



Compact Laminate

Alfresco

Summary

Laminex Compact Laminate - Alfresco with Protec+™ anti-microbial surface performance, is an exterior grade decorative panel manufactured under high pressure and temperature with UV inhibitors. The distinctive black core eliminates the need for edge treatment. Panels are durable for use in Alfresco applications.



Applications

- Benchtops
- Furniture
- Partitions
- Store Fixtures
- Decorative Wall Panelling
- Table Tops
- Alfresco Cabinetry

Functional Benefits



Horizontal Application



Vertical Application



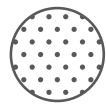
Stain Resistant



Heat Resistant



Water Resistant



Tactile



Scratch Resistant



Covered Outdoor



Antimicrobial

Product Characteristics

Attribute	Description
Product Category	Compact Laminate
Substrate Type	Black Core
Sheet Size	3600x1500mm
Thickness (nominal)	13mm
Weight (Kg/m ² approx.)	18.5
Decorative Surfaces	Double Sided (D/S)
Finish	Carbide
Colour/Pattern/Size	To view the full range, please visit www.laminex.com.au for the National Availability Guide

Dimensional Tolerance (Tested to EN 438-4)

Attribute	Description
Thickness	12.0 ≤ t < 16.0 mm ± 0.60 mm
Length and Width	+10mm / -0mm
Flatness	10.0 < t : 3,0 mm/m maximum deviation
Straightness of edges*	1.5 mm/m maximum deviation
Squareness*	1.5 mm/m maximum deviation

Provided the laminates are stored in the manner and conditions recommended by the manufacturer, they shall comply with the flatness requirements specified in the above table when measured in accordance with EN 438-2, Clause 9. The flatness values specified in the above table apply to laminates with two decorative faces. Limits for laminates with one face sanded shall be agreed between supplier and customer.

* Tolerances for cut-to-size panels shall be agreed between supplier and customer.





Surface Quality (Tested to EN438-2:2005)

Attribute	Minimum Values
Inspection Guidelines	Viewing distance 0.75 to 1.5m from laminate surface Light intensity approximately 800 to 1000 lx at the laminate surface Using normal vision, corrected if necessary. No magnification devices
Dirt, Spots & Similar Surface Defects	The admissible size of defects is based on a maximum contamination area equivalent to 1.0mm ² /m ² and is proportional to the sheet size under inspection The total admissible area of contamination may be concentrated in one spot or dispersed over an unlimited amount of smaller defects
Fibres, Hairs & Scratches	The admissible size of defects is based on a maximum contamination length equivalent to 10mm/m ² and is proportional to the sheet size under inspection The total admissible length of contamination may be concentrated in one defect or dispersed over an unlimited amount of smaller defects

Surface Performance (Tested to EN 438-2)

Attribute	Minimum Values
Resistance to	Surface Wear Initial wear ≥ 150 cycle Average wear ≥ 350 cycles
	Immersion in Boiling Water ≥ 2% <i>Slight change of gloss and/or colour, only visible at certain viewing angles</i>
	Water Vapour Appearance rating not worse than 4 <i>Slight change of gloss and/or colour, only visible at certain viewing angles</i>
	Wet Heat at 100°C Appearance rating not worse than 4 <i>Slight change of gloss and/or colour, only visible at certain viewing angles</i>
	Dry Heat at 180°C Appearance rating not worse than 4 <i>Slight change of gloss and/or colour, only visible at certain viewing angles</i>
	cracking under stress/crazing Appearance rating not worse than 4 Hairline cracks only visible under 6X magnification
Dimensional stability at elevated temperature	Longitudinal direction: Maximum cumulative change 0.30 % Transverse direction: Maximum cumulative change 0.60 %
Lightfastness	Contrast: Grey scale rating ≥ 4 <i>When tested in contrast with Blue wool 6 Ref: ISO 105-A02</i>

Specialty Performance - Weather Resistance Properties

Property	Test Method (EN438-2 Clause No.)	Property or Attribute	Unit (Max. or Min.)	Laminate Grade EDS and EDF
Resistance to Climatic Shock	19	Appearance	Rating (min)	4
		Flexural strength index Ds	(min)	0.95
		Flexural modulus index Ds	(min)	0.95
Resistance to UV Light	28	Contrast	Grey scale rating (not worse than)	3 (after 1500 hours exposure)
		Appearance	Rating (min)	4 (after 1500 hours exposure)
Resistance to artificial weathering (including light fastness)	29	Contrast	Grey scale rating (not worse than)	3 (after 650 MJ/m ² radiant exposure)
		Appearance	Rating (min)	4 (after 650 MJ/m ² radiant exposure)

Rating 3 Hairline surface cracks and/or erosion of surface. Rating 4 Change of gloss only





Emissions & Environmental Performance

Attribute	Tested to	Unit	Minimum Values
Formaldehyde	ISO 12460-3	mg/m ² h	≤ 3.5

Fire Properties (Typical Values)

Attribute	Tested to	Unit	Requirement
Fire hazard indices	AS/NZS 1530.3		13mm
Ignitability		index	9
Spread of flame		index	9
Heat Evolved		index	6
Smoke Developed		index	4
Cone Calorimeter	AS/NZS 3837		
Group number			3
Average specific extinction area -13mm		m ² /kg	97.4
Average specific extinction area - 6mm		m ² /kg	61.9
Average heat release rate -13mm		Kw/m ²	104
Average heat release rate - 6mm		Kw/m ²	107

Physical Properties

Attribute	Tested to	Unit	Requirement
Modulus of elasticity	EN ISO 178	MPa	≥ 9000
Tensile strength	EN ISO 527-2	MPa	≥ 60
Flexural strength	EN ISO 178	MPa	≥ 80
Wear resistance	EN 438-2:10	Cycles initial	150
		Cycles wear value	350
Steam resistance	EN 438-2:14	Rating Gloss/Other	3/4
Dry heat at 180°C	EN 438-2:16	Rating Gloss/Other	3/4
Stability at elevated temperature MD	EN 438-2:17	%	0.3 max
Stability at elevated temperature CD	EN 438-2:17	%	0.6 max
Impact resistance 13mm	EN 438-2:21	mm	1800
Crazing resistance	EN 438-2:24	Rating	4
Scratch resistance	EN 438-2:25	Textured	2N
Staining resistance	EN 438-2:26	Rating Group 1 & 2	5
Staining resistance	EN 438-2:26	Rating Group 3	4
Light fastness (xenon arc)	EN 438-2:27	Grey scale	4 to 5
Cigarette burn resistance	EN 438-2:30	Rating	3 min
Wet heat resistance at 100°C	EN 12721:1997	Rating Gloss/Other	3/4





Staining Agents & Groups (Tested to EN 438-4)

Attribute	Staining Agent	Test Conditions	Contact Time	
Group 1 *Acetone	Other organic solvents Toothpaste Hand cream Urine Alcoholic beverages Natural fruit and vegetable juices Lemonade and fruit juices Meats and sausages Animal and vegetable fats and oils Water Yeast suspension in water	Salt (<i>NaCl</i>) solutions Mustard Lyes, soap solutions Cleaning solution consisting of: <ul style="list-style-type: none"> • 23% dodecylbenzene sulfonate • 10% alkyl aryl polyglycol ether • 67% water Commercial disinfectants Stain or paint removers based on organic solvents Citric Acid (<i>10% solution</i>)	Apply staining agent at ambient temperature	16 hours
Group 2 *Coffee	Coffee (<i>120g of coffee per litre of water</i>) Wine vinegar Alkaline-based cleaning agents (<i>to 10% concentration with water</i>) Hydrogen peroxide (<i>3% solution</i>) Ammonia (<i>10% solution of commercial concentrate</i>) Nail varnish	Black (<i>9g of tea per litre of water</i>) Milk (<i>all types</i>) Nail varnish remover Lipstick Water colours Laundry marking links Ball point inks	Apply staining agent at approximately 80°C	16 hours
Group 31 *Sodium hydroxide *Hydrogen peroxide *Shoe polish	*Sodium hydroxide (<i>25% solution</i>) *Hydrogen peroxide (<i>30% solution</i>) Concentrated vinegar (<i>30% acetic acid</i>) Bleaching agents and sanitary cleaners containing them Hydrochloric acid based cleaning agents (<i>≤ 3% HCl</i>) Acid-based metal cleaners Mercurochrome (<i>2,7-diabromo-4-hydroxymercurifluorescein, disodium salt</i>)	*Shoe polish Hair colouring and bleaching agents Iodine Boric acid Lacquers and adhesives (<i>except fast curing materials</i>) Amidosulfonic acid descaling agents (<i>< 10% solution</i>)	Apply staining agent at ambient temperature	10 minutes

1) Some commercial cleaning agents contain acids and alkalis in concentrations stronger than those shown in Group 3 and can cause surface marking or damage. Any spillage of such materials must be washed off immediately. Rating 5 is equivalent to No visible change. Rating 4 is equivalent to Slight change of gloss and or colour, only visible at certain viewing angles.

Protec+® Antimicrobial Technology

Laminex Alfresco Compact with Protec+ contains antifungal and antibacterial resistant properties which do not wash off or leach out of the surface. It is safe for use in food preparation and processing activities and can be in direct contact with food, provided that good hygiene practices are followed.





Important Information

Note	Details
Ⓢ ONLY use for internal/alfresco applications	Claims arising from non-internal applications are not covered under warranty
Ⓢ ONLY use compact laminate sheets within 12 months of purchase	Claims arising from sheets stored for longer than 12 months where storage/ environmental conditions cannot be maintained are not covered under warranty.
Ⓢ ALWAYS condition of panels prior to fabrication and installation	Claims attributable to failure to adhere to conditioning guidelines are not covered under warranty.
Ⓢ DO NOT bond directly to plaster, plasterboard, masonry or concrete	Claims arising from bonding to non-recommended surfaces resulting in undulations telegraphing to the decorative surface or poor bonding, are not covered under warranty
Ⓢ DO NOT use in installations where a Group 1 or 2 fire resistant product is required	

Ⓢ Denotes specific warranty conditions apply.

Warranty Document

To view the latest Warranty Document for this product, please visit www.laminex.com.au.

Care & Maintenance Document

To view the latest Care & Maintenance Document for this product, please visit www.laminex.com.au.

Safety Data Sheet

To view the latest Safety Data Sheet for this product, please visit www.laminex.com.au.

