



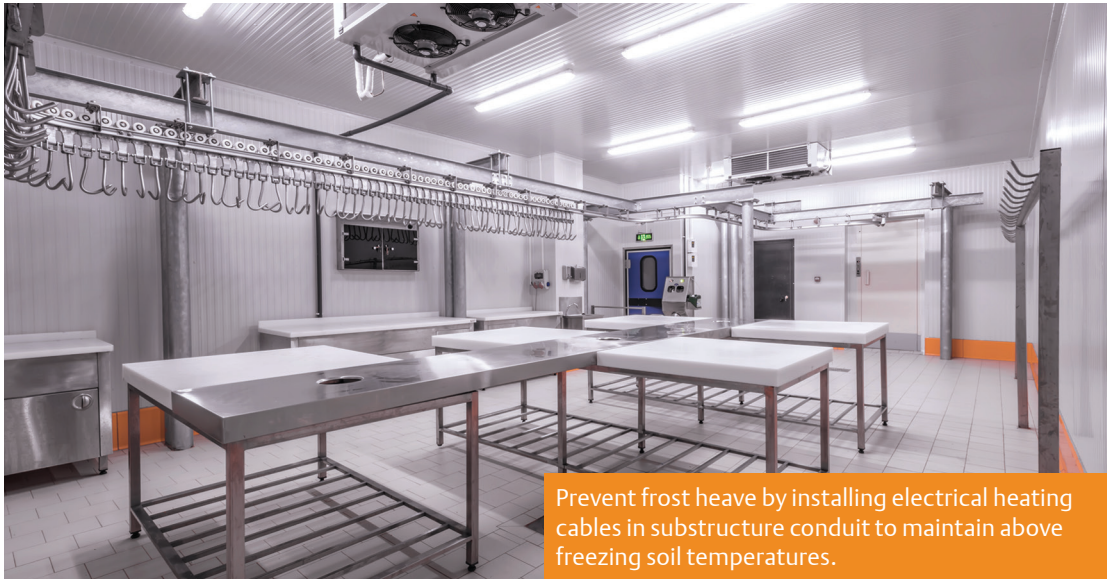
Advanced Frost Heave Protection for Cold Area Flooring

EasyHeat™ Commercial Frost Heave Prevention Systems

Self-regulating electric heating cables and controls, specifically designed for freezers, refrigerated warehouses, ice arenas and cold rooms.



Protect Against Costly Floor Damage.



Frost heave is the uplift of saturated soil due to expansion from freezing. Cold storage areas maintain continuous temperatures at or below freezing. Even when insulated, those cold temperatures can seep down through the floor, causing the moisture to freeze in the soil below the slab drawn through capillary action. As that ice formation expands vertically, it heaves the soil beneath the freezer floor, resulting in significant structural damage and costly repairs.

Frost heave results from three basic conditions:

- Ground subject to freezing
- Moisture in soil below floor slab
- Constant exposure to below freezing temperatures

Managing the controllable variable:

- Installing electrical heating cables in the conduit embedded in the substructure beneath the floor insulation maintains above freezing soil temperatures, preventing ice buildup in the ground below
- The substructure can be any suitable construction material, including concrete OR compacted sand

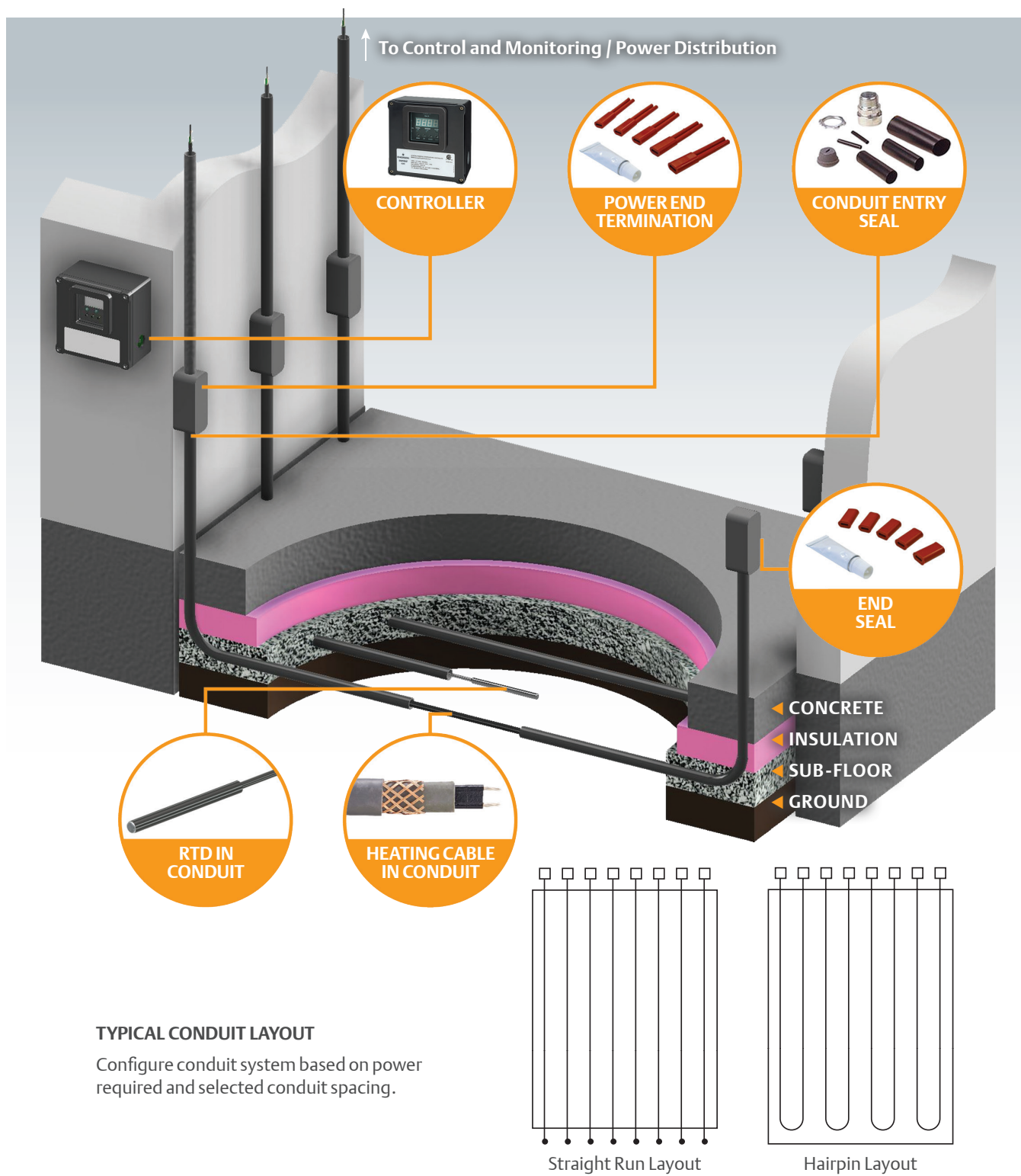
BENEFITS

EasyHeat self-regulating frost heave prevention systems by Emerson mitigate saturated soil uplift while offering easier installation and considerably less maintenance than air or glycol systems. The cable efficiently and effectively provides the heat output necessary to maintain above freezing soil temperatures, preventing ice formation beneath the freezer floor.

SYSTEM DESIGN CONSIDERATIONS

- **Facility**
 - Surface area to be heated
 - Concrete thickness
 - Above / below grade
 - Substrate type / thickness
 - Insulation type / thickness
 - Room temperature
- **System Layout**
 - Conduit layout / spacing / type
 - Junction / pull box locations
- **Circuit Length / Electrical Load**
 - Operating voltage
 - Breaker size
- **Controls**
 - Thermostat
 - Sensor(s)

System Installation.



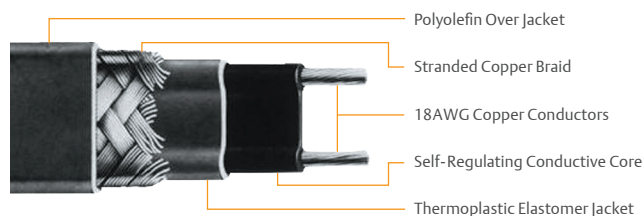
Ideal for Commercial Applications.



SELF-REGULATING HEATING CABLES

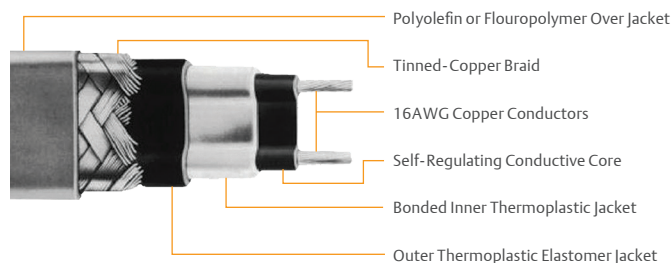
Emerson's high-quality EasyHeat heating cables and controls are engineered for efficient and cost-effective protection from frost heave by maintaining the ground temperatures above-freezing. Our systems provide exceptional performance in every cold room, freezer, ice arena and virtually every refrigerated commercial application

EasyHeat SR Trace™ Cable



Designed for use in Ordinary (Unclassified) Locations

EasyHeat TSR Cable



Designed for use in Ordinary (Unclassified) and Hazardous Locations

A premium frost-heave prevention solution, suitable for installation in the conduit embedded within the substructure. Ideal for freeze protection systems, the self-regulating cable automatically adjusts its heat output with temperature fluctuations for safe, efficient operation.

Product Feature	SR Trace				TSR Cable			
	Catalog Number	Voltage	Cable Power	Max. Segment Cable Length	Catalog Number	Voltage	Cable Power	Max. Segment Cable Length
Product Output ① @ +50 °F (+10 °C)	SR51J	120 Vac	3.3 W/ft	240 ft	TSR51J	120 Vac	3.0 W/ft	270 ft
	SR52J	240 Vac		480 ft	TSR52J	240 Vac		540 ft
	SR81J	120 Vac	5.2 W/ft	190 ft	TSR81J	120 Vac	4.8 W/ft	210 ft
	SR82J	240 Vac		380 ft	TSR82J	240 Vac		420 ft
Max. Voltage	277 Vac				277 Vac			
Bus Wire Size	18 Gauge				16 Gauge			

① Power output adjusted for installation in conduit.

Digital Temperature Control of Heating Cable Segment.



DIGITAL CONTROL

EasyHeat digital controllers by Emerson provide microprocessor-based temperature control and monitoring of a single heater segment, with remote alarm contacts and ground fault leakage protection. They are recommended for use with frost heave prevention systems to optimize energy consumption during operation. ①

EasyHeat EGPC Controller

Microprocessor based controller is wall-mounted, and has been specifically designed for electric heat tracing applications. Provides digital temperature control of an individual heater segment with sensor monitoring, remote alarm contacts and ground fault protection.

- NEMA 4X fiberglass reinforced, carbon impregnated, UV resistant polymer enclosure is designed for wall-mounted applications
- Dual pole switching
- Provided with common alarm contacts for remote monitoring of the control system



① Note: Ground-fault protection is required by the NEC in all heating cable applications.

Optimize Energy Consumption During Operation.



THERMOSTAT CONTROL

EasyHeat thermostats by Emerson provide temperature control of a single heater segment. They are recommended for use with frost heave prevention systems to optimize energy consumption during operation. ①

EasyHeat C3RC Thermostat

Suitable for commercial applications, the C3RC can be used in ambient-sensing mode or line sensing mode.

- Voltage: 120, 208, 240 or 277 Vac
- Current: 22 Amps
- Adjustable Temperature Range: 0 °F to +150 °F (-15 °C to +65 °C)
- Fixed Differential Temperature: +6 °F (+3.3 °C)
- Maximum Bulb Temperature: +190 °F (+88 °C)
- Capillary Length: 10 ft (3 m)



① Note: Ground-fault protection is required by the NEC in all heating cable applications.

Ensure a Successful Installation, Every Time.

ACCESSORIES

Emerson provides all of the material necessary to complete your frost heave prevention system installation.

EasyHeat SRPCRG Power Connection Kit



Designed for use with EasyHeat SR Trace and TSR heater cables to provide a watertight entry seal into a junction box ①. The SRPCRG allows for heating cable to heating cable splice using a customer supplied junction box.

- Provides one (1) heat shrinkable end seal
- Includes cable seals for power connection and end terminations for a single heating cable

EasyHeat SRMP Power End Termination Kit



Designed for use with EasyHeat SR Trace and TSR heater cables and used for terminating field-fabricated heating cables inside the power connection box.

- Constructed of molded silicone material and silicone adhesive
- Each kit contains materials to complete five (5) terminations

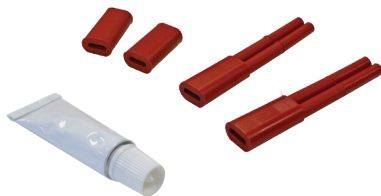
EasyHeat SRME End Seal Kit



Designed for use with EasyHeat SR Trace and TSR heater cables and used for terminating the ends of field-fabricated heating cables.

- Constructed of molded silicone material and silicone adhesive
- Each kit contains materials to complete five (5) terminations

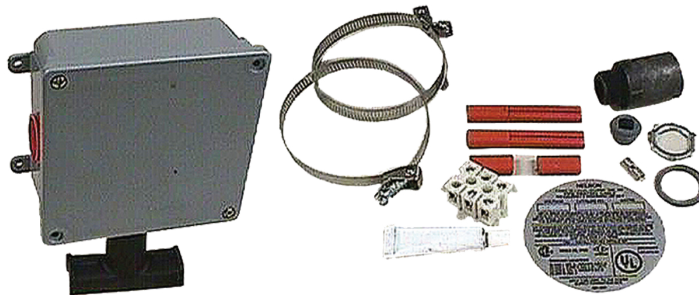
EasyHeat SRM2 End Seal and Power End Connection Kit



The SRM2 is used for terminating the ends of field-fabricated heating cables and heating cables inside a power connection box.

- Constructed of molded silicone material with waterproof silicone adhesive
- Kit contains two (2) end seals, two (2) power end connections, and silicone adhesive

EasyHeat TSRP3 Power Connection Kit

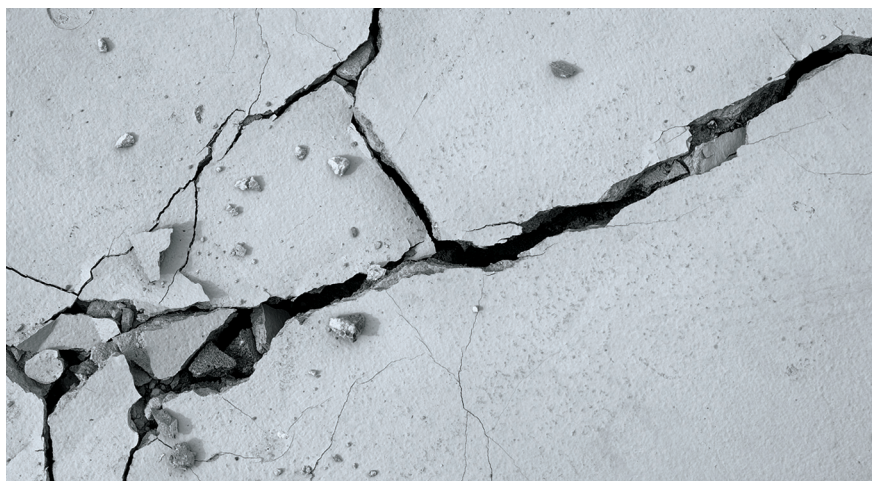


Non-metallic connection kit is suitable for connecting up to two heating cables to customer supplied power wiring. Kit contains:

- One (1) universal base, box adapter, sealing gasket, O-ring and locknut
- Two (2) end seals, two (2) power end connections, and silicone adhesive
- One (1) junction box with sealing gasket and cover
- One (1) sealing grommet
- Two (2) power terminations and cable end seals with adhesive sealant
- One (1) 3-point floating terminal block
- One (1) ground connection splice
- Two (2) stainless steel pipe clamps

① Note: Junction box is not included with the SRPCRG Power Connection Kit.

Heating cable solutions protecting cold rooms against structurally compromising frost heave damage.



EASYHEAT®

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