
















<b>GENERAL DESCRIPTION</b>	<b>SUBSTRATE</b>				
<b>COLORITE THERMO-COOL</b> prepainted steel is developed to provide a durable material for exterior applications with High Thermal reflectivity, weatherability & good formability.	Galvanized steel, minimum G60(180 GSM). Grade CS Type A&B, FS Type A & B , SS 33, SS40 , SS50.				
<b>TYPICAL USES</b>	<b>DIMENSIONS:</b> (For normal supply products )				
Roofing and Walling, Sandwich Panels, K-Span, Cold Rooms, etc.	<table border="1"> <tr> <td><b>THICKNESS* (MM)</b></td> <td><b>WIDTH** (MM)</b></td> </tr> <tr> <td>From 0.32 to 1.20</td> <td>From 50 to 1320</td> </tr> </table>	<b>THICKNESS* (MM)</b>	<b>WIDTH** (MM)</b>	From 0.32 to 1.20	From 50 to 1320
<b>THICKNESS* (MM)</b>	<b>WIDTH** (MM)</b>				
From 0.32 to 1.20	From 50 to 1320				
<b>STANDARDS</b>					
Substrate : ASTM A653/A653M Paint coating : ASTM A755/755M	*For grade SS50, minimum thickness is 0.50 mm **For width less than 1000 mm are supplied with slit edge For specific dimensions please contact Sales and Marketing Dept.				

<b>PRETREATMENT</b>	Corrosion resistance proprietary conversion coating.
<b>PRIMER COAT</b>	Universal Corrosion inhibitive Primer Nominal thickness- 5microns each side
<b>FINISH COAT</b>	Custom formulated system. Nominal thickness-20 microns on the top or weather side.
<b>BACKING COAT</b>	Custom formulated Backer-5-7microns Special backer suitable for foam application can also be provided Back coat can be in the same top coat colour and DFT as required
<b>GLOSS (60°)</b>	Nominal 30 - 35% Other gloss levels may be available on request

GUARANTEED PAINT PROPERTIES				
	TEST	TEST METHOD	DESCRIPTION	RESULTS
	Hardness (Pencil)	ASTM D 3363	Pencil	F 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	> 10 joules
	Cross hatch	ASTM D 3359	Cross hatch	No paint removal
	Gloss 60° (%)	ASTM D 523	Gloss	30 - 35
	Color Difference	ASTM D2244	Light colors	$\Delta E - \leq 1.0$
			Medium Colors	$\Delta E - \leq 1.5$
			Dark Colors	$\Delta E - \leq 2.0$ / Visual match
			Metallics	Visual match





EXPECTED PRODUCT SERVICE PERFORMANCE				
	PROPERTY	TEST METHOD	DESCRIPTION	RESULTS
	Resistance to UV (QUV-A) ASTM G53	Exposure Hours		1000 Hrs
		ASTM D2244	Color Change	DE Hunterlab - Light color $\leq 4$ Int.Color $\leq 6$ Dark color $\leq 8$
		ASTM D4214	Chalking	ASTM Rating 4 - 2
		ASTM D523	% Gloss Retention	$\geq 40$
	Natural well washed exposure ASTM G7	Exposure Years		7 Yrs
		ASTM D2244	Color Change (Non Vertical)	DE Hunterlab - Light color $\leq 6$ Int.Color $\leq 9$ Dark color $\leq 12$
		ASTM D4214	Chalking	ASTM Rating 4 - 2
		ASTM D523	% Gloss Retention	$\geq 30$
	Resistance to corrosion (Salt Spray) ASTM B117	Exposure Hours		500 Hrs
		ASTM D714 & ASTM D1654	Blister Density, Size & Corrosion Creep	Blister density- Few, Blister size rating $\geq 8$ Undercut from scribe $\leq 2\text{mm}$
	Resistance to humidity at $38 \pm 1^\circ\text{C}$ ASTM D 2247	Exposure Hours		1000 Hrs
		ASTM D714	Blister Density & Size	Blister density- Few, Blister size rating $\geq 8$
	Resistance to abrasion	ISO 1518	Scratch	$\geq 2000\text{gms}$
	Resistance to Heat (ECCA T13)	ASTM D2244	$90^\circ\text{C} - 700$ hours or $60^\circ\text{C} - 1000$ Hours	$\Delta E \leq 5$ , $\Delta \text{Gloss} \leq 7\%$
	Resistance to fire	BS 476 Part 7	Fire rating	Class M1
	Total Solar Reflectance	ASTM G159	Solar Reflectance	TSR values for different colors: RAL 9005-38% RAL 7035 65% RAL1015-56%


## NOTE

\*TSR values for other colors can be provided on request.  
SRI values and Thermal emittance values can be provided on request.

1. 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.

2. Values quoted are for  colours under normal well washed conditions of exposure.

If it is intended to use  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.

3.  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.

4. Properties guaranteed on minimum G60(180 GSM) .

