

tested property  
test method  
service no.

fire resistance  
EN 1366-3  
19-3



### steel pipes

**Graphite sealant**

service type <sup>1)</sup> dØ (mm) s1 (mm)	pipe insulation min. 60 kg/m <sup>3</sup> eg Armaflex	EI	constructive element <sup>2)</sup>	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 25mm	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°	
				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	perpendicular + all angles between 90° and 45°	
		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		
		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		
		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 25mm	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	perpendicular + all angles between 90° and 45°	
				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	perpendicular + all angles between 90° and 45°	
		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		
		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		
		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		
		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		
		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		
		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		
		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		
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	perpendicular + all angles between 90° and 45°	
		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		
		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	perpendicular + all angles between 90° and 45°
rigid floors ≥ 150 mm					15 mm	25 mm	2 sides	-	269 mm	C/U + U/C + C/C		
flexible walls ≥ 100 mm					10 mm	25 mm	2 sides	-	265 mm	C/U + U/C + C/C		
rigid floors ≥ 150 mm					15 mm	25 mm	2 sides	-	276 mm	C/U + U/C + C/C		
flexible walls ≥ 100 mm					10 mm	25 mm	2 sides	-	600 x 1200 mm	C/U + U/C + C/C		
rigid floors ≥ 150 mm					15 mm	25 mm	2 sides	-	300 mm	C/U + U/C + C/C		

in PA board 2S 50 mm

<sup>1)</sup> Penetration services must be supported; support distance ≤ 500mm (wall) or ≤ 400mm (floor).

<sup>2)</sup> Constructive element must be classified acc. EN 13501-2 for the required fire resistance period. EI for flexible walls ≥ 100mm is also applicable for rigid walls ≥ 100mm!