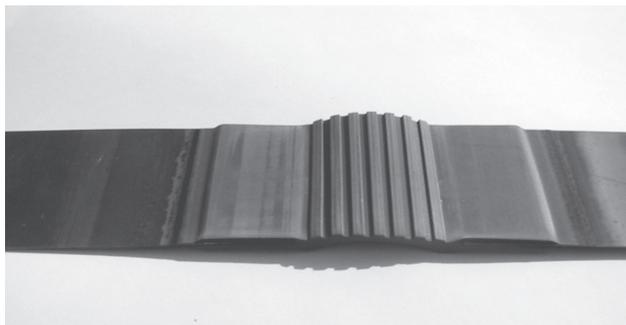
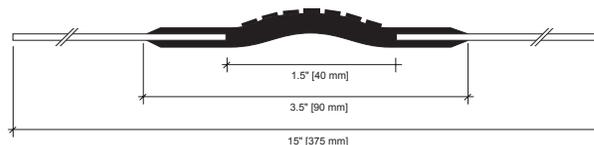


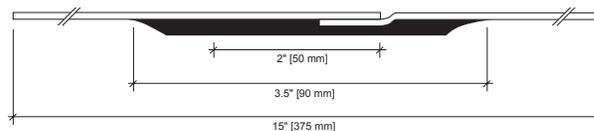
# DILA™ - Cu (Copper) Expansion Compensator



DILA-Cu (Copper) Profile



DILA-Cu (Copper) - Exposed Gland



DILA-Cu (Copper) - Covered Single Head

## DESCRIPTION

DILA-Cu (Copper) is fabricated out of 16 oz copper. The gland accommodates movements up to 1/4" [5 mm] and is manufactured out of Chloroprene, a high grade elastomer, which has excellent weathering properties. The gland can be ordered covered or exposed depending on the application. The various configurations available are illustrated above, the most common being the exposed gland product.

The DILA-Cu (Copper) expansion compensator comes in a 19½ foot [6 meter] roll ready to be soldered to any copper edge. It is recommended that during the soldering process a wet rug is placed over the gland to prevent damage from the heat of the soldering torch/iron. The copper sheet used conforms to ASTM B 370, "Standard Specification for Copper Sheet and Strip for Building Construction."

DILA-Cu Copper can be bent and formed to a desired profile shape on site using a standard hand metal brake. No special training or equipment is required to fabricate or install the DILA product.

### EXPANSION/CONTRACTION GLAND DATA

The DILA-Cu (Copper) waterproof expansion compensator can accommodate 3 way movements concurrently:

#### EXPANSION/CONTRACTION RANGE

Movement Direction	Movement
Horizontal	± 1/2" [± 5 mm]
Vertical	± 1/2" [± 5 mm]
Shear	± 1/2" [± 5 mm]

#### TECHNICAL DATA

Property & Test Method	Results
Hardness Shore A ASTM D-2240	60 ± 5
Low Temperature Flex ASTM D-746	-70°F [-57°C]
Ultimate Elongation ASTM D-412	400 %
Tensile Strength ASTM D-816 minimum.	80 lbf/in [14 N/mm]
Tear Strength ASTM D-624 (Die C) minimum	28.5 lbf/in [5 N/mm]
UV Exposure ASTM G-53 5000 hours	No Cracks or Cracking
Resistance to Ozone ASTM D-1149	Excellent

#### Chemical Resistance to:

Acids, Alkalis, Polar Solvents	No effect
Saline Solutions	

#### PHYSICAL DATA

Property	DILA
Gland Thickness	0.118" [3.0 mm]
Gland Width	1½" [40 mm]
Color	Black (Standard) or Special Order

COPPER DATA	
Property	DILA
Copper Grade:	110 Alloy
	99.9% Pure
Copper Weight:	16 oz
Thickness:	23 mil [0.62 mm]
Weight:	1.0 lb/ft² [4.90 kg/m²]
Maximum Coil Length: <i>Exposed Gland</i>	19' 8¼" [6 m]
<i>Single Head</i>	9' 10" [3 m]

## STORAGE

Store coils on end, on original pallets or elevated platform. Protect from external factors which can injure the chloroprene gland prior to installation, ideally store in an enclosed area.

## POSITIONING

DILA expansion compensators are placed at a maximum distance of 26 feet [8 m] apart, although where movement is restricted at one end, this spacing should be halved. An expansion compensator should also be installed within 3 feet [0.90 m] of a direction change i.e. corner or turn. Exact methods of placement can be calculated, as outlined in the manufacturers technical publication.

## INSTALLATION

A length of DILA expansion compensators is first cut from the coil to go round the perimeter of the gutter. This is joined to the adjacent metal work, the length of which gives the correct DILA spacing. The metal selvage edges of the DILA must overlap the metal sheets by a minimum of 1 inch [25 mm] and the weld location should be made at least 3 inches [75 mm] from the chloroprene, or 4 inches [100 mm] for aluminium and copper due to their better conductivity. The chloroprene and its connection with the metal selvage edges is resistant to heat but it is recommended that a wet rug be placed over the chloroprene as the weld is being made, to conduct away the heat. The same precaution is recommended when brazing or welding as it is necessary to cover the chloroprene gland with a damp cloth to prevent damage from sparks generated during the welding process. Naked flame must be kept away from the chloroprene at all times.

The welding of the DILA compensator depends on the metal type being used. TIG welding is best for aluminium and stainless steel, but low currents must be used due to the light metal gauge metal of the DILA selvage edges. DILA - Cu (Copper) can be soldered or brazed. Where additional strength is required the overlap can be riveted before soldering. For DILA - Pb (lead), the traditional lead sheet welding technique for a flat lapped seam can be used. Welding DILA is easiest on flat sheets but in certain situations the metal sheets and the DILA have to be preformed to shape before installation. The DILA is then formed to take up the shape of the gutter and placed into position. The bending process of the DILA can be done with ease on a standard metal break, for detail consult the manufacturers most recent printed literature. If heavy rooftop traffic is anticipated the covered single head version of the DILA must be used.

## MAINTENANCE

DILA expansion compensators are designed and manufactured to be maintenance free and do not require any particular care or attention over the life span of the roof.