

RAUTITAN HYDRONIC HEATING SERVICES Product List

Valid from August 2015

HYDRONIC HEATING SERVICES The System



Drawing on over 50 years experience in the plumbing and heating industry across the globe, REHAU has developed a comprehensive hydronic heating solution that systematically addresses the needs of designers, installers, builders and homeowners alike.

REHAU Hydronic Heating is an integrated system consisting of the world class RAUTHERM S, RAUTITAN pink piping systems and RAUTITAN stabil composite pipe, solid stainless steel and modular polymer manifolds, numerous floor systems to meet almost any installation challenge, and flexible and sophisticated control systems to maximise the complete system performance.

The system consists of:

- Pipe
- Manifold
- Floor system
- Controls
- Accessories



PIPE

- Secure and robust piping (PE-Xa) system
- Maximum protection against corrosion with EVOH oxygen barrier
- More than 50 years of expected service life
- Up to 90°C or 6 bar (600 kpa) operating conditions



MANIFOLD

-

- Flexible solution for all installations pre-assembled or modular system
- Slim line design for fixing in narrow wall spaces



FLOOR SYSTEM

- Tacker Sheet EPS insulation board is a fast and simple clipping system, which provides superior performance for the user
- Heat Diffusion plates provide the perfect solution for suspended timber joist construction
- RAUFIX can be laid directly on concrete or your choice of insulation



CONTROLS

- Simple set-up ensures each job is completed safely and with minimal time
- Comprehensive range of modern design room thermostats with a variety of functionality specifically designed for underfloor heating
- Floor sensor available

230V and 24V Zone Controls available



ACCESSORIES

- Simple, secure and reliable compression sleeve jointing technology
- RAUTOOL professional range of manual, battery and electric hydraulic tool kits to suit every installer's needs.
- RAUTOOL A3, RAUTOOL A-Light 2

Compression sleeve connections in slab are approved

REHAU PROJECT DESIGN SERVICE for assistance with your next project.

Australia contact	:	1300 768 033
Email	:	fhdesign.anz@rehau.com
Website	:	http://hydronic.rehau.com.au

REHAU Hydronic Heating Service is suitable for residential as well as commercial and industrial projects, such as:





Airports



Churches



Car dealer showrooms





Universities

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1. FLOOR SYSTEMS PIPE

RAUTHERM S for underfloor heating

RAUTHERM S pipe is made from peroxide-crosslinked polyethylene (PE-Xa) with an oxygen barrier.

REHAU Article	REECE Code	Size	m/Coil	m/Length	Piece(s)/Package
136130-200	1450569	16 x 2.0	200	-	1

RAUTITAN pink for underfloor heating and radiator connections

RAUTITAN PINK pipe is made from peroxide-crosslinked polyethylene (PE-Xa) with an oxygen barrier.

REHAU Article	REECE Code	Size	m/Coil	m/Length	Piece(s)/ Package
136042-006	1450321	16 x 2.2	-	6	10
136052-006	1450322	20 x 2.8	-	6	10
136062-006	1450301	25 x 3.5	-	6	5
136072-006	1450302	32 x 4.4	-	6	5
136082-006	1450303	40 x 5.5	-	6	2
136042-200	1450299	16 x 2.2	200	-	1
136052-120	1450379	20 x 2.8	120	-	1
136062-050	1450329	25 x 3.5	50	-	1
136072-050	1450380	32 x 4.4	50	-	1



RAUTITAN stabil for radiator connections and water services

Multi-layer pipe consisting of self-supporting pressure resistant inner layer of cross-linked polyethylene; middle layer of butt welded aluminum and polyethylene outer coating. Durable heat resistant primer provides superior adhesion performance ensuring the three layers behave as one over the service life.

REHAU Article	REECE Code	Size	m/Coil	m/Length	Piece(s)/ Package
130071-005	1450341	16.2 x 2.6	-	5	20
130081-005	1450343	20 x 2.9	-	5	10
130091-005	1450345	25 x 3.7	-	5	8
130101-005	1450346	32 x 4.7	-	5	5
130111-005	1450347	40 x 6.0	-	5	3
130121-100	1450340	16.2 x 2.6	100	-	1
130131-100	1450342	20 x 2.9	100	-	1
130141-050	1450508	25 x 3.7	50	-	1



Note: Other pipe lengths are available for projects. Please check with your local Reece branch for availability.

1. FLOOR SYSTEMS STAINLESS STEEL MANIFOLD

Stainless steel manifold system HKV-D

Solid stainless steel manifolds delivered pre-assembled and ready to install. Comprising 2 x 1" flow and return sections mounted on galvanised brackets. Well engineered robust construction and slim dimensions facilitate fixing in narrow wall spaces. (For connection to pipe, see manifold unions on page 11). Circuit screw connections ¾" external thread euro-cone for polymer or multi-layer pipes.



Individual circuits can be closed off by turning the heads of the flow meters.

Each manifold set includes:

- Combined flow meter and quick-stop
- 2x combination isolating / venting and drain valves with washers
- Galvanised brackets with sound insullation inserts
- Labels for identifying circuits
- 1x balancing key
- 1x set of fixing screws

Description	REHAU Article	REECE Code	Piece(s)/Package
Stainless steel flow meter manifold - HKV - D 2 (2 port)	208021	1450683	1
Stainless steel flow meter manifold HKV - D 3 (3 port)	208031	1450684	1
Stainless steel flow meter manifold - HKV - D 4 (4 port)	208041	1450685	1
Stainless steel flow meter manifold - HKV - D 5 (5 port)	208051	1450686	1
Stainless steel flow meter manifold - HKV - D 6 (6 port)	208061	1450687	1
Stainless steel flow meter manifold - HKV - D 7 (7 port)	208071	1450688	1
Stainless steel flow meter manifold - HKV - D 8 (8 port)	208081	1450689	1
Stainless steel flow meter manifold - HKV - D 10 (10 port)	208101	1450690	1
Stainless steel flow meter manifold - HKV - D 12 (12 port)	208121	1450691	1
lating ball valve set (2 x 1")*	208122	1451008	1

*1 set per manifold, to be ordered separately

1. FLOOR SYSTEMS POLYMER MANIFOLD

Polymer manifold system

REHAU offers a modular polymer manifold for the ultimate on-site flexibility. Arrange any combination of blocks to achieve the desired number of ports.

Individual modules are made of reinforced fibreglass and thermal resistant polymer material with integrated air chambers. To differentiate between inlet and outlet, modules are available in red and blue. Operating temperature from -20°C to +90°C. Supply module with integrated shut-off, change over to actuator possible. Return module with integrated, adjustable flowmeter, lead-sealable cap.



Connection block with 1½" exernal thread, 1" internal thread, 4 additional ½" holes for air vent, fill and drain valve, thermometer. Service connection right or left possible. Circuit screw connections ¾" male thread euro-cone for polymer or multi-layered compound pipes. For connection to pipe see page 11.

Manifold components	Quantity required (pcs)	_
Polymer inlet block - red	1x per circuit	
Polymer return block - blue	1x per circuit	Modular Manifold
Threaded rod M8 x 1,000 mm	4x per manifold	Manifold
Connection set 4	1x per manifold	



Manifold inlet block - red

Single module with shut-off, manual regulation, O-ring seal and pressure tested.



REHAU Article	REECE Code	Description	Piece(s)/Package
302036	1450382	Manifold inlet block - red with O-ring seal	1

Manifold return block - blue

Single module with flowmeter, lead-sealable cap, O-ring seal and pressure tested.

REHAU Article	REECE Code	Description	Piece(s)/Package
302037	1450383	Manifold return block	
302037	1400000	- blue with red indicator	I

Threaded rod

Threaded bar M8 x 1,000 mm galvanized for polymer manifolds up to 17 circuits.

REHAU Article	REECE Code	Description	Piece(s)/Package
302045	1450667	Threaded rod - M8 (Dia) x 1,000 mm (L)	1

Connection set 4 for polymer manifold modules

	REHAU Article	REECE Code	Description	Piece(s)/Package
	302433	1450397	Connection set 4 for polymer manifold modules	1
	(Set includes:		Quantity
	(Connection block		2
1 1 1 1 1 1 1 1 1		End plate		2
		Nut M8		4
		Jniversal wall holder set		1
		Manual air vent ½"		2
	Film Film	Plug ½"		2
	ГР (88) Р	Fill & drain valve G1/2" wit	th hose connection ¾"	2
		Ball valve 1½" union nut	x 1" female thread	2
		Femperature gauge set		1
	100 100 100	Circuit identification plate	e set (20pcs)	1

1. FLOOR SYSTEMS POLYMER MANIFOLD - SPARE PARTS

Fill and Drain	valve with hose	connection ¾"		
REHAU Article	REECE Code	Description	Piece(s)/Package	
302056	1450399	Fill and Drain valve G½" B with hose connection ¾"	2	

Ball valve 11/2	2" union nut x 1"	female thread		
To shut off the se	rvice connection.			
REHAU Article	REECE Code	Description	Piece(s)/Package	
302057	1450500	Ball valve G1½" union nut x G1" female thread	2	

Manual air ve	ent ½" male threa	d		
REHAU Article	REECE Code	Description	Piece(s)/Package	
302049	1450672	Manual air vent G½" B male thread	2	

Plug 1/2" male thread

REHAU Article	REECE Code	Description	Piece(s)/Package
302055	1450671	Plug G1/2" B male thread	4



1. FLOOR SYSTEMS POLYMER MANIFOLD - SPARE PARTS

Universal wall holder				
пД	REHAU Article	REECE Code	Description	Piece(s)/Package
	302236	1450670	Universal wall holder - 103 to 115 mm (H) 1 set of 2x brackets	1

Circuit identification plate set

20x printed tags (kitchen, bathroom, etc.).

RENAU	REHAU Article	REECE Code	Description	Piece(s)/Package
LIVING	302059	1450505	Circuit identification plate set - set of 20 pcs	1

1. FLOOR SYSTEMS MANIFOLD ACCESSORIES

Manifold unions for RAUTITAN pink and RAUTHERM S

Brass manifold union to connect RAUTITAN pink or RAUTHERM S pipe to manifold systems, include split brass ring and compression nut. Integral fitting/insert design provides positive clamping and sealing action with split compression ring.

	REHAU Article	REECE Code	Description	Piece(s)/Package	
-	266352	1450304	Manifold unions for RAUTITAN pink, RAUTHERM S - 16 x 2.2 / 16 x 2.0	2	8
_	266362	1450305	Manifold unions for RAUTITAN pink - 20 x 2.8	2	

Manifold stand

Adjustable stand to suit all REHAU manifold types and sizes.

REHAU Article	REECE Code	Size (mm)	Piece(s)/Package
216636	1450699	770 (H) x 280 (D) x up to 630 (W)	1





Tacker floor system

The Tacker Floor System consists of a pipe fixing Tacker sheet, edge insulation strip, staples, a staple gun and an expansion joint. Due to its robust features it is suitable for use with liquid screed.

Improve energy efficiency

Tacker sheet

Foil surface prevents screed moisture from penetrating into the polysterene insulation board. The printed laying grid allows for greater flexibility and accuracy during installation.

ELIVE	REHAU Article	REECE Code	Description	Size	Piece(s)/Package
Milli	218442	1450496	Tacker sheet 70 - 25 EPS SL-R 70 kpa compressive stress acc. AS 1366.3	2.4m (L) x 1m (W) x 25mm (H)	5 = 12m ²
Buduce	218441 1)		Tacker sheet 165 - 25 EPS VH-R 165 kpa compressive stress acc. AS 1366.3	2.4m (L) x 1m (W) x 25mm (H)	5 = 12m ²
Reduce downward losses by up to 50%*	¹⁾ Non-stock item * Note: Depender		r quantity applies. itions.		

Edge insulation strip

Edge insulation strip is laid around the circumference of the room to allow for thermal expansion of the screed. Made from closed cell PE foam, with a self-adhesive strip on back and foil flap, prevents moisture and water from the screed reaching the EPS floor insulation.



REHAU Article	REECE Code	Size (mm)	m/Roll	Piece(s)/Package
217904	1450381	- 8 (W) x 150 (H) mm	25	4

Pipe fixing staple

Pipe fixing staples fasten the pipe firmly to the panel. Their optimum retaining force prevents the pipes from floating.

REHAU Article	REECE Code	Description	Piece(s)/Package
240221	1450357	Pipe fixing staple	300
		- for 16mm pipe, grey	
262373	1450614	Pipe fixing staple	300
202373	1400014	- for 20mm pipe, black	300



Tacker staple gun MULTI

The staple gun allows quick and easy fastening of the pipe to the panel. Holds up to 90 staples.

REHAU Article	REECE Code	Description	Piece(s)/Package
227835	1450602	Tacker staple gun MULTI - for 16 + 20mm staples	1



Expansion joint profile

Expansion joint is used to allow for thermal expansion of heated screeds and/or controlled zones. Typically used to separate screed plates in areas $>40m^2$.

REHAU Article	REECE Code	Size (mm)	m/Length	Piece(s)/Package
239243	1450606	Expansion joint profile - 100 (H) x 10 (W) x 1,200 (L)	1.2	20



Tape for Floor System Tacker

Tape for proper adhesion of REHAU Tacker sheets.				
REHAU Article	REECE Code	Size	m/Roll	Piece(s)/Package
261949	1450613	- 50mm (W) x 66m (L)	66	6





RAUFIX system

The RAUFIX system consists of RAUFIX rails, made from polypropylene with a pipe lift of 5mm and the RAUFIX staples to ensure firm seating of the RAUFIX rail in the floor. Pipe can be installed in either single or double meander style.

RAUFIX rail



The RAUFIX rail is available without barbs, for pipe securing on concrete parts and also with barbs to ensure exact securing in insulation panels. Both rails feature connectors which are moulded into the RAUFIX rail enabling connection of the pipe bracket without tools. Hooks on the top retaining clips of the rail guarantee firm clipping of the pipe. Securing at the connector enables reliable and quick connection of the 1m RAUFIX rail. An installation spacing of 5cm and multiples is possible.

REHAU Article	REECE Code	Description/Size	m/Length	Piece(s)/Package
240241	1450678	RAUFIX rail 16 (without barbs) -1,000mm (L) x 50mm (W)	1	10
244248	1450679	RAUFIX rail 16 (with barbs) -1,000mm (L) x 50mm (W)	1	10

RAUFIX staple

The specially formed barbs of the RAUFIX staple ensure firm seating of the RAUFIX rail in the floor.



1. FLOOR SYSTEMS DRY SYSTEM

Diffusion plate system

The Diffusion Plate system consists of aluminium heat transfer plates with pipe guide grooves for clip-in attachment of the pipe and integrated break points, which ensures rapid laying and saves installation time. This system is a perfect solution for new build and for refurbishments and due to its low weight suitable for suspended timber floors on joists. Suitable for pipe outer diameters 16mm.

Suitable for new build & refurbishment

Double heat diffusion plate						
REHAU Article	REECE Code	Size (mm)	Pipe Spacing	m/Length	Piece(s)/Package	1
249075	1450361	1,000 (L) x 390 (W)	200 mm centre	1	10	



2. CONTROLS THERMOSTATS AND ZONE CONTROL

NEA zone controls

REHAU NEA Zone control system is a digital control system specifically designed to give optimum and accurate control of underfloor heating system. It is simple to install has high functionality with a sleek-looking digital interface.

THERMOSTAT HT



THERMOSTAT HCT



NEA HCT thermostat provides the added functionality of an external temperature sensor which can be used to control slab temperature or air temperature while the thermostat is hidden away from view. It also includes timer function and set-back/holiday/Party modes. Controls up to 5 actuators.

REHAU Article	REECE Code	Description	Piece(s)/Package
338024	1450694	Thermostat HCT	1

NEA external sensor



NEA external temperature sensor is connected to the NEA HCT thermostat to allow external control of air or slab temperature.

REHAU Article	REECE Code	Description	Piece(s)/Package
214451	1450695	NEA external sensor	1

NEA WIRING CENTRE H 24V

NEA wiring centre is the centre of the NEA zone control system. All thermostats, actuator connections terminate here. The 24V centre is simple to wire using 3 or 4 core 1.5mm² signal wire between thermostats and wiring centre. Also comes with a 230V capable switch for controlling a single pump/boiler. 230V to 24V transformer must be ordered separately.

REHAU Article	REECE Code	Description	Piece(s)/Package
339024	1450697	NEA wiring centre H 24V	1

NEA TRANSFORMER

Converts 230V to 24V to power the NEA wiring centre.

REHAU Article	REECE Code	Description	Piece(s)/Package
299954-002	1448654	NEA transformer	1

Room Thermostat ADR-UFH

The ADR-UFH is a stand-alone electronic binary temperature controller for heating systems. The ADR-UFH features one internal and one external NTC temperature sensor input and one binary output relay switching up to 1.5A. Cost saving option with Economy functionality and set point limitations. A detailed parameterisation is possible with the use of a simple configuration routine. Clock and time schedule functions. Blue backlight for LCD.

REHAU Article	REECE Code	Description	Piece(s)/Package
206825	1450666	Room Thermostat ADR-UFH - 230 V	1
299954-003	-	ADR-UFH Floor sensor with 2m cable	1

Actuator UNI

The actuator allows individual control of circuits by opening and closing the corresponding isolating valve on the manifold. The actuator is controlled by room thermostat NEA or ADR-UFH.

REHAU Article	REECE Code	Description	Piece(s)/Package
217916	1440859	Actuator UNI - 24 V for NEA	1
217915	1440863	Actuator UNI - 230 V for ADR-UFH	1





- and



2. CONTROLS FLOW TEMPERATURE CONTROL

E-mix

The E-mix unit is used to supply a preselected set temperature to the REHAU flow meter manifold. Components are supplied ready to fit REHAU flow meter manifolds. All joints are flat sealed. It can be assembled to be connected to the supply tubings on either side and is suitable for outputs up to 14 KW.

For connection to flow/return pipe use No.3 straight connector 3/4" - see page 20.



3. ACCESSORIES CONDUIT AND FITTINGS

RAUTITAN conduit

REHAU Article	REECE Code	Description	m/Coil	Piece(s)/Package
180252-050	1450570	RAUTITAN conduit - 16 (yellow)	50	1
180262-050	1450571	RAUTITAN conduit - 20 (yellow)	50	1
137160-025	1450495	RAUTITAN conduit - 25 (black)	25	1



Radiator tails

Stainless steel radiator tails are used to provide an attractive connection between RAUTITAN pink or stabil pipe to the radiator valves. Available with plugged ends and open ends.

REHAU Article	REECE Code	Description	Size	mm/ Length	Piece(s)/ Package
219634	1440595	Radiator tail (with plug)	DN15 COD 12.7 mm	300	10
219635	1450692	Radiator tail (without plug)	DN15 COD 12.7 mm	300	10



RAUTITAN PX sleeve - polymer

REHAU Article	REECE Code	Size	Piece(s)/Package
160001	1450510	16	100
160002	1450511	20	100
160003	1450512	25	100
160004	1450513	32	50
160005	1450514	40	25





RAUTITAN PX no. 1 straight coupling - polymer

	REHAU Article	REECE Code	Size	Piece(s)/Package
-	160011	1450515	16	10
	160012	1450516	20	10
	160013	1450517	25	10
	160014	1450518	32	10
_	160015	1450519	40	4

RAUTITAN ONE no. 2 straight connector - female thread - brass

REHAU Article	REECE Code	Size	Piece(s)/Package
216997	1451050	25 - Rp1⁄2" Fl	10
216999	1451052	25 - Rp¾" Fl	10

RAUTITAN ONE no. 3 straight connector - male thread - brass

REHAU Article	REECE Code	Size	Piece(s)/Package
216992	1451042	25 - R¾" MI	10
218612	1451043	25 - R1" MI	10
218613	1451044	32 - R¾" MI	10
216993	1451045	32 - R1" MI	10

RAUTITAN ONE no. 13 elbow - male thread - brass



REHAU Article	REECE Code	Size	Piece(s)/Package
217425	1451057	25 - R¾" MI	10
217426	1451058	32 - R1" MI	3

Polymer profile bend brackets $90^{\circ} \times 5D$

REHAU Article	REECE Code	Description/Size (mm)	Piece(s)/Package
297891	1450617	Polymer profile bent brackets 90° x 5D - 16	10
297892	1450618	Polymer profile bent brackets 90° x 5D - 20	10
299894-098	1450620	Polymer profile bent brackets 90° x 5D - 25	10



Pipe unwinder

Galvanised steel pipe unwinder suitable for RAUTITAN pink, RAUTITAN stabil and RAUTHERM S pipes in nominal width up to 20mm and pipe coils up to 600m.

REHAU Article	REECE Code	Description	Piece(s)/Package
286151	1450615	Pipe unwinder	1





REHAU SERVICES One-stop Supplier of Quality Solutions



HYDRONIC HEATING DESIGN & TRAINING CENTRE One Stop Service for Hydronic Projects



REHAU is proud to introduce the first ever hydronic underfloor heating and cooling design web portal in Australia & New Zealand. REHAU has been designing advanced radiant heating and cooling systems globally for over 30 years and has now made the design tools available online to make materials estimation, performance calculations and full design faster and easier. It places the design timeline into the hands of the installer ensuring optimum turnaround and enabling greater skill and knowledge within the market.

The **QUICK QUOTE** estimates the REHAU components recommended for the project, **PERFORMANCE CALCULATIONS** identifies the required water flow rates and temperatures to enable accurate sizing of pumps and an energy source and **DESIGN PLUS** is a full design service that provides pipe layout design and individual circuit specifications for optimised installation and operation. The design portal also includes online installation and design training modules, installation videos, RAIN training registration, event information, product information and regularly updated references and case studies. Everything for the new and experienced installer, builder, architect and engineer is just a few clicks away. Check out the website at **http://hydronic.rehau.com.au** and register your details to gain access. A local REHAU representative is available to assist with the registration and use of the website.

Contact your local REHAU office on 1300 768 033.



REHAU SERVICES REHAU Authorised Installer Network (RAIN)

Not only is the quality and design of REHAU piping systems exceptional, the company's commitment to the people who sell and install them is just as outstanding. Consequently, REHAU plumbers worldwide enjoy an array of benefits second to none.



Stay on top of your trade

REHAU is much more than your supplier of piping and fittings. We aim to provide a standard of after-sales service to match the world-class quality of our products.

To assist you and your team to utlise the full capabilities of our products and services we have developed the REHAU Authorised Installer Network (RAIN). Our vision is to grow and support our customers as they mature across the marketplace. The RAIN network is an exclusive group of installation experts who are trained and authorised by REHAU to install the RAUTITAN product range.

REHAU QUALITY

AUTHORISED INSTALLER



RAIN MEMBER BENEFITS

In addition to comprehensive training and technical support, RAIN members will enjoy:

- Special project design assistance
- Project assistants with plumbing/gas regulators
- Advanced training seminars
- Priority access to sales promotions
- Regular product updates and information
- Invitations to special RAIN promotional events
- Joint advertising and marketing opportunities with REHAU
- Regulatory updates
- And much more

To register with RAIN, contact your local REHAU sales office or visit www.rehau.com.au

PROJECT DESIGN SUPPORT Whether your project is a family home or a 40-storey high rise development, REHAU is your design partner.

high rise development, REHAU is your design partner. Our central design office and experienced engineers can provide advise regarding system performance, pipe layout, required materials, controls, hydraulic consideration and much more.

Submit your project details (description and CAD drawing) to our central design office or go online and complete a DIY design.

http://hydronic.rehau.com.au



YOUR PERFECT LONG-TERM PARTNER

We offer you the strength of a world-leading brand of polymer-based solutions. One that is backed by **outstanding innovations, the most modern manufacturing technologies and flexible logistics**. You'll find in REHAU a future-oriented and reliable partner with a width and depth of expertise second to none.



NOTES

NOTES

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 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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