



Dear Customer,

It is an honour to be a part of Such Organization and work with valuable Customers, efficient employers and esteemed suppliers like yourself.

Talent is one of the most trusted manufacturers of plastic. Pipes and fittings incorporated in Egypt. The total installed capacity is 1800 Metric Ton per annum. This is being made possible because of our valuable customers who are the back bone of our company in promoting our pipes under the brand name of \ll Talent-therm \gg . We have recently installed the latest Technology to cater the growing demand in Domestic \gg Global Market .

Talent has constantly tried to be the best and our investments in product innovation and R&D have yielded fruitful results. Our skilled technicians and stringent quality checks have produced plastic Pipes to meet all the international quality standards.... My Sincere thanks to my dedicated team with whose support the company has been able to achieve the continuous and consistent growth pattern.

I Feel very happy to inform you that our company is not only on Egyptian map but its presence has also been felt Globally. The outlook of plastic pipes industry is very bright in Egypt because of infrastructure development and the expansion of New cities development, the Consumption of plastic pipes shall be at its peak. With best management practices and every attempt targeted to outdo our self. Talent Assures to be the front runner in its domain θ achieve new dimensions of success.

I once again wish to convey my sincere thanks to our valued customer who have shown their dedication and consistent support and expect to keep on getting the same in future.



TALENT

FOR PPH PUSH-FITDRAINAGE SYSTEM Technical Catalogue

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OUR VISION

To be an acknowledged leader in plastic piping industry by exceeding customers' expectations and maximizing bottom line for all our stake holders.



OUR MISSION

To bring a revolution in plastic piping industry through innovative solutions which would create a profitable growth and benefit our customers & the society at large.



OUR CORE VALUES

Respect: We respect & appreciate all individuals and cultural identities. We embrace the differences. We ensure harmonious working environment for all our employees.

Transparency: Transparency is the hallmark of all our business dealings. We communicate openly and sincerely, we appreciate feedback.

Commitment to Quality: We are committed to providing the best quality products to our customers.

Ownership: We believe in accepting responsibility and ownership while embracing common goals, teamwork and collaborative decision making.



INTRODUCTION

Water is the basis of life, an indispensable resource for everyday use, for industry, and for agriculture. Considering increasing demands for water, Talent offers clean, efficient technologies and the highest level of safety for your use.

Because the quality of the system that carries your water can make all the difference in terms of safety, so you should make sure to choose the system that can offer optimum performance even under the most extreme conditions.

Talent Therm manufacture an economically innovative wide product range of PP-R pipes and fittings for drinkable cold & hot water as well as PP-H & PVC pipes and fittings for drainage.

Talent Therm manufacture PP-H pipes and fittings for the construction of waste and rainwater drainage systems. It is an extremely light system and thanks to the push-fit socket with hydraulic seal it represents the simplest solution for the construction of waste and drainage systems.

They are available in full range from 32 mm to 160 mm. The entire range is manufactured as per internationally accepted quality standards and specifications.



Why you should choose Talent-Therm?

1 - Our Products are always available

we like knowing that we're doing our absolute best. Your order is always available and ready for quick delivery that means any quantity of any product we offer. Extra-fast order fulfillment.

2 - After sales services & warranty

- Customer satisfaction: Talent is committed to maintain a management system with the prime focus on customer satisfaction by meeting their needs & expectations, and continual effective communication with their customers.
- Services: Our service doesn't end at delivery and install. Our team will ensure you are satisfied by meeting your needs and expectations, we will support you through our web site, social media pages, call center and customer service team any time you need help especially after sales.
- Warranty & guarantee: Because talent is committed to maintain the highest standards of quality for you, we provide guarantee for 10 years to our customers upon testing their plumbing.

Contificate of Guarantee (100) (100

3 - High Quality with best price

We use the latest equipment imported from our certified suppliers, We also import raw material from our certified global plants.

All our products are produced by the highest qualified employees in compliance with current European and global standards, as shown with quality section below.

Talent doesn't care to how to be a profitable organization, but how to deliver every customer with unbeatable prices within reach of all people.





PROPERTIES AND BENEFITS

POLYPROPYLENE (HOMOPOLYMER) - PPH

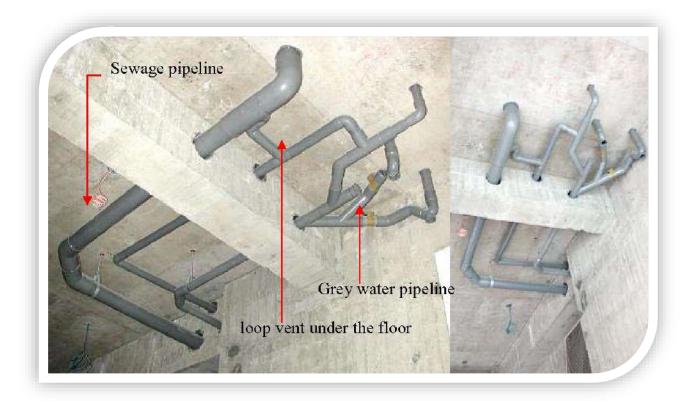
Material Information

- Polypropylene is a thermoplastic that belongs to the polyolefin group of materials.
- The sewage pipes and their socket details are manufactured from high quality grey colored granulated polypropylene produced in developed countries. Production process is performed according to the requirement of ISO 9001:2018 standard and according to DIN EN 1451.
- It is lightweight, resistant to staining, and does not absorb moisture. It has excellent resistance to acids, alkalis, organic solvents, and degreasing agents, but has poor resistance to aromatic, aliphatic, and chlorinated solvents. It is also tough, heat-resistant, and semi-rigid, making it ideal for use with hot liquids or gases. Its hard, smooth, surface also makes it ideal for use in areas where bacteria build up is a concern.

hot liquids or gases. It's hard, smooth, surface also makes it ideal for use in areas where bacteria build up is a concern.



Talent Therm PPH system applications:



Talent Therm offers internal sewage system pipes and fittings made of PPH, which can be applied in construction of buildings, including multi-family housings, cottages, offices, hospitals, laboratories, industrial facilities as well as for agriculture. They may be used in the food industry by considering the biological neutrality of the material.

- Acid Filling Stations
- Laboratories
- Automotive Industry
- Nuclear Research Centers
- Chemical Industry
- Construction "Plumping"
- Pharmaceutical Industry
- **Desalination Plants**

- Picking Lines
- Water Purification Plants
- Refineries
- Suction and Exhaust pipelines
- Lined Piping (Mild Steel + PP) (FRP + PP)
- Water, effluent, Chemical transport
- Hoods, Fume Ducts
- Storage tank for chemical



Advantages:

- sewer pipes and fittings made of polypropylene are 15-20 times lighter than similar cast iron Pipe.
- do not need re-painting.
- Tightness and easy of connections due to sealing rubber ring placed in socket section of the pipe through device.
- Easy transportation and mounting due to the levity of pipes and their profiles.
- Vibration and sound absorption. As opposed to metal and PVC pipes, polypropylene pipes absorb the sound and vibration arising from water discharge.



- Since heat conductivity is low, no condensate is generated on the outer surface.
- Resistant to:
 - ✓ Impact of chemical detergents.
 - ✓ Impact of water flow with high temperature at +95°C (in some cases even at +100°C).
 - ✓ Impact of household, economic and industrial wastewater containing different types of aggressive agents and substances.
 - ✓ Hydraulic friction.







Talent PPH V/s Multilayer PVC V/s HDPE

Material Property	Talent PPH	Multilayer PVC	HDPE
Impact Strength	2x compared to PVC	Very poor	Good impact resistance
Chemical Resistance	Exceptional chemical resistance; withstands wide range of chemicals ranging from pH 2 to pH 12	Limited chemical resistance	Good chemical resistance
Application Areas	Can be used in residential condominiums, high rises, hotels, commercial kitchens, hospitals, etc.	Can be used for only ordinary drainage applications	Can be used for only ordinary drainage applications
Suspended Application	Highly suitable	Limited suitability	Limited suitability
Acoustic Properties	Very good sound insulation	Poor sound insulation	Poor sound insulation
Installation	Easy installation with a push-fit system	Solvent-based installation	Requires a complex welding system





Characteristics & properties

Raw Material:

Talent-Therm products for drainage solutions are produced with superior German quality, All pipes and fittings are made of the purest homo polymer random (PP-H and the best copper in Egypt for threaded fittings.

Scope and fields of applications:

Cold and hot potable water Swimming pool installation Rainwater application Heating systems Pipelines for industrial use Air conditioning system Agriculture and Irrigation systems and Industrial use Fire Protection Installation Chemical Liquids Ship building installation,

Smooth and Easy to install:

The smooth internal surface of PP-H products reduces frictional losses and prevents fouling and scaling in long term. All products are flexible. light, easy to cut for installation.



Resistance to current strays and Fire protection:

Talent-Therm system is a poor electrical conductor. So, there is no risk of stray current occurring. As Talent-Therm system is normally inflammable and do not produce any toxic gas. So, it is no risk of dioxin emission.

Soundproof-ness:

Talent-Therm system is highly soundproof because of its ability to absorb and eliminate almost all vibrations.

Non-Toxic and environmental harmless

The row material of Talent- Therm products is non-toxic according to national and international standards. All Products are physiologically. environmentally and microbiologically harmless



UV Resistance

Talent-Therm Products are UV resistant but should not be installed without protection where subject to UV radiation, Pipes and Fittings are equipped with UV stabilizer. However, the maximum storage time in the Quality

Quality system

TALENT has total commitment to the Quality Management System which forms the framework for all company activities and processes. With the pace of change and the rate of innovation, TALENT INDUSTRIAL is aware that a great process today will be imagined in a few months and obsolete shortly thereafter. Thus, TALENT INDUSTRIAL continuously evaluates, analyze and improves its processes to keep the level of our quality standard. The Quality Management System is used to enable us to continually improve customer satisfaction by meeting their needs and expectations. improve quality performance and the value of our organization.



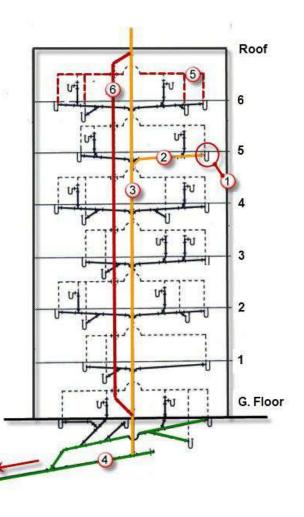
Our quality is based on the normally anchored quality awareness of our dedicated employees in a positive, creative work ambience. and ensuring satisfaction at all levels through

motivation.

To building's main sanitary inspection chamber

To achieve this, we are reviewing and Refining our processes to ensure we are one step ahead in our preparation and when approaching any project or task With unwavering commitment to quality. We have implemented controls and procedures proven to meet the quality standards.

You can expect excellence from design to delivery. continuous in-process inspections through final inspections All of our QC employees are specially trained and regularly lectured to keep them informed with client feedback. This is to find solutions to any problem to make production more efficient and ensure any defects that occur are never repeated.





Quality Control procedures

The production of pipes and fittings requires the supervision, regulation, and control of all the working operations.

Al results are recorded and documented includes:



- Acceptance testing materials and raw incoming goods.
- Process control.
- Inspection and testing of products
- Final inspection and sample tests the production batches.

This procedure is required by the standard that regulates the Quality Management System (UNI EN ISO 9001) and the relevant protocols for the quality control of piping systems for the transport of water inside buildings.

(UNI EN ISO 15874, ASTM F2389. etc.).

QUALITY ASSURANCE

Talent is committed to the philosophy of Total Quality Management. All Talent manufacturing sites are certified to ISO 9001, ISO 45001 "Quality Management systems Model" for quality assurance in production, installation, and servicing. Standards Mark certification has been achieved by Talent for products to various Egyptian and American Standards From the raw materials entering the factory to the delivery of the finished product, Talent emphasis on quality and customer service ensures performance that exceeds the requirements of industry and standards.

All raw materials for products must meet detailed specifications and suppliers are required to conform to strict quality assurance standards. Production processes are enumerated, closely specified, and continuously monitored and recorded. Inspection and control are exercised by properly trained personnel using calibrated equipment.

System Standards

All products are produced in compliance with global standards as we implement international guidelines to ensure absolute compliance.

- Germany standards DIN 8063.8062 8061
 - o DIN 8080.8079.8078, 8077 & DIN 19560,
 - o 16962.4102 International Standards
 - o ISO 2-15874 & ISO 3-15874 & ISO 4422
- Egyptian standards
 - o ES 848 & ES 1717 & ES 3703 & ES 5232
- **European Standards**
 - EN 16962 & BS EN 681 ESTERS ISO 9001

Internal Control

A team of highly qualified and skilled employees ensure that all assessments are carried out according to the appropriate regulations and fulfill all technical arrangements in accordance with the quality policy.

Internal quality controls are documented. recorded and stored in accordance win the provisions of law.

Acceptance of incoming goods

All incoming goods are subject to specific tests that guarantee that incoming products control the special requirements.



In Progress Inspection and Test

The quality plan adopted by TALENT INDUSTRIAL requires that tests and inspections are carried out before and during the production process.

During the production phase, the quality plan establishes that products pass the following tests:

- Dimensional check
- Surace.
- Marking check.
- Control of process parameters.

The samples are collected and sent to the quality department that performs quality checks and performance testing on the products and submits them to various degrees and types of stress (pressure, temperature, oxidation, etc.)

Final Inspection and Testing

The quality plan adopted by TALENT INDUSTRIAL requires that the inspections and tests are carried out throughout the entire production cycle.

All test results are documented in the test report and the certificate (available on request)

Final tests include:

- Internal pressure test at 95 C (time and pressure are specified in the reference Standard).
- Cold impact test.
- Oxidation induction time:
- Melt flow index.
- Homogeneity test with polarized light microscopy.
- Dimensional checks.
- Elongation test with dynamometer.
- Tensile test (> 23 N/mm2) with dynamometer.

After the final tests, more tests are carried out on some batches:

- Thermal cycle: pipes and fittings are subjected to temperature cycles lasting 15 minutes at °95 C and 15 minutes at °20 C with a pressure of 10 bar for a total of 5.000 cycles;
- Oxidation induction time: determining the percentage of antioxidants in the Product after the extrusion
- Thermal stability at 110 C for 8.760 hours (= 1 year).

Laboratory equipment

for the Granular and Powder materials

1- Melt flow Tester (ISO 1133)

Measurement of the melt flow index

2- Flow test (ES 1991)

Measurement of the flow of material in the feeder of the machine

3- Heat stability test (ES 1991)

Measurement of the heat stability of the material

4- Bulk density (ES 1991)

Measure the density of the powder.

for the Pipes, Fittings and Gaskets

1. Falling Impact Test

According to (ES 848 - ISO 4422 - ISO 15877 - ASTM D1785 - ASTM D2241)
These depend on the diameter of the pipe at which we fall a certain mass in the pipe from 2-meter height at room temperature according to standard.

2. Pendulum Impact Test

According to (ES 848 - ES 5232 - DIN 8061 - DIN 8080)

The tests according to DIN and ES standard that measure notched Charpy impact strength of the pipe.

3. VST Test

According to (ES 848 - ES 5232 - DIN 8061 - DIN 8080 - ISO 4422) That measures the softening temperature of the product (Pipes or Fittings)

4. Hydrostatic Pressure Test

According to (ES 848 - ISO 4422 - ISO 15877 - ASTM D1785 - ASTM D2241 - DIN 8061 - DIN 8074 - DIN 8075 - DIN 8080)

Measurement of the Internal Hydrostatic pressure of the pipes and fittings

5. Burst Pressure Test

According to (ASTM D1785 - ASTM D2241 - ASTM F441 - ASTM F439) Measurement of the Burst pressure of the pipes and the fittings



6 Oven (Heat reversion) Test

According to (ES 848 - ES 5232 - DIN 8061 - DIN 8080 - DIN 8075) Measure the effect of the high temperature on the products.

7. Compression Tester

According to (BS EN ISO 9969 - EN 1401 - ES 1717 - ISO 4435) Measurement the stiffness of the pipe

8. Hardness Tester

According to (ISO 48 - DIN 681-1/2 - DIN 53505 - ASTM D 2240)

9. Thermocycling Tester

According to (ISO 10508)

Those test a net of the product (pipes and fittings) at different temperatures and certain internal pressure for long time.



Chimical resistance guide

Important Information The listed data are based on results of immersion tests on specimens, in the absence of any ap-plied stress. In certain circumstances, where the preliminary classification indicates high or limited resistance, it may be necessary to conduct further tests to assess the behavior of pipes and fittings under internal pressure or other stresses. Variations in the analysis of the chemical compounds as well as in the operating conditions (pressure and temperature) can significantly modify the actual chemical resistance of the materials in comparison with this chart indicated value. It should be stressed that these ratings are intended only as a guide to be used for initial information on the material to be selected. They may not cover the particular application under consideration and the effects of altered temperatures or concentrations may need to be evaluated by testing under specific conditions. No guarantee can be given in respect of the listed data. reserves the right to make any modification whatsoever, based upon further research and experiences.

Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)	Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)
				Barium sulfide	S	S	S
A				Beer	S	S	
Acetic acid (10%)	S	S		Beet Juice	S	S	0
Acetic acid (50%)	S	S	0	Benzaldehyde	S	S	
Acetic acid (100%)	S	S		Benzene	0	U	U
Acetic anhydride	S	S		Benezene Sulfonic Acid, 10%	S	S	S
Acetone	S	S		Benzoic Acid	S		
Acetonitrile	S			Benzyl alcohol	S	S	
Acetophenone	0	0	U	Benzyl chloride	S	S	
Almond Oil	S	S		Bismuth carbonate	S	S	
Aluminum ammonium sulfate	S	S		Bluing	S	S	S
Aluminum chloride	S	S	0	Borax	S	S	S
Aluminum fluoride	S	S		Boric acid	S	S	
Aluminum hydroxide	S	S		Brandy	S	S	
Aluminum nitrate	S	S	S	Brake fluid	S	0	
Aluminum potassium sulfate	S	S		Brine	S	S	S
Alums (all types)	S	S		Bromic acid	U	U	
Ammonia (anhydrous)	S	S		Bromine	U	U	
Ammonia (30% aqueous)	S	S		Bromine water	U	U	
Ammonium bi-fluoride	S	S		Butane	0		
Ammonium carbonate	S	S	S	Butyl acetate	U	U	
Ammonium chloride	S	S	0	Butyl acrylate	U	U	
Ammonium fluoride (25%)	S	S	-	Butyl alcohol	S	S	
7 IIIII	Ŭ	Ŭ		Butyl Phthalate	S	S	S

Legend: S = Satisfactory O = Some attack U = Unsatisfactory



Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)	Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)
Ammonium hydroxide	S	S		С			
Ammonium nitrate	S	S	S	Calcium bisulfate	S	S	
Ammonium sulfate	S	S	S	Calcium carbonate	S	S	S
Ammonium sulfide	S	S		Calcium chlorate	S	S	3
Ammonium thiocyanate	S	S		Calcium chloride	S	S	0
Amyl acetate	0	U		Calcium hydroxide	S	S	S
Amyl alcohol	S	0	U	Calcium hypoclorite	S	S	· ·
Amyl chloride	U	U		Calcium nitrate	S	S	
Aniline	S	S	0	Calcium soap grease	S	0	
Anisole	0	0	U	Calcium sulfate	S	S	
Antimony trichloride	S	S		Calgonite (1%)	S	S	
Apple Juice	S	S	S	Camphor Oil	U	U	U
Aqua regia	0	0		Carbon dioxide (dry)	S	S	
Arsenic acid	S	S		Carbon dioxide (wet)	S	S	
Aviation fuel	0	0		Carbon disulfide	0	U	
В				Carbon monoxide	S	S	
Barium carbonate	S	S		Carbon tetrachloride	U	U	
Barium chloride	S	S	0	Carbonic acid	S	S	
Barium hydroxide	S	S		Castor oil	S	S	
Barium soap grease	S	0		Caustic Soda, conc.	S	S	S
Barium sulfate	S	S		Cellosolve	S	S	
Cetyl alcohol	S			Ethylene chloride	U	U	
Chlorine (dry)	U	U		Ethylene chlorohydrin	S	S	
Chlorine (wet)	0	U		Ethylene dichloride	S	_	
Chloroacetic acid	S			Ethylene glycol	S	S	
Chlorobenzene	U	U		Ethylene oxide	S		
Chloroform	0	U		F	•		
Chlorosulfonic acid	U	U		Ferric chloride	S	S	
Chromic acid (10%)	S	S		Ferric nitrate	S	S	
Chromic acid (50%)	S	S		Ferric sulfate	S	S	
Chromic acid (80%)	S	0		Ferrous chloride	S	S	0
Cider	S	S		Ferrous nitrate	S	S	0
Citric acid	S	S	0	Ferrous sulfate	S	S	
Clorox	S	S	S	Fluorine	U	U	
Clove Oil	0	U	U	Fluosilicic acid	S	S	0
Copper chloride	S	S		Formaldehyde	S	S S	0
Copper cyanide	S	S		Formic acid (10%)	S	5	
Copper fluoride	S	S		From (12, 22)	S		
Copper nitrate	S S	S		Freon (12, 22)	U	c	
Copper sulfate Corn oil	S S	S S		Fructose	S S	S S	
Corn oil Cottonseed oil	S S	S S		Fruit juice		0	
	S S	S S		Fuel oil	0		
Cresol	5	5		Furfural	U	U	

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Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)	Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)
Cuprous chloride	S	S		G			
Cyclohexane	S	0		Gasoline	0	U	
Cyclohexanol	S	0		Gelatin	S	S	
Cyclohexanone	0	U		Glucose	S	S	
D				Glycerol	S	S	S
Decalin	U	U		Glycol	S	S	0
Developers (photographic)	S	S		Glycolic acid	S	S	
Dextrin	S	S		Н			
Dibutyl phthalate	S	S		Heptane	U	U	U
Dichloroethylene	S			Hexadecyl alcohol	S	S	
Diethanolamine	S	S		Hexane	0	U	
Diethyl ether	0	0		Hydrobromic acid (50%)	S	S	
Diglycolic acid	S	S		Hydrochloric acid (20%)	S	S	0
Diisooctyl phthalate	S	S		Hydrochloric acid (100%)	S	S	0
Dimethyl phthalate	S	S		Hydrofluoric acid (35%)	S	0	
Dioctyl Phthalate	U	U	U	Hydrogen chloride gas (dry)	S	S	
p-Dioxane	S	0		Hydrogen peroxide (30%)	S	0	
E				Hydrogen peroxide (90%)	0	0	U
Ethanolamine	S	S		Hydrogen sulfide	S	S	
Ethyl acetate	S	S		Hydroiodic acid	U	U	
Ethyl alcohol	S	S	S	Hydroquinone	S	S	
Ethylamine	S	S					
Ethyl chloride	0	0		I			
Ethyl ether	0	0		Igepal	S	S	
lodine (dry)	S	S		Motor oil	S	S	
lodine (wet)	U			Mustard Paste	S		
Isooctane	U			N			
Isopropyl alcohol	S	S		Naphtha	S	S	
J				Naphthalene	S	S	S
Jet fuel (JP-4 and JP-5)	0	U		Neat's Foot Oil	S		
K				Nickel chloride	S	S	
Kerosene	0	U		Nickel nitrate	S	S	0
L				Nickel sulfate	S	S	S
Lactic acid	S	S		Nitric acid (10%)	S	S	S
Lacquer	S			Nitric acid, conc.	0	U	
Lanolin	S	S		Nitric acid (fuming)	U		
Lead acetate	S	S	S	Nitric/sulfuric acid (50/50)	U		
Lemon oil	0			Nitrobenzene	S	0	
Ligroin	S			Nitrous acid	0		
Lime Sulfur	S			Nutmeg Oil	U	U	U
Linseed oil	S	S		0			
Lubricating oil	S	0		Oleic acid	S	S	
Lye	S			Oleum	U		

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Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)	Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)
М				Olive oil	S	S	
Magnesium carbonate	S	S	S	Orange Juice	S		
Magnesium chloride	S	S	0	Oxalic acid	S	S	
Magnesium hydroxide	S	S	S	Oxygen	U	U	
Magnesium nitrate	S	S		Ozone	U	U	
Magnesium sulfate	S	S		P			
Magnesium sulfite	S	S		Palmitic Acid	S	S	S
Malic acid	S	0		Paradichlorobenzene	S	S	
Maple Syrup	S			Peanut oil	S	S	
Mayonnaise	S			Perchloroethylene	U	U	
Mercuric chloride	S	S		Phenol (10%)	S	S	0
Mercuric cyanide	S	S		Phosgene (gas)	U	U	
Mercuric nitrate	S	S		Phosgene (liquid)	U	U	
Mercurochrome	S			Phosphoric acid (30%)	S	S	0
Mercury	S	S		Phosphoric (85%)	S	S	0
Merthiolate (tincture)	S	S		Phosphorus	S		
Methane	S	S		Phthalic acid	S		
Methanol	S	S		Picric Acid	S		
Methyl cellosolve	S			Polyvinyl acetate	S		
Methyl chloride	U			Potassium bromide	S	S	S
Methylene chloride	S	0		Potassium carbonate	S	S	S
Methyl ethyl ketone	S	S		Potassium chlorate	S	S	0
Methyl isobutyl ketone	S	S		Potassium cyanide	S	S	
Methylsulfuric acid	S	S		Potassium dichromate	S	S	S
Milk	S	S		Potassium ferrocyanide	S	S	
Mineral oil	S	U		Potassium hydroxide	S	S	S
Molasses	S			Potassium nitrate	S	S	
Potassium permanganate	S	0		T			
Potassium sulfate	S	S	S	Tannic acid (10%)	S	S	0
Potassium sulfide	S	S	S	Tartaric Acid	S	S	S
Propanol	S	S		Tea	S	S	S
Pyridine	S			Tetrahydrofuran	S	S	0
R				Tetralin	0	0	0
Rice Bran Oil	S	S		Toluene	U	U	0
Rosin, light	S			Tomato Juice	S	S	S S
S	_	_		Tomato Soup	S	S	5
Safflower Oil	S	0		Tributyl phosphate Trichloroacetic Acid	S	0	
Sauerkraut	S				S	0	
Shellac	S			Trichloroethylene	U	U	
Silicone Oil	S			Tricresyl phosphate Triethanolamine	S	S O	
Silver cyanide	S	S			O S	S	
Silver nitrate	S	S	S	Trisodium phosphate	3	3	

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Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)	Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)
Sodium acetate	S	S		Turpentine	S	0	0
Sodium benzoate	S	S	S	U			
Sodium bicarbonate	S	S		Urea	S	S	
Sodium bisulfate	S	S		Urine	S	S	
Sodium bisulfite	S	S		V			
Sodium bromide	S	S		Vanilla	S	S	
Sodium carbonate	S	S	S	Varnish	S		
Sodium chlorate	S	S	0	Vaseline	S	0	0
Sodium chloride	S	S	0	Vinegar	S	S	
Sodium cyanide	S	S		W			
Sodium hydroxide, conc.	S	S	S	Water	S	S	0
Sodium Hypochlorite, conc.	S	0	U	Wheat Germ Oil	S	S	
Sodium Nitrate	S	S	S	Whiskey	S	S	S
Sodium Perborate	S			White Spirits	U	U	U
Sodium Phosphate	S	S	S	Wines	S	S	
Sodium sulfate	S	S		X			
Sodium sulfite	S	S		Xylene	0	U	
Sodium Thiosulfate	S	S		Xylol	S		
Soybean Oil	S	S		Υ			
Stannic chloride	S	S		Yeast	S	S	
Stannous chloride	S	S		Z			
Starch	S	S		Zinc chloride	S	S	
Styrene	U	U	U	Zinc oxide	S	S	
Sucrose (20%)	S	S		Zinc sulfate	S	S	
Sulfamic acid	S	S					
Sulfur	0	U	U				
Sulfur Chloride	0	U	U				
Sulfuric acid (10%)	S	S	S				
Sulfuric acid (50%)	S	S					
Sulfuric acid, conc.	S	0	U				
Sulfuric acid (fuming)	U	U					

Legend: S = Satisfactory O = Some attack U = Unsatisfactory

Origin of noise in drainage piping

The fluid flowing inside sewer piping can reach a relatively high speed. Due to the flow and fluid impact on the pipe wall, air column resonance occurs especially in places like bends, branches, and vertical collecting pipes. The noise created by air column resonance has a tendency to penetrate the pipe wall and be transmitted to the building structure. The noise created by the pipe wall vibration has a similar propensity as well.

Experience The Power of Silence

Talent PPH system completely isolates airborne and structure-borne noise.

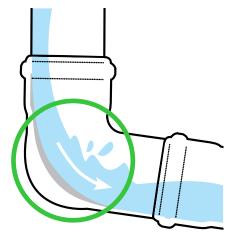
An unsuitable PVC drainage pipe system or ones using low-quality brackets generate airborne and structureborne noise.

Airborne noise occurs if the noise of a sound source is transferred directly through the air to human ears, while structure-borne noise transfers sound through a solid body and passes the vibration to the human ears.

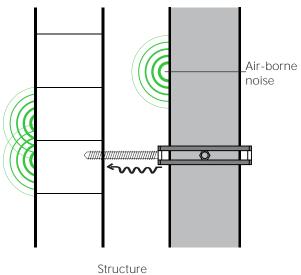
With Talent PPH system, experience true silence

Talent PPH can effectively absorb noise right at the point of its origin - inside the pipes - and can prevent its transmission through the pipe wall, all thanks to the special molecular structure of the used material.

Due to the near silent environment, it becomes possible to achieve noise values approaching the noise perception threshold. When tested, dramatically lower data were reached as required by DIN 4109, the standard regulating noise conditions in noiseprotected premises in Germany. Now we bring, the same manufacturing excellence, technology, and know-how to Egypt so that all your projects here achieve a similar level of noise insulation and guiet. With Talent PPH, your ears will experience silence like never before.



Specially designed HT Safe bends reduce air-transmitted sound.

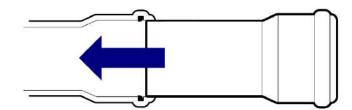


borne noise



Easy Installation!!

Talent PPH uses a push-fit system with sockets and patented seal which ensure a watertight system. The push-fit design confirms errorproof connections and considerable reduction in installation time.



Talent PPH system must be installed in such a manner that they are free of tension and that changes in length are not hindered. The product is installed using rubber-lined pipe clamps.

Pipe preparation and assembly

- 1. Pipes are produced in various lengths with one or two sockets and with plain, prebeveled ends. Proper cutting tools should be used if cutting to length is needed (manual or mechanical. Bevel the cut pipe end with an angle of approximately 15° with a bevel length of about 5 mm.
- 2. Remove chips, shavings, and sawdust before installing.
- 3. Check the position and integrity of the lip seal in the socket gasket slot. Clean the seal and the socket and apply a thin layer of lubricant around the plain pipe end.
- 4. Fittings should be inserted to maximum socket depth, whereas pipes, after being pushed completely into the socket, have to be pulled back approximately 10 mm.
- 5. For anchoring Talent PPH to walls and ceilings, use steel brackets with rubber inserts, approved for acoustic insulation systems.
- 6. As a general rule, straight lengths of pipe must be anchored by means of fixed brackets (FB) under each socket, while the rest of the pipework and the fittings will be supported by sliding brackets (SB).
- 7. The distance between the pipe clamps in the case of horizontal piping is approximately 10 times the exterior pipe diameter.
- 8. In the case of vertical installation, the distance between clamps should be 1 to 2 meters, not exceeding 2 meters.
- 9. A fixed clamp and a loose clamp per pipe length (storey height of more than 2.50 m) are recommended for drop pipelines.



Sealing Ring

Produced according to DIN EN 681-2 and DIN 4060.

1- Material: Rubber: TPE

2- Colour: Black

3- Size: From 32 mm to 160 mm

4- Features: Ease assembly

Good Fixation Good flexibility Good elasticity Long lifetime

Shore Hardness 50 to 60



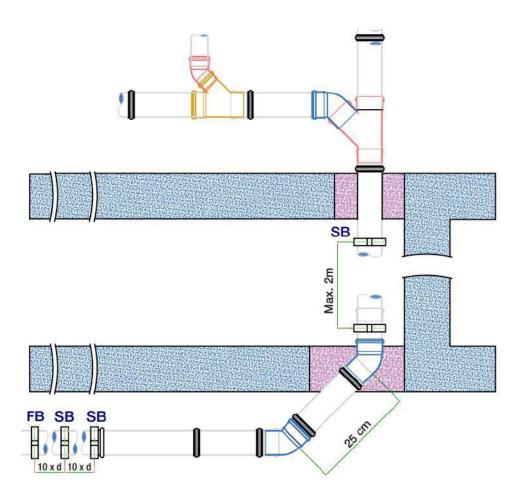
How to Arrange Brackets and Clamps?

Talent PPH can significantly reduce noise levels. However, when installing highperformance sound-insulating wastewater piping systems, it is still necessary to consider how effectively the system can be noise-isolated from all aspects of structure and airborne noise transmissions. Talent PPH considers the wastewater discharge system, including several points of contact with the building structure pipe brackets and clamps, the running of pipework through walls and ceilings, mortar droppings between pipes and wall surfaces etc.)

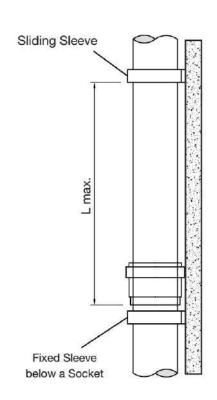
- The sound dampening brackets reduce structure-borne noise transmission by decoupling the vibrations within the drainage line from the wall.
- The quick and easy push-fit installations add to the convenience. It guarantees hydraulic tightness and allows the normal movements of the pipe, including those caused by thermal expansion. It also repeats the performance of the sound dampening effect by centralizing the pipe securely and applying the exact fastening force.

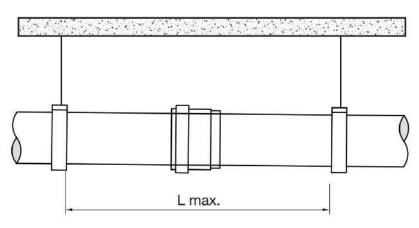


- Talent PPH, with superior, well-engineered pipes and fittings, improves sound insulation performance through specially designed bends with optimal wall thickness that reduce the air transmitted sound even further.
- By combining these sound insulation techniques into one system, Talent PPH can fulfil the best acoustic requirements and mechanical performance targets, making it the ideal solution for all types of large modern / multistoried buildings.



Spacing Distances





Horizontal Pipe Routing

Nominal outer	Max distance between brackets					
diameter	Horizontal (m)	Vertical (m)				
32	0.5	1.2				
50	0.5	1.5				
63	0.5	1.5				
75	0.8	2.0				
90	1.1	2.0				
110	1.1	2.0				
160	2.0	2.0				



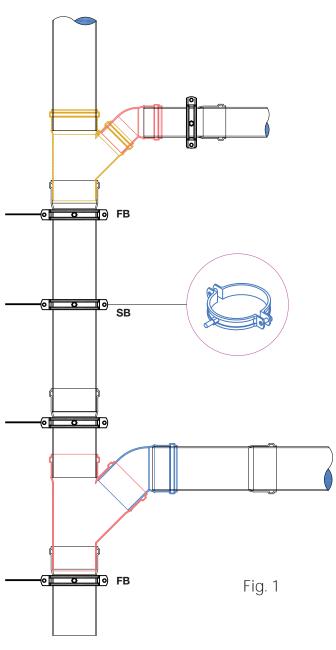
How to Position The Brackets and Clamps?

Any mechanical stress must be considered during design and assembly, so as not to affect the integrity of the system. Pipes must be fastened using brackets, and placed under the socket, in order to prevent them from slipping (Fig. 1).

Talent PPH should be installed tension-free and with free lateral allowance for temperature compensation. All fittings that involve a change in the direction of the system must be properly clamped to prevent the socket from slipping in the event of accidental excess pressure. The sound-dampening brackets have a rubber-lined sliding and fixing clamp that work together effectively to decouple vibrations from the drainage stake to the fixing wall. For pipe systems in which inner pressures can arise, the joints have to be secured to prevent them from sliding apart and deviating from the central structure.

Fixed Bracket (FB) - A fixed point (fixed bracket) that blocks that part of the system must be installed under the socket of each pipe, leaving the rest of the system free to expand. With fixed brackets, no longitudinal movement is possible, and the pipe/fitting is firmly secured and cannot be moved.

Sliding Bracket (SB) - Sliding brackets allow longitudinal movement. Post installation, the pipe can be moved through the bracket, even when the clamp and screws are tightened.





Our Products

PPH System System

مواسیر صرف بجوان ۳م **PPH Pipe 3m**

مقاس/م	Art No.			
Size/mm				
32*1.8	2015			
50*1.8	2016			
50*2.2	2017			
63*2	2019			
75*1.9	2020			
75*2.3	2021			
110*2.7	2022			
110*3.4	2023			
160*3.9	2024			
160*4.9	2025			



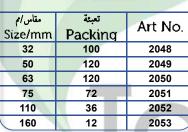
یارده صرف بجوان ۱۰۰ سم PPH Yard 100cm			
مقاس/م Size/mm	Art No.		
50	2038		
63	2041		
75	2042		
110	2044		





يارده صرف بچوان		
PPH Yard 50cm		
مقاس/م Size/mm	Art No.	
50	2027	
63	2030	
75	2031	
110	2022	







	PPH Socket Reducer		
	مقاس/م	تعبئة	Art No.
	Size/mm	Packing	AICNO.
	32*50	90	2060
ĺ	50*75	80	2064
	50*110	64	2067
ı	75*110	48	2069
	110*160	18	2073

جلبه نقاص صرف بجوان



PPH Repairing Socket		
مقاس/م Size/mm	تعبئة Packing	Art No.
75	72	2057
110	36	2058

كوع صرف بجوان بباب

جلبه اصلاح صرف بجوان



كوع صرف بجوان
PPH Elbow 87.5°
TTT EIDOU G/IS



PPH EIDOW 87.3		
مقاس/م Size/mm	تىبئة Packing	Art No.
32	90	2075
50	120	2076
63	80	2077
75	40	2078
110	18	2079
160	5	2080



PPH EIDOW 87.5° WITH access		
مقاس/م Size/mm	تعبئة Packing	Art No.
63	80	2083
75	36	2084
110	18	2085
160	5	2086

PPH System

كوع صرف بجوان مفتوح PPH Elbow 45°

مقاس/م Size/mm	تىبئة Packing	Art No.
32	60	2116
50	150	2117
63	120	2118
75	120	2119
110	24	2120
160	8	2121



مشترك صرف بجوان PPH T

مقاس/م Size/mm	تعبئة Packing	Art No.
32	60	2122
50	64	2123
63	45	2124
75	28	2125
110	12	2126
160	5	2127



واي صرف بجوان PPH Y

(
مقاس/م	تعبئة	Art No.
Size/mm	Packing	
32	50	2162
50	60	2163
63	45	2164
75	24	2165
110	12	2166
160	3	2167



مشترك صرف بجوان بباب **PPH T With access**

مقاس/م	تعبئة	Art No.
Size/mm	Packing	AIT NO.
75	24	2131
110	10	2132
160	3	2133



واي صرف بجوان نقاص **PPH Y Reducer**

مقاس/م	تعبئة	Art No.
Size/mm	Packing	ALCINO.
50*75	24	2172
50*110	16	2175
75*110	12	2177
110*160	12	2181



مشترك صرف بجوان نقاص **PPH T Reducer**

	- 1		
	مقاس/م ze/mm	تمبئة Packing	Art No.
	50*75	30	2138
	50*110	20	2141
	75*110	14	2143
1	10*160	5	2147



مشترك صرف بجوان نقاص ببار

PPH T Reducer With access		
مقاس/م Size/mm	تىبئة Packing	Art No.
50*110	17	2155
75*110	15	2157



صليبه صرف بجوان **PPH T Cross**

مقاس/م	تعبئة	Art No.
Size/mm	Packing	AICNO.
75	18	2205
110	9	2206



شجره صرف بجوان

PPH Tree		
مقاس/م Size/mm	تعبئة بد مدندا	Art No.
75	Packing 15	2185
110	10	2186



Tel. 015 569 833 33 Tel. 015 555 699 83

Tel. 015 555 699 84

System

5

بیبة صرف بجوان ۱۰ سم PPH Floor Drain 10 cm

مقاس/م	تعبئة	Art No.
Size/mm	Packing	AIT NO.
63/63	15	2253
50/75	18	2255
63/75	15	2256



بيبة صرف بجوان ۱۲ سم PPH Floor Drain 12 cm

مقاس/م	تعبئة	Art No.
Size/mm	Packing	AIT NO.
63/63	15	2271
50/75	17	2273
63/75	15	2274





هوایة صرف بجوان PPH Vent

مقاس/م Size/mm	تىبئة Packing	Art No.
50	90	2223
75	50	2225
110	18	2226



طبة نهاية خط صرف بجوان PPH End Cap

تعبئة Packing	Art No.
120	2234
50	2235
30	2236
10	2237
35	2238
20	2239
	Packing 120 50 30 10





طبة تسليك صرف بجوان PPH End Access

مقاس ام	تعبئة	Aut Min
Size/mm	Packing	Art No.
50	0	2229
75	0	2231
110	25	2232
160	10	2233



سيفون صرف بجوان PPH Sifon

مقاس/م Size/mm	تعبئة Packing	Art No.
110	12	2247





جرجوري صرف بجوان PPH Roof Drain

مقاس/م	تعبئة	Art No.
Size/mm	Packing	ALCINO.
75	10	2243
110	10	2244



جلبه سن داخلي صرف بجوان PPH Socket Female Thread

مقاس/م Size/mm	تعبئة Packing	Art No.
50	45	2074



كوع سن داخلي صرف بجوان
PPH Elbow 87.5° Female

Thread	
تعبئة صحنيات مي	Art No.
Packing	0445

S Had

Tel. 015 569 833 33 Tel. 015 555 699 83 Tel. 015 555 699 84 مقاس/م Size/mm 50



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