TECHNICAL NOTE: C-45/01/en/v2

Material Information Sheet Cedral Lap

1. Product Appearance

Cedral Lap fibre cement weatherboard cladding is the ideal low maintenance, rot free alternative to traditional timber weatherboarding. With the visual appeal of natural timber, Cedral Lap can be supplied in a wide range of factory applied solid colours and 2 woodstain finishes.

2. Colour

Cedral Lap are available in the following profiles:

- Classic: surface with wood nerve profile
- Smooth: slightly structured surface

Cedral Lap are finished with various coatings depending whether a covering colour or natural basic colour is used. The ends of wood colored Cedral Lap "CL 1xx RC" are treated with a colourless water-repellent impregnation.

Remarks concerning the wood colours "CL 1xx RC":

- Differences in colour as with staining of wood can occur within one or between different Cedral plank
- Cut edges have to be treated with the hydrophobation product Etersilan.
 Untreated or poorly treated cutting edges can lead to moisture stains on the front side
- Applications with visible fixings (e.g. vertical or flat horizontal installation) are not advised.

For an overview of the standard colours refer to the most recent Cedral colour chart. However it is technically impossible that this chart represents the colours realistically. Therefore, the final choice of the colour has to be made with samples. The naturally coloured Cedral Lap C00 are weather-resistant and are characterised by natural hues in the sheet and changes in colour through the effects of light and moisture. Other colours are available upon request for minimum orders. The risk of colour differences between the various sheets decreases as the whole party is ordered at once.

Colour differences are measured according the CIELAB colour model. Tolerated colour differences on a façade for full coated sheets are; Δ L* = ±1.0, Δ a* = ±0.4, Δ b* = ±0.4 en Δ E* = ±1.2. Colour differences of wood colours "CL 1xx RC" are measured according a simplified CIELAB colour model, by which only the lightness of the colour is checked. Tolerated colour differences are Δ L* = 5.0. Color variegation may be accentuated by the effects of light and the viewing angle.







Material Information Sheet Cedral Lap

3. Product Composition

Cedral Lap fibre cement consist of the following:

- Portland cement
- mineral fillers
- natural organic reinforcing fibres
- additives
- for the different covering colour shades: water-based acrylate dispersion on the image side and back coating on the back
- for the natural basic colour: colourless water-repellent impregnation on the image side

4. Production Method

Cedral Lap fibre cement is manufactured on a Hatschek machine and is autoclaved. The image side of Cedral Lap is provided with a wood nerve profile (Wood) or a smooth surface (Smooth). Cedral Lap are then finished with various coatings depending whether a covering colour or natural basic colour is used. The ends of wood colored Cedral Lap "CL 1xx RC" are treated with a colourless water-repellent impregnation.

5. Dimensions

Thickness 10mm

Cedral Lap Wood	190mm x 3600mm
Cedral Lap Smooth	190mm x 3600mm

6. Technical Properties

Average values according to the European standard EN 12467 'Fibre-cement flat sheets', which describes classification and most testing methods.

Technical Properties according to ISO quality management system



Load perpendicular to the production direction



Load parallel to to the production direction

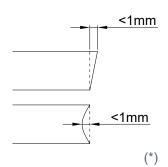
	Miniumum Density	Dry	EN12467	1300	kg/m³
	Characteristic bending strength perpendicular	ambient	EN12467	23.0	N/mm²
2060	Characteristic bending strength parallel	ambient	EN12467	11.0	N/mm²
on	Modulus of elasticity perpendicular	ambient	EN12467	7,500	N/mm²
	Modulus of elasticity parallel	ambient	EN12467	5,500	N/mm²
-	Hygrical movement	0-100%	EN12467	1.75	mm/m
	Porosity	0-100%	-	<23	%





Material Information Sheet Cedral Lap

Classification				
Durability classification		EN12467	Catego	ry A
Strength classification		EN12467	Class 2	
Reaction to fire		EN13501	A2-s1,c	10
Type test or best estimate				
Water impermeability test		EN12467	Pass	
Warm water test		EN12467	Pass	
Soak-dry test		EN12467	Pass	
Freeze-thaw test		EN12467	Pass	
Thermal movement		-	< 0.01	mm/mK
Thermal conductivity		-	0.212	W/mK
Panel Weight (ex works)				
Panel	Cedral Lap Wood	Cedr	al Lap Sm	ooth
10mm	11 2kg/piese	1.	1 Oka/piec	0



Panel	Cedral Lap Wood	Cedral Lap Smooth
10mm	11.2kg/piece	11.2kg/piece
Tolerances		
Thickness	± 10%	
Length	± 5.0mm	
Width	± 2.0mm	
Squareness	± 1.0mm (*)	
Squareness lengthwise	± 3.0mm	

7. Advantages

Providing the application guidelines are followed, Cedral Lap fibre cement have the following superior mix of properties compared to other materials:

- fire safe (no fire ignition, no spread of fire)
- sound insulating
- resistant to extreme temperatures
- water resistant (if in compliance with application guideline)
- resistant to many living organisms (fungi, bacteria, insects, vermin, etc.)
- resistant to many chemicals
- environmentally friendly, no harmful gas emissions

In addition, Cedral Lap fibre cement have the following specific properties:

- very little maintenance in comparison with wood because of its durable coating
- · aesthetic surface in different covering colours
- can be worked with joinery machinery
- screw and nail without pre-drilling





8. Applications

Exterior walls: exterior wall cladding, covering of gable ends, dormer windows

9. Safety Aspects

During the mechanical machining of panels, dust can be released which can irritate the airways and eyes. Apart from this, the inhalation of fine (respirable size) quartz containing dust, particularly when in high concentrations or over prolonged periods of time can lead to lung disease and an increased risk of lung cancer. Depending on the working conditions, adequate machinery with dust extraction and/or ventilation should be foreseen. For more ample information, please check the Safety Data Sheet (based on 1907/2006/EC, article 31).

10. Maintenance and Cleaning

For minor soiling, washing with a mild household detergent or soft soap solution followed by rinsing with clear water.

11. Certification





The manufacturer can - within the framework of the European Regulation N° 305/2011 (CPR) - present the Declaration of Performance (DOP) of the product such confirming that the product has a CE marking. The CE marking guarantees that the product is in accordance with the basic requirements determined by the harmonized European standard and applicable to the product. The Declaration of Performance is presented in accordance with the CPR and can be found on the manufacturer's website. The manufacturer is also ISO certified. Cedral Lap has an EPD (Environmental Product Declaration).

12. Information

Information on the different applications can be found in the Etex Exteriors application guidelines. They can be found on the website or can be obtained from local support. Information about external suppliers can also be downloaded from the local websites.

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