



RAUTITAN HIS 311

HOT AND COLD WATER PLUMBING SYSTEM

DRINKING WATER RETAINS ITS PURITY

A HIGH QUALITY POTABLE WATER SYSTEM
FOR BOTH HOT AND COLD WATER APPLICATIONS

REHAU Today

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 Industrial to the Construction, Industrial and Automotive sectors.

Through continuing research and development, REHAU consistently delivers cost-effective products that are designed with the environment in mind. Stringent quality control and safety guidelines ensure that all 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.

REHAU Everywhere

With over 120 branches, 44 plants and 12 training academies across 53 countries, REHAU is one of the world's leading polymer solutions providers.

REHAU products are found in a wide range of applications. From sound-absorbing roller shutter and energy efficient PVC windows to automotive bumper systems, REHAU products are many parts of our day-to-day lives.

REHAU - a global name where quality and innovation merge to inspire better living.



RAUTITAN his 311 plumbing system fulfills the standard installation requirements, and is appropriate for the following operating parameters in potable water installations:

Pressure rating at 20 °C	:	20 bar
Pressure rating at 70 °C	:	10 bar
Designed service life	:	50 years

RAUTITAN his 311 Pipe Dimensions for Potable Plumbing System

Outer Pipe Diameter	Wall Thickness	Coil Length	Straight
RAUTITAN his 311, 16mm	2.2mm	100m	5m
RAUTITAN his 311, 20mm	2.8mm	100m	5m
RAUTITAN his 311, 25mm	3.5mm	25/50m	5m
RAUTITAN his 311, 32mm	4.4mm	25/50m	5m
RAUTITAN his 311, 40mm	5.5mm	-	5m
RAUTITAN his 311, 50mm	6.9mm	-	5m
RAUTITAN his 311, 63mm	8.6mm	-	5m

RAUTOOL Kits



RAUTOOL M1



RAUTOOL H1



RAUTOOL E2



RAUTOOL A2



RAUTOOL G1



RAUTOOL HG1

Pipe Material

RAUTITAN his 311 pipes are made from high-density cross-linked polyethylene (PE-Xa), and are co-extruded with an external black PE sheath that protects the pipes against ultraviolet rays when exposed to direct sunlight.

In the past, embrittled polymer pipes were experienced when the products were exposed to sunlight, even for a short period of time. With the PE sheath protection, moderate amount of sun exposure in the course of short-term storing outdoor no longer causes deterioration in pipe material.

RAUTITAN his 311 pipes are hygienic and non-toxic. They comply with requirements of AS/NZS 4020:2002 (Testing of products for use in contact with drinking water) and other hygiene related requirements that are approved by various approval certifying bodies.

Having met all the requirements of the plumbing trade and by combining the advantages of conventional pipe installation techniques with PE-Xa pipes, RAUTITAN his 311 plumbing system has secured its position as a superior system for today's plumbing industry.



REHAU's range of RAUTITAN fittings

Fittings

REHAU fittings are specially designed for the RAUTITAN pipes listed in this brochure. Manufactured from dezincification resistant brass, the fittings are suitable to transporting potable water in accordance to the Australian standard.

All fittings and their complementary pipes can be easily identified by matching the outer diameter size imprinted on REHAU piping products. The straightforward visual confirmation leads to quick connection during installation.

With a comprehensive range of pipe and fitting, sizes of up to 63mm, plus the high flexibility of RAUTITAN his 311 pipes, the whole installation process can now be completed, even in the most complex and restricted sites.

Millions of meters of RAUTITAN his 311 pipes have been installed worldwide - a clear proof of the system's reliability and efficiency.

REHAU Permanent Compression Sleeve Jointing Technique - It's Simple!



Slide the compression sleeve over the pipe



Expand the pipe



Insert the fitting



Compress - complete!

With its excellent material and mechanical properties, RAUTITAN his 311 hot and cold water system with compression sleeve fittings is the right system, characterised by quiet flow behaviour and low noise transmission.

Take a no-risk approach to your plumbing engineering

Approvals & Certification

As pipe installation for potable water must correspond to the latest potable water regulations valid in Europe, Australia and other countries (such as DIN 1988 - parts 1-8 and the AS/NZS 3500), REHAU assures that our system design and pipe formulation adhere to both international and national regulations.

RAUTITAN his 311 Approvals and Certification

Australia -	Watermark
Hong Kong -	Office of Water Authority
Japan -	JWWA
New Zealand -	BRANZ
Malaysia -	Sirim
Taiwan -	Taipei Water Authority
United Kingdom -	WRAS

Tools and Accessories

REHAU's comprehensive range of tools and accessories allows quick and reliable installation that suits all kinds of site conditions.

Choose the different operational tools with all necessary accessories from the wide range of RAUTOOL kits available.

Complete with the right tools and accessories that are available for all kinds of site conditions, RAUTITAN his 311 plumbing installation is one of the most efficient and economical plumbing installations around.

Durable, reliable and easy to install!

Plumbers can now rely on REHAU technology as a solution for all their piping needs. Pipe installation has become faster, easier and safer.

Key advantages of RAUTITAN his 311 plumbing system: simple, robust and reliable

Overview the Advantages

REHAU consistently insists on the superior PE-Xa material properties for RAUTITAN family pipes to meet its high quality standard. Proven by industries worldwide, PE-Xa material properties offer the following advantages:

System Advantages	How It Works
Hot and Cold Water Application	PE-Xa pipe is proven capable of withstanding operating temperature up to 70°C and pressure of more than 10 bar, making the pipe excellent for both hot and cold water applications.
Permanent, Leak-Proof Joint	No additional sealing is required as the shrink-back capability of PE-Xa properties enables the pipe to double up as the sealing agent. When performing compression sleeve jointing, the expanded portion of the pipe will return to its original diameter, offering a leakproof connection permanently.
Reduced Corrosion and Incrustation	A layer of foreign particles is usually formed within the internal wall after some years, causing reduction not only in quantity but also in the quality of the drinking water. Because of its special properties, PE-Xa offers strong resistance to corrosion and buildup of calcium and deposits. It is, hence, able to retain its original bore size and good condition after years of service.
Simple and Fast Installation	Simple and fast REHAU jointing technique requires no specific skills such as soldering or brazing. Using this installation method, plumbers and installers globally are able to achieve 30% reduction in installation time with experiences gained, saving both time and money.
Sound Insulation	Soft polymeric properties absorb sound transmission within the walls of the pipe. It quietly but greatly reduces the noise problems such as pipe-borne water hammer inherent from conventional metal systems.
Maintenance-Free	A system that has been tried and tested by many. It is designed for a service life of at least 50 years in drinking-water applications.
UV Protection	Short-term storage of the pipes under direct sunlight is now possible. The co-extruded black PE coating prevents embrittlement of pipe when exposed to direct sunlight.
Food Grade	PE-Xa pipes are suitable for drinking water. Tested and certified by various government and international bodies, PE-Xa pipes are hygienic and non-toxic.
Concealed Installation	Because the safe jointing technique ensures permanent leak-proof, RAUTITAN his 311 pipe system is suitable for concealed installation whether in wall, ceiling or floor.
Visual Inspection	REHAU fittings are specially designed to allow easy visual confirmation that every joint connection is properly completed. Incorrect or incomplete joint in the pipe works will cause water leak.

The permanent joint (pipe insert and compression sleeve) is developed by REHAU for use with REHAU's PE-Xa pipes. Also, by retaining the same pipe works' layout design as the conventional metal pipe works, installing RAUTITAN his 311 is simple and fast.

Construction



Automotive



Industry



REHAU Branches in Asia/Australia

SINGAPORE

Asia/Australia Head Office
1 King George's Avenue
#06-00 REHAU Building
Singapore 208557
Tel : 65-6392 6006
Fax : 65-6392 6116

AUSTRALIA

Adelaide
3 Lloyd Street
St. Mary's 5042, Australia
Tel : 61-8-8299 0031
Fax : 61-8-8299 0126

Brisbane
27 Deakin Street
Brendale Q.L.D. 4500, Australia
Tel : 61-7-3889 7522
Fax : 61-7-3889 6325

Melbourne
9-11 Endeavour Way
Braeside VIC. 3195, Australia
Tel : 61-3-9587 5544
Fax : 61-3-9587 5599

Perth
46 Tacoma Circuit
Canning Vale 6155, Australia
Tel : 61-8-9-4564 311
Fax : 61-8-9-4564 319

Sydney
1 Rider Boulevard, Level 8
Rhodes 2138, Australia
Tel : 61-2-8741 4500
Fax : 61-2-9743 2900

CHINA

Beijing
No. 12 Dong Tu Cheng Road
C1708 Yihe Tower, Chaoyang
District, Beijing 100016, China
Tel : 86-10-6428 2956
Fax : 86-10-6448 9475

Guangzhou
Room 1404
Guangdong Hua Xin Center
No. 450 Huan Shi Dong Road
Guangzhou 510075, China
Tel : 86-20-8776 0343 / 3646
Fax : 86-20-8762 7243

Hong Kong
22nd Floor, Silver Tech Tower
26 Cheung Lee Street
Chai Wan, Hong Kong
Tel : 852-2898 7080
Fax : 852-2976 0287

Shanghai
19 Floor, 85 East Huai Hai Road
Shanghai 200021, China
Tel : 86-21-6355 1155
Fax : 86-21-6355 0889

INDIA

Mumbai
Office No.703, 7th Floor
Casablanca, Plot. No.45
Sector 11, CBD Belapur
Navi Mumbai 400 614
India
Tel : 91-22-6792 2929 / 2930
Fax : 91-22-2757 4783

New Delhi
88, 2nd Floor, Furniture Block
Kirti Nagar, New Delhi 110 015
India
Tel : 91-11-3294 8602 / 8522
Fax : 91-11-2592 3148

INDONESIA

Jakarta
Ariobimo Sentral Building, 6th Floor
Jl. HR Rasuna Said
Block X-2, No. 5
Jakarta 12950, Indonesia
Tel : 62-21-5275 177
Fax : 62-21-5275 178

JAPAN

Tokyo
Yamanaka Building
3rd Floor
2-8-24, Minami-Shinagawa
Shinagawa-ku
Tokyo 140-0004, Japan
Tel : 81-3-5796 2102
Fax : 81-3-3450 0722

NEW ZEALAND

Auckland
60b Cryers Road
East Tamaki
Auckland, New Zealand
Tel : 64-9-2722 264
Fax : 64-9-2722 265

SOUTH KOREA

Seoul
#402 Meraton B/D
747-22, Yoksam 1 dong
Kangnam-gu
Seoul, Korea
Tel : 82-2-5011 656
Fax : 82-2-5011 659

TAIWAN

Taipei
7th floor, No 124-1
Min-Tsu West Road
Taipei 10306, Taiwan
Tel : 886-2-2586 1210
Fax : 886-2-2586 1268

THAILAND

Bangkok
Thosapholland 3 Building
17th Floor, Room No. B, C1
947 Moo 12
Bangna-Trad Road
KM. 3, Kwang Bangna
Khet Bangna
Bangkok 10260, Thailand
Tel : 66-2-7443 155
Fax : 66-2-7443 165

Our verbal and written advice relating to technical applications is based on experience and is to the best of our knowledge correct but is given without obligation. The use of REHAU products in conditions that are beyond our control or for applications other than those specified releases us from any obligation in regard to claims made in respect of the products.

We recommend that the suitability of any REHAU product for intended application should be checked. Utilization 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.