



Compact Laminate

Multipurpose

Summary

Laminex® General Purpose Compact, with Protec+™ anti-microbial surface performance, is strong, durable and moisture resistant, making it suitable for a wide variety of uses.



Applications

- Shower & Toilet Cubicles
- Office worktops
- Interior Wall Cladding
- Lockers
- Kitchen Benchtops & Cabinetry
- Educational Furniture
- Durable Furniture

Functional Benefits



Horizontal Application



Vertical Application



Fingerprint Resistant



Antimicrobial



Stain Resistant



Heat Resistant



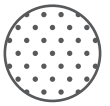
Water Resistant



Scratch Resistant



UV Stable Indoor Use



Tactile

Product Characteristics

Attribute	Description
Product Category	Laminate
Substrate Type	-
Thickness (nominal)	13mm, 18mm
Weight (Kg/m ² approx.)	18.5, 25.2
Decorative Surfaces	Double Sided (D/S)
Core	Black
Finish	Natural, Chalk, Nuance, AbsoluteMatte
Colour/Pattern/Size	To view the full range, please visit www.laminex.com.au for the National Availability Guide

Dimensional Tolerance (Tested to ISO 4586-2)

Property	Test Method (EN438-2: 2005 Clause No.)	Property or Attribute	Unit (Max. or Min.)	Laminate Grade CGS
Thickness	5		mm (max.)	3.0 ≤ t < 5.0 mm : ± 0.30 mm 5.0 ≤ t < 8.0 mm : ± 0.40 mm 8.0 ≤ t < 12.0 mm : ± 0.50 mm 12.0 ≤ t < 16.0 mm : ± 0.60 mm 16.0 ≤ t < 20.0 mm : ± 0.70 mm 20.0 ≤ t < 25.0 mm : ± 0.80 mm 25.0 mm ≤ t : to be agreed between supplier and customer. (t = nominal thickness)





Dimensional Tolerance (Tested to ISO 4586-2)

Property	Test Method (EN438-2: 2005 Clause No.)	Property or Attribute	Unit (Max. or Min.)	Laminate Grade CGS
Flatness ^{a)}	9		mm (max.)	2.0 ≤ t < 6.0 mm : 8.0 mm/m 6.0 ≤ t < 10.0 mm : 5.0 mm/m 10.0 mm ≤ t : 3.0 mm/m (t = nominal thickness)
Length and Width ^{b)}	6		mm	- 0/+ 10 mm
Straightness of edges ^{b)}	7		mm (max.)	1.5 mm/m
Squareness ^{b)}	8		mm (max.)	1.5 mm/m

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.

Alphabetical Classification System

First letter	C (Compact Grade)	Second letter	G (General purpose)	Third letter	S (Standard Grade)
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Surface Performance of Natural, Nuance & Chalk Finishes (Tested to EN 438-2: 2005)

Property	Test Method (EN438-2: 2005 Clause No.)	Property or Attribute	Unit (Max. or Min.)	Values CGS	
Resistance to	Surface Wear	Wear Resistance	Revolutions (min.) Initial point Wear value	150 350	
	Impact by Large Diameter Ball ^{c)}	Drop Height	mm (min.) 2 ≤ t < 6	1400	
			6 ≤ t (t = nominal thickness)	1800	
	Scratching ^{d)}	Force	Rating (min.) Textured Finishes	3 = 2N	
	Immersion in Boiling Water	12	Mass increase Thickness Increase Appearance	% (max.) 2 mm ≤ t < 5 mm	5.0
				t ≥ 5 mm	2.0
				% (max.) 2 mm ≤ t < 5 mm t ≥ 5 mm (t = nominal thickness)	6.0 2.0
Water Vapour	14	Appearance	Rating (min.) Other Finishes	4 4	
Wet Heat at 100°C	EN12721	Appearance	Rating (min.) Other finishes	4	
Dry Heat at 160°C	16	Appearance	Rating (min.) Other finishes	4	
Moisture	ISO 2924.1:1998 26	Appearance		4	
Staining	26	Appearance	Rating (min.) Groups 1&2	5	
			Group 3	4	
Crazing	24	Appearance	Grade (min.)	4	





Surface Performance of Natural, Nuance & Chalk Finishes (Tested to EN 438-2: 2005)

Property	Test Method (EN438-2: 2005 Clause No.)	Property or Attribute	Unit (Max. or Min.)	Values CGS
Dimensional stability at elevated temperature	17	Cumulative Dimensional Change	% (max) 2 mm ≤ t < 5 mm L a) 2 mm ≤ t < 5 mm T b) t ≥ 5 mm L t ≥ 5 mm T (t = nominal thickness)	0.40 0.80 0.30 0.60
Flexural Modulus	EN ISO 178	Stress	Mpa (min.)	9000
Flexural Strength	EN ISO 178	Stress	Mpa (min.)	80
Tensile Strength	EN ISO 527	Stress	Mpa (min.)	60
Density	EN ISO 1183	Density	kg/m ³ (min.)	1350
Antibacterial Activity and Efficacy	JISZ2801:2000 Referred by ISO 22196			Compliance
Antifungal	ASTMG21-09		Rating < 1	Inhibits growth on the surface according to ASTM G21-09
Compliance with the Demands of Food Contact Materials				Official collection of testing methods according to Rules and Regulations of the EC and EU community.

- a) L = in the longitudinal (or machine) direction of the fibrous sheet material (normally the direction of the longest dimension of the laminate).
 b) T = in the cross-longitudinal (cross-machine) direction of the fibrous sheet material (at right angles to direction L).
 c) When tested to specified drop height the diameter of the indent shall not exceed 10mm
 d) Minimum 1N for darker colours.

Surface Performance of AbsoluteMatte (Tested to ISO 4586-2)

Attribute	Minimum Values		
Resistance to	Surface Wear	Initial wear ≥ 150 cycle Average wear ≥ 350 cycles	
	Immersion in Boiling Water	Appearance rating not worse than 4 <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 160°C	Appearance rating not worse than 4 <i>Slight change of gloss and/or colour, only visible at certain viewing angles</i>	
Dimensional stability at elevated temperature	Longitudinal direction: Maximum cumulative change 0.30 % Transverse direction: Maximum cumulative change 0.60 %		
Resistance to	Impact	Large diameter ball > 1800mm	
	Cracking under stress/crazing	Appearance rating not worse than 4 Hairline cracks only visible under 6X magnification	
	Scratching	Rating = 3 (Force ≥ 2 Newton)	
	Staining	Groups 1 & 2	Acetone Coffee (120g of coffee per litre of water)
Group 3		Sodium hydroxide (25% solution) Hydrogen peroxide (30% solution) Shoe polish	Appearance rating not worse than 4 <i>Slight change of gloss and/or colour, only visible at certain viewing angles</i>
Lightfastness	Contrast: Grey scale rating ≥ 4 <i>When tested in contrast with Blue wool 6 Ref: ISO 105-A02</i>		





Typical Properties (Typical Values)

Attribute	Tested to	Unit	Requirement
Physical Properties			
Specific Gravity (minimum)	EN 438-4	kg/m ³	≥ 1350
Weight 13 mm thickness		kg/m ²	18.5
Weight 18 mm thickness		kg/m ²	25.2
Fire hazard indices			
Ignitability	AS/NZS 1530.3	Range	
Spread of flame		0-20	10
Heat Evolved		0-10	0
Smoke Developed		0-10	2
Cone Calorimeter	AS/NZS 3837		
Group number		1-3	3
Average specific extinction area -13mm		m ² /kg	4

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 Overhead white fluorescent lights, of colour temperature approximately 5000K
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
Edge Quality: Chipping	Max. 3mm/side
Indentations	The admissible size of defects is based on a maximum contamination area equivalent to 2.0mm 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

Specialty Performance for AbsoluteMatte

Attribute	Tested to	Minimum Values	
Fire Hazard Properties	AS/NZS 3837 (In accordance to AS5637.1)	Group Number	3
		Average Specific Extinction Area (ASEA)	11.7 m ² /Kg
Fingerprint Resistance	Laminex Internal Method	Appearance rating not worse than 4 <i>Slight change of gloss and/or colour, only visible at certain viewing angles</i>	
PROTEC+® Antimicrobial Surface	Protec+® antimicrobial surface technology, prevents growth of bacteria and inhibits fungus on decorative surfaces. Protec+® provides enhanced antimicrobial protection for the expected life of the laminate.		





Specialty Performance for AbsoluteMatte

Attribute	Tested to	Minimum Values	
Antibacterial Activity and Efficacy (24 hours)	JIS Z 2801 Referred to in ISO 22196	PASS = R value > 2.0 orders of magnitude difference between a treated sample and an untreated control or other inert surface	Bacterial Strains tested: <ul style="list-style-type: none"> Staphylococcus aureus (ATCC 6538P) Escherichia coli (ATCC 8739) Methicillin resistant Staphylococcus aureus (NCTC 12493) Pseudomonas aeruginosa (ATCC 15442) Salmonella choleraesuis (ATCC 10708)
Antifungal (Incubation condition: 30°C for 28 days at 90% relative humidity)	ASTM G21	Rating ≤ 1 1 = Traces of growth (less than 10%) 0 = None	Fungal Strains tested: <ul style="list-style-type: none"> Aspergillus niger (ATCC 9642) Penicillium pinophilum (ATCC 11797) Chaetomium globosum (ATCC 6205) Gliocladium virens (ATCC 9645) Aureobasidium pullulans (ATCC 15233)

Emissions & Environmental Performance

Attribute	Tested to	Unit	Minimum Values
Formaldehyde	ISO 12460-3	mg/m ² h	≤ 3.5
Volatile Organic Compounds (VOC's)	ASTM D5116	mg/m ² /h	≤ 0.5

Interpretation of Ratings

Rating	All ratings unless specified	Resistance to moisture	Crazing
5	No visible change		Surface and edges unchanged from "as received" condition
4	Slight change of gloss and/or colour only visible at certain viewing angles	Slight change of gloss/colour or slight edge swell or hairline edge cracks.	Surface unchanged, with slight hairline edge cracks visible to the naked eye
3	Moderate marked change of gloss and/or colour		Surface cracks visible to the naked eye, and/or moderate edge cracks
2	Marked change of gloss and/or colour		Moderate surface cracks, and/or delamination
1	Surface distortion and/or blistering		Severe surface cracks, and/or delamination

Laminex declares that the mentioned product will meet the above specifications when determined according to the given standards.

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 (NaCl) 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 (10% solution)	Apply staining agent at ambient temperature 16 hours





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

Attribute	Staining Agent	Test Conditions	Contact Time	
Group 2 *Coffee	Coffee (120g of coffee per litre of water)	Black (9g of tea per litre of water) Milk (all types)	Apply staining agent at approximately 80°C	16 hours
	Wine vinegar Alkaline-based cleaning agents (to 10% concentration with water) Hydrogen peroxide (3% solution) Ammonia (10% solution of commercial concentrate) Nail varnish	Nail varnish remover Lipstick Water colours Laundry marking links Ball point inks	Apply staining agent at ambient temperature	16 hours
Group 31 *Sodium hydroxide *Hydrogen peroxide *Shoe polish	*Sodium hydroxide (25% solution) *Hydrogen peroxide (30% solution) Concentrated vinegar (30% acetic acid) Bleaching agents and sanitary cleaners containing them Hydrochloric acid based cleaning agents ($\leq 3\%$ HCl) Acid-based metal cleaners Mercurochrome (2,7-diabromo-4-hydroxymercurifluoresein, disodium salt)	*Shoe polish Hair colouring and bleaching agents Iodine Boric acid Lacquers and adhesives (except fast curing materials) Amidosulfonic acid descaling agents (< 10% solution)	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.

Protec+® Antimicrobial Technology

Laminex Multipurpose 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 applications	Claims arising from non-internal applications are not covered under warranty
Ⓜ DO NOT expose to prolonged direct or indirect UV light	Claims arising from prolonged exposure to UV light (natural or artificial sources) resulting in shrinkage and/or colour changes beyond the tolerances stated in this document, are not protected under warranty
Ⓜ Use of different surface materials within a single installation may result in a perceived visual variation	Claims arising from colour, gloss or finish variation between different product groups, including products with different UV or aging stabilities, are not covered under warranty
Ⓜ Use of directional designs or finishes in opposing orientations may result in a perceived visual variation	Claims arising from colour, gloss or finish variation directly attributable to surface directionality, are not covered under warranty
Ⓜ ALL material must be inspected prior to commencing any fabrication activity	Claims arising from defects or variation clearly detectable prior to fabrication, will not be covered under warranty for labour costs or penalties
Ⓜ USE compact laminate sheets within 12 months of purchase	Claims arising from performance failure during fabrication that is directly attributable to the age of the laminate, are not covered under warranty
Ⓜ DO NOT postform laminate	Claims arising from blisters, cracks, micro-crazing or other failure modes directly attributable to postforming fabrication, are not covered under warranty
Ⓜ ALL Protec+ laminate surfaces must be regularly cleaned to maintain anti-microbial functionality	Claims arising from a build-up of surface dirt or grime that prevents direct contact between the bacteria or fungus, and the laminate surface, are not covered under warranty
Ⓜ DO NOT apply a coating to the surface	Claims arising from surface defects or other failure modes directly attributable to the application of paint or other surface lacquering systems, are not covered under warranty
Ⓜ DO NOT use decorative face as a cutting surface	Claims arising from physical damage of the decorative surface are not covered under warranty
Ⓜ DO NOT expose to heat, hot gases or moisture	Claims arising from frequent or excessive exposure to heat or moisture are not covered under warranty
	Claims arising from damage due to hot objects, such as saucepans or irons, contacting the decorative surface, are not covered under warranty
Ⓜ ONLY use recommended Care & Maintenance methods	Claims arising from staining or damage attributable to not following Care & Maintenance instructions, are not covered under warranty

Ⓜ 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.

