

Edoburg®



# PE-RT Piping System

Push. Fit. Done.



**Edoburg**<sup>®</sup>  
PIPING SYSTEMS



# TABLE OF CONTENTS

<b>About Edoburg</b>	<b>04</b>
<b>About Plastic</b>	<b>05</b>
<b>PP-R Pipe Introduction</b>	<b>06</b>
<b>PE-RT Pipe Range</b>	<b>07</b>
<ul style="list-style-type: none"><li>• Standard PE-RT Pipe Coil</li><li>• Standard PE-RT Pipe Straight Length</li></ul>	
<b>PE-RT Fittings</b>	<b>09</b>
<ul style="list-style-type: none"><li>• Push-fit Fittings</li><li>• Socket Fusion Fittings</li><li>• Fabricated Fittings</li><li>• Tools for Push-fit Fittings</li><li>• Tools for Socket Fusion</li></ul>	
<b>Technical Properties</b>	<b>15</b>
<ul style="list-style-type: none"><li>• Application Class Detail</li><li>• Physical and Mechanical Properties</li></ul>	
<b>PE-RT Pipe Features</b>	<b>17</b>
<b>Installation Instructions</b>	<b>18</b>
<ul style="list-style-type: none"><li>• Push-fit Structural Details</li><li>• Push-Fit Installation Guide</li><li>• Pipe Bending Guide</li></ul>	
<b>Packaging, Storage and Transportation</b>	<b>19</b>

# About Edoburg

**Edoburg**, an ISO 9001 certified 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 ensure 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
<b>High density</b> <ul style="list-style-type: none"> <li>Crane is needed for transport.</li> <li>Requires wide spacing for fixings.</li> <li>High anchoring forces, fixing required.</li> </ul>	<b>Low density</b> <ul style="list-style-type: none"> <li>Can be carried by hand up to d110.</li> <li>Requires minimal spacing for fixings.</li> <li>Simple and economical.</li> </ul>
<b>Thermal conductivity</b> <ul style="list-style-type: none"> <li>Insulation is needed to limit heat loss.</li> <li>Formation may result in corrosion.</li> </ul>	<b>Low thermal conductivity</b> <ul style="list-style-type: none"> <li>Limited heat loss.</li> <li>Low levels of condensation and resistance to corrosion.</li> </ul>
<b>Corrosion Behaviors</b> <ul style="list-style-type: none"> <li>Galvanic corrosion can occur.</li> <li>Corrosion reduces internal diameter.</li> <li>Reduced diameter causes pressure losses.</li> </ul>	<b>High Corrosion Resistance</b> <ul style="list-style-type: none"> <li>Galvanic Corrosion Free.</li> <li>Prevents corrosion and diameter reduction.</li> <li>No pressure losses.</li> </ul>
<b>Chemical resistance</b> <ul style="list-style-type: none"> <li>Low Resistance to Acids.</li> <li>Damage from Incrustation.</li> </ul>	<b>High chemical resistance</b> <ul style="list-style-type: none"> <li>A minimum of 25-years of life with correct jointing methods.</li> <li>Incrustation free.</li> </ul>

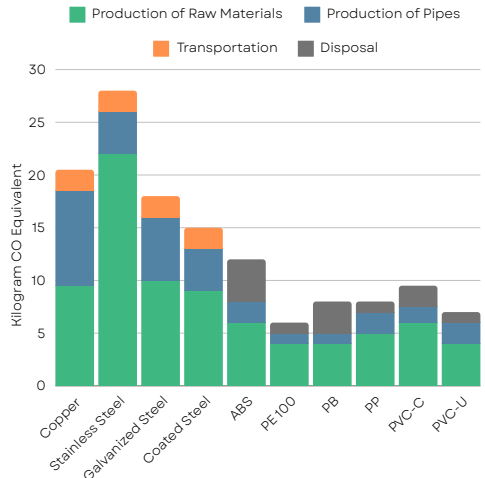
Thermoplastics in turn can be split into two main categories as partially-regulated (semi-crystalline) and irregular (amorphous) molecular structures.

- 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.





# PE-RT Piping System

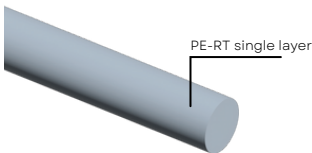
PE-RT pipes are heat-resistant Polyethylene pipes. Its extension is PE raised temperature, which means resistant to high temperatures. They are produced in accordance with DIN EN ISO 22391 and ISO 22391 standard.

Due to molecular structure and its incorporation of unique co-monomers, the tie chain formation in between the material's crystalline domains is enhanced, giving it a high resistance to slow crack growth and prolonged pressure at elevated temperatures.

- Ensures fast and easy installation thanks to its lightweight and flexible structure.
- Resistant to high pressure and temperature.
- 100% recyclable environment-friendly.
- High chemical resistance.
- Easy to carry and install due to production in the form of coil.
- Hygienic.
- No factors such as corrosion and calcification that reduces internal diameter.

## Fields of Application

- Hot and cold water installations
- Underfloor heating systems
- Drinking water systems
- Heat transfer applications at low/high temperatures
- Transfer of chemicals
- Radiators, air conditioners, coolers



PE-RT Standard Pipe



Food Grade



Hot & Cold Water



Industrial Supply



Residential Plumbing



Chemical Resistant



Air Conditioning

## Technical data

### Working Temperature

- -30°C to 95°C or 23°F to 203°F

### Pipe Standard

- DIN EN ISO 22391 -1,2
- BS 6920-1
- ISI 9845

### Certifications



# PE-RT Pipe Range

## Standard PE-RT Pipe Coil

### PN16 / SDR7.4 / S 3.2 PE-RT PIPE COIL



Code	Size (mm)	Length (m)	Color
PRTC101	20mm	30m / 100 Foot	Grey
PRTC102	25mm	30m / 100 Foot	Grey
PRTC103	32mm	30m / 100 Foot	Grey

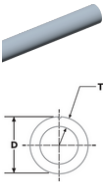
### PN20/SDR 6/S2.5 PE-RT PIPE COIL



Code	Size (mm)	Length (m)	Color
PRTC201	20mm	30m / 100 Foot	Grey
PRTC202	25mm	30m / 100 Foot	Grey
PRTC203	32mm	30m / 100 Foot	Grey

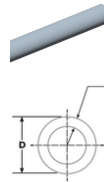
## Standard PE-RT Pipe Straight Length

### PN10 / SDR11 / S5 PE-RT PIPE COIL



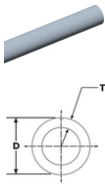
Code	Size (mm)(DxT)	Length (m)	Package	Color
PRTL001	20x2.0	3mm	75	Grey
PRTL002	25x2.3	3mm	50	Grey
PRTL003	32x2.9	3mm	30	Grey
PRTL004	40x3.7	3mm	15	Grey
PRTL005	50x4.6	3mm	10	Grey
PRTL006	63x5.8	3mm	7	Grey
PRTL007	75x6.8	3mm	5	Grey
PRTL008	90x8.2	3mm	5	Grey
PRTL009	110x10.0	3mm	3	Grey
PRTL010	125x11.40	3mm	3	Grey
PRTL011	160x14.60	3mm	1	Grey

### PN16 / SDR7.4 / S 3.2 PE-RT PIPE COIL



Code	Size (mm)(DxT)	Length (m)	Package	Color
PRTL101	20x2.8	3mm	75	Grey
PRTL102	25x3.5	3mm	50	Grey
PRTL103	32x4.4	3mm	30	Grey
PRTL104	40x5.5	3mm	15	Grey
PRTL105	50x6.9	3mm	10	Grey
PRTL106	63x8.6	3mm	7	Grey
PRTL107	75x10.3	3mm	5	Grey
PRTL108	90x12.3	3mm	5	Grey
PRTL109	110x15.1	3mm	3	Grey
PRTL110	125x16.90	3mm	3	Grey
PRTL111	160x21.9	3mm	1	Grey

**PN10 / SDR11 / S5 PE-RT PIPE COIL**



Code	Size (mm)(DxT)	Length (m)	Package	Color
PRTL201	20x3.4	3mm	75	Grey
PRTL202	25x4.2	3mm	50	Grey
PRTL203	32x5.4	3mm	30	Grey
PRTL204	40x6.7	3mm	15	Grey
PRTL205	50x8.3	3mm	10	Grey
PRTL206	63x10.5	3mm	7	Grey
PRTL207	75x12.5	3mm	5	Grey
PRTL208	90x15.0	3mm	5	Grey
PRTL209	110x18.3	3mm	3	Grey
PRTL210	125X20.8	3mm	3	Grey
PRTL211	160x26.6	3mm	1	Grey





# PE-RT Fittings Range

## PB1 Universal Push-fit Fittings

### SOCKET



Code	Size	Package (pcs/crtn)
PBSK001	20mm	100
PBSK002	25mm	80
PBSK003	32mm	60

### ELBOW 90°



Code	Size	Package (pcs/crtn)
PBEL001	20mm	60
PBEL002	25mm	50
PBEL003	32mm	40

### ELBOW 45°



Code	Size	Package (pcs/crtn)
PBEF001	20mm	60
PBEF002	25mm	50
PBEF003	32mm	40

### MALE THREAD ELBOW



Code	Size	Package (pcs/crtn)
PBME001	20x1/2"	70
PBME002	25x1/2"	50

### FEMALE THREAD ELBOW



Code	Size	Package (pcs/crtn)
PBFE001	20x1/2"	70
PBFE002	25x1/2"	50

### WALL PLATE M-THREAD ELBOW



Code	Size	Package (pcs/crtn)
PBWM001	20x1/2"	72
PBWM002	25x1/2"	50

### WALL PLATE F-THREAD ELBOW



Code	Size	Package (pcs/crtn)
PBWF001	20x1/2"	72
PBWF002	25x1/2"	50

### WALL PLATE Brass F-THREAD ELBOW



Code	Size	Package (pcs/crtn)
PRSWF001	20x1/2"	150
PRSWF002	25x1/2"	50

### STOP VALVE



Code	Size	Package (pcs/crtn)
PBSTV001	20mm	70
PBSTV002	25mm	50

### TEE



Code	Size	Package (pcs/crtn)
PBTE001	20mm	80
PBTE002	25mm	50
PBTE003	32mm	30

### TEE MALE THREAD



Code	Size	Package (pcs/crtn)
PBTM001	20x1/2"	60
PBTM002	25x1/2"	50
PBTM003	32x1/2"	40

### TEE FEMALE THREAD



Code	Size	Package (pcs/crtn)
PBTF001	20x1/2"	60
PBTF002	25x1/2"	50
PBTF003	32x1/2"	40

### MANIFOLD TEE



Code	Size
PBMT001	25x20x25mm
PBMT002	32x20x32mm
PBMT003	32x25x32mm

### CONCEALED STOP VALVE



Code	Size
PBCSV001	20mm
PBCSV002	25mm



### MALE THREAD ADAPTOR



Code	Size	Package (pcs/crtn)
PBAM001	20x1/2"	100
PBAM002	25x3/4"	80
PBAM003	32x1"	60

## FEMALE THREAD ADAPTOR



Code	Size	Package (pcs/crtn)
PBAF001	20x1/2"	100
PBAF002	25x3/4"	80
PBAF003	32x1"	60

## REDUCER



Code	Size
PBRD001	25/20mm
PBRD002	32/25mm
PBRD003	32/20mm

## CROSSOVER BEND



Code	Size
PBCB001	20mm
PBCB002	25mm
PBCB003	32mm

## ENTRY SLEEVE



Code	Size	Package (pcs/crtn)
PBES001	20mm	500
PBES002	25mm	400
PBES003	32mm	300

## GRAB RING



Code	Size	Package (pcs/crtn)
PSSG001	20mm	25
PSSG002	25mm	25
PSSG003	32mm	25

## BRASS MALE THREAD ADAPTOR



Code	Size	Package (pcs/crtn)
PRSAM001	20x1/2"	250
PRSAM002	25x1/2"	200
PRSAM003	25x3/4"	140
PRSAM004	32x1"	100

## TANK CONNECTOR



Code	Size
PBTC001	32x1"

## WALL CLAMP



Code	Size	Package (pcs/crtn)
PTWC001	20mm	500
PTWC002	25mm	400
PTWC003	32mm	300

## SPACER WASHER



Code	Size	Package (pcs/crtn)
PRTS001	20mm	25
PRTS002	25mm	25
PRTS003	32mm	25

## BRASS FEMALE THREAD ADAPTOR



Code	Size	Package (pcs/crtn)
PRSAF001	20x1/2"	200
PRSAF002	25x1/2"	150

## END CAP



Code	Size
PBEC001	20mm
PBEC002	25mm
PBEC003	32mm

## LONG PIPE PLUG



Code	Size	Package (pcs/crtn)
PRTPO01	1/2"	200

## PIPE PLUG



Code	Size	Package (pcs/crtn)
PRTPI01	1/2"	300

## O-RING



Code	Size	Package (pcs/crtn)
PDMO001	20mm	25
PDMO002	25mm	25
PDMO003	32mm	25

# SOCKET FUSION FITTINGS

## COUPLER



Code	Size	Package (pcs/crtn)
PCR001S	20mm	1600
PCR002S	25mm	100
PCR003S	32mm	560
PCR004S	40mm	260
PCR005S	50mm	200
PCR006S	63mm	100
PCR007S	75mm	60
PCR008S	90mm	40
PCR009S	110mm	24
PCR010S	125mm	20
PCR011S	160mm	14

## EQUAL TEE



Code	Size	Package (pcs/crtn)
PTE001S	20mm	800
PTE002S	25mm	480
PTE003S	32mm	230
PTE004S	40mm	120
PTE005S	50mm	70
PTE006S	63mm	40
PTE007S	75mm	30
PTE008S	90mm	18
PTE009S	110mm	9
PTE010S	125mm	6
PTE011S	160mm	4

## ELBOW 90°



Code	Size	Package (pcs/crtn)
PEN001S	20mm	1000
PEN002S	25mm	650
PEN003S	32mm	300
PEN004S	40mm	150
PEN005S	50mm	100
PEN006S	63mm	60
PEN007S	75mm	30
PEN008S	90mm	20
PEN009S	110mm	12
PEN010S	125mm	10
PEN011S	160mm	5

## ELBOW 45°



Code	Size	Package (pcs/crtm)
PEF001S	20mm	1500
PEF002S	25mm	750
PEF003S	32mm	380
PEF004S	40mm	300
PEF005S	50mm	150
PEF006S	63mm	70
PEF007S	75mm	40
PEF008S	90mm	22
PEF009S	110mm	15
PEF010S	125mm	10
PEF011S	160mm	7

## END CAP



Code	Size	Package (pcs/crtm)
PEC001S	20mm	2700
PEC002S	25mm	1500
PEC003S	32mm	800
PEC004S	40mm	520
PEC005S	50mm	250
PEC006S	63mm	150
PEC007S	75mm	100
PEC008S	90mm	60
PEC009S	110mm	36
PEC010S	125mm	25
PEC011S	160mm	20

## REDUCER ELBOW



Code	Size	Package (pcs/crtm)
PRE001S	25/20	900
PRE002S	32/20	500
PRE003S	32/25	480
PRE004S	40/32	200
PRE005S	40/25	200
PRE006S	40/20	200
PRE007S	50/40	60
PRE008S	50/32	60
PRE009S	50/25	60

## MALE THREAD COUPLER



Code	Size	Package (pcs/crtm)
PCM001S	20x1/2"	320
PCM002S	20x3/4"	200
PCM003S	25x1/2"	200
PCM004S	25x3/4"	200
PCM005S	32x1/2"	200
PCM006S	32x3/4"	200
PCM007S	32x1"	150
PCM008S	40x1-1/4"	60
PCM009S	50x1-1/2"	50
PCM010S	63x2"	40
PCM011S	75x2-1/2"	24
PCM012S	90x3"	14
PCM031S	110x4"	6

## FEMALE THREAD COUPLER



Code	Size	Package (pcs/crtm)
PCF001S	20x1/2"	320
PCF002S	20x3/4"	200
PCF003S	25x1/2"	200
PCF004S	25x3/4"	200
PCF005S	32x1/2"	200
PCF006S	32x3/4"	200
PCF007S	32x1"	150
PCF008S	40x1-1/4"	60
PCF009S	50x1-1/2"	50
PCF010S	63x2"	40
PCF011S	75x2-1/2"	24
PCF012S	90x3"	14
PCF031S	110x4"	6

## MALE THREAD ELBOW



Code	Size	Package (pcs/crtm)
PEM001S	20x1/2"	320
PEM002S	25x1/2"	240
PEM003S	25x3/4"	200
PEM004S	32x1/2"	120
PEM005S	32x3/4"	120
PEM006S	32x1"	100

## FEMALE THREAD ELBOW



Code	Size	Package (pcs/crtm)
PET001S	20x1/2"	320
PET002S	25x1/2"	240
PET003S	25x3/4"	200
PET004S	32x1/2"	120
PET005S	32x3/4"	120
PET006S	32x1"	100
PET007S	40x1-1/4"	50
PET008S	50x1-1/2"	30

## WALL PLATE MALE THREAD ELBOW



Code	Size	Package (pcs/crtm)
PWM001S	20x1/2"	1000
PWM002S	25x1/2"	800

## WALL PLATE FEMALE THREAD ELBOW



Code	Size	Package (pcs/crtm)
PWF001S	20x1/2"	1000
PWF002S	25x1/2"	800

## MALE THREAD UNION



Code	Size	Package (pcs/crtm)
PUM001S	20mm	200
PUM002S	25mm	200
PUM003S	32mm	100
PUM004S	40mm	80
PUM005S	50mm	50
PUM006S	63mm	20

## MALE THREAD TEE



Code	Size	Package (pcs/crtm)
PTM001S	20x1/2"	225
PTM002S	25x1/2"	160
PTM003S	25x3/4"	120
PTM004S	32x1/2"	130
PTM005S	32x3/4"	100
PTM006S	32x1"	70

## FEMALE THREAD TEE



Code	Size	Package (pcs/crtm)
PTF001S	20x1/2"	250
PTF002S	25x1/2"	200
PTF003S	25x3/4"	160
PTF004S	32x1/2"	120
PTF005S	32x3/4"	120
PTF006S	32x1"	80
PTF007S	40x1-1/4"	40

## FEMALE THREAD UNION



Code	Size	Package (pcs/crtm)
PUF001S	20mm	240
PUF002S	25mm	240
PUF003S	32mm	150
PUF004S	40mm	80
PUF005S	50mm	60
PUF006S	63mm	20

## CROSS OVER BEND



Code	Size
PCB001S	20mm
PCB002S	25mm

## BYPASS BEND



Code	Size	Package (pcs/crtm)
PBB001S	20mm	300
PBB002S	25mm	180
PBB003S	32mm	80

## BRASS UNION



Code	Size	Package (pcs/crtn)
PUN001S	20mm	200
PUN002S	25mm	150
PUN003S	32mm	100
PUN004S	40mm	80
PUN005S	50mm	50
PUN006S	63mm	20

## REDUCER



Code	Size	Package (pcs/crtn)
PRR001S	25/20	1200
PRR002S	32/20	720
PRR003S	32/25	660
PRR004S	40/20	600
PRR005S	40/25	560
PRR006S	40/32	360
PRR007S	50/20	300
PRR008S	50/25	300
PRR009S	50/32	300
PRR010S	50/40	200
PRR011S	63/32	150
PRR012S	63/40	120
PRR013S	63/50	100
PRR014S	75/40	90
PRR015S	75/50	70
PRR016S	75/63	60
PRR017S	90/50	60
PRR018S	90/63	50
PRR019S	90/75	40
PRR020S	110/63	39
PRR021S	110/75	39
PRR022S	110/90	39
PRR023S	125/110	30
PRR024S	160/90	20
PRR025S	160/110	20
PRR026S	160/125	20

## WELD SADDLE (FEMALE THREAD)



Code	Size	Package (pcs/crtn)
PWF001S	40x1/2"	225
PWF002S	50x1/2"	225
PWF003S	63x1/2"	225
PWF004S	63x3/4"	225
PWF005S	75x1/2"	225
PWF006S	75x3/4"	225
PWF007S	90x1/2"	225
PWF008S	90x3/4"	225
PWF009S	110x1/2"	225
PWF010S	110x3/4"	225
PWF011S	125x1/2"	225
PWF012S	125x3/4"	225
PWF013S	160x1/2"	225
PWF014S	160x3/4"	225

## PLASTIC UNION



Code	Size	Package (pcs/crtn)
PUP001S	20mm	600
PUP002S	25mm	300
PUP003S	32mm	250
PUP004S	40mm	150
PUP005S	50mm	70
PUP006S	63mm	40

## REDUCER TEE



Code	Size	Package (pcs/crtn)
PTR001S	25/20/25	540
PTR002S	32/20/32	280
PTR003S	32/25/32	250
PTR004S	40/20/40	200
PTR005S	40/25/40	150
PTR006S	40/32/40	130
PTR007S	50/20/50	120
PTR008S	50/25/50	100
PTR009S	50/32/50	80
PTR010S	50/40/50	80
PTR011S	63/25/63	72
PTR012S	63/32/63	72
PTR013S	63/40/63	72
PTR014S	63/50/63	52
PTR015S	75/25/75	40
PTR016S	75/32/75	40
PTR017S	75/40/75	40
PTR018S	75/50/75	32
PTR019S	75/63/75	32
PTR020S	90/32/90	24
PTR021S	90/40/90	24
PTR022S	90/50/90	24
PTR023S	90/63/90	16
PTR024S	90/75/90	16
PTR025S	110/32/110	14
PTR026S	110/40/110	14
PTR027S	110/50/110	14
PTR028S	110/63/110	12
PTR029S	110/75/110	12
PTR030S	110/90/110	12
PTR031S	125/63/125	12
PTR032S	125/75/125	12
PTR033S	125/90/125	12
PTR034S	125/110/125	12
PTR035S	160/63/160	5
PTR036S	160/75/160	5
PTR037S	160/90/160	5
PTR038S	160/110/160	5

## LONG PIPE PLUG



Code	Size	Package (pcs/crtn)
PLP001S	1/2"	400
PLP002S	3/4"	360

## FLANGE



Code	Size	Package (pcs/crtn)
PFL001S	32mm	100
PFL002S	40mm	75
PFL003S	50mm	60
PFL004S	63mm	60
PFL005S	75mm	45
PFL006S	90mm	40
PFL007S	110mm	36
PFL008S	125mm	20
PFL009S	160mm	15

## FLANGE CORE



Code	Size	Package (pcs/crtn)
PFC001S	32mm	500
PFC002S	40mm	350
PFC003S	50mm	300
PFC004S	63mm	200
PFC005S	75mm	120
PFC006S	90mm	80
PFC007S	110mm	50
PFC008S	125mm	25
PFC009S	160mm	22

## WELD SADDLE (PLAIN)



Code	Size	Package (pcs/crtn)
PWP001S	40x20	520
PWP002S	50x20	520
PWP003S	63x32	520
PWP004S	63x25	520
PWP005S	75x32	520
PWP006S	75x25	520
PWP007S	90x32	520
PWP008S	90x25	520
PWP009S	110x32	520
PWP010S	110x25	520
PWP011S	125x32	520
PWP012S	125x40	520
PWP013S	160x25	520
PWP014S	160x32	520
PWP015S	160x40	250
PWP016S	160x50	100
PWP017S	160x63	120
PWP018S	160x75	100

## FOUR WAY TEE / CROSS



Code	Size	Package (pcs/crtn)
PFT001S	20mm	400
PFT002S	25mm	360
PFT003S	32mm	180
PFT004S	40mm	90

## STOP VALVE



Code	Size	Package (pcs/ctn)
PSV001S	20mm	120
PSV002S	25mm	80
PSV003S	32mm	60
PSV004S	40mm	40
PSV005S	50mm	50
PSV006S	63mm	20

## CLAMP



Code	Size	Package (pcs/ctn)
PCL001S	20mm	2200
PCL002S	25mm	1800
PCL003S	32mm	1100
PCL004S	40mm	700
PCL005S	50mm	600
PCL006S	63mm	500

## TANK NIPPLE



Code	Size	Package (pcs/ctn)
PTN001S	32mm/1"	300
PTN002S	40mm/1-1/4"	300
PTN003S	50mm/1-1/2"	200
PTN004S	63mm/2"	100

## PIPE PLUG

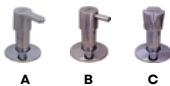


Code	Size	Package (pcs/ctn)
PPP001S	1/2"	3000
PPP002S	3/4"	2000
PPP003S	1"	1000

## CONCEALED STOP VALVE



Code	Size	Package (pcs/ctn)
PCS001S	20mm	70
PCS002S	25mm	70
PCS003S	32mm	60



# FABRICATED FITTINGS

## PLASTIC UNION



Code	Size
PRTPU001F	20mm
PRTPU002F	25mm
PRTPU003F	32mm

## MALE THREAD COUPLER



Code	Size
PRTCM002F	20x3/4"
PRTCM003F	25x1/2"
PRTCM005F	32x1/2"
PRTCM006F	32x3/4"

## FEMALE THREAD COUPLER



Code	Size
PRTCF002F	20x3/4"
PRTCF003F	25x1/2"
PRTCF005F	32x1/2"
PRTCF006F	32x3/4"

## FEMALE THREAD TEE



Code	Size
PRTTF003F	25x3/4"
PRTTF005F	32x3/4"
PRTTF006F	32x1"

## MALE THREAD TEE



Code	Size
PRTTM003F	25x3/4"
PRTTM005F	32x3/4"
PRTTM006F	32x1"

## MALE THREAD ELBOW



Code	Size
PRTEM003F	25x3/4"
PRTEM005F	32x3/4"
PRTEM006F	32x1"

## FEMALE THREAD ELBOW



Code	Size
PRTEF003F	25x3/4"
PRTEF005F	32x3/4"
PRTEF006F	32x1"

## MALE THREAD UNION



Code	Size
PRTUM001F	20x1/2"
PRTUM002F	25x3/4"
PRTUM003F	32x1"

## FEMALE THREAD UNION



Code	Size
PRTUF001F	20x1/2"
PRTUF002F	25x3/4"
PRTUF003F	32x1"

## METAL UNION



Code	Size
PRTUN001F	20x1/2"
PRTUN002F	25x3/4"
PRTUN003F	32x1"



# Tools

## PB1 Universal Push-fit Fittings Tools

### PIPE EDGE TRIMMER



Code	Size
PAL001	20-40mm

### PIPE CUTTER



Code	Size	Package (pcs/ortn)
PPCR001	20-40mm	10
PPCR002	20-75mm	10

### TEMPLATE - ADJUSTABLE (WALL MIXER ELBOW)



Code
PWMT001

## Socket Fusion Fittings Tools

### WELDING MACHINE



Code	Size
PWM112S	20-63mm
PWM113S	75-110mm
PWM114S	160mm
<b>WELDING DIE ONLY</b>	
PWM106S	125mm

### PIPE CUTTER



Code	Size	Package (pcs/ortn)
PPC006S	20-40mm	900
PPC007S	20-63mm	600

### REPAIR SET



Code	Size
PRS001S	9mm
PRS002S	11mm

### TEMPLATE - ADJUSTABLE (WALL MIXER ELBOW)



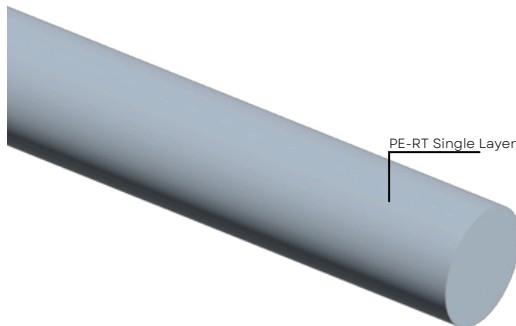
Code
PTE001



# Technical Properties

## Technical Characteristics

Pipe Structure	Single Layered Standard PE-RT Pipe
Diameters (mm)	d20, d25, d32, d40, d50, d63, d75, d90, d110, d125, d160
Pipe Classes	Class 1: For Hot Water Supply at 60°C Class 2: For Hot Water Supply at 70°C Class 4: Under-floor Heating and Low temperature radiators Class 5: High temperatures radiators
Pipe Length	Straight length - 3m / 10 foot, Coil - 30m / 100 foot.
Joining Methods	Push-fit, Socket Fusion Welding, Flange Connection, Mechanical threaded connection
Color	Grey
Chemical Resistance	Resistant to organic and inorganic chemical environments for pH values between 2 and 12
Installation Temperature	Minimum: +5oC Maximum: +40oC
Operating Temperature	Standard PE-RT Pipes: -30°C - +95°C
Standards	DIN EN ISO 22391 -1,2, BS 6920-1, ISI 9845
Thermal Expansion Coefficient	0.18 mm/m*°K
Thermal Conductivity Coefficient	0.42-0.48 W/m*°K
Approvals and Certificates	UK: <b>WRAS</b> , India: <b>ISI, BIS</b>



**PE-RT Standard Pipe**

## APPLICATION CLASS TABLE as per DIN EN ISO 22391 -1, 2

The PE-RT pipes which are supplied by are Monolayer pipes with superior thermal resistance. The PE-RT pipes do not have an oxygen barrier and are mainly used for drinking water (hot & cold) installations.

PE-RT Pipe					Maximum Working Pressure Table (DIN EN ISO 22391-2)				
Outer Diameter (mm)	16	20	25	32	APPLICATION CLASS	Ø16 X 2.2	Ø20 X 2.8	Ø25 X 3.5	Ø32 X 4.4
Wall Thickness (mm)	2.2	2.8	3.5	4.4	1	10	8	8	8
Weight (kg/m)	0.098	0.153	0.238	0.388	2	8	8	6	6
Coefficient Linear Expansion (mm/m <sup>2</sup> K)	0.18	0.18	0.18	0.18	4	10	8	8	8
Application Class (ISO 22391)	2-4-5	2-4-5	2-3-5	2-4-5	5	8	6	6	6

Pressures are in Bar Unit.

As per Table 1 of ISO 22391 ( Part 1 ) : 2009 specification PE-RT pipes are recommended for four different application classes as per following details:

- Application Class 1 : For Hot Water Supply at 60°C
- Application Class 4 : Under-floor Heating and Low temperature radiators
- Application Class 2 : For Hot Water Supply at 70°C
- Application Class 5 :High temperatures radiators

See application class table (DIN EN ISO 22391-1)  
See maximum working pressure table (DIN EN ISO 22391-2) and maximum working temperature(°C)

## Physical & Mechanical Properties

Physical Properties : PE-RT Type II			
PROPERTY	TEST METHOD	UNIT	VALUES (Typical)
Melt Flow Rate	ISO 1133	g/10 min	0.3
Density	ISO 1133	g/cm <sup>3</sup>	0.950
Vicatsoftning Point	ISO 306	°C	125
Thermal Conductivity at 60°C	DIN 16833/DIN EN 12664	g/10 min	0.4
Co-efficient of thermal Expansion	DIN 53752 A (20°C-70°C)	cm/cm/°C	0.0001

Mechanical Properties : PE-RT Type II			
PROPERTY	TEST METHOD	UNIT	VALUES (Typical)
Hardness	ISO 868	Shore	>60
Tensile Strength Yield	ISO 527-2	MPa	>24
Tensile Strength Break	ISO 527-2	MPa	33
Elongation at Break	ISO 527-2	%	>600
Flexural Modulus	ISO 178	MPa	>1100
Izod Impact	ISO 180	KJ/m <sup>2</sup>	>22
Stress Crack Resistance	ASTM D 1693	F 50	No Failure



# Features of PE-RT Pipes & Fittings Supplied by Edoburg



## Easy to Install

PE-RT piping method offers fast installation and it has been developed as a Push fitting system, which does not require tools and technology. And it can be easily joined through a variety of joining methods.



## Low Temperature Use

PE-RT system has excellent low temperature resistance, so it can be constructed even when the temperature is low in winter (-30 °C), and the pipe does not need to be preheated during bending.



## Non-Toxic Product

PE-RT is nontoxic material verified by NSF. Therefore, it can be used for potable waterworks.



## Electrical Insulation

Unlike metal pipe material, PE-RT has excellent electrical insulation.



## Fitness for Use in Seismic Areas

Flexibility of the PE-RT pipe is best suited to be used in seismic prone areas. The pipe is not prone to any damages.



## 360° Rotation possible

PE-RT system can be easier to bend and it can be rotated 360° even after connecting pipes and fittings.



## Ultimate Strength

PE-RT Plumbing System has no decline in quality and no change on creep PE-RT is a high-temperature flexible plastic pressure pipe with extensive testing for durability and material performance.



## Flexibility & Light Weight

Flexibility to bend the pipe around corners, thus reducing the consumption of pipe fittings and ultimate installation cost and light weight make transportation easy.



## Maintenance Free

PE-RT pipes are stress crack resistance. When the pipe is bending, the stress in the bent part loose quickly. Therefore no maintenance cost after installation.



## Noise Free

PE-RT Plumbing System helps no more noise issue from water hammer, constant pressure and fluctuating temperatures.



## Chemical Resistance

PE-RT system is strong against chemical reaction and corrosion resistant. It prevents bacteria & algae from breaching into the plumbing system. The PERT pipes are resistant to the most commonly used antifreeze fluids.



## Wide temperature application

PE-RT pipe have wide operating temperature range from -30°C to 95°C.



## Freezing and Heat Resistance

On account of the high elasticity, the PE-RT plumbing system assures heat resistance and protects it from freezing.



## Low Wastage

Due to flexibility of PE-RT pipes they can be supplied in 50-100 meter coils. This means exact length can be cut for installation and there is no wastage of pipe compared to standard length pipes.



## Cost Effective

Flexibility to speed installation decrease labour cost, long term reliability and less deficiency rate.

# PE-RT Pipes Installation Instructions

## Structure of PB1 Universal Fittings

**O-Ring**  
The O-ring is resistant to high or low temperatures. Made of EPDM Material for long lasting and hygiene property.

**Grab Ring**  
Grab ring is made of 316 stainless steel, which is an excellent corrosion resistant and has the strength to crawl at high temperatures.

### Retaining Cap

The retaining cap is factory fitted and does not require further tightening to get the proper torque. If the cap is loose, it can be easily tightened using hands without any tools.

### Spacer Washer

Space washer is designed to separate the O-ring seal from the grab ring and proper seating area for O-ring.

PB1 Universal Pushfit Fittings

## Installation of PE-RT Push-fit Fittings



### Step: 1 Cutting the Pipe

Use pipe cutter to cut the pipe on a cut mark (>|<).



### Step: 2 Inserting the Entry Sleeve / Stiffener

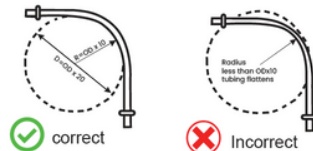
Before fixing the pipe into push-fit fitting support sleeve / stiffener must be inserted completely.

### Step: 3 Inserting the Pipe into Fitting

- Take a push-fit fitting and just spin the retaining cap 2-3 times and rotate only to loosen the cap.
- Take a Pipe with support sleeve and push it gently up-to the next mark and tighten the cap by hand (no tools) and you are done.

## Bending of the PE-RT pipe

PE-RT (Type II) pipe can be repeatedly bent and flexed with no affects to the integrity of the pipe however the minimum radius should be 10x the outside diameter of the pipe. Bending further will run the risk of kinking occurs the section should be cut out and replaced.

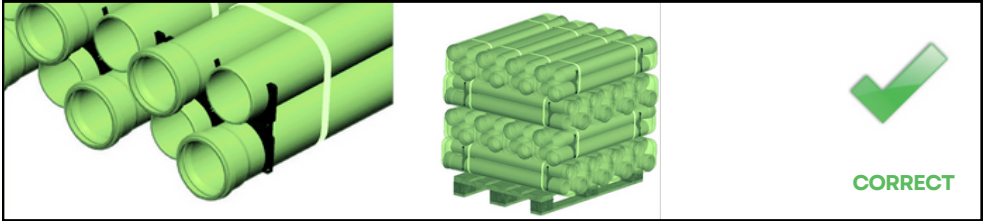


Bending of PE-RT Pipes  
(Bends near fittings are not advisable)

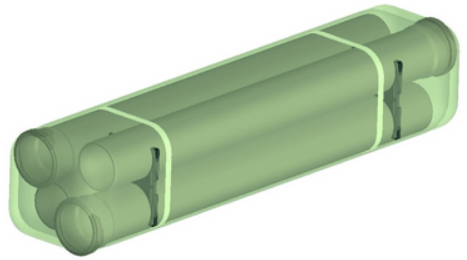
# Packaging, Storage and Transportation

## Packaging

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

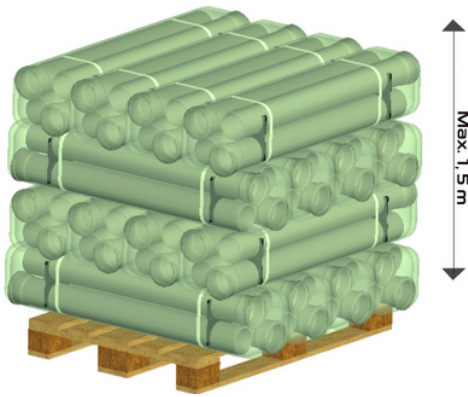


Short parts with the length of 150, 250 and 500 mm are packed in carton boxes like connection parts.



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

## Storage

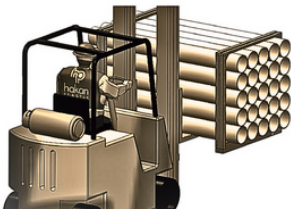
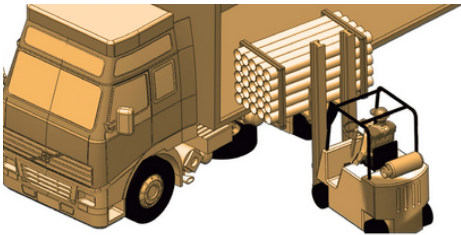


Method of storage should not cause any outflow and should not damage the pipes. As long as they are stored properly, no permanent deformations or damages will occur on the pipes and fittings. Pipes should not be stacked above 1,5 m. Pipes should be safe against sliding.



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 slid 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.



Disclaimer: The information and technical data (altogether "Data") herein are not binding. The Data neither constitutes any expressed, implied or warranted characteristics, nor guaranteed properties or a guaranteed durability. All Data is subject to modification. The General Terms and Conditions of Sale of Edoburg Piping Systems apply.

# Edoburg®

[www.edoburg.com](http://www.edoburg.com)

[f](#) [X](#) [@](#) [▶](#) [in](#) /edoburgpipes



**Edoburg Piping Systems LLP**  
Reg. Office: 320, Vikas Kunj  
Vikasपुरi, Delhi 110018 IN

+1 201 616 0164  
+91 962 585 8500  
[hello@edoburg.com](mailto:hello@edoburg.com)