

Knauf system FIRESTOP Fire stopping collars

E411a.en – Knauf Firecollar FIREWIN SP – for plastic pipes

E411b.en – Knauf Firecollar FIREWIN LP – for plastic pipes

E411c.en – Knauf Firecollar FIREWIN M – for multi-layer composite and metal pipes and conduits with cables



Knauf System FIRESTOP according to the European
Technical Assessment ETA no. ETA-18/0377

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E41.en Fire Stopping collars

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Notes on the document

Knauf System data sheets are the planning and application basis for the planners and professional installers with the application of Knauf systems. The contained information and specifications, constructions, details and stated products are based, unless otherwise stated, on the certificates of usability (e.g. European Technical Assenments and/or Classification Reports) valid at the date they are published as well as on the applicable standards. In addition, design and structural requirements and those regarding building physics (fire protection and sound insulation) are considered.

The contained construction details are examples and can be used in a similar way for various cladding variants of the respective system. At the same time, the demands made on fire resistance and/or sound insulation as well as any necessary additional measures and/or limitations must be observed.

References to other documents

- Knauf Metal Stud Partitions W11
- Knauf Holztafelbau-Wände W55
- Knauf Installation Shaft Walls W62
- Observe the Product Data Sheets of the Knauf system components

Instructions

The firecollars in vertical separating elements (walls) have to be installed on both sides of the wall. The fire stop collars in horizontal separating elements (ceilings) have to be installed at the bottom side of the floor. Regarding all fire tests in accordance with ÖNORM EN 1366-3 standard, the FIREWIN SP, FIREWIN LP and FIREWIN M fire protection collars for application in shaft walls (2x20, 3x15 and 2x25 mm) - in case of combustible pipes with a diameter ≤ 110 mm - were always installed only one-sided on the side facing the fire. When applying and installing the product, make sure to meet the requirements of additional national laws and regulations that may exist. The manufacturers' product must not be modified or exposed to mechanical load. Additional information about penetration seals that is not included in this installation instruction will be given by the manufacturer on request. The applicability of the manufacturers' products for the given specific requirements has to be checked by the user.

Insulations

Plastic pipes are tested with or without insulation. The insulation can be installed continued-sustained (CS) or local-sustained (LS) (Sound insulation). The length of local insulations has to be minimum 100 mm on both sides of the separating element (measured from the surface of the separating element). Multi-layer composite pipes are tested without insulation up to pipe outside diameter $\varnothing 26$ mm and with continued-sustained (CS) insulation up to pipe outside diameter $\varnothing 63$ mm.

Metal pipes are always tested with continued-sustained (CS) insulation. Detailed insulation type and thickness is included in the following installation details or will be given by the manufacturer on request.

Pipe end configuration

Plastic pipes are tested U/U (uncapped/uncapped) for the use in a drain-waste-vent system.

Multi-layer composite pipes are tested U/C (uncapped/capped) for the use in a self-contained pipe system (e.g. pressurized water system, heating pipes). Conduits are tested C/C (capped/capped) and have to be closed with commercially available silicone sealant on both sides of the penetration seal. Metal pipes are tested C/C (capped/capped). Conveying tubes are tested U/U (uncapped/uncapped).

Service support construction

All types of pipes have to be supported by a service support construction (e.g. pipe hangers) made of metal with a decomposition point greater than 1050°C. The support must tightly enclose the pipe and maintain a rigid suspension for the required period of fire resistance.

Use category

The pipe penetration seal "Knauf System FIRESTOP" is intended for use at temperatures below 0°C and with exposure to UV, but with no exposure to rain, and can therefore – according to ETAG 026-Part 2 clause 2.4.12.1.3.3 – be categorized as Type Y₁. Since the requirements for Type Y₁ are met, also the requirement for Type Y₂, Z₁ and Z₂ are fulfilled.

Although a penetration seal is intended for indoor applications only, the construction process may result in it being subjected to more exposed conditions for a period before the building envelope is closed. For this case provisions shall be made to protect temporarily exposed penetration seals according to the ETA-holder's installation instructions.

It is assumed that

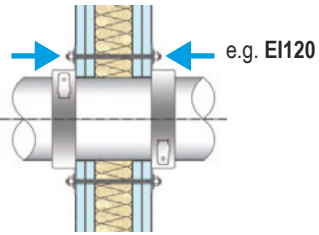
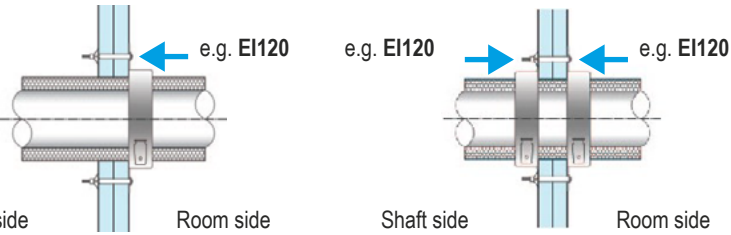
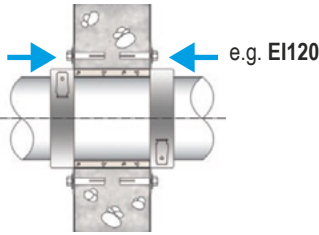
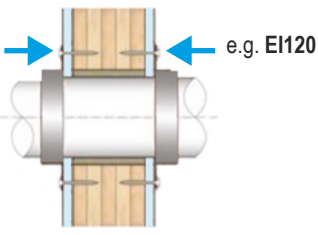
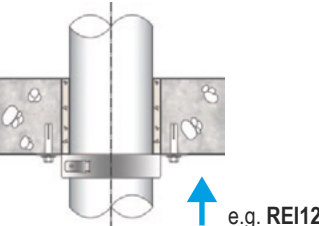
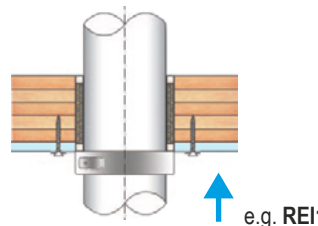
- damages to the penetration seal are repaired accordingly,
- the installation of the penetration seal does not effect the stability of the adjacent building element – even in case of fire,
- the lintel or floor above the penetration seal is designed structurally and in terms of fire protection such that no additional mechanical load (other than its own weight) is imposed on the penetration seal,
- the thermal movement in the pipe work will be accommodated in such way that it does not impose a load on the penetration seal,
- the installations are fixed to the adjacent building element (not to the penetration seal) in accordance with the relevant regulations in such a way that, in case of fire, no additional mechanical load is imposed to the penetration seal,
- the support of the installations is maintained for the required period of fire resistance and pneumatic dispatch systems, compressed air systems, etc. are switched off by additional means in case of fire (for sealing off plastic pipes and conveying tubes).

General instructions

For flexible wall, shaft walls and rigid walls the pipe collars have to be installed on both sides of the separating element. For shaft walls where fire can ignite only outside the shaft the pipe collar has to be installed on the fire side (outside the shaft) of the separating element. In this case the profiles (studs) of the shaft wall have to be inside the shaft (on the non-fire side).

For horizontal separating elements the pipe collars have to be installed at the bottom side of the separating element. The first support (service support construction) for plastic pipes, multi-layer composite pipes, metal pipes, conveying tubes and conduits in flexible walls, shaft walls, rigid walls and rigid floors has to be at maximum 250 mm (measured from the surface of the separating element).

Separating elements

<p>Flexible walls</p> <ul style="list-style-type: none"> ■ Metal stud or timber stud partitions ■ Double layer 12,5 mm cladding type DF acc. to EN 520 or GM-F acc. to EN 15283-1 ■ Minimum thickness ≥ 100 mm  <p>e.g. EI120 e.g. EI120</p>	<p>Shaft walls</p> <ul style="list-style-type: none"> ■ Steel studs lined on one face with 2x20, 3x15 or 2x25 mm gypsum plasterboards DF acc. to EN 520 or GM-F acc. to EN 15283-1 ■ Minimum nominal width of profiles 50 mm (e.g. CW50), with or without mineral wool  <p>Shaft side Room side Shaft side Room side</p>
<p>Rigid walls</p> <ul style="list-style-type: none"> ■ Aerated concrete, concrete, masonry ■ Minimum density ≥ 500 kg/m³ ■ Minimum thickness ≥ 100 mm  <p>e.g. EI120 e.g. EI120</p>	<p>Cross-laminated timber walls</p> <ul style="list-style-type: none"> ■ Minimum annular gap (10 mm, filled with non-combustible material or FIREWIN MASTIC C) ≥ 100 mm ■ 15 mm gypsum plasterboards DF acc. to EN 520  <p>e.g. EI120 e.g. EI120</p>
<p>Rigid floors</p> <ul style="list-style-type: none"> ■ Aerated concrete, concrete ■ Minimum density ≥ 500 kg/m³ ■ Minimum thickness ≥ 150 mm  <p>e.g. REI120</p>	<p>Cross-laminated timber floors</p> <ul style="list-style-type: none"> ■ Minimum thickness ≥ 140 mm ■ 12,5 mm gypsum plasterboards DF acc. to EN 520  <p>e.g. REI120</p>

Collar	Penetrating element	Material or pipe name and standard or manufacturer	Pipe end configuration
FIREWIN SP and LP	Combustible pipes	PE-HD acc. to EN 1519-1	U/U
	Combustible pipes	PE-HD acc. to EN12201-2	U/U
	Combustible pipes	„Rautitan flex“ REHAU Gesellschaft m.b.H.	U/U
	Combustible pipes	PP acc. to EN 1451-1	U/U
	Combustible pipes	PP acc. to EN ISO 15494-3	U/U
	Combustible pipes	PP acc. to EN ISO 15874-2	U/U
	Combustible pipes	„POLO-KAL NG“ POLOPLAST GMBH & CO KG	U/U
	Combustible pipes	„POLO-KAL 3S“ POLOPLAST GMBH & CO KG	U/U
	Combustible pipes	„Raupiano Plus“ REHAU Gesellschaft m.b.H.	U/U
	Combustible pipes	„WC Anschlussstutzen“ Viega GmbH	U/U
FIREWIN LP	Combustible pipes	„PP MASTER SN12“ Pipelife Austria GmbH & Co KG	U/U
	Combustible pipes	„Aquatherm firestop“ aquatherm GmbH Kunststoffextrusions- und Spritzgießtechnik	U/C
	Combustible pipes	PVC-U EN 1401-1	U/U
	Conveying tubes	„Pelflex/AS“ HY-POWER Prduktions und Handels GmbH	U/U
	Conveying tubes	„Pelflex PU/AS“ HY-POWER Prduktions und Handels GmbH	U/U
FIREWIN M	Combustible pipes	„Geberit Mepla-Rohr“ Geberit Vertriebs GmbH	U/C
	Combustible pipes	„FRIATHERM multi-press“ Friatec AG	U/C
	Combustible pipes	„HENCO Mehrschichtverbundrohr“ HENCO Industries NV	U/C
	Combustible pipes	„JRG Sanipex MT“ Georg Fischer JRG AG	U/C
	Combustible pipes	„RAUTITAN stabil“ REHAU Gesellschaft m.b.H.	U/C
	Combustible pipes	„TECEflex-Verbundrohr“ TECE GmbH	U/C
	Combustible pipes	„Uponor Verbundrohr“ Uponor Vertriebs GmbH	U/C
	Combustible pipes	„K06 KELIT ALU-Verbundrohr PN20“ KE KELIT Kunststoffwerk GesmbH	U/C
	Non-combustible pipes	Metal pipes Reaction to fire class A1 acc. to EN 13501-1 with a melting or decomposition point greater than 1022°C and a thermal conductivity smaller or equal to copper	C/C
	Conduits	PVC conduits for cables acc. to EN 61386-22	C/C
Cable	NYM-J	-	
FIREWIN M „C application“ ceiling	Combustible pipes	„POLO-KAL NG“ POLOPLAST GMBH & CO KG	U/U
	Combustible pipes	„Geberit Mepla-Rohr“ Geberit Vertriebs GmbH	U/C
	Combustible pipes	„HENCO Mehrschichtverbundrohr“ HENCO Industries NV	U/C
	Combustible pipes	„TECEflex-Verbundrohr“ TECE GmbH	U/C
	Conduits Conduits	PVC conduits for cables acc. to EN 61386-22 and EN 61386-21	C/C
FIREWIN M „C application“ wall	Combustible pipes	PP acc. to EN 1451-1	U/U
	Combustible pipes	„Geberit Mepla-Rohr“ Geberit Vertriebs GmbH	U/C
	Combustible pipes	„HENCO Mehrschichtverbundrohr“ HENCO Industries NV	U/C
	Combustible pipes	„TECEflex-Verbundrohr“ TECE GmbH	U/C
	Conduits Conduits	PVC conduits for cables acc. to EN 61386-22 and EN 61386-21	C/C
FIREWIN M „C application“ floor	Combustible pipes	PP acc. to EN 1451-1	U/U
	Combustible pipes	PP acc. to EN ISO 15814-2	U/U
	Combustible pipes	„POLO-KAL NG“ POLOPLAST GMBH & CO KG	U/U
	Combustible pipes	„Raupiano Plus“ REHAU Gesellschaft m.b.H.	U/C
	Combustible pipes	„Geberit Mepla-Rohr“ Geberit Vertriebs GmbH	U/C
	Combustible pipes	„HENCO Mehrschichtverbundrohr“ HENCO Industries NV	U/C
	Combustible pipes	„TECEflex-Verbundrohr“ TECE GmbH	U/C
	Conduits Conduits	PVC conduits for cables acc. to EN 61386-22 and EN 61386-21	C/C
FIREWIN M multiple penetration	Combustible pipes	„Geberit Mepla-Rohr“ Geberit Vertriebs GmbH	U/C
	Combustible pipes	„TECEflex-Verbundrohr“ TECE GmbH	U/C
	Combustible pipes	„HENCO Mehrschichtverbundrohr“ HENCO Industries NV	U/C
	Combustible pipes	„JRG Sanipex MT“ Georg Fischer JRG AG	U/C
	Combustible pipes	„RAUTITAN stabil“ REHAU Gesellschaft m.b.H.	U/C
	Combustible pipes	„FRIATHERM multi-press“ Friatec AG	U/C
	Conduits	PVC conduits for cables acc. to EN 61386-22	C/C
	Non-combustible pipes	Metal pipes Reaction to fire class A1 acc. to EN 13501-1 with a melting or decomposition point greater than 1022°C and a thermal conductivity smaller or equal to copper	C/C

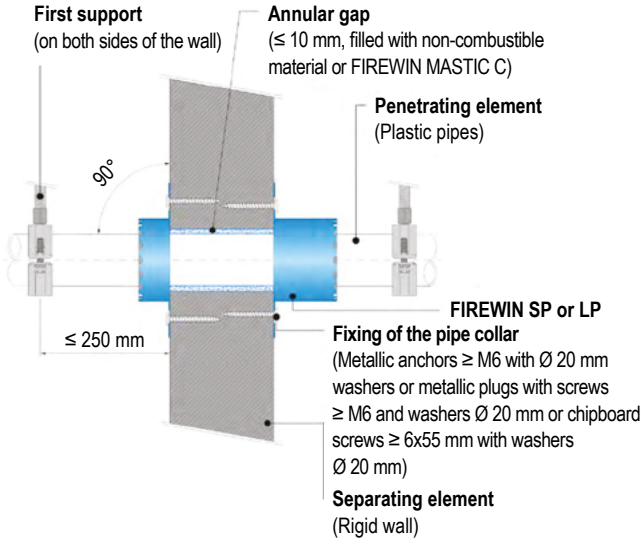
System variants

Rigid wall, thickness ≥ 100 mm									
Type	Fire resistance	Material	Pipe outside diameter [mm]	Insulation [mm]				Gap (Pipe-Wall)	Mounting
				without	PE	Elastomer	Mineralwool		
					≤ 4	≤ 32	≤ 50		
FIREWIN SP	EI 120	PE	≤ 135	■	■	■	≤ 10 mm, filled with Knauf FIREWIN MASTIC C fire protective gap filler or mortar	Metallic anchors or metallic plugs with screws ≥ M6 or chip-board screws ≥ 6x55 mm (only for aerated concrete)	
		PP	≤ 125	■	■	■			
FIREWIN LP	EI 120	PE	≤ 200	■	■				
		PP	≤ 250	■	■				
		PVC-U	≤ 200	■	■				
FIREWIN M	EI 120	Multi-layer composite pipes	≤ 26	■	■	≤ 9			
			≤ 63			■			■
	EI 90	Conduits	≤ 50	■					
	EI 90	Metal pipes	≤ 18		≤ 10	≤ 9			

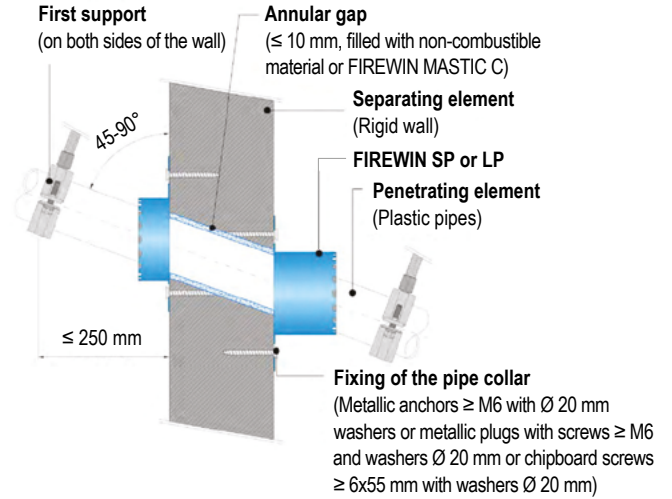
Multiple penetration rigid wall, thickness ≥ 100 mm									
Type	Fire resistance	max. DN	Material / Penetrating element	Pipe dimensions [mm]	Insulation [mm]			Gap (Pipe-Wall)	Mounting
					without	PE	Elastomer		
						≤ 10	≤ 9		
FIREWIN M	EI 120	110	max. 2 x multilayer composite pipes	≤ 26		■	■	≤ 10 mm, filled with Knauf FIREWIN MASTIC C fire protective gap filler or mortar	Metallic anchors or metallic plugs with screws ≥ M6 or chip-board screws ≥ 6x55 mm (only for aerated concrete)
			EI 90	110	max. 13 x PVC conduits	≤ 50			
	max. 13 x NYM-J	max. 5x6,0 mm ²							
	max. 2 x metal pipes	≤ 18				■	■		
	EI 90	63	max. 1 x PVC conduits	≤ 25					
			max. 1 x NYM-J	max. 5x2,5 mm ²					

Details

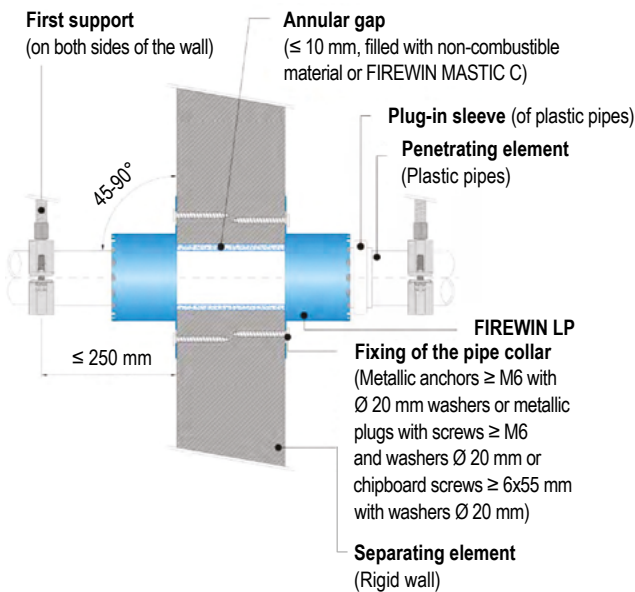
E41.en-D23 FIREWIN SP and LP plastic pipes



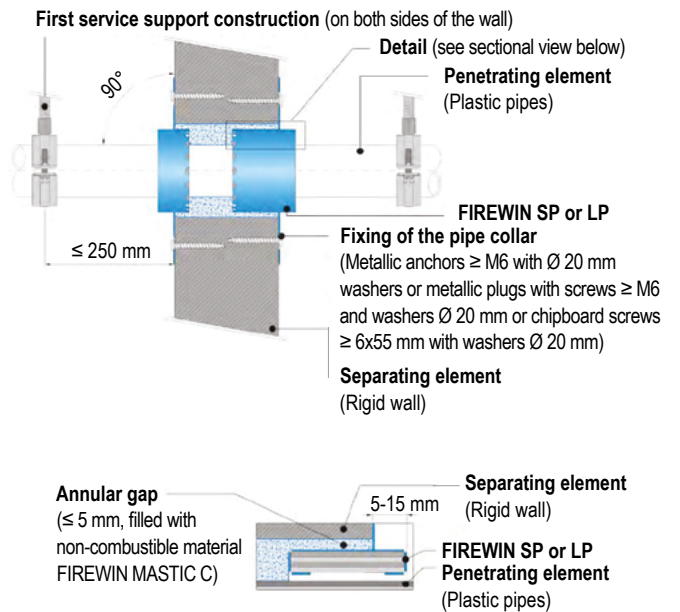
E41.en-D25 FIREWIN SP and LP unisulated plastic pipes up to Ø 110 mm



E41.en-D27 FIREWIN LP unisulated plastic pipes up to Ø 160 mm on plug-in sleeve



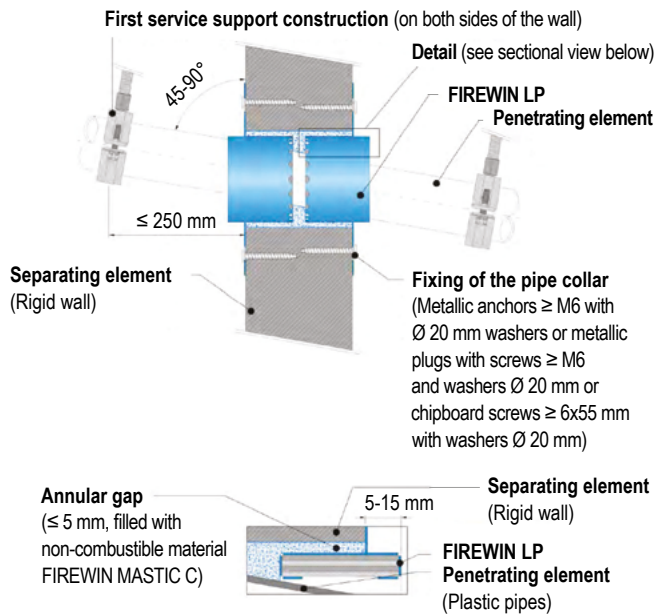
E41.en-D28 FIREWIN SP and LP plastic pipes up to Ø 160 mm flush mounted



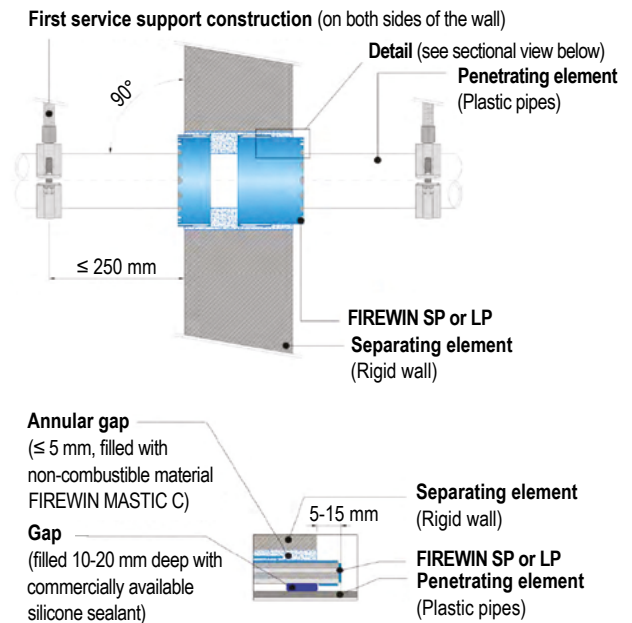
Note The pipe collars have to be used on both sides of the wall.

Details

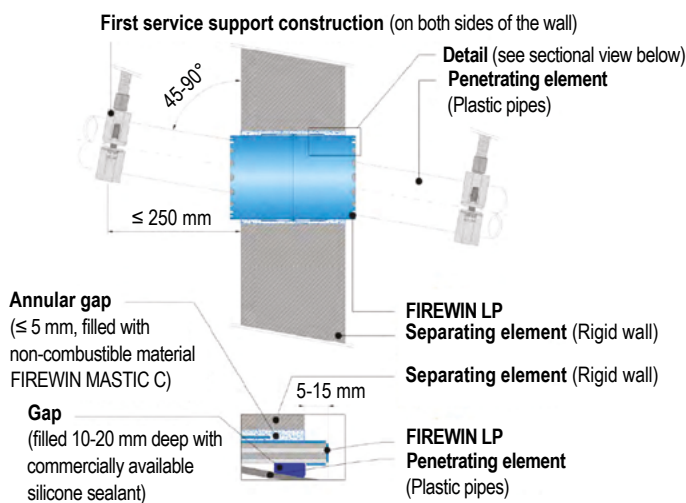
E41.en-D30 FIREWIN LP plastic pipes up to Ø 160 mm flush mounted on inclined pipe



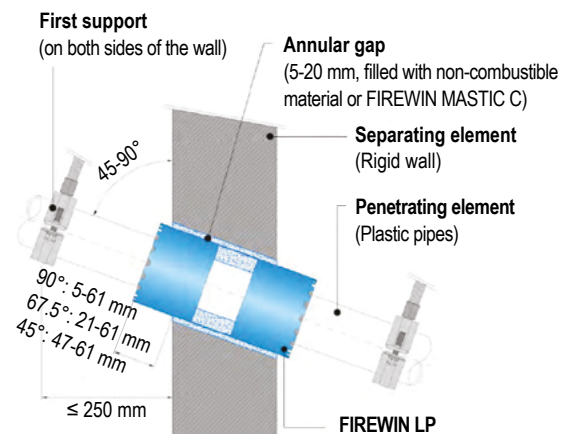
E41.en-D31 FIREWIN SP and LP plastic pipes up to Ø 160 mm fixed with FIREWIN MASTIC C or non-combustible material



E41.en-D33 FIREWIN LP plastic pipes up to Ø 160 mm fixed with FIREWIN MASTIC C or non-combustible material on inclined pipe



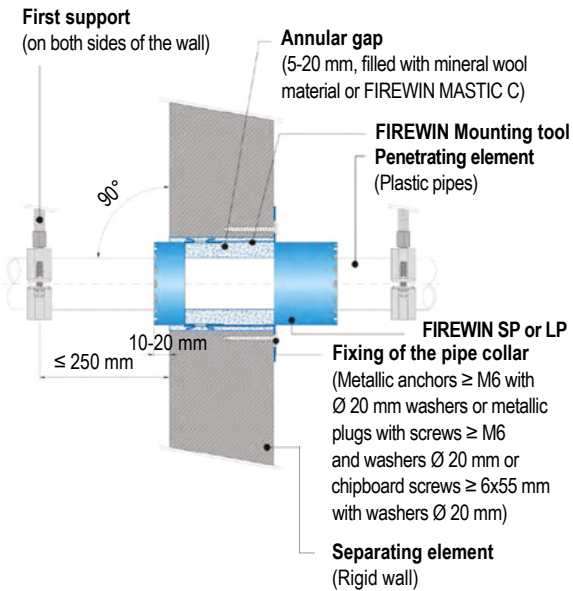
E41.en-D34 FIREWIN LP uninsulated plastic pipes up to Ø 160 mm fixed with non-combustible material on inclined pipe



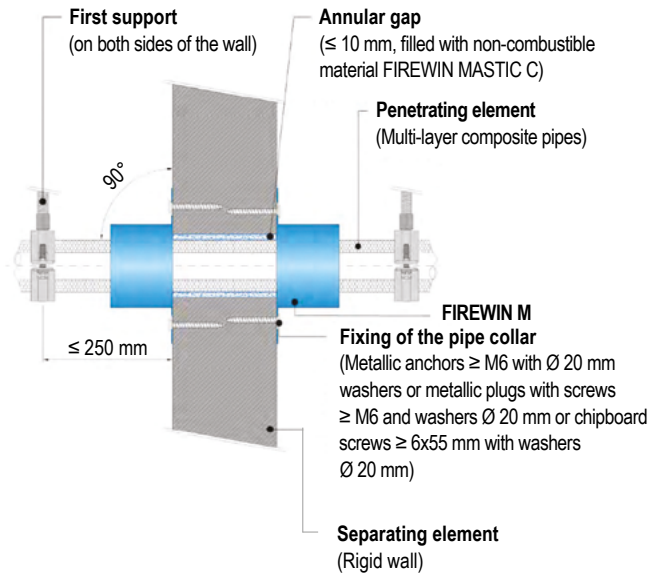
Note The pipe collars have to be used on both sides of the wall.

Details

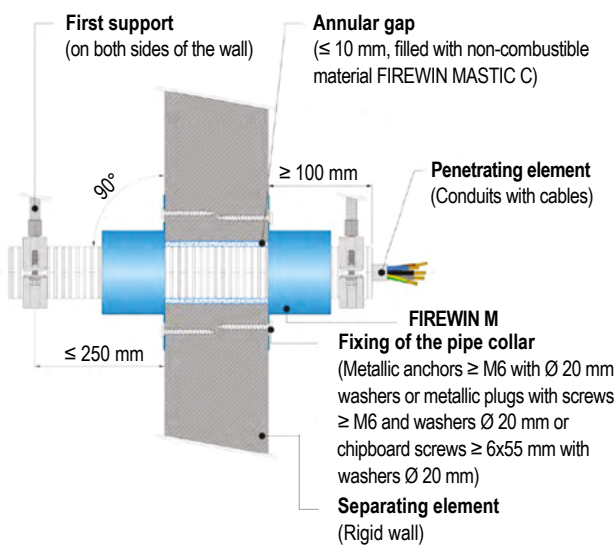
E41.en-D35 FIREWIN SP and LP plastic pipes up to Ø160 mm mounted by the FIREWIN mounting tool



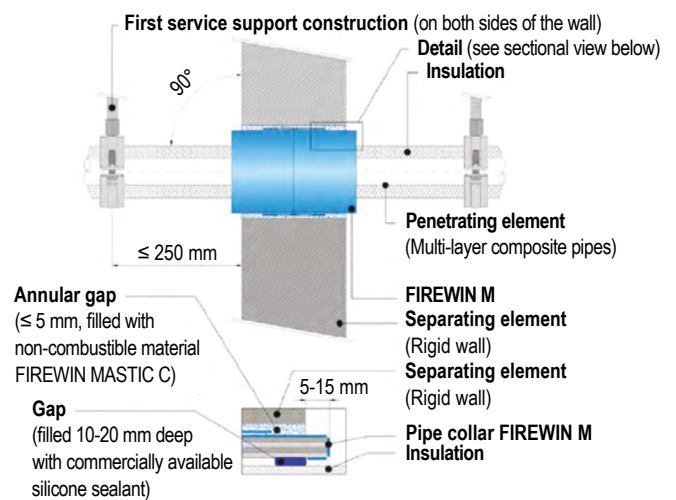
E41.en-D39 FIREWIN M Multi-layer composite pipes and metal pipes



E41.en-D41 FIREWIN M conduits with cables and conveying tubes



E41.en-D43 FIREWIN M multi-layer composite pipes up to Ø 26 mm fixed with FIREWIN MASTIC C or non-combustible material



Note The pipe collars have to be used on both sides of the wall.

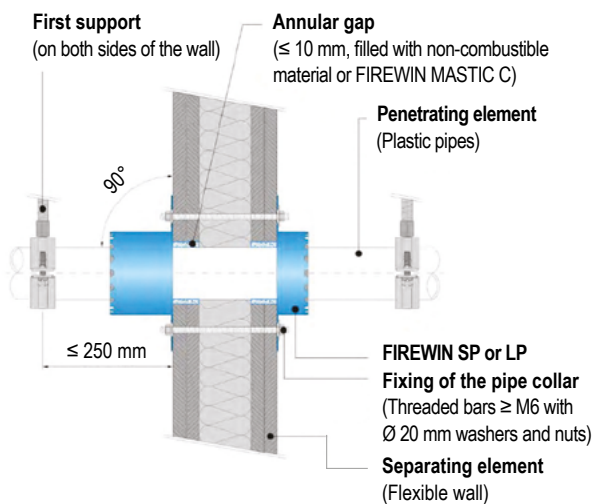
System variants

Flexible wall, thickness ≥ 100 mm								
Type	Fire resistance	Material / Penetrating element	Pipe dimensions [mm]	Insulation [mm]			Gap (Pipe-Wall)	Mounting
				without	PE ≤ 4	Elastomer ≤ 32		
FIREWIN SP	EI 120	PE	≤ 135	■	■		≤ 10 mm, filled with Knauf FIREWIN MASTIC C fire protective gap filler or mortar	Threaded bars ≥ M6 with Ø 20 mm washers and nuts
		PP	≤ 125	■	■			
FIREWIN LP	EI 90	PE	≤ 200	■	■			
		PP	≤ 200	■	■			
FIREWIN M	EI 90	Multi-layer composite pipes	≤ 63		■	■		
		Conduits	≤ 50					

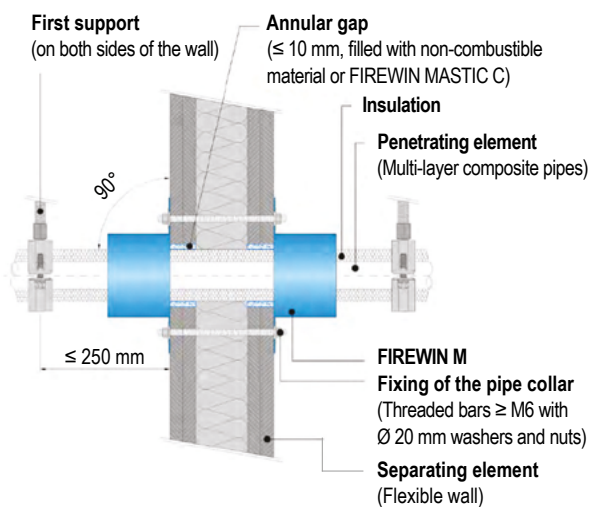
Multiple penetration flexible wall, thickness ≥ 100 mm							
Type	Fire resistance	max. DN	Material / Penetrating element	Pipe dimensions [mm]	Insulation [mm]	Gap (Pipe-Wall)	Mounting
					without		
FIREWIN M	EI 90	110	max. 13 x PVC conduits	≤ 50		≤ 10 mm, filled with Knauf FIREWIN MASTIC C fire protective gap filler or mortar	Threaded bars ≥ M6 with Ø 20 mm washers and nuts
			max. 13 x NYM-J	max. 5x6,0 mm ²			

Details

E41.en-D1 FIREWIN SP and LP plastic pipes



E41.en-D3 FIREWIN multi-layer composite pipes



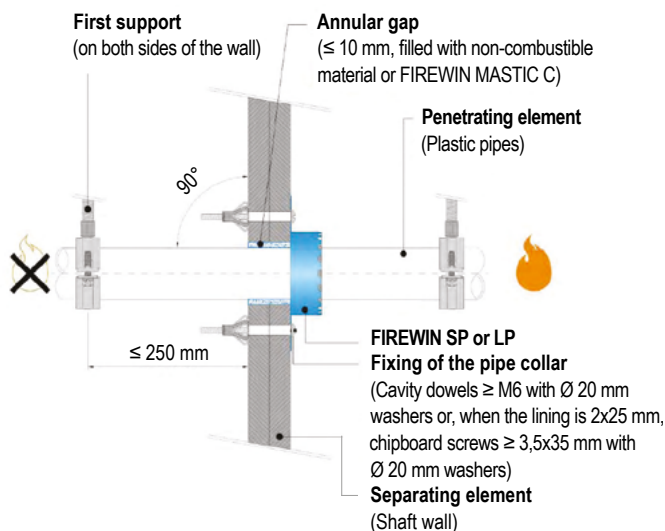
System variants

Shaft wall, lining 2x20, 3x15 or 2x25 mm								
Type	Fire resistance	Material	Pipe outside diameter []	Insulation [mm]			Gap (Pipe-Wall)	Mounting
				without	PE ≤ 4	Elastomer ≤ 9		
FIREWIN SP	EI 90	PE	≤ 110		■		≤ 10 mm, filled with Knauf FIREWIN MASTIC C fire protective gap filler or mortar	Cavity dowels ≥ M6 or chipboard screws ≥ 3,5x35 mm with Ø 20 mm washers (only for lining 2x25 mm)
		PP	≤ 110	■	■			
FIREWIN LP	EI 90	PE	≤ 110		■			
		PP	≤ 110	■	■			
FIREWIN M	EI 90	Multi-layer composite pipes	≤ 26	■	≤ 10	■		
		Conduits	≤ 50					
		Metal pipes	≤ 12			■		

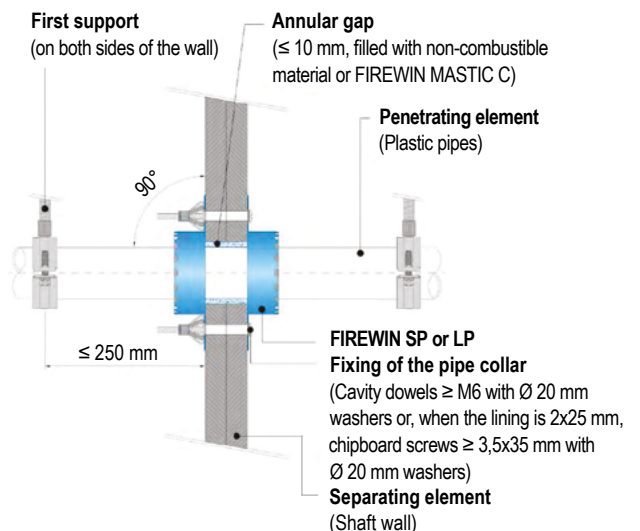
Multiple penetration shaft wall, lining 2x20, 3x15 or 2x25 mm								
Type	Fire resistance	max. DN	Material / Penetrating element	Pipe dimensions [mm]	Insulation [mm]		Gap (Pipe-Wall)	Mounting
					without	Elastomer ≤ 9		
FIREWIN M	EI 90	110	max. 13 x PVC conduits	≤ 50			≤ 10 mm, filled with Knauf FIREWIN MASTIC C fire protective gap filler or mortar	Cavity dowels ≥ M6 or chipboard screws ≥ 3,5x35 mm with Ø 20 mm washers (only for lining 2x25 mm)
			max. 13 x NYM-J	max. 5x6,0 mm ²				
	EI 90	63	max. 2 x metal pipes	≤ 12		■		
			max. 1 x PVC conduits	≤ 25				
			max. 1 x NYM-J	max. 5x2,5 mm ²				

Details

E41.en-D5 FIREWIN SP and LP plastic pipes

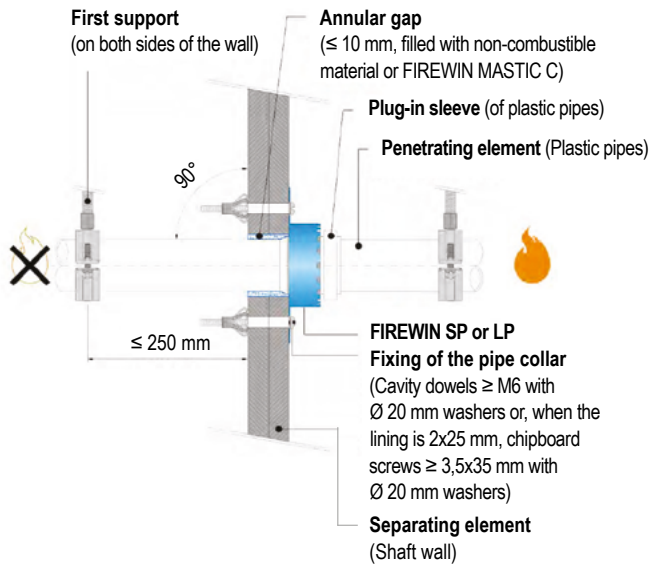


E41.en-D6 FIREWIN SP and LP plastic pipes

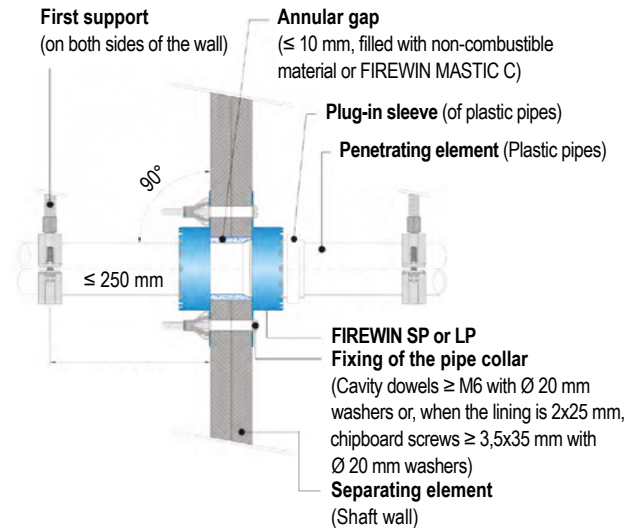


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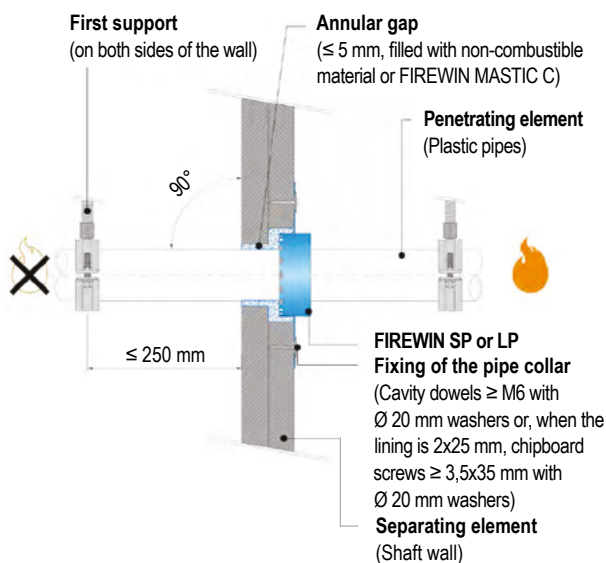
E41.en-D49 FIREWIN LP uninsulated plastic pipes with plug-in sleeves flush mounted



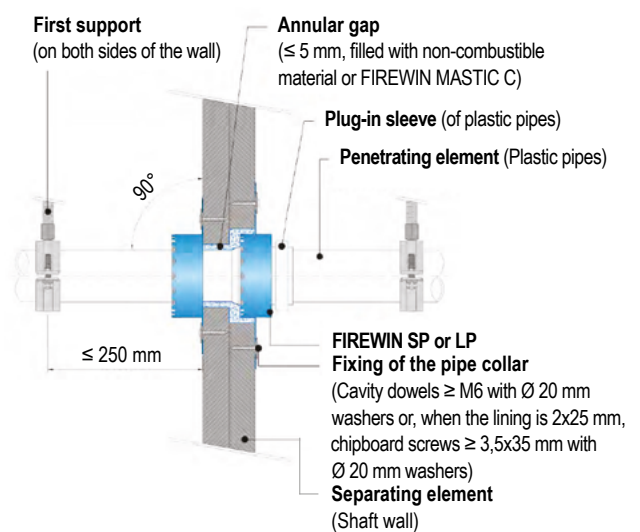
E41.en-D54 FIREWIN LP uninsulated plastic pipes fixed with non-combustible material on inclined pipe



E41.en-D55 FIREWIN SP or LP plastic pipes fixed with non-combustible material and FIREWIN Mounting tool

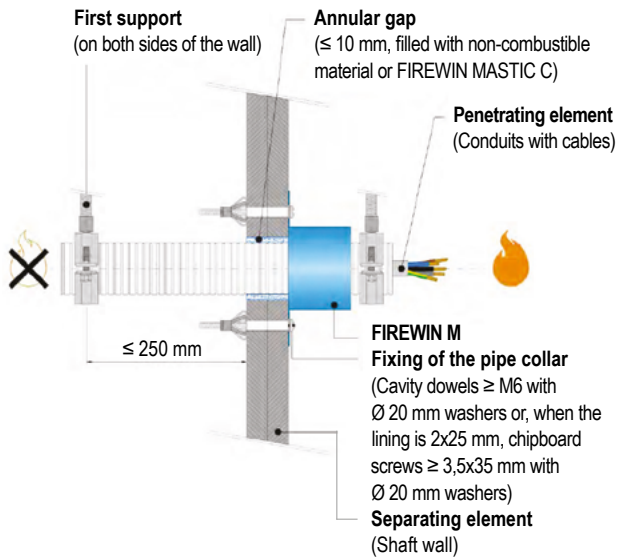


E41.en-D57 FIREWIN M Multi-layer composite pipes

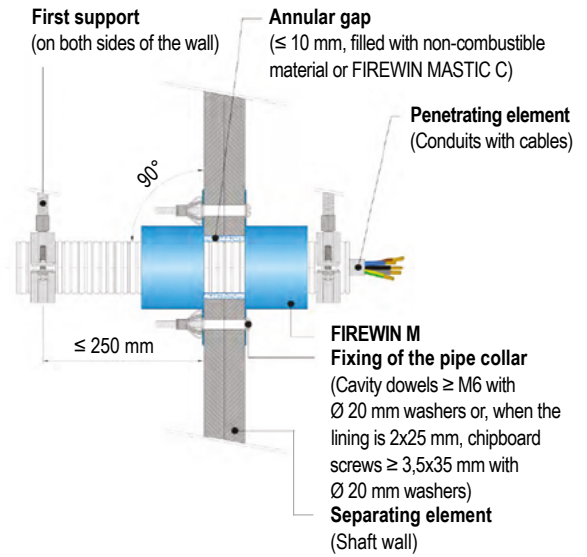


Details

E41.en-D35 FIREWIN SP and LP plastic pipes up to Ø160 mm mounted by the FIREWIN mounting tool



E41.en-D39 FIREWIN M Multi-layer composite pipes and metal pipes



System variants

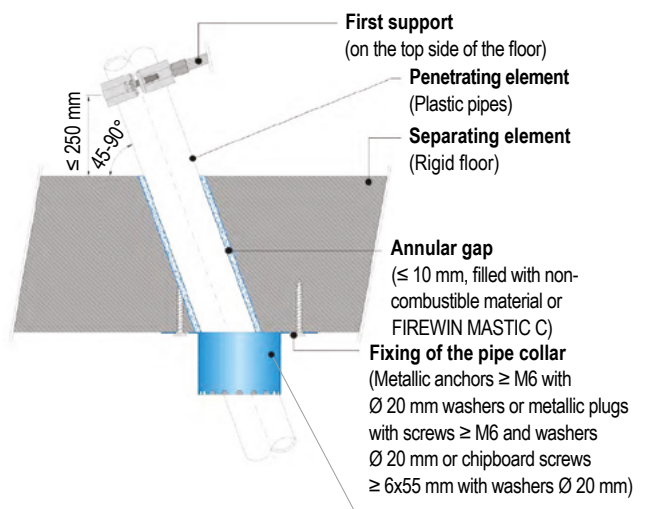
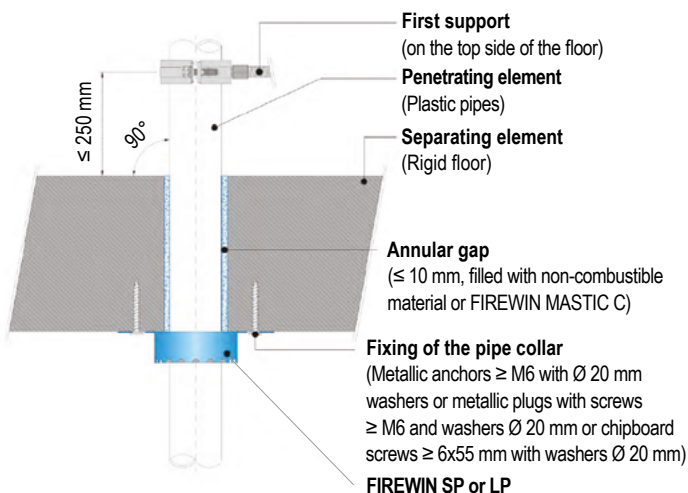
Rigid floors, thickness ≥ 150 mm										
Type	Fire resistance	Material	Pipe outside diameter [mm]	Insulation [mm]					Gap (Pipe-Wall)	Mounting
				without	PE	Elasto-mer	Mineral wool	Poly-esterf leece		
					≤ 4	≤ 25	≤ 50	≤ 4		
FIREWIN SP	EI 120	PE	≤ 135	■	■			■	≤ 10 mm, filled with Knauf FIREWIN MASTIC C fire protective gap filler or mortar	Metallic anchors or metallic plugs with screws ≥ M6 or chipboard screws ≥ 6x55 mm (only for aerated concrete)
		PP	≤ 125	■	≤ 8			■		
FIREWIN LP	EI 120	PE	≤ 135	■	■			■		
		PP	≤ 125	■	≤ 8			■		
FIREWIN M	EI 120	Multi-layer composite pipes	≤ 26	■	■	■	■			
			≤ 63			■	■			

Multiple penetration rigid floors, thickness ≥ 150 mm									
Type	Fire resistance	max. DN	Material / Penetrating element	Pipe dimensions [mm]	Insulation [mm]			Gap (Pipe-Wall)	Mounting
					without	PE	Elasto-mer		
						≤ 10	≤ 9		
FIREWIN M	EI 90	110	max. 7 x Multi-layer composite pipes	≤ 26		■	■	≤ 10 mm, filled with Knauf FIREWIN MASTIC C fire protective gap filler or mortar	Metallic anchors or metallic plugs with screws ≥ M6 or chipboard screws ≥ 6x55 mm (only for aerated concrete)
	EI 120	80	max. 2 x Multi-layer composite pipes	≤ 26		■	■		

Details

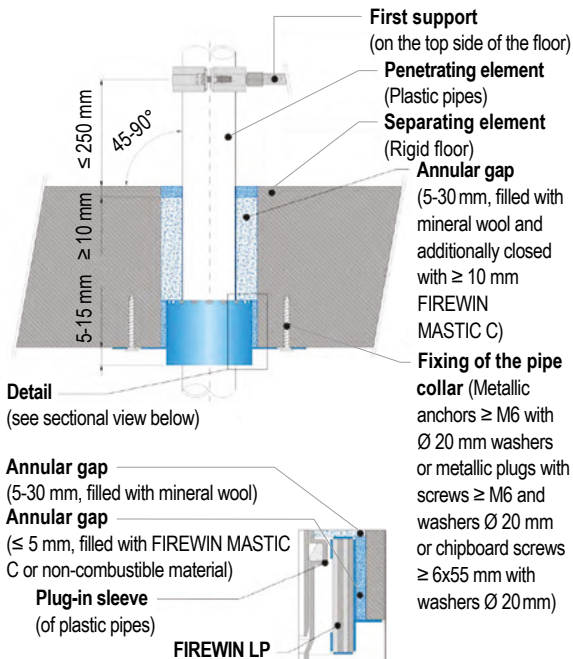
E41.en-D44 FIREWIN SP and LP plastic pipes

E41.en-D47 FIREWIN SP and LP plastic pipes

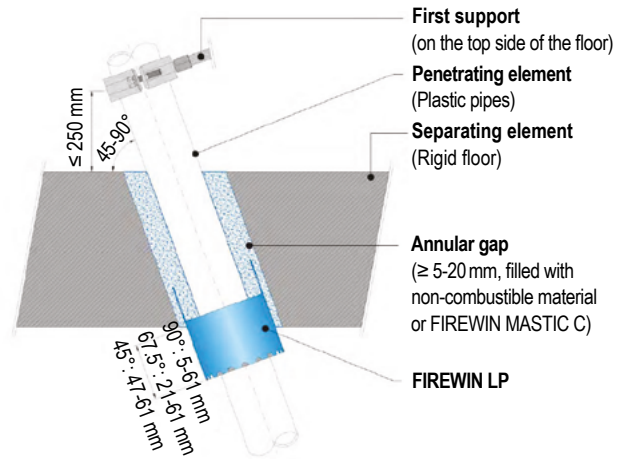


Details

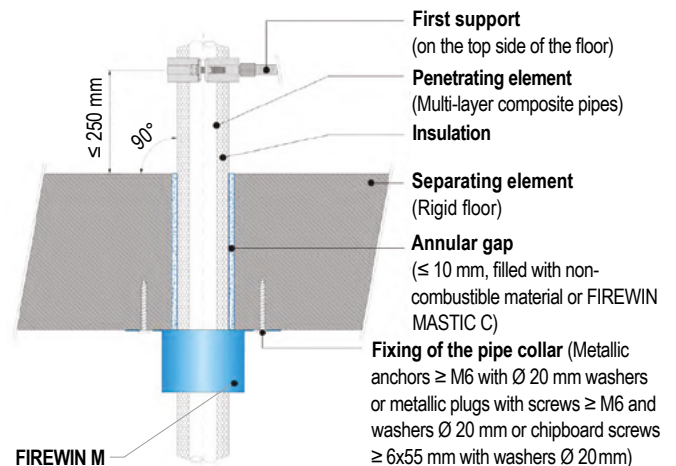
E41.en-D49 FIREWIN LP uninsulated plastic pipes with plug-in sleeves flush mounted



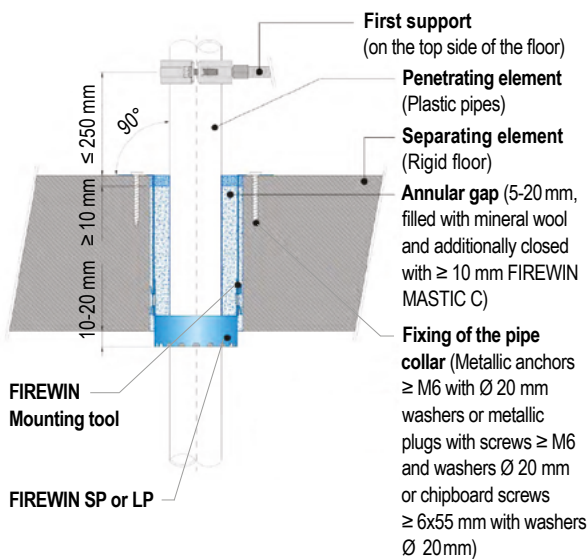
E41.en-D54 FIREWIN LP uninsulated plastic pipes fixed with non-combustible material on inclined pipe



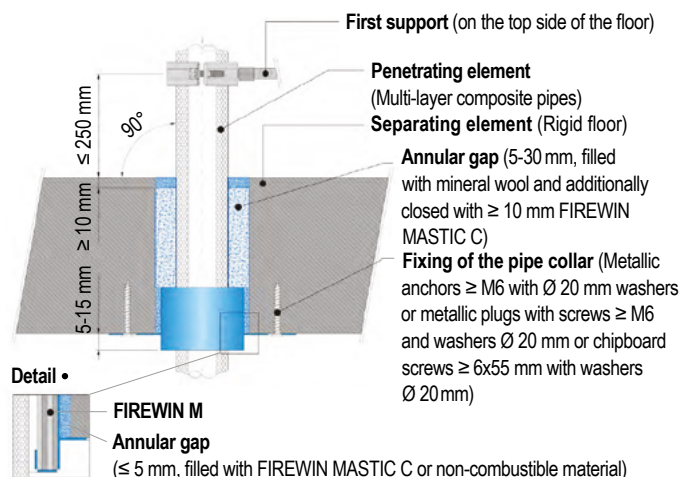
E41.en-D57 FIREWIN M Multi-layer composite pipes



E41.en-D55 FIREWIN SP or LP plastic pipes fixed with non-combustible material and FIREWIN Mounting tool



E41.en-D59 FIREWIN M Multi-layer composite pipes flushed mounted



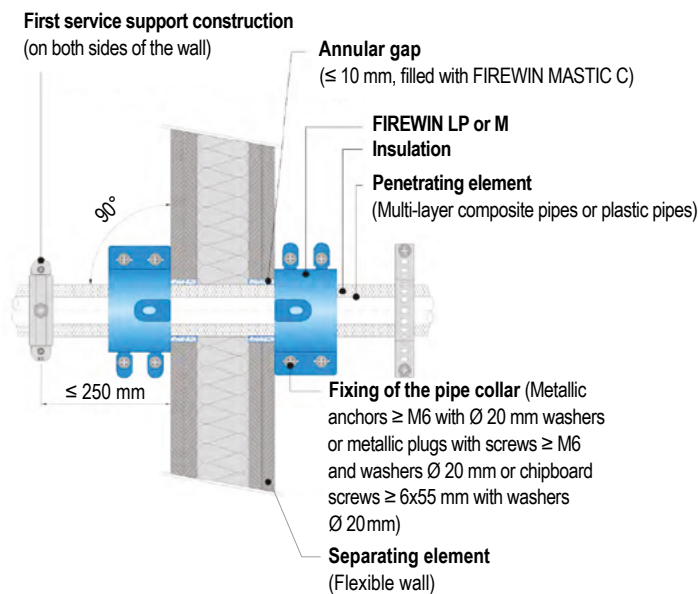
System variants

Flexible wall ≥ EI 90, Thickness ≥ 100 mm Shaft wall ≥ EI 90, Cladding 2x20, 3x15 oder 2x25 mm Rigid wall, Thickness ≥ 100 mm		
Type	Gap (Pipe-Wall)	Mounting
FIREWIN LP FIREWIN M	≤ 10 mm filled with Knauf FIREWIN MASTIC C fire protective gap filler	Metallic anchors or metallic plugs with screws ≥ M6 or chipboard screws ≥ 6x55 mm (only for aerated concrete)

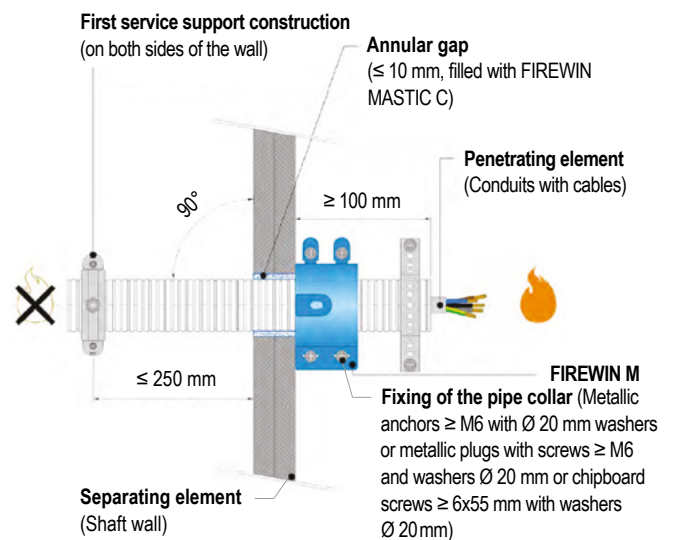
Multiple penetration shaft wall ≥ EI 90, Cladding 2x20, 3x15 oder 2x25									
Type	Fire resistance	max. DN	Material / Penetrating element	Pipe outside diameter [mm]	Insulation [mm]			Gap (Pipe-Wall)	Mounting
					without	PE	Elasto-mer		
FIREWIN M	EI 90	80	max. 2 x multilayer composite pipes	≤ 26		≤ 10	■	≤ 10 mm, filled with Knauf FIREWIN MASTIC C fire protective gap filler	Metallic anchors or metallic plugs with screws ≥ M6 or chipboard screws ≥ 6x55 mm (only for aerated concrete)
			max. 1 x PP	≤ 75	■	≤ 4			
			1 x PVC conduit	≤ 25					
	max. 1 x NYM-J	max. 5x6,0 mm ²							
	EI 90	80	max. 11 x PVC conduits	≤ 25					
max. 11 x NYM-J			max. 5x2,5 mm ²						

Details

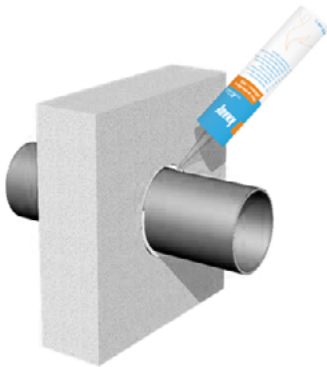
E41.en-D61 FIREWIN LP and M Multi-layer composite pipes and plastic pipes



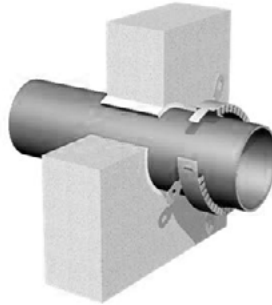
E41.en-D67 FIREWIN M conduits with cables



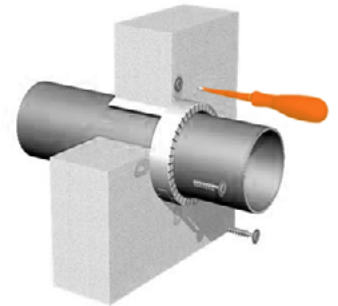
Installation steps



Fill gap acc. to installation details. First support (Non-combustible service support construction) in a distance of max. 25 cm on both sides of the wall or on the top side of the floor.

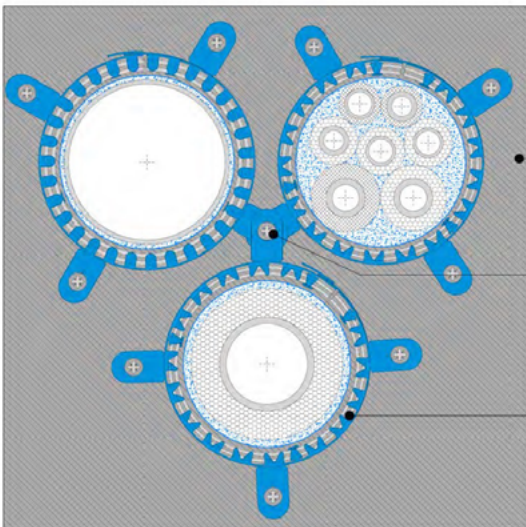


Put the firecollar on the pipe or if the pipe is insulated, on the insulation and close the closure flaps.



Mount the firecollars acc. to installation details.

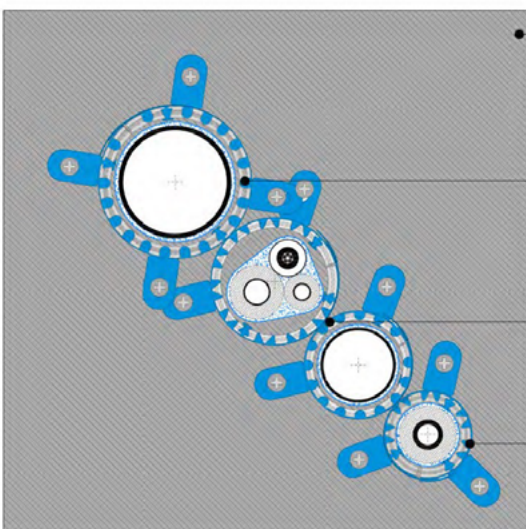
Application



Separating element
(Flexible wall, shaft wall, rigid wall or rigid floor)

Fixing of the pipe collars
(Up to 3 fastening flaps positioned above each other and mounted with a collective fixing)

FIREWIN SP, FIREWIN LP or FIREWIN M



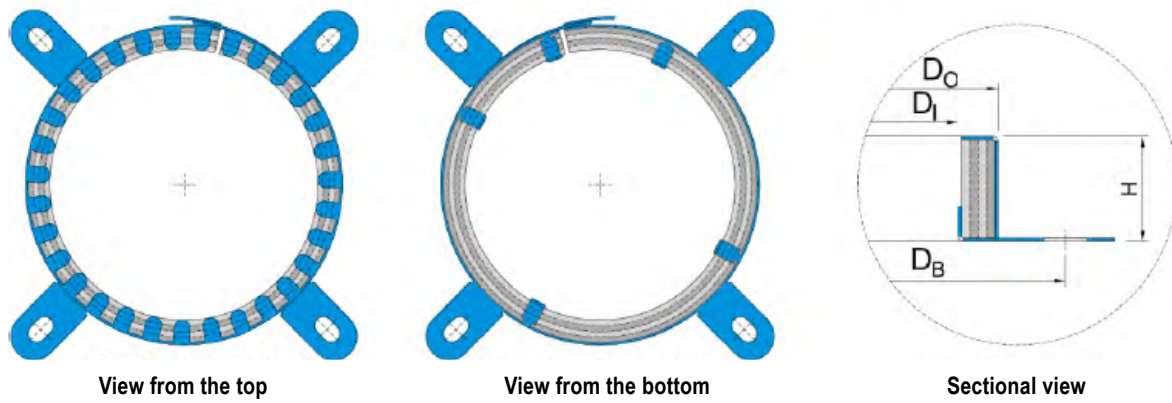
Separating element
(Flexible wall, shaft wall, rigid wall or rigid floor)

FIREWIN SP, FIREWIN LP or FIREWIN M

Fastening flaps
(Hooked into the gap between housing and intumescent inlay of the adjacent pipe collar)

Maximum 4 pipe collars
placed side by side and surface mounted

FireWin SP

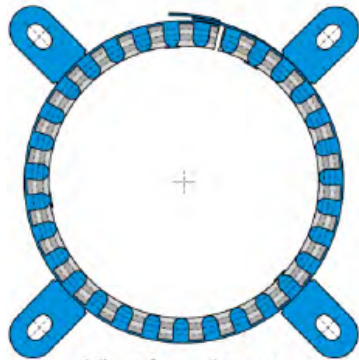


Pipe collar FIREWIN SP						
Height [H] [mm]	31			Number of closure flaps	1	
Dimension	Nominal thickness of inlay [mm]	Nominal inner diameter [Di] [mm]	Nominal outer diameter [Do] [mm]	Nominal pitch circle diameter* [DB] [mm]	Number of fastening flaps	Diameter of penetrating element* [mm]
DN40	5.0	46	57	99-129	3	16-46
DN56	5.0	62	74	116-146	3	47-62
DN63	7.5	70	86	128-158	3	63-70
DN80	7.5	87	103	145-175	4	71-87
DN90	10.0	109	131	173-203	4	88-109
DN110	10.0	120	142	184-214	4	110-120
DN125	12.5	133	159	201-231	4	121-133
DN140	15.0	146	178	220-250	4	134-146

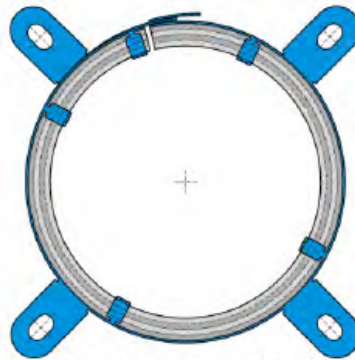
* Pipe outside diameter of uninsulated pipe or insulation outside diameter of insulated pipe

**Diameter for use with or without extension of fastening flaps

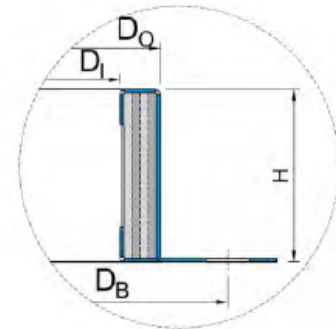
FireWin LP



View from the top



View from the bottom



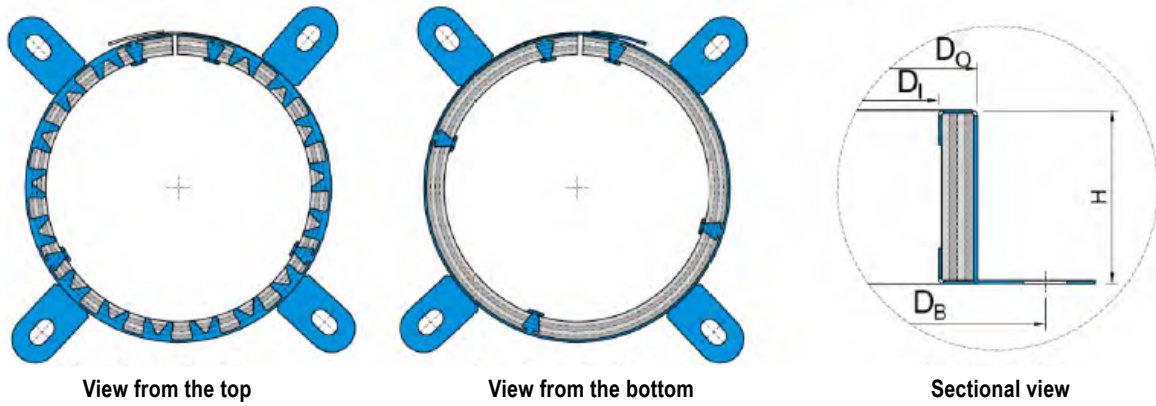
Sectional view

Pipe collar FIREWIN LP						
Height [H] [mm]	61			Number of closure flaps		2
Dimension	Nominal thickness of inlay [mm]	Nominal inner diameter [Di] [mm]	Nominal outer diameter [Do] [mm]	Nominal pitch circle diameter [DB] [mm]	Number of fastening flaps	Diameter of penetrating element* [mm]
DN40	5.0	46	57	99-129	3	16-46
DN56	5.0	62	74	116-146	3	47-62
DN63	7.5	70	86	128-158	3	63-70
DN80	7.5	87	103	145-175	4	71-87
DN90	10.0	109	131	173-203	4	88-109
DN110	10.0	120	142	184-214	4	110-120
DN125	12.5	133	159	201-231	4	121-133
DN140	15.0	146	178	220-250	4	134-146
DN160	15.0	169	201	243-273	5	147-169
DN180	15.0	190	218	260-290	6	170-190
DN200	17.5	210	243	285-315	6	191-210
DN225	20.0	235	268	310-340	6	211-235
DN250	20.0	260	301	343-373	6	236-260

* Pipe outside diameter of uninsulated pipe or insulation outside diameter of insulated pipe

**Diameter for use with or without extension of fastening flaps

FireWin M




Pipe collar FIREWIN M						
Height [H] [mm]	61			Number of closure flaps	2	
Dimension	Nominal thickness of inlay [mm]	Nominal inner diameter [D _I] [mm]	Nominal outer diameter [D _O] [mm]	Nominal pitch circle diameter [D _B] [mm]	Number of fastening flaps	Diameter of penetrating element* [mm]
DN40	6.0	46	59	101-131	3	16-46
DN56	6.0	60	74	116-146	3	47-60
DN63	6.0	71	85	127-157	3	61-71
DN80	8.0	86	103	145-175	4	72-86
DN90	8.0	109	126	168-198	4	87-105
DN110	8.0	121	137	179-209	4	106-121
DN125	10.0	136	157	199-229	4	122-136
DN140	12.0	151	178	220-250	4	137-151
DN160	12.0	172	198	240-270	5	152-163

* Pipe outside diameter of uninsulated pipe or insulation outside diameter of insulated pipe

**Diameter for use with or without extension of fastening flaps

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