Edoburg®

International Organization for Standardization
ISO
9001

XLPE Insulation

Keep the Heat, Beat the Loss

PRODUCT CATALOGUE

Edoburg®
PIPING SYSTEMS

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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, 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.

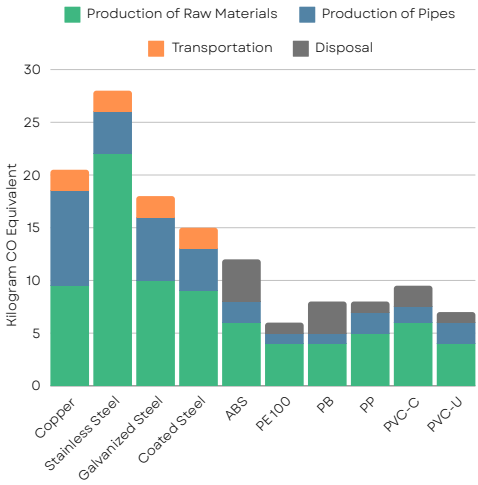
Thermoplastics in turn can be split into two main categories as partially-regulated (semi-crystalline) and iregular (amorphous) molecular structures.

- 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.



What is XLPE Insulation?

XLPE (Cross-Linked Polyethylene) insulation for pipes is a type of thermal insulation material commonly used in various piping systems. It is made from polyethylene, which has been chemically or physically cross-linked to enhance its properties.

Properties of XLPE Insulation:

1. Thermal Resistance: XLPE has excellent thermal insulation properties, which makes it effective in maintaining the temperature of the fluids inside the pipes, whether they are hot or cold.
2. Chemical Resistance: It is resistant to a wide range of chemicals, making it suitable for use in harsh environments.
3. Moisture Resistance: XLPE has low water absorption, which helps in preventing moisture ingress and subsequent corrosion or degradation of the pipe.
4. Mechanical Strength: The cross-linking process enhances the mechanical strength of the polyethylene, making it more durable and resistant to impact and abrasion.
5. Flexibility: Despite its strength, XLPE remains flexible, which is advantageous during installation and operation in dynamic environments.

Advantages:

- Energy Efficiency: Reduces energy loss, leading to more efficient systems.
- Longevity: The durability and resistance to various environmental factors contribute to a longer lifespan of the insulation.
- Ease of Installation: The flexibility and lightweight nature of XLPE make it easier to install compared to some other types of insulation.

Salient Features:

- Negligible water/ moisture absorption (>90 % closed cell)
- Wide operating temperature range : -40°C to +115°C
- Excellent thermal insulation
- Resistance to fungi & bacteria
- Chemically unreactive
- Stable K value
- Maintenance free
- Fibre free & dust free
- Flexible & easy to install

Technical Properties

PARAMETER	XLPE SPECIFICATION		
Material (ASTM C1427)	Chemically Cross Linked Closed Cell Polyethylene Foam Insuation		
Temperature Range	(-)40° C to +115°C		
Nominal Density	30 ± 3Kg/m3		
Thermal Conductivity	Mean Temperature (°C)	W/m °K	Kcal/hr m (°C)
	0	0.0318	0.0273
	23	0.0329	0.0283
	26	0,0382	0.0328
Water Vapour ResistanceFactor (μ) (MEW) - (DIN - 52615)	Moisture Resistance Factor (μ) >9000 (for plain foam)>14000 (for AL foil faced foam)		
Fire Characteristics(BS 476 Part 7 and 6) (For class 0)	a) Surface Spread of Flame : Class 1 As per BS 4 76 Part 7b) Fire Propagation : Class 'O' As per BS 4 76 Part 6		
Reaction to Fire (For class 0)	Self Extinguishing, Non-toxic Ozone: Very Good		
Dimensional Stability: BS 4370 Part 1	Change in dimension at -20° C for 4 hrs: <0.5% and at 110°C for 4 hrs: <0.5%		
Limiting Oxygen Index: ASTM D2863	24%		
Compression Stregth @ 25%: ASTM D3575	0.44 Kgf/cm2		
Resistance to Chemical: ASTM C543	No characteristic change observed		
Tensile Stregth @ 50 mm/min: ASTM D3575	2.51 Kgf/cm2		
Elongation at Break: ASTM D3575	133.2%		
Fungal Resistance: ASTM G21	No growth observed		
Volume % -age ofclosed cell: ASTM D6226 Part 2	>90%		
Sound Transmission Class for 9 mm foam with12 mmGypsum board: ASTM E413 / ISO 140	40 dB		
Water Absorption: ASTM C209 / ASTMC1763	<0.2%		
Water Vapour Permeance: ASTM E96	0.15 ng/pas.m		
Health & Safety Aspects	CFC / HCFC Free: Dust and Fibre Free, VOC / SVOC Free		
Emission of Volatile Organic Compound (VOC)	Negligible		

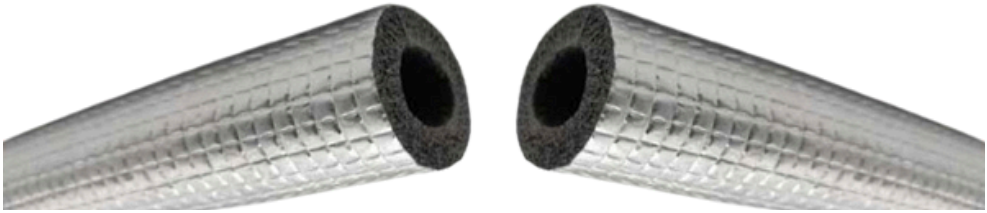
Applications:

- **Plumbing Systems**: Used for hot and cold water supply due to its excellent thermal insulation properties.
- **HVAC Systems**: Used in heating, ventilation, and air conditioning systems to prevent heat loss or gain.
- **Industrial Piping**: Suitable for conveying a variety of fluids in industrial settings due to its chemical resistance.
- **Underground Piping**: Often used in underground piping systems where resistance to moisture and durability are crucial.

ALUPET FOIL XLPE Insulation

CLASS 1 WITH ALUPET FOIL - 2 METRE								
Tube ID (cm)	Insulation Thickness						Recommended For Nominal Pipe Size	
	6 mm		9 mm		13 mm			
	Product Code	Std. Pkg.	Product Code	Std. Pkg.	Product Code	Std. Pkg.	Coper & CPVC (CTS)	CPVC (IPS) / uPVC / MS / GI
1.59	IP-06.16.15.NA	330	IP-09.16.15.NA	200	IP-13.16.15.NA	150	1.5 cm (½")	-
2.23	IP-06.22.20.NA	250	IP-09.22.20.NA	160	IP-13.22.20.NA	115	2.0 cm (¾")	1.5 cm (½")
2.87	IP-06.28.25.NA	190	IP-09.28.25.NA	125	IP-13.28.25.NA	100	2.5 cm (1")	2.0 cm (¾")
3.5	IP-06.35.32.NA	150	IP-09.35.32.NA	100	IP-13.35.32.NA	75	3.2 cm (1¼")	2.5 cm (1")
4.34	IP-06.43.40.NA	100	IP-09.43.40.NA	70	IP-13.43.40.NA	60	4.0 cm (1½")	3.2 cm (1¼")
4.0	IP-06.50.40.NA	90	IP-09.50.40.NA	60	IP-13.50.40.NA	50	-	4.0 cm (1½")
5.41	IP-06.54.50.NA	80	IP-09.54.50.NA	60	IP-13.54.50.NA	40	5.0 cm (2")	-
5.0	IP-06.62.50.NA	70	IP-09.62.50.NA	40	IP-13.62.50.NA	40	-	5.0 cm (2")
6.5	IP-06.75.65.NA	50	IP-09.75.65.NA	36	IP-13.75.65.NA	32	6.5 cm (2½") (IPS)	
8.0	IP-06.91.80.NA	40	IP-09.91.80.NA	22	IP-13.91.80.NA	20	8.0 cm (3") (IPS)	
10.0	IP-06.116.100.NA	35	IP-09.116.100.NA	18	IP-13.116.100.NA	16	10.0 cm (4") (IPS)	

CLASS O WITH ALUPET FOIL - 2 METRE								
Tube ID (cm)	Insulation Thickness						Recommended For Nominal Pipe Size	
	6 mm		9 mm		13 mm			
	Product Code	Std. Pkg.	Product Code	Std. Pkg.	Product Code	Std. Pkg.	Coper & CPVC (CTS)	CPVC (IPS) / uPVC / MS / GI
1.59	IP-06.16.15.OA	330	IP-09.16.15.OA	200	IP-13.16.15.OA	150	1.5 cm (½")	-
2.23	IP-06.22.20.OA	250	IP-09.22.20.OA	160	IP-13.22.20.OA	115	2.0 cm (¾")	1.5 cm (½")
2.87	IP-06.28.25.OA	190	IP-09.28.25.OA	125	IP-13.28.25.OA	100	2.5 cm (1")	2.0 cm (¾")
3.5	IP-06.35.32.OA	150	IP-09.35.32.OA	100	IP-13.35.32.OA	75	3.2 cm (1¼")	2.5 cm (1")
4.34	IP-06.43.40.OA	100	IP-09.43.40.OA	70	IP-13.43.40.OA	60	4.0 cm (1½")	3.2 cm (1¼")
4.0	IP-06.50.40.OA	90	IP-09.50.40.OA	60	IP-13.50.40.OA	50	-	4.0 cm (1½")
5.41	IP-06.54.50.OA	80	IP-09.54.50.OA	60	IP-13.54.50.OA	40	5.0 cm (2")	-
5.0	IP-06.62.50.OA	70	IP-09.62.50.OA	40	IP-13.62.50.OA	40	-	5.0 cm (2")
6.5	IP-06.75.65.OA	50	IP-09.75.65.OA	36	IP-13.75.65.OA	32	6.5 cm (2½") (IPS)	
8.0	IP-06.91.80.OA	40	IP-09.91.80.OA	22	IP-13.91.80.OA	20	8.0 cm (3") (IPS)	
10.0	IP-06.116.100.OA	35	IP-09.116.100.OA	18	IP-13.116.100.OA	16	10.0 cm (4") (IPS)	



PLAIN XLPE Insulation

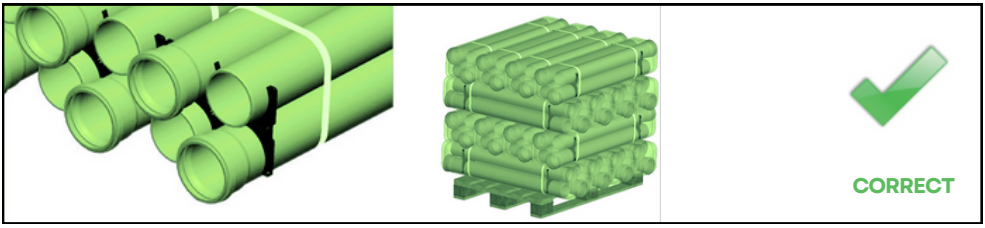
CLASS 1 PLAIN - 2 METRE								
Tube ID (cm)	Insulation Thickness						Recommended For Nominal Pipe Size	
	6 mm		9 mm		13 mm			
	Product Code	Std. Pkg.	Product Code	Std. Pkg.	Product Code	Std. Pkg.	Coper & CPVC (CTS)	CPVC (IPS) / uPVC / MS / GI
1.59	IP-06.16.15N	330	IP-09.16.15N	200	IP-13.16.15N	150	1.5 cm (½")	-
2.23	IP-06.22.20N	250	IP-09.22.20N	160	IP-13.22.20N	115	2.0 cm (¾")	1.5 cm (½")
2.87	IP-06.28.25N	190	IP-09.28.25N	125	IP-13.28.25N	100	2.5 cm (1")	2.0 cm (¾")
3.5	IP-06.35.32.N	150	IP-09.35.32N	100	IP-13.35.32N	75	3.2 cm (1¼")	2.5 cm (1")
4.34	IP-06.43.40.N	100	IP-09.43.40N	70	IP-13.43.40N	60	4.0 cm (1½")	3.2 cm (1¼")
4.0	IP-06.50.40.N	90	IP-09.50.40.N	60	IP-13.50.40.N	50	-	4.0 cm (1½")
5.41	IP-06.54.50.N	80	IP-09.54.50N	60	IP-13.54.50N	40	5.0 cm (2")	-
5.0	IP-06.62.50.N	70	IP-09.62.50.N	40	IP-13.62.50.N	40	-	5.0 cm (2")
6.5	IP-06.75.65.N	50	IP-09.75.65.N	36	IP-13.75.65.N	32	6.5 cm (2½") (IPS)	
8.0	IP-06.91.80.N	40	IP-09.91.80.N	22	IP-13.91.80.N	20	8.0 cm (3") (IPS)	
10.0	IP-06.116.100.N	35	IP-09.116.100.N	18	IP-13.116.100.N	16	10.0 cm (4") (IPS)	

CLASS 0 PLAIN - 2 METRE								
Tube ID (cm)	Insulation Thickness						Recommended For Nominal Pipe Size	
	6 mm		9 mm		13 mm			
	Product Code	Std. Pkg.	Product Code	Std. Pkg.	Product Code	Std. Pkg.	Coper & CPVC (CTS)	CPVC (IPS) / uPVC / MS / GI
1.59	IP-06.16.15.OP	330	IP-09.16.15.OP	200	IP-13.16.15.OP	150	1.5 cm (½")	-
2.23	IP-06.22.20.OP	250	IP-09.22.20.OP	160	IP-13.22.20.OP	115	2.0 cm (¾")	1.5 cm (½")
2.87	IP-06.28.25.OP	190	IP-09.28.25.OP	125	IP-13.28.25.OP	100	2.5 cm (1")	2.0 cm (¾")
3.5	IP-06.35.32.OP	150	IP-09.35.32.OP	100	IP-13.35.32.OP	75	3.2 cm (1¼")	2.5 cm (1")
4.34	IP-06.43.40.OP	100	IP-09.43.40.OP	70	IP-13.43.40.OP	60	4.0 cm (1½")	3.2 cm (1¼")
4.0	IP-06.50.40.OP	90	IP-09.50.40.OP	60	IP-13.50.40.OP	50	-	4.0 cm (1½")
5.41	IP-06.54.50.OP	80	IP-09.54.50.OP	60	IP-13.54.50.OP	40	5.0 cm (2")	-
5.0	IP-06.62.50.OP	70	IP-09.62.50.OP	40	IP-13.62.50.OP	40	-	5.0 cm (2")
6.5	IP-06.75.65.OP	50	IP-09.75.65.OP	36	IP-13.75.65.OP	32	6.5 cm (2½") (IPS)	
8.0	IP-06.91.80.OP	40	IP-09.91.80.OP	22	IP-13.91.80.OP	20	8.0 cm (3") (IPS)	
10.0	IP-06.116.100.OP	35	IP-09.116.100.OP	18	IP-13.116.100.OP	16	10.0 cm (4") (IPS)	

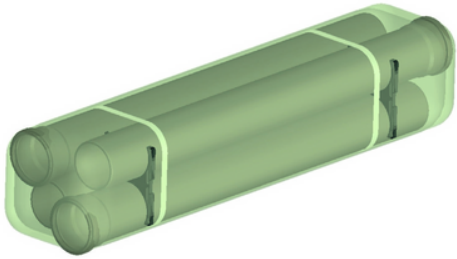
Packaging, Storage and Transportation

Packaging

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

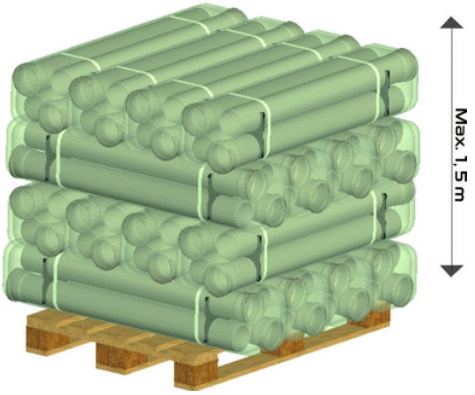


Short parts with the length of 150, 250 and 500 mm are packed in carton boxes like connection parts.



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

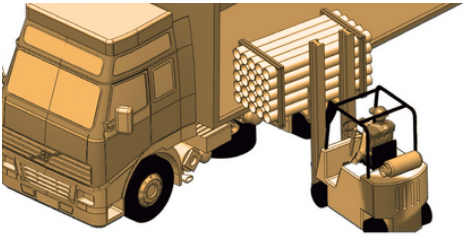
Storage

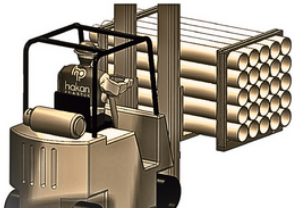


Method of storage should not cause any outflow and should not damage the pipes. As long as they are stored properly, no permanent deformations or damages will occur on the pipes and fittings. Pipes should not be stacked above 1,5 m. Pipes should be safe against sliding.

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.

Notes

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/edoburgpipes

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