merino
ECONOMY ◆ EXCELLENCE ◆ ETHICS
FR+
FIRE
RESISTANCE
MAKES ALL
THE DIFFERENCE.
UNBELIEVABLE SURFACES
by Merino

Disclaimer

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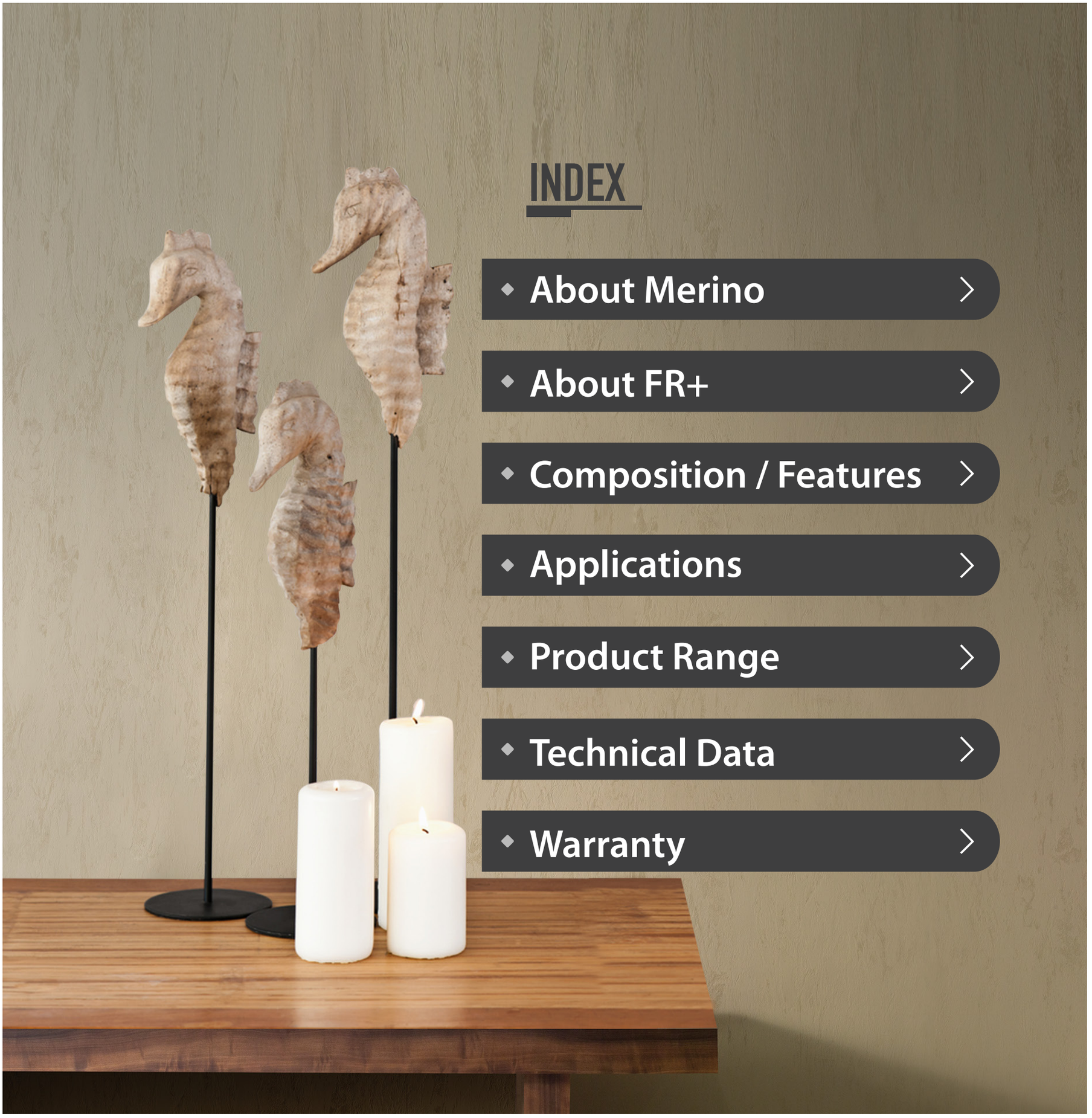

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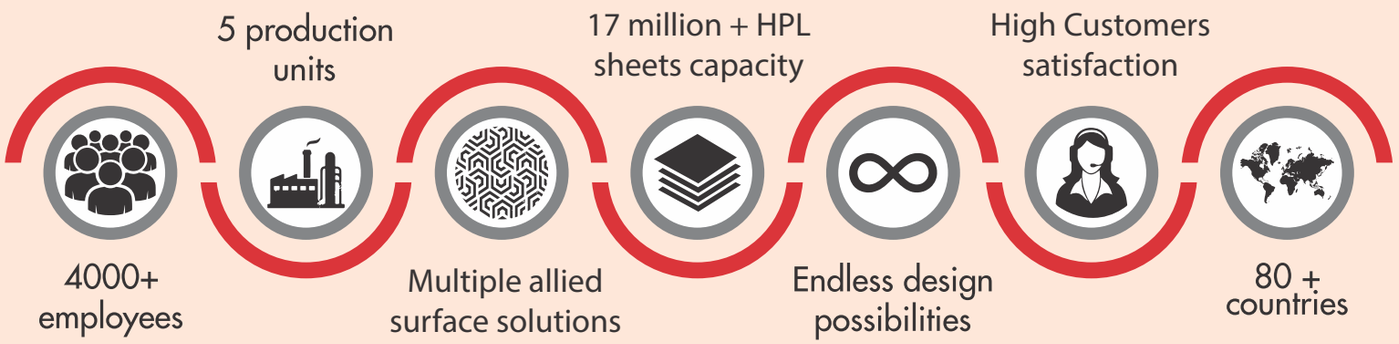
ECONOMY ◆ EXCELLENCE ◆ ETHICS

ABOUT MERINO

The Merino Group is a leading player in the laminates and panel industry. The first product was plywood, launched in 1974 and later it spread its wings into high-pressure decorative laminates in 1981. The Group has diverse business interests expanding into Interior Architectural Products, Information Technology and Food & Agro business. Over 4000 employees, 5 production units and multiple allied surface solutions having endless design possibilities are what ensure a consistent range of superior quality products and the Group's continuous significant growth in the challenging market scenario. With innovation and perfection at its core, Merino commits to the highest manufacturing standards with a strong customer support.



CERTIFICATIONS

GREENGUARD PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS UL.COM/GG UL 2818

GREENGUARD PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS UL.COM/GG UL 2818 GOLD

eph Entwicklungs- und Prüflabor Holztechnologie GmbH Zellescher Weg 24. D-01217 Dresden www.eph-dresden.de

FIRA

NEMA National Electrical Manufacturers Association

FSC www.fsc.org 100% From well-managed forests FSC™ C130225

India 075

CII Confederation of Indian Industry

"IGBC - MP - 1076"

BUREAU VERITAS Certification

ISO 14001:2004
OHSAS 18001:2007
ISO 9001:2008

ASTM INTERNATIONAL Standards Worldwide

European Standard EN 438

JSI

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THE *Un*-SCORCHED FIRE-RETARDANT (FR+)

Halogen free fire-retardant laminates.

Fire Retardant (FR+) is a special type of laminates which is halogen free in the category of fire-resistant laminates. As per ASTM and NFPA standards, its performance belongs to Class 1 grade making it an eminent laminate resistant to fire. With suitable substrates and adhesives, FR+ can help prevent casualties and damage caused due to fire hazard.

10168
Mediterranean Oak

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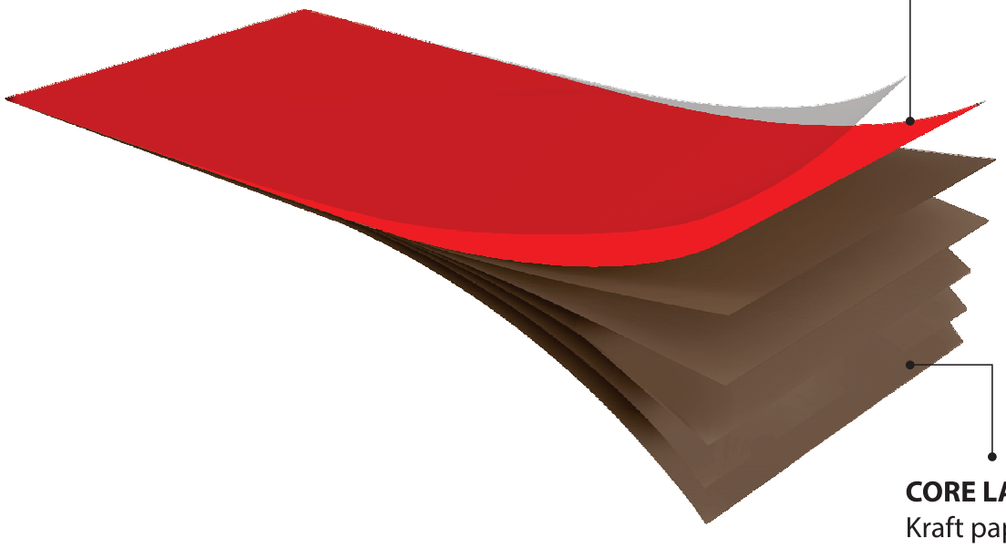
Un-SCORCHED COMPOSITION



TOP LAYER
Decor paper impregnated with specially formulated Melamine Formaldehyde resin that has been modified with proprietary additives to impart flame retardant properties.

CORE LAYER
Kraft paper impregnated with specially formulated Phenolic Formaldehyde resin that has been modified with proprietary additives to impart flame retardant properties.

Un-SCORCHED FEATURES

HALOGEN FREE

LOW SPREAD OF FLAME

SELF-**EXTINGUISHABLE**

HIGHLY DECORATIVE

IMPACT RESISTANT

NON-**TOXIC**

HALOGEN FREE

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Un-SCORCHED APPLICATION

For both vertical and horizontal application.

Cabinetry & Case Work

Wall Panels

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Utility Panels

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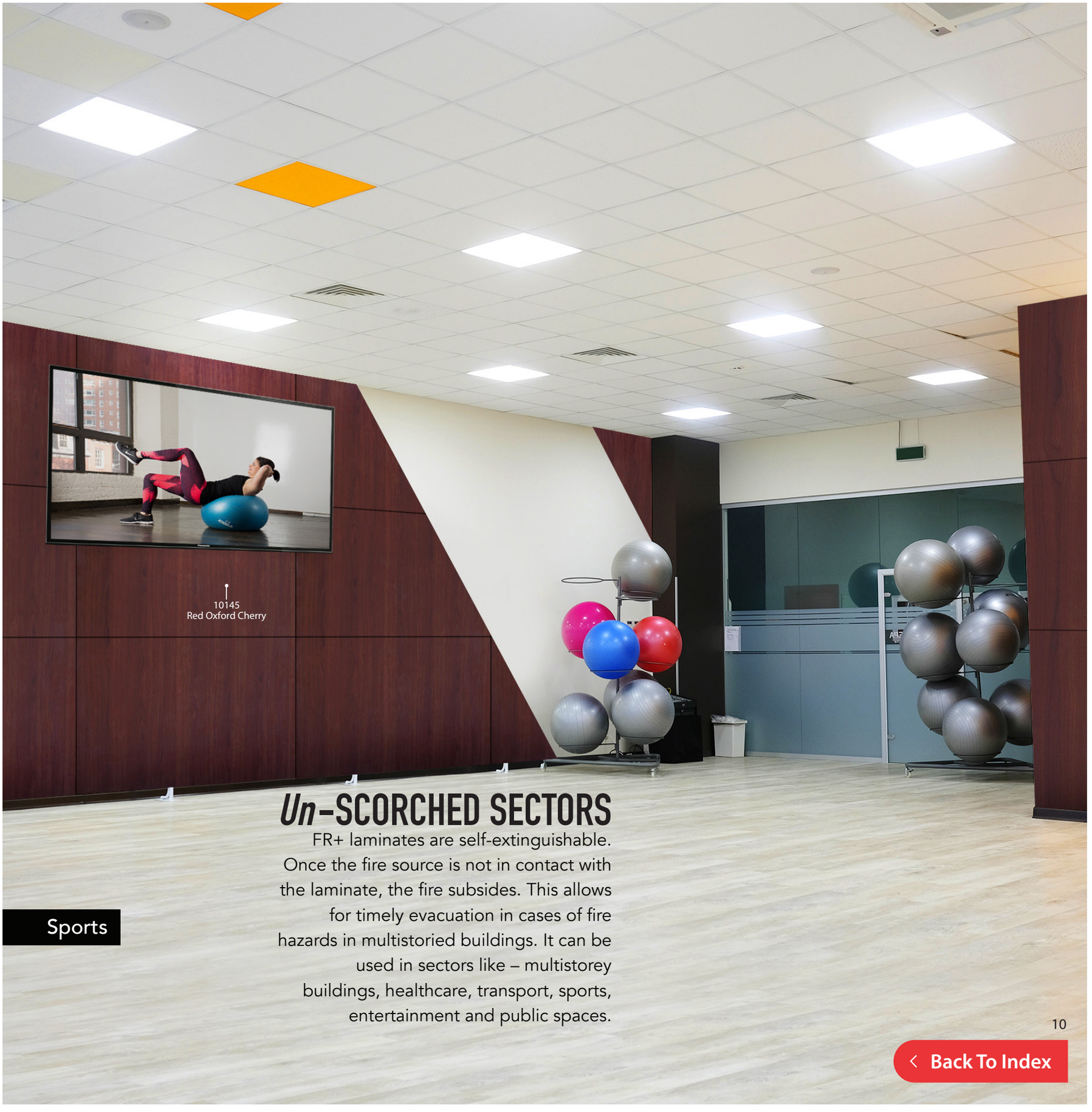

Un-SCORCHED SECTORS

FR+ laminates are self-extinguishable. Once the fire source is not in contact with the laminate, the fire subsides. This allows for timely evacuation in cases of fire hazards in multistoried buildings. It can be used in sectors like – multistorey buildings, healthcare, transport, sports, entertainment and public spaces.

Sports

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Multistorey Buildings

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Healthcare

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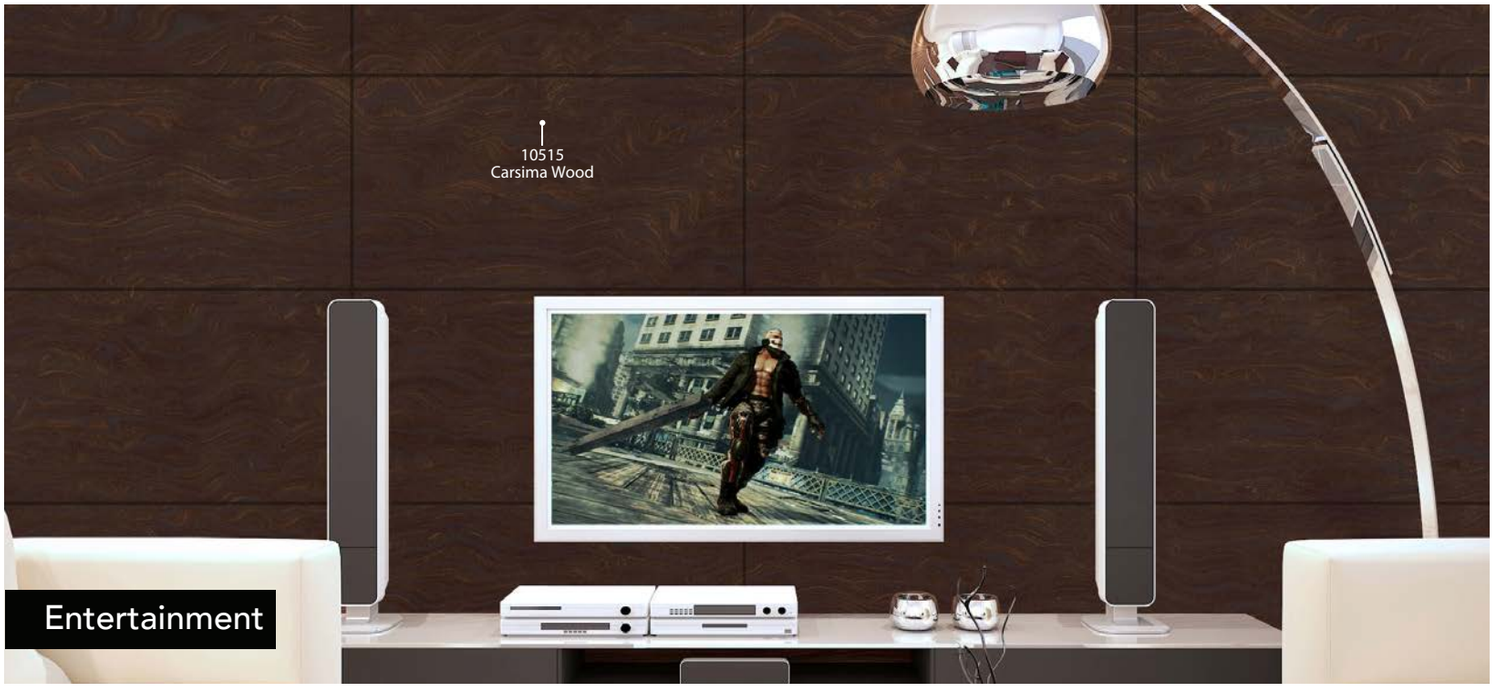

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Image shown are for reference. Actual product may vary

TEST REPORT

ASTME 84-10

Test Specimen	Flame Spread Index	Smoke Developed Index
Fiber-Reinforced Cement Board, Grade II Red Oak Flooring	0 100	0 100
Design No. 21069 — FR Grade HPL	15	40

Class A	0 - 25 Flame Spread Index	0 - 450 Smoke Developed Index
Class B	26 - 75 Flame Spread Index	0 - 450 Smoke Developed Index
Class C	76 - 200 Flame Spread Index	0 - 450 Smoke Developed Index

Class A, B, and C correspond to Type I, II, and III respectively in other codes.

AVAILABILITY MATRIX

Property	Thickness	Sizes in feet	Finishes	Designs
FR+	1 mm	4 X 8, 4 X 10, 4.3 X 10, 5 X 8, 5 X 12, 6 X 14	As per bel ow sheet	Our complete design range with 50 sheets MOQ as per availability in sizes

TECHNICAL SPECIFICATION

MERINO FINISHES	AVAILABLE STANDARD SIZES (MM)										
Finishes	**1220 x 2440**	**1220 x 3050**	**1300 x 2440**	**1300 x 2800**	**1300 x 3050**	**1550 x 2440**	**1550 x 3660**	**1550 x 4300**	**Compact Only 1830 x 3660**	**1830 x 4300**	**Door Size 915 x 2135**
Bark (BRK)	*										
Cement (CMT)	*					*	*				
Classic Leather (CLR)	*	*									
Chimera (CMR)	*										
Crossfire (CFR)	*	*									
Drizzle (DZL)	*										
Drymatt (DMT)	*										
Fabric (FB)	*										
Flicker (FK)	*	*									
Galactic (GLT)	*						*				
Grains (GRN)	*										
Hi-Gloss (HGL)	*	*			*	*	*				
Horizon (HRZ)	*										
Impression (IMP)	*										
Linen (LNN)	*										
Matt (MT)	*	*	*	*	*			*			
Microline (ML)	*										
Monte (MNT)	*										
Opal (OPL)	*				*	*	*				
Parish (PRH)	*										
Sandstone (SV)					*		*				
Sawcut (SCT)	*										
Streak (STK)	*										
Suede (SF)	*	*	*		*	*	*		*	*	*
Valley (VLY)	*										
Veneer (VNR)	*										
Venza (VNZ)	*										
Vertiline (VL)	*										
Wave (WV)	*						*				
Whitney (WTN)	*										

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TEST DATA

Properties	Test Method as per EN 438-2 CLAUSE NO.	Property or attribute	Unit (max or min)	Values as per EN 438-3	Merino Value
Thickness Maximum Variation	5		mm	±0.10mm	±0.10mm
Length & Width	6		mm	+10mm -0.0mm	+10mm -0.0mm
Density	EN ISO 1183	Density	g/cm^3	≥1.35	>1.35
Resistance to Surface wear	10	Wear Resistance	Revolution (min)	≥350	>400
Resistance to Impact by Small diameter Ball	20	Spring Force	N(min)	≥20	>20
Resistance to Scratching	25	Force	Rating (see annex a)	3	≥3
Dimensional stability at elevated temperature	17	Cumulative dimensional change	% long % Cross	≤ 0.55 ≤ 1.05	<0.45 < 0.90
Resistance to immersion in boiling water	12	Appearance	Grade (min) Gloss Finish Other finishes	 3 4	 >3 >4
Resistance to dry Heat at 180^0C	16	Appearance	Grade (min) Gloss Finish Other finishes	 3 4	 >3 >4
Resistance to Staining	26	Appearance	Rating Group-1&2 Group-3	 ≥5 ≥4	 5 ≥4
Resistance to water vapor	14	Appearance	Grade (min) Gloss Finish Other finishes	 3 4	 >3 >4
Light Fastness (Xenon arc)	27	Contrast	Gray Scale Rating	4 to 5	>4
Resistance to cigarette burn	30	Appearance	Grade (min)	3	>3
Resistance to Cracking under stress	23	Appearance	Grade (min)	4	>4

** For fabrication, Care & maintenance refer our website

Limited warranty

Merino Industries Limited & Merino Panel Product Ltd. warrant that, under normal use & service, the material & workmanship of their products shall confirm to the standards set forth on the applicable technical data sheet for a period of twelve (12) months from the date of sale to the first consumer purchaser. Dealers & distributors are provided with the technical data sheets, which contain specific standards of performance of the product. In the event that a Merino Industries Limited or a Merino Panel Product Limited product does not perform as warranted, the first purchaser's sole remedy shall be limited to repair or replacement of all or any part of the product, which is defective, at the manufacturer's sole discretion. This warranty is not transferable, and expires upon resale or transfer by first purchaser. This warranty shall not apply to defects or damage arising from any of the following: Accidents, abuse or misuse, exposure to extreme temperature, improper fabrication or installation, improper maintenance. No other warranties, expressed or implied, are made. Under no circumstances shall the manufacturer be liable for any loss or damage arising from the purchase, use, or inability to use the product, or for any special, indirect, incidental, or consequential damages.No fabricator, installer, dealer, agent or employee of Merino Industries Limited and Merino Panel Product Limited has the authority to modify the obligation or limitation of this warranty.

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