

For Residential and Commercial Applications

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

SunTouch® TapeMat™

120 and 240 Voltages

SunTouch 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

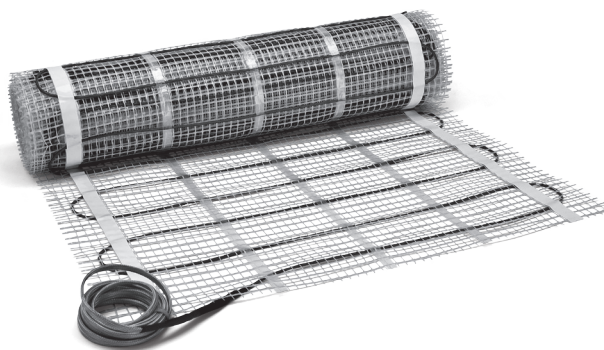
Supply Voltage	120VAC, 1-phase 240VAC, 1-phase
Amp Draw	120VAC: 1 amp per 10 sf. 240VAC: 1 amp per 20 sf.
Maximum Circuit Load	20 amps (15 amps with SunStat Control)
Wire Spacing	2-1/2" (63.5 mm) o.c.
Maximum Allowable Temperature	194°F (90°C) Continuously
EMF	Less than 1 milligauss at 1/2" (12.7 mm) above surface.
Heating Elements	Oxygen-free copper or nickel-copper
Insulation	ETFE Fluoropolymer
Ground Braid	Tin-coated copper
Double-Sided Tape	3/4" (19 mm) wide, installed along both edges of mat.
Minimum Allowable Bend Radius	1/2" (12.7 mm)

Application Parameters ✓		
Watt Density	2-1/2" (63.5 mm) o.c.	12 W/sf
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	
	Hardwood	

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

⚠ 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 safety information provided with the product.



SunTouch TapeMats are available in various lengths with voltage options of 120 or 240 VAC.

Installation Parameters

- Measure and certify the correct wire resistance (ohms) value for the heating cables, 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 TapeMat to the floor.
- Install the floor sensor in accordance with installation manual.
- Install floor coverings as detailed in installation manual.



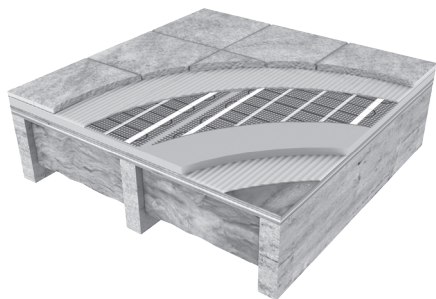
UL Listed for U.S. under UL Standard 1693 and Canada under CAN/CSA C22.2 No. 130-03.
Listing file number E185866.

ATTENTION: Never cut the heating cable or damage it in any way. Use only the attachment methods as described in the Installation Manuals for SunTouch TapeMat, WarmWire, UnderFloor, ProMelt or SlabHeat as other methods may damage the heating element.

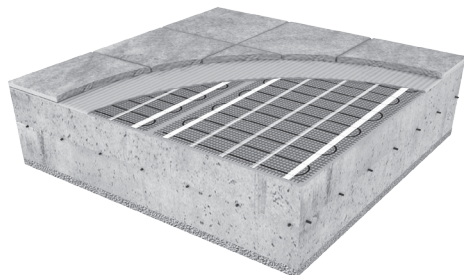
 **SunTouch**
Electric Floor Heating & Snow Melting

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

SunTouch TapeMat Application Examples



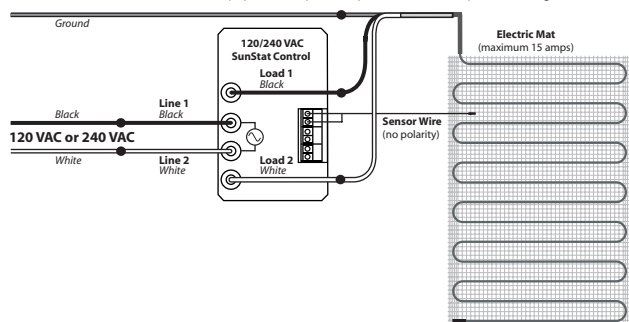
SunTouch over wood frame floor with backer board



SunTouch over concrete slab.

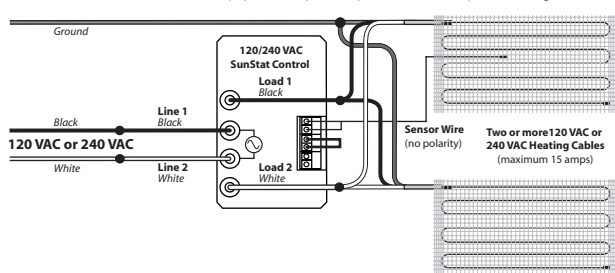
Electrical Wiring Diagram for Single Cable with SunStat Control (120/240VAC)

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



Electrical Wiring Diagram for Multiple Cable with SunStat Control (120/240VAC)

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



120 VAC SunTouch TapeMats

✓	Application Parameters				
	Order No.	Mat Sizes (W x L)	Total sq.ft	Reet Value*	Amp Draw
	81002183	2' x 5' (0.61 m x 1.52 m)	10	0.11	1.0
	81007233	2' x 7'-6" (0.61 m x 2.29 m)	15	0.13	1.5
	81002197	2' x 10' (0.61 m x 3.05 m)	20	0.13	2.0
	81007234	2' x 12'-6" (0.61 m x 3.81 m)	25	0.10	2.5
	81002208	2' x 15' (0.61 m x 4.57 m)	30	0.06	3.0
	81007235	2' x 17'-6" (0.61 m x 5.33 m)	35	0.13	3.5
	81002217	2' x 20' (0.61 m x 6.10 m)	40	0.10	4.0
	81007236	2' x 22'-6" (0.61 m x 6.86 m)	45	0.11	4.5
	81002226	2' x 25' (0.61 m x 7.62 m)	50	0.14	5.0
	81002234	2' x 30' (0.61 m x 9.14 m)	60	0.13	6.0
	81002240	2' x 35' (0.61 m x 10.67 m)	70	0.13	7.0
	81002246	2' x 40' (0.61 m x 12.19 m)	80	0.19	8.0
	81002184	3' x 5' (0.91 m x 1.52 m)	15	0.13	1.5
	81002188	3' x 6'-8" (0.91 m x 2.03 m)	20	0.13	2.0
	81002194	3' x 8'-4" (0.91 m x 2.54 m)	25	0.10	2.5
	81002200	3' x 10' (0.91 m x 3.05 m)	30	0.06	3.0
	81002209	3' x 15' (0.91 m x 4.57 m)	45	0.11	4.5
	81002220	3' x 20' (0.91 m x 6.10 m)	60	0.13	6.0

240 VAC SunTouch TapeMats

✓	Application Parameters				
	Order No.	Mat Sizes (W x L)	Total sq.ft	Reet Value*	Amp Draw
	81002265	2' x 10' (0.61 m x 3.05 m)	20	0.11	1.0
	81002269	2' x 15' (0.61 m x 4.57 m)	30	0.13	1.5
	81002274	2' x 20' (0.61 m x 6.10 m)	40	0.13	2.0
	81002279	2' x 25' (0.61 m x 7.62 m)	50	0.10	2.5
	81002284	2' x 30' (0.61 m x 9.14 m)	60	0.06	3.0
	81002288	2' x 35' (0.61 m x 10.67 m)	70	0.13	3.5
	81002293	2' x 40' (0.61 m x 12.19 m)	80	0.10	4.0
	81002407	2' x 45' (0.61 m x 13.72 m)	90	0.11	4.5
	81002410	2' x 50' (0.61 m x 15.24 m)	100	0.14	5.0
	81002415	2' x 60' (0.61 m x 18.29 m)	120	0.13	6.0
	81002419	2' x 70' (0.61 m x 21.34 m)	140	0.13	7.0
	81002422	2' x 80' (0.61 m x 24.38 m)	160	0.19	8.5
	81002266	3' x 10' (0.91 m x 3.05 m)	30	0.13	1.5
	81002268	3' x 13'-4" (0.91 m x 4.06 m)	40	0.13	2.0
	81002272	3' x 16'-8" (0.91 m x 5.08 m)	50	0.10	2.5
	81002277	3' x 20' (0.91 m x 6.10 m)	60	0.06	3.0
	81002286	3' x 30' (0.91 m x 9.14 m)	90	0.11	4.5
	81002406	3' x 40' (0.91 m x 12.19 m)	120	0.13	6.0

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