



## INDUSTRIAL GUTTERS COATING SELECTOR

### INTRODUCTION

The correct selection of materials is an important consideration in the specification of metal gutters. Gutters can be subjected to corrosive conditions including standing water and debris and therefore the gutters and downspouts of rainwater systems must have excellent resistance to corrosion and scratching.

It is recommended that all galvanised steel gutters should be painted on the weathering surfaces prior to, or after, installation with a protective paint or equivalent to ensure satisfactory durability.

The materials used to manufacture metal gutters fall into two main categories for the substrate; ferrous (cast iron, mild steel and stainless steel) and non-ferrous (aluminium, copper and zinc).

Coating	BS Standard	Thickness (Metallic coating)	Thickness (Applied coating)	Service Life (Years)
Galvanised Before Manufacture	BS EN 10346	G275 - G600 grms/sq mtr	-	Determined by ISO 14713-1
Galvanised After Manufacture	BS EN ISO 1461	≥1.5 to 3mm - 55µm >3 to ≤6 mm - 70µm	-	Determined by ISO 14713-1
Plastisol	EN 13523	-	200µm	40
Emaline (High Build Bitumus Coating)	-	-	250 - 500µm	-
Bitumen	-	-	100 – 1000µm	25
PPC	BS 6496 alum BS EN 13438:2005 galv	-	40 – 70µm	25
TPO Coating	-	-	100 - 300µm	25
PVC Membrane	-	-	400 - 1500µm	Minimum 10
TPO Membrane	-	-	800 - 1200µm	Minimum 10

**Notes:**

- Gutters galvanised after manufacture (GAM) provide a higher level of protection due to the process being carried out after all forming, welding and fabrication.
- Gutters galvanised before manufacture (GBM) should be manufactured using G600 material which offers the highest level of protection available for this substrate. Fabrication and welding processes will however, destroy this coating therefore post-manufacturing treatment is required locally to restore corrosion resistance using a zinc-rich 'cold galvanising' paint.
- Both GAM and GBM gutters should be coated on the weather side with a suitable factory or site-applied liquid coating system to protect the galvanised surface from corrosion and to ensure long term performance of the gutter system.

- Mill-finish aluminium, whilst adequate for the majority of applications, can be post-treated with polyester powder coating for further protection when required.
- Pre-coated, galvanised steel light gauge gutters, by nature of the Plastisol finish coating, afford a level of protection from corrosion.
- Post-installation protective coatings can be required depending on gutter location and use, weathering periods, access etc.
- For aesthetic purposes both aluminium and GBM steel gutters can be polyester powder coated. However, this coating should not be relied upon as the only form of protection.
- A full gloss finish will highlight any surface imperfections on undulations and is not recommended.

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