



Engineering progress
Enhancing lives

RAUTITAN Hydronic Heating Services

Product list - AUSTRALIA



REHAU



Hydronic Heating Services



The system consists of:

- Pipe
- Manifold
- Floor system
- Controls
- Accessories

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.



Pipe

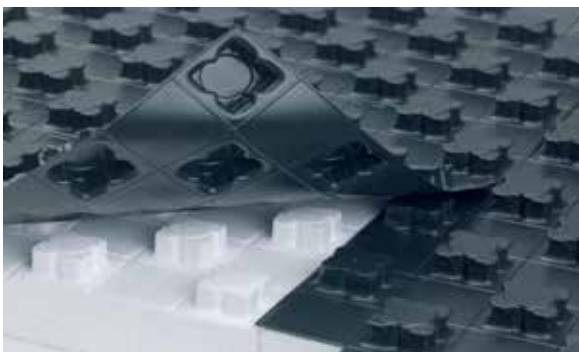
- Secure and robust piping (PE-Xa) system
- Maximum protection against corrosion with EVOH oxygen barrier
- More than 50 years of expected service life
- Up to 90°C or 6 bar (600 kpa) operating conditions

Manifold

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

Floor system

- Studded panel EPS insulation board is a fast and simple system, which provides superior performance and easy positioning of the pipes for the user and installer.
- 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



Accessories

- Simple, secure and reliable compression sleeve joining technology
- RAUTOOL – professional range of manual, battery and electric hydraulic tool kits to suit every installer's needs.

Hydronic Heating Projects

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



Cold stores



Churches



Car dealer showrooms



Residential buildings



Airports



Universities

Contents

01 Floor Systems	6
Pipe	6
Stainless Steel Manifolds	7
Polymer Manifolds	8
Polymer Manifolds - Spare Parts	10
Manifold Accessories	11
Wet System	12
Dry System	15
02 Controls	16
Thermostats and Zone Controls	16
Flow Temperature Control	18
03 Accessories	19
Thermostats and Zone Controls	19
REHAU Services	22

01 Floor systems - Pipe

RAUTHERM S SDR 11 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 SDR 7.4 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
336082-006	3830000	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

* Use only with brass fittings and polymer sleeves.

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

01 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 3/4" 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 insulation inserts
- Labels for identifying circuits
- 1x balancing key
- 1x set of fixing screws

Stainless Steel Flow Meter Manifold

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

*1 set per manifold, to be ordered separately

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



Modular manifold

Components

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

01 Floor systems - Polymer 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 - blue with red indicator	1

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:

Connection block	2
End plate	2
Nut M8	4
Universal wall holder set	1
Manual air vent ½"	2
Plug ½"	2
Fill & drain valve G½" with hose connection ¾"	2
Ball valve 1½" union nut x 1" female thread	2
Temperature gauge set	1
Circuit identification plate set (20pcs)	1

Quantity



01 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 1½" union nut x 1" female thread

To shut off the service connection.



REHAU Article	REECE Code	Description	Piece(s)/Package
302057	1450500	Ball valve G1½" union nut x G1" female thread	2

Manual air vent ½" male thread



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

Plug ½" male thread



REHAU Article	REECE Code	Description	Piece(s)/Package
302055	1450671	Plug G½" B male thread	4

01 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 polymer compression ring and compression nut. Integral fitting/insert design provides positive clamping and sealing action with polymer 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	10
266362	1450305	Manifold unions for RAUTITAN pink - 20 x 2.8	10

Manifold stand

Adjustable stand to suit all REHAU manifold types and sizes.

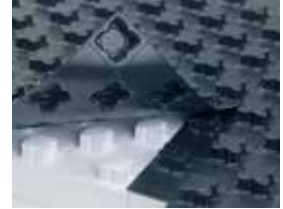


REHAU Article	REECE Code	Size (mm)	Piece(s)/Package
216636	1450699	770 (H) x 280 (D) x up to 630 (W)	1

01 Floor systems - Wet system

Studded panel

The studded panel solution with top foil and insulation provides great performance for the screed systems. The shape of the studs with undercut securely holds the pipe in place and protect them from damage by other trades. The top surface foil provides easy fixture of pipes in multiples of 50mm distances.



REHAU Article	REECE Code	Description	Size	Piece(s)/Package
359699	3803003	Studded panel	1200mmx800mmx20mm	1=0.96m ²

Studded panel connection strip

The connection strip is used to connect two separate adjacent studded panels. The connection strip prevents the screed from penetrating through the gap between the panels.



REHAU Article	REECE Code	Description	Length	Height	Width	Piece(s)/Package
227849-001	1450977	Studded panel connection strip	950	20	100	20

Studded panel Transition strip

The transition strip is used to connect studded panel to standard insulation without studs, ie installed in doorways, rounded wall areas, or in front of the manifold. The standard insulation must be of the same thickness and compressive strength as studded panel and covered with foil to prevent from moisture during screed pour.



REHAU Article	REECE Code	Description	Length	Height	Width	Piece(s)/Package
227859-001	1450978	Studded panel transition strip	950	20	200	20

Studded panel Bridging piece

The bridging piece is fixed to 2 adjacent studs across a pipe installed at a 45 degree angle to fix it in place.



REHAU Article	REECE Code	Description	Piece(s)/Package
239203-001	1450979	Studded panel bridging piece	100

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, it 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

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 >40m².



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

RAUFIX rail

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

The RAUFIX rail is available without barbs (to secure pipe to concrete) and 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 multiples of 5 cm 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.



REHAU Article	REECE Code	Description/Size	Piece(s)/Package
259268	1450680	RAUFIX staple -50mm (L) x 20mm (Tip Spacing)	500

01 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.



Double heat diffusion plate

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

02 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 an underfloor heating system. It is simple to install, has high functionality with a sleek-looking digital interface.

Thermostat HT

The NEA HT thermostat is a PI room thermostat used to control actuators using pulse width modulation. It offers excellent and precise control response. Its digital interface is sleek and sophisticated yet simple to control temperature, timer function and set-back/holiday/party modes. Can control up to 5 actuators.



REHAU Article	REECE Code	Description	Piece(s)/Package
337024	1450693	Thermostat HT 24V	1
337230	1440860	Thermostat HT 230V	1

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 24V	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
217905	3819000	NEA external sensor	1

NEA wiring centre HC

NEA wiring centre is the centre of the NEA zone control system. All thermostats, actuator connections terminate here. It 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
342024	1451092	NEA wiring centre HC 24V 6 Channel	1
342230	1451093	NEA wiring centre HC 230V 6 Channel	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

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
320276-001	1440859	Actuator UNI - 24 V for NEA	1
320275-001	1440863	Actuator UNI - 230 V for ADR-UFH	1

2. Controls - Flow temperature control

Flex Mixer

The Flex mixer is used to supply a preselected set temperature to the REHAU Flow meter manifold. Components are supplied ready to fit the REHAU manifolds and all joints are flat sealed. Electronic high-efficiency pump with maximum flow rate of 1,650 l/h (approx 20kW output, depending on deltaT). Integrated thermostat adjustable from 20°C to 55°C supply temperature into the circuit.



REHAU Article	REECE Code	Description	Piece(s)/Package
318510-001	3803001	UFH flex mixer suitable for REHAU manifold with thermostat	1

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 OD 12.7 mm	300	10
219635	1450692	Radiator tail (without plug)	DN15 OD 12.7 mm	300	10

RAUTITAN PX sleeve - polymer



REHAU Article	REECE Code	Size	Piece(s)/Package
160001	1450510	16	150
160002	1450511	20	100
160003	1450512	25	100
160004	1450513	32	50
160005	1450514	40	25

3. Accessories - Conduit and fittings

RAUTITAN No.1 straight coupling



REHAU Article	REECE Code	Size	Material	Piece(s)/Package
326505-001	750520	16	PXsr	10
326506-001	750521	20	PXsr	10
216973-001	1450997	16	Brass	10
216974-001	1450998	20	Brass	10
216975-001	1450999	25	Brass	10
216976-001	1451000	32	Brass	10
216977-001	1451033	40	Brass	4

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



REHAU Article	REECE Code	Size	Piece(s)/Package
216997	1451050	25 - Rp $\frac{3}{4}$ " Fl	10
216999	1451052	32 - Rp1" Fl	10

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



REHAU Article	REECE Code	Size	Piece(s)/Package
216992	1451042	25 - R $\frac{3}{4}$ " MI	10
218612	1451043	25 - R1" MI	10
218613	1451044	32 - R $\frac{3}{4}$ " 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 - R $\frac{3}{4}$ " MI	10
217426	1451058	32 - R1" MI	3

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 and 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 videos, RAIN training registration, product information and regularly updated references and case studies. Everything is just a few clicks away, however, this service is only for underfloor heating experts who are also an authorised REHAU installer.



Check out the website at

www.myrehau.com 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 representative or call us on **1300 768 033**.



Project design support

Whether your project is a family home or a 40-storey high rise development, REHAU is your design partner. Our central design office and experienced engineers can provide advice regarding system performance, pipe layout, required materials, controls, hydraulic consideration and much more.

Submit your project details (description and CAD drawing) on myREHAU.com and complete a DIY design.

www.myrehau.com



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.

REHAU Pty Ltd

National Customer Service Centre

Australia

Tel: 1300 768 033 • Fax: 1300 760 665

Email: sales.au@rehau.com

www.rehau.com.au

New Zealand

Tel: +64 9 272 2264

Email: sales.nz@rehau.com

www.rehau.co.nz



The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. Before using, the user will determine suitability of the information for user's intended use and shall assume all risk and liability in connection therewith.