Edoburg®

International Organization for Standardization
ISO
9001

Fire Sprinkler Piping System

Fire Safety You Can Trust.

PRODUCT CATALOGUE

Edoburg®
PIPING SYSTEMS

TABLE OF CONTENTS

About Edoburg

Edoburg, an ISO 9001 certifies company, specialises in supplying high-quality piping systems that consistently meet stringent international standards, ensuring unparalleled performance of the piping systems. Our experienced team, equipped with extensive technical knowledge, coupled with our efficient operations and fast turnaround time, enables us to provide top-tier supply of piping products tailored to your needs.

Our Mission

Edoburg's mission is to supply high-quality piping systems worldwide, offering a complete solution that meets international standards to ensure superior performance in every project.

Product Range

Our stellar lineup of pipes, ready for every project:

- PEX Pipe: PEX-A, PEX-B, PEX-A EVOH, PEX-B EVOH
- PPR Pipe
- PERT Pipe
- HDPE Pipe
- MDPE Pipe
- PVC-C Pipe: Portable water, Reclaim water, Industrial
- PVC-U Pipe: Drainage, Portable water, Reclaim water, Industrial
- PVC-O
- Composite Pipe: PEX-AL-PEX, HDPE-AL-HDPE
- PVC Electrical Conduit
- PVC Hose

Complete Solution Concept

Our wide range of products represent our complete solution concept.

With our products intended for diverse sectors, we offer individual and comprehensive system solutions. Focusing on the needs of projects and entire system.

We provide high standards of products in the market at all times. We always stand by our piping systems and reliable service network.

As a global pipe supplying company that stands out with successful operations ever since our incorporation, we act as a solution point to meet all your needs based on our technical knowledge, specialization and reliability.

Quality Assurance

We are committed to excellence in every aspect of our operations. The products we supply comply with the international standards and certifications, ensuring reliability, durability, and safety in every application. With Edoburg, you can trust that you're receiving top-notch piping solutions that meet your specifications and exceed your expectations.

Our Presence in the World

Our warehousing are strategically located in various places in **India**, **Vietnam** and **China**, to ensures efficient distribution of the products. We ensure fast deliveries with our modern logistics partners deployed at our local distribution hubs which are strategically located near the ports to ease the export of products. Edoburg Piping Systems exports its products all over the world.

Our Market Segments

Based on our experience and high-quality standard of products in the sector, Edoburg Piping Systems supports its clients with a complete piping solutions for every project requirement.

- Chemical and Petrochemical
- Water and Wastewater
- Mining and Mineral Processing
- Power Generation
- Marine and Offshore
- Building and Construction
- Manufacturing Industries
- Agriculture
- Pharmaceuticals
- Infrastructure

About Plastics

Plastics are polymers created by the chemical conversion of natural products or synthesized from organic materials. The primary components that make up the building blocks of plastics are long chains of carbon (C) and hydrogen (H) known as monomers.

The raw materials used for the production of plastics are natural compounds such as cellulose, coal, oil and natural gas. In the plastics industry, around 6 % of the petroleum products that come out from refineries is used.

Plastics fall into three main categories on the basis of their internal structure and the resulting mechanical characteristics: thermoplastics, thermosetting plastics and elastomers.

Advantages of Plastics

Thermoplastics obviously demonstrate different characteristics than those of the metals traditionally used for piping.

Metal	Plastic
High density • Crane is needed for transport. • Requires wide spacing for fixings. • High anchoring forces, fixing required.	Low density • Can be carried by hand up to d110. • Requires minimal spacing for fixings. • Simple and economical.
Thermal conductivity • Insulation is needed to limit heat loss. • Formation may result in corrosion.	Low thermal conductivity • Limited heat loss. • Low levels of condensation and resistance to corrosion.
Corrosion Behaviors • Galvanic corrosion can occur. • Corrosion reduces internal diameter. • Reduced diameter causes pressure losses.	High Corrosion Resistance • Galvanic Corrosion Free. • Prevents corrosion and diameter reduction. • No pressure losses.
Chemical resistance • Low Resistance to Acids. • Damage from Incrustation.	High chemical resistance • A minimum of 25-years of life with correct jointing methods. • Incrustation free.

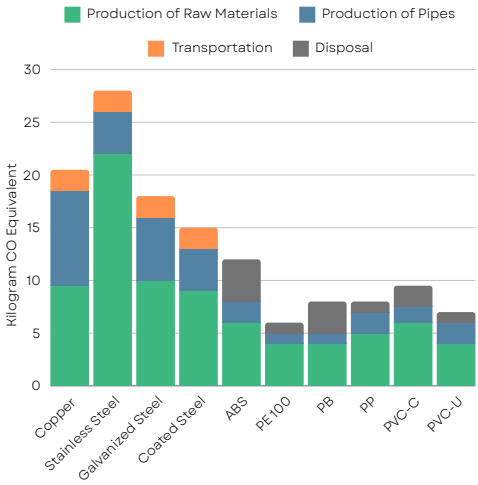
Thermoplastics in turn can be split into two main categories as partially-regulated (semi-crystalline) and iregular (amorphous) molecular structures.

- Semicrystalline thermoplastics, which have a partially ordered molecular structure: this category includes the polyolefins (polypropylene, polyethylene, polybutylene) and fluoropolymers (PP, PE, etc.)
- Amorphous thermoplastics, which have no crystalline regions and no packed molecular structure: this category includes the vinyl chlorides (PVC-U, PVC-C, etc.) and styrenes (ABS, polystyrene, etc.]

Semicrystalline materials are more suitable for hot welding, while amorphous thermoplastics are ideal for cementing or cold welding (solvent cementing).

Carbon Footprint of Plastics Vs Metal

It is the total of all greenhouse gases emitted to the atmosphere during the entire lifetime including the processes for extracting a product having carbon footprint from under the ground, refining, producing, using and disposing of that product.



Fire Sprinkler Piping System

Our CPVC Fire Sprinkler Piping System is engineered to meet the stringent requirements of NAPA 13 compliance, ensuring optimal performance and reliability in fire protection applications. Crafted from high-quality Chlorinated Polyvinyl Chloride (CPVC), this piping system offers a superior combination of durability, ease of installation, and resistance to corrosion and microbial growth.

- NAPA 13 Compliance: Rigorously tested and certified to meet the NAPA 13 standards for fire sprinkler systems, providing assurance of safety and regulatory adherence.
- Superior Material: Made from CPVC, a material renowned for its ability to withstand high temperatures and corrosive environments, ensuring longevity and reliability in critical fire protection systems.
- Enhanced Safety: Designed for optimal fire suppression, our CPVC pipes and fittings provide reliable performance under high-pressure conditions, ensuring efficient and effective fire control.
- Ease of Installation: Lightweight and easy to handle, our CPVC piping system can be quickly installed with simple tools, reducing labor costs and installation time.
- Corrosion Resistance: Unlike metal piping, CPVC does not corrode or scale, maintaining consistent water flow and pressure over time, and reducing maintenance requirements.
- Microbial Resistance: The smooth interior surface of CPVC pipes inhibits the growth of biofilms and bacteria, ensuring cleaner water delivery and minimizing health risks.

Fields of Application

- Residential Buildings: Ideal for fire sprinkler systems in single-family homes, multi-family dwellings, and high-rise apartments.
- Commercial Properties: Suitable for use in offices, retail spaces, hotels, and other commercial buildings requiring reliable fire protection.
- Industrial Facilities: Perfect for warehouses, manufacturing plants, and other industrial environments where robust fire protection is critical.

Technical data

Working Temperature
0°C - 93°C (32°F - 200°F)

Pipe Standard
- IS:16088
- ASTM F442
- NFPA 13 Complaint

Certifications

Fire Sprinkler Pipe Range

CPVC Fire Sprinkler Pipe (SDR 13.5)

Size (cm)	Size (inch)	Product Code	Pkg.
2.0	¾	M541130302	30
2.5	1	M541130303	20
3.2	1¼	M541130304	15
4.0	1½	M541130305	10
5.0	2	M541130306	8
6.5	2½	M541130307	5
8.0	3	M541130308	3

Available 3 meter length.

Fire Sprinkler Pipe Range

CPVC Fire Sprinkler Fittings (ASTM F 439)

COUPLER

Size (cm)	Size (inch)	Pkg.
2.0	¾	300
2.5	1	175
3.2	1¼	100
4.0	1½	80
5.0	2	50
6.5	2½	33
8.0	3	15

ELBOW 90°

Size (cm)	Size (inch)	Pkg.
2.0	¾	200
2.5	1	125
3.2	1¼	60
4.0	1½	50
5.0	2	25
6.5	2½	18
8.0	3	12

Cross Tee

Size (cm)	Size (inch)	Pkg.
2.0	¾	50
2.5	1	50
3.2	1¼	30
4.0	1½	25
5.0	2	15
6.5	2½	09
8.0	3	06

Tee

Size (cm)	Size (inch)	Pkg.
2.0	¾	50
2.5	1	50
3.2	1¼	30
4.0	1½	25
5.0	2	15
6.5	2½	09
8.0	3	06

SPRINKLER HD ADAPTOR

Size (cm)	Size (inch)	Pkg.
2.0 x 1.5	¾ x ½	150
2.5 x 1.5	1 x ½	100
2.5 x 2.0	1 x ¾	100

SPRINKLER HD ELBOW 90°

Size (cm)	Size (inch)	Pkg.
2.0 x 1.5	¾ x ½	75
2.5 x 1.5	1 x ½	40
2.5 x 2.5	1 x 1	50

ELBOW 45°

Size (cm)	Size (inch)	Pkg.
2.0	¾	200
2.5	1	150
3.2	1¼	80
4.0	1½	60
5.0	2	35
6.5	2½	20
8.0	3	12

UNION

Size (cm)	Size (inch)	Pkg.
2.0	¾	120
2.5	1	80
3.2	1¼	50
4.0	1½	40
5.0	2	30
6.5	2½	15
8.0	3	10

REDUCER COUPLER

Size (cm)	Size (inch)	Pkg.
2.5 x 2.0	1 x ¾	200
3.2 x 2.0	1¼ x ¾	140
3.2 x 2.5	1¼ x 1	125
4.0 x 2.0	1½ x ¾	100
4.0 x 2.5	1½ x 1	100
4.0 x 3.2	1½ x 1¼	80
5.0 x 2.0	2 x ¾	70
5.0 x 2.5	2 x 1	75
5.0 x 3.2	2 x 1¼	75
5.0 x 4.0	2 x 1½	75
6.5 x 2.0	2½ x ¾	01
6.5 x 2.5	2½ x 1	01
6.5 x 3.2	2½ x 1¼	48
6.5 x 4.0	2½ x 1½	40
6.5 x 5.0	2½ x 2	40
8.0 x 2.0	3 x ¾	01
8.0 x 2.5	3 x 1	01
2.0	¾	125
2.5	1	80
3.2	1¼	45
4.0	1½	30
5.0	2	18
6.5	2½	12
8.0	3	07
8.0 x 3.2	3 x 1¼	30
8.0 x 4.0	3 x 1½	30
8.0 x 5.0	3 x 2	30
8.0 x 6.5	3 x 2½	30

SPRINKLER HD TEE

Size (cm)	Size (inch)	Pkg.
2.0 x 1.5	¾ x ½	50
2.5 x 1.5	1 x ½	40
2.5 x 2.5	1 x 1	30

SPRINKLER HD ADAPTOR (SPIGOT)

Size (cm)	Size (inch)	Pkg.
2.0 x 1.5	¾ x ½	150
2.5 x 1.5	1 x ½	125

SPRINKLER HD BUSH (SPIGOT)

Size (cm)	Size (inch)	Pkg.
2.5 x 1.5	1 x ½	250

REDUCING TEE

Size (cm)	Size (inch)	Pkg.
2.5 x 2.0	1 x ¾	100
3.2 x 2.0	1¼ x ¾	50
3.2 x 2.5	1¼ x 1	50
4.0 x 2.0	1½ x ¾	40
4.0 x 2.5	1½ x 1	40
4.0 x 3.2	1½ x 1¼	30
5.0 x 2.0	2 x ¾	25
5.0 x 2.5	2 x 1	20
5.0 x 3.2	2 x 1¼	20
5.0 x 4.0	2 x 1½	20
6.5 x 2.0	2½ x ¾	01
6.5 x 2.5	2½ x 1	15
6.5 x 3.2	2½ x 1¼	15
6.5 x 4.0	2½ x 1½	15
6.5 x 5.0	2½ x 2	12
8.0 x 2.0	3 x ¾	01
8.0 x 2.5	3 x 1	10
8.0 x 3.2	3 x 1¼	12
8.0 x 4.0	3 x 1½	10
8.0 x 5.0	3 x 2	09
8.0 x 6.5	3 x 2½	09
2.5 x 2.0 x 2.0	1 x ¾ x ¾	01
3.2 x 2.5 x 2.0	1¼ x 1 x ¾	01
3.2 x 2.5 x 2.5	1¼ x 1 x 1	01
4.0 x 3.2 x 2.0	1½ x 1¼ x ¾	01
4.0 x 3.2 x 2.5	1½ x 1¼ x 1	01

Technical Properties

PHYSICAL PROPERTIES

Parameter	Unit	Typical Value
Density	g/cm3	1.51
Tensile Strength	MPa	55
Modulus of Elasticity	MPa	2700
Compressive Strength, ps	MPa	62
Coefficient of Linear Expansion	in./(in. °F)	3.2 X 10-5
Flame Spread Index	--	0
Smoke Development Index	--	5-20
Limiting Oxygen Index	%	60
Flash Ignition Temperature	°C	482
Flammability	--	Flame Retardant, V0

PIPE DIMENSIONS

Nominal Size			Outside Diameter				Wall Thickness	
			Average		Tolerance		Minimum	
cm	mm	inch	inch	mm	inch	mm	inch	mm
2.0	20	¾"	1.050	26.7	±0.004	±0.10	0.078	1.98
2.5	25	1"	1.315	33.4	±0.005	+0.10	0.097	2.46
3.2	32	1-¼"	1.660	42.2	±0.005	+0.10	0.123	3.12
4.0	40	1-½"	1.900	48.2	±0.006	+0.10	0.141	3.58
5.0	50	2"	2.375	60.3	±0.006	+0.10	0.176	4.47
6.5	65	2-½"	2.875	73.0	±0.007	+0.10	0.213	5.41
8.0	80	3"	3.500	88.9	±0.008	+0.20	0.259	6.58

FITTINGS: CPVC Sprinkler fittings conform to the requirement of ASTM F439 (Schedule 80). Female threaded adapters for sprinkler head connections will contain brass inserts or other suitable metallic inserts.

SOLVENT CEMENT:CPVC socket connections should be joined with IPS weld-on solvent cement which meets ASTM F493. No other solvent cements are recommended for use with Astral Fire Pro products and use of such non-approved welding agents will invalidate the manufacturer's warranty.

Pressure Rating: CPVC pipe manufactured by Astral of nominal sizes 3/4" - 3" (20 - 80 mm) are rated for continuous service of 175 psi (12.3 kg/cm2) at 150°F (65°C). FIRE PRO pipe is produced in SDR 13.5 dimensions. SDR, or standard dimensional ratio, means the pipe wall thickness is directly proportional to the outside diameter. This results in all diameters carrying the same pressure capability. FIRE PRO pipe is produced to the specifications of ASTM F 442.

FIRE SPRINKLER CPVC SYSTEM FOR BUILDERS AND DEVELOPERS:
Fire Sprinkler CPVC pipes and fittings offer substantial reductions in labor and transportation costs in typical installations. CPVC pipe is easily handled, stored, cut, and joined, contributing to these savings. Furthermore, the price stability of Fire Sprinkler CPVC pipes and fittings, compared to metal systems, adds financial predictability. The elimination of heavy equipment typically required for the installation of metal and other piping systems further reduces costs. The installation process for the Fire Sprinkler CPVC system is significantly more economical. Fire Sprinkler pipes and fittings can be directly installed on the underside of concrete or along walls. Their inherent immunity to Microbiologically Influenced Corrosion (MIC) ensures long-term, trouble-free performance, minimizing occupant inconvenience during retrofit construction.

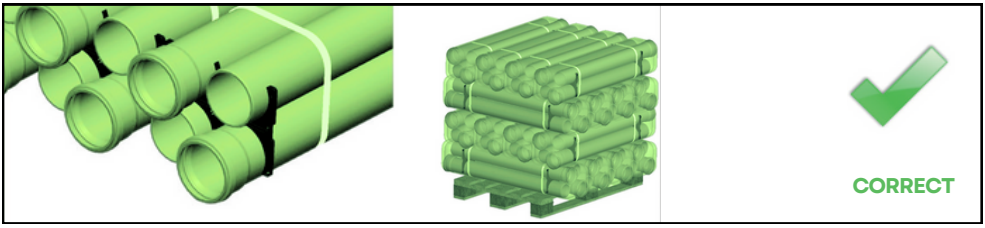
FIRE SPRINKLER CPVC SYSTEM FOR DESIGNERS, ARCHITECTS, AND ENGINEERS:
Fire Sprinkler CPVC pipes and fittings provide enhanced design flexibility. The system's Hazen-Williams C factor of 150 results in a smooth inner surface with lower friction loss compared to metal systems. This allows for the use of smaller pipe diameters, reducing material costs and increasing design options, particularly in retrofit applications. Fire Sprinkler CPVC pipes and fittings are engineered for a 50-year life expectancy with a safety factor of two. When properly selected and installed, they deliver years of maintenance-free service, making them a reliable choice for long-term fire protection solutions.

FIRE SPRINKLER CPVC SYSTEM FOR CONTRACTORS:
The installation of Fire Sprinkler CPVC pipes and fittings is streamlined and efficient. No special rigging or heavy equipment is required for moving the pipe into a building, and on-site cutting can be accomplished with basic hand tools. The one-step joining system accelerates installation, minimizing labor costs. The absence of heavy equipment reduces conflicts with other trades, allowing work to proceed smoothly alongside drywallers, framers, and other mechanical contractors. Fire Sprinkler CPVC pipes are compatible with most hangers designed for metal pipes. Their rigidity and inherent strength reduce the need for additional hangers and supports, further cutting down on material and labor costs.

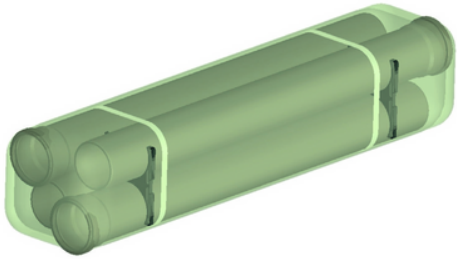
Packaging, Storage and Transportation

Packaging

Our pipes and fittings are packed as ready for transport in a customer-friendly way. Packing ensures safety, efficient storage and easy transport.

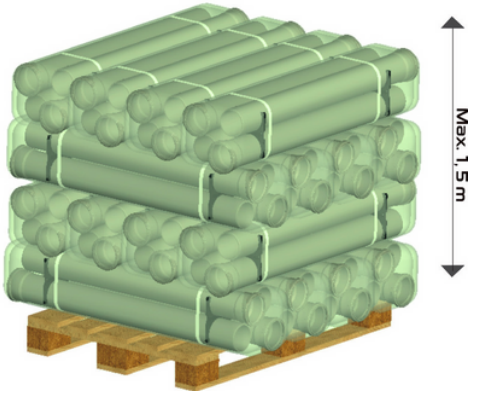


Short parts with the length of 150, 250 and 500 mm are packed in carton boxes like connection parts.



Pipes are packed by plastic clamps to hold them together. Stretch film is applied to protect pipes from pipes dust and stains.

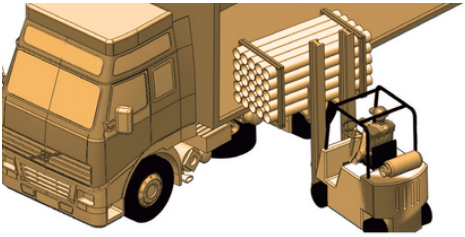
Storage

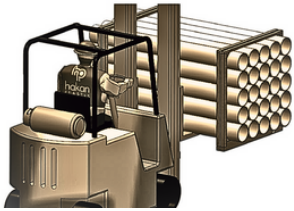


Method of storage should not cause any outflow and should not damage the pipes. As long as they are stored properly, no permanent deformations or damages will occur on the pipes and fittings. Pipes should not be stacked above 1,5 m. Pipes should be safe against sliding.

Pipes and fittings packed in carton boxes should be protected against moisture. Carton boxes should be sealed and stored in a dry area.

Transportation





Pipes should be carefully transported to prevent any damages. Avoid sudden and hard pressures on pipes and fittings that might cause freezing in cold weather conditions. Ensure that pipes are not slided and dropped on the floor. Loading and unloading and packing of pipes in a block should be carried out by means of forklifts having flat threads and extensions.

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/edoburgpipes

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