

## General Catalogue

Construction and Urban Industry





• Giti Pasand Industrial Group, SGP, is one of the biggest private equity holdings in Iran with more than 20 subsidiaries, mainly factories, with brand names: NEW PIPE, AZIN LULEH (ALS), SEPEHR FOAM (SP), DINA POLYMER, NEWFLEX, BATIS, NPA, Multi Pipe and etc., that most of them are located in Esfahan since 1998.

Our main activity is production of building installation, refers to all types of piping system, and building materials, refers to gypsum boards and wood doors.

SGP has got more than 3000 employees directly joint to the factories. It has a wide range of products that are being produced under the best standard protocols i.e., ASTM, DIN, EN and ISO. The products are categorized and listed as below:

- 1. Single Layer HDPE Pipes
- 2. Drip Irrigation PE Pipes and Fittings
- 3. Water & Wastewater Branching Equipment
- 4. Push-Fit Pipes, Fittings and Tools
- Silent Push-Fit 3 Layer Pipes, Fittings and Tools
- 6. PPRC/GF Pipes, Fittings and Tools
- 7. Pex-Al-Pex Pipes, Fittings and Tools
- 8. Polymer Thermal Insulations
- 9. Gypsum Boards (RG & MR)
- 10. Internal, Entrance and Security Wood Doors
- 11. Brass Billets & Rods
- 12. Stone Papers



■ Dina Polymer Safahan started producing single-wall polyethylene pipes in sizes 16 to 315 mm and in the range of 4 to 20 bar in 2007. The company has provided annual production capacity of over 33,000 tons With 10 production lines with the latest technology Europe. Production of single-wall pipes is in accordance with the national standard of Iran that is licensed by the Agricultural Mechanization Development Center.

#### Usages

- Under pressure Irrigation network, including dripping and rainwater.
- Urban and rural water supply networks.
- Sewage disposal networks.
- Electrical and telecommunication cables cover.
- Drainage of construction sites.
- Industrial waste water disposal systems.

#### Advantages

- Life expectancy between 50 and 100 years.
- Resistance to sudden pressure changes.
- Sound, thermal and electric proof.
- High speed in installation.
- Mechanical strength despite low density.
- Corrosion and chemical reaction resistance.
- Easy to install without leaking.
- Ability to use in areas with unstable cortical tissue.
- Easy to install and low cost, with the minimum number of fittings.
- Low weight, easy handling and considerable savings in installation.
- Using modern European machineries in production process.
- Equipped with laboratory accredited by Iranian Bureau of Standardization to perform 23 tests.
- High reliability and low failures for earthquake in hazardous areas.
- Low coefficient of friction and constant throughout the application period.



#### Certificates

- Approval of the Water and Soil Center and the Development of the Mechanization of the Ministry of Agricultural for the purpose of water supplying.
- The Iranian National Standard Certificate according to Standard 14427-2 for water supply, sewage, drainage and pressure systems.
- Product conformity certificate to the International Standard DIN 8074: 2011 from IQS UK Compliance Certificate.
- Product conformity certificate to the International Standard EN 1555: 2010 of IQS UK.
- Certificate of Compliance with Russian Standards for Pipelines and Fittings by Water and Gas Supply.
- ISO 9001: 2008 Quality Management Certificate from LLC-CERTIFICATION.
- Member of Polyethylene Pipes and Fittings producers.
- Ten years quality assurance.





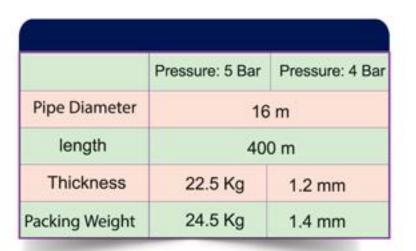
■ Dina Polymer Safahan Co. is one of the subsidiaries of ■□ Industrial Group with 6 drip irrigation production line in two models: Dripper pipes and non-drip pipes with an annual capacity of 175,000 km (equivalent to 4.5 times the Earth's surface). The production of drip irrigation pipes is based on the latest European technology and well-equipped laboratories in line with Iran's national standard and the approval of the Agricultural Mechanization Development Center.

#### Usages

- Irrigation of gardens, green roofs, building enclosures and green spaces.
- High irrigation efficiency (about 90%) and reduction of losses of irrigation systems.
- No runoff and mud & preserving the beauty of the urban landscape
- Special irrigation system for keeping valuable herbs.

| Pipe Diameter                  | 16 mm                       |
|--------------------------------|-----------------------------|
| * Pipe Thickness               | 1.05 mm ,1.2 mm             |
| * Packing Size                 | 400 m                       |
| Average water flow in Drippers | 4.0 Lit/hr , 2.0 Lit/hr     |
| * Drippers Space               | 20,25,33,40,50,60,75,100 Cm |









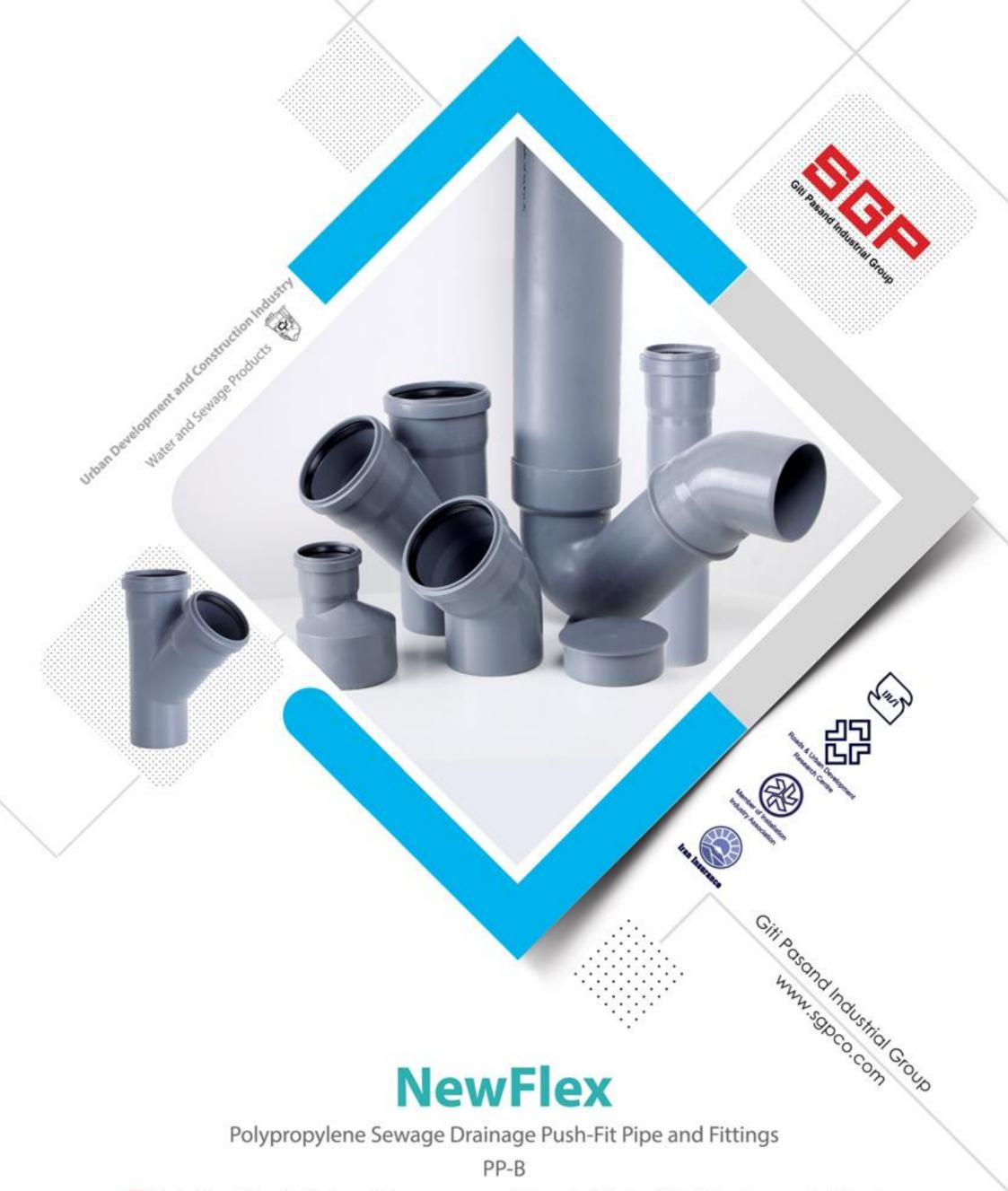
#### **Features**

These Drippers have a large flow cross-section, a long spiral path, and a chain out filter. This combination provides a dripper with excellent resistance to pores obstruction. The chain out filter causes the drainage water to drain from the adjacent part to the center of the pipe, where the water flows more rapidly. The higher water flow helps keep the filter surface clean. Also the chain out filter prevents solid particles from depositing on the filter between irrigation cycles. Drippers are made using an injection molding method, made entirely of first hand materials, and have additives to increase the UV resistance of the sun and corrosion against chemicals and fertilizers.

#### Certificates

- Water and Soil Center and Development of Mechanization of Ministry of Agriculture Approval for Drip Irrigation Pipes.
- Iran National Standard Certificate according to Standard 7607 for Polyethylene Irrigation Pipes.
- Iran National Standard Certificate according to Standard 6775 for polyethylene Drip pipes.
- Certificate of conformity with International standard BS EN ISO 9261: 2010 from IQS UK.
- Certificate of conformity with Russian standards for Drip irrigation pipes and fittings.
- Quality Management Certificate ISO 9001: 2008 LLC-CERTIFICATION.
- Member of the Polyethylene Pipes and Fittings Manufacturers Association.
- Ten Years Insurance Guarantee for Product quality.





■ Novin Etesal Pardis Gostaresh Company, one of the subsidiaries of **BGP**, has been established in 2007 with the aim of producing Polypropylene sewage drainage Push-Fit pipe and fittings. The company produces with brand name Newflex in sizes from 50 to 160 mm in B, BD and Silent mode.

- High impact resistance, even at temperatures below 0 ° C.
- High thermal resistance to hot outlet water of dishwashers and washing machine.
- Easy Installation (No Glue and Welding).
- Smooth inner surface of the pipe and the fittings.
- No Sediment due to roughness index less than 0 / 007 mm.
- High speed in installation without using any complex equipment.
- Resistant to various types of chemicals (acid bases ...) Detergent, stain removers and... .
- Resistant to flame spread and fire resistant in possible combustion.
- Wide Variety of fittings for easy installation and demounting.
- Resistant to the destruction of microorganisms and rodents.
- Lightweight and Easy to carry.
- Long life.
- Resistant to earthquake and building subsidence.



#### Usages

- Sewage disposal system of Residential buildings, office, Complexes, hotels and hospitals.
- Condensate water drainage in air conditioning systems.
- Urban Sewage pipes.
- Rain water collection system.



| flammability           | with anti-Fire material |
|------------------------|-------------------------|
| color                  | mid-gray RAL 7037       |
| Density                | 0.91 g/cm <sup>3</sup>  |
| Tensile strength c°y • | 30 N/mm²                |
| Yield stress           | 21 N/mm²                |
| Fleibility factor      | 1200 N/mm <sup>2</sup>  |
| Elongation             | 800 %                   |
| Bending stress         | 20 N/mm <sup>2</sup>    |
| Elasticity             | 350 N/mm <sup>2</sup>   |
| Impact stress          | 25 kJ/m <sup>2</sup>    |
| Thermal conductivity   | 0.23 W/mK               |
| Longitudinal expansion | 0.00015 m/mK            |
| Roughness index        | 0.007 mm                |
| PH                     | 2-12                    |





3 Layer silent push-fit pipes are produced in different diameters (50 to 160 mm).

- Reducing and preventing sound transmission to adjacent surroundings.
- High physical resistance, especially the impact and thermal resistance.
- Smooth inner surface of the pipe and the fittings & No sediment.
- Easy Installation (No Glue and Welding).
- High speed in installation without using any complex equipment.
- Wide Variety of fittings for easy installation and demounting.
- Long life.
- Resistant to earthquake and building subsidence.



Sewage disposal system of Residential buildings, office, Complexes, hotels and hospitals.









#### Technical Specification

| Raw Material           | PP-MD(Mineral Reinforced Polypropylen) |
|------------------------|--|
| Density (Middle Layer) | 1.507 * g/cm <sup>3</sup>              |
| Melt Flow Index (MFI)  | 1.16 g/10 min                          |
| PH                     | 12-2                                   |
| Roughness Index        | 0.007 mm                               |
| Thermal Conductivity   | 0.55 w/mm                              |
| Moisture               | Less than 700 ppm                      |



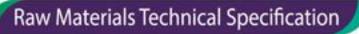
PPRC TYPE 3

Azin Luleh Sepahan Co. is one of the largest manufacturers of polypropylene single-layer pipes in Iran. The raw materials used in production process are Polypropylene random copolymers (PPRC TYPE 3), which are supplied from reputable manufacturers. The products of this company are under precise total quality control. The company has already 24 production lines with an annual capacity of 110 million meters in sizes of 20 to 125 mm. The company is also in the field of producing polypropylene fittings with a variety of more than 150 types by using the most high-tech press and injection machines with a capacity of annually 180 million pieces.

- Anti-Sediment, Anti-Decay and Anti-Rust.
- Very Low Pressure Drop due to Low Roughness inside the pipe.
- Fast and Easy to Install.
- Resistant to Chemicals (Acids,...).
- Resistant to physical shock and Environmental Degradation.
- Guild line sign in pipes and fittings.
- No microorganisms' growth.

#### Usages

- Hot & Cold Drinking Water System.
- Risers' installation system.
- Industrial Installations.



| Characteristic                        | Standard   | Result                 |
|---------------------------------------|------------|------------------------|
| Melt Flow Index (MFI) g/10min (mfi)   | ISO1133    | 0.3<br>(2.16 Kg/230°C) |
| Density Index (MFI) g/cm <sup>3</sup> | ISO1183    | 0.897                  |
| Thermal Resistance 150°C              | ASTM D3012 | 2000                   |
| Melting point c                       |            | 147                    |
| Impact Strength (Charpy) 30 °C (kg/m) | ISO 197    | 2.5                    |
| Impact Strength (Charpy) 23°C (kg/m)  | ISO 197    | No Break               |

#### Pipe Technical Specification

| Characteristic                   |      |      |      |      |      |      |      |      |      |
|----------------------------------|------|------|------|------|------|------|------|------|------|
| Pipe Size (mm)                   | 20   | 25   | 32   | 40   | 50   | 63   | 75   | 90   | 110  |
| Min Thickness (mm)               | 3.4  | 4.2  | 5.4  | 6.7  | 8.3  | 10.5 | 12.5 | 15   | 18.3 |
| Max Thickness (mm)               | 3.9  | 4.8  | 6.1  | 7.5  | 9.3  | 11.7 | 13.9 | 16.7 | 20.3 |
| Max Outer Diameter (mm)          | 20.3 | 25.3 | 32.3 | 40.4 | 50.5 | 63.6 | 75.7 | 90.9 | 111  |
| Weight (gr/m)                    | 172  | 266  | 434  | 671  | 1040 | 1650 | 2340 | 3360 | 5010 |
| Heat Transfer Coefficient (W/mk) |      |      |      |      | 0.2  |      |      |      |      |











Azin Luleh Sepahan Co. is one of the largest manufacturers of polypropylene single-layer pipes in Iran. The raw materials used in production process are Polypropylene random copolymers (PPRC TYPE 3), which are supplied from reputable manufacturers. The products of this company are under precise total quality control.

The new type of PPR Pipe is PPRC-GF that has unique features to other polymer pipes and The company has already started production lines with an annual capacity of 20 million meters in sizes of 20 to 63 mm.

- Increased pressure & temperature resistance of the product compared to single-layer PP pipes
- Very low longevity expansion compared to single-layer PP pipes (about 75% less)
  Minimize the change in pipe length due to temperature changes inside the piping system
  Minimize the number of pipe clips used in the piping system that reduce costs
- Higher mechanical properties compared to single-layer PP pipes
- Quick and easy installation that save about 30% of installation time compared to PP foil pipes
- Less heat loss Compared to PP foil pipes and metal pipes due to having a lower heat transfer coefficient
- It is not possible to separate the layers
- Lower weight than PP foil pipes and metal pipes and easy transportation

#### Usages

- Hot & Cold Drinking Water System
- Cooling Tower Risers
- Air-Pressure Branching
- Fan Coil Unit Piping
- Risers' installation system

#### Technical Specifications

| Size ( mm ) | Thickness ( mm ) | Outer Diameter ( mm ) |
|-------------|------------------|-----------------------|
| 20          | 3.4              | 20.3                  |
| 25          | 4.2              | 25.3                  |
| 32          | 5.4              | 32.3                  |
| 40          | 6.7              | 40.4                  |
| 50          | 8.3              | 50.5                  |
| 63          | 10.5             | 63.6                  |

| Standards         | ISO 21003-2& ISO 15874-2<br>DIN 8077/8078<br>INSO 12753-2 & INSO 6314-2 |
|-------------------|---|
| Class             | S 2.5 -SDR 6 -PN25  |
| Type              | PPRC TYPE 3   |
| Color             | White   |
| PN                | 10 Bar  |
| Application Class | Class 1&4   |



Ati Luleh Sepahan Company, one of the subsidiaries of **BGP**, has been developing five-layers PEX b AL PEX b pipe with the brand name 'NEW PIPE' in line with global progress. This pipe with a five-layer structure and the use of PEX polymer with aluminum can withstand temperatures of 90 ° C in a pressure of 10 bars in accordance with the functional class 5 of the National Iranian Standard No 12753. The company now has 37 production lines with an annual capacity of 120 million meters in sizes of 16 to 63 mm. Also, the brass fittings of these pipes are producing in Isfahan Chalak Company with brand name NPA with a variety of more than 500 types of fittings and an annual production capacity of one million Ton Brass in accordance with the national standard in threaded, press and

coupling models.

- Production in accordance with the national standard INSO12753 and the international standards ASTMF1281, INSO2003.
- Useable according to topics 14 and 16 of the Building national regulations.
- Heat tolerance up to 90 degrees.
- No Longitudinal Expansion Coefficient (at the metal level only).
- Resistant to Chemicals (acids, bases ...).
- No oxygen penetration into the pipe and destruction prevention in central heating systems.
- Excellent pressure resistance due to the presence of aluminum and continuous ultrasonic welding.
- Low pressure drop due to the low roughness coefficient inside the pipe.
- No sediments, Decay, rust and water color change.
- Flexibility.
- Easy installation without waste.



#### Usages

- Cooling and heating consumables water systems.
- Cooling, heating and air conditioning systems.
- Under-floor heating systems.
- Water transfer in razors.
- Sanitary Industry, industrial installation.



| Size                                   | 16                  | 20      | 25      | 32      | 40      | 50      | 63      |
|--|---------------------|---------|---------|---------|---------|---------|---------|
| Dimensions(inner & outer)              | 12 - 16             | 16 - 20 | 20 - 25 | 26 - 32 | 32 - 40 | 41 - 50 | 51 - 63 |
| wight per meter (gr./m)                | 105                 | 145     | 200     | 310     | 490     | 730     | 1220    |
| pipe eater load (litr./m)              | 0.113               | 0.201   | 0.314   | 0.498   | 0.804   | 1.320   | 2.042   |
| min. pipe thickness                    | 1.65                | 1.90    | 2/25    | 2/90    | 3/40    | 4/00    | 4/60    |
| Roughness Index                        | 0.007               |         |         |         |         |         |         |
| Heat Transfer Coefficient (W/m         | 0.40                |         |         |         |         |         |         |
| Longitudinal expansion (M/m            | 25*10 <sup>-6</sup> |         |         |         |         |         |         |
| Operating temperature(Long time        | 80 C°               |         |         |         |         |         |         |
| Operating temperature(short time       | 100 C               |         |         |         |         |         |         |
| Operating temperature for Liquic       | - 40 C°             |         |         |         |         |         |         |
| Pressure Tolerance in 50 years(constan | 10 bar              |         |         |         |         |         |         |
| Pipe usage class                       |                     | 5       |         |         |         |         |         |



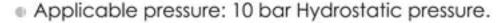




Isfahan Chalak Company, one of the subsidiaries of **BBP**, was established in 2002 and is expanding along with High-Tech and Updated technology. In addition to producing Pex and PPRC pipe fittings and brass ones, the company now provides a variety of Building installations Valves including water and gas. The products are made from a special type of brass alloys to improve the mechanical and chemical properties of them. All products of this company are manufactured according to the standards of International Association of Plumbing and Installations IAPMO, INSO 16222 and ISIRI 3664 and in gas valves according to ISIRI 4047 standard.

#### Technical Specification

- Applicable pressure: 10 bar Hydrostatic pressure.
- Test pressure: 16 bar Hydrostatic pressure.
- Production standard: BS EN 13828 INSO 16222.
- Thread standard: ISO 228-1.
- Applicable temperature: 5 ° C to 95 ° C.
- Applicable pressure: 10 bar Hydrostatic pressure.
- Test pressure: 16 bar Hydrostatic pressure.
- Production standard: BS EN 13828 INSO 16222.
- Thread standard: ISO 228-1- BS 21
- Applicable temperature: 5 ° C to 95 ° C.



- Test pressure: 16 bar Hydrostatic pressure.
- Production standard: BS EN 13828 INSO 16222.
- Thread standard: ISO 228-1-BS 21
- Applicable temperature: 5 ° C to 95 ° C.



- Test pressure: 11 bar Hydrostatic pressure.
- Production standard: ISIRI 3664 BS 5154
- Thread standard: ISO 228-1-BS 21
- Applicable temperature: 5 ° C to 95 ° C.

Applicable pressure: 10 bar Hydrostatic pressure.

Test pressure: 16 bar Hydrostatic pressure.

- Production standard: BS 2767 INSO 18732
- Thread standard: ISO 228-1
- Applicable temperature: 120 ° C

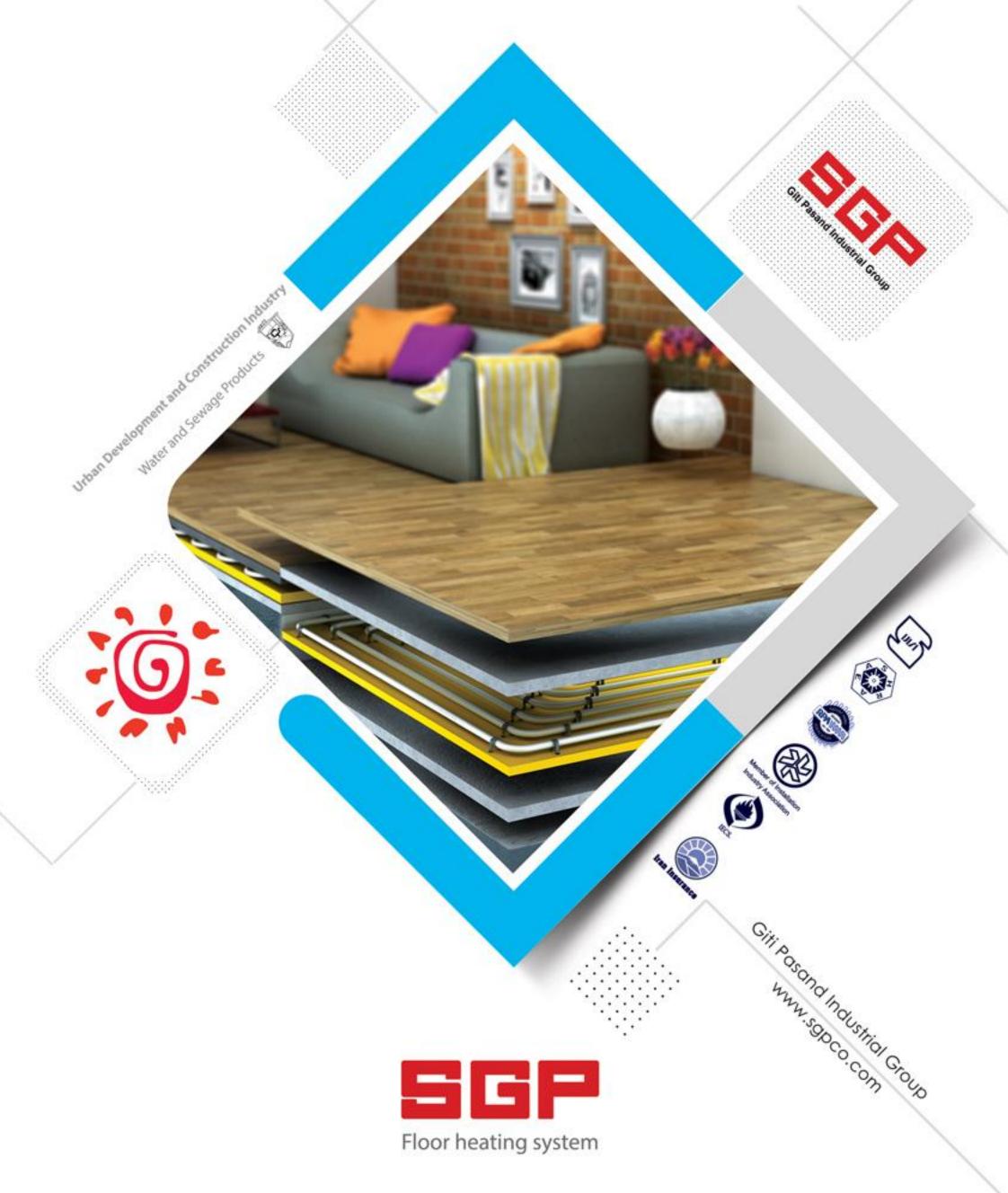




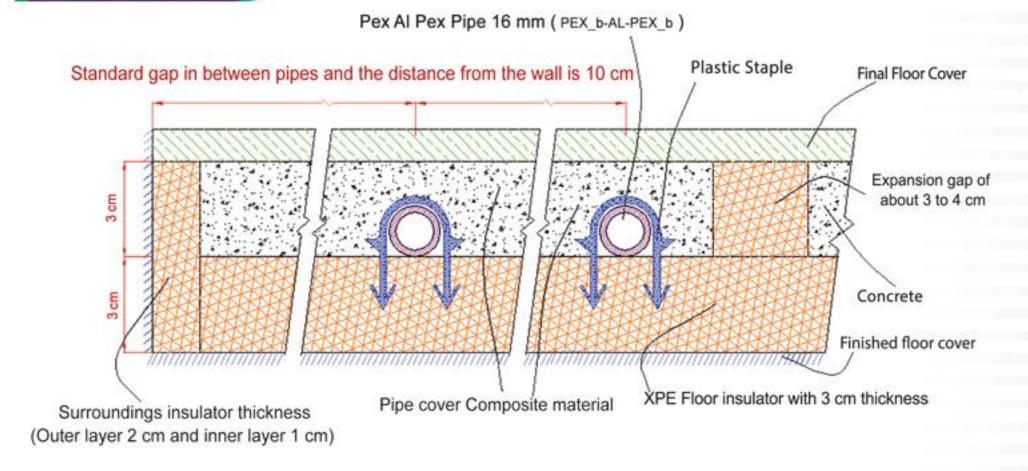








■ The most important goal in any heating system is to create comfort. The floor heating system is recognized as the most consistent method with the human body and the healthiest method of building heating. Heat Radiation transfer has a large share in the heating process of this system and people will receive heat through the heat transfer of radiation from the floor that makes them feel more comfortable. In comparison with other heating systems, the floor heating system has at least %40 energy savings.



**B**GP Floor Heating System Layers

- Providing the highest level of thermal comfort.
- Reduces energy consumption by about 40%.
- Uniform distribution of heat at different points of the floor.
- Much more free space in interior decoration design.
- The least need for maintenance.
- Clean air without drying.
- No dust.
- Providing Energy by solar heating system.

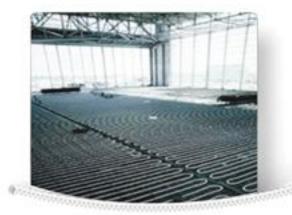


Manifold Box

#### Usages

Residential Building Commercial Industrial.







\*Floor Heating system is a necessity, Not an option\*



■Sepehr Polymer Espadana Company, one of the subsidiaries of **BBP**, started production of different types of polyethylene foam with the brand name of "Sepehr Foam" in 2006. The company with a production capacity of more than 10,000 tons of polyethylene EPE foam, Cross-Linked polyethylene XPE and XPS extruded polystyrene has a huge share in the country and the Middle East. The products of this company are supplied to the domestic and foreign markets according to the international standards and the support of the High-Tech Polymer laboratory in various industries such as construction, automotive, sports, gas and petrochemicals, packaging, home appliances and so on.

#### Polyethylene Cross-linked XPE Foam

This insulator is produced by creating a three-dimensional structure that is made by baking. This product with Thicknesses of 3 to 35 mm is in rolls, and 40 to 120 mm is in mattresses with densities of 30 to 200. Thicknesses of 10 to 25 mm in sizes of 3.8 to 5 inches are produced in pipe foam. The above-mentioned insulators are capable of being laminated with a variety of aluminum foils, metalized coat, polymer films and PVC.



| Polyethylene Cross-linked XPE Fo              | oam                    |
|---|------------------------|
| Density (ASTM D3575-W)                        | 30-200 Kg/m³           |
| Compression Set (ASTM D3575-B)                | 20%<                   |
| Heat Transfer index (coefficient) (ASTM C335) | 0.033 W/m° K           |
| Water Absorption (ASTM D3575-L)               | 0.03 Kg/m <sup>2</sup> |
| Tensile Strength (ASTM D412)                  | 0.3 MPa                |
| Tension Strength (ASTM D412)                  | 110%                   |

| Thermal Tolerance                           | 90 °C          |
|---|----------------|
| Flammability(DIN 4102)                      | B2             |
| Water Vapor Permeability (WVP) (ISIRI-7292) | 0.003 mg/hmpa  |
| Vapor Tolerance Index(ISIRI-7292)           | 6.788 mm²pa/mg |
| WVP Index(ISIRI-7292)                       | 0.169 mg/hm²pa |
| Water transfer Index(ISIRI-7292)            | 204.26 mg/hm²  |

#### EPE polyethylene foam

Polyethylene foams are produced in the thicknesses of 0.5 to 35 mm in the form of sheet and the thickness of 40 to 120 mm in the form of mats. The above-mentioned insulators are capable of being laminated with a variety of aluminum foils, metalized coat, polymer films and PVC.

The product is also available in sizes of 3.8 to 2 inches in the form of Pipe foam.



| EPE Technical Specification:                  |                        |
|---|------------------------|
| Density (ASTM D3575-W)                        | 25 Kg/m <sup>3</sup>   |
| Compression Set (ASTM D3575-B)                | 29%                    |
| Heat Transfer index (coefficient) (ASTM c335) | 0.035W/m°K             |
| Water Absorption(ASTM D3575-L)                | 0.107Kg/m <sup>2</sup> |
| Tensile Strength (ASTM D412)                  | 0.2 MPa                |
| Tension Strength (ASTM D412)                  | 75%                    |
| Thermal Tolerance                             | 70C°                   |

#### XPS extruded polystyrene

Among the various available insulators, the XPS extruded polystyrene foam has its own unique properties due to its closed structure, which is constant over time and makes it possible to use them in specific cases. This product can be manufactured in the thickness of 10 to 50 mm in size of 200 X 60 cm.



| Density (ISIRI-7118)                           | 35+5                        |
|--|-----------------------------|
| Tensile Strength (ISIRI-7117)                  | KPa500-200                  |
| Water Absorption(ISIRI-7300)                   | 0.2v/v%                     |
| Heat Transfer index (coefficient) (ISIRI-8621) | 0.030-0.040 W/m.k           |
| Flammability(DIN 4102)                         | According to Customer Order |
| Dimensional Stability                          | 0.5>%                       |



Gypsum Boards (RG & MR)

Behin Sazan No-Andish Sepahan factory with an annual capacity of 10 million square meters in the first phase is located in Garmsar Industrial Zone. The company is known as the second largest producer RG gypsum board in the country with the standards ISIRI 14818 and the International Standard EN520 with the brand name BATIS.

#### Gypsum board

These boards have gypsum core and their surface and edges are covered with paper. They are generally used in dry construction systems (such as separator walls, Covering treatment walls and dropped ceilings.

#### Technical specification of gypsum

- Dimensions 2400 x 1200 mm.
- Thickness 9.5 and 12.5 mm.
- In accordance with national standard 14818 certification and production in accordance with international standard EN520 and certified by the Research Center.

#### Usage

- Prefabricated buildings.
- To be used as a traditional whitewashing alternative.
- Building interior walls.
- Dropped ceilings.
- Separator walls.

#### Advantages

- Quick and easy installation.
- Sound, thermal and humidity proof.
- Ability to paint and using sticking wallpaper.
- immediately after installation.
- Decreasing building weight.

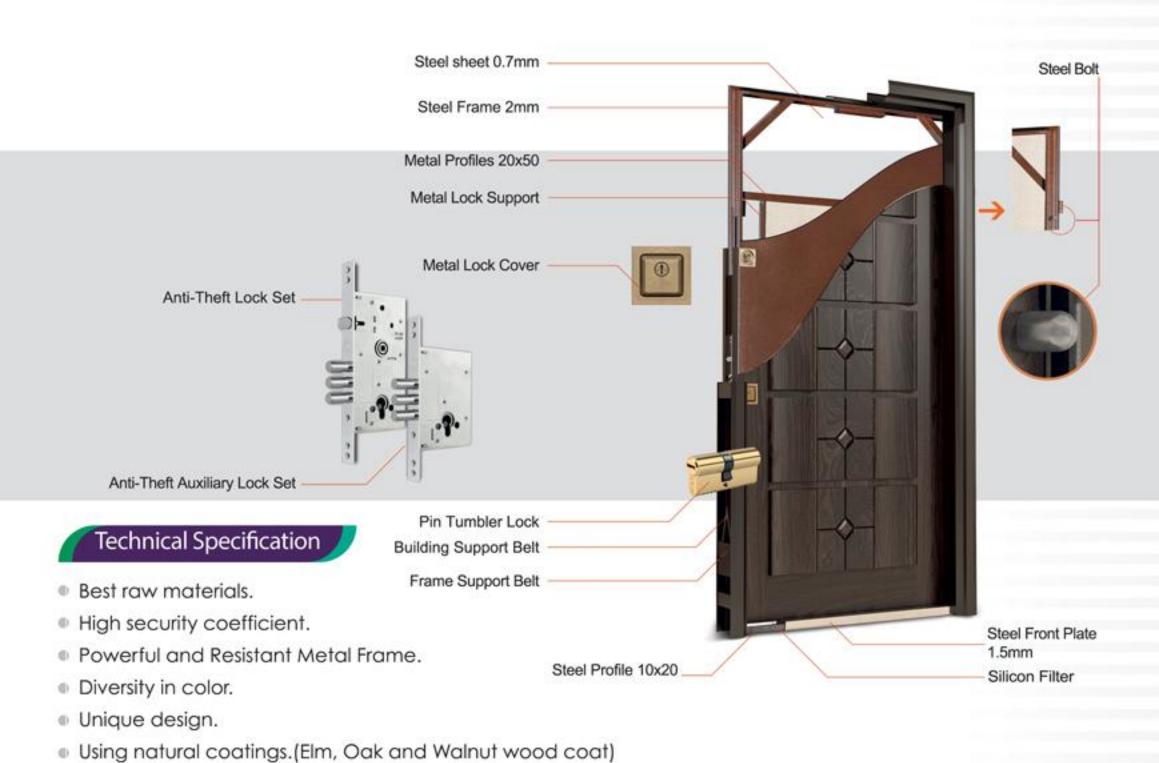








Sekooya Choob Atlas Company, one of the subsidiary factories of **BGP**, started its operations with the aim of producing wood and wood products for the domestic and foreign markets since 2012. This factory is able to produce various types of entrance security doors (anti-theft) and wooden interior doors in standard sizes and unique designs with the experts in the field of wood industry accompanied by using the high-tech machinery.



| Notes: |
|--------|
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |

| Notes: |
|--------|
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |
|        |

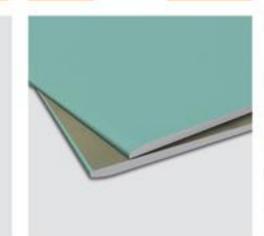








# GROUP











No. 83, Shariati st., Isfahan, Iran +98 313 69377 Ext. 3537 & 2171