

Expansion Strip Joint – Technical data

The Expansion Strip Joint has been designed to install as an expansion joint for Industrial Box gutters. It replaces the need to box the end of two adjoining gutters and the need to form a bridge to span the boxed ends.

Specs and Data of recommended sealant

Aquarius Rubber (Manufacturer) recommend the use of a neutral cure silicone. Acetyl cure silicone should not be used.

The purpose of silicone is to help provide a seal between the rubber and the metal box gutter. The seal occurs when pop (sealed) rivets or self-drilling screws are applied to provide a downward pressure to create a watertight seal with the silicone.

Temperature range that the product: Aquarius Rubber Expansion Strip can handle

Aquarius Rubber (Manufacturer) states that EPDM will withstand continuous temperatures of 115°C. The Aquarius Expansion Strip Joint will withstand UV degradation in the world's harshest environments for periods longer than the twenty year warranty period.

Data illustrating how long the product: Aquarius Rubber Expansion Strip has been in the market and used in under extreme temperatures

Aquarius state that the product has been sold Australia wide through all major merchants. The product has been vastly used in QLD where UV exposure is high, no issues reported regarding UV degradation or any other defects. Warranty link - <http://www.aquariusdist.com.au/wp-content/uploads/2012/11/DQAW02-Expansion-Strip-Warranty.pdf>

MAXIMUM ALLOWABLE LENGTH Between expansion joints. (Guide only)

Material	Base Metal Thickness (mm)	Max Length (metres)
Aluminum	0.90	12
Copper	0.60	9
Copper	0.80	15
Copper	1.0	26
Steel Colorbond Zinalume	0.55	20
Steel	0.75	25
Stainless Steel	0.55	20
Zinc	0.80	10

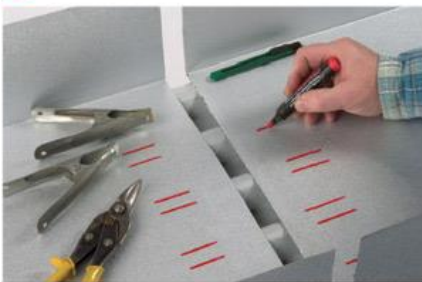
Expansion Strip Joint – Cont.

Expansion Strip Joint Sizes

Code	Width	Length	Expansion Range	Support Metal	Pack Qty
ESJ145-5	145mm	5m	145 to 175mm	Aluminium	5m roll in 1 pack
ESJ200-5	200mm	5m	200 to 250mm	Aluminium	5m roll in 1 pack

Installation Overview

1



Mark the position of the support tray alleys on the gutter to allow for rivet installation clearance.

2



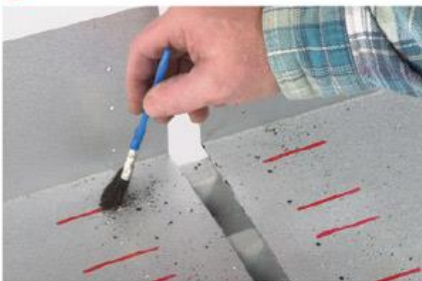
Clamp the Expansion Strip Joint into position and press into corners of the box gutter with square object (e.g. piece of wood).

3



Hold the Expansion Strip Joint in place whilst drilling rivet holes. Place rivets temporarily in position to stop flashing moving whilst drilling additional holes.

4



Remove the flashing and pull out rivets to brush away any metal swarf.

5



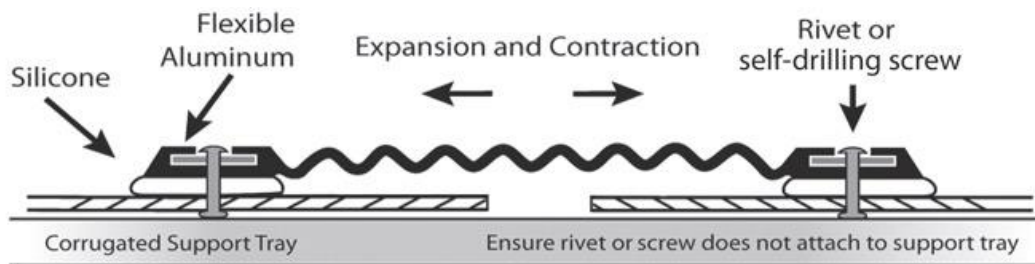
Apply a neutral cure silicone bead along the line of rivet holes on both box gutters.

6



Pop rivet the Expansion Strip Joint in place and smooth over the Silicone to complete installation.

Cross section of Expansion Strip Joint



Expansion Strip Joint – Cont.

Compound Properties

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6167 - 70 SHORE A BLACK EPDM

6167 is an EPDM compound that is easy to process and exhibits good resistance to aging, UV and Ozone

Test	Method	Specification
Ultimate Elongation	ASTM D412	150% minimum
Tensile Strength	ASTM D412	6MPa minimum
Hardness	ASTM D2240	63 - 73 Shore A
Compression Set	ASTM D395	
% Set	22hrs at 70°C	50% maximum
Heat Aging, 72 hours at 70C		
Change in Elongation	ASTM D573	-50% maximum
Change in Tensile Strength	ASTM D575	± 30% maximum
Change in Hardness	ASTM D577	± 15 Shore A maximum
Ozone Resistance	ASTM D1171	100% rating
Staining Resistance	ASTM D925	Non staining
Low Temperature Resistance	ASTM D2137	Non brittle at -40C