For Floor Heating and Snow Melting Applications

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

RadiantPEX+ Tubing

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

Watts Radiant's RadiantPEX+ is cross-linked polyethylene tubing used for radiant floor heating, snow melting, and distribution piping. RadiantPEX+ is manufactured with an integral ethylene vinyl alcohol (EVOH) DIN Standard O₂ barrier that limits oxygen diffusion through the walls of the tubing to less than 0.10g/m3/day at 104°F water temperature. RadiantPEX+ adds a protective polypropylene layer to the outside of the EVOH oxygen barrier.

Specifications

MAX PRESSURE
80 psi
100 psi
160 psi

System shall be installed using Watts Radiant RadiantPEX+ tubing. All connections shall be made using Watts Radiant's CinchClamp, CrimpRing, or Compression fittings of corresponding size and in accordance with all corresponding installation guidelines.

Installation

RadiantPEX+ must be installed in accordance with all Watts Radiant installation procedures, including information provided in the RadiantPEX+ installation manual.



Standards and Listings



RadiantPEX+is manufactured to ASTM F-876 and F-877 standards, and to SDR-9 dimensions.

RadiantPEX conforms to ASTM E84 and UL263.

RadiantPEX+ is listed by The International Code Council Evaluation Service (ICC) to Report #ESR-1155 and PMG-1008 which give compliance to IPC, IMC, UMC, and UPC.



NSF-rfh RadiantPEX+ is tested and listed by the National Sanitation Foundation to Standards (rfh) and NSF P171 (chlorine resistance).



All RadiantPEX+ is certified to CSA Standard B137.5.

Quantity	Product	Model No.	I.D. (0.D.) Stick and Coil Lengths		Bend Radius	Fluid Capacity Per 100'
	3/8" RadiantPEX+	PB032061	0.360" (1/2")	600 ft.	4"	0.50 gal.
	1/2" RadiantPEX+	PB032081	0.485" (5/8")	Custom, 100, 300, 500, 600, 1000 ft.	5"	0.92 gal.
	5/8" RadiantPEX+	PB032101	0.584" (3/4")	Custom, 300, 500, 600, 1200 ft.	6"	1.34 gal.
	3/4" RadiantPEX+	PB032121	0.681" (7/8")	Custom, 20, 100, 300, 500, 600, 1000, 1200 ft.	7"	1.84 gal.
	1" RadiantPEX+	PB032161	0.875" (1-1/8")	Custom, 20, 100, 300, 600 ft.	9"	3.04 gal.

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

For Floor Heating and Snow Melting Applications

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

RadiantPEX Tubing

Sizes: 1-1/4", 1-1/2", 2"

Watts Radiant's RadiantPEX is cross-linked polyethylene tubing used for radiant floor heating, snow melting, and distribution piping. RadiantPEX is manufactured with an integral ethylene vinyl alcohol (EVOH) DIN Standard O2 barrier that limits oxygen diffusion through the walls of the tubing to less than 0.10g/m3/ day at 104°F water temperature.

Specifications

MAX TEMPERATURE	MAX PRESSURE
200°F	80 psi
180°F	100 psi
73.4°F	160 psi

System shall be installed using Watts Radiant RadiantPEX tubing. All connections shall be made using Watts Radiant's CrimpRing, or Compression fittings of corresponding size and in accordance with all corresponding installation guidelines.

Installation

RadiantPEX must be installed in accordance with all Watts Radiant installation procedures, including information provided in the RadiantPEX installation manual.



Standards and Listings



RadiantPEX is manufactured to ASTM F-876 and F-877 standards, and to SDR-9 dimensions.

RadiantPEX conforms to ASTM E84 and UL263.

RadiantPEX is listed by The International Code Council Evaluation Service (ICC) to Report #ESR-1155 and PMG-1008 which give compliance to IPC, IMC, UMC, and UPC.



RadiantPEX is tested and listed by the National Sanitation Foundation to Standards (rfh) and NSF P171 (chlorine resistance).



II & RadiantPEX is certified to CSA Standard B137.5.

Quantity	Product	Model No.	I.D. (0.D.)	Stick and Coil Lengths	Bend Radius	Fluid Capacity Per 100'
	1-1/4" RadiantPEX	PB032181	1.069" (1-3/8")	20, 100, 300 ft.	11"	4.53 gal.
	1-1/2" RadiantPEX	PB032201	1.263" (1-5/8")	20, 100, 300 ft.	13"	6.32 gal.
	2" RadiantPEX	PB032221	1.653" (2-1/8")	100, 300 ft.	17"	11.15 gal.

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RaciantPEX Cross-linked Polyethylene Tubing w/EVOH Barrier

Unlike some pex connection systems, our three choices for RadiantPEX+ connections can be quickly made and immediately pressure tested.

CinchClamps[™] unique stainless steel design allows for easier connections in tight, hard-to-reach spaces.

CrimpRings[™] are precision-formed, ductile copper connectors. When crimped to brass crimp fittings, these connectors form a permanent seal.

T-20 Compression fittings do is needed.





from 1" to 2" diameter.

Codes, Listings and Standards

- RadiantPEX and RadiantPEX+ are manufactured to American Standard Testing Methods (ASTM F-876 and F-877) and to SDR9 dimensions. These standards include requirements and testing methods for materials, workmanship, dimensions, environmental stress cracking, sustained hydrostatic pressure strength, bend strength, and degree of crosslinking. RadiantPEX and RadiantPEX+ meet or exceed these standards.
- RadiantPEX and RadiantPEX+ are tested and listed by the National Sanitation Foundation to NSF-14 (rfh) and NSF P171 (chlorine resistance).
- RadiantPEX and RadiantPEX+ conform to ASTM E-84 (Standard Test Method for Surface Burning Characteristics of Building Materials) and UL 263 (Fire Tests of Building Construction and Materials).
- RadiantPEX and RadiantPEX+ are listed by the International Code Council Evaluation Service (ICC) to Report #ESR-1155, and PMG-1008 which give compliance to IPC, IMC, UMC, and UPC.

In USA: Watts Radiant 4500 E. Progress Place Springfield, MO 65803 (800) 276-2419 toll free (417) 864-6108 phone (417) 864-8161 fax wattsradiant.com

In Canada: 5435 North Service Road Burlington, ON L7L 5H7 (888) 208-8927 toll free (905) 332-4090 phone (905) 332-7068 fax www.wattscanada.ca







or hydronic radiant heating, snow melting systems and distribution piping P T ssiona S đ N



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1/2" Radiant 5/8" RadiantP 3/4" Radiant 1" RadiantPl 1-1/4" Radiant 1-1/2" Radiant

2" RadiantPE

B137.5.



and solar heat sources.

Description	Model #*	Nominal I.D. (inches)	Nominal O.D. (inches)	Standard Length(s) (feet)**	Bend Radius (inches)
3/8" RadiantPEX+	PB032061-XXX	0.35	1/2	600	4
1/2" RadiantPEX+	PB032081-XXX	0.475	5/8	100 / 300 / 500 / 600 / 1,000	5
5/8" RadiantPEX+	PB032101-XXX	0.574	3/4	300 / 500 / 600 / 1,200	6
3/4" RadiantPEX+	PB032121-XXX	0.671	7/8	20 / 100 / 300 / 500 / 600 / 1,000 / 1,200	7
1" RadiantPEX+	PB032161-XXX	0.863	1-1/8	20 / 100 / 300 / 600	9
1-1/4" RadiantPEX [§]	PB032181-XXX	1.054	1-3/8	20 / 100 / 300	11
1-1/2" RadiantPEX [§]	PB032201-XXX	1.244	1-5/8	20 / 100 / 300	13
2" RadiantPEX [§]	PB032221-XXX	1.653	2-1/8	20 / 300	17

* XXX denotes the stick or coil length required.

** Stick lengths (20') come in bundles of 25 for 3/4" RadiantPEX+ and 5 for other sizes. §1-1/4" and larger sizes are 3-layer RadiantPEX, not RadiantPEX+.

All RadiantPEX and RadiantPEX+ pipe is certified to CSA Standard



Watts Radiant is an ISO9001:2008 approved facility.



A Watts Water Technologies Company

RaciantPEG Cross-linked Polyethylene Tubing w/EVOH Barrier

Commercial Heating

Commercial Snow melting



RadiantPEX+

All 3/8" through 1" Watts RadiantPEX+ has a protective outer layer. This outer layer adds several benefits:

- Easier to pull through joists
- Reduces expansion noise in walls and floors
- Protects the oxygen barrier from job-site abuse
- Protects the oxygen barrier against moisture
- Improved flexibility

All of our barrier PEX offers these benefits over traditional piping systems: - Extremely flexible

- Light and easy to transport
- and store - Maintenance free
- Corrosion resistant
- Connection systems that are fast and reliable

Commercial Approvals:

- Conforms to UL 263 (fire test of building and construction materials)
- Conforms to ASTM E-84





Silane Cross-linking is Better

We use the Silane cross-linking process in manufacturing our PEX. Our superior silane technology enables higher burst strengths and higher anti-oxidant protection than other PEX manufacturing methods. Silane manufacturing is the most widely used process to manufacture PEX, and has been proven world-wide for over 30 years.

RadiantPEX+ is available in a wide range of sizes, coils, and stick configurations.

Where to use **RadiantPEX**+

RadiantPEXH can be used in a wide range of applications, from UnderFloor with heat transfer plates to slabs. Use RadiantPEX+ for snowmelt systems in concrete or under brick pavers.





Install RadiantPEX+ in thin-slab systems using Watts Radiant's SnapClips, RailWays", or staples.

Insula Grade

Install RadiantPEX+ in concrete slab and brick paver applications for snow melting.

Cable ties

Install RadiantPEX+ for underfloor radiant systems

using Watts Radiant heat transfer plates

Slab RadiantPEX+ Rebar/Rewire

Insulation

loist

floor heating applications





Install RadiantPEX+ for underfloor floor warming using Watts Radiant's LockDown™ fasteners



Install RadiantPEX+ in slab systems for radiant

