

FM Approved Fire Pipe

- Production Standard of FM Approved Fire Pipe
- Dimensions and Sizes of FM Approved Fire Pipe
- Chemical Composition of FM Approved Fire Pipe
- Mechanical Properties Tensile Strength and Yield Strength of FM Approved Fire Pipe



● Production Standard of FM Approved Fire Pipe

● FM Approved Fire Pipe

The FM Approved Fire Pipe standard is a certification that ensures steel pipes meet the stringent safety and quality requirements set by FM Global, a leading insurance company. This standard applies to pipes used in fire protection systems, such as sprinklers and hydrants. Pipes that are FM Approved have undergone rigorous testing for durability, corrosion resistance, and performance under high-pressure conditions. Compliance with this standard guarantees that the fire pipes will function reliably in critical fire safety applications, providing optimal protection for buildings and occupants.

● Dimensions and Sizes of FM Approved Fire Pipe

Standard	EN10217, EN10216, ASTM A53, ASTM A795, ASTM A135, ASTM A106
Procedure	ERW, SMLS
Dimensions	33.4mm – 355.6mm
	1" – 14"
	DN25 – DN350
Thickness	1.65mm – 25.4mm
	SCH10, SCH10, SCH30, SCH40
Unit Length	1.5 – 12 mtrs

Steel Grade	Depending on the implementation criteria chosen by the customer, see other home page standards for details.
Surface Coating	Black, Red, Primer, Hot Dip Galvanizing, FBE coating
End Type	Square cut, Bevelled, Grooved
Joint Method	Fitting, Flange, Coupling, Clamp, Pipe Shoulder, Welding
Pipe Packing	In bundles, Plastic wrap

Nominal Pipe Size		Outside Diameter	Nominal Wall Thickness Schedule	
NPS	DN	mm	SCH 10	SCH 40
1	25	33.4	2.77	3.38
1 1/4	32	42.2	2.77	3.56
1 1/2	40	48.3	2.77	3.68
2	50	60.3	2.77	3.91
2 1/2	65	73	3.05	5.16
3	80	88.9	3.05	5.49
3 1/2	90	101.6	3.05	5.74
4	100	114.3	3.05	6.02
5	125	141.3	3.4	6.55
6	150	168.3	3.4	7.11

●Chemical Composition of FM Approved Fire Pipe

Elements	Grade A	Grade B	Grade C
Carbon max. %	0.25	0.3	0.35
Manganese %	0.27 to 0.93	0.29 to 1.06	0.29 to 1.06
Phosphorous, max. %	0.025	0.025	0.025
Sulfur, max. %	0.025	0.025	0.025

Silicon, min. %	0.1	0.1	0.1
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●Chemical Composition of FM Approved Fire Pipe

	Grade A	Grade B	Grade C
Tensile Strength, min., psi	48000	60000	70000
Yield Strength, min., psi	30000	35000	40000