

UL-EU CERTIFICATE

Certificate No. UL-EU-01121-CPR
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Certificate Holder PILO ESH
Hasandlar 5 Eilat
Israel

Manufacturer A/003

Certified Product Type Fire Stop – Pipe Collar
Product Trade Name PILOSTOP COLLAR
Trademark N/A
Rating/Classification See Appendix

Expiry date 2029-11-25



A handwritten signature in black ink, appearing to read 'Chris Miles'.

Head of Notified Body
Chris Miles

This is to certify that representative samples of the Certified Product listed above have been investigated by Underwriters Laboratories to the Standard(s) indicated on this Certificate, in accordance with the UL Global Services Agreement and the UL-EU Mark Service Terms and Conditions ("Agreement"). The Certificate Holder is entitled to use the UL-EU Mark for the Certified Product listed on the certificate and manufactured at the production site(s) listed, in accordance with the terms of the Agreement. Only those products bearing the UL-EU Mark for Europe should be considered as being covered by UL's UL-EU Mark Service. This Certificate shall remain valid through the Expiration date, unless a Standard identified on this Certificate is amended or withdrawn prior to that date or there is a non-compliance with the Agreement.



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This certificate relates to the use of PILOSTOP COLLAR for fire stopping where there are service penetrations through floors and walls. The detailed scope is given in pages 3 to 23 of this Certificate. This shows the thickness and acceptable dimensions, substrates and orientations required to provide fire resistance periods of up to 240 minutes for differing services and wall/floor constructions.

The products are certificated on the basis of:

- i) Inspection and surveillance of factory production control by UL
- ii) Fire resistance test data in accordance with EN 1366-3: 2009
- iii) Classification in accordance with EN 13501-2
- iv) Durability and Servicability as defined in EAD 350454-00-1104

The durability class of PILOSTOP COLLAR is Z₂ - intended for use at internal conditions with humidity classes other than Z₁, excluding temperatures below 0°C.

The PILOSTOP COLLAR may be supplied with powder coated steel or stainless steel shells.



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Product-type: Pipe Collar		Intended use: Penetration Seal
Assessment method	Essential characteristic	Product Performance
BWR 2 Safety in case of fire		
EN 13501-1	Reaction to fire	Performance not assessed
EN 13501-2	Resistance to fire	See pages 4 - 23
BWR 3 Hygiene, health and environment		
EN 1026	Air permeability	No performance determined
EAD 350454-00-1104, Annex C	Water permeability	No performance determined
Declaration of manufacturer & EN 16516	Content, emission and/or release of dangerous substances	Use categories: IA1, S/W3 Declaration of manufacturer
BWR 4 Safety in use		
EOTA TR 001:2003	Mechanical resistance and stability	No performance determined
EOTA TR 001:2003	Resistance to impact/movement	No performance determined
EOTA TR 001:2003	Adhesion	No performance determined
EAD 350454-00-1104, Clause 2.2.9	Durability	Z ₂
BWR 5 Protection against noise		
EN 10140-1,2,4,5/ EN ISO 717-1	Airborne sound insulation	R _w (C;Ctr): 58 (-1;-7)
BWR 6 Energy economy and heat retention		
EN 12664, EN 12667, EN 12939, EN ISO 8990, EN ISO 6946, EN ISO 14683, EN ISO 10211, EN ISO 10456	Thermal properties	No performance determined
EN ISO 12572, EN 12086, EN ISO 10456	Water vapour permeability	No performance determined



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Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)	
					E	EI
Gypsum board/ Masonry/ Concrete	100	PVC-U pipe according to EN 1329-1, EN 1452-1 and EN 1453-1 and PVC-C according to EN 1566-1				
		Diameter 32 mm, wall thickness 1.2-3.7 mm*	Both Sides	30 x 3.0 mm	90	60
		Diameter 40 mm, wall thickness 1.2-3.7 mm*				
		Diameter 50 mm, wall thickness 1.2-4.6 mm*				
		Diameter 55 mm, wall thickness 1.3-4.7 mm*		30 x 3.2 mm	60	60
		Diameter 63 mm, wall thickness 1.5-5.0 mm*				
		Diameter 75 mm, wall thickness 1.8-5.4 mm*				
		Diameter 82 mm, wall thickness 2.0-5.6 mm*				
		Diameter 90 mm, wall thickness 2.2-5.9 mm*				
		Diameter 110 mm, wall thickness 2.7-6.6 mm*		30 x 6.0 mm	90	60
		Diameter 110 mm, wall thickness 2.7-6.6 mm**				
		Diameter 125 mm, wall thickness 2.9-7.4 mm**				
		Diameter 140 mm, wall thickness 3.0-8.3 mm**		50 x 11.5 mm	90	60
		Diameter 160 mm, wall thickness 3.2-9.5 mm*				
		Diameter 32 mm, wall thickness 2.4-4.6 mm**	Both Sides	30 x 3.0 mm	90	60
		Diameter 40 mm, wall thickness 2.4-4.6 mm**				
		Diameter 50 mm, wall thickness 2.4-4.6 mm**				
		Diameter 55 mm, wall thickness 2.5-4.7 mm**		50 x 3.2 mm	90	60
		Diameter 63 mm, wall thickness 2.5-5.0 mm**				
		Diameter 75 mm, wall thickness 2.6-5.4 mm**				
		Diameter 82 mm, wall thickness 2.6-5.6 mm**				
		Diameter 90 mm, wall thickness 2.6-5.9 mm**				
		Diameter 110 mm, wall thickness 2.7-6.6 mm**		50 x 6.0 mm	90	60
		Diameter 110 mm, wall thickness 2.7-6.6 mm**				
		Diameter 125 mm, wall thickness 2.9-7.4 mm**				
		Diameter 140 mm, wall thickness 3.0-8.3 mm**		60 x 11.5 mm	60	60
		Diameter 160 mm, wall thickness 3.2-9.5 mm**				
		Diameter 315 mm, wall thickness 9.2 mm~	75 x 18 mm	60	60	

All pipe classifications marked '*' are pipe end configuration U/C and C/C - U=Uncapped, C=Capped

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Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)	
					E	EI
Gypsum board/ Masonry/ Concrete	100	PE pipe according to EN 1519-1, EN 12201-2 and EN 12666-1, ABS according to EN 1455-1 and pipes made from SAN+PVC according to EN 1565-1				
		Diameter 32 mm, wall thickness 3.0-4.6 mm**	Both Sides	30 x 3.0 mm	90	45
		Diameter 40 mm, wall thickness 3.0-4.6 mm**				
		Diameter 50 mm, wall thickness 3.0-4.6 mm**				
		Diameter 32 mm, wall thickness 3.0-5.6 mm*		30 x 3.2 mm	90	60
		Diameter 40 mm, wall thickness 3.0-5.6 mm*				
		Diameter 50 mm, wall thickness 3.0-5.6 mm*				
		Diameter 55 mm, wall thickness 3.0-6.0 mm*		30 x 3.6 mm	60	60
		Diameter 63 mm, wall thickness 3.1-6.6 mm*		30 x 4.2 mm		
		Diameter 75 mm, wall thickness 3.2-7.5 mm*		30 x 4.6 mm		
		Diameter 82 mm, wall thickness 3.2-8.0 mm*		30 x 5.0 mm		
		Diameter 90 mm, wall thickness 3.3-8.6 mm*		30 x 6.0 mm		
		Diameter 110 mm, wall thickness 3.4-10.0 mm*		50 x 6.0 mm	90	60
		Diameter 110 mm, wall thickness 3.4-10.0 mm**		50 x 9.0 mm	60	60
		Diameter 125 mm, wall thickness 4.2-9.8 mm*		50 x 11.5 mm		
		Diameter 140 mm, wall thickness 5.1-9.6 mm*		50 x 15.0 mm		
		Diameter 160 mm, wall thickness 6.2-9.5 mm*		50 x 3.0 mm	120	90
		Diameter 32 mm, wall thickness 3.0-4.6 mm**				
		Diameter 40 mm, wall thickness 3.0-4.6 mm**				
		Diameter 50 mm, wall thickness 3.0-4.6 mm**		50 x 3.2 mm	90	60
		Diameter 55 mm, wall thickness 3.1-5.0 mm**		50 x 3.6 mm		
		Diameter 63 mm, wall thickness 3.1-5.7 mm**		50 x 4.2 mm		
		Diameter 75 mm, wall thickness 3.2-6.8 mm**		50 x 4.6 mm		
		Diameter 82 mm, wall thickness 3.2-7.4 mm**		50 x 5.0 mm		
		Diameter 90 mm, wall thickness 3.3-8.1 mm**		60 x 6.0 mm	90	60
		Diameter 110 mm, wall thickness 3.4-10.0 mm**		60 x 8.8 mm		
		Diameter 125 mm, wall thickness 4.0-11.5 mm**		60 x 11.5 mm		
		Diameter 140 mm, wall thickness 4.4-12.8 mm**		60 x 15.0 mm	90	90
		Diameter 160 mm, wall thickness 4.9-14.6 mm**		75 x 10.8 mm	60	60
		Diameter 200 mm, wall thickness 18.2 mm~		75 x 12.6 mm		
		Diameter 250 mm, wall thickness 22.7 mm~				

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Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)	
					E	EI
Gypsum board/ Masonry/ Concrete	100	PP pipe according to EN 1451-1				
		Diameter 32 mm, wall thickness 3.0-5.6 mm*	Both Sides	30 x 3.0 mm	90	60
		Diameter 40 mm, wall thickness 3.0-5.6 mm*				
		Diameter 50 mm, wall thickness 3.0-5.6 mm*				
		Diameter 32 mm, wall thickness 1.8-4.6 mm**		30 x 3.0 mm	90	60
		Diameter 40 mm, wall thickness 1.8-4.6 mm**				
		Diameter 50 mm, wall thickness 1.8-4.6 mm**				
		Diameter 50 mm, wall thickness 1.8-5.6 mm*		30 x 3.0 mm	90	60
		Diameter 55 mm, wall thickness 2.0-5.7 mm*		30 x 3.2 mm		
		Diameter 63 mm, wall thickness 2.2-5.8 mm*		30 x 3.6 mm		
		Diameter 75 mm, wall thickness 2.5-5.9 mm*		30 x 4.2 mm		
		Diameter 82 mm, wall thickness 2.7-6.0 mm*		30 x 4.6 mm		
		Diameter 90 mm, wall thickness 2.9-6.1 mm*		30 x 5.0 mm		
		Diameter 110 mm, wall thickness 3.4-6.3 mm*		30 x 6.0 mm		
		Diameter 50 mm, wall thickness 1.8-5.6 mm*		50 x 3.0 mm	90	60
		Diameter 55 mm, wall thickness 2.0-6.0 mm*		50 x 3.2 mm	60	60
		Diameter 63 mm, wall thickness 2.2-6.6 mm*		50 x 3.6 mm		
		Diameter 75 mm, wall thickness 2.5-7.6 mm*		50 x 4.2 mm		
		Diameter 82 mm, wall thickness 2.7-8.2 mm*		50 x 4.6 mm		
		Diameter 90 mm, wall thickness 2.9-8.9 mm*		50 x 5.0 mm		
		Diameter 110 mm, wall thickness 3.4-10.5 mm*		50 x 6.0 mm		
		Diameter 125 mm, wall thickness 3.8-11.7 mm*		50 x 8.8 mm		
		Diameter 140 mm, wall thickness 4.2-12.9 mm*		50 x 11.5 mm		
		Diameter 160 mm, wall thickness 4.9-14.6 mm*		50 x 15.0 mm		
		Diameter 50 mm, wall thickness 1.8-4.6 mm**		50 x 3.0 mm	90	60
		Diameter 55 mm, wall thickness 2.0-4.7 mm**		50 x 3.2 mm		
		Diameter 63 mm, wall thickness 2.2-5.0 mm**		50 x 3.6 mm		
		Diameter 75 mm, wall thickness 2.5-5.4 mm**		50 x 4.2 mm		
		Diameter 82 mm, wall thickness 2.7-5.6 mm**		50 x 4.6 mm		
		Diameter 90 mm, wall thickness 2.9-5.9 mm**		50 x 5.0 mm		
		Diameter 110 mm, wall thickness 3.4-6.6 mm**		50 x 6.0 mm	90	60
		Diameter 110 mm, wall thickness 3.4-6.6 mm**		60 x 6.0 mm		
		Diameter 125 mm, wall thickness 3.9-9.0 mm**		60 x 9.0 mm	60	60
		Diameter 140 mm, wall thickness 4.4-11.4 mm**		60 x 11.5 mm		
		Diameter 160 mm, wall thickness 4.9-14.6 mm**		60 x 15.0 mm		

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Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)	
					E	EI
Gypsum board/ Masonry/ Concrete	100	Wavin SiTech + PP-M B according to EN 13501-1				
		32-40 mm diameter/ 1.8 mm wall thickness*	Both Sides	50 x 3.0 mm	120	120
		50 mm diameter/ 1.8 mm wall thickness *		50 x 3.2 mm		
		75 mm diameter/ 1.8-2.5 mm wall thickness*		50 x 4.2 mm	120	60
		90 mm diameter/ 1.8-2.9 mm wall thickness*		50 x 5.0 mm		
		110 mm diameter/ 1.8-3.4 mm wall thickness *		50 x 6.0 mm		
		Aquatherm Green SDR9 MF PP-RP according to ISO 21003				
		32 mm diameter/3.0-5.6 mm wall thickness**	Both Sides	30 x 3.0 mm	120	120
		40 mm diameter/3.0-5.6 mm wall thickness**		50 x 3.0 mm		
		50 mm diameter/3.0-5.6 mm wall thickness**		50 x 3.2 mm	120	60
		63 diameter/3.6-7.0 mm wall thickness**		50 x 3.6 mm		
		75 diameter/4.1-8.4 mm wall thickness**		50 x 4.2 mm		
		90 diameter/4.7-10.1 mm wall thickness**		50 x 5.0 mm		
		110 diameter/5.6-12.3 mm wall thickness**		50 x 6.0 mm		
		Geberit Silent PP according to DIN 4102				
		32-50 mm diameter/ 1.8 mm wall thickness*	Both Sides	50 x 3.0 mm	120	120
		75 mm diameter/1.8-2.5 mm wall thickness*		50 x 4.2 mm	120	60
		90 mm diameter/1.8-2.9 mm wall thickness*		50 x 5.0 mm		
		110 mm diameter/1.8-3.4 mm wall thickness*		50 x 6.0 mm		
		Polo-Kal NG Poloplast PP-MV according to DIN 4102				
		32-40 mm diameter/1.8-2.0 mm wall thickness*	Both Sides	50 x 3.0 mm	120	120
		50 mm diameter/1.8-2.0 mm wall thickness*		50 x 3.2 mm		
		75 mm diameter/1.9-2.6 mm wall thickness*		50 x 4.2 mm	120	90
		90 mm diameter/1.9-2.9 mm wall thickness*		50 x 5.0 mm		
		110 mm diameter/2.0-3.4 wall thickness*		50 x 6.0 mm		
		Diameter 125 mm, wall thickness 3.9 mm*		60 x 9.0 mm	120	120
		Diameter 160 mm, wall thickness 4.9 mm*		60 x 15 mm	120	120
		Rehau Raupiano Plus PP-DD according to DIN 4102				
		40 mm diameter/1.8 mm wall thickness*	Both Sides	50 x 3.0 mm	120	90
		50 mm diameter/1.8 mm wall thickness*		50 x 3.2 mm		
		75 mm diameter/1.8-2.2 mm wall thickness*		50 x 4.2 mm	120	60
		90 mm diameter/1.8-2.4 mm wall thickness*		50 x 5.0 mm		
		110 mm diameter/1.8-2.7 mm wall thickness*		50 x 6.0 mm		
		Diameter 125 mm, wall thickness 3.1 mm*		60 x 9.0 mm	120	120
		Diameter 160 mm, wall thickness 3.9 mm*		60 x 15.0 mm		

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Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)	
					E	EI
Gypsum board/ Masonry/ Concrete	100	BluePower Multilayer pipe – TR02-PP according to EN 1451-1				
		32-40 mm diameter/1.8 mm wall thickness**	Both Sides	50 x 3.0 mm	120	90
		50 mm diameter/1.8 mm wall thickness**		50 x 3.2 mm		
		75 mm diameter/1.8-2.5 mm wall thickness*		50 x 4.2 mm		
		90 mm diameter/1.8-2.9 mm wall thickness*		50 x 5.0 mm	120	60
		110 mm diameter/1.8-3.4 mm wall thickness*		50 x 6.0 mm		
		125 mm diameter/2.3-3.8 mm wall thickness*		60 x 9.0 mm	60	60
		160 mm diameter/3.4-4.9 mm wall thickness*		60 x 15.0 mm	90	90

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Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)	
					E	EI
Gypsum board/ Masonry/ Concrete	120	PVC-U pipe according to EN 1329-1, EN 1452-1 and EN 1453-1 and PVC-C according to EN 1566-1				
		Diameter 32-50 mm, wall thickness 2.4-3.7 mm	Both Sides	50 x 3.0 mm	120	120
		Diameter 55 mm, wall thickness 2.4-3.9 mm		50 x 3.2 mm		
		Diameter 63 mm, wall thickness 2.5-4.3 mm		50 x 3.6 mm		
		Diameter 75 mm, wall thickness 2.5-4.9 mm		50 x 4.2 mm		
		Diameter 82 mm, wall thickness 2.6-5.2 mm		50 x 4.6 mm		
		Diameter 90 mm, wall thickness 2.6-5.6 mm		50 x 5.0 mm		
		Diameter 110 mm, wall thickness 2.7-6.6 mm		50 x 6.0 mm		
		Diameter 125 mm, wall thickness 3.1-7.5 mm		60 x 8.8 mm		
		Diameter 140 mm, wall thickness 3.5-8.4 mm		60 x 11.5 mm	120	120
		Diameter 160 mm, wall thickness 4.0-9.5 mm		60 x 15.0 mm		
		Diameter 50 mm, wall thickness 2.4 mm #		60 x 15.0 mm	90	90
		PE pipe according to EN 1519-1, EN 12201-2 and EN 12666-1, ABS according to EN 1455-1 and pipes made from SAN+PVC according to EN 1565-1				
		Diameter 32-50 mm, wall thickness 3.0-4.6 mm	Both Sides	50 x 3.0 mm	120	120
		Diameter 55 mm, wall thickness 3.1-5.0 mm		50 x 3.2 mm	120	90
		Diameter 63 mm, wall thickness 3.1-5.7 mm		50 x 3.6 mm		
		Diameter 75 mm, wall thickness 3.2-6.8 mm		50 x 4.2 mm		
		Diameter 82 mm, wall thickness 3.2-7.5 mm		50 x 4.6 mm		
		Diameter 90 mm, wall thickness 3.3-8.2 mm		50 x 5.0 mm		
		Diameter 110 mm, wall thickness 3.4-10.0 mm		50 x 6.0 mm		
		Diameter 110 mm, wall thickness 3.4 mm		50 x 6.0 mm	120	120
		Diameter 125 mm, wall thickness 3.9-9.8 mm		60 x 8.8 mm	90	90
		Diameter 140 mm, wall thickness 4.4-9.7 mm		60 x 11.5 mm		
		Diameter 160 mm, wall thickness 4.9-9.5 mm		60 x 15.0 mm	120	120
		Diameter 160 mm, wall thickness 9.5 mm		60 x 15.0 mm		
		PP pipe according to DIN 8077/8078				
		Diameter 32-50 mm, wall thickness 2.9-4.6 mm	Both Sides	50 x 3.0 mm	120	120
		Diameter 55 mm, wall thickness 2.9-5.0 mm		50 x 3.2 mm	120	90
		Diameter 63 mm, wall thickness 2.9-5.7 mm		50 x 3.6 mm		
		Diameter 75 mm, wall thickness 2.8-6.8 mm		50 x 4.2 mm		
		Diameter 82 mm, wall thickness 2.8-7.5 mm		50 x 4.6 mm		
		Diameter 90 mm, wall thickness 2.8-8.2 mm		50 x 5.0 mm		
		Diameter 110 mm, wall thickness 2.7-10 mm		50 x 6.0 mm		
		Diameter 125 mm, wall thickness 3.3-11.3 mm		60 x 8.8 mm	120	90
		Diameter 140 mm, wall thickness 4.0-12.8 mm		60 x 11.5 mm		
		Diameter 160 mm, wall thickness 4.9-14.6 mm			60 x 15.0 mm	120

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#Pipe fitted at 45° to the face of the partition in a horizontal plane



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Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar	Collar Inlay	Fire Resistance (mins.)	
						E	EI
Gypsum board/ Masonry/ Concrete	120	Cables up to 21 mm Ø, in partial or fully filled tied bundles up to 110 mm Ø (Collar internal diameter to match cable bundle size)	Both Sides	Up to 110 mm collar at 30 mm height	Between 3.0 and 6.0 mm	120	60
		Cables up to 80 mm Ø, in partial or fully filled tied bundles up to 160 mm Ø (Collar internal diameter to match cable bundle size)		Up to 110 mm collar at 50 mm height, 125-160 mm at 60 mm height	Between 3.0 and 15.0 mm	120	60
		None (blank). Hole behind collar to be fitted with minimum 25 mm thick stone mineral wool insulation at minimum 33 kg/m³.		Up to 110 mm collar at 30 mm height	Between 3.0 and 6.0 mm	120	60
		None (blank). Hole behind collar to be fitted with minimum 25 mm thick stone mineral wool insulation at minimum 33 kg/m³.		160 mm collar at 60 mm height	15.0 mm	120	120
		Uponor Aqua PEX pipe in pipe system					
		Diameter up to 25 mm pipes, wall thickness 0.6 mm, in bundles up to 55 mm	Both Sides	55 mm collar at 30 mm height	3.2 mm	120	90



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Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar	Service Insulation	Fire Resistance (mins.)	
						E	EI
Gypsum board/ Masonry/ Concrete	120	Copper pipe or mild steel					
		Diameter 54 mm, wall thickness 1.2 mm	Both Sides	Ø 110 x 50 x 6.0 mm	19 mm thick Elastomeric insulation minimum class B-s3,d0	120	90
		Diameter 54 mm, wall thickness 1.2 mm		Ø 110 x 50 x 6.0 mm	25 mm thick Phenolic Foam insulation	120	60
		Diameter 54 mm, wall thickness 1.2 mm		Ø 110 x 50 x 6.0 mm	20 mm thick PE foam insulation	120	90

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PILOSTOP COLLAR: Service Penetration Seals Comprising 1x 50 mm PILOSTOP FIRESEAL PANEL 2-S in Drywalls and Masonry Walls - Maximum aperture size 1200 mm x 600 mm						
Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)	
					E	EI
Gypsum board/ Masonry/ Concrete	120	PVC-U pipe according to EN 1329-1, EN 1452-1 and EN 1453-1 and PVC-C according to EN 1566-1				
		32-50 mm diameter / 1.9-3.7 mm wall thickness*	Both Sides	50 x 3.0 mm	120	60
		55 mm, / 1.9-4.0 mm wall thickness*		50 x 3.2 mm	90	60
		63 mm, / 2.0-4.4 mm wall thickness*		50 x 3.6 mm		
		75 mm, / 2.2-4.9 mm wall thickness*		50 x 4.2 mm		
		82 mm, / 2.3-5.3 mm wall thickness*		50 x 4.6 mm		
		90 mm, / 2.4-5.7 mm wall thickness*		50 x 5.0 mm		
		110 mm diameter / 2.7-6.6 mm wall thickness*		50 x 6.0 mm		
		PE pipe according to EN 1519-1, EN 12201-2 and EN 12666-1, ABS according to EN 1455-1 and pipes made from SAN+PVC according to EN 1565-1				
		32-50 mm diameter / 3.0-4.6 mm wall thickness*	Both Sides	50 x 3.0 mm	120	60
		55 mm, / 3.0-5.2 mm wall thickness**		50 x 3.2 mm	90	60
		63 mm, / 3.0-5.9 mm wall thickness**		50 x 3.6 mm		
		75 mm, / 3.1-6.9 mm wall thickness**		50 x 4.2 mm		
		82 mm, / 3.1-7.6 mm wall thickness**		50 x 4.6 mm		
		90 mm, / 3.2-8.3 mm wall thickness**		50 x 5.0 mm		
		110 mm, / 3.4-10.0 mm wall thickness**		50 x 6.0 mm		

All pipe classifications marked “*” are pipe end configuration U/C and C/C - U=Uncapped, C=Capped
 All pipe classifications marked “**” are pipe end configuration C/C only - C=Capped



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PILOSTOP COLLAR: Service Penetration Seals in Masonry Walls						
Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)	
					E	EI
Masonry/ Concrete	150	PVC-U pipe according to EN 1329-1, EN 1452-1 and EN 1453-1 and PVC-C according to EN 1566-1				
		Diameter 32 mm, wall thickness 2.0-3.7 mm**	Both Sides	50 x 3.0 mm	240	180
		Diameter 40 mm, wall thickness 2.0-3.7 mm**				
		Diameter 50 mm, wall thickness 2.0-3.7 mm**				
		Diameter 55 mm, wall thickness 2.1-3.9 mm**		50 x 3.2 mm	180	180
		Diameter 63 mm, wall thickness 2.2-4.3 mm**		50 x 3.6 mm		
		Diameter 75 mm, wall thickness 2.3-4.9 mm**		50 x 4.2 mm		
		Diameter 82 mm, wall thickness 2.4-5.2 mm**		50 x 4.6 mm		
		Diameter 90 mm, wall thickness 2.5-5.6 mm**		50 x 5.0 mm		
		Diameter 110 mm, wall thickness 2.7-6.6 mm**		50 x 6.0 mm		
		Diameter 125 mm, wall thickness 3.1-7.5 mm**		60 x 8.8 mm	240	240
		Diameter 140 mm, wall thickness 3.5-8.4 mm**		60 x 11.5 mm		
		Diameter 160 mm, wall thickness 4.0-9.5 mm**		60 x 15.0 mm		
		Diameter 315 mm, wall thickness 9.2 mm~		75 x 18 mm	120	120
		PE pipe according to EN 1519-1, EN 12201-2 and EN 12666-1, ABS according to EN 1455-1 and pipes made from SAN+PVC according to EN 1565-1				
		Diameter 32 mm, wall thickness 3.0-4.6 mm**	Both Sides	50 x 3.0 mm	240	240
		Diameter 40 mm, wall thickness 3.0-4.6 mm**				
		Diameter 50 mm, wall thickness 3.0-4.6 mm**				
		Diameter 55 mm, wall thickness 3.1-4.5 mm**		50 x 3.2 mm	240	180
		Diameter 63 mm, wall thickness 3.1-4.3 mm**		50 x 3.6 mm		
		Diameter 75 mm, wall thickness 3.2-4.1 mm**		50 x 4.2 mm		
		Diameter 82 mm, wall thickness 3.3-3.9 mm**		50 x 4.6 mm		
		Diameter 90 mm, wall thickness 3.3-3.8 mm**		50 x 5.0 mm		
		Diameter 110 mm, wall thickness 3.4 mm**		50 x 6.0 mm		
		Diameter 125 mm, wall thickness 3.9-5.2 mm**		60 x 9.0 mm	180	180
		Diameter 140 mm, wall thickness 4.3-7.0 mm**		60 x 11.5 mm		
		Diameter 160 mm, wall thickness 4.9-9.5 mm**		60 x 15.0 mm		
		Diameter 200 mm, wall thickness 18.2 mm~		75 x 10.8 mm	60	60
		Diameter 250 mm, wall thickness 22.7 mm~		75 x 12.6 mm	120	90

All pipe classifications marked '**' are pipe end configuration U/C and C/C - U=Uncapped, C=Capped

All pipe classifications marked '**' are pipe end configuration U/U, C/U, U/C and C/C - U=Uncapped, C=Capped

All pipe classifications marked '~' are pipe end configuration C/C only - C=Capped



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PILOSTOP COLLAR: Service Penetration Seals in Masonry Walls						
Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)	
					E	EI
Masonry/ Concrete	150	PP pipe according to EN 1451-1				
		Diameter 32 mm, wall thickness 1.6-5.5 mm*	Both Sides	30 x 3.0 mm	240	240
		Diameter 40 mm, wall thickness 1.6-5.5 mm*				
		Diameter 50 mm, wall thickness 1.6-5.5 mm*		50 x 3.2 mm		
		Diameter 55 mm, wall thickness 1.7-5.9 mm*		50 x 3.6 mm		
		Diameter 63 mm, wall thickness 1.8-6.5 mm*		50 x 4.2 mm		
		Diameter 75 mm, wall thickness 2.1-7.3 mm*		50 x 4.6 mm		
		Diameter 82 mm, wall thickness 2.2-7.9 mm*		50 x 5.0 mm		
		Diameter 90 mm, wall thickness 2.3-8.5 mm*		50 x 6.0 mm		
		Diameter 110 mm, wall thickness 2.7-10.0 mm*		60 x 9.0 mm		
		Diameter 125 mm, wall thickness 3.3-11.4 mm*		60 x 11.5 mm		
		Diameter 140 mm, wall thickness 4.0-12.8 mm*		60 x 15.0 mm		
		Diameter 160 mm, wall thickness 4.9-14.6 mm*				
		Diameter 32 mm, wall thickness 1.6-5.5 mm**	Both Sides	30 x 3.0 mm	240	240
		Diameter 40 mm, wall thickness 1.6-5.5 mm**				
		Diameter 50 mm, wall thickness 1.6-5.5 mm**		50 x 3.0 mm	240	240
		Diameter 50 mm, wall thickness 1.6-5.5 mm**		50 x 3.2 mm	240	60
		Diameter 55 mm, wall thickness 1.7-5.9 mm**		50 x 3.6 mm		
		Diameter 63 mm, wall thickness 1.8-6.5 mm**		50 x 4.2 mm		
		Diameter 75 mm, wall thickness 2.1-7.3 mm**		50 x 4.6 mm		
		Diameter 82 mm, wall thickness 2.2-7.9 mm**		50 x 5.0 mm		
		Diameter 90 mm, wall thickness 2.3-8.5 mm**		50 x 6.0 mm		
		Diameter 110 mm, wall thickness 2.7-10.0 mm**		50 x 3.2 mm	240	90
		Diameter 55 mm, wall thickness 1.7-5.6 mm**		50 x 3.6 mm		
		Diameter 63 mm, wall thickness 1.8-5.7 mm**		50 x 4.2 mm		
		Diameter 75 mm, wall thickness 2.0-5.9 mm**		50 x 4.6 mm		
		Diameter 82 mm, wall thickness 2.1-6.0 mm**		50 x 5.0 mm		
		Diameter 90 mm, wall thickness 2.3-6.1 mm**		50 x 6.0 mm		
		Diameter 110 mm, wall thickness 2.7-6.3 mm**		60 x 6.0 mm	240	60
		Diameter 110 mm, wall thickness 2.7-10.0 mm**		60 x 8.8 mm		
		Diameter 125 mm, wall thickness 33-11.4 mm**		60 x 11.5 mm		
		Diameter 140 mm, wall thickness 4.0-12.8 mm**		60 x 15.0 mm		
		Diameter 160 mm, wall thickness 4.9-14.6 mm**			240	180

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All pipe classifications marked “***” are pipe end configuration U/U, C/U, U/C and C/C - U=Uncapped, C=Capped



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PILOSTOP COLLAR: Service Penetration Seals in Floors						
Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)	
					E	EI
Concrete	150	PVC-U pipe according to EN 1329-1, EN 1452-1 and EN 1453-1 and PVC-C according to EN 1566-1				
		Diameter 32 mm, wall thickness 1.9-3.7 mm**	Fitted to soffit of floor	30 x 3.0 mm	90	60
		Diameter 40 mm, wall thickness 1.9-3.7 mm**				
		Diameter 50 mm, wall thickness 2.0-3.7 mm**				
		Diameter 55 mm, wall thickness 2.1-3.9 mm**		30 x 3.2 mm	60	60
		Diameter 63 mm, wall thickness2.2-4.3 mm**		30 x 3.6 mm		
		Diameter 75 mm, wall thickness 2.5-4.9 mm**		30 x 4.2 mm		
		Diameter 82 mm, wall thickness 2.6-5.2 mm**		30 x 4.6 mm		
		Diameter 90 mm, wall thickness 2.8-5.6 mm**		30 x 5.0 mm		
		Diameter 110 mm, wall thickness 3.2-6.6 mm**		30 x 6.0 mm		
		Diameter 32 mm, wall thickness 2.0-3.7 mm*		50 x 3.0 mm	120	120
		Diameter 40 mm, wall thickness 2.0-3.7 mm*				
		Diameter 50 mm, wall thickness 2.0-3.7 mm*				
		Diameter 55 mm, wall thickness 2.4-3.9 mm*	50 x 3.2 mm			
		Diameter 63 mm, wall thickness 3.0-4.3 mm*	50 x 3.6 mm			
		Diameter 75 mm, wall thickness 3.8-4.8 mm*	50 x 4.2 mm			
		Diameter 82 mm, wall thickness 4.3-5.1 mm*	50 x 4.6 mm			
		Diameter 90 mm, wall thickness 4.9-5.4 mm*	50 x 5.0 mm			
		Diameter 110 mm, wall thickness 6.3 mm*	50 x 6.0 mm			
		Diameter 50 mm, wall thickness 2.0-3.7 mm*	50 x 3.0 mm	120	90	
		Diameter 55 mm, wall thickness 2.1-4.0 mm*	50 x 3.2 mm			
		Diameter 63 mm, wall thickness 2.2-4.4 mm*	50 x 3.6 mm			
		Diameter 75 mm, wall thickness 2.4-5.0 mm*	50 x 4.2 mm			
		Diameter 82 mm, wall thickness 2.4-5.4 mm*	50 x 4.6 mm			
		Diameter 90 mm, wall thickness 2.5-5.8 mm*	50 x 5.0 mm			
		Diameter 110 mm, wall thickness 2.7-6.9 mm*	50 x 6.0 mm			
		Diameter 125 mm, wall thickness 2.9-7.6 mm*	50 x 8.8 mm			
		Diameter 140 mm, wall thickness 3.0-8.4 mm*	50 x 11.5 mm			
		Diameter 160 mm, wall thickness 3.2-9.5 mm*	50 x 15.0 mm			
		Diameter 160 mm, wall thickness 3.2-9.5 mm*	50 x 15.0 mm	180	90	
		Diameter 110 mm, wall thickness 6.3 mm*	60 x 6.0 mm	120	120	
		Diameter 125 mm, wall thickness 5.6-7.3 mm*	60 x 9.0 mm			
		Diameter 140 mm, wall thickness 5.0-8.2 mm*	60 x 11.5 mm			
		Diameter 160 mm, wall thickness 4.0-9.5 mm*	60 x 15.0 mm			
		Diameter 110 mm, wall thickness 2.7-6.3 mm*	60 x 6.0 mm	60	60	
		Diameter 125 mm, wall thickness 2.8-7.2 mm*	60 x 8.7 mm			
		Diameter 140 mm, wall thickness 3.0-8.2 mm*	60 x 11.4 mm			
		Diameter 160 mm, wall thickness 3.2-9.5 mm*	60 x 15.0 mm			

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 All pipe classifications marked '**' are pipe end configuration U/U, C/U, U/C and C/C - U=Uncapped, C=Capped



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PILOSTOP COLLAR: Service Penetration Seals in Floors						
Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)	
					E	EI
Concrete	150	PVC-U pipe according to EN 1329-1, EN 1452-1 and EN 1453-1 and PVC-C according to EN 1566-1				
		Diameter 110 mm, wall thickness 3.2-6.6 mm**	Fitted to soffit of floor	60 x 6.0 mm	60	60
		Diameter 125 mm, wall thickness 3.2-7.4 mm**		60 x 8.7 mm		
		Diameter 140 mm, wall thickness 3.2, 8.3 mm**		60 x 11.4 mm		
		Diameter 160 mm, wall thickness 3.2-9.5 mm**		60 x 15.0 mm		
		Diameter 110 mm, wall thickness 2.7-6.6 mm~		50 x 6.0 mm	60	60
		Diameter 125 mm, wall thickness 2.8-7.4 mm~		60 x 8.7 mm		
		Diameter 140 mm, wall thickness 3.0-8.3 mm~		60 x 11.4 mm		
		Diameter 160 mm, wall thickness 3.2-9.5 mm~		60 x 15.0 mm		
		PE pipe according to EN 1519-1, EN 12201-2 and EN 12666-1, ABS according to EN 1455-1 and pipes made from SAN+PVC according to EN 1565-1				
		Diameter 32 mm, wall thickness 3.0-4.6 mm**	Fitted to soffit of floor	30 x 3.0 mm	60	60
		Diameter 40 mm, wall thickness 3.0-4.6 mm**				
		Diameter 50 mm, wall thickness 3.0-4.6 mm**				
		Diameter 110 mm, wall thickness 10.0 mm*				
		Diameter 55 mm, wall thickness 3.0-5.2 mm**		30 x 3.2 mm	60	60
		Diameter 63 mm, wall thickness 3.0-5.9 mm*		30 x 3.6 mm	60	60
		Diameter 75 mm, wall thickness 3.1-6.9 mm*		30 x 4.2 mm		
		Diameter 82 mm, wall thickness 3.1-7.6 mm*		30 x 4.6 mm		
		Diameter 90 mm, wall thickness 3.2-8.3 mm*		30 x 5.0 mm		
		Diameter 110 mm, wall thickness 3.4-10.0 mm*		30 x 6.0 mm	240	240
		Diameter 32-40 mm, wall thickness 3.0-4.6 mm*		50 x 3.0 mm		
		Diameter 50 mm, wall thickness 3.0-4.6 mm*		50 x 3.2 mm	240	240
		Diameter 32-40 mm, wall thickness 3.0 mm**		50 x 3.0 mm		
		Diameter 50 mm, wall thickness 3.0 mm**		50 x 3.2 mm	60	60
		Diameter 50 mm, wall thickness 3.0-4.6 mm**		50 x 3.0 mm		
		Diameter 55 mm, wall thickness 3.1-5.1 mm**		50 x 3.2 mm		
		Diameter 63 mm, wall thickness 3.1-5.8 mm**		50 x 3.6 mm		
		Diameter 75 mm, wall thickness 3.2-6.9 mm**		50 x 4.2 mm		
		Diameter 82 mm, wall thickness 3.3-7.5 mm**		50 x 4.6 mm		
		Diameter 90 mm, wall thickness 3.3-8.2 mm**		50 x 5.0 mm		
		Diameter 110 mm, wall thickness 3.4-10.0 mm**		50 x 6.0 mm	60	60
		Diameter 110 mm, wall thickness 3.4-10.0 mm**		60 x 6.0 mm		
		Diameter 125 mm, wall thickness 3.9-11.3 mm**		60 x 8.8 mm		
		Diameter 140 mm, wall thickness 4.3-12.7 mm**		60 x 11.5 mm		
		Diameter 160 mm, wall thickness 4.9-14.6 mm**		60 x 15.0 mm		

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 All pipe classifications marked ‘***’ are pipe end configuration U/U, C/U, U/C and C/C - U=Uncapped, C=Capped
 All pipe classifications marked ‘~’ are pipe end configuration C/U, U/C and C/C - U=Uncapped, C=Capped



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PILOSTOP COLLAR: Service Penetration Seals in Floors									
Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)				
					E	EI			
Concrete	150	PE pipe according to EN 1519-1, EN 12201-2 and EN 12666-1, ABS according to EN 1455-1 and pipes made from SAN+PVC according to EN 1565-1							
		Diameter 32 mm, wall thickness 3.0-4.6 mm*	Fitted to soffit of floor	50 x 3.0 mm	120	120			
		Diameter 40 mm, wall thickness 3.0-4.6 mm*							
		Diameter 50 mm, wall thickness 3.0-4.6 mm*							
		Diameter 55 mm, wall thickness 3.1-5.0 mm*					50 x 3.2 mm		
		Diameter 63 mm, wall thickness 3.1-5.8 mm*					50 x 3.6 mm		
		Diameter 75 mm, wall thickness 3.2-6.9 mm*		50 x 4.2 mm					
		Diameter 82 mm, wall thickness 3.3-7.5 mm*		50 x 4.6 mm					
		Diameter 90 mm, wall thickness 3.3-8.2 mm*		50 x 5.0 mm					
		Diameter 110 mm, wall thickness 3.4-10.0 mm*		50 x 6.0 mm					
		Diameter 125 mm, wall thickness 3.9-11.3 mm*		50 x 8.8 mm					
		Diameter 140 mm, wall thickness 4.4-12.7 mm*		50 x 11.5 mm					
		Diameter 160 mm, wall thickness 4.9-14.7 mm*		50 x 15.0 mm			180	120	
		PP pipe according to EN 1451-1							
		Diameter 32 mm, wall thickness 1.8-4.6 mm**	Fitted to soffit of floor	30 x 3.0 mm	120	120			
		Diameter 40 mm, wall thickness 1.8-4.6 mm**							
		Diameter 50 mm, wall thickness 1.8-4.6 mm**							
		Diameter 50 mm, wall thickness 2.9 mm**					50 x 3.2 mm	240	240
		Diameter 50 mm, wall thickness 1.8-4.6 mm**					50 x 3.0 mm	120	120
		Diameter 55 mm, wall thickness 1.9-4.8 mm**					50 x 3.2 mm	60	60
		Diameter 63 mm, wall thickness 2.0-5.0 mm**					50 x 3.6 mm		
		Diameter 75 mm, wall thickness 2.2-5.4 mm**					50 x 4.2 mm		
		Diameter 82 mm, wall thickness 2.3-5.6 mm**					50 x 4.6 mm		
		Diameter 90 mm, wall thickness 2.4-5.9 mm**					50 x 5.0 mm		
		Diameter 110 mm, wall thickness 2.7-6.6 mm**		50 x 6.0 mm					
		Diameter 55 mm, wall thickness 1.9-4.8 mm*		50 x 3.2 mm	120	120			
		Diameter 63 mm, wall thickness 2.0-5.0 mm*		50 x 3.6 mm					
		Diameter 75 mm, wall thickness 2.2-5.4 mm*		50 x 4.2 mm					
		Diameter 82 mm, wall thickness 2.3-5.6 mm*		50 x 4.6 mm					
		Diameter 90 mm, wall thickness 2.4-5.9 mm*		50 x 5.0 mm					
		Diameter 110 mm, wall thickness 2.7-6.6 mm*		50 x 6.0 mm					

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PILOSTOP COLLAR: Service Penetration Seals in Floors						
Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)	
					E	EI
Concrete	150	PP pipe according to EN 1451-1				
		Diameter 50 mm, wall thickness 1.8-4.6 mm*	Fitted to soffit of floor	30 x 3.0 mm	60	60
		Diameter 55 mm, wall thickness 1.9-5.1 mm*		50 x 3.2 mm		
		Diameter 63 mm, wall thickness 2.0-5.8 mm*		50 x 3.6 mm		
		Diameter 75 mm, wall thickness 2.2-6.9 mm*		50 x 4.2 mm		
		Diameter 82 mm, wall thickness 2.3-7.5 mm*		50 x 4.6 mm		
		Diameter 90 mm, wall thickness 2.5-8.2 mm*		50 x 5.0 mm		
		Diameter 110 mm, wall thickness 2.7-10.1 mm*		50 x 6.0 mm		
		Diameter 125 mm, wall thickness 4.7-11.4 mm*		50 x 8.8 mm		
		Diameter 140 mm, wall thickness 6.8-12.8 mm*		50 x 11.5 mm		
		Diameter 160 mm, wall thickness 9.5-14.6 mm*		50 x 15.0 mm		
		Diameter 110 mm, wall thickness 2.7-6.6 mm*		60 x 6.0 mm	120	120
		Diameter 125 mm, wall thickness 3.4-8.9 mm*		60 x 8.8 mm		
		Diameter 140 mm, wall thickness 4.1-11.2 mm*		60 x 11.5 mm		
		Diameter 160 mm, wall thickness 4.9-14.6 mm*		60 x 15.0 mm	180	180
		Diameter 110 mm, wall thickness 2.7-6.6 mm**		50 x 6.0 mm	60	60
		Diameter 125 mm, wall thickness 3.6-8.9 mm**		60 x 8.8 mm		
		Diameter 140 mm, wall thickness 4.7-11.3 mm**		60 x 11.5 mm		
		Diameter 160 mm, wall thickness 6.2-14.7 mm**		60 x 15.0 mm		
		Diameter 160 mm, wall thickness 6.2 mm**		60 x 15.0 mm	90	90
		Wavin SiTech + PP-M B according to EN 13501-1				
		32-40 mm diameter/ 1.8 mm wall thickness**	Fitted to soffit of floor	50 x 3.0 mm	240	240
		50 mm diameter/ 1.8 mm wall thickness**		50 x 3.2 mm		
		75 mm diameter/ 1.8-2.5 mm wall thickness~		50 x 4.2 mm	180	180
		90 mm diameter/ 1.8-2.9 mm wall thickness~		50 x 5.0 mm		
		110 mm diameter/ 1.8-3.4 mm wall thickness~		50 x 6.0 mm		
		Aquatherm Green SDR9 MF PP-RP according to ISO 21003				
		32 mm diameter/3.6-5.6 mm wall thickness^	Fitted to soffit of floor	30 x 3.0 mm	240	240
		40 mm diameter/3.6-5.6 mm wall thickness^		50 x 3.0 mm		
		50 mm diameter/3.6-5.6 mm wall thickness^		50 x 3.2 mm		
		63 diameter/5.6-12.3 mm wall thickness^		50 x 3.6 mm	120	120
		75 diameter/4.4-8.4 mm wall thickness^		50 x 4.2 mm		
		90 diameter/4.9-10.0 mm wall thickness^		50 x 5.0 mm		
		110 diameter/5.6-12.3 mm wall thickness^		50 x 6.0 mm		

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All pipe classifications marked ‘***’ are pipe end configuration U/U, C/U, U/C and C/C - U=Uncapped, C=Capped
All pipe classifications marked ‘~’ are pipe end configuration C/U, U/C and C/C - U=Uncapped, C=Capped
All pipe classifications marked ‘^’ are pipe end configuration C/C - U=Uncapped, C=Capped



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PILOSTOP COLLAR: Service Penetration Seals in Floors						
Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)	
					E	EI
Concrete	150	Geberit Silent PP according to DIN 4102				
		32-40 mm diameter/ 1.8 mm wall thickness**	Fitted to soffit of floor	50 x 3.0 mm	240	240
		50 mm diameter/ 1.8 mm wall thickness**		50 x 3.2 mm		
		75 mm diameter/1.8-2.4 mm wall thickness~		50 x 4.2 mm	180	180
		90 mm diameter/1.8-2.8 mm wall thickness~		50 x 5.0 mm		
		110 mm diameter/1.8-3.4 mm wall thickness~		50 x 6.0 mm		
		Polo-Kal NG Poloplast PP-MV according to DIN 4102				
		32-40 mm diameter/1.8-2.0 mm wall thickness**	Fitted to soffit of floor	50 x 3.0 mm	240	240
		50 mm diameter/1.8-2.0 mm wall thickness**		50 x 3.2 mm		
		75 mm diameter/1.9-2.6 wall thickness~		50 x 4.2 mm	240	240
		90 mm diameter/2.0-2.9 wall thickness~		50 x 5.0 mm		
		110 mm diameter/2.0-3.4 wall thickness~		50 x 6.0 mm		
		Diameter 125 mm, wall thickness 3.9 mm*		60 x 9.0 mm	240	240
		Diameter 160 mm, wall thickness 4.9 mm~		60 x 15 mm	240	240
		Rehau Raupiano Plus PP-DD according to DIN 4102				
		40 mm diameter/1.8 wall thickness**	Fitted to soffit of floor	50 x 3.0 mm	240	240
		50 mm diameter/1.8 wall thickness**		50 x 3.2 mm		
		75 mm diameter/1.8-2.2 mm wall thickness~		50 x 4.2 mm	120	120
		90 mm diameter/1.8-2.4 mm wall thickness~		50 x 5.0 mm		
		110 mm diameter/1.8-2.7mm wall thickness~		50 x 6.0 mm		
		Diameter 125 mm, wall thickness 3.1 mm~		60 x 9.0 mm	180	180
		Diameter 160 mm, wall thickness 3.9 mm~		60 x 15.0 mm	240	240
		BluePower Multilayer pipe – TR02-PP according to EN 1451-1				
		32-40 mm diameter/1.8 mm wall thickness**	Fitted to soffit of floor	50 x 3.0 mm	180	180
		50 mm diameter/1.8 mm wall thickness**		50 x 3.2 mm		
		75 mm diameter/1.8-3.4 mm wall thickness~		50 x 4.2 mm	180	180
		90 mm diameter/1.8-3.4 mm wall thickness~		50 x 5.0 mm		
		110 mm diameter/1.8-3.4 mm wall thickness~		50 x 6.0 mm		
		125 mm diameter/3.4-4.9 mm wall thickness~		60 x 9.0 mm	240	240
		160 mm diameter/3.4-4.9 mm wall thickness~		60 x 15.0 mm		

All pipe classifications marked ‘**’ are pipe end configuration U/C and C/C - U=Uncapped, C=Capped

All pipe classifications marked ‘***’ are pipe end configuration U/U, C/U, U/C and C/C - U=Uncapped, C=Capped

All pipe classifications marked ‘~’ are pipe end configuration C/U, U/C and C/C - U=Uncapped, C=Capped



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PILOSTOP COLLAR: Service Penetration Seals in Floors						
Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)	
					E	EI
Concrete	150	PVC-U pipe according to EN 1329-1, EN 1452-1 and EN 1453-1 and PVC-C according to EN 1566-1				
		Diameter 32 mm, wall thickness 2.0-3.7 mm	Fitted to soffit of floor	50 x 3.0 mm	120	120
		Diameter 40 mm, wall thickness 2.0-3.7 mm				
		Diameter 50 mm, wall thickness 2.0-3.7 mm				
		Diameter 55 mm, wall thickness 2.1-3.9 mm		50 x 3.2 mm		
		Diameter 63 mm, wall thickness 2.2-4.3 mm		50 x 3.6 mm		
		Diameter 75 mm, wall thickness 2.3-4.8 mm		50 x 4.2 mm		
		Diameter 82 mm, wall thickness 2.4-5.1 mm		50 x 4.6 mm		
		Diameter 90 mm, wall thickness 2.5-5.4 mm		50 x 5.0 mm		
		Diameter 110 mm, wall thickness 2.7-6.3 mm		50 x 6.0 mm		
		Up to 200 mm diameter/ 4.9-11.9 mm wall thickness		60 x 18 mm	120	60
		Up to 250 mm diameter/ 6.1-11.9 mm wall thickness		75 x 24 mm	60	60
		Up to 315 mm diameter/ 7.7-12.1 mm wall thickness		75 x 30 mm		
		Up to 400 mm diameter/ 15.3 mm wall thickness		100 x 39 mm		
		PE pipe according to EN 1519-1, EN 12201-2 and EN 12666-1, ABS according to EN 1455-1 and pipes made from SAN+PVC according to EN 1565-1				
		Up to 200 mm diameter/ 6.2-18.2 mm wall thickness	Fitted to soffit of floor	60 x 18 mm	240	120
		Up to 250 mm diameter/ 11.5-18.4 mm wall thickness		75 x 24 mm	240	240
		Up to 315 mm diameter/ 18.7 mm wall thickness		75 x 30 mm		
		Up to 400 mm diameter/ 36.3 mm wall thickness		100 x 39 mm	90	90
		PP pipe according to EN 1451-1				
		Up to 200 mm diameter / 4.9-18.2 mm wall thickness	Fitted to soffit of floor	60 x 18 mm	120	120
		Up to 250 mm diameter / 15.1-22.7 mm wall thickness		75 x 24 mm	60	60
		Up to 315 mm diameter / 28.6 mm wall thickness		75 x 30 mm		
		Up to 400 mm diameter / 9.8-22.7 mm wall thickness		100 x 39 mm	30	30

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PILOSTOP COLLAR: Service Penetration Seals in Floors							
Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar	Service Insulation	Fire Resistance (mins.)	
						E	EI
Concrete	150	Copper pipe or mild steel					
		Diameter 54 mm, wall thickness 1.2 mm	Fitted to soffit of floor	Ø 110 x 50 x 6.0 mm	19 mm thick Elastomeric insulation minimum class B-s3,d0	240	60

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PILOSTOP COLLAR: Service Penetration Seals in Floors							
Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar	Fire Resistance (mins.)		
					E	EI	
Concrete	150	None (blank)	Fitted to soffit of floor	Ø 55 x 30 x 3.2 mm	240	60	
		None (blank)		Ø 160 x 60 x 15.0 mm	120	120	
		Cables up to 21 mm Ø, in bundles up to 55 mm Ø		Ø 55 x 30 x 3.2 mm	120	120	
		Cables up to 21 mm Ø, in bundles up to 100 mm Ø		Ø 110 x 50 x 6.0 mm	90	90	
		Cables up to 21 mm Ø, in bundles up to 160 mm Ø		Ø 160 x 60 x 15.0 mm	180	180	
		PVC-U pipe according to EN 1329-1, EN 1452-1 and EN 1453-1 and PVC-C according to EN 1566-1					
		Diameter 32 mm, wall thickness 1.9-3.7 mm	Fitted to top face of floor	50 x 3.0 mm	240	240	
		Diameter 40 mm, wall thickness 1.9-3.7 mm		50 x 3.0 mm			
		Diameter 50 mm, wall thickness 1.9-3.7 mm		50 x 3.2 mm	120	120	
		Diameter 55 mm, wall thickness 2.0-4.0 mm		50 x 3.2 mm			
		Diameter 63 mm, wall thickness 2.1-4.4 mm		50 x 3.6 mm			
		Diameter 75 mm, wall thickness 2.4-5.0 mm		50 x 4.2 mm			
		Diameter 82 mm, wall thickness 2.5-5.3 mm		50 x 4.6 mm			
		Diameter 90 mm, wall thickness 2.7-5.7 mm		50 x 5.0 mm			
		Diameter 110 mm, wall thickness 3.2-6.6 mm		50 x 6.0 mm			
		Diameter 125 mm, wall thickness 5.0-7.5 mm		60 x 8.8 mm	240	180	
		Diameter 140 mm, wall thickness 6.9-8.3 mm		60 x 11.5 mm			
		Diameter 160 mm, wall thickness 9.5 mm		60 x 15 mm			
		PE pipe according to EN 1519-1, EN 12201-2 and EN 12666-1, ABS according to EN 1455-1 and pipes made from SAN+PVC according to EN 1565-1					
		Diameter 32 mm, wall thickness 3.0-4.6 mm	Fitted to top face of floor	50 x 3.0 mm	240	240	
		Diameter 40 mm, wall thickness 3.0-4.6 mm		50 x 3.0 mm			
		Diameter 50 mm, wall thickness 3.0-4.6 mm		50 x 3.2 mm			
		Diameter 55 mm, wall thickness 3.0-5.1 mm		50 x 3.2 mm	240	60	
		Diameter 63 mm, wall thickness 3.0-5.8 mm		50 x 3.6 mm			
		Diameter 75 mm, wall thickness 3.1-6.9 mm		50 x 4.2 mm			
		Diameter 82 mm, wall thickness 3.2-7.5 mm		50 x 4.6 mm			
		Diameter 90 mm, wall thickness 3.2-8.2 mm		50 x 5.0 mm			
		Diameter 110 mm, wall thickness 3.4-10.0 mm		50 x 6.0 mm			
		Diameter 125 mm, wall thickness 5.2-9.9 mm		60 x 8.8 mm	60	60	
		Diameter 140 mm, wall thickness 7.0-9.7 mm		60 x 11.5 mm			
		Diameter 160 mm, wall thickness 9.5 mm		60 x 15 mm			

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PILOSTOP COLLAR: Service Penetration Seals in Floors						
Substrate	Minimum Wall Thickness (mm)	Penetrating Services	Seal Position	Collar Inlay	Fire Resistance (mins.)	
					E	EI
Concrete	150	PP pipe according to EN 1451-1				
		Diameter 32 mm, wall thickness 2.9-4.6 mm	Fitted to top face of floor	50 x 3.0 mm	240	180
		Diameter 40 mm, wall thickness 2.9-4.6 mm		50 x 3.0 mm		
		Diameter 50 mm, wall thickness 2.9-4.6 mm		50 x 3.2 mm		
		Diameter 55 mm, wall thickness 3.5-5.1 mm		50 x 3.2 mm	180	90
		Diameter 63 mm, wall thickness 4.4-5.8 mm		50 x 3.6 mm		
		Diameter 75 mm, wall thickness 5.8-6.9 mm		50 x 4.2 mm		
		Diameter 82 mm, wall thickness 6.6-7.5 mm		50 x 4.6 mm		
		Diameter 90 mm, wall thickness 7.5-8.2 mm		50 x 5.0 mm		
		Diameter 110 mm, wall thickness 10.0 mm		50 x 6.0 mm		
		Diameter 125 mm, wall thickness 11.3 mm		60 x 8.8 mm	240	60
		Diameter 140 mm, wall thickness 12.7 mm		60 x 11.5 mm		
		Diameter 160 mm, wall thickness 14.6 mm		60 x 15 mm		

All pipe classifications are pipe end configuration U/C and C/C - U=Uncapped, C=Capped



Appendix UL-EU Certificate

Certification Mark	UL-EU mark
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