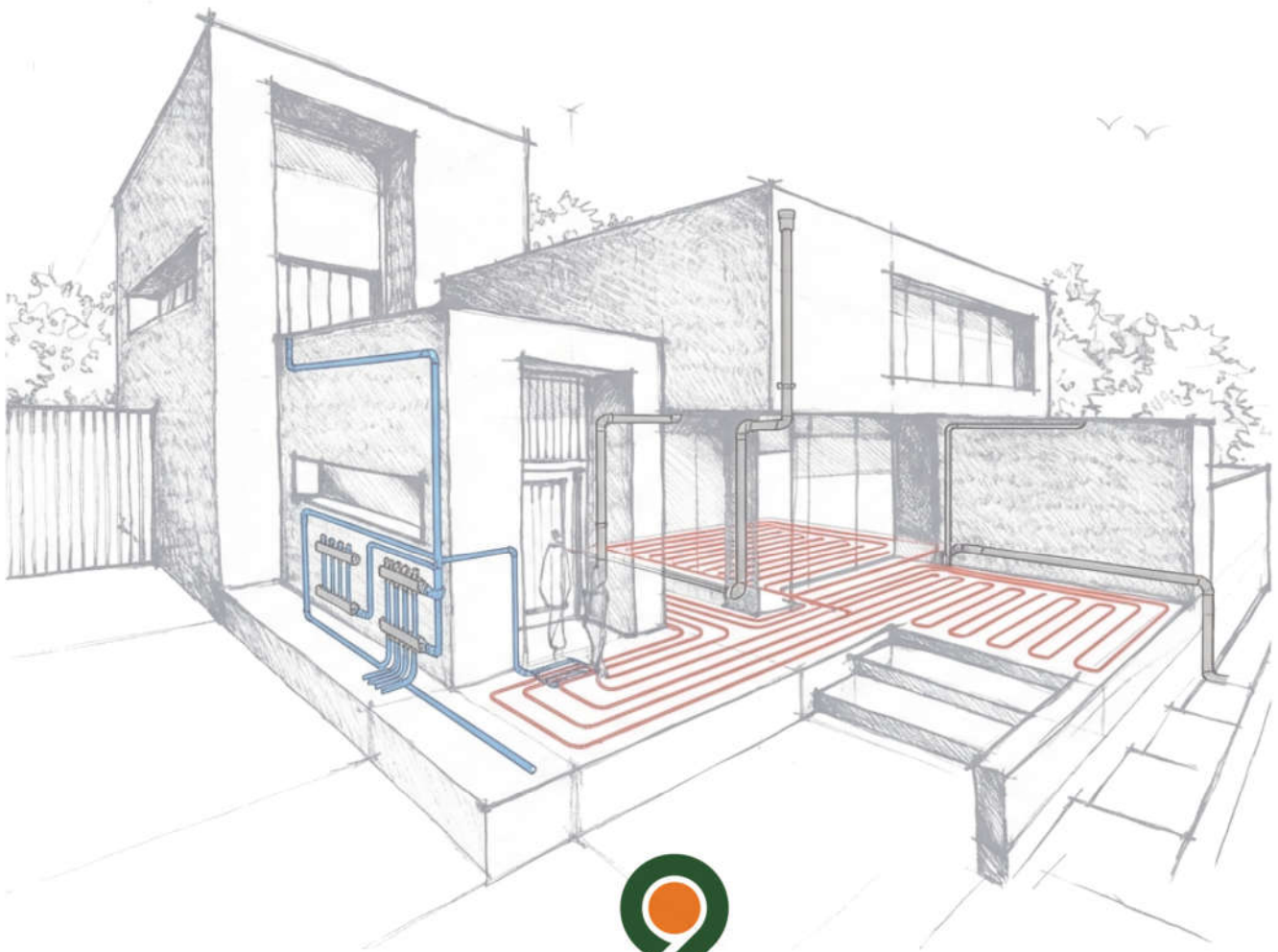


PRODUCT CATALOG & TECHNICAL INFORMATION



VAHID
INDUSTRIAL
GROUP

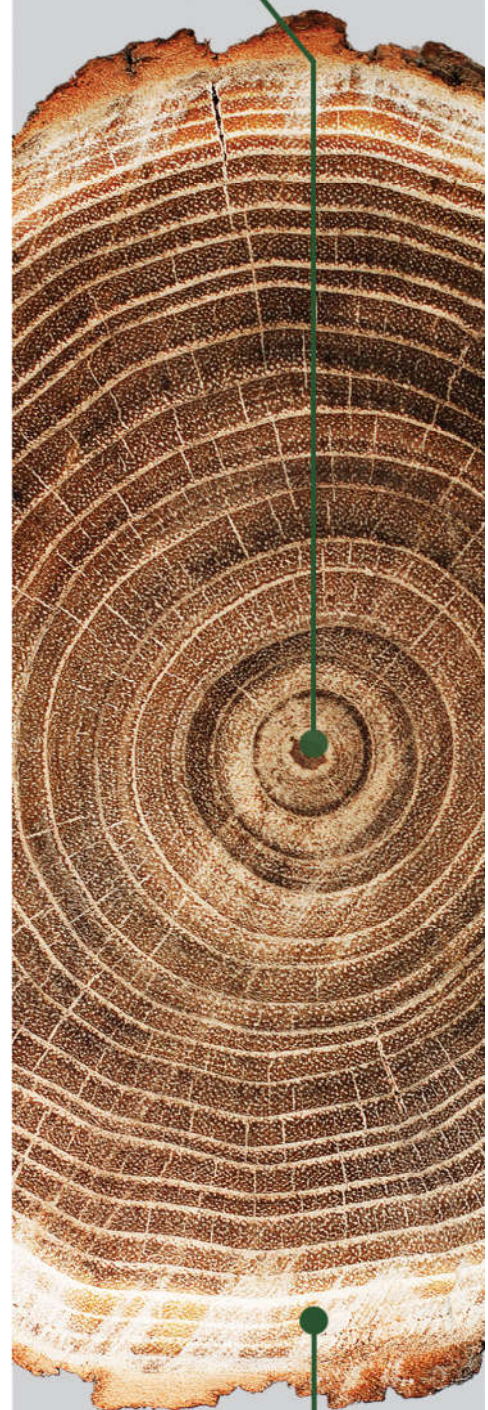


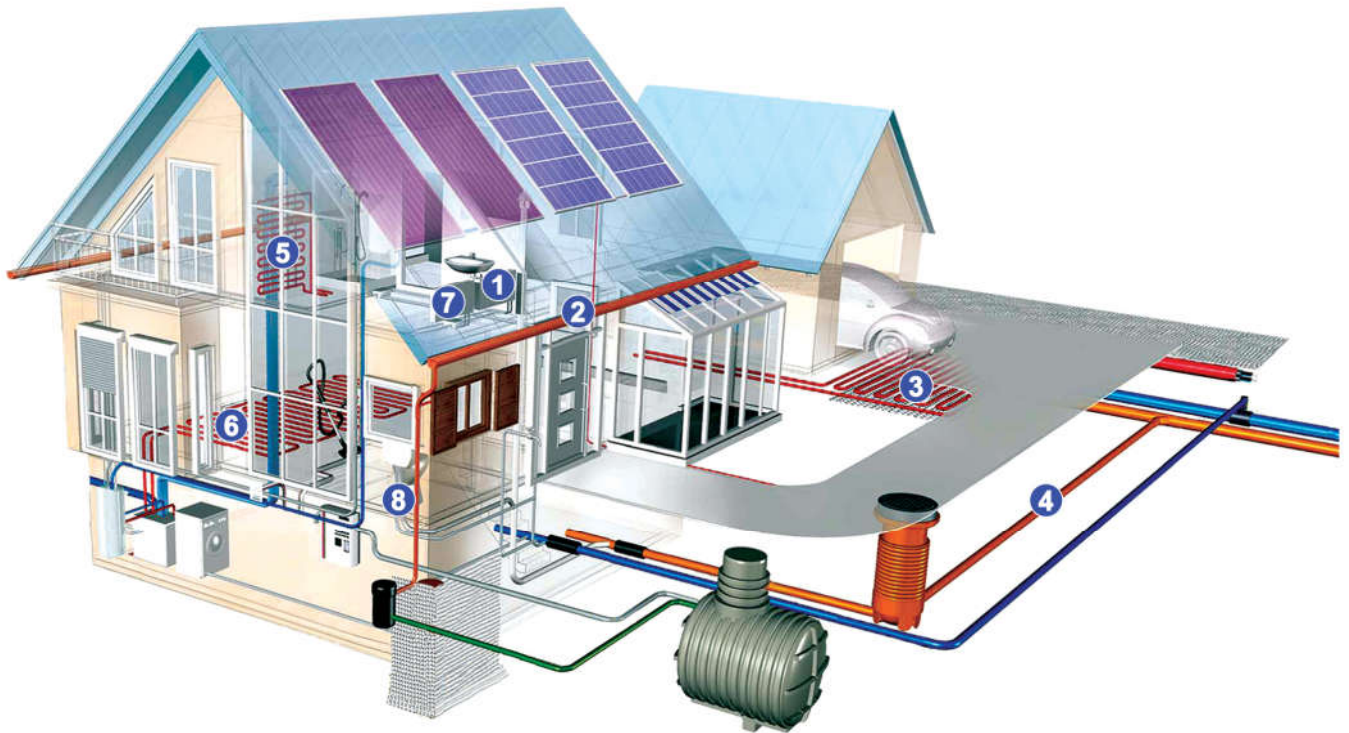


OUR JOURNEY FROM PAST TO FUTURE...



- 1374** Company establishment
- 1375** PP-R polypropylene pipes
- 1376** HDPE polyethylene pipes
- 1379** PP-R polypropylene fittings
- 1382** Drinking water branch connection kits
- 1384** Double-wall corrugated pipes
- 1385** Five-layer composite pipes PEX/AL/PEX
- 1386** MASTER DRIP drip irrigation tapes
- 1387** Sewer branch connection kits
- 1388** Three-layer silent push-fit drainage piping system, MURI SILENT PIPE
- 1389** Single-layer and three-layer SMART PEX intelligent pipes
- 1390** PPSU fittings and new-generation five-layer composite pipes
- 1392** Three-layer polypropylene pipes with glass-fiber reinforcement and zero longitudinal expansion
- 1393** Conventional two-layer PP-HT push-fit drainage pipes and fittings
- 1395** ULTRA TAPE continuous-layer drip irrigation tapes
- 1396** ULTRA PIPE plain and dripper-type irrigation pipes
- 1397** Conventional two-layer push-fit drainage pipes and fittings (fire-retardant)
- 1398** Three-layer silent push-fit drainage pipes and fittings (fire-retardant)
- 1399** Production of continuous-layer drip irrigation tapes with reduced clogging sensitivity, available as ULTRA TAPE++ and ULTRA TAPE+
- 1400** Production of ULTRA FIT fittings for 16 and 22 drip irrigation tapes
- 1401** Production of continuous-layer drip irrigation tapes with a flow rate of 0.4 L/h
- 1401** Production of 200-mm push-fit pipe fittings
- 1402** Production of ULTRA Drip online drippers
- 1404** ULTRA FLEX flexible lay-flat pipes





1

Hot & Cold Sanitary Piping System
 Smart PEX PE-Xa Pipes
 PPRC Pipes
 PPRCT+GF Pipes
 PowerPEX Multilayer Pipes

5

Wall Radiant Floor Heating
 with Stainless Manifold Steel

2

Rain Water Collection System
 Muri Silent Piping System
 HDPE PE100 Pipes

6

Under Floor Radiant Heating
 With Stainless Steel Manifold

3

Snow Melting System
 Smart PEX PE-Xa Pipes

7

Heating & Cooling Piping System
 Smart PEX PE-Xa Pipes
 PPRCT+GF 3 Layers Pipes
 PowerPEX Multilayer Pipes

4

Buried Sewage Piping System
 House Sewage Piping System
 SN4/SN8 Buried Piping System

8

House Sewage Piping System
 MURI SILENT PIPE - MURI SILENT PIPE FR
 MURI LOW NOISE PIPE - MURI LOW NOISE PIPE FR

BUILDING PIPING PRODUCTS

- SINGLE-LAYER POLYPROPYLENE PIPES AND FITTINGS



- THREE-LAYER POLYPROPYLENE PIPES AND FITTINGS



- TWO-LAYER PUSH-FIT DRAINAGE PIPES AND FITTINGS



- SILENT PUSH-FIT DRAINAGE PIPES AND FITTINGS



- BRASS FITTINGS FOR PEX AND FIVE-LAYER PIPES



- PPSU POLYMER FITTINGS FOR PEX AND FIVE-LAYER PIPES



- SINGLE-LAYER PEX PIPE



- THREE-LAYER PEX PIPE



- PEX PIPES FOR UNDERFLOOR HEATING



- FIVE-LAYER COMPOSITE PEX PIPES



PP-RC Polypropylene piping system

This Piping System is recommended for use in hot and cold potable water systems, drainage systems for HVAC units, hot and cold risers, cooling tower risers, industrial collectors for underfloor heating, compressed air transmission systems, and urban water supply networks up to the meter. Easy and fast installation is the key advantages of this piping system

Features:

- Ease of installation and high speed of execution
- Welded connections
- Good impact resistance

Raw Material Type	Polypropylene Random Copolymer (PP-R 80)
National standard – International standard	INSO 6314 – BS EN ISO 15874
Maximum working pressure – performance class	10 bar – class 1
Pipe structure – pipe color	Single-layer – White – Green
Available sizes	20 to 250 mm (outer diameter)
Available thicknesses	SDR 7.4-SDR 6
Fire-resistance class	DIN4102-B2



Building products

**Three-layer Polypropylene piping system
(new generation – zero longitudinal expansion)
PR-RCT / PP-R+GF / PP-RCT**

This new-generation polypropylene piping system is designed to prevent longitudinal expansion. The pipes feature a three-layer structure and are suitable for use in hot and cold potable water systems as well as heating and cooling systems. This piping system can also be used in hot and cold-water risers, heating and cooling risers, cooling tower risers, industrial collectors for underfloor heating, and compressed air transmission systems



Features:

- Easy and fast installation
- Simple branching in risers using Saddle fittings
- Good impact resistance
- low longitudinal expansion

Raw Material Type	Beta Nucleating PP-PPRCT (PP-RCT 100)
National standard – International standard	INSO 6314 – BS EN ISO 15874 ISIRI 12753-BS EN ISO 21003
Maximum working pressure – performance class	10 bar – class 1&5
Pipe structure – pipe color	Three-layer – Gray
Available sizes	20 to 250 mm (outer diameter)
Available thicknesses	SDR 7.4-SDR 6
Fire-resistance class	DIN4102-B2



Building products

Single-layer and three-layer smart PE-Xa piping systems – SMART PEX

Single-layer and three-layer PE-Xa piping systems are among the high-quality piping solutions available for use in hot and cold potable water systems as well as heating and cooling applications.

These pipes undergo cross-linking during the production process and therefore do not require any additional post-production treatment for cross-linking. The combination of flexibility and thermal memory in these pipes constitutes one of their unique features.

Features:

- High flexibility
- Thermal memory
- Fast installation without the need for electricity or batteries
- Wide range of pipe options for various applications

Thermal
Memory

Raw Material Type	Polyethylene HD
National standard – International standard	ISIRI 13205 – BS EN ISO 15875
Maximum working pressure – performance class	10 bar – class 1&2&5
Pipe structure – pipe color	Single-layer (White) – Three-layer (Blue)
Available sizes	16 to 32 mm (outer diameter)
Available thicknesses	SDR 3.2-SDR 7.4
Fire-resistance class	DIN4102-B2



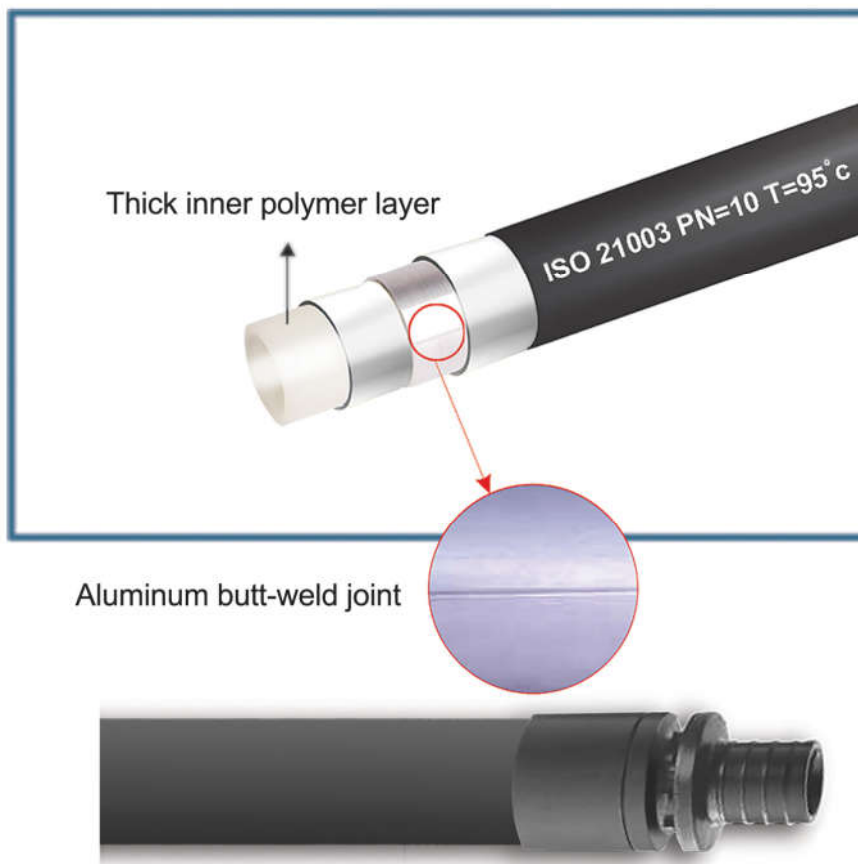
Building products

Five-layer PEX/AL/PEX or PE-RT/AL/PE-RT piping systems

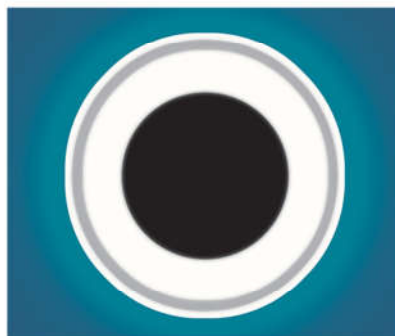
The company's new-generation five-layer piping systems feature aluminum butt-welding and a thick inner polymer layer, which gives the pipe superior resistance to kinking in tight bends. These pipes are composed of two adhesive layers, an aluminum layer, and two polymer layers (PE-X or PE-RT), and offer high resistance to pressure, temperature, and longitudinal expansion.

Features:

- High flexibility
- Low longitudinal expansion
- Fast installation without need for electricity or batteries
- Kink-resistant structure



Cross-section view of a five-layer composite pipe with butt-fusion welding



Building products

PPSU Fittings System

The fittings for PEX and five-layer pipes produced by this company are manufactured from PPSU super polymer – an advanced engineering polymer. This polymer offers unique properties that surpass those of metals and is completely safe for use in potable water systems as well as heating and cooling applications. These fittings offer advantages such as resistance to rusting and corrosion in humid environments or when exposed to aggressive fluids.

Features:

- With a melting point of 370°C, this polymer far exceeds the maximum temperatures encountered in plumbing systems
- High impact resistance
- Exceptional creep resistance and mechanical properties



Installation steps for fittings used with PEX and five-layer composite pipes:



1- Cut the pipe squarely



2- Expand the pipe end



3- Place the connection ring



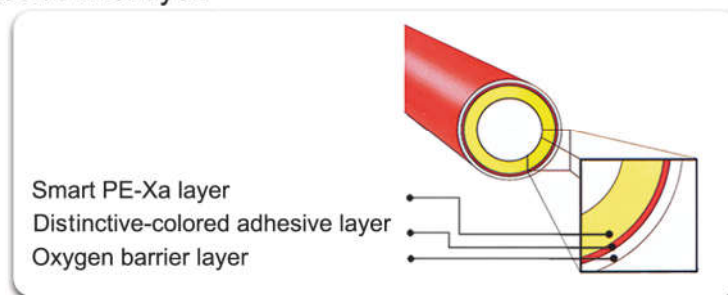
4- Complete the joint by sliding the ring into position
Building products

Building products

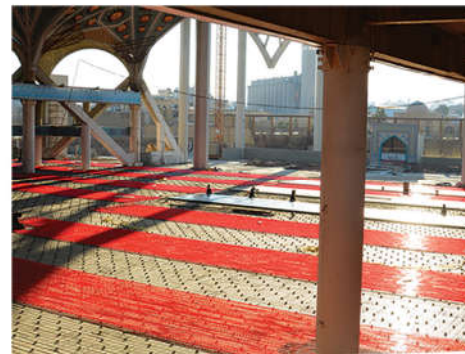
Underfloor Heating and Cooling Systems

Underfloor heating systems rank among the most advanced building services systems currently available, aligning perfectly with the human body's thermal comfort profile. Their growing popularity is driven by significant energy savings and superior thermal comfort. In line with its commitment to introducing state-of-the-art products to Iran, Vahid Industrial Group has developed specialized pipes for underfloor heating and cooling systems with unique specifications.

These pipes are manufactured from PE-Xa polymer, which features thermal memory. An EVOH layer is applied to the outer surface to prevent oxygen permeation, and this layer is bonded to the PE-Xa substrate using an adhesive interlayer.



Raw Material Type	Polyethylene HD
National standard – International standard	ISIRI 13205 – BS EN ISO 15875
Maximum working pressure – performance class	8 bar – class 4
Pipe structure – pipe color	Three-layer (Red)
Available sizes	16 to 25 mm (outer diameter)
Available thicknesses	S 4
Fire-resistance class	DIN4102-B2



Building products

Two-Layer Push-Fit Piping System (MURI LOW NOISE PIPE)

- This piping system have two-layer structure
- High impact resistance even at temperatures as low as -23°C
- Equipped with high quality BL orings to ensure leak tight sealing
- The white inner layer allows for easy visual inspection of the pipe's internal surface



Raw Materials	Polypropylene Block Copolymer – PP-B
Size	40 to 200 mm
Operating temperature	80°C (continuous) - 95°C (short-term)
Operating pressure	0.5 bar
Pipe structure	2-layer (red inner – red outer)
Manufacturing standard	INSO 13822-BS EN ISO 1451
Fire-resistance class	DIN 4102-B1
Density	0.9 g/cm ³

Building products

Two-Layer Fire Retardant Push-Fit Piping System (MURI LOW NOISE PIPE FR)

- This piping system have two-layer structure
- High impact resistance even at temperatures as low as -23°C
- Equipped with high quality BL orings to ensure leak tight sealing
- Certified with B1 fire resistance class in accordance with DIN 4102



Raw Materials	Polypropylene Block Copolymer – PP-B
Size	40 to 200 mm
Operating temperature	80°C (continuous) - 95°C (short-term)
Operating pressure	0.5 bar
Pipe structure	2-layer (red inner – red outer)
Manufacturing standard	INSO 13822-BS EN ISO 1451
Fire-resistance class	DIN 4102-B1
Density	0.9 g/cm ³

Three-Layer Silent Push Fit-Piping System (MURI SILENT PIPE)

- This piping system has three-layer structure
- High impact resistance even at temperatures as low as -23°C
- Equipped with high quality BL orings to ensure leak tight sealing
- The white inner layer allows for easy visual inspection of the pipe's internal surface
- Offers excellent acoustic properties to ensure a quieter living environment

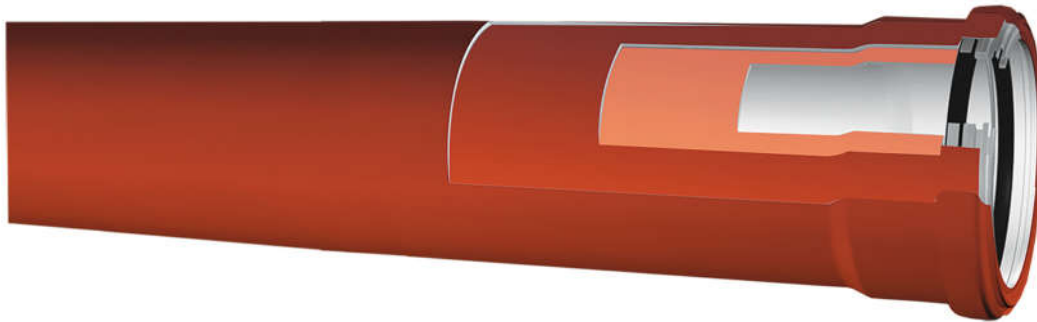


Raw Materials	Polypropylene with mineral-filled inner layer – PP-MD
Size	40 to 200 mm
Operating temperature	80°C (continuous) - 95°C (short-term)
Operating pressure	1 bar
Pipe structure	3-layer (white inner – white outer)
Manufacturing standard	INSO 13822-BS EN ISO 1451
Fire-resistance class	DIN 4102-B2
Density	1.8 g/cm ³

Building products

Three-Layer Silent Fire-Retardant Push-Fit Piping System (MURI SILENT PIPE)

- This piping system has three-layer structure
- High impact resistance even at temperatures as low as -23°C
- Equipped with high quality BL orings to ensure leak tight sealing
- The white inner layer allows for easy visual inspection of the pipe's internal surface
- Offers excellent acoustic properties to ensure a quieter living environment
- Certified with B1 fire resistance class in accordance with DIN 4102



Raw Materials	Polypropylene with mineral-filled inner layer – PP-MD
Size	40 to 200 mm
Operating temperature	80°C (continuous) - 95°C (short-term)
Operating pressure	1 bar
Pipe structure	3-layer (white inner – red outer)
Manufacturing standard	INSO 13822-BS EN ISO 1451
Fire-resistance class	DIN 4102-B1
Density	1.5 g/cm ³

AGRICULTURAL AND DRIP IRRIGATION PRODUCTS

- ULTRA TAPE CONTINUOUS-LAYER LABYRINTH DRIP IRRIGATION TAPE

ULTRA Tape

- ULTRA PIPE DRIP IRRIGATION PIPES – PLAIN AND DRIPPER-TYPE WITH CYLINDRICAL DRIPPERS (REGULAR, PC, AND PC-AS)

ULTRA Pipe INline
Normal



ULTRA Pipe INline
PC



ULTRA Pipe INline
PC/ND



ULTRA Pipe INline
PC/AS



ULTRA Pipe INline
Mineral



ULTRA Pipe



- ULTRA DRIP PC ONLINE DRIPPER

ULTRA DRIP ONLINE

- ULTRA FLEX LAY-FLAT FLEXIBLE HOSE

ULTRA Flex



- POLY FIT THREADED FITTINGS

POLY Fit



- ULTRA FIT DRIP IRRIGATION TAPE FITTINGS

ULTRA Fit



- POLYETHYLENE PIPES

VPI HDPE 1

- BRANCHING CLAMP

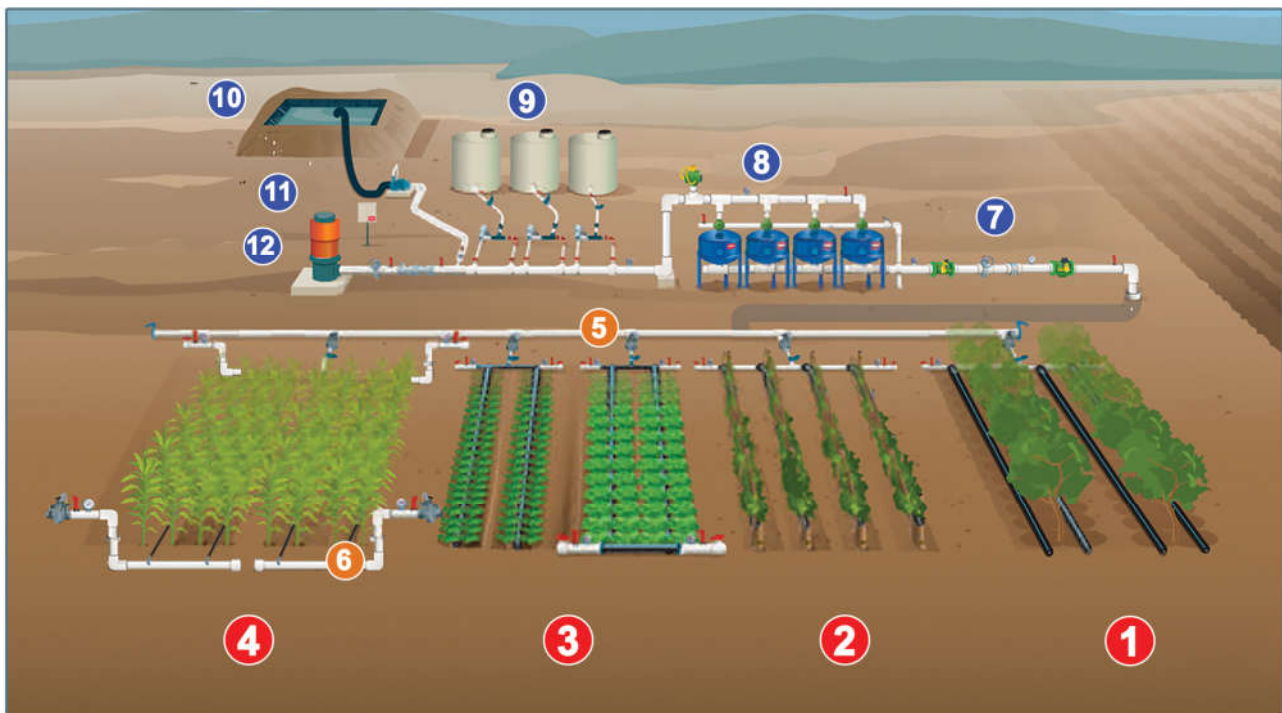
ULTRA Clamp S

- BRANCHING CLAMP WITH BRASS INSERT

ULTRA Clamp B

- BRANCHING CLAMP WITH REINFORCING RING

ULTRA Clamp R


1

DRIP IRRIGATION with ULTRA
PIPE and ULTRA DRIP

3

Drip Irrigation with Master Drip
Flat Dripper Tape

2

DRIP IRRIGATION with
ULTRA PIPE

4

DRIP IRRIGATION with
ULTRA TAPE Lay Flat Tape

5

Branching Saddle

6

PolyFit Fittings (PN16)

Control Valve

7

Water Reservoir and Pump

10

Primary Filter

8

Irrigation Control Panel

11

Sand Filter and Nutrient Feeder

9

Water well pump

12

Single Wall Polyethylene Pipes for Water and Sewage Transmission

The polyethylene pipes manufactured by this company are of the high quality and are suitable for use in water supply systems, rainwater collection, and sewage transmission networks. One of the key advantages of these polyethylene pipes is their high resistance to corrosion and rust, as well as their excellent resistance to ultraviolet radiation.

Features:

- Lightweight compared to other metal and concrete pipes
- Low wall friction coefficient
- High impact resistance
- Compatible with welded and threaded fittings

Raw Material Type	PE 100 / PE 80
National standard – International standard	ISIRI 14427 – BS EN ISO 12201-4427
Maximum working pressure	25 bar
Pipe structure – pipe color	Single-layer (black)
Available sizes	16 to 250 mm (outer diameter)
Fire-resistance class	DIN4102-B2 or B1



Agricultural Products

POLYFIT Threaded Fittings – PN16/PN10

POLYFIT threaded fittings represent a new generation of threaded connections, designed for operating pressures up to 16 atm. Thanks to the advanced technology employed in these fittings, the pipe can be easily inserted into the fitting with a fully sealed connection simply by loosening the cap nut, after which the nut is tightened securely.

Features:

- Quick and easy installation
- Wide variety of installation options
- High pressure resistance

Raw Material Type	Polyethylene HD
National standard – International standard	INSO 21264 – BS EN ISO 17885
Maximum working pressure	16 bar for sizes 20-63 – 10 bar for sizes 75 and above
Fitting Color	Black body – blue cap nut
Available sizes	20 to 110 mm (outer diameter)



Agricultural Products

Branching Clamp

The company manufactures and supplies branch saddles in three types: Normal thread, brass Insert, and with a reinforced steel ring. These saddles are suitable for branching off polyethylene and polypropylene pipes.

Raw Material Type	Polyethylene HD
National standard – International standard	ISIRI 8996 – ISO 13460
Maximum working pressure	10 bar
Available sizes	20 to 200 mm (outer diameter)
Fire-resistance class	DIN4102-B2

(Plain / With collar / With brass outlet)



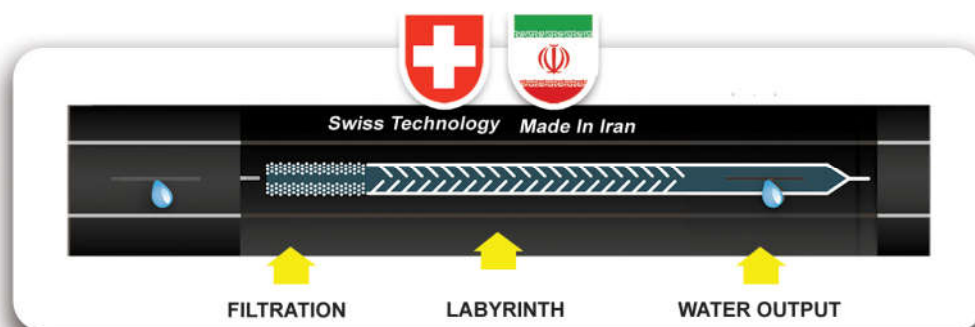
Agricultural Products

ULTRA TAPE

ULTRA TAPE Labyrinth Drip Irrigation Tapes

ULTRA TAPE labyrinth drip tapes incorporate the latest drip tape technology available worldwide and are offered in 16 and 22 mm. Thanks to their exceptional quality, these tapes provide excellent flow uniformity and represent the most cost effective choice for large scale farming operations.

Raw Material Type	Polyethylene
National standard – International standard	ISIRI 6775 – ISO 9612:2010
Maximum working pressure	0.7 bar
Pipe color	Black with white stripes
Available sizes	16 and 22 mm
Available thicknesses	150 to 250 microns (6 to 10 mils)
Dripper spacing	10 – 15 – 20 – 30 cm
Dripper flow rates	0.4 – 0.7 – 1.3 – 1.6 – 2 L/h
Coefficient of Variation (CV)	Less than 7%
Power Factor	0.45



Agricultural Products

ULTRA TAPE+

Swiss Technology



Made In IRAN

New-generation continuous-layer drip tapes with reduced clogging sensitivity



Filtration difference between PLUS tape and regular drip tape



Ø Size : 16 mm
22 mm

Flow Rate : 1.6 Lit/h

Distances : 15 cm
30 cm

ULTRA TAPE++

Swiss Technology



Made In IRAN

New-generation continuous-layer labyrinth drip tapes with a full filtration zone for each dripper



Ø Size : 16 mm
22 mm

Flow Rate : 0.4 Lit/h
0.7 Lit/h
1.3 Lit/h
2 Lit/h

Distances : 10 cm
20 cm
30 cm

Agricultural Products

ULTRA PIPE

Drip Irrigation Pipes (Plain, Dripper Type, Single Layer, and Three Layer)

The company manufactures and supplies drip irrigation pipes in two types: plain and dripper-type. The drippers are cylindrical and available in four versions: Standard, PC (Pressure-Compensating), PC-ND (Pressure-Compensating, Non-Drain), and PC-AS (Pressure-Compensating, Anti-Siphon).



Ø Size : 16 mm
20 mm



Flow Rate : 2 Lit/h
4 Lit/h
8 Lit/h

Raw Material Type	Polyethylene
National standard – International standard	ISIRI 7607 – ISO 8779:2010
Maximum working pressure	PN 3.2 – PN 4 – PN 5
Pipe color	Single-layer (black) – 3-layer (green)
Available sizes	16 and 20 mm
Available thicknesses	1.2 – 1.4 – 1.5 mm
Dripper spacing	0.9 – 1 – 1.1 cm
Dripper flow rates	2 and 4 L/h
Coefficient of Variation (CV)	Less than 7%

Agricultural Products

ULTRA FLEX Lay Flat Polymer Pipes

ULTRA FLEX lay flat pipes offer an innovative alternative with very low weight, rapid installation, easy transport, and the ability to be rolled up and reused. In addition to simplifying implementation, they significantly reduce overall costs. When used in combination with drip irrigation methods and tape irrigation systems, punched lay flat pipes enable better branch management while reducing the need for fittings and valves.



Available in sizes of 2, 2½, 3, 4, 5, 6, and 8 inches
Equipped with single ½-inch outlets at regular intervals ranging from 0.2 to 1 meter

Connecting lay-flat pipes to drip tape

- Equal Tee connector
- Available in 16-mm and 22-mm
- Can be connected to 16-mm and 22-mm drip tapes on both ends
- Valve Tee connector
- Available in 16-mm and 22-mm
- Can be connected to 16-mm and 22-mm drip tapes on both ends
- Elbow valve
- Available in 16-mm and 22-mm
- Can be connected to 16-mm and 22-mm drip tape on one end
- Elbow
- Available in 16-mm and 22-mm
- Can be connected to 16-mm and 22-mm drip tape on one end



Agricultural Products

ULTRA PIPE NORMAL



Regular in-line drippers

Ø Size : 16 mm
20 mm

Flow Rate : 2 Lit/h
4 Lit/h
8 Lit/h

ULTRA PIPE MINERAL



PC-ND in-line drippers

Ø Size : 16 mm

Flow Rate : 2 Lit/h
4 Lit/h
8 Lit/h

Agricultural Products

ULTRA PIPE

(PC/PC-ND/PC-AS)



PC in-line drippers

Ø Size : 16 mm
20 mm

Flow Rate : 2 Lit/h
4 Lit/h



Agricultural Products

ULTRA DRIP

PC Online Dripper

The ULTRA Drip online dripper, featuring pressure-compensating (PC) technology, ensures precise and uniform water distribution across a wide range of operating pressures.

These drippers are resistant to UV radiation and agricultural chemicals. With a coefficient of variation of less than 7%, they guarantee high irrigation uniformity under various conditions. The continuous self-cleaning system effectively flushes out sediments and minerals, preventing clogging and ensuring uninterrupted operation.



Flow Rate : 2 Lit/h
4 Lit/h
8 Lit/h

- Suitable for orchards, vineyards, greenhouses, nurseries, and landscaping projects
- ideal for areas with difficult topography and steep slopes

Flow Rate	2, 4, and 8 L/h
Working Pressure	4 – 0.5 bar
Features	Pressure-Compensating (PC)
Coefficient of Variation (CV)	Less than 7%
Required Filtration	120 – 130 mesh
Recommended Punch Size	3 mm



Agricultural Products

ULTRA FIT

Drip irrigation tape fittings

Product Description	Product Image	Product Size
Drip tape to pipe connector		16x16 22x20
Drip tape end cap		16 22
Drip tape connector		16 22
Drip tape starter kit with gasket		16 22
Drip tape starter valve with gasket		16

Agricultural Products

WATER AND SEWAGE PRODUCTS

- POLYETHYLENE PIPES



- DRINKING WATER BRANCH CONNECTION KITS



- MUNICIPAL SEWAGE BRANCH CONNECTION KITS



- BURIED PUSH-FIT DRAINAGE PIPES AND FITTINGS

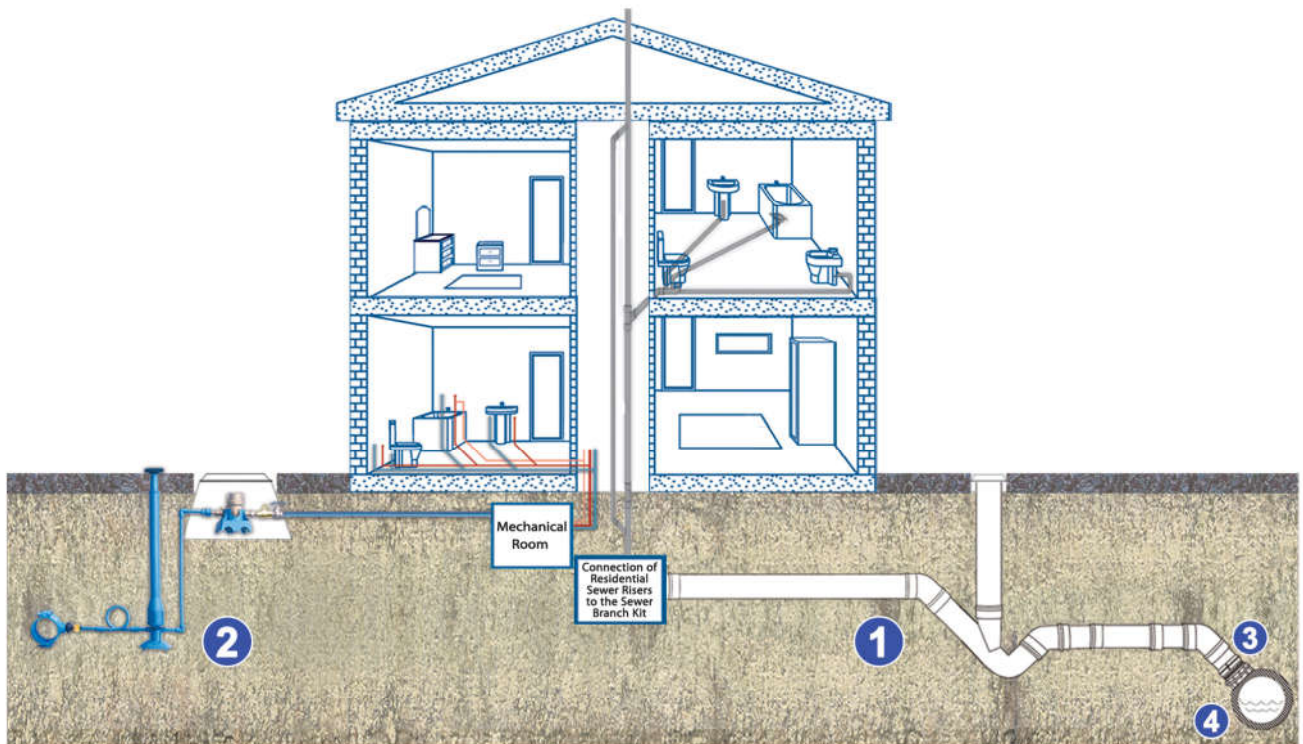


- DOUBLE-WALL CORRUGATED PIPE



- POLYFIT THREADED FITTINGS





1

Buried PP Pushfit pipe and fittings
for Sewage Housing Connection

2

Drinking Water Housing Connection

3

Branch Fittings
from main line

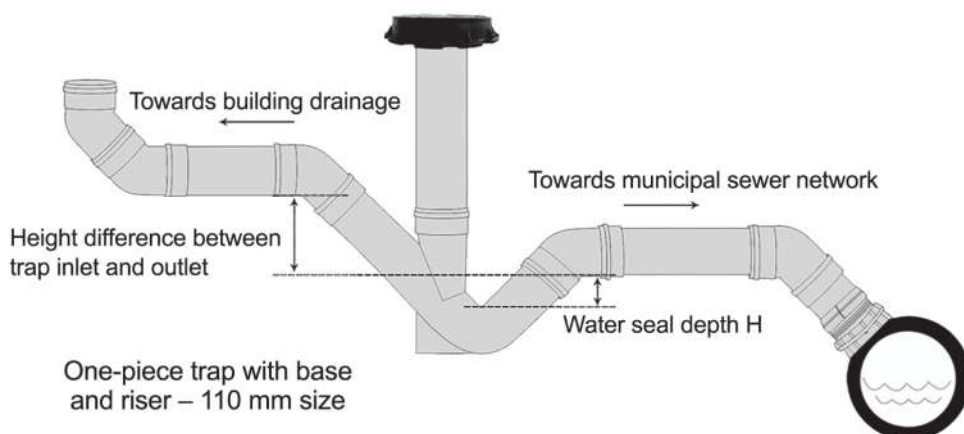
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Double wall Corrugated pipe

Municipal Sewage Branch Connection Kit Muri Drainage Pipe

To connect municipal sewage networks to residential properties, the company offers a buried push fit piping system, complete with traps and specially designed branch fittings. These products are manufactured and supplied for use in municipal Buried sewage systems.

Raw Material Type	Polypropylene Block Copolymer
National standard – International standard	ISIRI 16509 – EN ISO 1852 (SN 4-SN8)
Maximum working pressure	0.5 bar
Maximum working temperature	90°C (continuous) - 95°C (short-term)
Available sizes	110 to 160 mm
Pipe structure – pipe color	Single-layer (white)
Fire-resistance class	DIN4102-B2



Drinking Water Branch Connection Kits

The company offers a wide range of drinking water branch connection kits, compatible with various types of pipes. These kits are designed and supplied specifically for connecting residential properties to the main water supply network.

Raw Material Type	PP-HDPE-PEX-MULTILAYER PIPE
National standard – International standard	INSO 6314-INSO 14427-ISIRI 13205-INSO 12753
Maximum working pressure	10 bar
Available sizes	16 to 32 mm
Fire-resistance class	DIN4102-B2



PEX branch connection kit



HDPE branch connection kit



Branch connection kit with ball valve



Infrastructure Products

Double Wall Corrugated Pipes

The company manufactures and supplies double wall corrugated pipes in both plain and socketed types at its Shiraz plant. These pipes are used in municipal sewage systems and surface water drainage.

Features:

- Very lightweight compared to other pipes
- High ring stiffness for withstanding soil loads
- Very fast installation thanks to the socketed pipe design

Raw Material Type	Polyethylene HD
National standard – International standard	INSO 9116 – BS EN ISO 13476
Maximum working pressure	0.5 bar
Pipe structure – pipe color	2-layer (inner: blue or yellow – outer: black)
Available sizes	160 to 800 mm (inner diameter)
Ring Stiffness Classes (SN Classes)	SN 4 – SN 8
Fire-resistance class	DIN4102-B2 or B1



The Flow Of Life Designed For The Future



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