For Residential, Commercial and Snow Melt Applications

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No
Approval	Representative

RadiantPEX-AL[™] **RadiantPEX-AL** Tube

Sizes: 3/8", 1/2", 5/8", 3/4", 1"

Watts Radiant's RadiantPEX-AL is a multi-layered, cross-linked polyethylene tubing with an aluminum inner core for radiant floor heating and snow melting applications and distribution piping. RadiantPEX-AL is manufactured with an integral aluminum oxygen layer that prevents any oxygen diffusion through the walls of the tubing.

Specifications

System shall be installed using Watts Radiant RadiantPEX-AL. All connections shall be made using Watts Radiant's Press or Compression fittings and in accordance with all corresponding installation guidelines.

MAX TEMPERATURE	MAX PRESSURE		
200°F	100 psi		
180ºF	125 psi		
140°F	160 psi		
73⁰F	200 psi		

Installation

RadiantPEX-AL must be installed in accordance with all Watts Radiant installation procedures, including information provided in Watts Radiant's RadiantPEX[®], RadiantPEX+[™] & RadiantPEX-AL Installation Manual.

In order to avoid property damage or injury, please refer to the complete installation manual and warnings provided with the product.



Standards and Listings



Manufactured in accordance with American society for Testing and Materials (ASTM) F-1281-05.



RadiantPEX+ is tested and listed by the **ISE**)rfh National Sanitation Foundation to NSF-14 (rfh).

> Carries the UPC certification mark, as approved by the International Association of Plumbing and Mechanical Officials (IAPMO).

	Quant.	Model #	Order #	Description	Length (ft.)	ID (in.)	OD (in.)	Min. Bend Radius (in)	Fluid Capacity (Gal/1000')
		RL06-200-0R	81011133	3/8" RadiantPEX-AL Coil	200	0.346	0.472	2.5	5.3
C01LS		RL0508-300-0R	81010635		300	0.500	0.630	3.2	9.1
		RL0508-500-0R	81010634	1/2" RadiantPEX-AL Coil	500				
		RL0508-1000-0R	81010637		1,000				
		RL10-300-0R	81007605	E/OII DedientDEV AL Ceil	300	0.637	0.787	4.0	16.2
		RL10-1200-0R	81007606	5/6 Raulantrex-AL Coll	1,200				
		RL12-100-0R	81007607		100	0.806	0.984	5.5	25.3
		RL12-300-0R	81007608	3/4" RadiantPEX-AL Coil	300				
		RL12-500-0R	81007609		500				
		RL16-100-0R	81007610	1" DedientDEV AL Ceil	100	1.032	1.260	6.5	39.5
		RL16-300-0R	81007611	I Haulantrex-AL Cull	300				
		RL0508-20-0R	81010636	1/2" RadiantPEX-AL Sticks, 25/bundle	20	0.500	0.630	3.2	9.1
)KS		RL10-20-0R	81008574	5/8" RadiantPEX-AL Sticks, 25/bundle	20	0.637	0.787	4.0	16.2
STIC		RL12-20-0R	81008575	3/4" RadiantPEX-AL Sticks, 25/bundle	20	0.806	0.984	5.5	25.3
		RL16-20-0R	81008576	1" RadiantPEX-AL Sticks, 10/bundle	20	1.032	1.260	6.5	39.5

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.



USA: 4500 East Progress Place, Springfield, MO 65803; www.wattsradiant.com Canada: 5435 North Service Rd., Burlington, ONT. L7L 5H7; www.wattscanada.ca
 WR_RadiantPEX AL_Submittal_Product
 EN
 20100601
 Effective: 6/1/2010

Supercedes Previous Release

RadiantPEX-AL

Cross-Linked Polyethylene x Aluminum x Cross-Linked Polyethylene

For

RadiantPEX-AL Tools

15" PressTool with interchangeable jaws in 1/2",5/8", and 3/4" sizes.



19" PressTool with interchangeable jaws in 1/2",5/8", 3/4", and 1" sizes.



RadiantPEX-AL Fitting Systems

Watts Radiant offers three jobsite-proven connection systems that are made to the ASTM F-1281-05 standard for pipe and fittings.

Press Fittings:



This proven permanent connection features a brass body with double o-ring seals, stainless steel sleeves (included with all press fittings), and a polymer insulator against the pipe end. Press fittings available for 1/2"-1" (no 3/8" press fittings).

Compression Fittings:

All-brass body fitting seals without special tools with double o-ring seals and and a polymer insulator against the pipe end. Compression fittings available for 3/8"-1".





SS-T20 Compression and Press fittings:

These fittings are designed for use with Stainless Steel or T20 copper manifolds.

These specialty fittings integrate the features of either a Press or Compression fitting with the ease of a T20. SS-T20 Connections are made directly to any Stainless Steel or T20 Copper Manifold.

RadiantPEX-AL Specifications

Note: Operating Temperature / Pressure for all sizes is 180°F at 125psi.

			MIN. BEND	STANDARD	FLUID CAPACITY
COILS	I.D.	0.D.	RADIUS	COIL LENGTHS	PER 1000'
3/8" RadiantPEX-AL	0.346 in	0.472 in	2.5 in	200'	5.3 Gal.
1/2" RadiantPEX-AL	0.500 in	0.630 in	3.2 in	300'/500'/1000'	9.1 Gal.
5/8" RadiantPEX-AL	0.637 in	0.787 in	4.0 in	300'/1200'	16.2 Gal.
3/4" RadiantPEX-AL	0.806 in	0.984 in	5.5 in	100'/300'/500'	25.3 Gal.
1" RadiantPEX-AL	1.032 in	1.260 in	6.5 in	100'/300'	39.5 Gal.

In the United States: Watts Radiant 4500 Progress Place Springfield, MO 65803 1-800-276-2419 toll-free 417-864-6108 phone 417-864-8161 fax www.wattsradiant.com In Canada: Watts Industries-Canada 5435 North Service Road Burlington, ON L7L 5H7 1-888-208-8927 toll-free 905-332-4090 phone 905-332-7068 fax www.wattscanada.ca



WattsRadiant[®] Floor Heating & Snow Melting

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RadiantPEX-AL manifolds

Use RadiantPEX-AL SS-T20 Press and **Compression fittings with Watts Radiant's** Stainless Steel manifolds.



Watts Radiant copper manifolds with built-in Press fittings



Watts Radiant copper manifolds with built-in compression fittings



Watts Radiant is an ISO9001:2008 approved facility.



A Watts Water Technologies Company

The RadiantPEX-AL Advantage

RadiantPEX-AL is a composite tubing made of 3 layers (Pex-Aluminum-Pex).

- Easier installations bend it and it stays in place
- Almost no thermal expansion (85% less than PEX)
- Superior Aluminum Oxygen Barrier
- Smaller bend ratio than PEX
- Retains flexibility in cold weather





RadiantPEX-AL stays where you want it, making tie-down easier



RadiantPEX-AL works great with SubRay for a thin profile subfloor.



You can install RadiantPEX-AL on the underside of a subfloor, using underfloor plates.

RadiantPEX-AL bends to conform to the shape of outdoor steps for snow melting.

RadiantPEX-AL Cross-Linked Polyethylene **x** Aluminum **x** Cross-Linked Polyethylene

RadiantPEX-AL Is Built to Last

Pipe and fittings are manufactured to American Standard Testing Methods for composite radiant pipe (ASTM F-1281-05). Included are requirements and test methods for materials, workmanship, dimensions, environmental stress cracking, sustained hydrostatic pressure strength, thermo-cycling resistance and bend strength, among other tests. RadiantPEX-AL meets or exceeds these specifications.

Use RadiantPEX-AL for Distribution Piping

Use RadiantPEX-AL as supply and return piping to manifolds, fan coils, baseboards and radiators. Once you try it, you'll never go back to using expensive, time-consuming copper.







SubRay system.

Grade



Pour concrete over for heating or snow melting.





Staple up below subfloors to heat the room above.

Install in a thin concrete, gypsum or self-leveling floor.

