



RADIANT HEATING SYSTEMS

PRODUCT CATALOG

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1.

RAUPEX® O₂ BARRIER PIPE



RAUPEX O₂ Barrier Pipe is manufactured using REHAU's high-pressure peroxide method for cross-linked polyethylene (Engel method, PEXa). RAUPEX O₂ Barrier Pipe has a co-extruded oxygen diffusion barrier that exceeds the strict requirements of DIN 4726. All RAUPEX O₂ Barrier Pipe meets or exceeds the requirements of ASTM F 876, F 877, CSA B 137.5 and PPI TR-3, and is certified to NSF Standards 61. RAUPEX O₂ Barrier Pipe also meets the requirements of ASTM F 2023 for chlorine resistance and is produced in REHAU's ISO 9001 certified manufacturing facilities.

RAUPEX O₂ Barrier Pipe is rated for continuous operation of:

- 160 psi @ 73.4°F (1105 kPa @ 23°C)
- 100 psi @ 180°F (690 kPa @ 82.2°C)
- 80 psi @ 200°F (550 kPa @ 93.3°C)

RAUPEX O₂ Barrier Pipe is compatible with RAUPEX compression nut fittings and EVERLOC compression-sleeve fittings certified to ASTM F 2080 and CSA B 137.5.

3/8" RAUPEX O₂ Barrier Pipe

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
136008-500	3/8" RAUPEX O ₂ Barrier Pipe, 500 ft coil (152.4 m)	1 coil	10.5	23.1
136008-000	3/8" RAUPEX O ₂ Barrier Pipe, 1000 ft coil (304.8 m)	1 coil	21.0	46.2

Pipe inside diameter is 0.350 inches (9 mm). 3/8" pipe capacity is 0.0050 US gallons per foot (0.0624 l/m).

1/2" RAUPEX O₂ Barrier Pipe

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
136031-300	1/2" RAUPEX O ₂ Barrier Pipe, 300 ft coil (91.4 m)	1 coil	7.8	17.2
136031-500	1/2" RAUPEX O ₂ Barrier Pipe, 500 ft coil (152.4 m)	1 coil	13.1	28.9
136031-000	1/2" RAUPEX O ₂ Barrier Pipe, 1000 ft coil (304.8 m)	1 coil	26.3	57.9

Pipe inside diameter is 0.475 inches (12 mm). 1/2" pipe capacity is 0.0098 US gallons per foot (0.1222 l/m).

5/8" RAUPEX O₂ Barrier Pipe

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
136880-400	5/8" RAUPEX O ₂ Barrier Pipe, 400 ft coil (121.8 m)	1 coil	16.3	35.9
136880-000	5/8" RAUPEX O ₂ Barrier Pipe, 1000 ft coil (304.8 m)	1 coil	35.9	79.1

Pipe inside diameter is 0.575 inches (15 mm). 5/8" pipe capacity is 0.0134 US gallons per foot (0.1671 l/m).

3/4" RAUPEX O₂ Barrier Pipe

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
136051-100	3/4" RAUPEX O ₂ Barrier Pipe, 100 ft coil (30.5 m)	1 coil	4.9	10.9
136051-500	3/4" RAUPEX O ₂ Barrier Pipe, 500 ft coil (152.4 m)	1 coil	24.6	54.3
136051-000	3/4" RAUPEX O ₂ Barrier Pipe, 1000 ft coil (304.8 m)	1 coil	49.2	108.5

Pipe inside diameter is 0.675 inches (17 mm). 3/4" pipe capacity is 0.0189 US gallons per foot (0.2356 l/m).

1" RAUPEX O₂ Barrier Pipe

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
136011-100	1" RAUPEX O ₂ Barrier Pipe, 100 ft coil (30.5 m)	1 coil	7.9	17.5
136011-500	1" RAUPEX O ₂ Barrier Pipe, 500 ft coil (152.4 m)	1 coil	39.7	87.5

Pipe inside diameter is 0.870 inches (22 mm). 1" pipe capacity is 0.0316 US gallons per foot (0.3939 l/m).

1 1/4" RAUPEX O₂ Barrier Pipe

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
136283-100	1 1/4" RAUPEX O ₂ Barrier Pipe, 100 ft coil (30.5 m)	1 coil	11.4	25.0

Pipe inside diameter is 1.070 inches (27 mm). 1 1/4" pipe capacity is 0.0467 US gallons per foot (0.5827 l/m).

1 1/2" RAUPEX O₂ Barrier Pipe

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
136293-100	1 1/2" RAUPEX O ₂ Barrier Pipe, 100 ft coil (30.5 m)	1 coil	16.0	35.0

Pipe inside diameter is 1.263 inches (32 mm). 1 1/2" pipe capacity is 0.0650 US gallons per foot (0.8118 l/m).

2" RAUPEX O₂ Barrier Pipe

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
136303-100	2" RAUPEX O ₂ Barrier Pipe, 100 ft coil (30.5 m)	1 coil	27.4	60.0

Pipe inside diameter is 1.653 inches (42 mm). 2" pipe capacity is 0.1114 US gallons per foot (1.3906 l/m).



RAUPEX O₂ Barrier Pipe 20 ft Straight Lengths

Article #	Description	Package Quantity Outer Bag	Unit Weight	
			kg	lb
136051-020	3/4" RAUPEX O ₂ Barrier Pipe, 20 ft long (6.1 m)	25 (500 ft)	0.98	2.2
136011-020	1" RAUPEX O ₂ Barrier Pipe, 20 ft long (6.1 m)	25 (500 ft)	1.6	3.5
136283-020	1 1/4" RAUPEX O ₂ Barrier Pipe, 20 ft long (6.1 m)	5 (100 ft)	2.3	5.0
136293-020	1 1/2" RAUPEX O ₂ Barrier Pipe, 20 ft long (6.1 m)	5 (100 ft)	3.2	7.0
136303-020	2" RAUPEX O ₂ Barrier Pipe, 20 ft long (6.1 m)	5 (100 ft)	5.5	12.0

Same dimensions and capacities as RAUPEX O₂ Barrier Pipe sold in coils.

2.

RAUPEX® NON-BARRIER PIPE



RAUPEX Non-Barrier Pipe is manufactured using REHAU's high-pressure peroxide method for cross-linked polyethylene (Engel method, PEXa). All RAUPEX Non-Barrier Pipe meets or exceeds the requirements of ASTM F 876, F 877, CSA B 137.5 and PPI TR-3, and is certified to NSF Standard 61. RAUPEX Non-Barrier pipe also meets the requirements of ASTM F 2023 for chlorine resistance. RAUPEX Non-Barrier Pipe is produced in REHAU's ISO 9001 certified manufacturing facilities.

RAUPEX Non-Barrier Pipe is rated for continuous operation of:

- 160 psi @ 73.4°F (1105 kPa @ 23°C)
- 100 psi @ 180°F (690 kPa @ 82.2°C)
- 80 psi @ 200°F (550 kPa @ 93.3°C)

RAUPEX Non-Barrier Pipe is compatible with RAUPEX compression nut fittings, and EVERLOC compression-sleeve fittings certified to ASTM F 2080 and CSA B 137.5.

Use of RAUPEX Non-Barrier Pipe in heating systems requires corrosion protection and/or isolation by using a heat exchanger or non-ferrous components throughout the system.

3/8" RAUPEX Non-Barrier Pipe

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
261683-300	3/8" RAUPEX Non-Barrier Pipe, 300 ft coil (91.4 m)	1 coil	6.3	13.8
261683-500	3/8" RAUPEX Non-Barrier Pipe, 500 ft coil (152.4 m)	1 coil	10.5	23.1
261683-000	3/8" RAUPEX Non-Barrier Pipe, 1000 ft coil (304.8 m)	1 coil	21.0	46.2

Pipe inside diameter is 0.350 inches (9 mm). 3/8" pipe capacity is 0.0050 US gallons per foot (0.0624 l/m).

1/2" RAUPEX Non-Barrier Pipe

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
261026-100	1/2" RAUPEX Non-Barrier Pipe, 100 ft coil (30.5 m)	1 coil	2.6	5.8
261026-300	1/2" RAUPEX Non-Barrier Pipe, 300 ft coil (91.4 m)	1 coil	7.8	17.2
261026-500	1/2" RAUPEX Non-Barrier Pipe, 500 ft coil (152.4 m)	1 coil	13.1	28.9
261026-000	1/2" RAUPEX Non-Barrier Pipe, 1000 ft coil (304.8 m)	1 coil	26.3	57.9

Pipe inside diameter is 0.475 inches (12 mm). 1/2" pipe capacity is 0.0098 US gallons per foot (0.1222 l/m).

3/4" RAUPEX Non-Barrier Pipe

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
261046-100	3/4" RAUPEX Non-Barrier Pipe, 100 ft coil (30.5 m)	1 coil	4.9	10.9
261046-300	3/4" RAUPEX Non-Barrier Pipe, 300 ft coil (91.4 m)	1 coil	14.7	32.3
261046-500	3/4" RAUPEX Non-Barrier Pipe, 500 ft coil (152.4 m)	1 coil	24.6	54.3
261046-000	3/4" RAUPEX Non-Barrier Pipe, 1000 ft coil (304.8 m)	1 coil	49.2	108.5

Pipe inside diameter is 0.675 inches (17 mm). 3/4" pipe capacity is 0.0189 US gallons per foot (0.2356 l/m).

1" RAUPEX Non-Barrier Pipe

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
261066-100	1" RAUPEX Non-Barrier Pipe, 100 ft coil (30.5 m)	1 coil	7.9	17.5
261066-300	1" RAUPEX Non-Barrier Pipe, 300 ft coil (91.4 m)	1 coil	23.8	52.4
261066-500	1" RAUPEX Non-Barrier Pipe, 500 ft coil (152.4 m)	1 coil	39.7	87.5

Pipe inside diameter is 0.870 inches (22 mm). 1" pipe capacity is 0.0316 US gallons per foot (0.3939 l/m).

1 1/4" RAUPEX Non-Barrier Pipe

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
261086-100	1 1/4" RAUPEX Non-Barrier Pipe, 100 ft coil (30.5 m)	1 coil	11.4	25.0

Pipe inside diameter is 1.070 inches (27 mm). 1 1/4" pipe capacity is 0.0467 US gallons per foot (0.5827 l/m).

1 1/2" RAUPEX Non-Barrier Pipe

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
261106-100	1 1/2" RAUPEX Non-Barrier Pipe, 100 ft coil (30.5 m)	1 coil	16.0	35.0

Pipe inside diameter is 1.263 inches (32 mm). 1 1/2" pipe capacity is 0.0650 US gallons per foot (0.8118 l/m).

2" RAUPEX Non-Barrier Pipe

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
138331-100	2" RAUPEX Non-Barrier Pipe, 100 ft coil (30.5 m)	1 coil	27.4	60.0

Pipe inside diameter is 1.653 inches (42 mm). 2" pipe capacity is 0.1114 US gallons per foot (1.3906 l/m).



RAUPEX Non-Barrier Pipe 20 ft Straight Lengths

Article #	Description	Package Quantity Outer Bag	Unit Weight	
			kg	lb
261046-020	3/4" RAUPEX Non-Barrier Pipe, 20 ft long (6.1 m)	25 (500 ft)	1.0	2.2
261066-020	1" RAUPEX Non-Barrier Pipe, 20 ft long (6.1 m)	25 (500 ft)	1.6	3.5
261086-020	1 1/4" RAUPEX Non-Barrier Pipe, 20 ft long (6.1 m)	5 (100 ft)	2.3	5.0
261106-020	1 1/2" RAUPEX Non-Barrier Pipe, 20 ft long (6.1 m)	5 (100 ft)	3.2	7.0
138331-020	2" RAUPEX Non-Barrier Pipe, 20 ft long (6.1 m)	5 (100 ft)	5.5	12.0

Same dimensions and capacities as RAUPEX Non-Barrier Pipe sold in coils.

3.

RAUPANEL™ RADIANT HEATING SYSTEM



REHAU's RAUPANEL Radiant Heating System is a high-performance alternative to poured thermal mass and joist space radiant heating installations. This lightweight, low-profile system is well suited for both new construction and retrofit applications. Extruded aluminum RAUPANEL sections conduct heat from 3/8" RAUPEX pipe to provide even floor surface temperatures. Durable machined plywood return bends and furring strips complete the installation.

RAUPANEL System Components

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
235307	RAUPANEL	16	1.73	3.80
235327-PLY	6" Plywood Return Bend	8	1.82	4.00
235337-PLY	8" Plywood Return Bend	8	2.05	4.50
235377-PLY	2" Plywood Furring Strip	34	0.45	1.00



Furring strips are to be used in conjunction with 8" return bends to facilitate proper spacing of the RAUPANELs, and to provide a nailing surface for the floor covering. Reference the table below for product dimensions and square footage. Be sure to read the RAUPANEL System Installation Guide 855.625 for instructions on design and use of this product.

Article #	Dimensions W x L x H	ft ² /pc	ft ² /pkg
235307	6" x 72" x 0.625"	3.0	48.0
235327-PLY	8" x 48" x 0.625"	2.7	21.3
235337-PLY	9" x 48" x 0.625"	3.0	24.0
235377-PLY	2" x 48" x 0.625"	0.7	22.7

RAUPANEL Installation Accessories



Article #	Description	Package Quantity	Unit Weight	
			kg	lb
235387	Deburring Tool	10	0.09	0.19
235397-010	Carbide Cutting Blade (10")	1	0.23	0.50

Use deburring tool to eliminate burrs and sharp edges after cutting RAUPANEL. Cutting blade is made of tungsten carbide and is suitable for cutting both wood and aluminum. Follow all published safety warnings when using these tools.

4.

PRO-BALANCE® BRASS HEATING MANIFOLD



PRO-BALANCE Brass Heating Manifold With Gauges

Article #	Stations	Manifold Length		Package Quantity	Unit Weight	
		mm	in		kg	lb
240021-N	2	295	11.8	1	3.9	8.6
240031-N	3	350	14.0	1	4.3	9.5
240041-N	4	405	16.2	1	4.8	10.5
240051-N	5	482	19.3	1	5.2	11.5
240061-N	6	500	20.0	1	5.5	12.1
240071-N	7	592	23.7	1	5.9	13.0
240081-N	8	620	24.8	1	6.2	13.8
240091-N	9	675	27.0	1	6.6	14.6
240101-N	10	730	29.2	1	7.3	16.0
240111-N	11	782	31.3	1	7.6	16.8
240121-N	12	838	33.5	1	8.2	18.1

Delivered pre-assembled and ready to install. Use with 3/8", 1/2", 5/8", and 3/4" RAUPEX pipe. Compatible with manifold valve actuator Art. 260166 (see PRO-BALANCE Accessories and Replacement Parts section). Order manifold-to-pipe connectors separately (see R-20 compression-style manifold connections in the PRO-BALANCE Accessories and Replacement Parts section).

Each manifold comes complete with:

- Instruction booklet
- 1" NPT supply and return manifold isolation valves with mini thermometers
- Air vent/fill ports
- Visual flow gauges (0-2 GPM) on supply side
- Circuit balancing/isolation valves on return side
- Mounting brackets
- Four drywall screws and four self-tapping screws
- Circuit labels

Notes:

- Manifold lengths above include the isolation ball valve (3 1/4" (80 mm)) and the air vent / fill (1.85" (47 mm))
- Maximum flow is 2.0 GPM (0.13 l/s) per circuit; 16 GPM (1.01 l/s) total
- Can fit within a 2" x 4" stud wall, only 3-1/4" deep
- Can be joined to other manifold sections using 1" BSPF Unions (Art. 260407) or 1" BSPF x 1" BSPF x 1 1/4" BSPM Union Tee Art. 250227-001 (see PRO-BALANCE Accessories and Replacement Parts section)

5.

BRASS HEATING MANIFOLD (NO BALANCING VALVES)



HLV Brass Heating Distribution Manifold (No Balancing Valves Included - Valveless Style)

Article #	Stations	Manifold Length		Package Quantity	Unit Weight	
		mm	in		kg	lb
250327	2	285	11.4	1	3.0	6.6
250337	3	340	13.6	1	3.5	7.7
250347	4	395	15.8	1	4.0	8.8
250357	5	448	17.9	1	4.5	9.9
250367	6	503	20.1	1	5.0	11.0
250377	7	558	22.3	1	5.5	12.1

Delivered pre-assembled and ready to install. Use with 3/8", 1/2", 5/8", and 3/4" RAUPEX pipe. Order manifold-to-pipe connectors separately (see PRO-BALANCE RAUPEX Connections for Brass Manifolds in the PRO-BALANCE Accessories and Replacement Parts section).

Each manifold comes complete with:

- 1" NPT supply and return manifold isolation valves
- Mounting Brackets (Art. 261386)
- Vent Elbows (Art. 250207)

Notes:

- Circuit isolation and balancing valves are not included
- Can fit within a 2" x 4" stud wall, only 3 1/4" deep
- Can be joined to other manifold sections using 1" BSPP Unions (Art. 260407) or 1" BSPF x 1" BSPF x 1 1/4" BSPM Union Tee, Art. 250227-001 (see PRO-BALANCE Accessories and Replacement Parts section).

6.

PRO-BALANCE® ACCESSORIES AND REPLACEMENT PARTS

Note: Unless otherwise noted any of these accessories can be used on either the PRO-BALANCE or HLV brass heating manifolds (not for PRO-BALANCE XL).



PRO-BALANCE RAUPEX Connections for Brass Manifolds

Article #	Description	Package Quantity			Unit Weight	
		Bag	Box	Ctn	gm	lb
267507	3/8" RAUPEX x R-20 Brass Manifold Outlet	2	50	300	76	0.17
261007	1/2" RAUPEX x R-20 Brass Manifold Outlet	2	50	300	73	0.16
267557	5/8" RAUPEX x R-20 Brass Manifold Outlet	2	50	300	73	0.16
267007	3/4" RAUPEX x R-20 Brass Manifold Outlet	2	24	144	132	0.29

For use with PRO-BALANCE and HLV brass manifolds. 3/8", 1/2" and 5/8" fittings include insert with O-ring, split brass ring and compression nut. 3/4" fitting includes R-20 x 1" bushing, 3/4" insert with O-ring, split brass ring and compression nut.



PRO-BALANCE Flow-Stop Circuit Valve

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
250224	PRO-BALANCE Flow-Stop Circuit Valve	5	0.12	0.26

This brass 1/4 turn ball valve attaches to R-20 circuit outlets on the supply side of PRO-BALANCE manifolds to allow for complete shut-off. Standard 1/4" vent key (supplied with each manifold) is used to operate the valve. Install flow-stop valves by hand onto R-20 outlets of the PRO-BALANCE manifold. Do not use pipe dope or thread sealant. Thread the valve clockwise until it stops. If necessary, back the valve off to align the valve stem with the front of the manifold. No tightening with a wrench is necessary, as the integral O-ring makes the seal.



PRO-BALANCE Manifold Extension Kit

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
250225	Extension Kit for PRO-BALANCE Manifolds	1	1.0	2.2

Used to add a circuit to an existing PRO-BALANCE manifold. The extension kit includes a supply section with a visual flow gauge, a return section with a circuit balancing/isolation valve, and two gaskets.



PRO-BALANCE Flow Setter Valves

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
244807-001	1/2-4 GPM PRO-BALANCE Flow Setter Valve	1	760	1.67
244817-001	1-9 GPM PRO-BALANCE Flow Setter Valve	1	760	1.67

PRO-BALANCE flow setter valves are used to set flow to PRO-BALANCE and HLV manifolds and can be installed in-line into any pipe feeding a manifold. This is ideal when multiple manifolds are fed from a single circulator and flow needs to be set correctly to each. PRO-BALANCE flow setter valves are also used in variable speed injection pump mixing systems to set the flow through the injection loop.

PRO-BALANCE flow setter valves are supplied with two gaskets and adapters converting to 1" MPT.



PRO-BALANCE 4-Wire Manifold Valve Actuator

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
260166	4-Wire Manifold Valve Actuator	1	0.14	0.30

The 4-wire manifold valve actuator is used to open and close circuit valves on the PRO-BALANCE heating manifolds. Use REHAU thermostats to control actuators directly, or connect through REHAU electronic controls.

Features and Specifications:

- Gray position indicator provides visual verification of the actuator’s position. When the actuator is off and closed, the gray indicator is flush with the top of the actuator. When the actuator is on and open, the gray indicator will rise out of the top of the actuator and be visible from the side.
- Red pull-out tab is provided to reduce the force of the actuator when installing on the manifold.
- A dry-contact end switch is built in to the actuator. This end switch can be used to operate 24VAC relays for pumps and other devices, and can be wired so that pumps turn on only when actuator is fully open.
- If required, connect the green end switch wires to a suitable 24VAC-powered relay, to activate a device to be operated by the actuator’s end switch. Or, connect these wires directly into a Speedzone (Art. 243047).
- 24VAC “thermal motor” heating element melts a wax cartridge, allowing the actuator to open when there is a call for heat (power on). When the power is off, the wax cools and closes the valve (normally closed). Operation takes 3-4 minutes.
- 4 wires: Blue/brown – Apply 24VAC power; green (2) – end switch. Length – 40" (100 cm).
- Ambient operating temperature range of 32°F to 140°F (0°C to 60°C).
- Low power draw: Approximately 2VA in operation. Maximum 4.5VA when first powered.



PRO-BALANCE BSPP Angle Piece

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
250214	1" 90-degree BSPP Angle Piece	1	600	1.30

For PRO-BALANCE or HLV manifolds. Includes union nut and gasket. Can be used to install 1" manifold isolation valves at a right angle to manifold.



PRO-BALANCE 1" NPT Valve Set with Thermometer Housings

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
250216	1" NPT Valve Set w/Thermometer Housings	1 set	420	0.92

These valves have integrated thermometer housings on each side of the valve bodies. Mini-Thermometers (Art. 250218) can be set into these housings to give accurate readings of temperatures on both supply and return sides of any PRO-BALANCE or HLV manifold. Includes gaskets. Mini-Thermometers are sold separately.



PRO-BALANCE Mini-Thermometer

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
250218	Mini-Thermometer	1	28	0.06

Mini-Thermometers can be set into the housings on 1 1/4" or 1" NPT valves with thermometer housings to give accurate readings of temperatures on both supply and return sides of any PRO-BALANCE XL, PRO-BALANCE or HLV manifold (for use only with these valves). Thermometers read from 40°F-200°F and 0°C-100°C. Valves sold separately.



PRO-BALANCE Flow Gauge

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
250220	PRO-BALANCE Replacement Flow Gauge	1	28	0.06

Replacement flow gauge for the PRO-BALANCE manifold. Install using "pipe dope" thread sealant. Gauge range is 0-2 GPM.



PRO-BALANCE Circuit Balancing/Isolation Valve

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
250221	PRO-BALANCE Circuit Balancing/Isolation Valve	1	90	0.19

Replacement circuit balancing/isolation valve for the return side of the PRO-BALANCE manifold. Install using "pipe dope" thread sealant.



PRO-BALANCE Manifold Union Set

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
260407	1" BSPF Unions for PRO-BALANCE and HLV Manifolds	1 set	300	0.65

For use with PRO-BALANCE and HLV manifolds to connect two or more manifolds together in series. Includes union nuts and gaskets. May be used to extend an installed manifold.



PRO-BALANCE 1" BSPF Union Tee Set

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
250227-001	1" BSPF Manifold BSPM Union Tee	1 set	1.50	3.30

Supply side of Tee is 1 1/4" BSPM. Set is supplied with two gaskets.



PRO-BALANCE Circuit Outlet Cap

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
250209-C	R-20 Brass Circuit Outlet Cap w/Gasket	1	28	0.07

Brass circuit outlet cap is used to cap off un-used outlets on any PRO-BALANCE or HLV manifold. Includes gasket.



PRO-BALANCE Manifold End Cap

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
250213	1" Brass Manifold End Cap w/Gasket	1	100	0.22

Can be used to cap off end of any manifold header while eliminating usual end pieces. Includes gasket.



PRO-BALANCE Air Vent/Boiler Drain Combination Set

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
250226	Air Vent/Boiler Drain Combination Set w/Gaskets	1 set	310	0.68

This set includes air vent/boiler drain combination pieces with union nuts and gaskets. Manual air vent opens with 1/4" vent key (supplied with each manifold). Boiler drain ball valve includes female garden hose thread (GHT) for convenient connections. Gas-ketted caps are also included as shown. For PRO-BALANCE and HLV manifolds.



PRO-BALANCE Vent Elbow Set

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
250207	Replacement Vent Elbow Set	1 pair	120	0.28

This replacement set includes vent elbows with union nuts and gaskets. Operated with 1/4" vent key (supplied with each manifold). Original equipment supplied with HLV manifolds.



PRO-BALANCE Automatic Air Vent

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
250212	Automatic Air Vent, 3/8" BSPP	1	200	0.44

For PRO-BALANCE manifolds. Can be used to replace manual air vent on air vent/boiler drain pieces (Art. 250226) to allow automatic elimination of entrained air in a hydronic system.



PRO-BALANCE Heating Manifold Cabinets

Manifold Article #	Stations	Dimensions (mm)			Dimensions (in)			Package Quantity	Unit Weight	
		W	H	D	W	H	D		kg	lb
250437	1 to 3	400	700	110-160	15.7	27.6	4.3-6.3	1	10.0	22.0
250447	2 to 6	550	700	110-160	21.7	27.6	4.3-6.3	1	13.0	28.7
250457	3 to 9	750	700	110-160	29.5	27.6	4.3-6.3	1	16.0	35.3
250467	4 to 12	950	700	110-160	37.4	27.6	4.3-6.3	1	19.0	41.9
250477	5 to 12	1150	700	110-160	45.3	27.6	4.3-6.3	1	22.0	48.5

PRO-BALANCE manifold cabinets are made from galvanized steel with welded seams for strength and durability. Integral brackets allow for easy mounting of any PRO-BALANCE or HLV brass manifold. Copper manifolds can be mounted in cabinet using Steel Manifold Brackets (Art. 261386 or 261396). Cabinets come with adjustable legs to mount the cabinet on the floor; legs can be removed to flush-mount the cabinet inside a wall cavity. Height and depth are adjustable. Cabinets include a steel door and have pipe knockouts on both sides for pipe connections to the manifold.

Dimensions are Width x Height x Depth. Depth is adjustable from 4.3" to 6.3" (110 mm to 160 mm).



PRO-BALANCE Steel Manifold Brackets

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
261386	1 1/4" Steel Manifold Brackets for 1 1/4" Copper Manifolds	1 pair	0.45	1.0
261396	1 1/2" Steel Manifold Brackets for 1 1/2" Copper Manifolds	1 pair	0.50	1.1

These sturdy brackets are for use with copper manifolds used in supply/return configuration. Flexible liners inside holders reduce vibration/noise transfer and permit limited movement. 1 1/4" Brackets can be used as replacements for PRO-BALANCE or HLV brass manifolds.

Note: Art. 261396, 1 1/2" Brackets are not replacements for PRO-BALANCE manifolds.



Plastic Manifold Bracket

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
261266	Plastic Manifold Brackets	1 pair	0.18	0.40

Brackets are made of reinforced nylon. A 1.57" (40 mm) offset allows supply/return manifold clearance. These brackets are used with 1" and 1 1/4" diameter copper manifolds, using supplied flexible spacers.

7.

PRO-BALANCE® XL BRASS HEATING MANIFOLD



PRO-BALANCE XL Brass Heating Manifold

Article #	Stations	Manifold Length		Package Quantity	Unit Weight	
		mm	in		kg	lb
281841-001	4	398	15.08	1	6.2	13.7
281851-001	5	453	17.06	1	6.6	14.6
281861-001	6	508	19.02	1	7.1	15.7
281871-001	7	563	20.99	1	7.6	16.8
281881-001	8	618	22.95	1	8.3	18.3
281891-001	9	673	24.92	1	8.9	19.6
281801-001	10	728	26.89	1	9.2	20.3

Delivered pre-assembled and ready to install. Use with 3/8", 1/2", 5/8", and 3/4" RAUPEX pipe. Compatible with manifold valve actuator Art. 260166 (see PRO-BALANCE XL Accessories and Replacement Parts section). Order manifold-to-pipe connectors separately (see R-20 compression-style manifold connections under PRO-BALANCE XL RAUPEX Connections for Brass Manifolds section).

Each manifold comes complete with:

- Instruction booklet
- 1 1/4" NPT supply and return manifold isolation ball valves with thermometer sockets (Mini Thermometers Art. 250218 sold separately)
- Visual flow gauges (0-4 GPM) on supply side
- Circuit balancing/isolation valves on return side
- Mounting brackets
- Four drywall screws and four self-tapping screws
- Circuit labels

Notes:

- Manifold lengths above include the isolation ball valve (3.86" (98mm))
- Maximum flow is 4.0 GPM (0.25 l/s) per circuit; 40 GPM (2.52 l/s) total
- Manifold cannot fit within a 2" x 4" stud wall, 4" deep at thermometer socket, add another 1/2" with mini thermometer
- Can be joined to other manifold sections using 1 1/4" BSPP Unions (Art. 281971-001) or 1 1/4" BSPF x 1 1/4" BSPF Union Tee (Art. 250228-001).

8.

PRO-BALANCE® XL ACCESSORIES AND REPLACEMENT PARTS



PRO-BALANCE XL RAUPEX Connections for Brass Manifolds

Article #	Description	Package Quantity			Unit Weight	
		Bag	Box	Ctn	gm	lb
267507	3/8" RAUPEX x R-20 Brass Manifold Outlet	2	50	300	76	0.17
261007	1/2" RAUPEX x R-20 Brass Manifold Outlet	2	50	300	73	0.16
267557	5/8" RAUPEX x R-20 Brass Manifold Outlet	2	50	300	73	0.16
267007	3/4" RAUPEX x R-20 Brass Manifold Outlet	2	24	144	132	0.29

For use with PRO-BALANCE XL manifolds. 3/8", 1/2" and 5/8" fittings include insert with O-ring, split brass ring and compression nut. 3/4" fitting includes R-20 x 1" bushing, 3/4" insert with O-ring, split brass ring and compression nut.



PRO-BALANCE XL Flow-Stop Circuit Valve

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
250224	PRO-BALANCE Flow-Stop Circuit Valve	5	0.12	0.26

This brass 1/4" turn ball valve attaches to R-20 circuit outlets on the supply side of PRO-BALANCE XL manifolds to allow for complete shut-off. Standard 1/4" vent key (supplied with each manifold) is used to operate the valve. Install flow-stop valves by hand onto R-20 outlets of the PRO-BALANCE XL manifold. Do not use pipe dope or thread sealant. Thread the valve clockwise until it stops. If necessary, back the valve off to align the valve stem with the front of the manifold. No tightening with a wrench is necessary, as the integral O-ring makes the seal.



PRO-BALANCE XL Flow Setter Valves

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
244807-001	1/2-4 GPM PRO-BALANCE Flow Setter Valve	1	610	1.34
244817-001	1-9 GPM PRO-BALANCE Flow Setter Valve	1	654	1.44

PRO-BALANCE Flow Setter Valves are used to set flow to PRO-BALANCE XL manifolds, and can be installed in-line into any pipe feeding a manifold. This is ideal when multiple manifolds are fed from a single circulator and flow needs to be set correctly to each. PRO-BALANCE Flow Setter Valves are also used in variable speed injection pump mixing systems to set the flow through the injection loop.

PRO-BALANCE Flow Setter Valves are supplied with two gaskets and adapters converting to 1" MPT.



PRO-BALANCE XL 4-Wire Manifold Valve Actuator

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
260166	4-Wire Manifold Valve Actuator	1	0.14	0.30

The 4-wire manifold valve actuator is used to open and close circuit valves on the PRO-BALANCE XL manifolds. Use REHAU thermostats to control actuators directly, or connect through REHAU electronic controls.

Features and Specifications:

- Gray position indicator provides visual verification of the actuator’s position. When the actuator is off and closed, the gray indicator is flush with the top of the actuator. When the actuator is on and open, the gray indicator will rise out of the top of the actuator and be visible from the side.
- Red pull-out tab is provided to reduce the force of the actuator when installing on the manifold.
- A dry-contact end switch is built into the actuator. This end switch can be used to operate 24VAC relays for pumps and other devices, and can be wired so that pumps turn on only when actuator is fully open.
- If required, connect the green end switch wires to a suitable 24VAC-powered relay, to activate a device to be operated by the actuator’s end switch. Or, connect these wires directly into a Speedzone (Art. 243047).
- 24VAC “thermal motor” heating element melts a wax cartridge, allowing the actuator to open when there is a call for heat (power on). When the power is off, the wax cools and closes the valve (normally closed). Operation takes 3-4 minutes.
- 4 wires: Blue/brown – Apply 24VAC power; green (2) – end switch. Length – 40" (100 cm).
- Ambient operating temperature range of 32°F to 140°F (0°C to 60°C).
- Low power draw: Approximately 2VA in operation. Maximum 4.5VA when first powered.



PRO-BALANCE XL 0-4 GPM Flow Gauge

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
281901-001	0-4 GPM Flow Gauge	1	0.027	0.060

Replacement flow gauge for the PRO-BALANCE XL manifold. Install using "pipe dope" thread sealant. Gauge is 0-4 GPM.



PRO-BALANCE XL Circuit Balancing/Isolation Valve

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
250221	PRO-BALANCE Circuit Balancing/Isolation Valve	1	90	0.19

Replacement circuit balancing/isolation valve for the return side of the PRO-BALANCE manifold. Install using "pipe dope" thread sealant.



PRO-BALANCE XL NPT Isolation Ball Valve Set

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
281931-001	1 1/4" NPT Iso. Valve Set w/Gaskets	1 set	2.1	4.63

These valves have integrated thermometer housings on each side of the valve bodies. Mini-Thermometers (Art. 250218) can be set into these housings to give accurate readings of temperatures on both supply and return sides of any PRO-Balance XL manifold. Includes gaskets. Mini-Thermometers are sold separately.



PRO-BALANCE XL Mini-Thermometer

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
250218	Mini-Thermometer	1	28	0.06

Mini-Thermometers can be set into the housings on 1 1/4" or 1" NPT Valves with thermometer housings to give accurate readings of temperatures on both supply and return sides of any PRO-BALANCE XL, PRO-BALANCE or HLV manifold (for use only with these valves). Thermometers read from 40°F-200°F and 0°C-100°C. Valves sold separately.



PRO-BALANCE XL BSPP Manifold End Cap

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
281951-001	1 1/4" BSPP Manifold End Cap w/Gasket	1	0.1	0.22



PRO-BALANCE XL Air Vent / Boiler Drain Valve Set

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
281941-001	1 1/4" Air Vent / Boiler Drain Valve Set w/ Gaskets	1 set	0.76	1.67



PRO-BALANCE XL BSPP Manifold Union

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
281971-001	1 1/4" BSPP Manifold Union w/Gaskets	1	0.22	0.487

For use with PRO-BALANCE XL manifolds to connect two or more manifolds together in series. Includes union nuts and gaskets. May be used to extend an installed manifold.



PRO-BALANCE XL BSPP Union Tee Set

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
250228-001	1 1/4" BSPP Manifold Union Tee w/ Gaskets	1 set	1.50	3.30

Supply side of Tee is 1 1/4" BSPM. Set is supplied with four gaskets.



PRO-BALANCE XL BSPP 90-Degree Angle Piece

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
281981-001	1 1/4" BSPP 90-Degree Angle Piece w/ Gasket	1	0.221	0.487

For PRO-BALANCE XL manifolds. Includes union nut and gasket. Can be used to install 1 1/4" manifold isolation valves at a right angle to manifold.



PRO-BALANCE XL Heating Manifold Cabinets

Manifold Article #	Stations	Dimensions (mm)			Dimensions (in)			Package Quantity	Unit Weight	
		W	H	D	W	H	D		kg	lb
250437	1 to 3	400	700	110-160	15.7	27.6	4.3-6.3	1	10.0	22.0
250447	4 to 6	550	700	110-160	21.7	27.6	4.3-6.3	1	13.0	28.7
250457	3 to 9	750	700	110-160	29.5	27.6	4.3-6.3	1	16.0	35.3
250467	4 to 10	950	700	110-160	37.4	27.6	4.3-6.3	1	19.0	41.9

REHAU manifold cabinets are made from galvanized steel with welded seams for strength and durability. Integral brackets allow for easy mounting of any PRO-BALANCE or HLV brass manifold. Copper manifolds can be mounted in cabinet using Steel Manifold Brackets (Art. 261386 or 261396). Cabinets come with adjustable legs to mount the cabinet on the floor; legs can be removed to flush-mount the cabinet inside a wall cavity. Height and depth are adjustable. Cabinets include a steel door and have pipe knock-outs on both sides for pipe connections to the manifold.

Dimensions are Width x Height x Depth. Depth is adjustable from 4.3" to 6.3" (110 mm to 160 mm).



Steel Manifold Brackets

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
261396	1 1/2" Steel Manifold Brackets	1 pair	0.50	1.1

These sturdy brackets are for use with PRO-BALANCE XL manifolds used in supply/return configuration. Flexible liners inside holders reduce vibration/noise transfer and permit limited movement.

9.

COPPER MANIFOLDS



Pre-Cut Copper Manifolds

Article #	Description	Package Quantity		Unit Weight	
		Each	Box	kg	lb
261326	1" Copper Manifold, 2 1/2" Outlets	1	50	0.20	0.45
261336	1" Copper Manifold, 3 1/2" Outlets	1	50	0.27	0.60
261346	1" Copper Manifold, 4 1/2" Outlets	1	50	0.34	0.75

Manifolds are type L copper with open ends, in sizes indicated. One end is copper male, while the opposite end is flared to copper female (sweat). Manifold pieces may be combined to make longer manifolds. Copper outlets are high-temperature brazed (lead-free) into headers at 2" on-center, so manifolds cannot be cut to length. 1/2" copper outlets are 2" long. Use with REHAU fittings and valves to assemble complete manifolds for heating applications.



Manifold Header Stock

Article #	Description	Max GPM	Header Size	Outlet Size	Package Quantity	Unit Weight	
						kg	lb
250810	1" x 1/2" Copper Manifold	20	1"	1/2"	5	2.7	6.0
250817	1" x 3/4" Copper Manifold	20	1"	3/4"	4	3.1	6.8
250820	1 1/4" x 1/2" Copper Manifold	32	1 1/4"	1/2"	4	3.4	7.3
250827	1 1/4" X 3/4" Copper Manifold	32	1 1/4"	3/4"	4	3.6	7.9
250829	1 1/2" x 1/2" Copper Manifold	44	1 1/2"	1/2"	3	4.1	9.0
250830	1 1/2" x 3/4" Copper Manifold	44	1 1/2"	3/4"	3	4.3	9.4
250839	2" x 1/2" Copper Manifold	75	2"	1/2"	2	5.8	12.8
250840	2" x 3/4" Copper Manifold	75	2"	3/4"	2	6.1	13.5
250850	2" x 1" Copper Manifold	75	2"	1"	2	6.8	15.0

Manifolds are type L copper with open ends, in sizes indicated. Copper outlets are high-temperature brazed (lead-free) into headers. Each manifold is 72" (180 cm) long with 24 outlets at 3" on-center, except the 2" x 1" Copper Manifold (Art. 250850) which has 18 outlets at 4" on-center. Manifolds can easily be cut to length. Do not exceed maximum flow rates listed above. Use with REHAU fittings and valves to assemble complete manifolds for heating applications.



EVERLOC Ball Valve Manifolds

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
234107	EV Manifold 1" CM In, 12 1/2" EV Valves	2	3.2	7.0
234147	EV Manifold 1 1/4" CM In, 12 5/8" EV Valves	2	4.1	9.1

Manifolds are type L copper with open ends. EVERLOC ball valves in sizes indicated are soldered onto the headers at 3" on-center. Manifolds can easily be cut to length.

Art. 234107 includes twelve of 1/2" EV valve Art. 261946.

Art. 234147 includes twelve of 5/8" EV valve Art. 243667.



End Cap Vent Drains

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
250810-ECVD	1" End Cap Vent Drain	1	0.16	0.35
250820-ECVD	1 1/4" End Cap Vent Drain	1	0.23	0.50
250830-ECVD	1 1/2" End Cap Vent Drain	1	0.28	0.61
250840-ECVD	2" End Cap Vent Drain	1	0.42	0.93

End cap vent drain pieces are for use with copper manifolds for RFH and SIM applications. They allow easy connection of an automatic air vent (1/4" NPT) and a drain valve (1/2" NPT) to the end of the copper manifold. Use standard 1/4" NPT air vent.

Note: The REHAU Automatic Air Vent (Art. 250212) does not work with the end cap vent drains due to different thread sizes. The REHAU automatic air vent is only for use on brass PRO-BALANCE manifolds.

10.

COPPER-EVERLOC® MANIFOLDS



Open End, Cut-To-Length (CTL) Manifolds

Article #	Description	Package Quantity		Unit Weight	
		Each	Box	kg	lb
266357	1" EV CTL Manifold, 24 1/2" EV Out	1	6	2.41	5.30
266397	1" EV CTL Manifold, 12 1/2" EV Out	1	6	1.18	2.60
266367	1 1/4" EV CTL Manifold, 24 1/2" EV Out	1	4	3.41	7.50

Manifolds are type L copper with open ends, in sizes indicated. 1/2" EVERLOC fittings are high temperature brazed (lead-free) into headers at 3" on-center so manifolds can easily be cut to length. 24-outlet manifolds are 72" (180 cm) long. 12-outlet manifold is 36" (90 cm) long.



Copper Open-End (COE) Manifolds

Article #	Description	Package Quantity		Unit Weight	
		Each	Box	kg	lb
234427	EV COE Manifold 1" CM In, 2 1/2" EV Out	1	50	0.22	0.50
234437	EV COE Manifold 1" CM In, 3 1/2" EV Out	1	50	0.30	0.66
234447	EV COE Manifold 1" CM In, 4 1/2" EV Out	1	40	0.39	0.85
234457	EV COE Manifold 1" CM In, 5 1/2" EV Out	1	25	0.46	1.02
234467	EV COE Manifold 1" CM In, 6 1/2" EV Out	1	25	0.54	1.20
234477	EV COE Manifold 1" CM In, 7 1/2" EV Out	1	25	0.62	1.36
234487	EV COE Manifold 1" CM In, 8 1/2" EV Out	1	20	0.70	1.55
234417	EV COE Manifold 1" CM In, 12 1/2" EV Out	1	10	1.00	2.20
234607	EV COE Manifold 1 1/4" CM In, 12 3/4" EV Out	1	10	1.36	3.00
234637	EV COE Manifold 1 1/2" CM In, 12 3/4" EV Out	1	3	1.48	3.25
234647	EV COE Manifold 1 1/2" CM In, 12 1" EV Out	1	3	1.59	3.50
234667	EV COE Manifold 2" CM In, 12 3/4" EV Out	1	2	1.70	3.75
234677	EV COE Manifold 2" CM In, 12 1" EV Out	1	2	1.82	4.00

Manifolds are type L copper with open ends, in sizes indicated. For 1" copper manifolds, EVERLOC fittings are high-temperature brazed (lead-free) into the 1" headers at 2" on-center, so manifolds cannot be cut to length. The 1 1/4", 1 1/2" and 2" headers have EVERLOC fittings brazed at 3" on-center, so they can be easily cut.

These manifolds have one end spun to a tapered closure and the opposite end is open copper pipe (CM). The spun-closed end can be cut off to extend the manifold or to connect the manifold to a copper sweat fitting or valve of the same size.

11.

MANIFOLD CONNECTIONS AND VALVES



RAUPEX Connections for Copper Manifolds

Article #	Description	Package Quantity			Unit Weight	
		Bag	Box	Ctn	kg	lb
267517	3/8" RAUPEX x 1/2" MPT or 1/2" C Female (Sweat)	5	25	210	0.13	0.29
260997	1/2" RAUPEX x 1/2" C Female (Sweat)	5	30	180	0.11	0.24
267567	5/8" RAUPEX x 1/2" MPT or 1/2" C Female (Sweat)	5	25	150	0.16	0.34
260347	3/4" RAUPEX x 3/4" C Female (Sweat)	1	20	120	0.17	0.38
260467	1" RAUPEX x 1" C Female (Sweat)	1	10	60	0.28	0.63

REHAU split-ring compression nut fittings are machined from solid brass stock. Integral fitting/insert design provides positive clamping and sealing action with split compression ring. Make solder connection before connecting to RAUPEX pipe.

- 3/8" Fitting (Art. 267517) for use with 1/2" drops on copper manifolds
- 1/2" Fitting (Art. 260997) for use with 1/2" drops on copper manifolds
- 5/8" Fitting (Art. 267567) for use with 1/2" drops on copper manifolds
- 3/4" Fitting (Art. 260347) for use with 3/4" drops on copper manifolds
- 1" Fitting (Art. 260467) for use with 1" drops on copper manifolds



Balancing Valves for Copper Manifolds

Article #	Description	Cv	Package Quantity	Unit Weight	
				kg	lb
260156	1/2" Copper x Compression Tail Piece (required)	-	1	0.09	0.20
260176P	1/2" x R-20 RA Balancing & Shutoff Valve	1.6	1	0.27	0.60
260196	RA Valve Manual Balancing Handle	-	1	0.15	0.33
260027	3/4" FPT x 3/4" MPT RA Valve	2.7	1	0.44	0.97
260037	1" FPT x 1" MPT RA Valve	2.8	1	0.71	1.60

Build your own balancing manifold with these attachments for copper manifolds. Can be combined with the manifold valve actuator for RA valve (Art. 260167) for electric thermostat control (not the standard manifold valve actuator Art. 260166). 1/2" RA valve can be used with 3/8", 1/2", 5/8", and 3/4" RAUPEX connections for brass manifolds (see above). 3/4" and 1" RA valve connections are as noted.



Single Circuit Valve

Article #	Description	Cv	Package Quantity	Unit Weight	
				kg	lb
260567	Single Circuit Balancing & Shut-off Valve	0.05-0.85	1	0.50	1.10

Used to control fluid flow through a single heating circuit. Can be combined with the manifold valve actuator for RA valve (Art. 260167) for electric thermostat control (not the standard manifold valve actuator Art. 260166). Adjust spring-loaded balancing collar to set desired flow rate/Cv. Use with 3/8", 1/2", 5/8" or 3/4" RAUPEX connections for brass manifolds (see above) to connect to RAUPEX pipe.



Manifold Valve Actuator for RA Valve

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
260167	Manifold Valve Actuator for RA Valve	1	0.14	0.30

The 4-wire manifold valve actuator for RA valves is a special version for use with "RA valves". This includes balancing valves for copper manifolds in sizes 1/2", 3/4", and 1" (Art. 260176P, 260027, and 260037) and the Single Circuit Balancing and Shut-off Valve (Art. 260567). Features and specifications are the same as for the 4-wire manifold valve actuator (Art. 260166).

12.

EVERLOC® FITTINGS

EVERLOC fittings are ideal for fire protection and plumbing applications. EVERLOC fittings and sleeves create reliable connections that can be embedded directly in a thermal mass (when wrapped in chloride-free tape or RAUCROSS heat shrink tubing to help reduce corrosion caused by the surrounding environment – check local codes for compliance) or walled in. Installation is easy with EVERLOC tools.

EVERLOC Fittings are produced from solid brass stock. Elbows and tees are hot-forged for superior strength and durability, while straight fittings are machined from solid brass rod. EVERLOC Fittings and Sleeves are certified to ASTM F 2080, and meet the performance requirements of ASTM F 877, NSF 61 and CSA B 137.5.



EVERLOC Sleeves

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
243507	3/8" EVERLOC Sleeve	150	900	23	0.05
260077	1/2" EVERLOC Sleeve	150	900	23	0.05
243607	5/8" EVERLOC Sleeve	40	240	56	0.12
260577	3/4" EVERLOC Sleeve	80	480	37	0.08
260877	1" EVERLOC Sleeve	40	240	73	0.16
235507	1 1/4" EVERLOC Sleeve	25	150	118	0.26
235707	1 1/2" EVERLOC Sleeve	20	120	132	0.29
235907	2" EVERLOC Sleeve	10	60	245	0.54

Sleeves are unplated brass. Tapered end installs toward fitting.



EVERLOC Couplings

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
243517	3/8" x 3/8" EVERLOC	70	420	36	0.08
260227	1/2" x 1/2" EVERLOC	60	360	54	0.12
243627	5/8" x 5/8" EVERLOC	40	240	76	0.17
260317	3/4" x 3/4" EVERLOC	35	210	82	0.18
260427	1" x 1" EVERLOC	20	120	136	0.30
235527	1 1/4" x 1 1/4" EVERLOC	5	30	227	0.50
235727	1 1/2" x 1 1/2" EVERLOC	5	30	345	0.76
235927	2" x 2" EVERLOC	3	18	599	1.32

Order EVERLOC Sleeves separately.



EVERLOC Reducer Couplings

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
260247	3/4" x 1/2" EVERLOC	45	270	68	0.15
260447	1" x 3/4" EVERLOC	25	150	114	0.25
235517	1 1/4" x 1" EVERLOC	10	60	195	0.43
235717	1 1/2" x 1 1/4" EVERLOC	5	30	410	0.90
235737	1 1/2" x 1" EVERLOC	5	30	277	0.61
235917	2" x 1 1/2" EVERLOC	3	18	503	1.11
235937	2" x 1 1/4" EVERLOC	3	18	544	1.20
235947	2" x 1" EVERLOC	3	18	440	0.97

Order EVERLOC Sleeves separately.



EVERLOC Plugs

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
260087	1/2" EVERLOC Plug	100	600	32	0.07
260397	3/4" EVERLOC Plug	60	360	54	0.12
260497	1" EVERLOC Plug	30	180	91	0.20
235267	1 1/4" EVERLOC Plug	20	120	97	0.22

Order EVERLOC Sleeves separately.



EVERLOC Copper Adapters

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
260017	1/2" EVERLOC x 3/8" C Female (Sweat) or 1/2" C Male (Street)	65	390	41	0.09
260047	1/2" EVERLOC x 1/2" C Female (Sweat)	65	390	45	0.10
243637	5/8" EVERLOC x 1" C Male (Street) or 3/4" C Female (Sweat)	35	210	136	0.30
260807	3/4" EVERLOC x 1" C Female (Sweat)	35	210	114	0.25
260827	3/4" EVERLOC x 3/4" C Male (Street) or 1/2" C Female (Sweat)	35	210	82	0.18
260837	3/4" EVERLOC x 1" C Male (Street) or 3/4" C Female (Sweat)	25	150	118	0.26
260417	1" EVERLOC x 1" C Male (Street) or 3/4" C Female (Sweat)	25	150	136	0.30
260947	1" EVERLOC x 1 1/4" C Male (Street) or 1" C Female (Sweat)	20	120	163	0.36
235567	1 1/4" EVERLOC x 1 1/4" C Male (Street) or 1" C Female (Sweat)	5	30	222	0.49
235577	1 1/4" EVERLOC x 1 1/2" C Male (Street) or 1 1/4" C Female (Sweat)	5	30	249	0.55
235767	1 1/2" EVERLOC x 1 1/2" C Male (Street) or 1 1/4" C Female (Sweat)	5	30	322	0.71
235777	1 1/2" EVERLOC x 2" C Male (Street) or 1 1/2" C Female (Sweat)	5	30	508	1.12
235967	2" EVERLOC x 2" C Male (Street) or 1 1/2" C Female (Sweat)	5	30	644	1.42
235977	2" EVERLOC x 2 1/2" C Male (Street) or 2" C Female (Sweat)	3	18	797	1.76

Copper adapters connect RAUPEX pipe to copper pipe in sizes indicated. Many of these copper adapters can be used as male (street) or female (sweat) fittings. Make solder connection before connecting to RAUPEX pipe. Order EVERLOC Sleeves separately.



EVERLOC Dual MPT/Copper Adapters

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
243537	3/8" EVERLOC x 1/2" MPT or 1/2" C Female (Sweat)	50	300	59	0.13
260237	1/2" EVERLOC x 1/2" MPT or 1/2" C Female (Sweat)	65	390	68	0.15
243647	5/8" EVERLOC x 1/2" MPT or 1/2" C Female (Sweat)	35	210	91	0.20
260327	3/4" EVERLOC x 3/4" MPT or 1/2" C Female (Sweat)	30	150	122	0.27
260597	3/4" EVERLOC x 1" MPT or 3/4" C Female (Sweat)	20	120	109	0.24
260437	1" EVERLOC x 1" MPT or 3/4" C Female (Sweat)	20	120	191	0.42
235557	1 1/4" EVERLOC x 1 1/4" MPT or 1" C Female (Sweat)	5	30	331	0.73
235757	1 1/2" EVERLOC x 1 1/2" MPT or 1 1/4" C Female (Sweat)	5	30	503	1.11
235957	2" EVERLOC x 2" MPT or 1 1/2" C Female (Sweat)	3	18	889	1.96

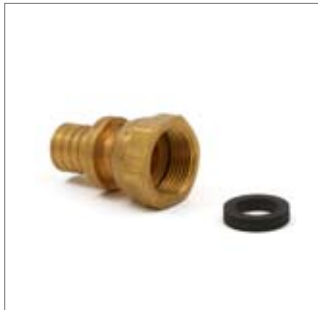
Dual adapters connect RAUPEX pipe to either female threaded fittings (first size) or copper pipe (second size) in sizes indicated. Make threaded or solder connections before connecting to RAUPEX pipe. Order EVERLOC Sleeves separately.



EVERLOC FPT Adapters

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
260287	1/2" EVERLOC x 1/2" FPT	35	210	77	0.17
260387	3/4" EVERLOC x 3/4" FPT	25	150	132	0.29
260487	1" EVERLOC x 1" FPT	10	60	231	0.51

FPT adapters connect RAUPEX pipe to male threaded fittings in sizes indicated. Make threaded connection before connection to RAUPEX pipe. Order EVERLOC Sleeves separately.



EVERLOC Swivel Adapters

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
260097	1/2" EVERLOC x 1/2" NPS Female Swivel	50	300	73	0.16
260587	3/4" EVERLOC x 3/4" NPS Female Swivel	30	180	114	0.25

Swivel adapters connect RAUPEX pipe to connections with male threaded ends. The captured swivel nut turns freely to make convenient connections. This allows the EVERLOC connection to be made in an open space before attaching the fitting to a mating part in a more confined location. Fitting is supplied with a flat gasket for the internal seal. Swivel adapters use parallel threads, not tapered threads. Do not use pipe dope or thread sealant - the flat gasket makes the seal. Swivel adapters cannot be walled in. Order EVERLOC Sleeves separately.



EVERLOC Straight Tees

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
260607	1/2" x 1/2" x 1/2" EVERLOC Tee	25	150	114	0.25
260617	3/4" x 3/4" x 3/4" EVERLOC Tee	15	90	191	0.42
260977	1" x 1" x 1" EVERLOC Tee	8	48	349	0.77
235607	1 1/4" x 1 1/4" x 1 1/4" EVERLOC Tee	5	30	508	1.12
235807	1 1/2" x 1 1/2" x 1 1/2" EVERLOC Tee	2	12	875	1.93
236007	2" x 2" x 2" EVERLOC	1	6	1247	2.75

Order EVERLOC Sleeves separately.



EVERLOC Run Reducing Tees

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
260647	3/4" x 1/2" x 3/4" EVERLOC Tee	15	90	172	0.38
260687	1" x 3/4" x 1" EVERLOC Tee	10	60	322	0.71
235637	1 1/4" x 1" x 1 1/4" EVERLOC	5	30	381	0.84
235837	1 1/2" x 1 1/4" x 1 1/2" EVERLOC Tee	2	12	650	1.43
235847	1 1/2" x 1" x 1 1/2" EVERLOC Tee	2	12	599	1.32
236047	2" x 1 1/2" x 2" EVERLOC Tee	1	6	850	1.87
236057	2" x 1 1/4" x 2" EVERLOC Tee	1	6	800	1.76

Order EVERLOC Sleeves separately.



EVERLOC Branch Reducing Tees

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
260627	3/4" x 3/4" x 1/2" EVERLOC Tee	20	120	159	0.35
260707	1" x 1" x 3/4" EVERLOC Tee	10	60	295	0.65
260727	1" x 1" x 1/2" EVERLOC Tee	10	60	254	0.56
235617	1 1/4" x 1 1/4" x 1" EVERLOC Tee	5	30	454	1.00
235817	1 1/2" x 1 1/2" x 1 1/4" EVERLOC Tee	2	12	650	1.43
235827	1 1/2" x 1 1/2" x 1" EVERLOC Tee	2	12	694	1.53
236017	2" x 2" x 1 1/2" EVERLOC Tee	1	6	850	1.87
236027	2" x 2" x 1 1/4" EVERLOC Tee	1	6	800	1.76
236037	2" x 2" x 1" EVERLOC Tee	1	6	1080	2.38

Order EVERLOC Sleeves separately.



EVERLOC Run and Branch Reducing Tees

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
260637	3/4" x 1/2" x 1/2" EVERLOC Tee	20	120	141	0.31
260697	1" x 3/4" x 3/4" EVERLOC Tee	10	60	254	0.56
235657	1 1/4" x 1" x 1" EVERLOC Tee	5	30	422	0.93
235857	1 1/2" x 1 1/4" x 1 1/4" EVERLOC Tee	2	12	685	1.51
235867	1 1/2" x 1 1/4" x 1" EVERLOC Tee	2	12	500	1.10
235877	1 1/2" x 1" x 1" EVERLOC Tee	2	12	590	1.30
236067	2" x 1 1/2" x 1 1/2" EVERLOC Tee	1	6	1161	2.56
236077	2" x 1 1/2" x 1 1/4" EVERLOC Tee	1	6	700	1.54
236087	2" x 1 1/2" x 1" EVERLOC Tee	1	6	957	2.11
236097	2" x 1 1/4" x 1 1/4" EVERLOC Tee	1	6	993	2.19

Order EVERLOC Sleeves separately.



EVERLOC "Bullhead" Tees

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
260857	1/2" x 1/2" x 3/4" EVERLOC Tee	20	120	145	0.32
260897	3/4" x 3/4" x 1" EVERLOC Tee	10	60	240	0.53

Order EVERLOC Sleeves separately.



90° Elbows - EVERLOC to EVERLOC

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
260657	1/2" x 1/2" EVERLOC Elbow	40	240	77	0.17
260677	3/4" x 3/4" EVERLOC Elbow	25	150	132	0.29
260717	1" x 1" EVERLOC Elbow	10	60	254	0.56
235597	1 1/4" x 1 1/4" EVERLOC Elbow	8	48	372	0.82
235797	1 1/2" x 1 1/2" EVERLOC Elbow	2	12	667	1.47
235997	2" x 2" EVERLOC Elbow	2	12	1080	2.38

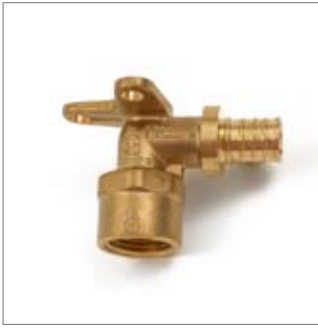
In some situations, a 90° bend may be formed without an elbow (refer to REHAU's heating and plumbing technical manuals); see support bends and PVC bend guides under installation accessories in this catalog. Order EVERLOC Sleeves separately.



90° Elbows - EVERLOC Dual MPT/Copper

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
260737	1/2" EVERLOC x 1/2" MPT or 1/2" C Female (Sweat) Drop Ear Elbow	25	150	118	0.26
260747	3/4" EVERLOC x 3/4" MPT or 1/2" C Female (Sweat) Elbow	15	90	172	0.38

Dual adapters connect RAUPEX pipe to either female threaded fittings (first size) or copper pipe (second size) in the sizes indicated. Art. 260737 has three drop ears with 0.275" diameter holes for increased stability. Art. 260747 does not have drop ears. Make threaded or solder connection before connecting to RAUPEX pipe. Order EVERLOC Sleeves separately.



90° Elbows - EVERLOC to FTP, Drop Ear

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
260667	1/2" EVERLOC x 1/2" FPT Drop Ear Elbow	20	120	132	0.29

Art. 260667 has three drop ears with 0.275" diameter holes for increased stability. Make threaded connection before connecting to RAUPEX pipe. Order EVERLOC Sleeves separately.



90° Elbows - EVERLOC to Copper

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
260537	1/2" EVERLOC x 1/2" C Male (Street) or 3/8" C Female (Sweat) Elbow	50	300	59	0.13
260557	1/2" EVERLOC x 3/4" C Female (Sweat) Elbow	35	210	86	0.19
260757	1/2" EVERLOC x 3/4" C Male (Street) or 1/2" C Female (Sweat) Elbow	25	150	104	0.23
243687	5/8" EVERLOC x 1" C Male (Street) or 3/4" C Female (Sweat) Elbow	20	120	150	0.34
243697	5/8" EVERLOC x 3/4" C Male (Street) or 1/2" C Female (sweat) Elbow	20	120	114	0.25
260767	3/4" EVERLOC x 1" C Male (Street) or 3/4" C Female (Sweat) Elbow	20	120	163	0.36
260817	3/4" EVERLOC x 3/4" C Male (Street) or 1/2" C Female (Sweat) Elbow	25	150	127	0.28

Copper adapters connect RAUPEX pipe to copper pipe in sizes indicated. Make solder connection before connecting to RAUPEX pipe. Order EVERLOC Sleeves separately.

13.

RAUPEX® COMPRESSION NUT FITTINGS

REHAU split-ring compression nut brass fittings are machined from solid brass stock. Integral fitting/insert design provides positive clamping and sealing action with split compression ring. Follow all published installation instructions.



Dual MPT/Copper Adapters

Article #	Description	Package Quantity			Unit Weight	
		Bag	Box	Carton	gm	lb
267517	3/8" RAUPEX x 1/2" MPT or 1/2" C Female (Sweat)	5	35	210	130	0.29
260987	1/2" RAUPEX x 1/2" MPT or 1/2" C Female (Sweat)	5	25	150	136	0.30
267567	5/8" RAUPEX x 1/2" MPT or 1/2" C Female (Sweat)	5	25	150	160	0.34
260357	3/4" RAUPEX x 3/4" MPT or 1/2" C Female (Sweat)	1	15	90	229	0.50
260477	1" RAUPEX x 1" MPT or 3/4" C Female (Sweat)	1	10	60	305	0.67

Dual adapter fittings connect RAUPEX pipe to threaded fitting (first size) or copper pipe (second size) in sizes indicated. Make solder or threaded connection before connecting to RAUPEX pipe.



Copper Adapters

Article #	Description	Package Quantity			Unit Weight	
		Bag	Box	Carton	gm	lb
260997	1/2" RAUPEX x 1/2" C Female (Sweat)	5	30	180	108	0.24
260347	3/4" RAUPEX x 3/4" C Female (Sweat)	1	20	120	166	0.37
260467	1" RAUPEX x 1" C Female (Sweat)	1	10	60	274	0.60

Copper adapter fittings connect RAUPEX pipe to copper pipe in sizes indicated. Make solder connection before connecting to RAUPEX pipe.

14.

EVERLOC® BALL VALVES

REHAU's EVERLOC valves provide the same reliable connections as our other EVERLOC fittings. Easy installation with EVERLOC tools (see installation tools). These ball valves complete your heating installation. Solder valves in open position.



Straight Ball Valves, EVERLOC to Copper

Article #	Description	Cv	Package Quantity		Unit Weight	
			Box	Carton	gm	lb
261946	1/2" EVERLOC x 1/2" C Female (Sweat) Valve	3.0	24	144	150	0.33
243667	5/8" EVERLOC x 3/4" C Female (Sweat) Valve	6.2	18	108	320	0.70
261376	3/4" EVERLOC x 3/4" C Female (Sweat) Valve	6.2	18	108	190	0.43

Make solder connection before connecting to RAUPEX pipe. Order EVERLOC Sleeves separately.



Straight Ball Valves, EVERLOC to EVERLOC

Article #	Description	Cv	Package Quantity		Unit Weight	
			Box	Carton	gm	lb
261906	1/2" x 1/2" EVERLOC Valve	3.0	24	144	190	0.42
261956	3/4" x 3/4" EVERLOC Valve	6.2	12	72	230	0.51

Order EVERLOC Sleeves separately.



Balancing Ball Valves, EVERLOC to Copper

Article #	Description	Cv	Package Quantity		Unit Weight	
			Box	Carton	gm	lb
260797	1/2" EVERLOC x 1/2" C Female (Sweat) Balancing Valve	0-3.0	12	72	270	0.60
266447	3/4" EVERLOC x 3/4" C Female (Sweat) Balancing Valve	0-6.2	6	36	350	0.78

Balancing Ball Valves combine a balancing screw with a ball valve in one unit. To balance flow, use a 1/8" hex key to adjust flow from 0% to 100%. 10 turns open is 100% flow (Cv as shown above), 5 turns open is 50% flow, and 1 turn open is 10% flow. (Cv value indicates flow in GPM at 1 psi loss.) Integral ball valve allows quick, positive shut off. Make solder connection before connecting to RAUPEX pipe. Order EVERLOC Sleeves separately.

15.

COMPRESSION NUT BALL VALVES



Straight Ball Valves, Compression Nut to Copper

Article #	Description	Cv	Package Quantity		Unit Weight	
			Box	Carton	gm	lb
267527	3/8" RAUPEX x 1/2" C Female (Sweat) Valve	3.0	12	72	230	0.51
260277	1/2" RAUPEX x 1/2" C Female (Sweat) Valve	3.0	12	72	230	0.51
267587	5/8" RAUPEX x 1/2" C Female (Sweat) Valve	3.0	12	72	220	0.49
260367	3/4" RAUPEX x 3/4" C Female (Sweat) Valve	6.2	6	36	340	0.75

Make solder connection before connecting to RAUPEX pipe. Order EVERLOC Sleeves separately.



Straight Ball Valve, Compression Nut to MPT

Article #	Description	Cv	Package Quantity		Unit Weight	
			Box	Carton	gm	lb
260377	3/4" RAUPEX x 3/4" MPT Valve	6.2	6	36	350	0.77

Make threaded connection before connecting to RAUPEX pipe.



Balancing Ball Valves, Compression Nut to Copper

Article #	Description	Cv	Package Quantity		Unit Weight	
			Box	Carton	gm	lb
267537	3/8" RAUPEX x 1/2" C Female (Sweat) Balancing Valve	0 - 3.0	12	72	350	0.78
260847	1/2" RAUPEX x 1/2" C Female (Sweat) Balancing Valve	0 - 3.0	12	72	350	0.78
267597	5/8" RAUPEX x 1/2" C Female (Sweat) Balancing Valve	0 - 3.0	6	36	350	0.78
260297	3/4" RAUPEX x 3/4" C Female (Sweat) Balancing Valve	0 - 6.0	6	36	500	1.10

Balancing Ball Valves combine a balancing screw with a ball valve in one unit. To balance flow, use a 1/8" hex key to adjust flow from 0% to 100%. 10 turns open is 100% flow (Cv as shown above), 5 turns open is 50% flow, and 1 turn open is 10% flow. (Cv value indicates flow at 1 psi loss.) Integral ball valve allows quick, positive shut off. Make solder connection before connecting to RAUPEX pipe.

16.

INSTALLATION ACCESSORIES

REHAU's installation accessories are designed to save time and enhance craftsmanship.



Steel Support Bends

Article #	Description	Package Quantity		Unit Weight	
		Box	Carton	gm	lb
258408	3/8" and 1/2" Steel Support Bend	10	50	50	0.10
258798	5/8" Steel Support Bend	10	50	90	0.19
257249	3/4" Steel Support Bend	10	50	150	0.32
261153	1" Steel Support Bend	5	50	380	0.84

Create 90° bends without fitting an elbow. 3/8", 1/2", 5/8" and 3/4" steel support bends create a 90° bend by quickly snapping over RAUPEX pipe. 1" steel support bends (not shown) slide onto pipe.



Polymer Support Bends with Screw Hole

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
266207	3/8" and 1/2" Polymer Support Bend	50	40	0.08
266217	5/8" Polymer Support Bend	50	70	0.16
266227	3/4" Polymer Support Bend	50	70	0.16
266237	1" Polymer Support Bend	50	100	0.22
266727	1 1/4" Polymer Support Bend	50	200	0.44

These reinforced polymer bend supports create 90° bends without an elbow, quickly snapping over RAUPEX pipe. 'Ear' on the inside of the bend has a screw hole for secure mounting to a support or stud.



Galvanized Support Channel

Article #	Description	Length		Package Quantity	Unit Weight	
		m	ft		kg	lb
225547-001	1 1/4" Steel Support Channel	5.942	19.49	10	3.91	8.60
225557-001	1 1/2" Steel Support Channel	5.926	19.45	6	5.59	12.30
225567-001	2" Steel Support Channel	5.896	19.33	6	6.95	15.29

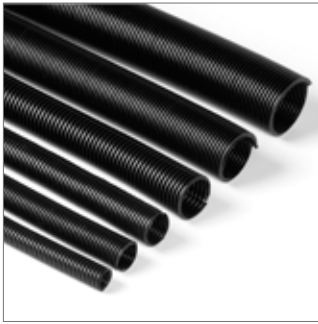
When the RAUPEX pipe is snapped into the Steel Support Channel, the result is a rigid pipe matrix that can be supported in overhead applications.



PVC Bend Guides

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
266170	3/8" and 1/2" PVC Bend Guide	40	40	0.09
266175	5/8" and 3/4" PVC Bend Guide	30	50	0.11
266180	1" PVC Bend Guide	20	270	0.60

Create 90° bends without fitting an elbow by inserting RAUPEX pipe into these rigid plastic PVC Bend Guides. PVC Bend Guides provide protection at slab penetrations and create professional appearance at manifolds.



PE Protection Sleeve

Article #	Description	Hole Size*	Package Quantity	Unit Weight	
				kg	lb
236107	Protection Sleeve for 3/8" and 1/2" Pipe	1"	100 ft (30.4 m)	2.6	5.7
236117	Protection Sleeve for 5/8" and 3/4" Pipe	1 1/4"	50 ft (15.2 m)	3.1	6.7
236127	Protection Sleeve for 1" Pipe	1 1/2"	50 ft (15.2 m)	1.7	3.6
236137	Protection Sleeve for 1 1/4" Pipe	2"	150 ft (45.7 m)	4.2	9.2
236147	Protection Sleeve for 1 1/2" Pipe	2 1/2"	100 ft (30.4 m)	7.8	17.2
236157	Protection Sleeve for 2" Pipe	3"	100 ft (30.4 m)	8.7	19.2

Protects RAUPEX pipe at slab and wall penetrations, expansion and construction joints, abrasive surfaces, and ultraviolet light (sunlight). Use in joist space heating or other hydronic applications to prevent RAUPEX pipe from rubbing directly against wooden members. Most sizes are slit for easier installation.

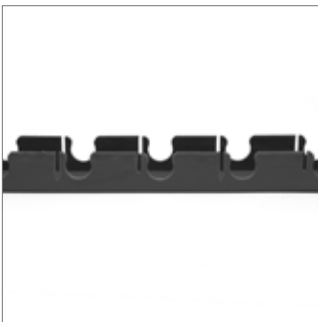
*This is the recommended hole size to be drilled for proper installation.



REHAU RAUCROSS™ Heat Shrink

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
253615	3/8", 1/2", 5/8", and 3/4" Heat Shrink - 3.3 ft (1 m)	5 m	82	0.18
253625	3/4" and 1" Heat Shrink - 3.3 ft (1 m)	5 m	122	0.27

REHAU's own heat shrink tubing is ideal for sealing around EVERLOC brass fittings installed in corrosive environments or buried in a thermal mass. Sized to seal tightly around fittings, RAUCROSS will shrink quickly with heat from a hot air gun. Follow enclosed installation instructions.



RAILFIX

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
259238-2M	1/2" RAILFIX - 6.5 ft (2 m)	16 pieces	480	1.06
266247	5/8" RAILFIX - 6.5 ft (2 m)	16 pieces	510	1.12
266257	3/4" RAILFIX - 6.5 ft (2 m)	16 pieces	620	1.36

For the most rapid installation of RAUPEX pipe in a thermal mass or in a sand bed. Reduces installation time for more economical pipe installation. Fabricated of durable polymer material and pre-drilled for fastening with Plastic Holding Pins (Art. 259268) or steel screws (not included). Pipe holders are spaced at 2" (5 cm) on-center.



Fixing Rail 3/8" - 3/4"

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
266407	Fixing Rail for 3/8", 1/2", 5/8" and 3/4" RAUPEX - 3.3 ft (1 m)	10 pieces	230	0.51

For rapid installation of RAUPEX pipe in four sizes indicated above. Fixing rail is molded with alternating small/large RAUPEX tabs that securely hold the pipe in place: the small tabs hold 3/8" and 1/2" RAUPEX pipes, while the large tabs hold 5/8" and 3/4" RAUPEX pipes. Alternating tabs are spaced at 4" (10 cm) for installed pipe spacing of 4", 8" or 12" (10 cm, 20 cm or 30 cm) on-center. Pieces are 3.3 ft (1 m) long. Flat bottom and pre-drilled holes allow for mounting directly onto insulation with Plastic Holding Pins (Art. 259268), or onto concrete or wood floors with steel screws (not included). Clips at the end of each piece allow pieces to be snapped together to make longer lengths.



Plastic Holding Pin

Article #	Description	Package Quantity		Unit Weight	
		Bag	Box	gm	lb
259268	Plastic Holding Pin	500	5000	1.46	0.003

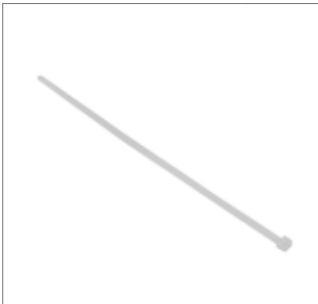
Plastic holding pins are used to secure RAILFIX and Fixing Rail (Art. 266407) to rigid insulation.



Insulation Screw Clips

Article #	Description	Package Quantity	Unit Weight	
		Quantity	gm	lb
260836	Insulation Screw Clips	1000	6	0.01

Insulation Screw Clips secure RAUPEX pipe to rigid insulation such as extruded polystyrene or polyurethane. Not recommended for use with expanded polystyrene foam insulation. Can be used with 1/2", 5/8" and 3/4" RAUPEX pipe. Can be installed with Screw Clip Ratchet Tool (Art. 260886).



Nylon Pipe Ties

Article #	Description	Package Quantity		Unit Weight	
		Bag	Box	gm	lb
724448	Nylon Pipe Ties	1000	5000	1.43	0.003

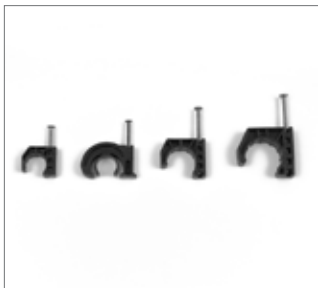
Non-abrasive nylon pipe ties safely secure pipe directly to slab reinforcing bars or wire mesh. Ties are 8" long and rated at 50 lbs tensile strength.



Locking Clips

Article #	Description	Package Quantity	Unit Weight	
		Quantity	gm	lb
261496	3/8" Locking Clips	100	4	0.01
261556	1/2" Locking Clips	100	5	0.01
261506	5/8" Locking Clips	100	6	0.01
261516	3/4" Locking Clips	100	8	0.02
261566	1" Locking Clips	50	11	0.03
261576	1 1/4" Locking Clips	50	14	0.03
261586	1 1/2" Locking Clips	25	21	0.05
261596	2" Locking Clips	25	30	0.07

Smaller clips (3/8" to 1") allow for rapid installation of RAUPEX pipe. Larger clips (1" to 2") are for use with RAUPEX pipe or copper manifolds. Locking clips attach to surface with a screw or nail (not included). RAUPEX pipe or manifold snaps in place when pushed into clip, and can be removed without damaging clip.



Talon Drive Hooks

Article #	Description	Package Quantity		Unit Weight	
		Bag	Box	gm	lb
260866	Twin Talon Drive Hooks	100	1000	6	0.01
260846	Low Profile 3/8" Talons	100	1000	4	0.01
261766	Low Profile 1/2" Talons	100	5000	4	0.01
261776	Low Profile 5/8" and 3/4" Talons	50	1000	6	0.01
261806	Low Profile 1" Talons	50	500	10	0.02

Twin talon drive hooks safely secure 3/8", 1/2", 5/8" or 3/4" pipe to wood subfloors, joists or in joist cavities. Low profile talons secure pipe in sizes indicated and are ideal for use with wooden "sleeper" RFH installations. Pre-installed barbed nails prevent backout.



Single Nail Clamps

Article #	Description	Package Quantity		Unit Weight	
		Bag	Box	gm	lb
261746	Single Nail Clamp for 3/8" and 1/2" Pipe	100	1500	4	0.01
261756	Single Nail Clamp for 3/4" Pipe	100	1000	5	0.01

Completely encircles pipe. Pre-installed barbed nail prevents backout. Fast and easy to use.



Plastic Pipe Clamps

Article #	Description	Package Quantity		Unit Weight	
		Bag	Box	gm	lb
282401	1 1/4" Plastic Pipe Clamp	50	800	16	0.04
282411	1 1/2" Plastic Pipe Clamp	25	600	20	0.05
282421	2" Plastic Pipe Clamp	25	300	32	0.07

Secures RAUPEX pipe to both wood and metal framework. Used in residential & commercial construction.



Isolating Suspension Clamps

Article #	Description	Package Quantity		Unit Weight	
		Bag	Box	gm	lb
282431	1 1/4" Isolating Suspension Clamp	50	800	15	0.03
282441	1 1/2" Isolating Suspension Clamp	25	600	28	0.04
282451	2" Isolating Suspension Clamp	25	300	23	0.05

Secures RAUPEX pipe to both wood and metal framework. Used in residential & commercial construction.



Heat Transfer Plates, Heavy Gauge

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
235962	Heat Transfer Plate, Heavy Gauge for 3/8" RAUPEX	20 pcs/carton 1200 per skid	495	1.09
235972	Heat Transfer Plate, Heavy Gauge for 1/2" RAUPEX	20 pcs/carton 1200 per skid	509	1.120

These heavy-duty extruded aluminum heat transfer plates are used in joist space installations to maximize heat transfer and improve efficiency. The unique design allows the heat transfer plates to be screwed into the joist space and RAUPEX pipe to snap into the plates for convenient installation. Plates are 3.5" (8.9cm) wide by 48" (121.9 cm) long.



Heat Transfer Plates, Light Gauge

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
270700	Heat Transfer Plate, Light Gauge for 3/8" RAUPEX	100	110	0.25
270701	Heat Transfer Plate, Light Gauge for 1/2" RAUPEX	100	110	0.25

Aluminum heat transfer plates are used in joist space installations to enhance heat transfer and improve efficiency. RAUPEX pipes snap into plates for convenient installation. Plates are 5" wide (12.7 cm) by 24" (61 cm) long, with roll-formed edges to increase rigidity and safety.

17.

INSTALLATION TOOLS



Screw Clip Tool

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
260886	Screw Clip Ratchet Tool	1	0.91	2.0

Screw Clip Ratchet Tool quickly attaches Insulation Screw Clips (Art. 260836) from a standing position.



RAUTACKER

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
266177	RAUTACKER Stapler Tool	1	2.70	6.00
266187	RAUTACK Foam Staple (1 1/2" long)	300	0.0012	0.003
266197	RAUTACK Foam Staple (2 1/4" long)	300	0.0015	0.003

For use with RAUPEX pipe to install on rigid foam board insulation (extruded polystyrene is recommended). The 1 1/2" staple is for use with minimum 1" (25 mm) thick insulation. The 2 1/4" staple is for use with minimum 1 1/2" (38 mm) thick insulation. RAUTACK foam staples work with 3/8", 1/2", 5/8" and 3/4" RAUPEX pipes installed in RFH and SIM applications. Staples are strong enough so that typically only one staple is required every three feet (90 cm) on straight runs of pipe, with one staple in the middle of bends.

The RAUTACK foam staple is installed from a standing position using a custom installation tool, the RAUTACKER. This lightweight tool can be loaded with 120 staples at a time, minimizing time to reload.



Hand Power (HP) Stapler

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
266287	Hand Power (HP) Stapler Tool	1	2.5	5.5
266297	Hand Power (HP) Plastic Staple	500	2.2	4.8

For use with RAUPEX pipe to install on wooden subfloor systems. The lightweight HP Stapler Tool installs special plastic staples with integral steel nail, without the use of air power or electricity. Strong HP Plastic Staples work with 3/8", 1/2" and 5/8" RAUPEX pipe installed in RFH applications. HP Plastic Staples are installed from a standing position by pushing quickly on the handle of the HP Stapler Tool. The tool can be loaded with 80 staples at a time minimizing the time required to reload. T-handle reduces effort and increases stability.



Pneumatic Stapler

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
261016	Pneumatic Stapler	1	5.0	11.0
261016-STP	1 1/4" Staples for use with Pneumatic Stapler	10,000	3.2	7.0

This professional quality air tool quickly and securely fastens RAUPEX pipe to a wooden subfloor. For use with 3/8", 1/2" and 5/8" RAUPEX pipe, it comes complete with pogo stick extension arm so it can be used from a standing position. Special design prevents firing until tool head is securely around pipe. Use only the Senco Staples (Art. 261016-STP, P15BAB) listed above or equal; 1" crown, 1 1/4" leg, 16 gauge chisel point. Follow all included safety warnings for safe use.



Staple Clip Gun

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
266117	Staple Clip Gun	1	0.58	1.30
266127	3/8" Flush Mount Staple Clips	100	0.03	0.06
266137	1/2" Flush Mount Staple Clips	100	0.03	0.06
266147	5/8" Flush Mount Staple Clips	100	0.03	0.06
266157	3/4" Flush Mount Staple Clips	100	0.03	0.06

For fast installation of RAUPEX pipe onto a wood surface. Hand-powered staple clip gun shoots plastic clips with steel staple inserts. Clips hold the pipe away from the surface. All sizes of clips are installed with the same gun. Follow all included safety warnings for safe use.



Pressure Tester

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
257334	Air Pressure Tester	1	0.5	1.0

Air Pressure Tester threads into the 1" isolation valve on a PRO-BALANCE or brass HLV manifold, and connects to an air hose (Schrader valve included). Tester includes a pressure gauge that reads from 0-200 psi. Follow all published pressure testing instructions for RAUPEX piping systems.



RAUPEX Uncoiler

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
282191	RAUPEX Uncoiler	1	40.8	90.0

Uncoiler dispenses RAUPEX pipe without twists or kinks. Greatly reduces installation labor needs. Pneumatic tires allow easy transportation over rough terrain. Pipe can be drawn off either vertically (as shown) or horizontally. Capable of holding up to 1,000 feet of 3/4" PEX. Less than 30" wide to get through doorways. Removable spool allows for convenient transportation to job sites.

18.

THERMOSTATS AND ACCESSORIES



Dual Sensing Dial Thermostat

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
236477-001	Dial Thermostat	1	84	0.185
236497-001	10K Floor Sensor	1	58	0.127

The display on this 3-wire thermostat is a simple easy-to-use dial with a red LED that is lit when there is a call for heat. With the optional floor sensor, this thermostat can regulate either the floor or the room temperature or both in which case the floor sensor is used as a temperature limiter, either high or low limit. This thermostat also comes with both °F and °C dials.



This thermostat has a 4x DIP switch which allows for limited programming and system configuration. This includes setting high & low floor temperature limits and allowing the thermostat to operate as a simple on/off switch or with PWM anticipation logic.

This thermostat can directly control up to 4 manifold valve actuators (Art. 260166), either independently or when used with REHAU electronic controls. The thermostat may also be used to control relays and other low voltage controls. This thermostat uses silent operation electronic triac output. 18 AWG or similar wire is recommended for all 24VAC wiring.

Notes:

- Floor / slab sensor requires 2 additional wires.
- Daily programming is not offered on this thermostat.



Dual Sensing Digital Programmable Thermostat

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
236487-001	Digital Thermostat	1	97	0.213
236497-001	10K Floor Sensor	1	58	0.127

This 3-wire thermostat offers system set-up capabilities with simple, easy-to-use menus. There is a reduced operating mode which may be used for nighttime and vacation periods. With the optional floor sensor, this thermostat can regulate either the floor or the room temperature or both in which case the floor sensor is used as a temperature limiter, either high or low limit. Additional features include pump exercise, °F or °C capabilities, and Air / Floor Priority.



This thermostat can directly control up to 4 manifold valve actuators (Art. 260166), either independently or when used with REHAU electronic controls. Thermostat may also be used to control relays and other low voltage controls. This thermostat uses silent operation electronic triac output. 18 AWG or similar wire is recommended for all 24VAC wiring.

Notes:

- Floor / slab sensor requires 2 additional wires.
- Daily programming is not offered on this thermostat



Programmable Digital Thermostats

Article #	Description	Package Quantity	Unit Weight	
			gm	lb
236457	PD 1 Heat-Only Thermostat	1	210	0.46
236467	PD 2 Heat/Cool or Two-Stage Heat Thermostat	1	250	0.54

Attractive and sleek 4-wire 24V electronic thermostats selected for styling and intended to be used together for a consistent esthetic look when the PD 2 is required.

236457 is a programmable digital thermostat intended for one-stage heating applications.

236467 is a programmable digital thermostat intended for either two-stage heating or one-stage heat/cool with auto-changeover applications. These thermostats can be wired to control a relay, manifold valve actuator or other REHAU electronic controls.

In addition to the built-in air sensor, a floor sensor (Art. 236397) can be added for floor warming applications or to help limit (maximum and/or minimum) the floor temperature. This is ideal in tiled areas such as bathrooms, or to protect solid hardwood floors from overheating. (Example: Minimum sub-floor temperature of 75°F for a tile floor; maximum sub-floor temperature of 85°F for a solid hardwood floor.) With the floor sensor, each thermostat can control the ambient air temperature, the floor temperature, or both. Floor sensor sold separately.

These thermostats allow for up to two external sensors, which could include the floor sensor. Auxiliary Universal Sensors (Art. 236217) can also be used to measure air temperature in additional locations to get an average temperature for large areas, or an auxiliary outdoor temperature sensor (Art. 236207) can be used to display the outdoor and/or a remote temperature.

4-wire conductor cable should be run to each thermostat. 18 AWG or similar wire is recommended for all 24VAC wiring. Sensor wiring should be run separately.

Note: Floor / slab sensor requires additional 2 wires.

Programming Features:

- Programmable for 7-day or 24-hour schedules
- Programmable for 2 to 4 temperatures per day
- 3-hour temporary override feature
- "Away" override for periods of extended absence
- Programs do not need to be reset after power outages

Specifications:

Power supply:	24V +/-10%, 60Hz, 3VA
Relays:	24VAC, 2A relay outputs
Inputs:	Two auxiliary sensor inputs (optional)
Ambient conditions:	Indoor use only, 32°F to 122°F (0°C to 50°C)
Enclosure:	White PVC plastic
Dimensions:	2 7/8" H x 2 7/8" W x 13/16" D (7.3 x 7.3 x 2.1 cm)



Accessories for Digital Thermostats

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
236387	Mounting Adapter Plate for PD1/PD2	1	0.06	0.13
236397	Floor Sensor for PD1/PD2 Thermostat	1	0.04	0.08

The Mounting Adapter Plate (Art. 236387) allows for installation of PD1/PD2 programmable digital thermostats onto a standard 2"x 4" electrical box. The Mounting Adapter Plate can be mounted vertically or horizontally and is designed to allow wiring to feed through in any position. Surface painted (white) screws for mounting to the 2"x 4" electrical box and screws to mount the thermostat to the mounting adapter plate are included.

The Floor Sensor (Art. 236397) can be used with PD1/PD2 programmable digital thermostats for floor warming applications and/or to help limit (maximum and/or minimum) floor temperatures. Sensor is completely encased in a protective jacket and can be encased in concrete (it is recommended to slide sensor through a short protective conduit where the wires enter / exit the concrete or gypsum cement). Sensor comes with 10 ft (3 m) of 2-conductor wire.

19.

ELECTRONIC CONTROLS



Speedzone Pump Control Module

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
243047	Deluxe Speedzone 4-Zone Pump Module	1	0.45	1.0
243057	Speedzone Extension Cable - 12 inch	1	0.05	0.1

Provides a convenient low-voltage wiring junction box for thermostats and manifold valve actuators, typically right at the PRO-BALANCE manifold. Easy to use flip lever wiring terminal connectors. Requires a 24VAC supply. Controls up to four "zones" (thermostats), with up to eight actuators (maximum two per zone). Each zone has a terminal for the actuator end switch wires, as provided on REHAU manifold valve actuators, which can be used (via relay) to operate circulator pumps, boiler, etc. For more than four zones (thermostats), additional Speedzone modules can be connected using the extension cable, so that the activation of any thermostat will activate all end switches.

Features and specifications:

- LED indicator lights for power and actuation
- Neutral priority
- Screwless, "flip lever" type terminal blocks for thermostat, actuator and power supply
- Painted, stainless steel case
- Overall dimensions approximately 3" H x 6" W x 1 1/2" D (7.6 x 15.0 x 3.2 cm)
- Power supply: 24VAC (not provided)
- Power draw: 1.2VA nominal



ZoneMaster Pump Control Modules

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
243067	ZoneMaster 4-Zone Pump Control Module	1	1.4	3.0
243077	ZoneMaster 6-Zone Pump Control Module	1	1.8	4.0

These modules provide a convenient wiring panel for thermostats and manifold valve actuators and are ideal for use in a multi-zone RFH system. For use with REHAU thermostats (Art. 236407, 236457, 236467) and manifold valve actuator (Art. 260166). Modules control up to four or six zones and can be connected for unlimited zone expansion. Each module has pre-wired terminals to control a circulator pump and an isolated end switch for boiler control. The 4-zone module is equipped with a 40VA replaceable transformer and the 6-zone module is equipped with a 75VA replaceable transformer.

Features and specifications:

- LED indicator lights for power and actuation
- Field-selectable priority for domestic hot water
- Screwless, push-button type terminal blocks for thermostat, actuator and power supply
- Painted, stainless steel case
- Built-in transformers (Art. 243067 - 40VA; Art. 243077 75 VA)
- Works with 2, 3, or 4-wire actuators and zone valves
- Circulator end-switch rating of 8 Amps
- 1 SPDT priority zone relay switch
- Field-replaceable fuse protection
- Overall dimensions approximately 6" H x 10" W x 3" D (15.0 cm x 25.0 cm x 7.6 cm)
- R & C (common) 24VAC transformer terminals
- Power supply: 120VAC



Deluxe Zone Valve Control – Wiring Junction Box with Transformer and Priority

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
281711-001	ZVC-404-EXP	1	0.45	1.0

Fully fuse protected and with two 40VA transformers, this junction box is feature rich with a priority switch for 4 zones, two end switches for pumps or boiler operations, a master / slave switch for the ganging together of multiple boxes for up to 20 zones. An extra set of dry contacts are also included. Two power port terminals are available and can receive plug-in cards, which can add additional features, such as post purge, priority protection and universal timer/pump exercise. Power Port cards are available through TACO®.

Features and specifications:

- External LED indicator lights for power, thermostat and actuator
- Switchable priority
- Simplified wiring
- Add-On power controls
- Works with 2, 3 or 4-wire zone valves
- Fuse protected
- 100% factory tested
- Isolated end switch
- Extra set of dry contacts
- Contractor friendly PC board layout
- Universal thermostat compatibility
- Sturdy screw connections
- Made in the USA
- UL and CSA listed
- Overall dimensions approximately 12" w x 8" h x 3" d (28 x 18 x 7cm)
- Power supply: 120VAC



Pump Switching Relay Control– Wiring Junction Box with Transformer and Priority

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
281721-001	SR-504-EXP	1	0.45	1.0

Fully fuse protected with standard "ice-cube" snap out relays, this junction box is feature rich with a priority switch for zone 4. There is a convenient 24VAC terminal available and a master / slave switch for the ganging together of multiple boxes for up to 20 zones. External LED indicator lights indicate system power and zone pump operation. Three power port terminals are available and can receive plug-in cards, which can add additional features, such as post purge, priority protection and universal timer/pump exercise. Power Port cards are available through TACO.

Features and specifications:

- External LED indicator lights for power, thermostat and actuation
- Switchable priority
- Simplified wiring
- Add-On power controls
- Fuse protected
- 100% factory tested
- Isolated end switch
- Contractor friendly PC board layout
- Universal thermostat compatibility
- Sturdy screw connections
- Made in the USA
- UL and CSA listed
- Overall dimensions approximately 10 w x 7" h x 3" d (25 x 18 x 7cm)
- Power supply: 120VAC



Plug-in Cards – Intelligent Control

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
281741-001	PC 702 – Outdoor Reset and 2 Stage Boiler	1	0.45	1.0
281751-001	PC 705 – Variable Speed Pump Injection Mixing Control	1	0.45	1.0

These plug-in controls are intended for use with REHAU ZVC-404-EXP and SR 504-EXP electronic controls. They both provide complete system control and monitoring by regulating the supply water temperature to a hydronic system based on outdoor temperature. Wiring is as simple as plugging the interface cable directly into any REHAU expandable (-EXP) control. By either controlling one boiler, two boilers or an injection pump, the PC 702 and 705 controls are an ideal way provides energy savings, system protection and increased comfort control.

PC 702 - Outdoor Reset and 2 Stage Boiler is a microprocessor-based control designed to regulate supply water temperature from a one or two stage boiler system based on the outdoor temperature or domestic hot water requirements. Additional features include adjustable interstage delay setting, boiler staging using proportional, integral and derivative (PID) logic, optional boiler rotation and a domestic hot water demand output. The PC 702 continually adjusts the boiler differential. Standard functions include warm weather shut down, minimum boiler supply temperature setting, and starting water temperature setting. The easy to use reset ratio calculation to set the relationship between outdoor temperature and supply water temperature (heating curve) provides optimum control and comfort.

PC 705 – Outdoor Reset and Variable Speed Pump Injection Mixing Control is a microprocessor-based control designed to simultaneously control a boiler and the speed of an injection pump. Based on the outdoor temperature, the PC 705 continuously adjusts the boiler differential to optimize the firing cycles of the boiler, preventing large water temperature swings, and increase the efficiency of the system. As the heating load increases, the mixing control speeds up the injection circulator as the load decreases it slows down the injection circulator. Standard functions include warm weather shut down, minimum boiler return temperature setting, and starting water temperature setting. The easy to use reset ratio calculation to set the relationship between outdoor temperature and supply water temperature (heating curve) provides optimum control and comfort.

PC 702 Specifications:

Control:	Microprocessor PI control. This is not a safety (limit) control
Dimension:	4 3/4" H x 2 7/8" w x 1 7/8" D (92 x 70 x 48mm)
Approvals:	CSA NRTL/C; Meets ICES & FCC regulations for EMI/RFI
Ambient conditions:	Indoor use only
Power supply:	24VAC 3VA (powered by –EXP control)
Relays:	24V (ac) 5A, pilot duty 240VA
Sensors:	1 outdoor air and 1 supply water
Boiler start:	35° to 150°F (2° to 66°C)
Outdoor start:	35° to 85° (2° to 29°C)
Boiler design:	70° to 220°F (21° to 104°C)
Outdoor design:	-60° to 32°F (-51° to 0°C)
Boiler minimum:	Off, 80° to 180°F (27° to 82°C)
Differential:	Auto, 2° to 42°F (1° to 24°C)
WWSD:	Off, 35° to 100°F (2° to 38°C)
Units:	°F or °C
DHW demand:	20 to 260V (ac) 2VA
Interstage delay:	0:30 to 4:00 minutes

PC 705 Specifications:

Control:	Microprocessor PID control. This is not a safety (limit) control
Dimension:	4 3/4" H x 2 7/8" w x 1 7/8" D (92 x 70 x 48mm)
Approvals:	CSA CVS; meets ICES & FCC regulations for IMI/RFI
Ambient conditions:	Indoor use only
Power supply:	24VAC 3VA (powered by –EXP control)
Variable pump:	120V (ac) 1.8 A 1/2 hp, fuse 2.5 A 250V
Relays:	24V (ac) 5A, pilot duty 240VA
Sensors:	1 outdoor air and 1 supply water
Mix start:	35° to 150°F (2° to 66°C)
Outdoor start:	35° to 85°F (2° to 29°C)
Mix design:	70° to 220°F (21° to 104°C)
Outdoor design:	-60° to 32°F (-51° to 0°C)
Boiler minimum:	Off, 80° to 180°F (27° to 82°C)
WWSD:	Off, 35° to 100°F (2° to 38°C)
Units:	°F or °C



Radiant Floor Heating (RFH) Controls

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
236307	Deluxe RFH/SIM Mixing Control	1	1.8	3.9
236317	Floating Action Mixing Control	1	1.4	3.1
236327	Variable Speed Mixing Control	1	1.4	3.1

These outdoor reset/mixing controls are microprocessor-based controls designed to maximize the comfort and efficiency provided by a radiant floor heating (RFH) or other hydronic heating system.

The deluxe RFH/SIM mixing control is capable of providing both a reset boiler supply temperature and a reset RFH mixed supply temperature based on outdoor air temperature and a system reset curve(s), while also providing boiler protection to help prevent condensation of flue gases (for non-condensing boilers). Either a variable speed injection pump or a floating action mixing valve can be used with the deluxe RFH/SIM mixing control.

In addition, this control is capable of controlling an indirect domestic hot water (DHW) tank and high temperature heating, such as baseboard or a fan coil. The deluxe RFH/SIM mixing control can operate up to five circulator pumps including: primary boiler loop, secondary (high-temperature) heating loop, secondary RFH (low temperature) heating loop, DHW pump, and variable speed injection pump (when not using floating action output).

By adding the snow and ice melt SIM enable kit (Art. 236267), the deluxe RFH/SIM mixing control will control a single zone SIM system while still controlling a boiler, a high temperature heating system and an indirect DHW pump. The SIM enable kit includes a Universal Sensor (Art. 236217), a Slab Sensor (Art. 236227) and a remote start/stop module so that the system operator can activate the SIM system before or when snow or ice begin to accumulate.

Deluxe RFH/SIM mixing control specifications:

Power supply:	120V +/- 10%, 50/60 Hz, 1300VA
Relays:	240VAC, 5A, 1/3 hp
Variable pump:	240VAC, 2.4 A, 1/6 hp, fuse T2.5A 250V
Demands:	20 to 260VAC, 2VA
Sensors included:	Outdoor Sensor (Art. 236207) and two Universal Sensors (Art. 236217)
Enclosure:	Black PVC plastic
Dimensions:	6 5/8" H x 7 9/16" W x 2 13/16" D (17.0 x 19.3 x 7.2 cm)

The floating action mixing control is an outdoor reset control designed to control the mixed supply water temperature to a RFH system. The floating action mixing control operates a 24VAC floating action 2, 3, or 4-way mixing valve actuator (Art. 260526, Art. 260566) to regulate the supply water temperature while still protecting a non-condensing boiler against flue gas condensation. This control also provides for boiler operation, primary pump operation, and secondary pump operation.

Floating action mixing control specifications:

Power supply:	120V +/- 10%, 50/60 Hz, 1300VA
Relays:	240VAC, 10A, 1/3 hp
Demands:	20 to 260VAC, 2VA
Sensors included:	Outdoor Sensor (Art. 236207) and two Universal Sensors (Art. 236217)
Enclosure:	Black PVC plastic
Dimensions:	6 5/8" H x 7 9/16" W x 2 13/16" D (17.0 x 19.3 x 7.2 cm)

The variable speed mixing control is an outdoor reset control designed to control the mixed supply water temperature to a RFH system. The variable speed mixing control operates a variable speed injection pump to regulate the supply water temperature while still protecting the boiler against flue gas condensation. This control also provides for boiler operation, primary pump operation, and secondary pump operation.

Variable speed mixing control specifications:

Power supply:	120V +/- 10%, 50/60 Hz, 1300VA
Relays:	240VAC, 10A, 1/3 hp
Demands:	20 to 260VAC, 2VA
Sensors included:	Outdoor Sensor (Art. 236207) and two Universal Sensors (Art. 236217)
Enclosure:	Black PVC plastic
Dimensions:	6 5/8" H x 7 9/16" W x 2 13/16" D (17.0 x 19.3 x 7.2 cm)



Snow and Ice Melt (SIM) Control

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
236337	Automatic SIM Mixing Control	1	1.8	4.0

The automatic SIM mixing control is a microprocessor-based control designed to maximize the safety and efficiency provided by a hydronic snow and ice melt (SIM) system.

The automatic SIM mixing control is capable of providing snow and ice melting operation based on the snow/ice sensor signal (Art. 236377), a remote start/stop module, or an external melt demand signal. When the snow-ice sensor is used, the control can be run automatically, heating the SIM area when moisture is detected during freezing conditions. In typical use, melting operation continues until the sensor no longer detects moisture on its surface.

When the control is not in melting mode, the system can either be automatically shut down or can operate in an idle mode, maintaining the SIM area at a set idle temperature for faster response and improved safety. This saves energy when compared with SIM systems that are always kept at melting temperature.

The automatic SIM mixing control provides slab protection by limiting the maximum fluid temperature that is sent to the SIM area, and by limiting the delta T between supply and return fluid temperatures. Both settings are adjustable by the installer. The control also provides boiler protection to help prevent condensation of flue gases (for non-condensing boilers), by controlling the minimum return fluid temperature.

Warm weather shut down turns off the control when the slab temperature and the outdoor air temperature exceed the set melting temperature by more than 2°F (1°C), to conserve energy. Cold weather cut-off turns off the control when the outdoor temperature drops below a set temperature, beyond which SIM operation is unnecessary or impractical, also to conserve energy.

Either a variable speed injection pump or floating action mixing valve can be used with the automatic SIM mixing control, depending on the preferred mixing strategy. The automatic SIM mixing control can also operate a boiler that is dedicated to SIM operation.

Automatic SIM control specifications:

LCD display:	Can be set in °F or °C
Power supply:	115V +/- 10%, 50/60 Hz, 600VA
Relays:	230VAC, 5 A, 1/3 hp, pilot duty 24VA
Variable pump:	230VAC, 2.4A, 1/6 hp, fuse T2.5A 250V
Demands:	20 to 260VAC, 2VA
Sensors included:	Outdoor Sensor (Art. 236207) and three Universal Sensors (Art. 236217)
Enclosure:	Black PVC plastic
Dimensions:	6 5/8" H x 7 9/16" W x 2 13/16" D (17.0 x 19.3 x 7.2 cm)
For indoor use only:	32°F to 104°F (0°C to 40°C), < 90% RH non-condensing
Sensors included:	Outdoor Sensor (Art. 236207); 3 of Universal Sensor (Art. 236217)
Sensors required:	Snow/Ice Sensor & Socket Kit (Art. 236377), or Slab Sensor (Art. 236227 or 236237)



Electronic Accessories

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
236207	070 Outdoor Sensor	1	0.16	0.35
236217	071 Universal Sensor (10 in / 25 cm wire)	1	0.04	0.08
236227	072 Slab Sensor (20 ft / 6 m cable)	1	0.17	0.37
236237	073 Slab Sensor (40 ft / 12 m cable)	1	0.32	0.70
236257	080 Universal Sensor Enclosure for 236217	1	0.18	0.40
236267	092 SIM Enable Kit for Deluxe RFH/SIM Mixing Control	1	0.45	1.00
236297	R003P 24VAC Relay	9	0.13	0.29
236357*	090 Snow/Ice Sensor (65 ft / 19.8 m jacketed cable)	1	2.00	4.40
236367*	091 Snow/Ice Sensor Socket	1	0.82	1.80

Electronic accessories can be used with mixing controls and/or digital thermostats as replacements and/or additional connections.

SIM enable kit (Art. 236267) includes one each of Universal Sensor (Art. 236217), Slab Sensor (Art. 236227) and remote start/stop module.

*Art. 236357 and 236367 are special order, requiring 4-6 weeks delivery.

20.

MIXING MODULES



PRO-BALANCE Mixing Module

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
281501-001	PRO-BALANCE Mixing Module	1	4.10	9

Connects directly to REHAU PRO-BALANCE or HLV manifolds. Capability up to 48,000 BTU/HR. Versatile Grundfos® 3-speed circulator (15-58) can be switched between three different head curves depending on manifold and circuit head loss. Integral check valve prevents backflow. Thermostatic injection valve with capillary sensor provides for a low cost, simple installation. The secondary temperature may be adjusted between 70° to 160°F using the calibrated dial. May be mounted to either the right or left of the PRO-BALANCE manifold and connects using integral union nuts (supplied for left mounting). For maximum BTU output, the primary loop must be operated at minimum 3 psi higher than the secondary loop.

Specifications:

Max. acceptable working temperature:	176°F / 80°C
Maximum acceptable working pressure:	87 psi / 6 bar
Temperature regulation range:	68° - 158°F / 20° - 70°C
Nominal heat output:	approx. 47,800 BTU /HR
Pump:	Grundfos UP 15-58-130 mm 1" BSPM connections. 3 Speed-Cast iron "SUPERBRUTE" Integral check valve 115VAC, 2 Pole, single phase Flow range: 0 - 17.5 U.S. GPM Head range: 0 - 19 FEET
Maximum fluid temperature:	230°F (110°C)
Min. fluid temperature:	36°F (2°C)
Maximum working pressure:	145 psi
Fittings:	Brass Ms 58
Pipe systems:	Brass Ms 63
O-Rings:	EPDM
Flat gaskets:	AFM 34 or EPDM
Plastic:	Impact-resistant and temperature-resistant



PRO-BALANCE Pressure Differential Bypass Module for 1" Manifolds

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
281541-001	PRO-BALANCE Pressure Differential Bypass Module	1	1.224	2.69

This modular accessory connects directly to 1" PRO-BALANCE or HLV brass manifolds. Normally, a constant speed circulator is sized assuming that all circuits in a zone valve system may be open. The pressure differential bypass module provides a means to control the excess flow (velocity) that would otherwise occur when actuators close. Installation of this module onto the 1" PRO-BALANCE or HLV manifolds creates an automatically regulated flow path such that operating zone circuits do not see unnecessarily high flow.



PRO-BALANCE – Variable Speed Injection Mixing

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
281731-001	PRO-BALANCE Variable Speed Mixing Module	1	8.4	18.5

Used to supply design temperature water to the PRO-BALANCE or HLV manifolds. Capability up to 120,000 BTU/HR. Included is an electronic variable speed injection mixing control, variable speed pump and system circulator including air elimination valve into a single compact unit. Extremely versatile, the PRO-BALANCE Variable Speed Mixing Module is equipped to be set up as an outdoor reset control, a set point control or a delta T limiting control. All this with no special piping, no balancing valve, no closely-spaced tees, no external controls, no complex wiring, just four (3/4" FNPT) pipe connections and your installation is complete.

Features:

- All in one injection piping, pumping, air elimination & control package
- Only 4 pipe connections required
- Plug-in low voltage connections
- Solid state microprocessor design
- Reduce installation complexity and time
- Substantial space savings
- Line cord included
- Bronze casing for open or closed systems
- Replaceable cartridge design
- Maintenance free, wet-rotor circulators
- 3 operation modes, outdoor reset, set point or delta T with limit
- Internal check valve
- Automatic pump exercise
- Adjustable reset ratio
- Warm weather shutdown
- Boiler control or enable setting
- Boiler protection sensor
- C° or F°
- Outdoor and 2 strap-on sensors included

21.

THERMOSTATIC MIXING VALVES



Modulating Mixing Valves

Article #	Description	Cv	Package	Unit Weight	
			Quantity	gm	lb
298006-001	1/2" 3-way Modulating Mixing Valve	1.5	1	568	1.25
298016-001	3/4" 3-way Modulating Mixing Valve	3.3	1	600	1.32
298026-001	1 1/4" 4-way Modulating Mixing Valve	17.5	1	1432	3.15

REHAU Modulating Mixing Valves are a powerful cost effective alternative for zone mixing with such features / options as outdoor reset, boiler return temperature protection and warm weather shut down (WWSD) built in. An integral microprocessor-based control is built into the valve to which all wiring connections are made. The direct drive actuator modulates the valve to mix different rates of hot (boiler primary) water with the (secondary) return water allowing for virtually any water temperature to be supplied to the heating system. Working with outdoor reset and an adjustable reset ratio, the valve's maximum and minimum system supply temperature can be adjusted to support all types of jobs, including joist space (higher starting temperature) and traditional over-pour thermal mass. Size valve based on Cv rating for required demand. The power to the modulating mixing valve may be switched through an end switch (REHAU electronic controls); a thermostat for intermittent operation or the power source may be connected directly to the modulating mixing valve for continuous operation.

Features:

- Operates off constant power or relay end switch
- Simple DIP switch programming
- Ball valve design with high Cv (3-way only)
- Manual operation button
- Solid state microprocessor design
- Compact design
- Easy, one-handed actuator removal
- 125 psi shut-off pressure (3-way only)
- Plug-in low voltage connections
- Multi-status LED indicator lights
- Fail safe mode
- Sensors included

Outdoor Reset Features:

- Selectable maximum supply temperature (110°F, 130°F, 150°F or Off)
- Selectable minimal supply temperature (85°F, when max. supply temp is set to 150°F or Off)
- Adjustable minimum boiler return temperature (120°F, 135°F or Off)
- Warm weather shutdown (WWSD) (70°F or Off)
- Adjustable heating curve (0.2 to 2.2 reset ratio)

Setpoint Features:

- Adjustable setpoint dial (80°F to 180°F)
- Selectable 15°F setback
- Optional boiler protection (set at 135°F)

Specifications:

Maximum operating pressure:	300 psi (2,100 KPa)
Fluid temperature range:	20°F to 240°F (-7°C to 115°C) @ 135°F (57°C) ambient
Ambient conditions:	Indoor use only, <90% RH non-condensing
Service:	Closed systems, hot and chill water up to 50% glycol
Seat leakage:	Drop-tight close off
Power supply:	24VAC + 10% 50/60 Hz
Power consumption:	7.2 Watts, 0.3 Amps
Electrical rating:	24VAC, 60 Hz 0.4Amps. Do not exceed number of valves per transformer rating. Example: Do not use more than 4 valves per 40VA transformer).
Sensors:	NTC thermistor, 10KΩ @ 77°F (25°C + 2°C) β = 3892



Thermostatic 3-Way Mixing Valves

Article #	Size	Cv	Connection	Temperature	Range	Package Quantity	Unit Weight	
							kg	lb
260006	1/2"	1.8	NPT	85° to 120°F	(19° to 49°C)	1	0.54	1.2
260016	1/2"	1.8	NPT	110° to 140°F	(43° to 60°C)	1	0.54	1.2
234037	3/4"	1.9	NPT	85° to 160°F	(19° to 71°C)	1	0.54	1.2
234047	3/4"	1.8	Compression	95° to 140°F	(35° to 60°C)	1	0.60	1.3
260067	1"	3.0	Compression	85° to 120°F	(19° to 49°C)	1	0.91	2.0
260068	1"	3.2	Compression	110° to 140°F	(43° to 60°C)	1	0.91	2.0
260507	1"	3.0	NPT	85° to 120°F	(19° to 49°C)	1	0.68	1.5
260547	1"	3.2	NPT	110° to 140°F	(43° to 60°C)	1	0.68	1.5

Thermostatic mixing valves control supply water temperature for small-sized RFH systems. Sensing element is a wax/copper compound mounted within the valve body. Provides rapid stabilization of supply water temperature. Temperature is adjusted with the knob located at the top of the valve body. For feedback on temperature adjustments, place a Thermometer (Art. 260957, 260967) downstream of the valve. Compression-type fitting for copper distribution piping or NPT type for threaded pipe. Size valve based on Cv rating (GPM @ 1 psi pressure loss, 2.3 feet headloss).

Specifications:

- Maximum input temperature: 195°F (90°C)
- Regulated output temperature range: As listed
- Maximum working pressure: 145 psi (10 bar; 1 MPa)
- Regulation accuracy: +/- 3.6°F (2°C) at a minimum flow of 0.5 GPM (2 l/m)
- Material: Brass body



Control Motor for Mixing Valves up to 2"

Article #	Description	Motor Speed	Package Quantity	Unit Weight	
				kg	lb
260526	62M Motor with End Switch for Valves up to 2"	100 sec	1	0.45	1.0

Use with brass and cast iron mixing valves 2" and smaller for motor operated control. The motor is controlled by REHAU outdoor reset/mixing controls. Operates on 24 Volt AC input provided through these controls. No additional installation kit is required. Built-in end switch is included. Manual override of mixing valve is possible by pressing and turning the knob. Be sure to adjust the motor speed setting on electronic mixing controls to 100 seconds.

Specifications:

- Ambient temperature range: 22°F to 130°F (-5°C to 55°C)
- Torque: 45 in. lbs
- Protection type: NEMA 1 (IP 40)
- Supply voltage: 24VAC, 50 - 60 Hz
- Power consumption: 6.5 VA (watts) when operating

Brass Mixing Valves

Compact 3- or 4-way brass mixing valves are ideal for reliable control of RFH or SIM supply water temperature. Suitable for motor controlled RFH or SIM applications with series 62M control motor (Art. 260526). When choosing a 3- or 4-way mixing valve, size according to flow (Cv) and not pipe size, for more accurate mixing. This often means using a valve that is one size smaller than supply/return pipes.



3-Way Brass Mixing Valves

Article #	Description	Cv	Package	Unit Weight	
			Quantity	kg	lb
260106	3/4" FPT 3-Way Brass Mixing Valve	7.3	1	0.7	1.5
260116	1" FPT 3-Way Brass Mixing Valve	14.0	1	1.0	2.2
260136	1 1/4" FPT 3-Way Brass Mixing Valve	21.0	1	1.1	2.4

Specifications:

- Maximum static pressure: 250 psi (10 bar)
- Maximum water temperature: 230°F (110°C)
- Maximum differential pressure drop: 25 psi (2 bar)
- Maximum torque: 10 in. lbs
- Material: Brass valve body, stem, and slider



4-Way Brass Mixing Valves

Article #	Description	Cv	Package	Unit Weight	
			Quantity	kg	lb
260236	3/4" FPT 4-Way Brass Mixing Valve	7.3	1	0.7	1.6
260246	1" FPT 4-Way Brass Mixing Valve	14.0	1	1.1	2.4
260266	1 1/4" FPT 4-Way Brass Mixing Valve	21.0	1	1.2	2.6

Specifications:

- Maximum static pressure: 250 psi (10 bar)
- Maximum water temperature: 230°F (110°C)
- Maximum differential pressure drop: 25 psi (2 bar)
- Maximum torque: 10 in. lbs

Cast Iron Mixing Valves

Durable 3- or 4-way cast iron mixing valves are ideal for reliable control of RFH or SIM supply water temperature for larger flow requirements. Suitable for motor controlled RFH or SIM applications with control motor (Art. 260526). When choosing a 3- or 4-way mixing valve, size according to flow (Cv) and not pipe size, for more accurate mixing. This often means using a valve that is one size smaller than supply/return pipes. Cast iron valves are not to be used in open systems due to corrosion potential.



3-Way Cast Iron Mixing Valve, FPT

Article #	Description	Cv	Package	Unit Weight	
			Quantity	kg	lb
260146	1 1/2" FPT 3-Way CI Mixing Valve	35.0	1	2.5	5.5

Specifications:

- Maximum static pressure: 125 psi (6 bar)
- Maximum water temperature: 230°F (110°C)
- Maximum differential pressure drop: 5 psi (30 kPa)
- Leakage in % of flow: Mixing max. 1%, diverting 0.5%
- Material: Cast iron valve body, stainless steel stem, brass slider



4-Way Cast Iron Mixing Valve, FPT

Article #	Description	Cv	Package Quantity	Unit Weight	
				kg	lb
260276	1 1/2" FPT 4-Way CI Mixing Valve	35.0	1	3.3	7.3

Specifications:

- Maximum static pressure: 125 psi (6 bar)
- Maximum water temperature: 230°F (110°C)
- Maximum differential pressure drop: 5 psi (30 kPa)
- Leakage in % of flow: 1.5%
- Material: Cast iron valve body, stainless steel stem, brass slider

22.

PRIMARY / SECONDARY ACCESSORIES



Primary / Secondary Closely-Spaced Tee with Isolation Ball Valves

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
281781-001	1 1/4" x 3/4" Closely-Spaced Tee with Isolation Ball Valve	1	1.58	3.49
281791-001	1 1/4" x 1" Closely-Spaced Tee with Isolation Ball Valve	1	1.74	3.83

These modular valves make easy work out of the installation of the Closely-Spaced Tee. These valves are used to connect the secondary loop (mixed temperature side) to the primary (boiler) loop. The integral Closely-Spaced Tee results in eliminating pressure differences in the region of the connections of the primary and secondary piping. This results in the hydraulic isolation (separation) of the primary and secondary systems and is a professional strategy for installation of hydronic systems. The isolation ball valve can be closed for system purging from the primary to the secondary side.



Pressure Differential Bypass Valves

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
260517	1/2" C Female (Sweat) Pressure Bypass Valve	1	0.68	1.5
260527	3/4" C Female (Sweat) Pressure Bypass Valve	1	0.91	2.0
267987	1" MPT Pressure Bypass Valve	1	1.40	3.0

Pressure Differential Bypass Valves divert excess flow when one circulator pump is used with multiple zones, reducing wear on the pump, avoiding noise problems in the control valves, and allowing more stable temperature control. Applications include PRO-BALANCE manifolds using manifold valve actuators. Valves are pressure-adjustable. Connections (union ends) are to copper pipe for 1/2" and 3/4" valves. The 1" valve is supplied with 1" MPT union ends.



Boiler Bypass Valves

Article #	Description	Cv	Package Quantity	Unit Weight	
				kg	lb
267417	1" FPT Boiler Bypass Valve 140°F	10.5	1	1.5	3.3
267427	1 1/4" FPT Boiler Bypass Valve 140°F	16.4	1	2.0	4.4
267437	1 1/2" FPT Boiler Bypass Valve 140°F	20.0	1	2.4	5.3

Designed to allow non-condensing boilers to reach their minimum operating temperature quickly to prevent cool return water temperatures. Necessary with non-condensing boilers that are supplying RFH or SIM systems through 3-way thermostatic mixing valves with no electric mixing provision for boiler minimum return protection. 140°F boiler bypass valves are to be installed on the boiler return.

Specifications:

- Maximum static pressure: 85 psi (6 bar)
- Maximum operating temperature: 230°F (110°C)
- Material: Cast iron



Thermometers

Thermometers are recommended in RFH/SIM supply and return pipes to monitor fluid temperatures.

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
260957	Thermometer with 1/2" MPT Well Fitting	1	0.09	0.20
260967	Thermometer with 3/4" Solder Well Fitting	1	0.11	0.24

REHAU immersion well thermometers have a 2 1/2" dial, reading from 50°F to 250°F (10°C to 120°C).



Combination Temperature/Pressure Gauge

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
266417	Combination Temperature/Pressure Gauge	1	0.08	0.17

REHAU's Combination Temperature/Pressure Gauge has a 2 1/2" dial reading from 0-100 psi and 30°F to 240°F (-1°C to 115°C). 1/4" NPT back-mounted connection for installation in a pipe tee/fitting. The immersion gauge actually contacts the water directly to give the highest degree of temperature and pressure accuracy. For use in RFH and SIM applications.



Heat Exchanger

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
266477	Heat Exchanger, 3/4" MPT Connections	1	1.50	3.3

Compact heat exchanger for use in RFH and SIM projects. Applications include: RFH systems using a domestic hot water tank as the heat source to separate heating water from drinking water (check local codes), SIM systems using concentration of glycol (antifreeze) different than the rest of the hydronic system, pool heating, etc. CSA and UL approved. Can provide more than 100,000 BTU/hr, depending on temperatures and flow rates. Contact your REHAU representative for sizing information.

Specifications:

- Maximum static pressure: 435 psi (30 bar)
- Maximum operating temperature: 365°F (185°C)
- Material (plates and connections): 316 Stainless steel - Single wall
- Material (solder): 99.9% Copper
- Recommended capacity: Approximately 100,000 BTU/hr or more, depending on fluid temperatures and flow rates

23.

EVERLOC® INSTALLATION TOOLS

Custom tools provide fast, easy, professional installations and are required to assemble EVERLOC fittings. REHAU tools are made of quality materials and field-tested for long life and reliable performance. Follow all included safety warnings for safe use.



EVERLOC Standard Tool Kit

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
261216	EVERLOC Standard Tool Kit	1	7.6	16.7

The EVERLOC Standard Tool Kit is specifically designed for assembling 1/2" and 3/4" EVERLOC fittings. With the addition of 3/8", 1", and 1 1/4" expander heads (sold separately), and 1" and 1 1/4" VERSALOC jaws (sold separately) this tool kit can assemble all sizes of EVERLOC 3/8" to 1 1/4". EVERLOC Standard Tool Kit comes complete with the following:

- RAUPEX Pipe Expander (Art. 139592)
- 1/2" and 3/4" Expander Heads (Art. 261866 and 261886)
- Grease and brush pack for expander maintenance
- COMBOLOC® Combination Expansion/Compression Tool (Art. 243107)
- VERSALOC® manual compression tool (Art. 243737)
- 4-in-1 VERSALOC Jaws Set (Art. 243767)
- RAUCUTTER (Art. 137495)
- Tool Box (Art. 261206)



EVERLOC Deluxe Tool Kit

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
261256	EVERLOC Deluxe Tool Kit	1	10.4	22.9

The EVERLOC Deluxe Tool Kit is specifically designed for assembling 1/2", 3/4", and 1" EVERLOC fittings. With the addition of 3/8" and 1 1/4" heads (sold separately), and 1 1/4" VERSALOC jaws (sold separately) this tool kit can assemble all sizes of EVERLOC 3/8" to 1 1/4". EVERLOC Deluxe Tool Kit comes complete with the following:

- RAUPEX Pipe Expander (Art. 139592)
- 1/2", 3/4" and 1" Expander Heads (Art. 261866, 261886, and 261896)
- Grease and brush pack for expander maintenance
- COMBOLOC Combination Expansion/Compression Tool (Art. 243107)
- VERSALOC Compression Tool (Art. 243737)
- 4-in-1 VERSALOC Jaws (set) and 1" VERSALOC Jaws (Art. 243767 and 243787)
- RAUCUTTER (Art. 137495)
- Ratchet Cutter for 1 1/2" RAUPEX (Art. 138062)
- Tool Box (Art. 261206)



VERSALOC® Compression Tool

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
243737	VERSALOC Compression Tool	1	1.09	2.4

The VERSALOC Compression Tool easily compresses EVERLOC sleeves onto EVERLOC fittings up to 1 1/4" for a reliable connection. Ideal for all types of installation applications including joist cavities and other tight spaces. The VERSALOC Compression Tool is used with interchangeable VERSALOC Jaws (jaws sold separately).



VERSALOC® Compression Jaws

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
243767	4-in-1 VERSALOC Jaws (set)	1	0.37	0.8
243787	1" VERSALOC Jaws (set)	1	0.68	1.5
243797	1 1/4" VERSALOC Jaws (set)	1	0.77	1.6

4-in-1 VERSALOC Compression Jaws are used with the VERSALOC Compression Tool to compress EVERLOC fittings in sizes 3/8", 1/2", 5/8", and 3/4". The lower groove works with 3/8" and 1/2" EVERLOC fittings, while the upper groove works with 5/8" and 3/4". The 4-in-1 jaws reduce switching of jaws for common fitting sizes. Jaws are sold in sets, so that 1 set includes 2 jaws.



Combination Screw Drive Tool, 3/8" through 3/4"

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
261296	3/8" – 3/4" EVERLOC Combination Screw Drive Tool	1	1.27	2.79

Especially for hydronic baseboard installations, this compact tool is ideal for the assembly of the EVERLOC fittings in tight locations, where a flush compression tool is required. This compression tool is an alternative to the VERSALOC Compression Tool.

This tool uses an 11/16" socket or wrench (not included) to drive the screw-drive threaded mechanism. The combination tool has dual cavities: the upper cavity compresses 5/8" and 3/4" fittings, while the lower cavity compresses 3/8" and 1/2" fittings.



RAUPEX Pipe Expander

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
139592	RAUPEX Pipe Expander	1	1.40	3.2

Expands RAUPEX pipe quickly and easily to assemble EVERLOC fittings. Includes grease and brush pack for expander tool maintenance. Expander heads sold separately.



Expander Heads

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
261856	3/8" Expander Head	1	0.15	0.32
261866	1/2" Expander Head	1	0.15	0.32
261876	5/8" Expander Head	1	0.16	0.35
261886	3/4" Expander Head	1	0.16	0.35
261896	1" Expander Head	1	0.18	0.39
235417	1 1/4" Expander Head	1	0.20	0.45

Expander heads come in all sizes to expand RAUPEX pipe. For use with RAUPEX pipe expander (Art. 139592).



COMBOLOC®

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
243107	COMBOLOC Combination Expansion/Compression Tool	1	1.09	2.4

The COMBOLOC tool combines both expansion and compression capabilities for 3/8" and 1/2" EVERLOC fittings in one compact tool that fits into tight areas. The COMBOLOC tool will fit flat against a wall or floor for fittings that must be close to a wall or floor. The COMBOLOC tool can expand all sizes of RAUPEX pipe up to 1", and compress EVERLOC fittings sizes 3/8" and 1/2". Expander Heads sold separately.



RAUPEX Cutters

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
137495	RAUCUTTER for up to 1" RAUPEX	1	0.17	0.38
138062	Ratchet Cutter for up to 1 1/2" RAUPEX	1	0.41	0.90
139092	Large Ratchet Cutter for up to 2" RAUPEX	1	1.18	2.60

It is important to use a proper cutter when cutting RAUPEX pipes, and RAUPEX cutters provide clean, square and accurate cutting of RAUPEX pipes in sizes indicated.



EVERLOC H2 Hydraulic Tool Kit

Article #	Description	Package Quantity	Unit Weight	
			kg	lb
235407	EVERLOC H2 Hydraulic Tool Kit	1	33.2	73.1

The EVERLOC H2 tool kit is specifically designed for assembling 1 1/2" and 2" EVERLOC fittings onto RAUPEX pipes. This powerful hydraulic tool uses a foot-pump, a 10-foot (3 m) hydraulic hose with quick-release fittings and an actuating head that is used for both expansion and compression steps. Follow all included safety warnings about safe use of this tool. With additional accessories, the H2 hydraulic tool can also be used for assembling metric EVERLOC fittings in sizes 63-110 mm (see REHAU's INSULPEX Program).

The H2 comes complete with the following:

- Aluminum case, hydraulic foot pump, and head
- Large Ratchet Cutter for up to 2" RAUPEX (Art. 139092)
- Pins, 2 short and 2 long (Art. 137914)
- 1 1/2" Expander Head (Art. 235427)
- 2" Expander Head (Art. 235437)
- 1 1/2" Compression Jaws (Art. 137964)
- 2" Compression Jaws (Art. 235497)

LITERATURE AND TECHNICAL INFORMATION

Sales Literature

Article #	Description	Package Quantity
855.410	Radiant Heating Consumer Brochure	100
855.410F	Radiant Heating Consumer Brochure - French	100
855.550	Residential Fire Protection Brochure	50
855.702	RAUPANEL Radiant Heating Systems Brochure	100
855.702F	RAUPANEL Radiant Heating Systems Brochure - French	50
855.704	RAUPEX Heating and Plumbing Systems Technical Brochure	100
855.704F	RAUPEX Heating and Plumbing Systems Technical Brochure - French	50
855.710	Snow and Ice Melting Brochure	100
855.720	PEX Plumbing Brochure	100
855.806	INSULPEX Brochure	100
855.806F	INSULPEX Brochure - French	50
855.840	MUNICIPEX Brochure	100
855.840F	MUNICIPEX Brochure - French	50

Technical Information

Article #	Description	Package Quantity
855.601	Radiant Heating Technical Manual	25
855.610	Snow and Ice Melting Technical Manual	25
855.620	PEX Plumbing Systems Technical Manual	25
855.630	INSULPEX Energy Transfer Pipe Technical Manual	25
855.650	Residential Fire Protection Technical Manual	25

Installation Guides

Article #	Description	Package Quantity
855.603	Radiant Heating Systems Installation Guide	25
855.622	MUNICIPEX Installation Guide	25
855.625	RAUPANEL Radiant Heating Systems Installation Guide	25
855.631	INSULPEX Installation Guide	25

Program Binders

Article #	Description	Package Quantity
855.016	REHAU Residential Fire Protection Systems Binder	1
855.029	REHAU INSULPEX Binder	1
855.030	REHAU Radiant Heating Systems Binder	1
855.110	REHAU PEX Plumbing Systems Binder	1

Product Catalogs

Article #	Description	Package Quantity
855.300	REHAU Residential Fire Protection Systems Catalog	25
855.305	REHAU INSULPEX Catalog	25
855.310	REHAU Radiant Heating Systems Product Catalog	25
855.311	REHAU PEX Plumbing Systems Product Catalog	25

Caution Labels

Article #	Description	Package Quantity
855.002	Caution Labels - English	25
855.002F	Caution Labels - French	25

Adhesive-backed caution labels indicate that a radiant system is installed.

Samples / Cases

Article #	Description	Package Quantity
240011-PB	1" PRO-BALANCE Cut-away	1
281991-001	1 1/4" PRO-BALANCE Cut-away	1
244917	EVERLOC Cut-away	1
235207	RAUPANEL Display Sample Case	1
221647	INSULPEX Display Sample Case	1
225577-001	1 1/4" EVERLOC Cut-away (O ₂ Barrier) with Steel Channel	1
225577-002	1 1/4" EVERLOC Cut-away (Non-Barrier) with Steel Channel	1
225577-003	2" EVERLOC Cut-away (O ₂ Barrier) with Steel Channel	1
225577-004	2" EVERLOC Cut-away (Non-Barrier) with Steel Channel	1



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