Weathertyte® Canopy Welding Methods

Weathertyte canopy material is manufactured to a width of 78" to allow for more design flexibility where narrower goods would require additional seams.

Weathertyte canopy material has been evaluated on most of the common welding systems utilized in the canopy and awning industry. Standard machine profiles for reinforced vinyl substrates provided acceptable weld strength when evaluated by the manufacturer.

The embossed texture will not be altered from using the Miller or Leister hot air weld systems, but it may change the gloss level in the welded area.

The radio frequency (RF) welding may smooth the embossed texture as energy and pressure are increased.

Weathertyte canopy material can be overlap welded or butt welded using Cooley Seam tape.

Miller-Weldmaster (Hot Air)
Temperature: 1100 °F
Speed Setting: 110
Pressure: 60 psi
Rear rollers: No

Leister Hand Welder (Hot Air)
Temperature: 1000°F

Demtech Pro-Wedge (Wedge Welder)
Temperature: 765°F
Speed: 14 ft/min

Cosmos (RF)
Plate Current: ≤1.0 A
Grid Current: <0.4 A
Pre-Seal Time: 2 seconds
Seal Time: 4 seconds
Cool Time: 4 seconds

Note: RF weld settings were developed using a Cosmos (Kabar) model 4000, 4KW welder. It takes relatively little energy to RF weld Weathertyte Canopy. Welders with higher output may experience sparking. Avoid this by using the "arc quencher" feature on the welding equipment (if so equipped) and/or insulating the table/base upon which the Canopy sample rests using PE film[1].

[1] Cooley recommends using the following insulating film if the material sparks during welding: https://www.grainger.com/product/GRAINGER-APPROVED-Film-Stock-36-in-Wd-56LJ76