

Engineering progress
Enhancing lives

RAUTITAN PEX plumbing system

Secure. Easier. Faster.





Flexible Cross-Linked Polyethylene (PEX) system with unique REHAU compression sleeve jointing technology for hot and cold water applications.

Live better with REHAU quality and innovation

REHAU was founded in Germany in 1948. Today, our proficiency in developing innovative solutions has made us a global leader in polymer processing technologies, providing a wide range of products and services to the Construction, Automotive and Industrial sectors. Through continuing research and development, REHAU consistently delivers cost-effective products designed with the environment in mind.

Stringent quality control and safety guidelines ensure that our products comply with the highest international standards. We take pride in our expertise and versatility to remain at the forefront of technology.

As an independent and privately owned company, REHAU focuses on building long-lasting partnerships and alliances with our customers.



SECURE

Simple. Robust. Reliable

Simply the most reliable joint

RAUTITAN Pipes

RAUTITAN pipes are made from high density cross-linked polyethylene (PE-Xa). The cross linking process causes the individual polyethylene molecules to bond in a three-dimensional network creating a tough and durable pipe with superior:

- long-term stability
- high temperature resistance and
- high pressure resistance
- superior flexibility and strength.

The external platinum PE-sheath blocks more than 99.9% of light transmission through the pipes to prevent the growth of algae within the plumbing system to maintain the system's hygiene.

The RAUTITAN system includes a single PN20 pipe system for both hot and cold water, which has been exposed in long-term tests at extreme temperature and pressure conditions to confirm its lifespan of over 50 years even for hot water application.

100%
leak-proof
joint



PRESSURE TEST UP TO 150 PSI

The RAUTITAN compression sleeve joint is a simple, robust and reliable connection.

EASIER

Engineered for
your convenience

Sealed
without
O-ring



Advanced light weight material and innovative jointing technology ensure that RAUTITAN is the most convenient and robust plumbing system available.

MAXIMUM FLEXIBILITY, ULTIMATE DESIGN FREEDOM

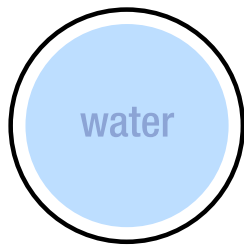
Even in the most confined space, the superior flexibility of the RAUTITAN PE-Xa pipes give you the freedom to bend around corners and around existing services to complete the installation. In addition the simple mechanical joint can be confidently made in very restricted spaces making it the ideal system for renovation or water service extensions.

HIGHER KINK RESISTANCE

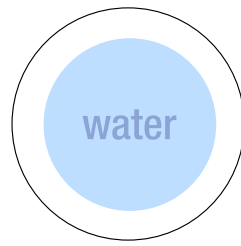
No need for bender tools or additional tools.



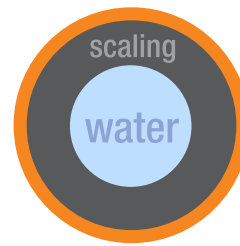
Inner diameter



**PEX
PN20**



**PP-R
PN20**



**Metal
with scaling**



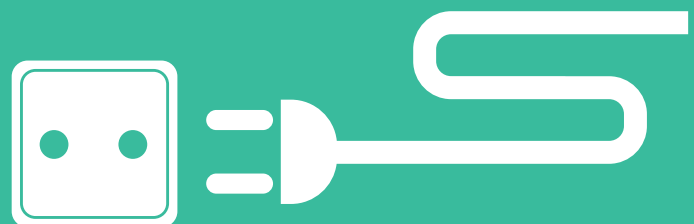
LONG-TERM PEACE OF MIND

Combined with advanced PVDF/PPSU polymer fittings and Dezincification Resistant Brass threaded fittings RAUTITAN PE-Xa pipes are significantly more resistant to scaling, corrosion and/or erosion than traditional systems such as copper.

Due to the corrosion and scaling resistant properties, the RAUTITAN system provides the highest standards of hygiene and hydraulic performance, today and in the future!

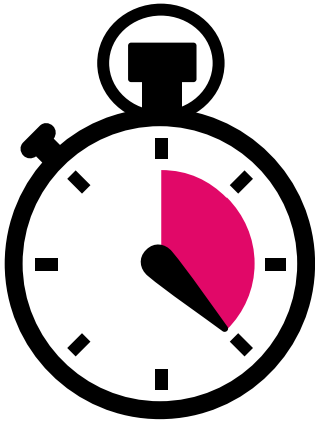
NO POWER, NO HEAT, NO WORRIES

RAUTITAN's robust 'cold' compression sleeve jointing technology requires **no brazing, no welding, no open flames or hot welding tools** (up to 260°C). Avoid the risk of damage to existing building elements or other services (e.g. electrical) caused by open flames or high temperatures; and of course the risk of injury to your team.



FASTER

Save time, save cost



more than
30%
faster

MORE TIME, MORE JOBS

With growing advancements in modern construction techniques, projects are moving faster than ever before; and with that growing client expectation. The RAUTITAN system provides:

- Simple, fast and robust jointing technique
- Up to 100m coiled pipe runs. No joint!
- More than 30% less joints per installation
- No waiting for cool down periods before pressurizing the system

100% SEAMLESS CONNECTION

Unique PEX/PPR adaptors to avoid using threaded connection between the two systems.



INSTALL A VALVE WITH NO THREADED CONNECTION

RAUTITAN valves are featured with unique REHAU compression sleeve connection joints that can create a permanent seal to our RAUTITAN PEX pipes.

RAUTITAN PX FITTINGS

For sizes 16mm to 40mm, non-threaded RAUTITAN fittings, PPSU (polyphenyl sulphone) and compression sleeves, PVDF (polyvinylidene fluoride).

RAUTITAN MX FITTINGS

For sizes 50mm to 63mm high quality Dezincification resistant brass fittings



**RAUTOOL
completes
RAUTITAN**



TWO EASY STEPS TO SECURITY

Making a 100% leak-proof joint has never been this easy. **Utilized for over 30 years** and across millions of connections REHAU guarantees a **100% permanent leak-proof joint in just two simple steps!**

1 Expand the pipe



2 Compress and complete!



RAUTOOL

The modular tool for every requirement

Only RAUTOOL assembly tools guarantee easy installation and fully leak-proof connections. Its compact construction simplifies handling and also makes it possible to install in the toughest construction sites. Available in a multitude of modular options, the RAUTOOL program can be tailored to the individual needs of each and every installer.

Simple mechanical design and robust materials ensure long-lasting performance, minimal tool maintenance and regular calibration.



RAUTOOL M1 16 - 40mm



RAUTOOL H2 16 - 40mm

Universal
and
professional



Technical Specification

SPECIFICATION

Material	-	PE-Xa
Colour (surface)	-	Platinum
Notch impact strength at 20°C	-	No fracture
Notch impact strength at -20°C	-	No fracture
Average coefficient of expansion		0.15
When laying with pipe support channel:		
- Size 16 - 40	mm/(mK)]	0.04
- Size 50 - 63		0.1
Thermal conductivity	W/(mK)]	0.35
Pipe roughness	[mm]	0.007
Operating pressure (maximum at 70°C)	[bar]	10
Operating temperature		
- Maximum	[°C]	90
- Minimum		-
Short-term maximum temperature (malfunction)	[°C]	100
Material constant C	-	12
Minimum bending radius without tools d = pipe diameter	-	8 x d
Minimum bending radius with pipe bend brackets d = pipe diameter	-	3 – 4 x d
Available sizes	[mm]	16 – 63

Standards and Certification

BS 6920

Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of water

BS 7291

Thermoplastics pipes and associated fittings for hot and cold water for domestic purposes and heating installations in buildings

BS EN 1982

Copper and copper alloys. Ingots and castings

BS EN 12163

Copper and copper alloys. Rod for general purposes

BS EN 12165

Copper and copper alloys - Wrought and unwrought forging stock

BS EN 12420

Copper and copper alloys. Forgings

DIN 1988

Codes of practice for drinking water installations (TRWI)

DIN 4102

Fire behaviour of building materials and components

DIN EN 13501

Fire classification of construction products and building elements

DIN EN 12164

Copper and copper alloys - Rod for free machining purposes

DIN EN 12168

Copper and copper alloys - Hollow rod for free machining purposes

DVGW W 291

Cleaning and disinfection of water distribution systems

DVGW W 534

Pipe connectors and connections in the drinking water installation

DVGW W 551

Drinking water heating and drinking water pipe systems

ISO 14001

Environment Management System (EMS) standard

ISO 7

Pipe threads where pressure-tight joints are not made on the threads

ISO 9001

Quality Management Systems

ISO 15875

Plastic piping systems for hot and cold water installations - crosslinked polyethylene (PE-X)

SS 375

















Suitability of nonmetallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water

ISO 50001

Energy Management Systems

QUALITY AND CERTIFICATION

RAUTITAN meets international quality and regulatory standards, and is accredited by both international and national regulation bodies:

   <p>GERMANY</p>	  <p>AUSTRALIA & NEW ZEALAND</p>	 <p>SWITZERLAND</p>	
 <p>HONG KONG</p>	  <p>MALAYSIA</p>	 <p>JAPAN</p>	 <p>TAIWAN</p>
  <p>SINGAPORE</p>	 <p>NETHERLANDS</p>	 <p>UNITED KINGDOM</p>	 <p>AUSTRIA</p>

RAUTITAN WATER SERVICES

Project References



- 1 **Federation Square**
Australia
- 2 **Primoretz Grand Hotel and Spa**
Bulgaria
- 3 **Bel-Air 8**
Hong Kong
- 4 **Ramada Resort Aquaworld**
Hungary
- 5 **JW Marriott Hotel**
Indonesia
- 6 **Traders Hotel**
Malaysia





- 7 **The Red Apple Apartment**
Netherland
- 8 **Discovery Primea**
Philippines
- 9 **Moscow School of Management**
Russia
- 10 **Wellness Aquamarine**
Slovakia
- 11 **W Hotel**
Singapore
- 12 **Radisson Blue Hotel**
South Africa

RAUTITAN Product Range

RAUTITAN pipes

Description	Art. - No.	DN in mm
Platinum Pipe (Available in coil or straight length)	132300-005	16 x 2.2 x 5M Lg
	132300-100	16 x 2.2 x 100M coil
	132310-005	20 x 2.8 x 5M Lg
	132310-100	20 x 2.8 x 100M coil
	132320-005	25 x 3.5 x 5M Lg
	132320-050	25 x 3.5 x 50M coil
	132330-005	32 x 4.4 x 5M Lg
	132330-050	32 x 4.4 x 50M coil
	132340-005	40 x 5.5 x 5M Lg
	132350-005	50 x 6.9 x 5M Lg
	132360-005	63 x 8.6 x 5M Lg

RAUTITAN components

Description	Art. - No.	DN in mm	
T-piece, Wall Mounted	138841-402	16 - Rp 1/2 - 16	MX
	138851-402	20 - Rp 1/2 - 20	MX
T-piece, Uniform	160031-001	16	PX
	(MX) 160032-001	20	PX
	160033-001	25	PX
	160034-001	32	PX
	(PX) 160035-001	40	PX
	137155-001	50	MX
	137165-001	63	MX

RAUTITAN components

Description	Art. - No.	DN in mm	
Straight Coupling	160011-001	16	PX
	(MX) 160012-001	20	PX
	160013-001	25	PX
	160014-001	32	PX
	(PX) 160015-001	40	PX
	139741-002	50	MX
139751-002	63	MX	

RAUTITAN components

Description	Art. - No.	DN in mm	
T-piece, Reduced Centre	160061-001	20 - 16 - 20	PX
	(MX) 160062-001	25 - 16 - 25	PX
	160063-001	25 - 20 - 25	PX
	(PX) 160064-001	32 - 16 - 32	PX
	160065-001	32 - 20 - 32	PX
	(PX) 160066-001	32 - 25 - 32	PX
	160067-001	40 - 20 - 40	PX
	160068-001	40 - 25 - 40	PX
	160069-001	40 - 32 - 40	PX
	230348-001	50 - 20 - 50	MX
	230358-001	50 - 25 - 50	MX
	139792-001	50 - 32 - 50	MX
	137089-001	50 - 40 - 50	MX
	230328-001	63 - 20 - 63	MX
	230338-001	63 - 25 - 63	MX
	137175-001	63 - 32 - 63	MX
137074-001	63 - 40 - 63	MX	
137084-001	63 - 50 - 63	MX	

Description	Art. - No.	DN in mm	
T-piece, Reduced Centre and End	160081-001	20 - 16 - 16	PX
	(MX) 160082-001	25 - 16 - 16	PX
	160085-001	25 - 20 - 20	PX
	(PX) 160086-001	32 - 20 - 20	PX
	160091-001	32 - 25 - 25	PX
	160092-001	40 - 32 - 32	PX

Description	Art. - No.	DN in mm	
Reducing Coupling	160041-001	20 - 16	PX
	(MX) 160042-001	25 - 16	PX
	160043-001	25 - 20	PX
	(PX) 160044-001	32 - 25	PX
	138018-001	40 - 25	MX
	160047-001	40 - 32	PX
	137863-001	50 - 32	MX
	137843-001	50 - 40	MX
138019-001	63 - 40	MX	
137853-001	63 - 50	MX	

Description	Art. - No.	DN in mm	
T-piece, Unequal Centre and End	160103-001	20 - 25 - 16	PX
	(MX) 160083-001	25 - 16 - 20	PX
	160084-001	25 - 20 - 16	PX
	(PX) 160087-001	32 - 20 - 25	PX
	160089-001	32 - 25 - 20	PX

Description	Art. - No.	DN in mm	
Elbow 90°	160021-001	16	PX
	(MX) 160022-001	20	PX
	160023-001	25	PX
	160024-001	32	PX
	(PX) 160025-001	40	PX
	139882-001	50	MX
	137873-001	63	MX

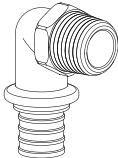
Description	Art. - No.	DN in mm	
T-piece, Unequal Centre	160101-001	16 - 20 - 16	PX
	(PX) 160102-001	16 - 25 - 16	PX
	160104-001	20 - 25 - 20	PX
	160106-001	25 - 32 - 25	PX


Description	Art. - No.	DN in mm	
T-piece, Reduced End	160071-001	20 - 20 - 16	PX
	(PX) 160072-001	25 - 25 - 16	PX
	160073-001	25 - 25 - 20	PX
	160074-001	32 - 32 - 20	PX
	160075-001	32 - 32 - 25	PX


Description	Art. - No.	DN in mm	
Compression Sleeve Required for every compression joint	160001-001	16	PX
	(MX) 160002-001	20	PX
	160003-001	25	PX
	(PX) 160004-001	32	PX
	160005-001	40	PX
	(PX) 139771-002	50	MX
	139781-002	63	MX


Description	Art. - No.	DN in mm	
Elbow 45°	160052-001	20	PX
	(MX) 160053-001	25	PX
	160054-001	32	PX
	(PX) 160055-001	40	PX
	137094-001	50	MX
	137104-001	63	MX

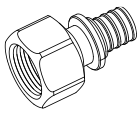
RAUTITAN components

Description	Art. - No.	DN in mm
Elbow Adaptor- male thread 	218661-001	16 - R 1/2 MX
	218662-001	20 - R 1/2 MX
	218663-001	20 - R 3/4 MX
	217425-001	25 - R 3/4 MX
	217461-001	25 - R 1 MX
	217426-001	32 - R 1 MX
	217428-001	40 - 1-1/4 MX

Description	Art. - No.	DN in mm
Elbow Adaptor- female thread 	218664-001	16 - Rp 1/2 MX
	137124-001	16 - Rp 3/4 MX
	137305-001	20 - Rp 1/2 MX
	218665-001	20 - Rp 3/4 MX

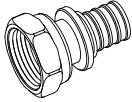
Description	Art. - No.	DN in mm
Short Wall- mounted Elbow - female thread 	217429-001*	16 - Rp 1/2 MX
	106511-001	20 - Rp 1/2 MX
	217431-001*	20 - Rp 3/4 MX
	138591-405	25 - Rp 3/4 MX

Description	Art. - No.	DN in mm
Long Wall- mounted Elbow - female thread 	138441-405	16 - Rp 1/2 MX
	138451-405	20 - Rp 1/2 MX

Description	Art. - No.	DN in mm
Straight Connector, female thread 	216995-001	16 - Rp 1/2 MX
	218614-001	20 - Rp 1/2 MX
	216996-001	20 - Rp 3/4 MX
	139281-002	25 - Rp 1/2 MX
	216997-001	25 - Rp 3/4 MX
	139101-002	32 - Rp 3/4 MX
	216999-001	32 - Rp 1 MX

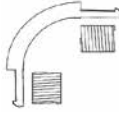
RAUTITAN components

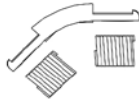
Description	Art. - No.	DN in mm
Straight Connector, male thread 	216989-001	16 - R 1/2 MX
	218609-001	16 - R 3/4 MX
	216990-001	20 - R 1/2 MX
	216991-001	20 - R 3/4 MX
	218611-001	20 - R 1 MX
	139181-002	25 - R 1/2 MX
	216992-001	25 - R 3/4 MX
	218612-001	25 - R 1 MX
	218613-001	32 - R 3/4 MX
	216993-001	32 - R 1 MX
	216994-001	40 - R 1-1/4 MX
	139711-002	50 - R 1-1/2 MX
	139721-002	63 - R 2 MX


Description	Art. - No.	DN in mm
Straight Tap Connector with gasket 	139551-002	16 - G 1/2 MX
	139561-002	20 - G 1/2 MX
	139571-002	20 - G 3/4 MX
	139912-001	25 - G 3/4 MX
	139922-001	25 - G 1 MX
	139932-001	32 - G 1 MX


Description	Art. - No.	DN in mm
Clip-on Support Channel 3m/length 	138033-001	16
	138043-001	20
	138053-001	25
	138063-001	32
	138073-001	40
	138083-001	50
	138093-001	63

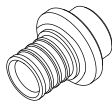
RAUTITAN components


Description	Art. - No.	DN in mm
Profile Bent Bracket 90° x 3D - with spring 	138881-002	16
	138891-002	20
	138351-002	25
	138641-002	32
	261153-001	32 (5D)

Description	Art. - No.	DN in mm
Profile Bent Bracket 45° x 3D - with spring 	139121-002	16
	139131-002	20
	138911-002	25
	138921-002	32

Description	Art. - No.	DN in mm
Profile Bent Bracket 90° x 5D - no spring 	258408-002	16
	258798-002	20
	257249-002	25

Description	Art. - No.	DN in mm
Profile Bent Bracket 45° x 5D - no spring 	265729-001	16
	268624-001	20
	268634-001	25

Description	Art. - No.	DN in mm
Stopper 	217433-001	16 MX
	217434-001	20 MX

Description	Art. - No.	DN in mm
RAUTITAN Gate Valve 	208896-001	16
	215583-001	20
	215585-001	25
	215586-001	32
	215587-001	40

PX: Material: PPSU, Color: Black
MX: Material: DZR Brass, Color: Natural Brass

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We recommend that the suitability of any REHAU product for the intended application should be checked. Utilisation and processing of our products are beyond our control and are therefore exclusively your responsibility. In the event that a liability is nevertheless considered, any compensation will be limited to the value of the goods supplied by us and used by you.

Our warranty assumes consistent quality of our products in accordance with our specification and in accordance with our general conditions of sale.

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