

MATERIAL FINISH

For indepth information on the materials and finishes that rainwater disposal goods are available in, please refer to Section 3.1.1 of this manual.

BRACKETS AND FASTENERS

Eave gutters are secured to the edge of the structure by internal or external brackets that are shaped to fit the gutter.

Internal brackets are available for Quad SI, Deep Quad, 125 Quad, Box 125 and Box 175 gutter, but the Box 175 brackets should only be used in areas that are not subjected to snow fall and/or wind above medium velocity (as described by NZS 3604). Refer Sections 3.1.4.1 to 3.1.4.5 and 3.1.4.9.

External brackets are available for 150 Half Round, 200 Half Round, Box 125, Box 175 and Box 300 gutter. The brackets for the Box 125, Box 175 and Box 300 gutters can be custom run to accommodate the depth of the profile where metal cladding is fixed vertically. Refer Sections 3.1.4.1, 3.1.4.2, 3.1.4.3, 3.1.4.6 and 3.1.4.8.

300mm wide extruded external aluminium brackets are used on 150 Half Round gutters.

Please refer to the individual section for each profile (Section 3.1.4.1-3.1.4.9) for guidance on bracket spacings and the recommended fasteners. For bracket spacings in snowfall areas refer Section 3.1.4.7.

It is recommended that snow clips are attached to the gutter in areas where snow fall is expected and it is considered prudent to do so in the areas where snow fall may occur. Typically the bracket is 0.55mm thick and 40mm wide, fixed using the last roof fixing, through the bracket, and is nominally at 600mm centres. The gutter is fixed with 2 x 4.8mm diameter aluminium rivets. Refer Section 3.1.4.7 or snow straps welded to gutter if stainless steel is used.

Brackets for custom run gutters are made to suit the gutter shape chosen. Recommended bracket material dimensions for custom folded brackets are:

Cross Sectional Area A_e (mm ²)	Steel & Stainless Steel (mm)	Aluminium (mm)	Maximum Bracket Spacing* (mm)
4,00-6,000	20 x 2	20 x 4	900
6,100-10,000	32 x 3	30 x 5	900
10,100-20,000	30 x 5	30 x 6	900
20,100-40,000	40 x 5	40 x 6	600
40,100 - 65,000	50 x 5	fabricated with stiffening rib	600

*In areas not subject to snowfall.

DOWNPIPES

Downpipe options are many and varied.

Steel As a standard round in 80mm diameter or custom made in a rectangular shape such as 100mm x 50mm, in prepainted coil steel of ColorCote® MagnaFlow™ (formerly ZM8) and Zincolume®. Standard lengths are 3.2m long. Other lengths are subject to confirmation. Call 0800 DIMOND.

Spiral welded pipe can be used on large commercial jobs especially where the downpipe passes through the building, resulting in a “pressurised” downpipe system.

Dimond do not recommend using a fabricated lock-seamed downpipe such as is used on the rectangular shape in enclosed ceiling spaces and wall cavities.

115° round zinc elbow bends are available in standard colours for connecting the standard 80mm diameter downpipes together. The joint with the downpipe must be sealed and held with a minimum two 3mm aluminium rivets to each joint. Rectangular shapes are available in lengths up to 6m long. These require fabricating, riveting and sealing together with a neutral curing silicone sealant.

Copper A similar range of sizes are available. Call 0800 DIMOND to confirm availability. The material is suitable for use where bends are required as the product can be mitre cut and joint soldered. Zinc elbow bends must not be used due to dissimilar metal contact.

Other materials subject to confirmation. Call 0800 DIMOND.

FLASHINGS

As required to saddle abutting gutter terminations at high point between downpipes.

Flashings overlapping the back upstand of the gutter and extending under the roof sheeting may be used for extra security against leakage into the building, e.g. if gutter flow is blocked by hail or ice.

STOP ENDS

Zinc cast stop ends, powder coated to match, are available for use on Deep Quad and Quad SI. These stop ends have locating lugs which allow the stop ends to be located on the cut end of the gutter and provide secure positioning before sealing with a neutral silicon sealing and riveting onto the gutter with 2 x 4.3mm diameter aluminium rivets.

DROPPERS

Droppers are available as a standard in 65mm, 75mm and 100mm diameter in either 0.55mm ColorCote® MagnaFlow™ (formerly ZM8) material, Titania colour or in PVC material. A rectangular PVC 100x50mm is also available. Other sizes can be custom made in the following materials: 0.6mm copper, 0.9mm unpainted aluminium and 0.9mm ColorCote® AlumiGard™ (formerly AR8/ARX) depending on coil availability.