

For Residential and Commercial Applications

Job Name _____
 Job Location _____
 Engineer _____
 Approval _____

Contractor _____
 Approval _____
 Contractor's P.O. No. _____
 Representative _____

SunTouch® Custom TapeMat®

120 and 240 Voltages

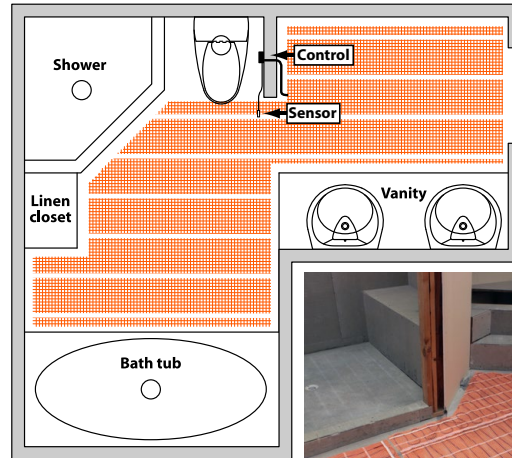
SunTouch Custom TapeMats are a series resistance heating cable assembly installed over plywood, backer board, or concrete slab (according to ANSI or TCNA guidelines), and then embedded in 3/8" (9.5 mm) or greater self-leveling or polymer-modified thin-set mortar.

Specifications

Supply Voltage	120VAC, 1-phase 240VAC, 1-phase
Amp Draw	See the Ordering Table below.
Maximum Circuit Load	15 amps
Wire Spacing	2.5" (63.5 mm) o.c. 3" (76 mm) o.c.
Maximum Allowable Temperature	194°F (90°C) Continuously
EMF	Less than 1 milligauss at 1/2" (12.7 mm) above surface.
Heating Elements	Oxygen-free copper or nickel-copper
Insulation	ETFE Fluoropolymer
Ground	Copper
Double-Sided Tape	1/2" (13mm), installed along both edges of mat
Minimum Allowable Bend Radius	1" (25 mm)
Power Lead Length	10' (2.7 m)

Application Parameters ✓			
Watt Density	C15 Series	2.5" (63.5 mm) o.c.	15 W/ft ² (161 W/m ²) 51 Btu/h/ft ² (549 Btu/h/m ²)
	C12 Series	3" (76 mm) o.c.	12 W/ft ² (129 W/m ²) 41 Btu/h/ft ² (441 Btu/h/m ²)
Minimum Polymer-modified Thinset	3/8" (9.5 mm)		
Allowable Substrate	Backer board over wood subfloor		
	Polymer-modified setting bed over wood subfloor		
	Polymer-modified setting bed over concrete slab		
	Thin slab/self-leveling concrete over wood subfloor		
	Thin slab/self-leveling concrete over concrete slab		
Allowable Floor Coverings	Tile/Stone		
	Carpet (C12 Series only)		
	Hardwood (C12 Series only)		

* Most anti-fracture membranes are approved for use with SunTouch Custom TapeMat. Contact manufacturer for details on specific products.



Installation Guidelines

- Measure and certify the correct wire resistance (ohms) value for the heating mat, record these readings in the chart provided in the installation manual.
- Use of manufacturer's alarm meter (LoudMouth™ meter) is recommended during installation.
- Clean the subfloor.
- Lay out and secure SunTouch Custom TapeMat to the floor.
- Install the floor sensor in accordance with installation manual.
- Install floor coverings as detailed in installation manual.



UL Listed for U.S. under UL Standard 1693 and Canada under CAN/CSA C22.2 No. 130.2-93
 Listing file number E185866.

⚠ WARNING

Never cut the heating cable or damage it in any way. Use only the attachment methods as described in the Installation Manuals for SunTouch Custom Tape Mat as other methods may damage the heating element.

⚠ CAUTION

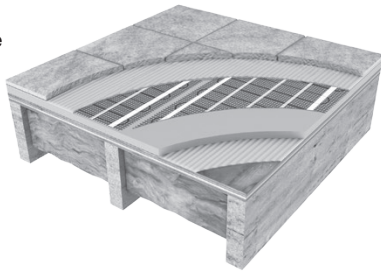
This Engineering Sheet is not intended to provide full installation instructions and safety information. In order to avoid property damage or injury, please refer to the complete installation manual and product safety information provided with the product.

SunTouch product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact SunTouch Technical Service. SunTouch 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 SunTouch products previously or subsequently sold.

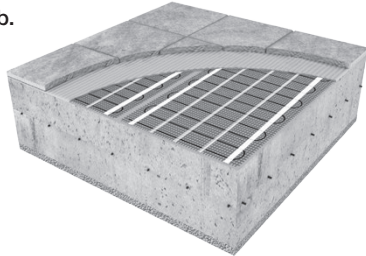


SunTouch Custom TapeMat Application Examples

SunTouch over wood frame floor with backer board

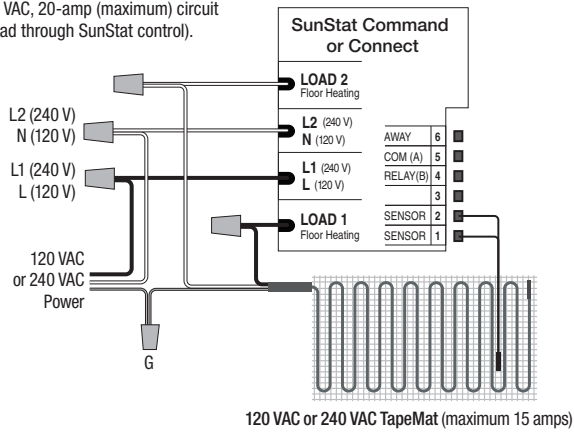


SunTouch over concrete slab.



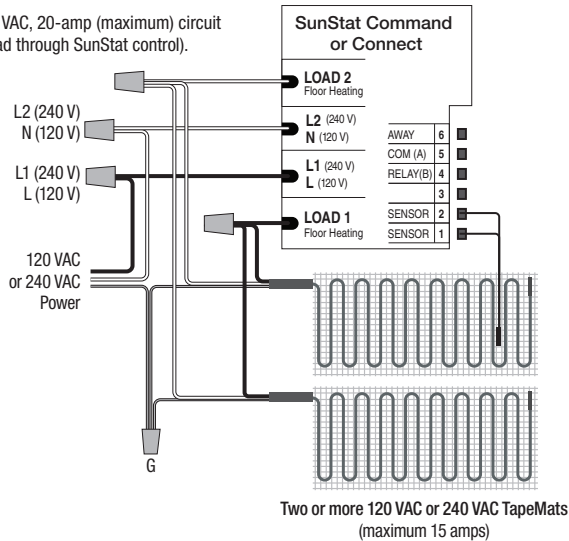
Typical Wiring for one Custom TapeMat with SunStat Control (120/240 VAC)

Dedicated 120 or 240 VAC, 20-amp (maximum) circuit (maximum 15 amp load through SunStat control).



Typical Wiring for multiple Custom TapeMats with SunStat Control (120/240 VAC)

Dedicated 120 or 240 VAC, 20-amp (maximum) circuit (maximum 15 amp load through SunStat control).



120 VAC SunTouch Custom TapeMats (C12 Series)

For applications requiring the C15 Series watt density, please contact the factory for special ordering details.

✓ Application Parameters				
Order No.	Total sq.ft	Reet Value*	Amp Draw	
81016649	10	0.11	1.0	
81016650	15	0.13	1.5	
81016651	20	0.13	2.0	
81016652	25	0.10	2.5	
81016653	30	0.06	3.0	
81016654	35	0.13	3.5	
81016590	40	0.10	4.0	
81016655	45	0.11	4.5	
81016656	50	0.14	5.0	
81016565	60	0.13	6.0	
81016657	70	0.13	7.0	
81016658	80	0.19	8.0	

240 VAC SunTouch Custom TapeMats (C12 Series)

✓ Application Parameters				
Order No.	Total sq.ft	Reet Value*	Amp Draw	
81016659	20	0.11	1.0	
81016660	30	0.13	1.5	
81016661	40	0.13	2.0	
81016662	50	0.10	2.5	
81016663	60	0.06	3.0	
81016664	70	0.13	3.5	
81016665	80	0.10	4.0	
81016666	90	0.11	4.5	
81016667	100	0.14	5.0	
81016668	120	0.13	6.0	
81016669	140	0.13	7.0	
81016670	160	0.19	8.0	

*REET, (Radiant Electric Emissions Test), which is conducted by an independent third party test lab known as ETL/Semko.



A Watts Water Technologies Company