Verbundrohr"	20				
	"PRIPRESS®"					
	"RADOPRESS"					
"TECEflex Verbundrohr"	26		9	9		

DECLARATION OF PERFORMANCE

Installation details cable penetration seals



DECLARATION OF PERFORMANCE

Areas of application cable penetration seals

SW		Cable penetration seal				EI90
		Shaft walls \geq EI90, panelling 3x15, 2x20 or 2x25 mm				
RORCOL	Max. DN	Elements implemented	Material / Pipe type	Outer diameter [mm]		Cable dimensions [mm]
				Bundle	Electrical installation pipes	
AV60	110	Bundle of electrical installation pipes with/without cables	Plastic	\leq 100	\leq 40	\leq 21

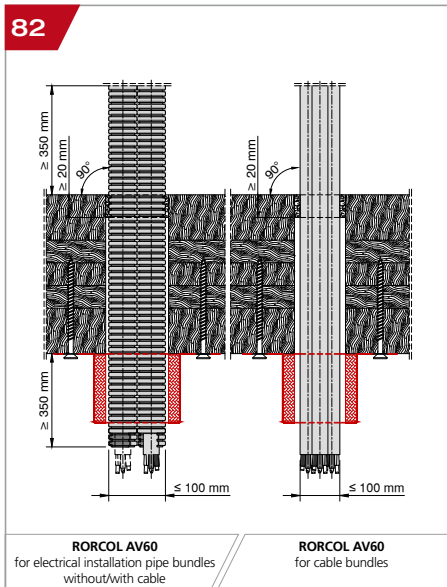
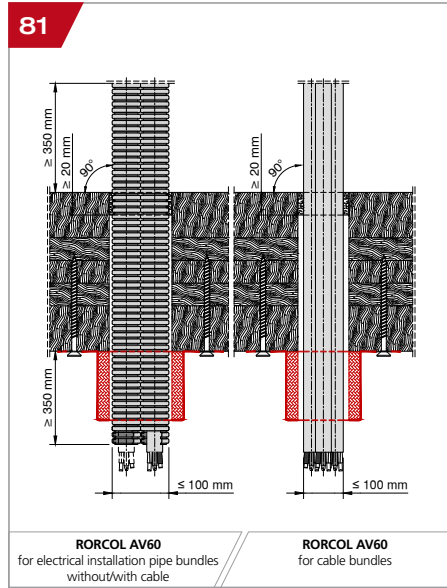
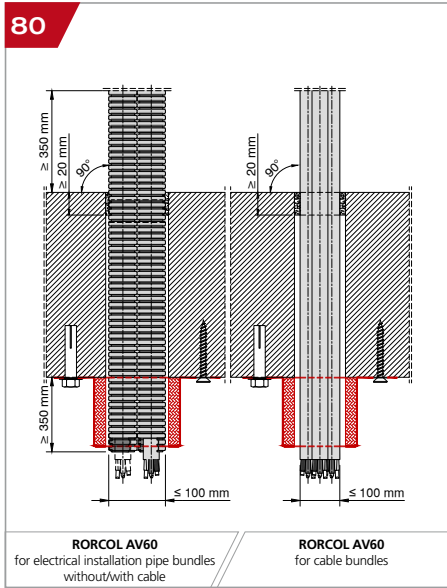
RW		Cable penetration seal				EI90
		Rigid walls, thickness \geq 100 mm				
RORCOL	Max. DN	Elements implemented	Material / Pipe type	Outer diameter [mm]		Cable dimensions [mm]
				Bundle	Electrical installation pipes	
AV60	110	Bundle of electrical installation pipes with/without cables	Plastic	\leq 100	\leq 40	\leq 21
		Cable bundle	All types of sheathed cables		-	\leq 21

FW		Cable penetration seal				EI90
		Flexible walls, thickness \geq 94 mm				
RORCOL	Max. DN	Elements implemented	Material / Pipe type	Outer diameter [mm]		Cable dimensions [mm]
				Bundle	Electrical installation pipes	
AV60	110	Bundle of electrical installation pipes with/without cables	Plastic	\leq 100	\leq 40	\leq 21
		cable bundle	All types of sheathed cables		-	\leq 21

TT100		Cable penetration seal				EI90
		Cross-laminated timber walls, thickness \geq 100 mm				
RORCOL	Max. DN	Elements implemented	Material / Pipe type	Outer diameter [mm]		Cable dimensions [mm]
				Bundle	Electrical installation pipes	
AV60	110	Bundle of electrical installation pipes with/without cables	Plastic	\leq 100	\leq 40	\leq 21
		Cable bundle	All types of sheathed cables		-	\leq 21

DECLARATION OF PERFORMANCE

Installation details cable penetration seals



DECLARATION OF PERFORMANCE

Areas of application cable penetration seals

RC		Cable penetration seal Rigid ceilings, thickness ≥ 150 mm				EI90
RORCOL	Max. DN	Elements implemented	Standard / Material / Pipe type	Outer diameter [mm]		Cable dimensions [mm]
				Bundle	Electrical installation pipes	
AV60	110	Bundle of electrical installation pipes with/without cables	Plastic	≤ 100	≤ 40	21
		Cable bundle	All types of sheathed cables		-	21
		Electrical installation pipes	EN 61386-22 Plastic	-	≤ 50	1x95 mm ² or 5x1.5 mm ² 5x10 mm ²
	125					

TC140		Cable penetration seal Cross-laminated timber ceilings, thickness ≥ 140 mm				EI90
RORCOL	Max. DN	Elements implemented	Material / Pipe type	Outer diameter [mm]		Cable dimensions [mm]
				Bundle	Electrical installation pipes	
AV60	110	Bundle of electrical installation pipes with/without cables	Plastic	≤ 100	≤ 40	21
		Cable bundle	All types of sheathed cables		-	21

TC163		Cable partitioning Cross-laminated timber ceilings, thickness ≥ 163 mm (155 mm wood + 8 mm wood fibre board)				EI90
RORCOL	Max. DN	Elements implemented	Material / Pipe type	Outer diameter [mm]		Cable dimensions [mm]
				Bundle	Electrical installation pipes	
AV60	110	Bundle of electrical installation pipes with/without cables	Plastic	≤ 100	≤ 40	21
		Cable bundle	All types of sheathed cables		-	21

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Installation details cable penetration seals Omega-application

83

Decke

Wand

RORCOL AV60
as an Omega-application
for electrical installation pipes

84

Decke

Wand

RORCOL AV60
as an Omega-application
for electrical installation pipes

85

Boden

Wand

RORCOL AV60
as an Omega-application
for electrical installation pipes

86

Wand

Decke

RORCOL AV60
as an Omega-application
for electrical installation pipes

DECLARATION OF PERFORMANCE

Areas of application cable penetration seals Omega-application

SW EI90		Cable penetration seal – Omega-application Shaft walls \geq EI90, panelling 3x15, 2x20 or 2x25 mm					EI90
RORCOL	Max. DN	Elements implemented	Standard / Material / Pipe type		Maximum number of pipes per sleeve	Outer diameter Electrical installation pipes [mm]	Maximum cable dimensions [mm]
AV60	40	Electrical installation pipes	EN 61386-22	Plastic	1	≤ 50	5x16mm ²
	80				12	≤ 32	5x2.5mm ²

RW		Cable penetration seal – Omega-application Rigid walls, thickness ≥ 100 mm					EI90
RORCOL	Max. DN	Elements implemented	Standard / Material / Pipe type		Maximum number of pipes per sleeve	Outer diameter Electrical installation pipes [mm]	Maximum cable dimensions [mm]
AV60	63	Electrical installation pipes	EN 61386-22	Plastic	3	≤ 50	5x16mm ²
	80				12	≤ 32	1x95mm ² 5x2.5mm ²

FW		Cable penetration seal – Omega-application Flexible walls, thickness ≥ 94 mm					EI90
RORCOL	Max. DN	Elements implemented	Standard / Material / Pipe type		Maximum number of pipes per sleeve	Outer diameter Electrical installation pipes [mm]	Maximum cable dimensions [mm]
AV60	63	Electrical installation pipes	EN 61386-22	Plastic	3	≤ 50	5x16mm ²
	80				12	≤ 32	1x95mm ² 5x2.5mm ²

RC		Cable penetration seal – Omega-application Rigid ceilings, thickness ≥ 150 mm					EI90
RORCOL	Max. DN	Elements implemented	Standard / Material / Pipe type		Maximum number of pipes per sleeve	Outer diameter Electrical installation pipes [mm]	Maximum cable dimensions [mm]
AV60	63	Electrical installation pipes	EN 61386-22	Plastic	3	≤ 50	5x10mm ²

SW

RW

FW

TW

RC

TC

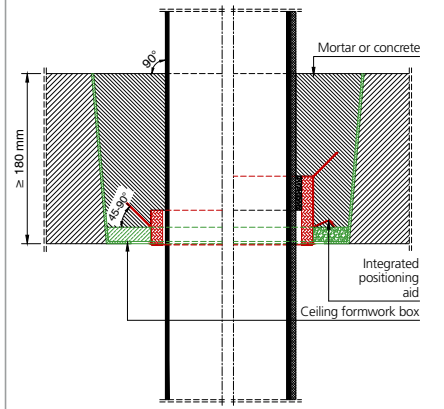
Electrical

CFB

DECLARATION OF PERFORMANCE

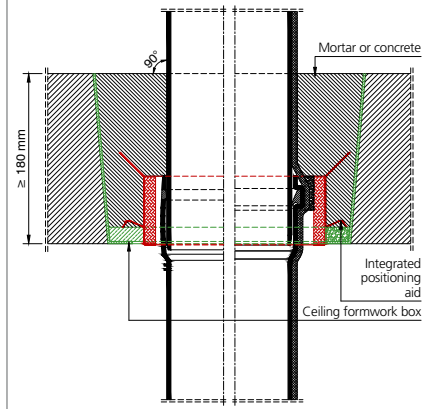
Installation details for ceiling formwork box

87 Installation with ceiling formwork box



RORCOL V30 or RORCOL V60
with ceiling formwork box
for plastic pipes without/with insulation

88 Installation with ceiling formwork box



RORCOL V30 or RORCOL V60
with ceiling formwork box
for plastic pipes without/with insulation

DECLARATION OF PERFORMANCE

Areas of application for ceiling formwork box

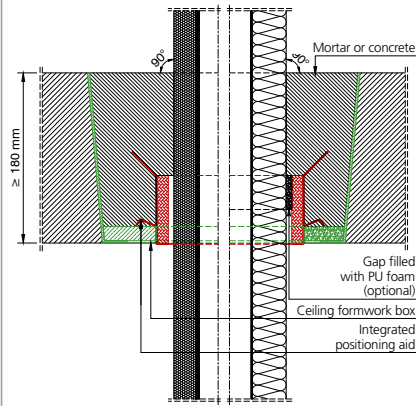
RC	Pipe insulation with ceiling formwork box Rigid ceilings, thickness ≥ 180 mm				EI90			
	RORCOL	Standard / Material / Manufacturer	Pipe Diameter [mm]	Insulation [mm]				
With-out				PE	Elastomer ⁽¹⁾	Mineral wool		
V30 / V60	Standard pipes according to table "Permissible pipe types" Page 85-85	PVC-U	≤ 160	✓	5			
		PVC-C						
		PE						
		ABS						
	EN 1401-01	SAN+PVC	110-125		5			
		PP						
		"DYKASTil®"		✓	5	13 (ø110) 19 (ø125)		
		"Geberit Silent-PP"	≤ 160					
		"Geberit Silent-Pro"		✓	5	13 (ø110) 19 (ø125)		
		"HT PLUS"	110-160					
		"PhonEX® AS-PLUS/ST"	≤ 160	✓	5	13 (ø110) 19 (ø125)		
		"Pipeliflex Master 3 PLUS"	≤ 160					
		"POLO-KAL 3S/XS"	≤ 160	✓	5	13 (ø110) 19 (ø125)		
		"POLO-KAL NG"	≤ 200					
	"RAUPIANO PLUS"	≤ 160	✓	5	13 (ø110) 19 (ø125)			
	"SANHA Master 3 PLUS"							
	"Valsir Silere"	≤ 160	✓	5	13 (ø110) 19 (ø125)			
	"Wavin AS-PLUS/SiTech+"							
V60	EN 1519-1	50				6		
		110				9-13		
		125				19		
	EN 1451-1	125				25		
	EN ISO 15874-2	50				25	20-50	
		110				13-43		
	"RAUTITAN flex" ⁽¹⁾	16			9-10	9-13	9	
		20					20-30	
		25					9-25	20-40
		32					9-32	20-50
40		9-10					40-60	
50		13-43					20-50	
63								

⁽¹⁾ RORCOL V60 only

DECLARATION OF PERFORMANCE

Installation details for ceiling formwork box

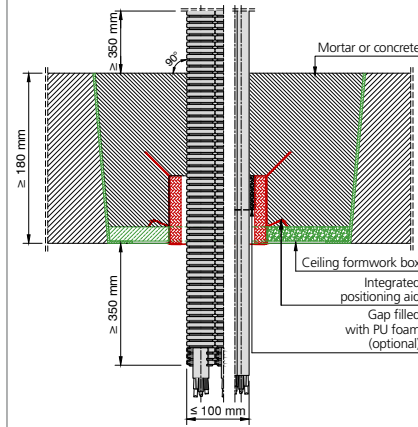
89 Installation with ceiling formwork box



RORCOL AV60
with ceiling formwork box
for multi-layer composite pipes with
insulation

RORCOL AV60
with ceiling formwork box
for metal pipes with insulation

90 Installation with ceiling formwork box



RORCOL AV60
with ceiling formwork box
for electrical installation pipe bundles

RORCOL AV60
with ceiling formwork box
for cable bundles

RC		Cable penetration seal with ceiling formwork box				EI90	
		Rigid ceilings, thickness ≥ 180 mm					
RORCOL	Max. DN	Elements implemented	Standard / Material / Pipe type		Outer diameter [mm]		Cable dimensions [mm]
					Bundle	Electrical installation pipes	
AV60	110	Bundle of electrical installation pipes with/without cables	Plastic		≤ 100	≤ 40	21
		Cable bundle	All types of sheathed cables			-	21
	125	Electrical installation pipes	EN 61386-22	Plastic	-	≤ 50	1x95mm ² or 5x1.5mm ² 5x10mm ²

DECLARATION OF PERFORMANCE

Areas of application for ceiling formwork box

RC		Pipe insulation with ceiling formwork box				EI20	
		Rigid ceilings, thickness ≥ 180 mm					
RORCOL	Material / Manufacturer	Maximum number of pipes per sleeve	Pipe Diameter [mm]	Insulation [mm]			
				PE	Elastomer	Mineral wool	
AV60	Metal pipes	1	≤ 16	9-10	6	≥ 20	
			≤ 22		9-13		
	≤ 28			13-32			
	≤ 42			19-43	≥ 30		
	≤ 54			25-43			
			$\leq 76,1$				
		"aquatec®-Aluflex-5-Schicht-Modulrohr"	4	16/17	9		
		"CLEVERFIT Radial"	1	16/17	9-10	9	
		"EASYTEC Installationsrohr"					
		"Geberit Mepla Systemrohr"	4	20/21	9-10	9	
		"Geberit Systemrohr ML" ⁽¹⁾					
		"Henco Mehrschichtverbundrohr"	1	25/26	9-10	9-13	20-30
		"JRG Sanipex MT"					
		"KELOX® Modulrohr"	1	32/33		9-25	20-40
		"MT-Verbundrohr"					
	"Polysan/Revi-ALU-Verbundrohr"	1	40/42		13-25	20-50	
	"PRINETO Stabil-Rohr" ⁽¹⁾						
	"PRIPRESS®"	1	50/52		13-32	20-60	
	"RADOPRESS"						
	"RAUTITAN stabil"	1	63		13-43	20-50	
	"Raxofix-Mehrschichtverbundrohr"						
	"Roth Systemrohr Alu-Laserplus®"	1	75 ⁽²⁾		19-43	30-50	
	"TECEflex Verbundrohr"						
	"TECElogo Verbundrohr" ⁽¹⁾	4	≤ 20	9-10	9		
	"Uponor Verbundrohr"						
	"PERTAL ² "	1	≤ 20	9-10	9		
			16	9-10	9		
			20	9-13	9		
	"STEELOX® Mehrschichtverbundrohr"	1	25	9-13	9-13	20-30	
M	Metal pipes	Steel	1	$\leq 76,1$		≥ 30	

⁽¹⁾ Only individual compartmentalisation (1 pipe per sleeve)

⁽²⁾ Exclusively "KELOX® Modulrohr"

⁽³⁾ Exclusively EI60 U/C

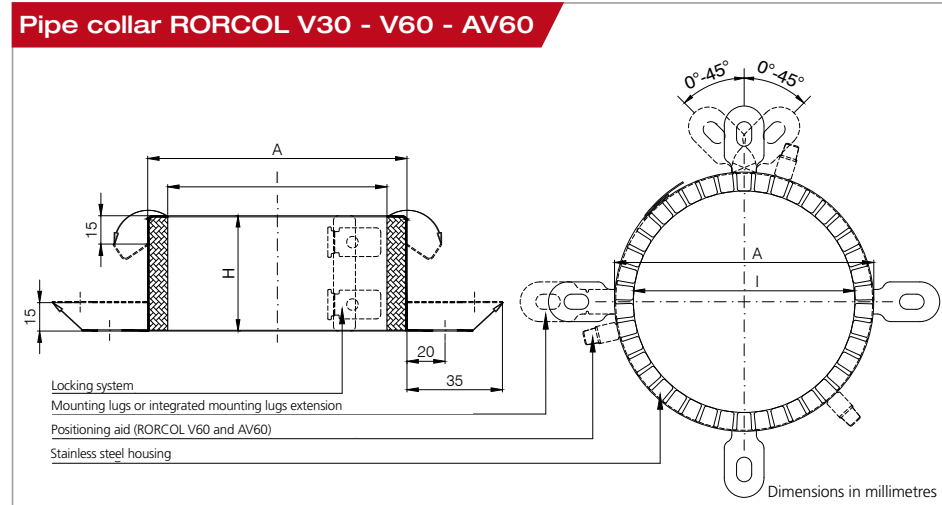
The performance of the above product corresponds to the declared performance/performance. The manufacturer mentioned above is solely responsible for drawing up the declaration of performance according to Regulation (EU) No. 305/2011.

Signed for and on behalf of the manufacturer by:



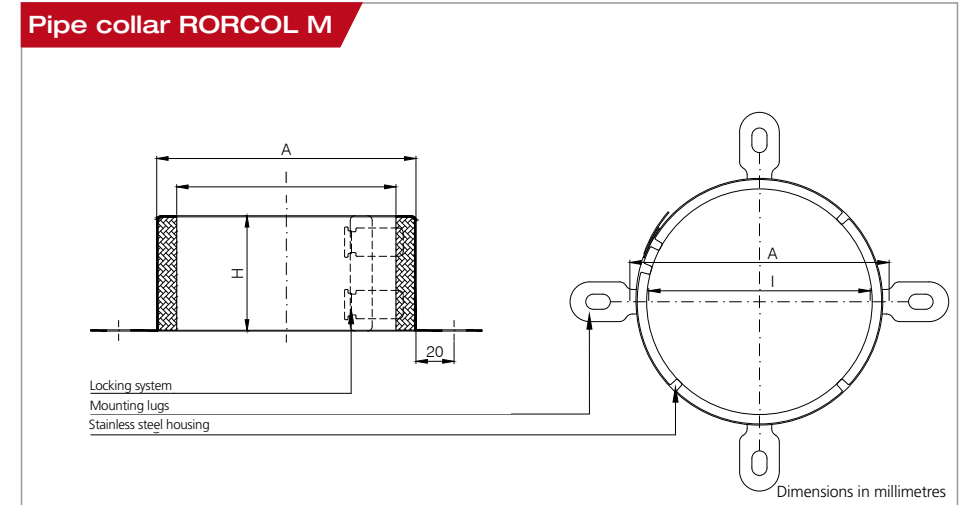
Air Fire Tech Brandschutzsysteme GmbH
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T: 01 952 01 74-0, E: office@airfiretech.at

Uwe Stefani, Managing Director CEO,
Air Fire Tech Brandschutzsysteme GmbH



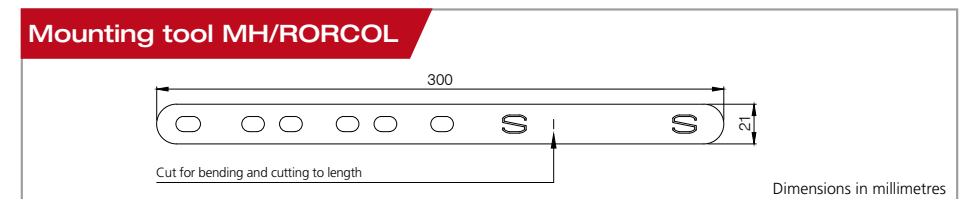
Length group	Field of application	Dimension	Outer diameter [A] [mm]	Inner diameter [I] [mm]	Depth [H] [mm]	Number of mounting lugs
V30	For plastic pipes	DN40	57	46	31	3
		DN56	74	62		
		DN63	86	70		
		DN80	103	86		
		DN100	127	105		4
		DN110	142	119		
		DN125	161	133		
		DN140	178	146		
V60	For plastic pipes, extended area of applications	DN56	74	62	61	3
		DN63	86	70		
		DN80	103	86		
		DN100	127	105		4
		DN110	142	119		
		DN125	161	133		
		DN140	178	146		
		DN160	201	168		5
		DN180	219	187		6
		DN200	246	209		8
DN250	303	261	8			
AV60	For aluminium composite pipes, cables and metal pipes	DN40	58	45	61	3
		DN56	74	60		
		DN63	86	73		
		DN80	103	85		4
		DN100	126	107		
		DN110	138	120		
		DN125	158	135		
		DN140	177	150		5
DN160	197	171				

Metal housing material: stainless steel

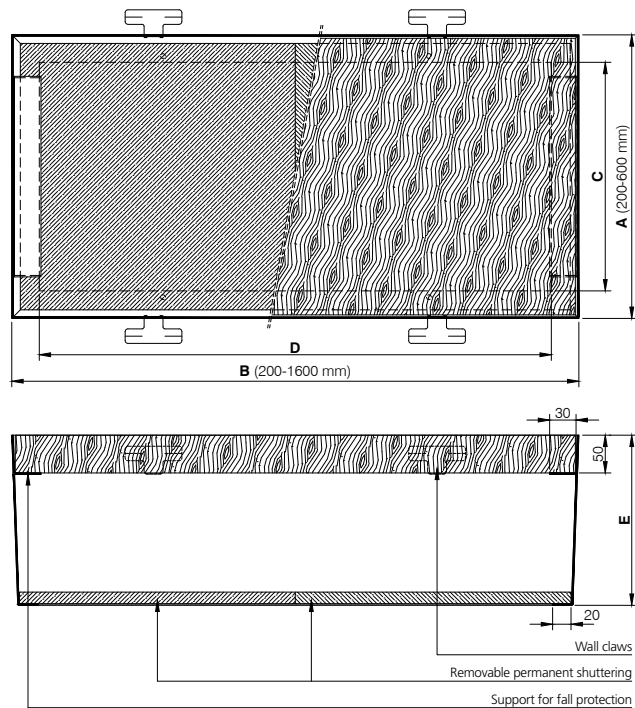


Length group	Field of application	Dimension	Outer diameter [A] [mm]	Inner diameter [I] [mm]	Depth [H] [mm]	Number of mounting lugs
M	For metal pipes	DN110	131	119	61	4
		DN125	145	134		
		DN140	161	150		
		DN160	186	170		
		DN200	231	209		6
		DN250	280	258		8

Metal housing material: stainless steel



Ceiling formwork box CFB



Dimensions in millimetres

	Type	External dimension		Penetration opening		Depth [E] [mm]
		[A] [mm]	[B] [mm]	[C] [mm]	[D] [mm]	
Min.	C-FB/182020	200	200	140	140	180-600
Max.	C-FB/1860160	600	1600	540	1540	180-600



TIROTECH® mixed penetration seal
Maximum safety through simple processing



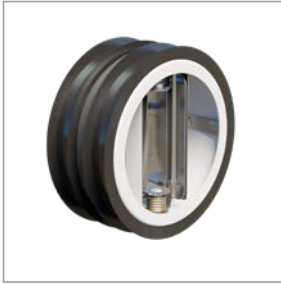
INLAP fire dampers
Reliable fire protection for ventilation ducts



Further assembly instructions and information about our products



Fire protection



Fire dampers*
INLAP
EI120(ho, ve, i+e)S



Fire damper air vents**
FSA
FLI-VE(ho+ve)90



Access panels*
FIREREV
EI120 / EI90 / EI60 / EI30

* The products listed are not subject to the ETA regulation.

** Classification and use according to national guidelines




Fire protection systems

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Download installation instructions

 1139
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13
1139-CPR-0523/13
ETA-13/0758
EAD 350454-00-1104
DOP 01/2026/RORCOL
Rohrabschottung „Air Fire Tech System RORCOL“ Nutzungskategorie Y ₁
Further relevant For properties, see ETA-13/0758