

QUALITY

Hulamin's quality control systems extend to every aspect of the production process: from casting and alloying the aluminium ingot, through the rolling process and to the final coil coating operation.

The on-site laboratory, one of the finest in the country, backs up the quality system with regular quality control tests of painted material, the retention of samples from every coil and the management of exposure testing at selected sites around South Africa.

Relevant quality systems and standards:

EN573-3	Aluminium and Aluminium Alloys
EN1396: 2007	Coil Coated Aluminium Sheet and Coil
SABS ISO 9001: 2008	Quality Management System
ISO 14001: 2004	Environmental Management Systems

HULAMIN

Hulamin is South Africa's premier aluminium rolling and extrusion company. Hulamin's modern plant in Pietermaritzburg supplies a wide range of products across many industry sectors. The company has a 75 year track record of supplying building and architectural markets in South Africa and around the world.

HULAMIN ROLLED PRODUCTS

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This brochure is available online on the Hulamin website

Think **future**. Think aluminium.



HULAMIN

PRE-PAINTED GUTTER COIL

Aluminium - when only the best will do

Think **future**. Think aluminium.

WHY AN ALUMINIUM GUTTER?

The intrinsic anti-corrosion properties of aluminium ensure that rain water goods manufactured from Hulamin's pre-painted coil will perform for many years. Aluminium ticks all the right boxes.

Lightweight and Strong	Corrosion Resistant	Aesthetic
1/3 the density of steel – a great structural material	Naturally generates a protective oxide coating	A range of G4 Color-Tech colours
Recyclable	Safe	Lifespan
100% recyclable requiring only 5% of the energy used to create it	No hazard to occupants or the surrounding environment	Proven in the field to last and last

COLOR-TECH G4

Hulamin's G4 painted coil is designed with South Africa's harsh environmental conditions in mind:

- An aluminium substrate with superior corrosion resistance
- A polyester paint surface applied to the most stringent quality standards

Paints are supplied by a leading global paint supplier with whom Hulamin has worked for many years on paint specifications to meet the region's demanding exposure conditions. G4 is a polyester based paint system.

Hulamin offers 6 standard colours for pre-painted gutter coil



Colours in this brochure are reproduced as accurately as possible. We recommend that your chosen colour be checked against a colour swatch on an aluminium substrate – available on request from Hulamin's approved distributors.



TECHNICAL SPECIFICATIONS

MECHANICAL AND OTHER PROPERTIES

Properties	Alloy 4017 (Temper H46)
Yield (Proof) Strength	150 MPa
Ultimate Tensile Strength	175 - 225 MPa
Density	2720 kg/m ³
Thermal Expansion Coefficient	23 x 10 ⁻⁶ /°C
Modulus of Elasticity (Youngs Modulus)	70 GPa

G4 PAINT COATING

Coating Layer	Type and Thickness
Top Coat	20 µm Polyester
Reverse Side Coat	Marble White 20 µm Polyester

COIL WIDTHS AND GAUGES

Alloy	Width Range	Gauge Range
4017	900mm to 1250mm	0.35mm to 1.00mm

Refer to the 4017 alloy data sheet for additional detail

COLOUR FASTNESS AND ADHESION OF PAINTED SURFACES

Colour	Max Fade Δ E	Gloss %	Physical
Light (L>60)	≤ 6	> 50	Will not crack, peel or chip
Dark (L<60)	≤ 15	> 60	

Note: Fade measurement per CIELab ASTM D2244 standard; measurements are at maximum 10 years

ALUMINIUM GUTTER SELECTION GUIDE

An aluminium gutter in Color-Tech G4 will outlast and outperform steel or plastic based gutter products.

The reason is simple: 100% of the substrate is corrosion resistant aluminium. Compare this to a steel-based substrate – sooner or later the steel will be exposed and corrode.

Aluminium roof sheet is so durable that Hulamin is the ONLY metal roofing and rain water goods material supplier to give meaningful guarantees for installations within 100m of the ocean shoreline.

SELECTION TABLE AND LIFE EXPECTANCY

Corrosion Zone	Inland C1-C2	Inland C3	Coastal C4	Coastal C5	Coastal C5+
Environment	Dry Interior	Inland Urban & Industrial	5km to 40km from the coast; Polluted Inland Areas	<5km from the shore	<1km from the shore; West Coast and Namibia
Corrosivity * classification	Low	Medium	High	Very High	Extremely High
Reasonable Life Expectancy of Aluminium Gutters in Years					
Color-Tech G4	>20	>20	>15	>10	>10

* Corrosion zones after ISO9223/SANS 10 400L

Notes:

1. This is a summarised table. Specific reference should be made to the CSIR's Corrosivity Zone map of South Africa – available from Hulamin – for specific corrosion conditions.
2. Fixtures and fittings which secure the gutter or are attached to it must be of a suitable material.

GUTTERS AND RAINWATER HARVESTING

South Africa is a water stressed country and as global warming persists extended periods of drought are forecast in all regions of the country.

Gutters are an essential component of a successful rainwater harvesting – they collect the water that drains from the roof and channel it to the water storage system. Hulamin's Color-Tech G4 coating and its aluminium substrate are perfectly safe for rainwater collection and there are no adverse health impacts from gutter coil which could impact consumers.