





Installing Radiant Floor Tubing has never been so quick and easy!

- Compact (2' x 4') and easy to handle, Heat-Sheet ® Panels securely interlock together.
- Tough preformed nodules resist job site breakage and form a multi-directional tubing channel grid.
- Tubing easily "walks into place" (in half the time or better!).
- And, tubing stays in place (without ties, clips or staples in most cases).



TECHNICAL INFORMATION

SPECIFICATIONS

Heat-Sheet® Radiant Floor Panels are made with expanded polystyrene (EPS) — a tough, high-density, closed cell foam insulation that is engineered to a minimum compression strength of 25 psi to support the weight of cast-in-place concrete. (Higher compression strengths are available upon request. See Size & Packaging Chart.) Heat-Sheet® Panels come in a range of thicknesses from 1-3/8" (R-4) to 5-1/4" (R-20). Heat-Sheet® 's tubing channel system provides proper multi-directional placement of 1/2", 5/8" or 3/4" I.D. tubing with 3" on-center points.

APPLICATIONS

Heat-Sheet® Radiant Floor Panels can be used in all under-concrete radiant floor applications, including Slab-On-Grade, Sandwich Slab, Snow-Melt and Retrofit & Overlay Applications.

ESTIMATING

- 1. Measure the length and width to determine the size of the area in which you want to install Heat-Sheet® Panels.
- 2. The panels are 8 sq. ft. each. Divide the area by 8 to get the number of panels you need.
- 3. Heat-Sheet® Panels come bundled in varying quantities as shown in the Size & Packaging Chart. When ordering your panels, round up to the nearest whole bundle.

INSTALLATION

LAYING HEAT-SHEET® RADIANT FLOOR PANELS

- 1. Ensure the ground is reasonably level before beginning installation.
- 2. A vapor barrier may be required by your local building code. When installing a vapor barrier, ensure it is in place before you begin laying the Heat-Sheet * panels.
- 3. Remove the interlock from two sides of the starting panel to avoid an air gap. It is easiest to remove the interlock you can see when looking at the back of the panel. Starting in a corner, place the cut edges tight against the wall.
- 4. For the next panel, cut the interlock on the 4' length only. Place trimmed panels so that they interlock along the 2' dimension.
- 5. Continue placing panels until you come to a wall. You will likely need to cut the final panel in this row to fit.
- 6. Use the leftover segments to start the next rows, and be sure to maintain the 3" spacing pattern.

 The idea is to have a staggered (running bond) layout rather than rows or columns. This helps keep the panels bound together and reduces waste.
- ONCE HEAT-SHEET® PANELS ARE INSTALLED

 1. Heat-Sheet® Radiant Floor Panels are designed with a 3" grid for easy tube spacing. Please consult an HVAC designer to determine the required separation
- Heat-Sheet® Radiant Floor Panels are designed with a 3" grid for easy tube spacing. Please consult an HVAC designer to determine the required separation points.
- 2. Install the tubing by simply "walking it" into the panels.
- 3. Ensure tubing is fully seated when turning a corner before beginning the next run. A plastic staple may be needed on the turns to keep the pipe in place.
- 4. Wire mesh and rebar can be laid directly on top of the panels, if required.

SCREED VOLUME RATES

To the top of the Heat-Sheet® nodules: 0.043 ft³/ft². For each additional inch of slab: 0.083 ft³/ft².

SIZE & PACKAGING CHART

	Nominal			Available (Compressive			
Product ⁸	Panel Thickness ¹	Overall Thickness ²	Average R-Value ³	25 psi (172 kPa)	40 psi (276 kPa)	60 psi (414 kPa)	Panels/ Bundle ⁷	Sq.Ft./ Bundle ⁷
HS-R4 ⁴	0.5"	1-3/8"	4	~			16	128
HS-R6 ⁶	1.0"	1-7/8"	6	✓			14	112
HS-R8	1.5"	2-3/8"	8	✓			8	64
HS-R10 ^{5,6}	2.0"	2-7/8"	10	✓	✓	✓	8	64
HS-R12 ^{5,6}	2.5"	3-3/8"	12	✓			6	48
HS-R14 ^{5,6}	3.0"	3-7/8"	14	✓			6	48
HS-NEOPOR- R16.1 ^{5,6}	3.0"	3-7/8"	16.1	~			6	48
HS-R16.1 ^{5,6}	3.5"	4-1/8"	16.1	✓	✓	✓	6	48
HS-R20 ^{5,6}	4.375"	5-1/4"	20	✓			6	48

CCMC EVALUATION LISTING 14007-L

¹Refers to thickness of the panel minus the nodules (grid height per image shown).

²Refers to thickness of nodule plus nominal panel thickness.

OVERALL THICKNESS

³In accordance with ASTM C578 and CAN/ULC S701 at 750°F (240°C). R-value is determined based on weighted average R-value of nodule and panel profile.

GRID HEIGHT = 0.875

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INTERLOCK

⁴These panels do not interlock and are designed to be applied only over flat surfaces, such as concrete slabs and wood subfloors.

⁵Additional vapor barrier may not be required per CAN/ULC S701 and the National Building Code of Canada.

⁶Additional vapor retarder may not be required per ASTM C578 and the International Residential Code. Confirm with your local building official prior to use.

[†]Panels per bundle may vary. Contact your local Heat-Sheet® representative to confirm.

Custom orders may be available upon request. Confirm availability of all Heat-Sheet products with your local supplier.

⁹Based on compressive strengths at 10% deformation.

HEAT-SHEET.COM

FOR MORE INFORMATION:

Visit <u>Heat-Sheet.com</u>. • Email us at <u>info@heat-sheet.com</u>. • Call your local Heat-Sheet ® manufacturer below.

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