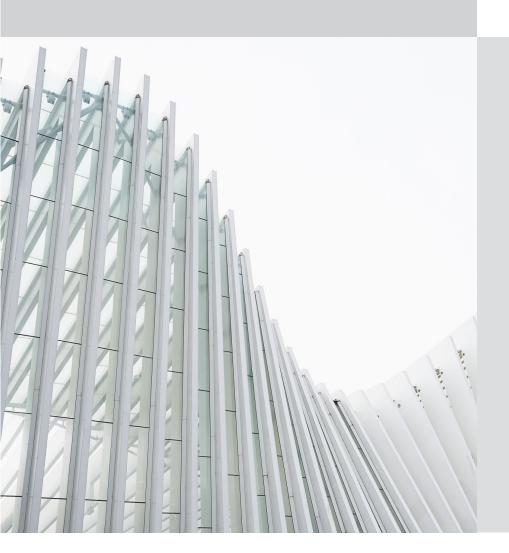


W W W . K E T R O W A . I R



درباره کتــروا

تأمیـن مصالـح و تجهیـزات پروژههـای سـاختمانی همـواره یکـی از مهمتریـن دغدغههـای سـازندگان و مدیـران پروژههاسـت. اهمیـت ایـن مسـئله نشـأت گرفتـه از تأثیـر مسـتقیم آن بـر زمـان بنـدی یـروژه، هزینـه تمـام شـده سـاخت و ارزش سـاختمان نهایـی اسـت.

تیم کتروا با هدف تسهیل فرایند تأمین کالاهای ساختمانی و با در نظرگرفتن مسئولیت اجتماعی خود، سامانه، سازندگان اجتماعی خود، سامانه ی جامع و برخط را ایجاد نموده است. در این سامانه، سازندگان قادر خواهند بود برای پروژه های ساختمانی خود، زمان بندی تأمین مصالح و تجهیزات را آماده نمایند و براساس این برنامه، سفارش تأمین کالا داشته باشند. این سفارش ها با مقایسه کالاهای متنوع موجود در سامانه انجام می گیرد.

انبوه سازان، مهمترین مشتریان هدف کتروا هستند و کتروا تلاش می کند با برنامه ریزی منطقی برای سازندگان و با ارائه مدل خرید نقدی و اعتباری، تأمین و تحویل به موقع کالا را به مصرف کننده ارائه نماید.

تأمین کالاهای ساختمانی برای بازارهای صادراتی، یکی دیگر از اهداف اصلی کتروا است. کتـروا قصـد دارد بـازار سـنتی و غیرشـفاف را بـه بـازاری مـدرن، پرسـرعت و دقیـق تبدیـل نمایـد کـه در آن خریـداران بـا مناسـب تریـن قیمـت بـه کالاهـای بـا کیفیـت مدنظـر خـود دسـت یابنـد.

MECHANICAL, HEATING

تأسيسات مكانيكي، گرمایشی و سرمایشی

تأسيسات الكتريكي

SANITARY بهداشتی

3 2

نازک کاری

محصولات در پنج شاخهی:

سازه و ابنیه، تأسیسات الکتریکی، تأسیسات مکانیکی ، گرمایشی و سرمایشی، بهداشتی و نازک کاری تحت یک برند، با ترکیب هنر و صنعت تولید و عرضه می گردد.

ســازه وابنیه

:Products are produced and supplied in five branches Structure, Electrical Facilities, Mechanical, Heating & Cooling Facilities,

.Sanitary, Joinery & Finishing., combining art and industry





Municipal Sewage PP pipes

لوله های PP فاضلاب شهری

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).

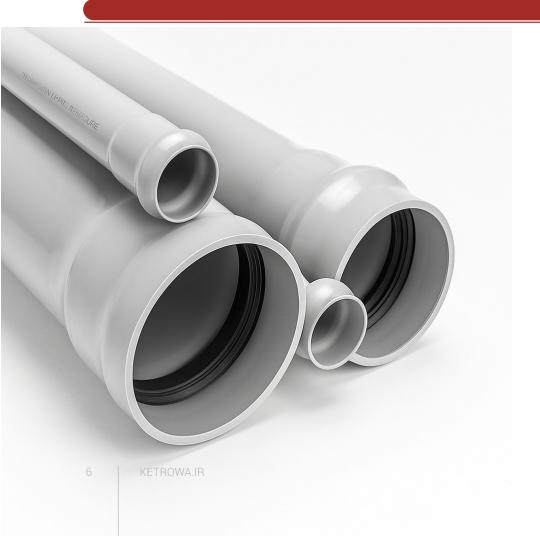
High resistance to chemicals in wastewater.

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).



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 F	Pipes BD			لوله های یک سر سوکت 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

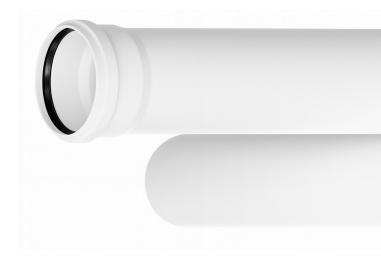


EN 1852-1, INSO 16509-1

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 F	Pipes B			لوله های یک سر سوکت 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	Pipes		لوله های دو سر سوکت 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	



Double Socket Pipes				لوله های دو سر سوکت 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





Silent سایلنت



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

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A		
	Tun	

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	

EN 1451-1, INSO 13822-1



Elbow 87 De	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	سه راه ۴۵ درجه سایلنت
DN (mm)	SN	S
50	SN2	S20
75	SN2	S20
110	SN2	S20
125	SN2	S20
160	SN2	S20

SN

SN2

SN2

SN2

SN2

SN2

سه راه ۷۸ درجه سایلنت

S

S20

S20

S20

S20

S20



Tee 87 Degrees Silent

DN (mm)

50 75

110

125

160





EN 1451-1, INSO 13822-1

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



سه راه تبدیل ۴۵ درجه سایلنت

EN 1451-1, INSO 13822-1

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



	سه راه بازدید سایلنت
SN	S20
SN2	S20
	SN2 SN2 SN2

EN 1451-1, INSO 13822-1

Cap Silent		درپوش سایلنت
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 Silent	سوكت رابط سايلنت
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

Conversion Sile	nt	تبديل سايلنت
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





Neogen نئوژن



Features and Benefits:

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

EN 1451-1, INSO 13822-1



Elbow 45 Degr	ee Neogen	زانو ۴۵ درجه نئوژن
DN (mm)	SN	S
50	SN2	S20
75	SN2	S20
110	SN2	S20
125	SN2	S20
160	SN2	S20

mi	-
	-
and a	-

Elbow 87 Degree Neogen		زانو ۸۷ درجه نئوژن
DN (mm)	SN	S
50	SN2	S20
75	SN2	S20
110	SN2	S20
125	SN2	S20
160	SN2	S20



Tee Conversion 45 Degrees Neogen			
DN (mm)	SN	S	
75x50	SN2	S20	
110x50	SN2	S20	
110x75	SN2	S20	
110x125	SN2	S20	
110x160	SN2	S20	
	سه راه تبدیل ۴۵ درجه نئوژن		

EN 1451-1, INSO 13822-1





Tee 87 Degrees	Neogen	سه راه ۸۷ درجه نئوژن
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



سه راه تبدیل ۸۷ درجه نئوژن

EN 1451-1, INSO 13822-1

Cap Neogen		درپوش نئوژن
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		سه راه بازدید نئوژن
DN (mm)	SN	S
75	SN2	S20
110	SN2	S20
125	SN2	S20
160	SN2	S20

EN 1451-1, INSO 13822-1

Conversion Neo	gen	تبديل نئوژن
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

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



EN 1451-1, INSO 13822-1

Roof Cane Neogen		عصایی بام نئوژن
DN (mm)	SN	S
75	SN2	S20
110	SN2	S20
125	SN2	S20
160	SN2	S20



Siphon Neogen			سيفون نئوژن
	SN	CNI	S S
DN (mm)	21/	SN	
50-50 -	20 cm	SN2	S20
	60 cm	SN2	320
75-75 -	20 cm	SN2	S20
	60 cm	SN2	320
125-110 –	20 cm	SN2	520
	60 cm	SN2	S20
110-110	60 cm	SN2	S20



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Ketrowa Technical Specifications and Features of

PUSH-FIT Pipes and Fittings

Technical Specifications of Neogen PUSH-FIT Pipes and Fittings

Color		Gray RAL 7037
Density	g/cm ³	0.91
Tensile Strength at 20°C	N/mm ²	30
Yield Stress	N/mm ²	21
Flexibility Coefficient	N/mm ²	1200
Percentage of Elongation	%	800
Bending Stress	N/mm²	20
Modulus of Elasticity	N/mm ²	350
Impact Strength	kJ/m ²	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/cm ³	1.507
Tensile Strength at 20°C	N/mm ²	25
Yield Stress	N/mm ²	20
Flexibility Coefficient	N/mm ²	800
Percentage of Elongation	%	150
Bending Stress	N/mm ²	20
Modulus of Elasticity	N/mm ²	2600
Impact Strength	kJ/m ²	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

























THE MANAGEMENT SYSTEM OF

TOSEE VA TAMIN BANA GOSTAR ASIA SAZEH CO. (KETROWA)

NO.477, BETWEEN 1ST AND 2ND VAHID ST., SHAHID BEHESHTI BLVD., BAGHESTAN HWY., SHAHRIAR, TEHRAN PROVINCE, IRAN

has been assessed and certified as meeting the requirements of

ISO 14001:2015

Environmental management system

FOR THE FOLLOWING ACTIVITIES

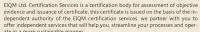
Comprehensive Supplier of Building Materials

CERTIFICATE REGISTRATION NO.: QM5933306 ORIGINAL CERTIFICATION DATE: MAY 07, 2025 CURRENT CERTIFICATION DATE: MAY 07, 2025 CERTIFICATE EXPIRY DATE: MAY 07, 2028

THIS CERTIFICATE REMAINS VALID SUBJECT TO SATISFACTORY SURVEILLANCE AUDITS.







The validity of this certificate can be verified at www.eigmcert.com

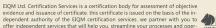








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THE MANAGEMENT SYSTEM OF

TOSEE VA TAMIN BANA GOSTAR ASIA SAZEH CO. (KETROWA)

NO.477, BETWEEN 1ST AND 2ND VAHID ST., SHAHID BEHESHTI BLVD., BAGHESTAN HWY., SHAHRIAR, TEHRAN PROVINCE, IRAI

has been assessed and certified as meeting the requirements of

ISO 45001:2018

Occupational health and safety management system

FOR THE FOLLOWING ACTIVITIES

Comprehensive Supplier of Building Materials

CERTIFICATE REGISTRATION NO.: QM5933307 ORIGINAL CERTIFICATION DATE: MAY 07, 2025 CURRENT CERTIFICATION DATE: MAY 07, 2025 CERTIFICATE EXPIRY DATE: MAY 07, 2028

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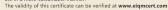








verified





THE MANAGEMENT SYSTEM OF

TOSEE VA TAMIN BANA GOSTAR ASIA SAZEH CO. (KETROWA)

NO.477, BETWEEN 1ST AND 2ND VAHID ST., SHAHID BEHESHTI BLVD., BAGHESTAN HWY., SHAHRIAR, TEHRAN PROVINCE, IRAN has been assessed and certified as meeting the requirements of

ISO 9001:2015

Quality management system

FOR THE FOLLOWING ACTIVITIES

Comprehensive Supplier of Building Materials

CERTIFICATE REGISTRATION NO.: QM5933305 ORIGINAL CERTIFICATION DATE: MAY 07, 2025 CURRENT CERTIFICATION DATE: MAY 07, 2025 CERTIFICATE EXPIRY DATE: MAY 07, 2028

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Authorized Signatory

EIQM Ltd. Certification Services

info@eigmcert.com

THIS CERTIFICATE REMAINS VALID SUBJECT TO SATISFACTORY SURVEILLANCE AUDITS.









CERTIFICATE REGISTRATION NO.: QM5933308

ORIGINAL CERTIFICATION DATE: MAY 07, 2025

CURRENT CERTIFICATION DATE: MAY 07, 2025

CERTIFICATE EXPIRY DATE:



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TOSEE VA TAMIN BANA GOSTAR ASIA SAZEH CO. (KETROWA)

NO.477, BETWEEN 1ST AND 2ND VAHID ST., SHAHID BEHESHTI BLVD., BAGHESTAN HWY., SHAHRIAR, TEHRAN PROVINCE, IRAN

has been assessed and certified as meeting the requirements of

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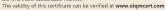
ISO 9001:2015 , ISO 14001:2015 , ISO 45001:2018

FOR THE FOLLOWING ACTIVITIES

Comprehensive Supplier of Building Materials

MAY 07, 2028

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