

## For Residential or Commercial Radiant Heating and Snow Melt Applications

# RadiantPEX-AL™

## Press & Compression Connections

### ⚠ WARNING



Read these instructions and all product labels BEFORE installation. Installation must be performed by qualified personnel, in accordance with local codes and standards.

**FAILURE TO COMPLY WITH PROPER INSTALLATION INSTRUCTIONS COULD DAMAGE TUBING AND FITTINGS CAUSING WATER DAMAGE AND/OR DAMAGE TO THE PIPING SYSTEM WHICH CAN RESULT IN PROPERTY DAMAGE AND/OR PERSONAL INJURY**



**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.  
For more information: [Watts.com/prop65](http://Watts.com/prop65)

## RadiantPEX-AL™ Connections - Press

RadiantPEX-AL press fittings include o-rings on the barbed section of the fitting and an insulator washer at the base. The stainless sleeve includes a view port for ensuring the RadiantPEX-AL is properly seated before making a press connection.



### Installation

- Cut the Tubing.** Use a tubing cutter. Ensure the cut is straight and clean.
- Prepare the connection**
  - Use a reamer tool to prepare the end of the tubing for the connection.
  - Ensure the insulator washer is in place at the base of the fitting.
  - Ensure the stainless steel sleeve is seated against the insulator washer.
  - Slide the RadiantPEX-AL tubing over the barb until it is fully inside the sleeve and can be seen through the view port.
- Make the connection**
  - Place the assembly contained by the sleeve into the press tool jaws.
  - Firmly close the jaws. The tool will automatically stop when complete.

#### 4. Pressure Test

Test all connections between 50 to 100 psi (3.4 to 6.9 bar) with either air or water (do not use both). If temperatures are near or below freezing, do not use water.

**O-rings and insulator must be re-installed before tubing is installed and the connection finalized.**

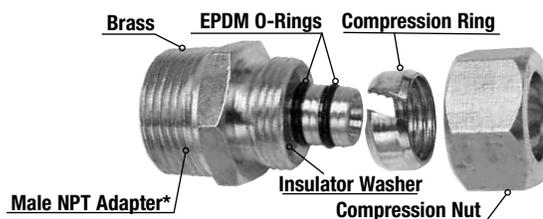
Refer to Watts Radiant's Product Catalog for connection and tool options.

### NOTICE

- Only use Watts Radiant fittings that correspond to the selected size and type of tubing. Improper sizing can result in leaks.
- Wrap completed connections with PVC electricians tape or shrink wrap if they will be buried in concrete or other masonry material.
- For sweat fittings, remove o-rings and insulator washer before soldering. Once cool, be sure to re-install.
- Do not splice multiple lengths of RadiantPEX-AL tubing together as this will result in increased pressure drops. Refer to the tubing installation manual available from [WattsRadiant.com](http://WattsRadiant.com) for recommended circuit lengths and other tubing installation guidelines.
- Repairing RadiantPEX-AL that has been in service requires special attention, particularly when glycol has been used. Any residual amounts of glycol or any other coating or debris inside the tube must be removed and all fitting surfaces must be clean before making connections.
- Watts RadiantPEX-AL fittings are engineered to work together. Watts extends no warranty – express or implied – to any failure or damage of any kind resulting from the use of materials not specified by Watts.

## RadiantPEX-AL™ Connections - Compression

RadiantPEX-AL compression fittings include o-rings on the barbed section and an internal compression ring with an external compression nut.



### Installation

- Cut the Tubing.** Use a tubing cutter. Ensure the cut is straight and clean.
- Make the connection**
  - Use a reamer tool to prepare the end of the tubing for the connection.
  - Slide the compression nut over the tubing.
  - Slide the compression ring over the tubing.
  - Ensure the insulator washer is in place in the recess of the fitting.
  - Slide the RadiantPEX-AL tubing over the barb. Make sure the tubing is seated against the insulator washer insert.
  - Slide the compression nut up and begin threading it onto the fitting. The compression ring will automatically be positioned as you tighten the nut..
  - Use an open-end wrench to complete the connection (do not use a crescent wrench). Tighten the connection to 20 in/lb (2.3 N-M) (snug and then an additional 1/4 turn).

#### 3. Pressure Test

Test all connections between 50 to 100 psi (3.4 to 6.9 bar) with either air or water (do not use both). If temperatures are near or below freezing, do not use water.

**WattsRadiant™**  
A WATTS Brand

## Press Fitting

\*insulator washer is white for 5/8", 3/4", and 1" and blue for 1/2".



Ream, shape and prep tubing



PressAll Tool kit



Assemble components



Press connection



Press fitting



Completed press connection

PEX-AL Press Fitting Parts			
Description	Qty	Order #	
1/2" (12.7 mm) Press Fitting Insulators	10	81010648	
5/8" (15.9 mm) Press Fitting Insulators	10	81008563	
3/4" (19.1 mm) Press Fitting Insulators	10	81008564	
1" (25.4 mm) Press Fitting Insulators	10	81008565	
1/2" (12.7 mm) Press Fitting O-Ring	10	81010652	
5/8" (15.9 mm) Press Fitting O-Ring	10	81008567	
3/4" (19.1 mm) Press Fitting O-Ring	10	81008568	
1" (25.4 mm) Press Fitting O-Ring	10	81008569	
1/2" (12.7 mm) Press Fitting Sleeve	10	81010648	
5/8" (15.9 mm) Press Fitting Sleeve	10	81008559	
3/4" (19.1 mm) Press Fitting Sleeve	10	81008560	
1" (25.4 mm) Press Fitting Sleeve	10	81008561	

## Compression Fitting

\*1/2" fittings will be indicated by a blue mark.



Ream, shape and prep tubing



Insert fitting



Insulator washer



Thread connection



Assemble components

PEX-AL Compression Fitting Parts			
Description	Qty	Order #	
3/8" (9.5 mm) Compression Fitting Insulators	10	81011165	
1/2" (12.7 mm) Compression Fitting Insulators	10	81010697	
5/8" (15.9 mm) Compression Fitting Insulators	10	81009456	
3/4" (19.1 mm) Compression Fitting Insulators	10	81009458	
1" (25.4 mm) Compression Fitting Insulators	10	81009460	
3/8" (9.5 mm) Compression Fitting O-Ring	10	81011167	
1/2" (12.7 mm) Compression Fitting O-Ring	10	81010652	
5/8" (15.9 mm) Compression Fitting O-Ring	10	81008567	
3/4" (19.1 mm) Compression Fitting O-Ring	10	81008568	
1" (25.4 mm) Compression Fitting O-Ring	10	81008569	

Description	Model#	Order#	lbs.
3/8" x 200' (Coil), RadiantPEX-AL	RL06-200-OR	81011133	18
1/2" x 300' (Coil), RadiantPEX-AL	RL0508-300-OR	81010635	23
1/2" x 1000' (Coil), RadiantPEX-AL	RL0508-1000-OR	81010637	70
5/8" x 300' (Coil), RadiantPEX-AL	RL10-300-OR	81007605	35
5/8" x 1200' (Coil), RadiantPEX-AL	RL10-1200-OR	81007606	130
3/4" x 100' (Coil), RadiantPEX-AL	RL12-100-OR	81007607	18
3/4" x 300' (Coil), RadiantPEX-AL	RL12-300-OR	81007608	48
3/4" x 500' (Coil), RadiantPEX-AL	RL12-500-OR	81007609	73
1" x 100' (Coil), RadiantPEX-AL	RL16-100-OR	81007610	20
1" x 300' (Coil), RadiantPEX-AL	RL16-300-OR	81007611	54

**Limited Warranty:** Watts Radiant (the "Company") warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge.

**THE WARRANTY SET FORTH HEREIN IS GIVEN EXPRESSLY AND IS THE ONLY WARRANTY GIVEN BY THE COMPANY WITH RESPECT TO THE PRODUCT. THE COMPANY MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. THE COMPANY HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

The remedy described in the first paragraph of this warranty shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemical, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication, improper installation or improper maintenance or alteration of the product.

Some States do not allow limitations on how long an implied warranty lasts, and some States do not allow the exclusion or limitation of incidental or consequential damages. Therefore the above limitations may not apply to you. This Limited Warranty gives you specific legal rights, and you may have other rights that vary from State to State. You should consult applicable state laws to determine your rights. **SO FAR AS IS CONSISTENT WITH APPLICABLE STATE LAW, ANY IMPLIED WARRANTIES THAT MAY NOT BE DISCLAIMED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO ONE YEAR FROM THE DATE OF ORIGINAL SHIPMENT.**

# WattsRadiant™

A WATTS Brand

USA: T: (800) 276-2419 • F: (417) 864-8161 • WattsRadiant.com

Canada: T: (905) 332-4090 • F: (905) 332-7068 • WattsRadiant.ca

Latin America: T: (52) 81-1001-8600 • F: (52) 81-8000-7091 • WattsRadiant.com