

FIRESIST+[®] FIRE SPRINKLER PIPES



Borusan Mannesmann is a leading European steel pipe company, manufacturing over 4.000 products at eight world-class facilities in Türkiye, Italy, Romania, and the USA, with over 65 years of expertise.

We provide the widest range of UL listed & FM approved fire protection pipes. We offer the most suitable product for your needs: bare, galvanized, primer varnished, epoxy-coated options and roll grooved, threaded & coupled, or beveled pipe ends. We have a well-established sales organization with active sales in over 35 countries.

Borusan Mannesmann is determined to become the supplier of choice for your increasingly vital challenges in fire protection projects through customer-centric R&D, long-term collaboration, consistent product quality, and seamless communication. Contact us at: export@borusan.com

FIRESIST+ EPOXY COATED SPRINKLER PIPES

Premium epoxy-coated Firesist+ pipes are certified as corrosion resistance category C4-M and proven to exhibit outstanding mechanical performance by European independent third-party testing laboratories. They are suitable for difficult environmental conditions and ideal for continuous operation up to 98 °C. Firesist+ pipes are specially developed with ease of on-site use in mind. They allow regrooving with no flaking or peeling on pipe ends. The coating color and texture are not visually affected by heat during cutting and drilling.

Firesist+ Product Specifications

- Superior epoxy coating up to 250 microns
- Corrosivity category C4-M certified
- DEKRA Certified
- Available in Gray (RAL 7012)
- Roll grooved, Threaded & Coupled or Beveled pipe end
- Eliminates field painting
- Widest range of UL and FM approval, CE certified
- Produced according to ASTM and EN standards
- Pressure ratings up to 300 psi
- Size range between 1/2” – 12”
- Reliable in all sizes
- Inner weld seam removal and custom length upon request
- Tight tolerances, consistent roundness and straightness



Technical Data Sheet

CORROSION RESISTANCE		
Corrosivity Category	C4 - M (urban, industrial, coastal, seashore)	ISO 12944-6:2018
Water Condensation (240 h)	No visual change (incl. blistering, rusting, cracking, flaking) 21,4 MPa adhesion	ISO 6270-1
Neutral Salt Spray (480 h)	No visual change 0,0 mm corrosion from scribe 21,9 MPa adhesion	ISO 9227

MECHANICAL PERFORMANCE		
Cathodic Disbondment	R < 4 mm (168 hours, 24 °C)	ASTM G8-96
Cross-cut	Gt 0	ISO 2409:2007
Adhesion	22,9 MPa	ISO 4624-B
Impact Resistance	≥ 2,0 N.m	ASTM D2794
Mandrel Bend Test	≥ 2 mm	ISO 1519:2011
Cupping Test (Erichsen Drawing)	≥ 11 mm	ISO 1520:2006
Buchholz Hardness	> 250 (0,0 mm)	ISO 2815:2003
Gloss	90 – 94 (60°) 40 – 48 (20°)	DIN EN ISO 2813:2014

CHEMICAL RESISTANCE		
Immersion (45 days at 24°C) - Distilled water 3 molar calcium chloride 3 molar sodium chloride - Sat. calcium hydroxide	No holidays No undercutting No blistering No loss of bond No softening	ASTM A775
Chloride Permeability	1.4 x 10 ⁻⁵ M (45 days at 24°C)	ASTM A775

EASY FLOW NON THREADABLE LIGHTWALL

	OD (mm)	OD (inch)	Wall Thickness (mm)	Wall Thickness (inch)	Weight (kg/mt PE)	Weight (lb/ft)	UL	FM
LIGHTWALL	33,7	1"	2,00	0.079	1,05	11,56		✓
	33,7	1"	2,60	0.102	1,34	1,99		✓
	42,4	1 1/4"	2,00	0.079	1,34	1,99		✓
	42,4	1 1/4"	2,30	0.091	1,53	2,27		✓
	42,4	1 1/4"	2,60	0.102	1,71	2,55		✓
	48,3	1 1/2"	2,00	0.079	1,53	2,28		✓
	48,3	1 1/2"	2,60	0.102	1,97	2,93		✓
	60,3	2"	2,00	0.079	1,93	2,88		✓
	60,3	2"	2,90	0.114	2,76	4,10		✓
	76,1	2 1/2"	2,18	0.086	2,67	3,97		✓
	76,1	2 1/2"	2,90	0.114	3,52	5,23		✓
	88,9	3"	2,36	0.093	3,38	5,04		✓
	88,9	3"	3,20	0.126	4,54	6,76		✓
	114,3	4"	2,60	0.102	4,81	7,16		✓
	114,3	4"	3,60	0.142	6,60	9,83		✓
	139,7	5"	3,40	0.134	7,68	11,43		✓
SCH 7	33,4	1"	2,00	0.079	1,55	1,04	✓	✓
	42,2	1 1/4"	2,00	0.079	1,98	1,33	✓	✓
	48,3	1 1/2"	2,13	0.084	2,42	1,62	✓	✓
	60,3	2"	2,13	0.084	3,05	2,05	✓	✓
	73	2 1/2"	2,18	0.086	3,80	2,55	✓	✓
	88,9	3"	2,36	0.093	5,04	3,38	✓	✓
	114,3	4"	2,60	0.108	7,16	4,81	✓	✓
	141,3	5"	3,40	0.134	11,56	7,76	✓	
SCH 10	26,7	3/4"	2,11	0.083	1,28	0,86	✓	
	33,4	1"	2,77	0.109	2,09	1,41	✓	✓
	42,2	1 1/4"	2,77	0.109	2,69	1,81	✓	✓
	48,3	1 1/2"	2,77	0.109	3,11	2,09	✓	✓
	60,3	2"	2,77	0.109	3,93	2,64	✓	✓
	73	2 1/2"	3,05	0.120	5,26	3,53	✓	✓
	88,9	3"	3,05	0.120	6,46	4,34	✓	✓
	101,6	3 1/2"	3,05	0.120	7,41	4,98	✓	✓
	114,3	4"	3,05	0.120	8,37	5,62	✓	✓
	141,3	5"	3,4	0.134	11,58	7,78	✓	✓
	168,3	6"	3,4	0.134	13,85	9,30	✓	✓
	219,1	8"	4,78	0.188	25,26	16,96	✓	✓
	273,1	10"	4,78	0.188	31,62	21,23	✓	✓
	323,8	12"	4,78	0.188	37,61	25,28		✓
SCH 30	33,4	1"	2,90	0.114	2,18	1,46		✓
	42,2	1 1/4"	2,97	0.117	2,87	1,93		✓
	48,3	1 1/2"	3,18	0.125	3,53	2,37		✓
	60,3	2"	3,18	0.125	4,48	3,00		✓
	73	2 1/2"	4,78	0.188	8,04	5,40		✓
	88,9	3"	4,78	0.188	9,92	6,65		✓
	101,6	3 1/2"	4,78	0.188	11,41	7,65		✓
	114,3	4"	4,78	0.188	12,91	8,66		✓
	219,1	8"	7,04	0.277	36,82	24,72		✓
	273,1	10"	7,8	0.307	51,05	34,27		✓
SCH 40	21,3	1/2"	2,77	0.109	1,27	0,85	✓	✓
	26,7	3/4"	2,87	0.113	1,69	1,13	✓	✓
	33,4	1"	3,38	0.133	2,50	1,68	✓	✓
	42,2	1 1/4"	3,56	0.140	3,39	2,27	✓	✓
	48,3	1 1/2"	3,68	0.145	4,05	2,72	✓	✓
	60,3	2"	3,91	0.154	5,45	3,66	✓	✓
	73	2 1/2"	5,16	0.203	8,64	5,80	✓	✓
	88,9	3"	5,49	0.216	11,29	7,58	✓	✓
	101,6	3 1/2"	5,74	0.226	13,58	9,12	✓	✓
	114,3	4"	6,02	0.237	16,09	10,80	✓	✓
	141,3	5"	6,55	0.258	21,79	14,63	✓	✓
	168,3	6"	7,11	0.280	28,29	18,99	✓	✓
	219,1	8"	8,18	0.322	45,34	30,45	✓	✓
	273,1	10"	9,27	0.365	60,29	40,52	✓	✓
SCH 80	21,3	1/2"	3,73	0.147	1,62	1,09		✓
	26,7	3/4"	3,91	0.154	2,20	1,48		✓
	33,4	1"	4,55	0.179	3,25	2,19		✓
	42,2	1 1/4"	4,85	0.191	4,49	3,03		✓
	48,3	1 1/2"	5,08	0.200	5,39	3,65		✓
	60,3	2"	5,54	0.218	7,55	5,08		✓
	73	2 1/2"	7,01	0.276	11,52	7,75		✓
	88,9	3"	7,62	0.300	15,39	10,35		✓
	101,6	3 1/2"	8,08	0.318	18,82	12,67		✓
	114,3	4"	8,56	0.337	22,60	15,20		✓
	141,3	5"	9,52	0.375	31,42	21,04		✓
	168,3	6"	10,97	0.432	43,05	28,88		✓
	219,1	8"	12,70	0.500	65,41	44,00		✓

EN UL & FM

	OD (mm)	Nominal OD (inch)	Wall Thickness (mm)	Wall Thickness (inch)	FM	UL
EN 10255 Medium	21,3	1/2"	2,6	0.102		
	26,9	3/4"	2,6	0.102		
	33,7	1"	3,2	0.126	✓	
	42,4	1 1/4"	3,2	0.126	✓	✓
	48,3	1 1/2"	3,2	0.126	✓	✓
	60,3	2"	3,6	0.142	✓	✓
	76,1	2 1/2"	3,6	0.142	✓	✓
	88,9	3"	4	0.157	✓	✓
	114,3	4"	4,5	0.177	✓	✓
	139,7	5"	5	0.197	✓	✓
	165,1	6"	5	0.197	✓	✓

	OD (mm)	Nominal OD (inch)	Wall Thickness (mm)	Wall Thickness (inch)	FM
EN 10255 Heavy	21,3	1/2"	3,2	0.126	✓
	26,9	3/4"	3,2	0.126	✓
	33,7	1"	4	0.157	✓
	42,4	1 1/4"	4	0.157	✓
	48,3	1 1/2"	4	0.157	✓
	60,3	2"	4,5	0.177	✓
	76,1	2 1/2"	4,5	0.177	✓
	88,9	3"	5	0.197	✓
	114,3	4"	5,4	0.213	✓
	139,7	5"	5,4	0.213	✓
	165,1	6"	5,4	0.213	✓

