



# How to work with heatshrink tubing...



**TECHFLEX**  
Braided Sleeving Products

## What is Heatshrink Tubing?

Heatshrink tubing is a flexible, pre-stretched tube, engineered from a wide range of polymers, that will shrink to a fixed diameter when sufficient heat is applied. Its diameter and thickness can vary, and it is rated by its expansion ratio, a comparative of the differences in expansion and recovery rate.

Heatshrink tubing is the ideal way to create a tight, professional finish on any wire, hose or cable management project. Once shrunk, the tubing will hold its reduced state, even in elevated temperatures. Typical applications for the heatshrink tubing include: electrical insulation, termination, splicing, cable bundling, color coding, strain relief, wire marking, identification, mechanical protection, corrosion protection, abrasion protection and moisture and weather sealing.

## What does shrink ratio (2:1, 3:1, etc.) mean?

The shrink ratio is the approximate maximum amount that heatshrink tubing will shrink relative to the unshrunk diameter. For example, a piece of 3/4" heatshrink tubing with a 3:1 shrink ratio will shrink down to a maximum diameter of approximately 1/4" when fully shrunk. All heatshrink tubing on our site is specified in it's UNSHRUNK diameter, so consider the shrink ratio and the unshrunk diameter when ordering heatshrink tubing. Heatshrink tubing with a larger shrink ratio will be more forgiving when fitting the tubing over plugs or connectors, but will have a bit thicker wall thickness and slightly less flexibility when shrunk then a lower ratio product.



### Step 1

**Measure the heatshrink tubing to length and cut with a scissor. The thickness of your bundle, as well as the desired final appearance, will determine the length of the tubing you cut. Generally, a piece 1 1/2" - 2" long will accommodate almost any need (such as this bundle of network cables). Single wires, or smaller bundles, require shorter pieces.**



### Step 2

**Slip the tubing over the bundle and position it so that both the sleeved and unsleeved portions are sufficiently covered. Notice the small pieces of tubing installed on single wires as part of a color coding system. If your project requires multiple operations, always work up from the smallest to the largest bundle.**



### Step 3

**Gently apply heat from a heat gun, hair dryer or torch with an appropriate attachment. Keep the heat source far enough away so that hot metal or direct flame don't come in contact with the tubing, wires or sleeving. Move the heat around the bundle to prevent damaging the sleeving and to ensure that all areas of the tubing have been shrunk. Once cooled, your installation is complete.**



## Milwaukee High Quality Heat Guns & Accessories

Production quality heat guns from one of the finest names in tools. These high quality guns will provide years of dependable service under the most intensive conditions. High strength, impact resistant cases with heavy duty motors and heating elements.

**Dual Temp - HGD8975-6**

**Variable Temp LED Display - HGL8988-20**

**Accessory Kit - HGA49-80-0300**