

High Strength | Wide Span | Attractive Appearance | Economical | Easy & Quick Installation



LYSAGHT FLEXICLAD® 1110 is designed to provide an aesthetic and economical wall cladding solution for commercial, residential and industrial application.

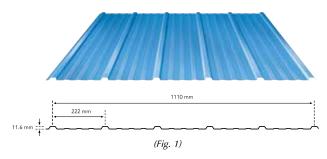
FLEXICLAD® 1110 is manufactured out of high strength steel. The profile has an attractive shape and provides superior strength making it suitable for wall cladding application.

### Features:

- · Attractive trapezoidal multi-ribbed profile
- · Quick and easy to install
- Specially designed side laps for leak proof performance
- Available in a wide range of COLORBOND® steel colours and ZINCALUME® steel

### **Profile**

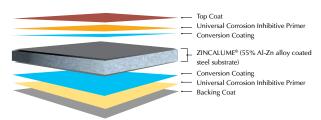
FLEXICLAD® is a 1110 mm wide coverage profile with nominal 11.6 mm deep ribs at nominal 222 mm centre-to-centre with three stiffeners in between the ribs. The end ribs are designed for anti-capillary action, to avoid any seepage of water through the lateral overlap. (Refer Fig. 1)



# **Material Specification**

FLEXICLAD® 1110 manufactured is COLORBOND® XRW steel, high tensile steel with minimum 550 MPa yield strength, metallic hot-dipped coated with Al-Zn alloy (55% Aluminium, 43.5% Zinc, 1.5% Si) as per AS1397/IS15961 standards and ZINCALUME® AZ150 (min. 150 g/m² total on both sides) with Super Durable Polyester COLORBOND® XRW steel\* quality paint system of approved color, suitable for exterior application conforming to AS/NZS 2728 type-4 / IS15965 class 3 of Tata BlueScope Steel make. The sheets have a total coating thickness of 35 microns, super durable polyester COLORBOND® XRW quality paint system of 20 microns on exposed surface and 5 micron reverse polyester coat on back surface and over 5 micron primer coat on both surfaces. The paint system is made of stable resin & inorganic pigments for paint durability and is lead free, making it suitable for rainwater harvesting. The sheets have a brand marking of the coated steel manufacturer along with relevant details on back side at regular interval confirming genuineness of the material.

\*Standard offering includes COLORBOND® XRW steel but other options like COLORBOND® Ultra steel, COLORBOND® XPD steel and COLORBOND® Metallic steel can also be used as per prevailing site conditions and respective specification.



Cross Sectional View of COLORBOND® steel

## Lengths

Sheets are supplied custom cut.

### **Tolerances**

Length: + 0 mm, - 15 mm Width: + 4 mm, - 4 mm

### Masses

	FLEXIC	FLEXICLAD® 1110											
Ī	BMT*	TCT*	Product	kg/m	kg/m²								
	0.35	0.40	ZINCALUME® steel	3.56	3.21								
	0.35	0.40	${\sf COLORBOND}^{\it @}~{\sf steel}$	3.63	3.27								
	0.40	0.45	ZINCALUME® steel	4.04	3.63								
	0.40	0.45	${\sf COLORBOND}^{\it @}~{\sf steel}$	4.11	3.70								
	0.45	0.50	ZINCALUME® steel	4.52	4.06								
	0.45	0.50	COLORBOND® steel	4.59	4.13								
	* Dimensions are in mm												

(Table 1)

# Maximum Support Spacing (in millimetres)

The maximum recommended support spacings are based on tests conducted in accordance with AS1562.1-1992, AS4040.1-1992 & AS4040.2-1992. Wall Span considers resistance to wind pressure only. The pressure considered (in accordance with IS 875.3) is based on buildings up to 10m high, Zone 3 (Basic wind speed  $V_h = 47$  m/s), Class A, Terrain category



3,  $K_1 = 1.0$ ,  $K_2 = 0.91$ ,  $K_3 = 1.0$ , with the following assumptions made:

### Walls:

Cpe = - 0.80 (internal cladding spans)

Cpe = - 1.20 (single and end cladding spans)

Cpi = +0.2

These spacings may vary for particular projects, depending on specific structure characteristics. (Refer Table 2 & Fig. 2)

Maximum Support Spacings (mm)									
	Total Co	Total Coated Thickness (mm)							
Type of span	0.40	0.45	0.50						
Walls									
Single Span	1000	1150	1350						
End Span	1100	1500	1650						
Internal Span	1600	1650	1650						
·									
· For walls, the data are based on pressure (see pressure table)									

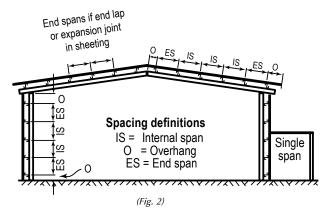
Tables are based on supports of 1 mm BMT Please contact Tata BlueScope Steel office before adopting for design

(Table 2)

### **Limit State Wind Pressure**

The wind pressure capacities are based on tests conducted at BlueScope Steel's NATA- registered testing laboratory. Testing was conducted in

with AS1562.1-1992 accordance Design Installation of Sheet Roof and Wall Cladding-Metal and AS 4040.2-1992 Resistance to Wind Pressure for Non-cyclonic Regions. The pressure capacities for serviceability are based on a deflection limit of (span/120) + (maximum fastener pitch/30). The pressure capacities for strength have been determined by testing the cladding to failure (ultimate capacity). These pressures are applicable when the cladding is fixed to a minimum of 1.0 mm thick, G550 steel. (For material less than 1.0 mm thick, seek advice from your nearest Tata BlueScope Steel office.) (Refer Table 3)



FLEXICLAD® 1110: Limit state wind pressure capacities (KPa)														
Span		Span (mm)												
Туре	Limit State	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800
FLEXICLAD® 1110 - 0.35 mm Base Metal Thickness (0.40 mm Total Coated Thickness)														
SINGLE	Serviceability Strength* Serviceability	1.83 12.00 2.39	1.57 10.75 2.19	1.33 9.50 2.00	1.10 8.30 1.81	0.88 7.15 1.62	0.70 6.15 1.44	0.55 5.35 1.28	0.43 4.70 1.12	0.35 4.20 0.97	0.30 3.85 0.82	0.26 3.55 0.68	0.24 3.35 0.55	0.23 3.20 0.42
END	Strength* ´ Serviceability	10.20 2.17	9.05 2.05	7.95 1.93	6.90 1.80	5.95 1.68	5.10 1.54	4.40 1.41	3.80 1.26	3.35 1.10	3.00 0.94	2.75 0.78	2.55 0.61	2.40 0.45
INTERNAL	Strength*	10.90	9.55	8.25	7.00	5.85	4.85	4.05	3.50	3.05	2.80	2.70	2.60	2.60
FLEXICLAD® 111	0 - 0.40 mm Base N	1etal Thick	kness (0.	45 mm	Total Co	ated Th	ickness	)	ı	1	1	ı	ı	
SINGLE	Serviceability Strength* Serviceability	2.19 12.90 3.24	1.88 11.70 2.90	1.58 10.60 2.58	1.30 9.50 2.26	1.03 8.45 1.96	0.81 7.50 1.69	0.63 6.65 1.45	0.49 6.00 1.24	0.39 5.40 1.06	0.33 4.95 0.90	0.29 4.50 0.75	0.27 4.15 0.63	0.26 3.85 0.51
END INTERNAL	Strength* Serviceability Strength*	10.75 2.91 11.50	9.70 2.68 10.25	8.60 2.45 9.05	7.60 2.22 7.90	6.70 2.00 6.80	5.85 1.79 5.90	5.15 1.59 5.10	4.55 1.40 4.50	4.05 1.22 4.05	3.70 1.05 3.70	3.40 0.89 3.50	3.15 0.74 3.30	2.90 0.59 3.20
FLEXICLAD® 1110 - 0.45 mm Base Metal Thickness (0.50 mm Total Coated Thickness)														
SINGLE	Serviceability Strength* Serviceability	2.55 13.80 4.08	2.18 12.70 3.61	1.82 11.70 3.15	1.49 10.70 2.71	1.18 9.75 2.30	0.91 8.85 1.93	0.70 8.00 1.62	0.54 7.30 1.35	0.43 6.65 1.14	0.36 6.05 0.97	0.32 5.50 0.82	0.30 5.00 0.70	0.29 4.55 0.59
END INTERNAL	Strength* Serviceability Strength*	11.35 3.65 12.10	10.35 3.30 10.95	9.30 2.96 9.85	8.35 2.63 8.80	7.45 2.32 7.80	6.60 2.03 6.95	5.90 1.77 6.20	5.30 1.54 5.55	4.80 1.34 5.05	4.40 1.16 4.65	4.05 1.00 4.35	3.75 0.86 4.05	3.45 0.72 3.80

<sup>\*</sup>A capacity reduction factor of  $\varnothing$ = 0.9 has been applied to strength capacities. Supports must be not less than 1 mm BMT.

Please contact Tata BlueScope Steel office before adopting for design.

Non standard thickness, sizes & colours are also available on special request.

<sup>(</sup>Table 3)



# FLEXICLAD® 1110 - Design Advantages

- FLEXICLAD® 1110 is suitable for wall cladding in industrial, commercial & residential buildings, as well as for garages, screens and fascias
- · Attractive and ecomomical multi-ribbed profile
- · Covers wide surface area in shortest possible time
- · Quick and easy to install
- Appealing architectural appearance and multiple color choice



For further technical assistance mail us at : lysaght@tatabluescopesteel.com

The above colours are only for illustrative purpose and actual colours may vary.

FLEXICLAD(R) 1110 0.53 MM TPT - A Product of Tata BlueScope Steel Ltd.

Quality Assurance: LYSAGHT® profiles are supplied with a brand mark at regular intervals on the reverse side of profile. The brand mark includes - name of the profile and Total Paint Thickness. This brand mark ensures authenticity and quality of the product.

### Note:

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For more information, please contact:

 North Region
 Gurgaon:
 Tel: +91 124 4712801

 East Region
 Kolkata:
 Tel: +91 33 40061945

 West Region
 Mumbai:
 Tel: +91 22 66743329

 South Region
 Chennai:
 Tel: +91 44 42693319



Tata BlueScope Steel Ltd.
CIN: U45209PN2005PLC020270
Regd. Office: The Metropolitan, 4th Floor,
Final PlotNo. 27, Survey No. 21,
Wakdewadi, Shivaji Nagar, Pune 411005. INDIA. Tel: +91 20 6621 8000
Website: www.tatabluescopesteel.com
Email: lysaght@tatabluescopesteel.com