Engineering Specification

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

SunTouch® Underfloor®

120 Voltages

SunTouch UnderFloor is a series resistance heating cable assembled into a foil "radiator" surface. It is installed indoors under a wood subfloor between the joists in residential and light commercial applications. Floor coverings above may be any type, with a maximum of R-11 total insulation for all layers.

Specifications

Supply Voltage	120 VAC, 1-phase
Amp Draw	120 VAC: 1 amp per 10 sf.
Maximum Circuit Load	20 amps (15 amps with SunStat Control)
Wire Spacing	2-3/4" (70 mm) o.c.
Maximum Allowable Temperature	194°F (90°C) Continuously
EMF	Less than 1 milligauss
Heating Elements	Oxygen-free copper or nickel-copper
Insulation	ETFE Fluoropolymer
Ground Braid	Stainless Steel
Minimum Allowable Bend Radius	1" (25 mm)

SunTouch UnderFloor is available in various lengths with voltage options of 120 VAC.

Installation Guidelines

- 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.
- Verify that the area below the subfloor is clear and clean of sharp objects such as nails from above, and is ready to receive work.
- Install the floor sensor in accordance with installation manual.
- Completely unroll the mat to make sure it fits between joists and obstructions.
- Use finish staples to secure the mesh edging to the joists, 2" (51 mm) below the subfloor.

Application Parameters	√		
Watt Density	☐	2-3/4" (70 mm) o.c.	10 W/sf
Allowable Floor Coverings	☐	Tile/Stone	
	☐	Carpet	
	☐	Hardwood	

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

⚠ ADVERTENCIA

Never cut the heating cable or damage it in any way. Do not install UnderFloor mats in mortar or cement, or install them in the same control zone as HeatWeave mats or WarmWire cables. These products have different heat output, and are manufactured for different applications. Use only the attachment methods as described in the Installation Manual to fasten the UnderFloor as other methods may damage the heating cable.

⚠ PRECAUCIÓN

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®
A WATTS Brand

SunTouch UnderFloor Application Examples

SunTouch UnderFloor - multiple joist bays

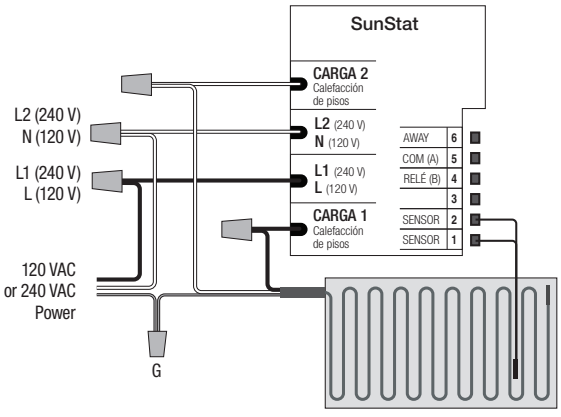
120 VAC UnderFloor

√	Mat Sizes		
	Order No.	Mat Sizes (W x L)	Amp Draw
☐	81006826	4' x 16"	0.4
☐	81006827	6' x 16"	0.7
☐	81006828	8' x 16"	0.9
☐	81006829	9'-6" x 16"	1.1
☐	81006830	12' x 16"	1.3
☐	81006831	14' x 16"	1.6
☐	81006832	16' x 16"	1.8
☐	81007125	5'-6" x 12"	0.5
☐	81007126	8' x 12"	0.7
☐	81007127	10'-6" x 12"	0.9
☐	81007128	13' x 12"	1.1
☐	81007129	16' x 12"	1.3

⚠ PRECAUCIÓN

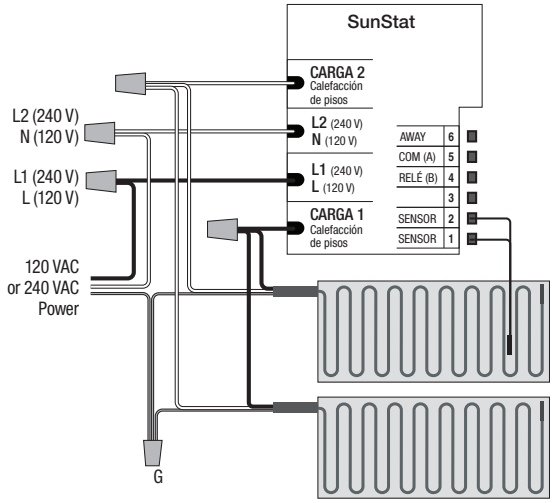
Make sure 120 VAC is supplied to 120 VAC. Otherwise, dangerous overheating and possible fire hazard can result.

Electrical Wiring Diagram for Single UnderFloor Mat with SunStat Control (120/240 VAC) Dedicated 120 or 240 VAC, 20-amp (maximum) circuit (maximum 15 amp load through SunStat control).



120 VAC or 240 VAC UnderFloor Mat (maximum 15 amps)

Electrical Wiring Diagram for Multiple UnderFloor Mats with SunStat Control (120/240 VAC) Dedicated 120 or 240 VAC, 20-amp (maximum) circuit (maximum 15 amp load through SunStat control).



Two or more 120 VAC or 240 VAC UnderFloor Mats (maximum 15 amps)

SunTouch®

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USA: T: (888) 432-8932 • SunTouch.com
Canada: T: (905) 332-4090
Latin America: T: (52) 81-1001-8600 • SunTouch.com