

W W W . K E T R O W A . C O M

ABOUT KETROWA

Providing materials and equipment for construction projects is always one of the most important concerns of builders and project managers. The importance of this issue stems from its direct impact on the project schedule, construction cost, and final building value. With the aim of facilitating the process of providing construction goods and taking into account its social responsibility, Ketrowa team has created a comprehensive and online system. In this system, builders will be able to prepare the schedule for the supply of materials and equipment for their construction projects and order the supply of goods based on the plan. These orders are made by comparing various products available in the system. Mass builders are the most important target customers of Ketrowa, and Ketrowa tries to supply and deliver goods on time to the consumer by logical planning for manufacturers and by providing cash and credit purchase model. Also, due to the reception and request for the supply of construction products for foreign markets, the supply of construction products for export markets is another main goal of Ketrowa. Ketrowa plans to transform the traditional and opaque market into a modern, high-speed and accurate market where buyers can get the quality goods they want at the most appropriate price.





ELECTRICAL FACILITIES

SANITARY

5

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JOINERY & FINISHING

Products are produced and supplied in five branches:

Structure, Electrical Facilities, Mechanical, Heating & Cooling Facilities, Sanitary, Joinery & Finishing., combining art and industry.

STRUCTURE

Ketrowa Technical Specifications and Features of PUSH-FIT Pipes & Fittings Technical Specifications of Neogen PUSH-FIT Pipes & Fittings

Color		Gray RAL 7037
Density	g/cm3	0.91
Tensile Strength at 20°⊂	N/mm2	30
Yield Stress	N/mm2	21
Flexibility Coefficient	N/mm2	1200
Percentage of Elongation	%	800
Bending Stress	N/mm2	20
Modulus of Elasticity	N/mm2	350
Impact Strength	kJ/m2	25
Thermal Conductivity Coefficient	W/m2k	0.23
Coefficient of Longitudinal Expansion	m/mk	0.00015
Roughness Coefficient	Mm/m	0.007
pH Range	_	2-12

Technical Specifications of Silent PUSH-FIT Pipes and Fittings

Color		White RAL 9018
Density of the Middle Layer	g/cm3	1.507
Tensile Strength at 20°C	N/mm2	25
Yield Stress	N/mm2	20
Flexibility Coefficient	N/mm2	800
Percentage of Elongation	%	150
Bending Stress	N/mm2	20
Modulus of Elasticity	N/mm2	2600
Impact Strength	kJ/m2	30
Thermal Conductivity Coefficient	W/m2k	0.55
Coefficient of Longitudinal Expansion	m/mk	0.09
Roughness Coefficient	Mm/m	0.007
pH Range	-	2-12





Municipal Sewage PP pipes

This product is supplied as two socket heads and one socket head for push fit connection with international standard EN1852-1.

It has a smooth and wear-resistant inner surface (proper hydraulic flow, no deposits and self-cleaning properties).

High resistance to chemicals in wastewater.

High shock resistance.

Easy installation.

Production of O-Ring socket section of pipes with Antishrinkage device.

Greater flexibility than other pipes (the possibility of breaking and cracking is much less than polyvinyl chloride products).



EN 1852-1, INSO 16509-1

This product is produced in two types, Neogen and Silent.

This product is produced in lengths of 15-25-50-100-200-300 cm.

Single Socket Pipes BD				
DN (mm)	SN	S	Thickness (Min. – Max.) (mm)	Pipe Length (m)
50	SN4	S16	3.8 - 4.4	4 & 6
75	SN4	S16	3.4 - 4.0	4 & 6
110	SN4	S16	4.3 – 5.0	4 & 6
125	SN4	S16	3.9 – 4.5	4 & 6
160	SN4	S16	5.5 – 6.3	4 & 6

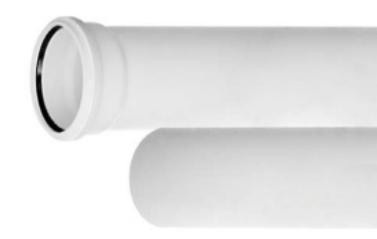


EN 1852-1, INSO 16509-1

This product is produced in two types, Neogen and Silent.

This product is produced in lengths of 15-25-50-100-200-300 cm.

Single Socket I	Single Socket Pipes B				
DN (mm)	SN	S	Thickness (Min. – Max.) (mm)	Pipe Length (m)	
50	SN2	S20	3.8 - 4.4	4 & 6	
75	SN2	S20	3.4 - 4.0	4 & 6	
110	SN2	S20	4.3 – 5.0	4 & 6	
125	SN2	S20	3.9 – 4.5	4 & 6	
160	SN2	S20	5.5 – 6.3	4 & 6	



EN 1852 - 1, INSO 16509 - 1

This product is produced in two types, Neogen and Silent. This product is produced in lengths of 50-100-200-300 cm.

Double Socket	Double Socket Pipes				
DN (mm)	SN	S	Thickness (Min. – Max.) (mm)	Pipe Length (m)	
50	SN4	S16	3.8 - 4.4	4 & 6	
75	SN4	S16	3.4 - 4.0	4 & 6	
110	SN4	S16	4.3 – 5.0	4 & 6	
125	SN4	S16	3.9 – 4.5	4 & 6	
160	SN4	S16	5.5 – 6.3	4 & 6	



Double Socket	Double Socket Pipes				
DN (mm)	SN	S	Thickness (Min. – Max.) (mm)	Pipe Length (m)	
50	SN2	S20	3.8 - 4.4	4 & 6	
75	SN2	S20	3.4 - 4.0	4 & 6	
110	SN2	S20	4.3 – 5.0	4 & 6	
125	SN2	S20	3.9 – 4.5	4 & 6	
160	SN2	S20	5.5 – 6.3	4 & 6	









Today's modern life has caused new anomalies such as noise pollution in societies. The shrinking of the living space in big cities and the use of light and durable materials have caused the emergence and compulsion of new standards to control the sound in the living and working environment of people in societies. In multi-storied and even small buildings, the flow of water and sewage always creates noise. In the traditional piping system, it is impossible to avoid this sound. Metal pipes or dry PVC pipes do not have the possibility to absorb the vibrations that cause sound, but rather amplify it. This noise may not cause much problem in a residential house, but it can become a problem in tall and commercial buildings with a high number of people.

Today, the measurement of sound emission in piping systems is done according to the EN14366 standard. According to this standard, the piping system must be implemented in a standard structure with a density of 220 kg/m2 for the walls and 410 kg/m2 for the floor and ceiling, and then the emission rate in different flows from 0.5 to 4 liters per second. The sound is measured by special sensors in certain places.

In Push-fit Silent pipes and fittings, it has been tried to reduce the sound caused by the movement of fluids by using the technology of producing multilayer pipes and using nano soundproofing materials in the structure of pipes and fittings.

The first standard regarding sound control of various equipment in residential spaces is DIN 4109.

This standard has set the permissible sound emission limit of utility systems, including the piping system, at 30 decibels. In fact, the maximum permissible sound transmission by piping systems (hot and cold water piping and sewage piping inside the building) for the sound comfort of people in closed spaces (living room and bedroom) is 30 dB and for work room and classroom has determined 35 decibels.

EN 1451-1, INSO 13822-1



Elbow 45 Degre	Elbow 45 Degree Silent				
DN (mm)	SN	S			
50	SN2	S20			
75	SN2	S20			
110	SN2	S20			
125	SN2	S20			
160	SN2	S20			





Elbow 87 D	Elbow 87 Degree Silent				
DN (mm)	SN	S			
50	SN2	S20			
75	SN2	S20			
110	SN2	S20			
125	SN2	S20			
160	SN2	S20			

EN 1451-1, INSO 13822-1

Tee 45 Degrees Silent				
DN (mm)	SN	S		
50	SN2	S20		
75	SN2	S20		
110	SN2	S20		
125	SN2	S20		
160	SN2	S20		





Tee 87 Degrees Silent				
SN	S			
SN2	S20			
	SN SN2 SN2 SN2 SN2			



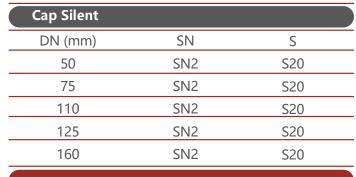


EN 1451-1, INSO 13822-1



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Tee Conversion	87 Degrees Sile	ent		
DN (mm)	SN	S		
75x50	SN2	S20		
110x50	SN2	S20		
110x75	SN2	S20		
125x110	SN2	S20		
160x110	SN2	S20		

EN 1451-1, INSO 13822-1





EN 1451-1, INSO 13822-1



(Tee Conversion	າ 45 Degrees Sil	ent
	DN (mm)	SN	S
	75x50	SN2	S20
	110x50	SN2	S20
	110x75	SN2	S20
	125x110	SN2	S20
	160x110	SN2	S20

EN 1451-1, INSO 13822-1

Interface Fitting Socket Silent		
DN (mm)	SN	S
50	SN2	S20
75	SN2	S20
110	SN2	S20
125	SN2	S20
160	SN2	S20



EN 1451-1, INSO 13822-1



EN 1451-1 , INSO 13822-1		
Tee Visit Silent		
DN (mm)	SN	S20
75	SN2	S20
110	SN2	S20
125	SN2	S20
160	SN2	S20

Conversion Silent		
DN (mm)	SN	S
75x50	SN2	S20
110x50	SN2	S20
110x75	SN2	S20
125x75	SN2	S20
110x125	SN2	S20
160x110	SN2	S20
160x125	SN2	S20







Features and Benefits:

- -High shock resistance
- -Easy installation
- -Abrasion resistant
- -Resistant to chemicals found in sewage

EN 1451-1, INSO 13822-1



Elbow 45 Degree Neogen		
DN (mm)	SN	S
50	SN2	S20
75	SN2	S20
110	SN2	S20
125	SN2	S20
160	SN2	S20

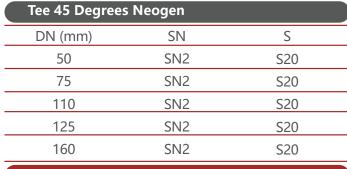
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	Elbow 87 Degre	ee Neogen
mmills	DN (mm)	SN
== 7	50	SN2
	75	SN2
	110	SN2
	125	SN2
	160	SN2



Tee Conversion 45 Degrees Neogen		
DN (mm)	SN	S
75x50	SN2	S20
110x50	SN2	S20
110x75	SN2	S20
110x125	SN2	S20
110x160	SN2	S20

EN 1451-1, INSO 13822-1





Tee 87 Degrees Neogen		
DN (mm)	SN	S
50	SN2	S20
75	SN2	S20
110	SN2	S20
125	SN2	S20
160	SN2	S20



Tee Conversion 87 Degrees Neogen		
DN (mm)	SN	S
75x50	SN2	S20
110x50	SN2	S20
110x75	SN2	S20
110x125	SN2	S20
110x160	SN2	S20



EN 1451-1, INSO 13822-1

Cap Neogen		
DN (mm)	SN	S
50	SN2	S20
75	SN2	S20
110	SN2	S20
125	SN2	S20
160	SN2	S20

EN 1451-1, INSO 13822-1

Interface Fitting Socket Neogen		
DN (mm)	SN	S
50	SN2	S20
75	SN2	S20
110	SN2	S20
125	SN2	S20
160	SN2	S20



EN 1451-1, INSO 13822-1

Tee Visit Neogen		
DN (mm)	SN	S
75	SN2	S20
110	SN2	S20
125	SN2	S20
160	SN2	S20

EN 1451-1, INSO 13822-1

Roof Cane Neogen		
DN (mm)	SN	S
50	SN2	S20
75	SN2	S20
110	SN2	S20



EN 1451-1, INSO 13822-1

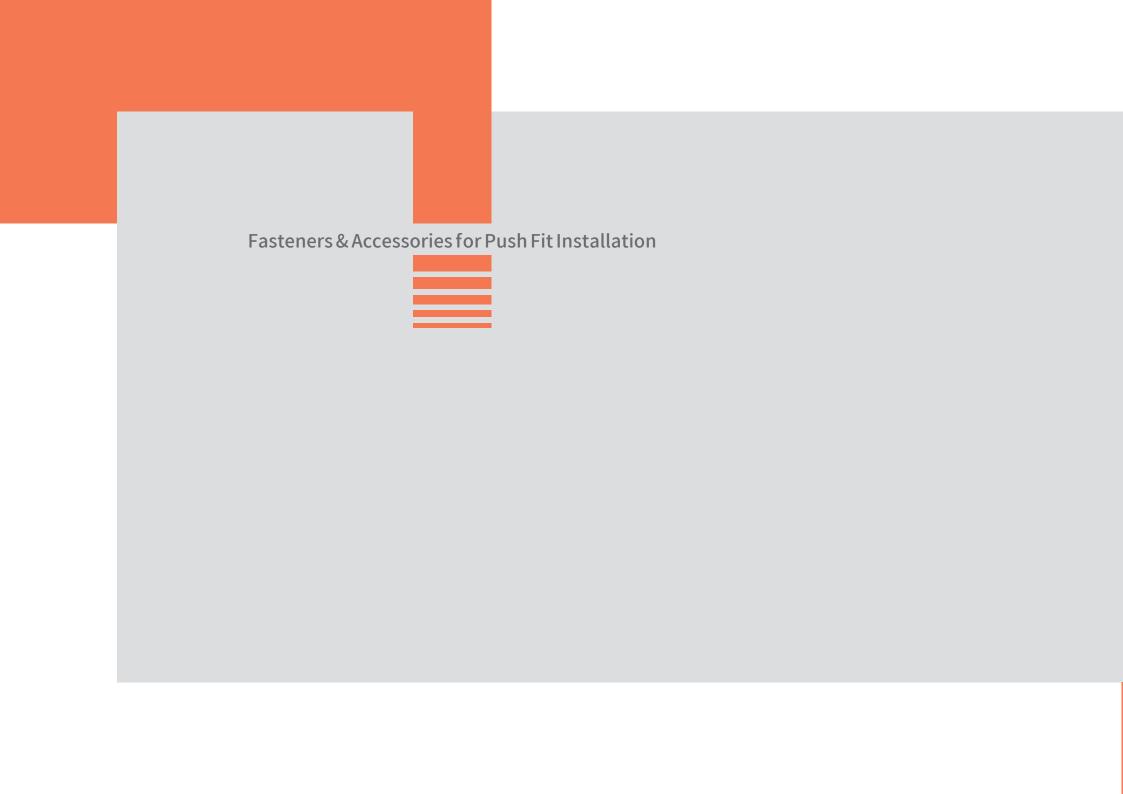
Conversion Neo	gen	
DN (mm)	SN	S
75x50	SN2	S20
110x50	SN2	S20
110x75	SN2	S20
125x75	SN2	S20
110x125	SN2	S20
160x110	SN2	S20
160x125	SN2	S20

EN 1451-1, INSO 13822-1

Siphon Neogen			
DN (mm)	SN	SN	S
50-75	20 cm	SN2	- S20
	60 cm	SN2	320
	20 cm	SN2	- S20
75-75	60 cm	SN2	_
	90 cm	SN2	
110-110	60 cm	SN2	S20
	20 cm	SN2	
110-125	60 cm	SN2	S20
	90 cm	SN2	_





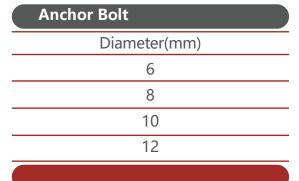






One Meter Long Metric Screw

Diameter(mm)	
8	
10	







White Nut

Diameter(mm)	
8	
10	

11 1 (1 31 11 1)
Diameter(mm)
8x18x1.5
10x20x1.5





Vertical Mounting Plate

Coated Bead Hanger Fastener

Diameter(mm)
50
75
110
125
160





Regulatory Installation Base



Coated Reglagi Fastener	
Diameter(mm)	
50	
70	
110	
125	
	$\overline{}$

Coated Wall Mount Fastener
Diameter(mm)
50
75
110
125
160







Coated Reglagi Fastener
Diameter(mm)
50
70
110
125

Flat Fix

Length of 2 meters with Thickness of 3 mm



U Fixer

Length of 2 meters with Thickness of 3 mm



Vertical Mounting Plate

Weld-on Nut Conversion 10









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