

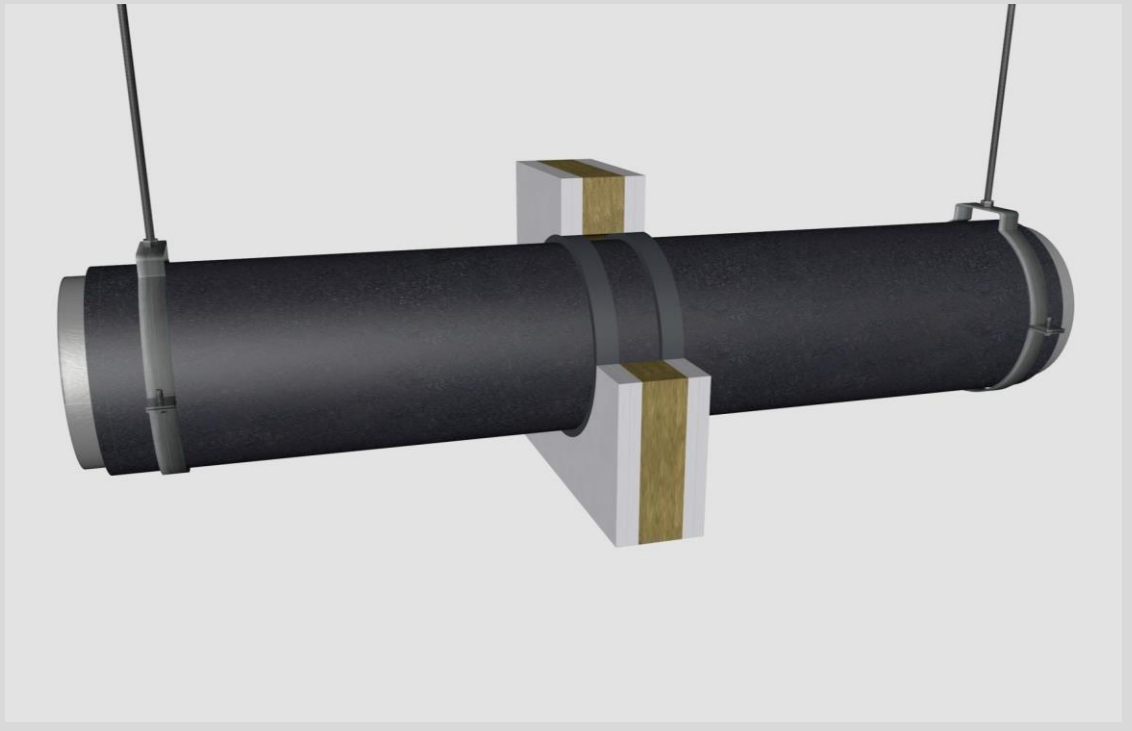
Notes:

- installation instructions in [TDS](#)
- apply joint seal in opening, flush with wall/floor on 2 sides
- other pipe $d\varnothing + s1$ (thickness) are allowed within range and same pipe material
- EI for flexible walls $\geq 100\text{mm}$ is also applicable for rigid walls $\geq 100\text{mm}$
- angle: perpendicular + all angles between 90° and 45°

principle detail

tested property
test method
service no.

fire resistance
EN 1366-3
19-3



steel pipes

Graphite sealant

service type ¹⁾ dØ (mm) s1 (mm)	pipe insulation min. 60 kg/m ³ eg Armaflex	EI	constructive element ²⁾	Firetect joint seal		application 1 or 2 sides	backing required	max. opening in construction	pipe end configuration	max. angle
				width	depth					
Ø15 1,0	synth. rubber 13mm	700 LS + LI + CS + CI	EI 120 flexible walls ≥ 100 mm	10 mm	25 mm	2 sides	-	61 mm	C/U + U/C + C/C	perpendicular + all angles between 90° and 45°
	25mm	700 LS + LI + CS + CI	EI 90 flexible walls ≥ 100 mm	10 mm	25 mm	2 sides	-	85 mm	C/U + U/C + C/C	
Ø22 1,1	synth. rubber 13mm	700 LS + LI + CS + CI	EI 60 flexible walls ≥ 100 mm	10 mm	25 mm	2 sides	-	600 x 1200 mm + 25%	C/U + U/C + C/C	
	13mm	700 LS + LI + CS + CI	EI 90 rigid walls ≥ 150 mm	10 mm	25 mm	2 sides	-	68 mm	C/U + U/C + C/C	
	13mm	700 LS + LI + CS + CI	EI 90 rigid floors ≥ 150 mm	10 mm	25 mm	2 sides	-	68 mm	C/U + U/C + C/C	
	13mm	700 LS + LI + CS + CI	EI 60 rigid floors ≥ 150 mm	10 mm	25 mm	2 sides	-	600 x 5000 mm	C/U + U/C + C/C	
Ø35 1,5	synth. rubber 13mm	700 LS + LI + CS + CI	EI 90 flexible walls ≥ 100 mm	10 mm	25 mm	2 sides	-	81 mm	C/U + U/C + C/C	
	25mm	700 LS + LI + CS + CI	EI 90 flexible walls ≥ 100 mm	6 mm	25 mm	2 sides	-	98 mm	C/U + U/C + C/C	
Ø42.2 3,25	synth. rubber 10mm	1000 LS + LI + CS + CI	EI 120 flexible walls ≥ 100 mm	10 mm	25 mm	2 sides	-	82 mm	C/U + U/C + C/C	
	10mm	1000 LS + LI + CS + CI	EI 240 rigid walls ≥ 150 mm	15 mm	25 mm	2 sides	-	102 mm	C/U + U/C + C/C	
	10mm	1000 LS + LI + CS + CI	EI 240 rigid floors ≥ 150 mm	15 mm	25 mm	2 sides	-	102 mm	C/U + U/C + C/C	
	13mm	700 LS + LI + CS + CI	EI 120 flexible walls ≥ 100 mm	10 mm	25 mm	2 sides	-	89 mm	C/U + U/C + C/C	
	13mm	750 LS + LI + CS + CI	EI 180 rigid walls ≥ 150 mm	15 mm	25 mm	2 sides	-	98 mm	C/U + U/C + C/C	
	13mm	750 LS + LI + CS + CI	EI 180 rigid floors ≥ 150 mm	15 mm	25 mm	2 sides	-	98 mm	C/U + U/C + C/C	
	25mm	700 LS + LI + CS + CI	EI 120 flexible walls ≥ 100 mm	10 mm	25 mm	2 sides	-	112 mm	C/U + U/C + C/C	
	25mm	750 LS + LI + CS + CI	EI 180 rigid walls ≥ 150 mm	15 mm	25 mm	2 sides	-	122 mm	C/U + U/C + C/C	
25mm	750 LS + LI + CS + CI	EI 180 rigid floors ≥ 150 mm	15 mm	25 mm	2 sides	-	122 mm	C/U + U/C + C/C		
Ø101.6 3,6	synth. rubber 13mm	1000 LS + LI + CS + CI	EI 60 flexible walls ≥ 100 mm	10 mm	25 mm	2 sides	-	600 x 1200 mm + 25%	C/U + U/C + C/C	
	13mm	1000 LS + LI + CS + CI	EI 90 rigid floors ≥ 150 mm	10 mm	25 mm	2 sides	-	148 mm	C/U + U/C + C/C	
	13mm	1000 LS + LI + CS + CI	EI 60 rigid floors ≥ 150 mm	10 mm	25 mm	2 sides	-	600 x 5000 mm	C/U + U/C + C/C	
max.	Ø219.1 14,2 synth. rubber 10mm	1000 LS + LI + CS + CI	EI 90 flexible walls ≥ 100 mm	10 mm	25 mm	2 sides	-	259 mm	C/U + U/C + C/C	
	10mm	1000 LS + LI + CS + CI	EI 90 rigid floors ≥ 150 mm	15 mm	25 mm	2 sides	-	269 mm	C/U + U/C + C/C	
	13mm	1000 LS + LI + CS + CI	EI 120 flexible walls ≥ 100 mm	10 mm	25 mm	2 sides	-	265 mm	C/U + U/C + C/C	
	13mm	750 LS + LI + CS + CI	EI 60 rigid floors ≥ 150 mm	15 mm	25 mm	2 sides	-	276 mm	C/U + U/C + C/C	
	25mm	1000 LS + LI + CS + CI	EI 60 flexible walls ≥ 100 mm	10 mm	25 mm	2 sides	-	600 x 1200 mm	C/U + U/C + C/C	
	25mm	750 LS + LI + CS + CI	EI 60 rigid floors ≥ 150 mm	15 mm	25 mm	2 sides	-	300 mm	C/U + U/C + C/C	

in PA board 2S 50 mm

¹⁾ Penetration services must be supported; support distance $\leq 500\text{mm}$ (wall) or $\leq 400\text{mm}$ (floor).

²⁾ Constructive element must be classified acc. EN 13501-2 for the required fire resistance period. EI for flexible walls $\geq 100\text{mm}$ is also applicable for rigid walls $\geq 100\text{mm}$!