

Strip Heaters



FINNED STRIP Heaters

Ceramic Insulated Finned Strip Heaters

TEMPCO Finned Strip Heaters are extremely efficient and dependable as a heat source for hundreds of industrial and commercial applications. They are used for both forced (mounted in a duct) and natural convection air heating (mounted at the bottom of cabinet type ovens).

The Finned Strip Heater's basic design consists of a helically wound resistance coil placed in a specially designed ceramic insulator. The resistance coil is mechanically connected to the screw terminal for positive connection. Stainless steel rectangular tubing is used to house the heater assembly. All remaining voids are filled with high purity magnesium oxide to increase thermal conductivity and dielectric strength.

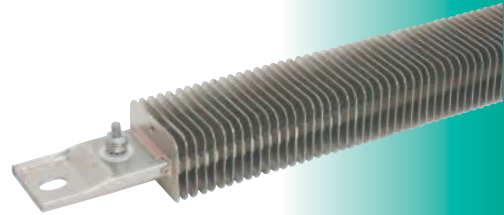
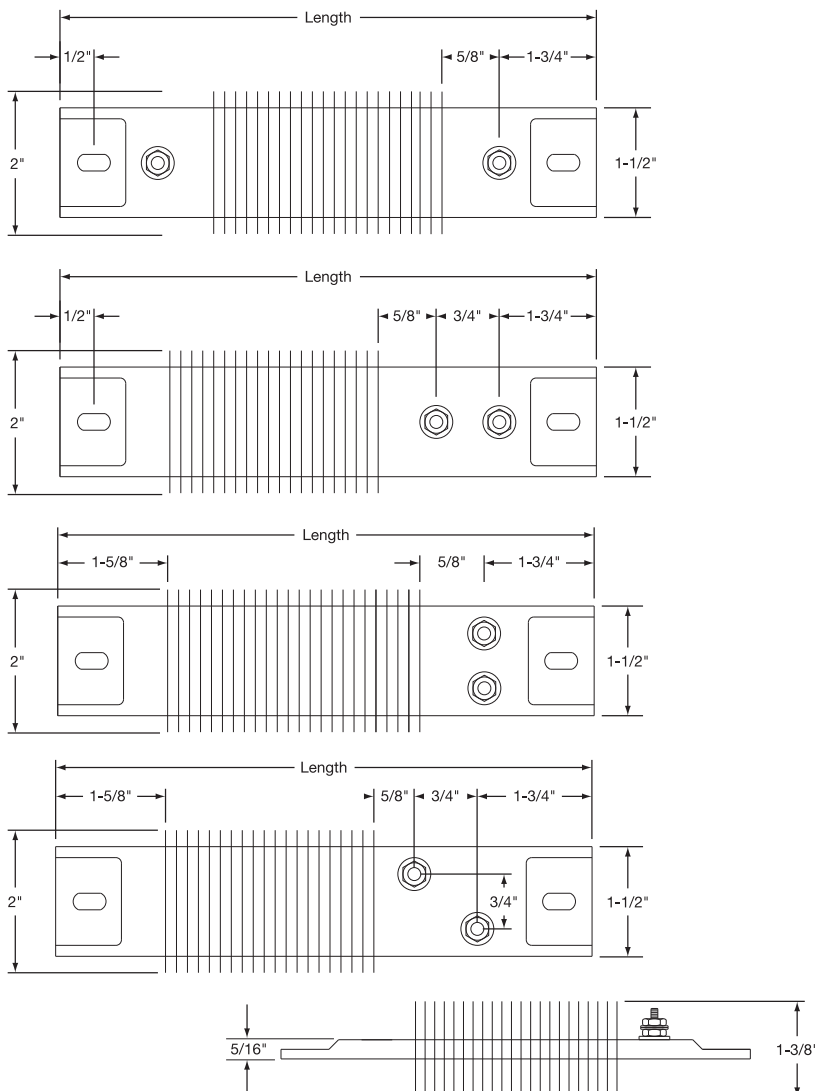
Typical Applications

- Duct Heating
- Space Heaters
- Drying Ovens
- Food Warmers
- Dehumidifier
- Shrinking Tunnels
- Air Heating
- Heat Curing

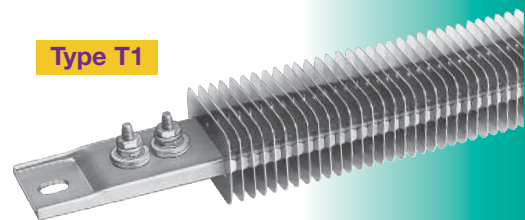
Nickel-plated steel fins (Stainless Steel optional) are mounted to the rectangular tubing. The fins have been specially designed to provide maximum surface contact for good heat dissipation into the finned cross sections, thus resulting in rapid heat transfer to the air. TEMPCO Finned Strip Heaters are manufactured in a full line of standard sizes, electrical ratings and terminations, or can be made to your specifications.

Design Features

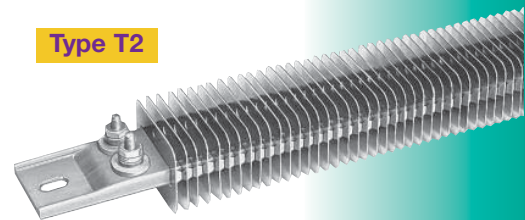
- * Rugged, Durable Construction
- * Stainless Steel Sheath
- * Nickel-Plated Steel Fins (Stainless Steel Optional)
- * Various Terminations
- * Trouble-Free Installation
- * Various Sizes in Stock



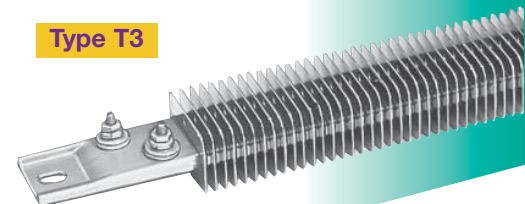
Type T1



Type T2



Type T3



Type T4

Fin Height

Large selection **IN STOCK**
for immediate delivery



Strip Heaters



Specifications & Tolerances

Standard Specifications and Tolerances of Finned Strip Heaters If tighter tolerances are required, consult Tempco.

PERFORMANCE RATINGS

Maximum Sheath Temperature: 1200°F (650°C)

Maximum Watt Density:

	Max. W/in ²	Max. W/cm ²
Still Air		
Up to 300°F (149°C)	20	3.1
300° to 600°F (149° to 316°C)	16	2.5
600° to 800°F (316° to 427°C)	10	1.6
Moving Air		
At 600 ft./min., up to 200°F	40	6.2
(3 m/sec., up to 93°C)		
At 600 ft./min., up to 400°F	30	4.7
(3 m/sec., up to 204°C)		
At 600 ft./min., up to 600°F	20	3.1
(3 m/sec., up to 316°C)		

Agency  **US Approvals**

Finned Channel Strip Heaters have been certified as Recognized Components by Underwriters Laboratories (File Number E65652) under CCN KSOT2/8 to meet UL standard 499 and Canadian Standard C22.2 No. 72.

This file specifies the end use limitations and conditions of acceptability for the use of this type of heater. For additional information consult Tempco.

If you require UL/CSA Agency Approval, please specify when ordering.

ELECTRICAL SPECIFICATIONS

Maximum Voltage: 480VAC (when applicable)

Maximum Amperage: 25 amps

Resistance Tolerance: +10%, -5%

Wattage Tolerance: +5%, -10%

MATERIAL SPECIFICATIONS & PHYSICAL SIZES

Sheath: 304 Stainless Steel

Fins: Nickel Plated Steel (Stainless Steel Optional)

Screw Terminals: Stainless Steel 10-32 UNF Threads

Width Including Fins: 2"

Height Including Fins: 1-3/8"

Length Tolerance: Up to 24" ± 1/16", over 24" ± 1/8"

Mounting Slot Size: Standard 5/16" × 1/2"

Slot Size For Secondary Insulating Bushing:

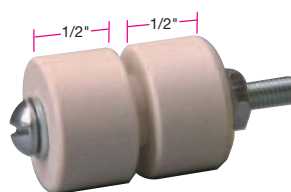
1/2" × 5/8" for 300 Volts and above

Secondary Insulating Bushings

Used to mount finned strip heaters in air heating applications. Also can be used when it is necessary to electrically isolate the heater from ground. When Insulating Bushings are required, a 1/2" × 5/8" slot is substituted for the standard slot size (5/16" × 1/2").



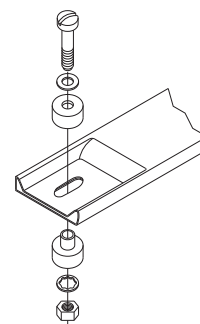
When using secondary insulating bushings, the heater must be guarded to avoid any accidental contact. The guard must be electrically isolated from the heater and must be properly grounded.



Insulating Bushing Assembly

Part Number: CERR-1001

NOTE: Two assemblies are required for each heater.

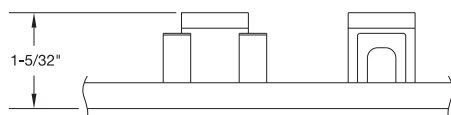


Ceramic Covers for Insulating Screw Terminals

Igloo™ Ceramic Covers

Igloo Ceramic terminal covers consist of two individual ceramic parts. With a tight-fitting cap and a solid base, an Igloo cover will fully insulate any standard 10-32 terminal lug used for electrical wiring hookups.

Igloo covers can be assembled on all Channel Strip and Finned Strip heaters with Type T1 and Type T4 screw terminals. Mica Strip heaters with screw terminals that have a minimum center to center distance of 7/8" can also be assembled with Igloo covers.



Type C6

Double Port In-Line

Part Number: CER-101-104

Type C7

Double Port 90°

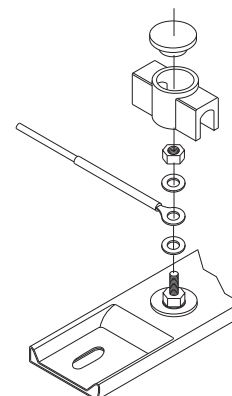
Part Number: CER-101-106



Type C8

Single Port

Part Number: CER-101-107



Ceramic Cap
Thread 10-32
Part Number CER-102-101

