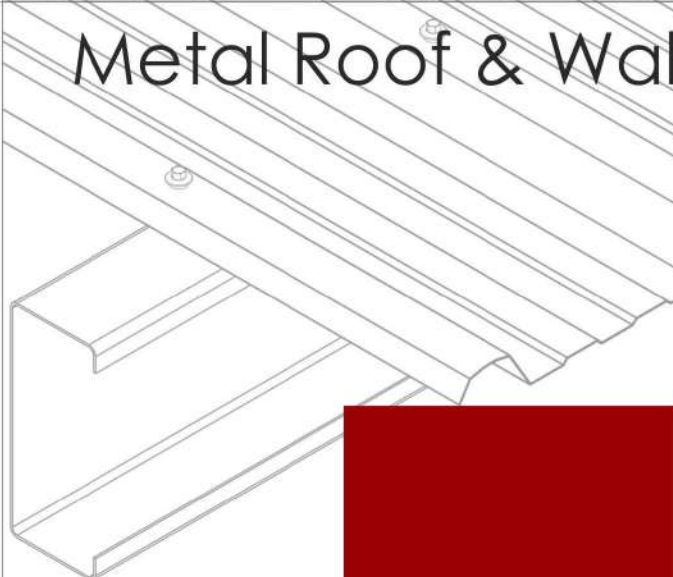




LCP K -CLAD[®] 30

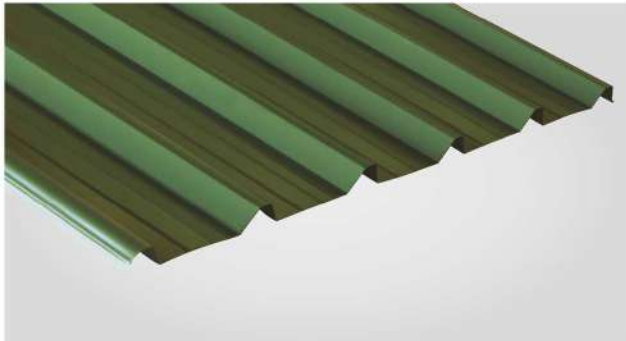


Metal Roof & Wall Cladding System



FEATURE

LCP K-CLAD® 30 combines economy, practicability and modern appearance to produce a light weight roofing and walling profile, suitable for a wide variety of applications.



AESTHETICALLY PLEASING & COST EFFECTIVE

- ▶ Deep Ribs - provide excellent spanning capability with good water carrying capacity.
- ▶ Economical - unique blend of characteristics provides a low installed cost.
- ▶ Simple Installation - through fixing and easy notching of flashings.
- ▶ 1000mm Cover - quick installation and easy handling.
- ▶ Hi-Tensile Steel - light weight and high strength.
- ▶ Domed Crest - provides greater foot traffic performance.
- ▶ Anti-Capillary Side Laps - gives improved weather performance.
- ▶ 3° Minimum Pitch - reduces support structures.
- ▶ A full range of load performance tables to suit almost any application.
- ▶ Also Available in Crimped Curve - to suit even more architectural applications.

MATERIALS

LCP K-CLAD® 30 is a cold roll formed roof and wall cladding manufactured from G550 base material (G550 MPa minimum yield stress) in zinc-aluminium coated (55% Al and 45% Zn) alloy coating in accordance with AS:1397 and IS:15961. Pre-painted zinc-aluminium coated steel is available in numerous colours in accordance with AS: 2728 and IS: 15965. Pre-painted galvanized steel (PPGI) is also available.

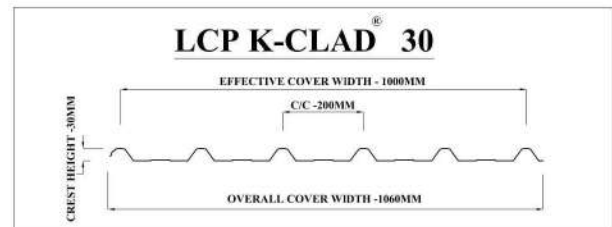
Other materials such as bare galvanized steel, aluminium and copper can be roll formed subject to enquiry. For further information, please contact **LCP Building Products Pvt. Ltd.** Technical Department.

COLOUR/AVAILABILITY

LCP K-CLAD® 30 is normally stocked in standard thickness in zinc-aluminium coated steel, and a wide range of colours in pre-painted zinc-aluminium coated steel. Please check with **LCP Building Products Pvt. Ltd.** Technical Department for specific colour availability.

COMPATIBILITY

Lead flashing should not be used in conjunction with zinc-aluminium coated steel, pre-painted zinc-aluminium coated steel sheeting. Drainage from zinc-aluminium coated steel pre-painted zinc-aluminium coated steel, steel roofing (inert material) should not be allowed to discharge onto galvanised rainwater components. Drainage from copper roofing should not be allowed to discharge on to zinc-aluminium coated steel pre-painted zinc-aluminium coated steel. Any of these combinations can result in premature corrosion.



ROOF PITCH

The water carrying capacity of **LCP K-CLAD® 30** allows for a minimum recommended slope of 3° (1 in 19). It is imperative that this minimum is adhered to at all points of the roof to prevent ponding from occurring. The 3° minimum pitch may be used for roofing run lengths up to 40m for rainfall intensities of up to 250mm/hr.

ARCHITECTURAL SPECIFICATION

The roofing and/ or wall cladding sheets shall be 0.47 TCT or 0.50 TCT **LCP K-CLAD® 30** profile sheet of 1000 mm effective cover width and overall cover width of 1060 mm with trapezoidal ribs of 30 mm high, spaced at 200 mm centre-to-centre in five pans. The anti-capillary side laps are designed to avoid any seepage of water through the lateral overlap. The sheeting material is manufactured out of Hi-Tensile steel with min. G 550 MPa yield strength, metallic hot dip coated with Aluminium-Zinc alloy (55% Aluminium, 45% Zinc) as per AS:1397 and IS:15961. The minimum coating mass for the zinc/ aluminium alloy – coated sheet shall be AZ150 (150 gms/ sq. mtr. minimum coating mass). All the accessories like gutter/ flashing / capping shall be made from the same material.

The sheet shall be installed in accordance to manufacturer's recommendations. The fasteners used to secure the metal sheets to the supports shall conform with AS3566 and be compatible with the roofing material used.

Sheets shall be laid in such a manner that the approved side lap faces away from the prevailing weather. A minimum of 50mm shall be provided for projection into gutters. Flashings shall be supplied in compatible materials as specified, minimum cover of flashing shall be 150mm. All sheets shall be fixed in a workman like manner, leaving the job clean and weather-tight. All debris (nuts, screws, cuttings, filings etc.) shall be cleaned off daily.

PROPERTIES

LCP K -CLAD® 30 - Material Mass and Thickness

Thickness		Material Mass in Kg/m ² of Roof Cover			
BMT (mm)	TCT (mm)	Bare Zinc-Aluminium / Bare Galvalume	Pre-painted Galvalume	Pre-painted Galvanized Iron	Grade of Steel
0.40	0.45	4.04	4.11	4.26	G550MPa
0.42	0.47	4.23	4.30	4.45	G550MPa
0.45	0.50	4.52	4.59	4.74	G550MPa
0.55	0.60	5.47	5.55	5.69	G550MPa
0.65	0.70	6.43	6.51	6.65	G300MPa

BMT – Base Metal Thickness ; TCT – Total Coated Thickness

Mentioned kg/m² are theoretical value.

MAXIMUM SPAN CHART

LCP K -CLAD® 30 - Material Span Chart

Thickness		Roof Spans(mm)			Wall Spans(mm)			Overhang (Roof & wall)	
BMT (mm)	TCT (mm)	Double Spans	Equal Spans	Internal (End Spans)* Combination	Double Spans	Equal Spans	Internal (End Spans)* Combination	Unstiffened	stiffened
0.40	0.45	1250	1250	1550(1250)	1700	1600	2100(1750)	-	-
0.42	0.47	1350	1350	1700(1350)	1750	1650	2200(1850)	150	400
0.45	0.50	1500	1500	1850(1500)	1900	1750	2350(1950)	150	400
0.55	0.60	1850	1850	2350(1850)	2050	1950	2600(2150)	150	400
0.65	0.70	2150	2150	2750(2200)	2300	2050	2850(2350)	150	400

CONDITIONS

The maximum span charts apply to buildings no more than 10m in height, and less than 1000m² in plan area. The span listed is based on the testing requirements of AS 1562 for both foot traffic and wind loadings, and assume both the end and the first internal span to be subject to local pressure zone factors. Assumed wind loads are: Sheltered suburban - 0.93kPa and 0.72kPa; exposed suburban -1.43kPa and 1.10kPa, for roof and walls respectively. Span chart also conforms to BS 5950 and IS 875.

* : For optimum spanning capacity, end spans are shorter than internal spans in a fixed ratio, (End Span = 0.8 x Internal Span). The Internal/End Span combinations shown must only be used in this specific ratio, rounded to the nearest 50mm.

PERFORMANCE

LCP K -CLAD® 30 - Permissible Wind Pressure

LCP K -CLAD® 30				Internal Span (End Span) Combination (mm)							
Thickness		Span Type	Foot Traffic Limitation	(750)	(1000)	(1250)	(1500)	(1750)	(2000)	(2250)	(2400)
BMT (mm)	TCT (mm)			900	1200	1500	1800	2100	2400	2700	3000
0.40	0.45	Internal (End)	1550(1250)	3.74	2.81	2.25	1.77	1.11	0.75	0.52	0.38
		Equal	1250	3.28	2.35	1.20	0.70	0.44	0.29	0.21	0.15
		Double	1250	2.99	2.25	1.53	0.89	0.56	0.37	0.26	0.19
		Single	700	2.95	1.24	0.64	0.37	0.23	0.16	0.11	0.08
0.42	0.47	Internal (End)	1700(1350)	4.09	3.07	2.46	2.01	1.27	0.85	0.60	0.44
		Equal	1350	3.58	2.68	1.37	0.79	0.50	0.33	0.23	0.17
		Double	1350	3.27	2.46	1.75	1.01	0.64	0.43	0.30	0.22
		Single	800	3.36	1.42	0.72	0.42	0.26	0.18	0.12	0.09
0.45	0.50	Internal (End)	1850(1500)	4.39	3.29	2.63	2.18	1.54	1.03	0.72	0.53
		Equal	1500	3.84	2.88	1.66	0.96	0.61	0.41	0.29	0.21
		Double	1500	3.51	2.63	2.00	1.23	0.77	0.52	0.36	0.27
		Single	900	4.07	1.72	0.88	0.51	0.32	0.21	0.15	0.11
0.55	0.60	Internal (End)	2350(1850)	4.68	3.51	2.81	2.34	2.01	1.43	1.00	0.73
		Equal	1850	4.10	3.08	2.30	1.33	0.84	0.56	0.39	0.29
		Double	1850	3.75	2.81	2.25	1.70	1.07	0.72	0.50	0.37
		Single	1300	5.63	2.37	1.22	0.70	0.44	0.30	0.21	0.15
0.65	0.70	Internal (End)	2750(2200)	4.68	3.51	2.81	2.34	2.01	1.74	1.22	0.89
		Equal	2150	4.10	3.08	2.46	1.62	1.02	0.68	0.48	0.35
		Double	2150	3.75	2.81	2.25	1.87	1.30	0.87	0.61	0.45
		Single	1750	6.87	2.90	1.48	0.86	0.54	0.36	0.25	0.19

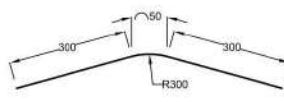
Loads have been determined from testing to AS 1562 and also conforms to BS 5950 and IS 875 - Design and Installation of Metal Roofing. : Spans shown in brackets are the end spans to be used in conjunction with the internal spans shown.

Note: Spans shown in shaded areas are not suitable for trafficable roofs.

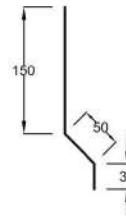
FLASHING



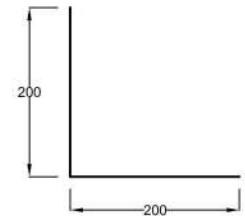
PLAIN RIDGE



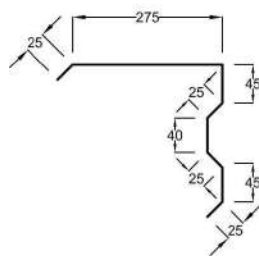
PROFILE RIDGE



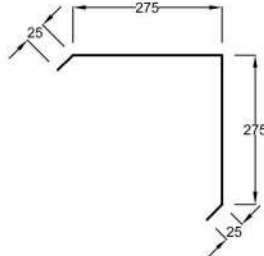
DRIP FLASHING



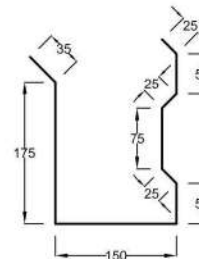
'L' FLASHING



BARGE BOARD



CORNER FLASHING



GUTTER



VALLEY GUTTER

Standard flashings are readily available for use with **LCP K-CLAD® 30** roofing. **LCP Building Products Pvt. Ltd.** will give design advice for flashing details and manufacture the required flashing.

INSTALLATION

All roof slopes require a turn up at the top of the sheet and also need to be turned down at the low end. This is best achieved using a **LCP K-CLAD® 30** Stop Ending Tool.

For maximum protection from weather intrusion, the sheets should be laid with the exposed edge of the overlaps away from the direction of the prevailing weather.

For detailed instructions, please call **LCP Building Products Pvt. Ltd.** Technical Department.

FASTENERS

All fasteners should conform with AS3566 and be compatible with the roofing material used.

Crest Fixing:

For steel purlins, use No 12 x 55mm hex head self drilling, self tapping screws with EPDM washers.

For timber, use No 12 x 65mm hex head self drilling type 17 screws with EPDM washers, (for F11 grade timber or better).

Pan Fixing:

For steel purlins/girts, use No 10 x 25MM hex head self drilling, self tapping screws with EPDM washers.

For timber (F11 grade or better), use No 10 x 25mm hex head type 17 screw with EPDM washers.

Side Laps:

Use No 8 x 12mm hex head "S" point screws with EPDM washers or Monel metal sealed pop rivets.

Do not over tighten screws, ensure they are kept upright and that EPDM washers remain in position during installation.

A range of "Cyclone" caps are available for even better wind load performance. Increase screw length by 10mm for installation on softwood applications. Lead head nails must not be used.

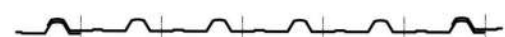
Fastener Locations:

LCP K-CLAD® 30 is usually fixed at every rib on each batten/purlin, i.e. 5 fasteners per sheet. This enables maximum performance and efficiency of the roof system.

CREST FASTENER LOCATION (ROOF)



VALLEY FASTENERS LOCATION (WALL)



Ensure sheets sit correctly before fixing so that the integral anti capillary space is effective. Side laps should be fastened at mid span for roof spans exceeding 900mm and wall spans exceeding 1200mm.

LAPPING

The minimum end lap should be 250mm when lapping metal to metal and 300mm when lapping metal to polycarbonate or fiberglass.

HANDLING & STORAGE

LCP K-CLAD® 30 should be handled with care at all times to preserve the quality of the finish. Packs should always be kept dry and stored above ground level whilst on site. If however the sheets have become wet then they should be separated, wiped and placed in the open to aid drying.

UNLOADING and / or LIFTING

When lifting roofing / cladding sheet crane, care should be taken to ensure that the load is spread to prevent damage. When a crane is not available, sufficient labour must be supplied to assist in manual unloading.

FOOTTRAFFIC

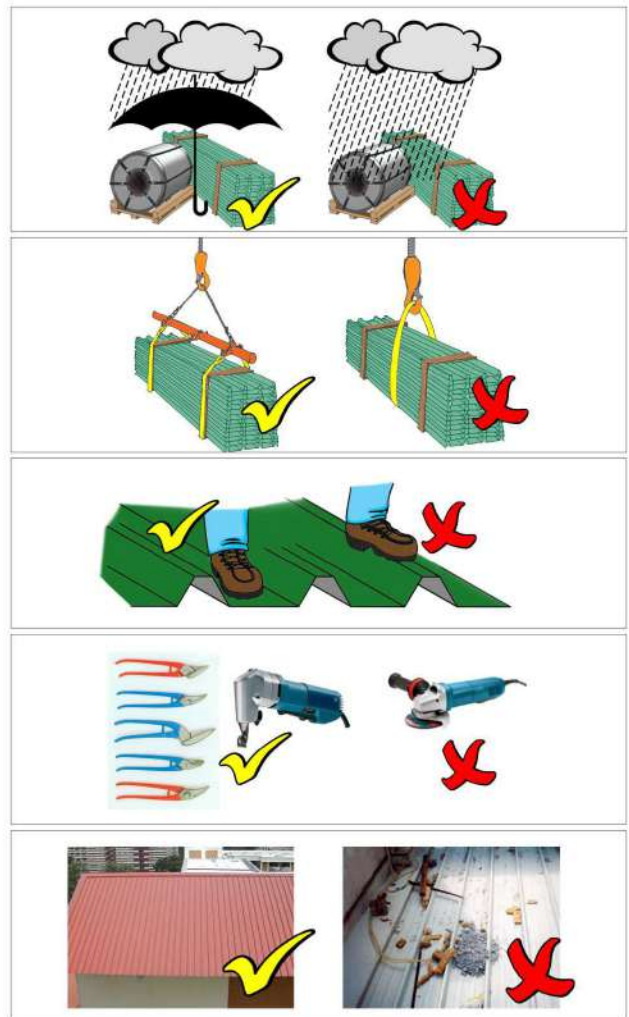
When walking on **LCP K-CLAD® 30** roofing, always wear flat rubber soled shoes and place feet only in the pans.

CUTTING

Sheeting can be cut, where necessary, by means of metal snips or electric nibbler. The use of cutting discs should be avoided but if it is used, the colour pre-painted steel sheeting should be placed downwards, or carefully shielded, to minimise the risk of hot filings embedding in the painted surface.

CLEANUP

Ensure that all debris, nails, rivets, screws, rags and especially filings & particles from cutting or drilling, are carefully cleared from the surface after each day's work or premature corrosion could occur.



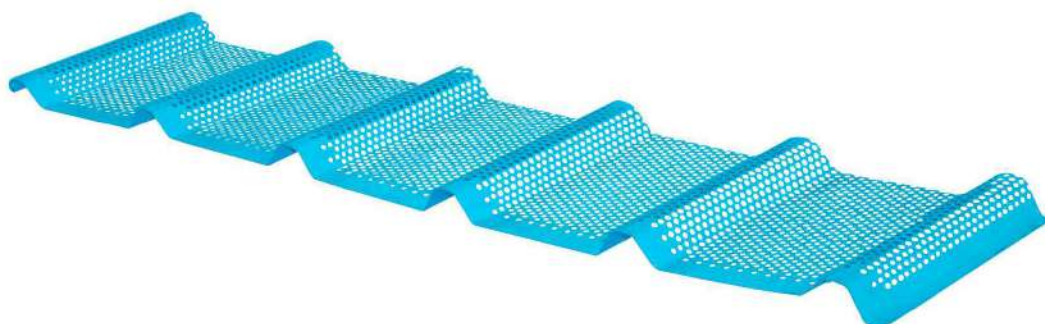
STANDARD COLOUR RANGE



These are standard colours. Non-standard colours may require higher lead time and price. The colour shades are only for reference. Due to limitations in printing, the colour shades may vary from actual sample.

NEW OFFERINGS

Perforated Profiled Sheet





LCP BUILDING PRODUCTS PVT. LTD.

(Co. No. U28112 TN2004 PTC053236)

City Office & Sales : Old No. 6, New No. 14, 4th Floor,
Viswanathapuram Main Road, Kodambakkam,
Chennai - 600 024, Tamilnadu, India.
Tel / Fax: +91-44-2989 2772

Registered Office & Factory : Plot No. F88-F92, SIPCOT Industrial
Park, Irungattukottai - 602 105, Tamilnadu, India.
Tel: +91-44-27190747/48, 27156163, 27156158
Fax: +91-44-47193053
Website: www.lcpindia.com

LCP BUILDING PRODUCTS PTE. LTD.

Co. No. 200009173 c
6 Gul Circle, Singapore 629 562
Tel: (65) 6865-1550 Fax: (65) 6861-4218
Email: lcp@lcp.sg Website: www.lcp.sg

A member of LCP Group of Companies

IMPORTANT NOTE: The information published in this brochure is as far as possible accurate at the date of publication, However, prior to application in a particular situation, **LCP Building Products Pvt. Ltd.** recommends that you obtain qualified expert advice confirming the suitability of product(s) in question for the application proposed. While **LCP Building Products Pvt. Ltd.** accepts its legal obligations, be aware however that to the extent permitted by law, **LCP Building Products Pvt. Ltd.** disclaims all liability (including liability for negligence) for all loss and damage resulting from the use of the information provided in this brochure.

Photographs of the premises displayed in this Brochure are not to be construed as an endorsement or recommendation by the owners of the premises to **LCP** and its products.

LCP K-CLAD® 30 Brochure 07/2018 **LCP Building Products Pvt. Ltd.** All rights reserved.