

GENERAL DESCRIPTION

Colorite Silicon Modified Polyester (SMP) is a premium pre-painted galvanized steel developed for Residential, Agricultural and commercial Construction Industrial segments to provide durability, stain resistance, abrasion resistance and metal marking.

Anti-Weathering Limited Warranty: 12 Years (UNICOIL Technical terms and conditions applicable).

SUBSTRATE

Galvanized steel G90 (275gsm)

TYPICAL USES

Roofing and walling, Hot water system wrappers, air conditioner, wrappers and garden sheds etc.

DIMENSIONS: (For normal supply products)

THICKNESS*(MM)(TCT-P)	WIDTH**(MM)	ZINC COATING (GSM)
0.42 to 1.20	700 to 1,300	275 (G90)

*For grade SS50, minimum thickness is 0.46 mm

**For width less than 700 mm are supplied with slit edge
For specific dimensions please contact Sales and Marketing Dept.

TCT-P – Total Coated Thickness with Paint Film (Steel thickness + Zinc coating thickness + Paint thickness)

Standards & Grades








Standard	Description	Sub-Strate Standard	Grades
SASO ASTM A755/ A755M	Standard Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Pre-painted by the Coil-Coating Process for Exterior Exposed Building Products.	SASO ASTM A653/A653M	CS-Type A, B, C, FS Type A, B,
ASTM A755/ A755M	Standard Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Pre-painted by the Coil-Coating Process for Exterior Exposed Building Products.	ASTM,A653/A653M, ASTM,A792/A792M, Aluminum Flat coils	SS33, SS37, SS40, SS50, SS55, SS60 & SS80
EN10169	Continuously organic coated (coil coated) steel flat products Technical delivery conditions	EN 10346	DX51D, DX52D, S220GD, S250GD, S280GD, S320GD, S350GD, S390GD, S420GD & S550GD
JIS G3312	Pre-Painted Hot Dip Zinc coated Steel Sheet and Strip	JIS G3302	SGCC, SGCD1,S-GC340, SGC400, SGC440 & SGC570
AS 2728	Prefinished/pre-painted sheet metal products for interior/exterior building, applications Performance requirements	AS 1397	S250, S300, S350, S450, S550










Paint System

Pretreatment	Corrosion resistance proprietary conversion coating
Primer Coat	Universal Corrosion inhibitive Primer Nominal thickness- 5µm each side
Finish Coat	Custom formulated system with a blend of Silicone and Polyester resins Nominal thickness 20 µm on the top or weather side. The finish coat is available on all RAL standard Color sand other colors may be available on request.
Backing Coat	Foam compatible epoxy coat or Polyester based custom formulated off white Nominal thickness: 5-7 µm. Back coat can be in the same topcoat color and DFT as required.
Gloss (60°)	Nominal 30±5% Other gloss levels may be available on request

GUARANTEED PAINT PROPERTIES

	TEST	TEST METHOD	DESCRIPTION	RESULTS
	Hardness (Pencil)	ASTM D 3363	Pencil	H or harder
	Adhesion -T bend	ASTM D 4145	T-bend	3T or less (No Pickoff)
	Flexibility	ASTM D 4145	T-bend	3T or less (no cracking)
	Adhesion - Reverse impact	ASTM D 2794	Reverse impact	> 8 joules
	Cross hatch	ASTM D 3359	Cross hatch	> No paint removal
	Gloss 60° (%)	ASTM D 523	Gloss	30±5%
	Color Difference	ASTM D2244	Light colors	Δ E : ≤1.0
			Medium Colors	Δ E : ≤ 1.5
			Dark Colors	Δ E : ≤2.0 / Visual match
			Metallics	Visual match



EXPECTED PRODUCT SERVICE PERFORMANCE				
	PROPERTY	TEST METHOD	DESCRIPTION	RESULTS
	Resistance to UV (QUV-A) ASTM G53	Exposure Hours		2000 Hrs
		ASTM D2244	Color Change	DE Hunterlab - Light color ≤4 Int.Color ≤6 Dark color ≤8
		ASTM D4214	Chalking	ASTM Rating 4 - 2
		ASTM D523	% Gloss Retention	≥ 50
	Natural well washed exposure ASTM G7	Exposure Years		10 Yrs
		ASTM D2244	Color Change (Non Vertical)	DE Hunterlab - Light color ≤6 Int.Color ≤9 Dark color ≤12
		ASTM D4214	Chalking	ASTM Rating 4 - 2
		ASTM D523	% Gloss Retention	≥ 50
	Resistance to corrosion (Salt Spray) ASTM B117	Exposure Hours		1000 Hrs
		ASTM D714 & ASTM D1654	Blister Density, Size & Corrosion Creep	Blister density- Few, Blister size rating ≥8 Undercut from scribe ≤2mm
	Resistance to humidity at 38± 1°C ASTM D 2247	Exposure Hours		1000 Hrs
		ASTM D714	Blister Density & Size	Blister density- Few, Blister size rating ≥8
	Resistance to abrasion	ISO 1518	Scratch	≥ 3000gms
	Resistance to Heat EN 13523-13	ASTM D2244	90°C - 700 hours or 60°C - 1000 Hours	ΔE ≤ 2.5 , ΔGloss ≤ 5%
	Resistance to fire	BS 476 Part 7	Fire rating	Class M0

NOTE

- For most products, the metallurgical process which is inherent in the paint stoving cycle will result in some loss of ductility compared with unpainted product. However, minimum strength levels designated by relevant standards will still be applicable.
- Values quoted are for standard **ColRite SMP** colours under normal well washed conditions of exposure.
- If it is intended to use **ColRite SMP** in an exterior application within 1 km of salt marine location, or severe industrial or abnormally corrosive environment, or in areas not washed by rain or in applications where it will be wholly or partially buried in the ground, please contact UNICOIL for advice. Improper storage or use of non approved roll forming lubricants may adversely affect colour. Material which becomes wet while in stacks or bundles must be separated and dried.
- ColRite SMP** has good resistance to accidental spillage of solvents such as methylated spirits, white spirits, mineral turpentine, trichloroethylene and dilute mineral acids & alkalis. However, all spillages should be immediately removed by water washing and drying.
- Properties guaranteed on G90 or G115 Galvanized steel,

