Edoburg



Reclaim Water Piping System

Efficient Pipes for a Greener World

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PROD





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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,
- PVC-U Pipe: Drainage, Portable water, Reclaim water, Industrial
- PVC-O
- Composite Pipe: PEX-AL-PEX, HDPE-AL-HDPE
- PVC Flectrical 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. · Can be carried by hand up to · Requires wide spacing for
- fixinas.
- · High anchoring forces, fixing reauired.

Low density

- d110
- Requires minimal spacing for fixinas.
- 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
- Reduced diameter causes pressure losses.

High Corrosion Resistance

- · Prevents corrosion and diameter reduction

- Chemical resistance · Low Resistance to Acids.

Damage from Incrustation.

· Galvanic Corrosion Free.

- · No pressure losses.

High chemical resistance

- · A minimum of 25-years of life with correct jointing methods.
- · Incrustation free.

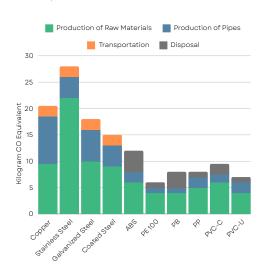
Thermoplastics in turn can be split into two main categories as partially-regulated (semicrystalline) and iregular (amorphous) molecular structures.

- 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.







Reclaim Water Piping System

Our UPVC (Unplasticized Polyvinyl Chloride) Pipes for reclaimed water applications are designed to offer superior performance in water management systems. Engineered for durability and efficiency, these pipes ensure the safe and reliable conveyance of reclaimed water, making them an ideal choice for sustainable irrigation, industrial processes, and other non-potable water uses.

- High Durability: Constructed from highquality UPVC, these pipes exhibit exceptional resistance to corrosion, chemical degradation, and environmental stress, ensuring long-lasting performance.
- Optimal Flow: Smooth inner walls reduce friction and enhance flow efficiency, minimizing pressure loss over long distances.

Fields of Application

Irrigation Systems

- Agriculture: Crops, greenhouses, orchards.
- · Landscaping: Parks, golf courses, gardens.
- · Horticulture: Nurseries, floriculture.

Industrial Waste Management

- Manufacturing: Recycling, effluent disposal, cooling.
- Food & Beverage: Wastewater recycled systems.
- · Textiles: Dyeing, finishing, effluent.

Municipal & Commercial

- Urban: Non-potable distribution, stormwater
- · Construction: Dust control, concrete mixing.
- · Facilities: Commercial, institutional.

- Easy Installation: Lightweight and easy to handle, UPVC pipes simplify installation processes, reducing labor and time costs.
- Leak-Proof Joints: Precision-engineered joints provide a secure, leak-proof connection, enhancing the integrity of the water distribution system.
- Versatile Applications: Suitable for a wide range of reclaimed water applications including landscaping, agricultural irrigation, and industrial processes.

Technical data

Working Temperature

• 0°C - 60°C (32°F - 140°F)

Pipe Standard

- ASTM D1784
- ASTM D1785

Certifications







Reclaim Water Pipe Range

Standard uPVC Reclaim Water Pipe

Nomir	Nominal Size		age Outside Wall neter (mm)		Wall Thickness (mm)			e Rating kg/cm2)	
		Min	Max	Sch 40		Sch	n 80	Sch 40	Sch 80
(cm)	(inch)	MIII	Max	Min	Max	Min	Max	Max	Max
1.5	1/2	21.24	21.44	2.77	3.28	3.73	4.24	42.19	59.76
2.0	3/4	26.57	26.77	2.87	3.38	3.91	4.42	33.75	48.51
2.5	1	33.27	33.53	3.38	3.89	4.55	5.08	31.64	44.29
3.2	11/4	42.03	42.29	3.56	4.07	4.85	5.43	26.01	36.56
4.0	11/2	48.11	48.41	3.68	4.19	5.08	5.69	23.20	33.04
5.0	2	60.17	60.47	3.91	4.42	5.54	6.20	19.69	28.12

Type of fittings & accessories for installation

Schedule 40 and Schedule 80 regular fittings are specifically designed and recommended for use with uPVC Reclaimed water pipes, ensuring compatibility and optimal performance in such applications.





Technical Properties

ASTM D1784 - Standard Specification

ASTM D1784 specifies the requirements for PVC compounds suitable for extrusion into flexible, semi-rigid, or rigid pipes and fittings used for pressure applications, including reclaimed water.

Property	Test Method	Requirements
Tensile Strength	ASTM D638	≥ 6,500 psi
Flexural Modulus	ASTM D790	≥ 400,000 psi
Izod Impact Strength	ASTM D256	≥ 0.6 ft-lb/in
Vicat Softening Point	ASTM D1525	≥ 176°F
Heat Deflection Temperature (at 264 psi)	ASTM D648	≥ 167°F
Specific Gravity	ASTM D792	1.40 - 1.46
Density	ASTM D792	1.37 - 1.43 g/cm³
Thermal Stability	Visual inspection after heating at 212°F	No blistering, cracking, or other visible defects
Chemical Resistance	Exposure to specified chemicals	No significant change in physical properties or appearance

Physical Properties of UPVC Pipes (Schedules 40 and 80)

Property	Test Method	Requirements
Density (g/cm³)	ASTM D792	1.37 - 1.43
Color	Visual inspection	Uniform throughout
Flammability	ASTM D635	Non-combustible when tested
Chemical Resistance	Exposure to specified chemicals	No significant change in physical properties or appearance

ASTM D1785 - Standard Specification

ASTM D1785 covers rigid PVC pipes in Schedules 40, 80, and 120 for water distribution, including reclaimed water. Below are typical properties specified for these pipes:

Mechanical Properties of UPVC Pipes (Schedules 40 and 80)

Property	Test Method	Schedule 40 Requirements	Schedule 80 Requirements
Tensile Strength	ASTM D1785	≥ 2500 psi	≥ 4000 psi
Modulus of Elasticity	ASTM D1785	-	≥ 400,000 psi
Impact Resistance	ASTM D1785	Pass minimum impact energy specified without fracture	
Pipe Stiffness (PS)	ASTM D1785	Minimum value varies with pipe diameter and schedule	

Dimensions and Tolerances for UPVC Pipes (Schedules 40 and 80)

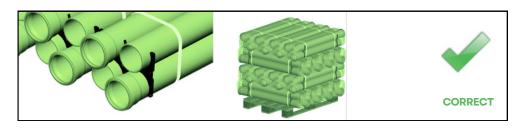
Property	Test Method	Schedule 40 Requirements	Schedule 80 Requirements
Outside Diameter (Inches)	ASTM D1785	Specified nominal sizes with tolerances	Specified nominal sizes with tolerances
Wall Thicknes s (Inches)	ASTM D1785	Specified nominal sizes with tolerances	Specified nominal sizes with tolerances
Length (Feet)	ASTM D1785	Standard lengths with permissible variation	



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.



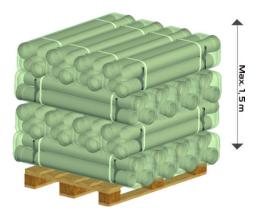


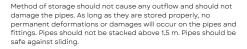


Pipes are packed by plastic clamps to hold them together. Stretch film is applied to protect pipes from pipes dust and stains.

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

Storage

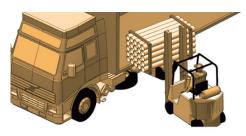


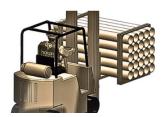




Pipes and fittings packed in carton boxes should be protected against moisture. Carton boxes should be sealed and stored in a dry area.

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.



Notes









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