



AICA LAMINATES INDIA PVT. LTD.

(A GROUP COMPANY OF AICA KOGYO COMPANY LTD. JAPAN)

FACTORY

Plot No. 23 to 26 & 45 to 48, Sector No-5, IIE- Pant Nagar Industrial Estate, Rudrapur-263153 (U.S. Nagar) Uttarakhand.

HEAD OFFICE

Jet Air House, 3rd & 4th Floor, 13 Community Centre, Yusuf Sarai, New Delhi - 110049, India





UNMATCHED PROTECTION OF THE PR

INDIAN TRUSTED BRAND





Exterior HPL

UNMATCHED PROTECTION
UNRIVALED STYLE





BUILT FOR OUTDOOR TOUGHNESS

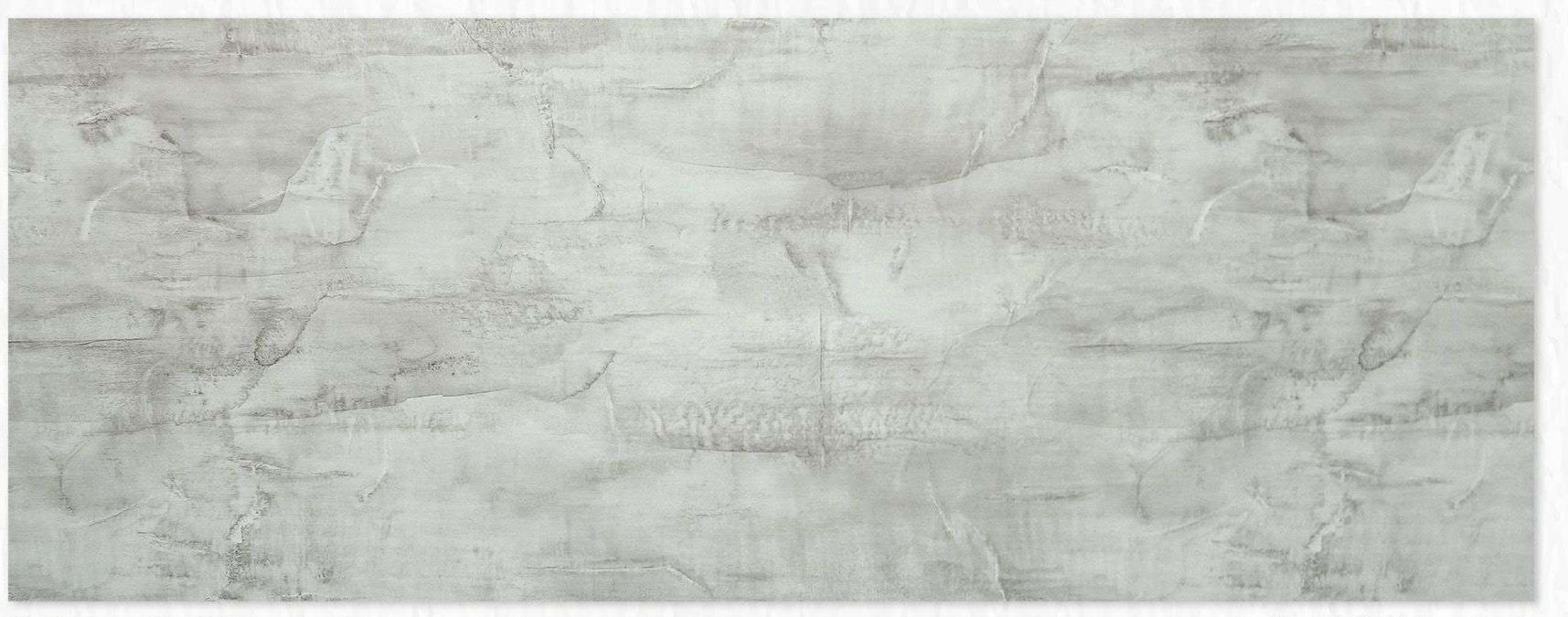
Ultra Shield Laminates offer more than just surface coverage, they provide a protective layer for your exterior spaces. Combining aesthetics with innovative technology, Ultra Shield makes it easy to create beautiful, durable spaces that reflect your lifestyle. Ultra Shield Exterior Laminates provide a perfect blend of resilience and beauty, transforming your outdoor environment into a space that's both functional and visually stunning.



WP 157 Novacinto Pine (Size: 8'x4', Thickness: 6mm)



Simple sense of eloquence. Now your outdoor wall will have its own uniqueness.

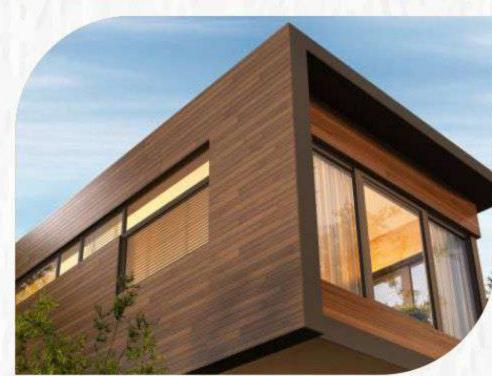


Y 699 Grey Side Walk (Size: 8'x4', Thickness: 6mm)











ABUUT

O A C A

Aica Kogyo Company Limited was established in 1936 in Kiyosu Aichi, Japan. We are the cornerstone of excellence in chemical materials, decorative laminates, and housing materials.

Aica Laminates India Pvt. Ltd. has been operating since its establishment in 2011. Today, it is one of the finest Japanese companies in India, manufacturing high-pressure and industrial laminates.

Our own brand, 'Sunmica,' a well-known name in the laminate industry, has become synonymous with the product itself. We will continue to create new value by blending Japanese and Indian technologies.

* Sunmica is a registered trademark of AICA LAMINATES INDIA PVT. LTD

1965

1978

2005

2011

Factory was setup in AKURDI Pune in 1965 in collaboration with Formica International

The Bombay Burmah Trading
Corporation Limited took over &
revamped business with emphasis
on the premium segment &
industrial laminates with impetus
on copper clad and glass epoxy
laminates

Pune operations shifted to Rudrapur with double production capacity It was taken over by Aica Kogyo Company Limited, 2011 & is now known as Aica Laminates India Pvt. Ltd.

Ultra Shield

ULTRA SHIELD APPLICATION ZONE

Ultra Shield Exterior Laminates are ideal for outdoor applications, providing long-lasting and stylish protection against extreme weather. They are especially well-suited for areas exposed to tough environmental conditions. Our laminates are perfect for outdoor use, offering durable, stylish protection against harsh weather conditions. But it is best for these deployment areas.



RESIDENCES



BUILDING FACADES



HOTELS



SHOWROOMS



SHOPPING MALLS

UNMATCHED QUALITY AND PRECISION

AICA Laminates holds industry-recognized certifications and accreditations, ensuring adherence to stringent quality standards, environmental sustainability, and safety regulations, fostering trust and confidence in their products worldwide.



ACCREDITATION

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CERTIFICATES

Green Label Singapore is an environmental certification that recognizes products meeting eco-friendly standards in sustainability & resource conservation.



The Green Pro certificate indicates environmental friendly products meet standards for sustainability, energy efficiency, and reduced ecological impact.



The IGBC certificate signifies adherence to green building standards, promoting sustainable practices in construction & environmental responsibility.



ISO 14001-2015

ISO 14001:2015 is a global standard for environmental management systems, guiding organizations in improving environmental performance & sustainability.



The FSC certificate ensures that forest products are sourced sustainably, protecting forests, wildlife, and communities while promoting responsible management.



ISO 9001-2015

ISO 9001:2015 is a global standard for environmental management systems, guiding organizations to enhance and sustain environmental performance.



Product Description

AICA Sunmica's Outdoor Wall Cladding Compact Laminate grade is specially formulated laminate for exterior application. This product meets all properties as per BS EN 438-6:2016. This grade is tested according to EN 438-2.19 & EN 438-2:29 for weather resistant properties as well to EN 13501-1 for fire resistant properties required for exterior grade application.

AICA Sunmica's Outdoor laminate is made with special type of synthetic polymers with acrylic coating technique that provides superior weather ability, excellent UV-absorbance and heat resistant performance.

Ultra Shield exterior laminates, crafted using advanced Japanese technology, offer superior protection and durability for outdoor surfaces. These high-performance laminates are designed to withstand harsh weather conditions, UV rays, and environmental wear, ensuring long-lasting color and texture. Ultra Shield provides a reliable solution for preserving the aesthetic and structural integrity of buildings and outdoor spaces, making it ideal for modern architectural applications.



BEST FEATURES

Ultra Shield Laminate is engineered to offer an exceptional balance of strength and beauty, making it the ultimate choice for any space. Its standout feature is its incredible design, built to withstand the rigidity of daily life.

These features make Ultra Shield a strong contender for anyone looking to balance durability.



Weather Resistant

AICA outdoor wall cladding is weather resistant and complies the property as per BS EN 438-6:2016 standard.



Fire Resistant

AICA outdoor wall cladding is Fire resistant and meets B-s2,d0 class according to EN13501-1 fire classification.



Mechanical Properties

AICA outdoor wall cladding is tested for impact resistant, flexural strength, abrasion resistance, chemical shock resistance and modules of elasticity and found to comply with BS EN 438-6: 2016 Standard.



UV Resistant

AICA outdoor wall cladding is UV resistant and complies the property as per BS EN 438-6:2016 standard.



Corrosion Free

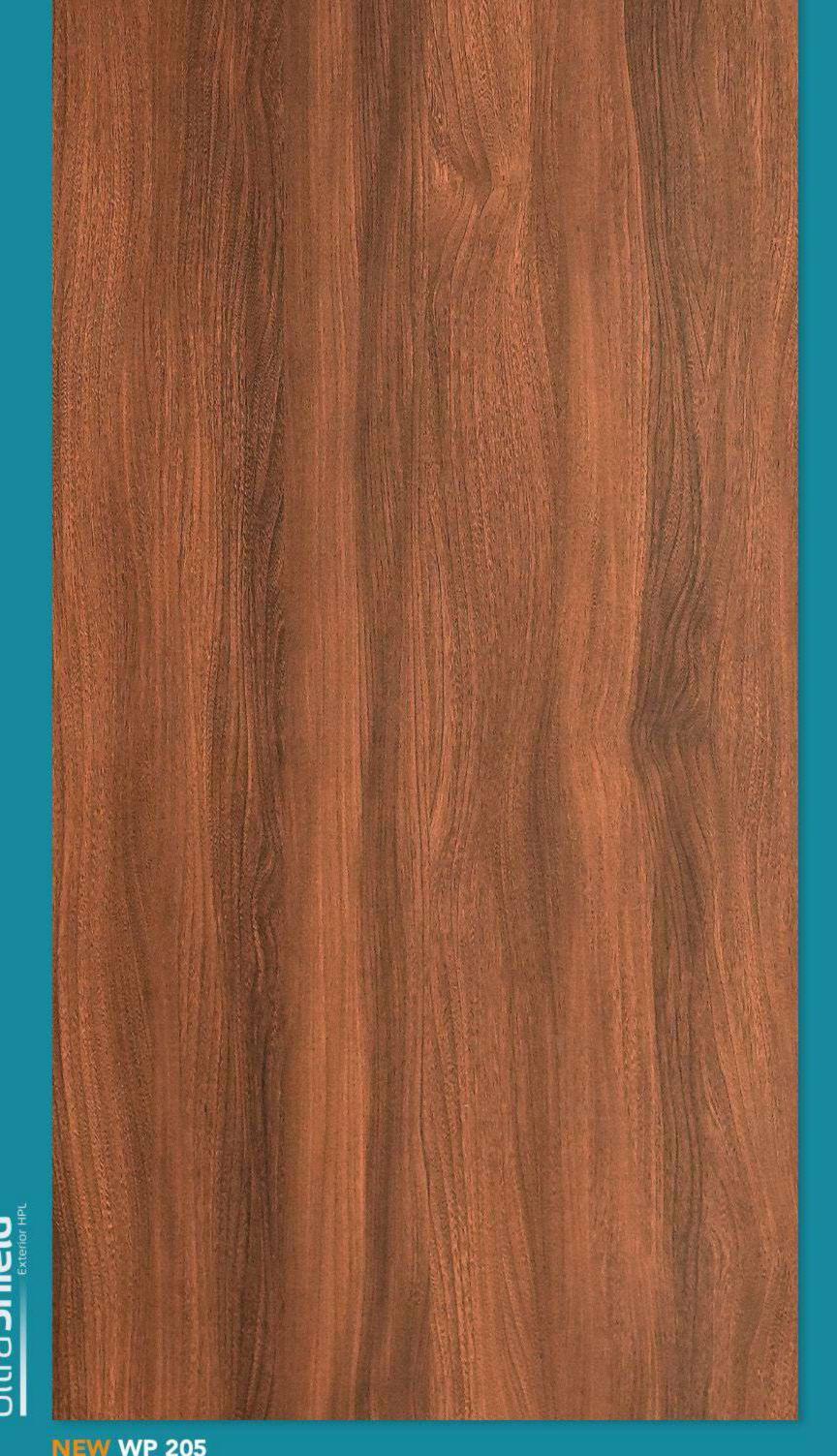
Being a nature of composition, AICA outdoor wall cladding is corrosion free.



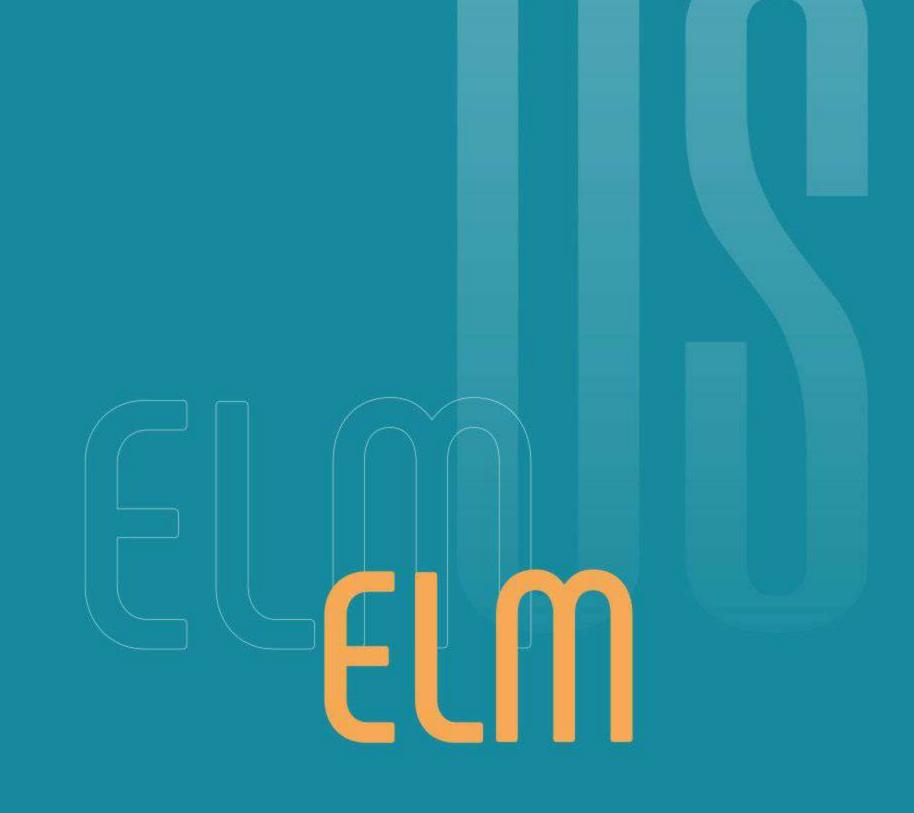
WP 157 NOVACINTO PINE



Ultra**Shield**



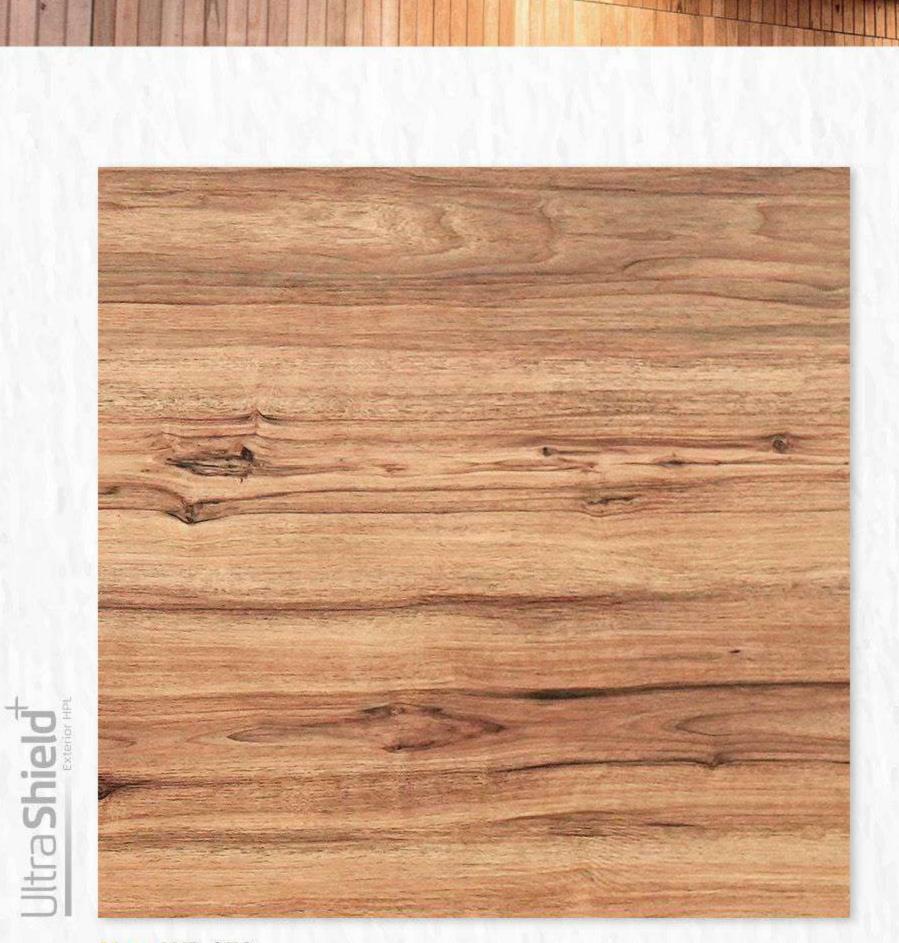
NEW WP 205 ROCHE ELM



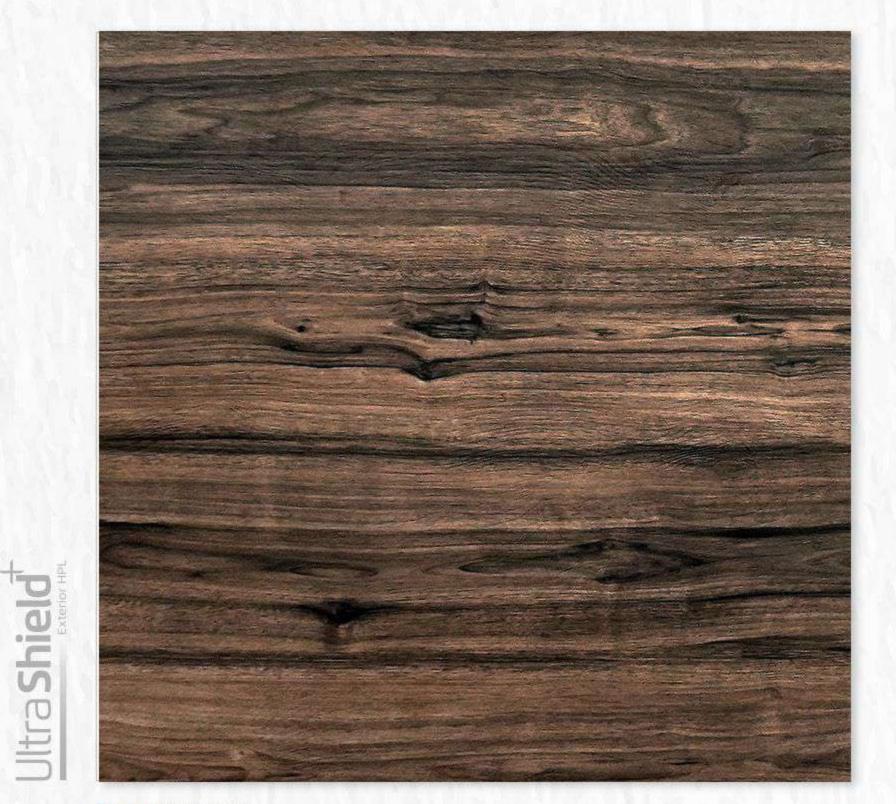


New WP 207
TWOTONE WALNUT NATURAL





New WP 253
PASTORAL LIGHT



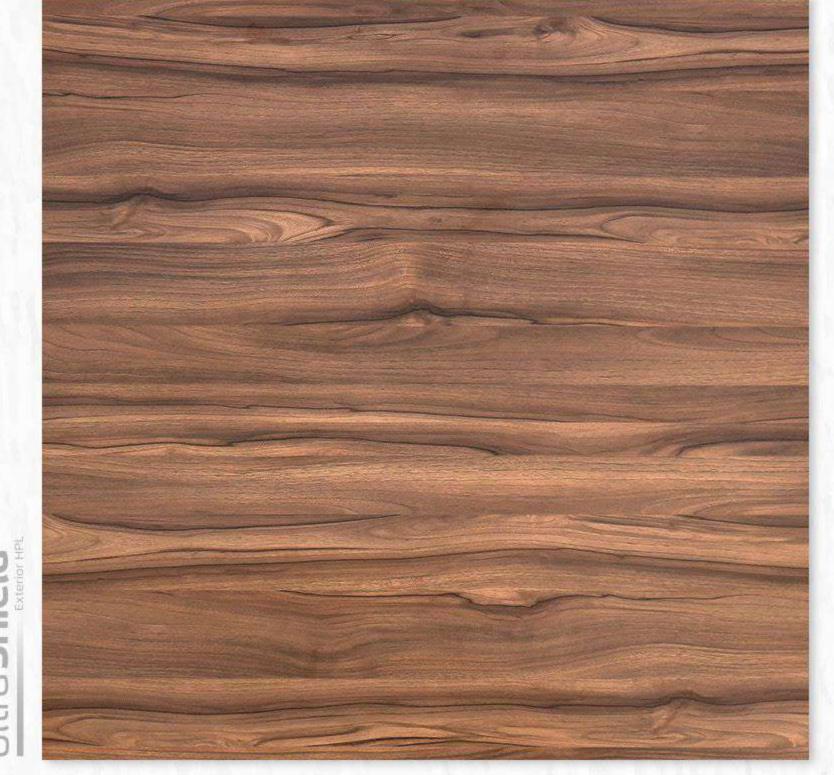
New WP 254 PASTORAL DARK



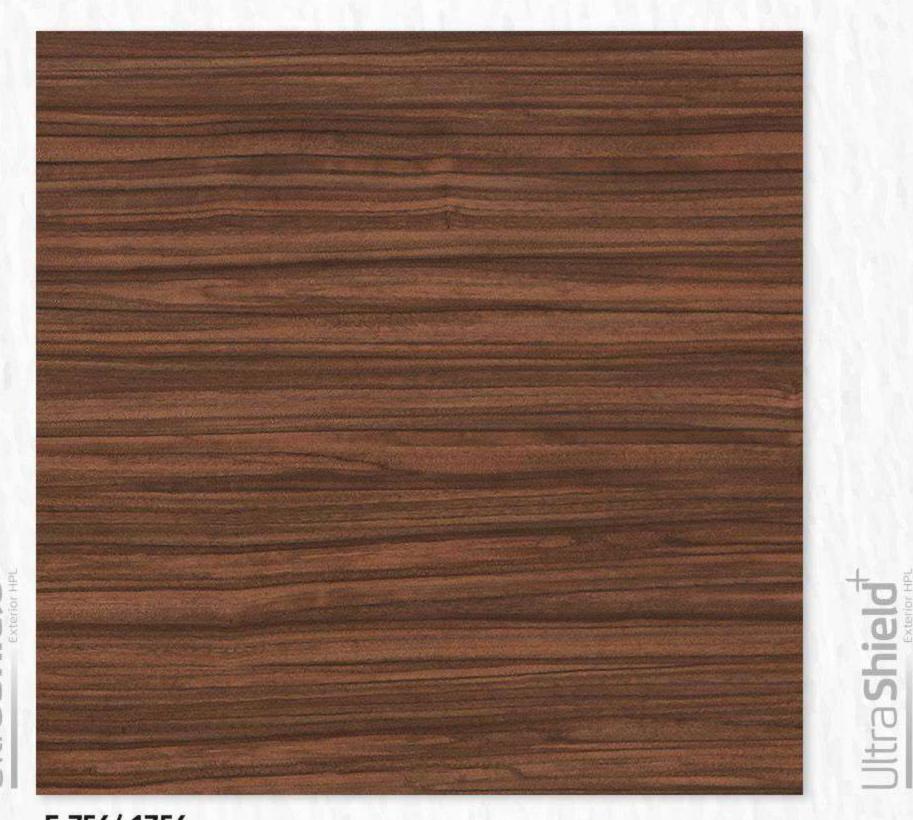
New WP 49
WINCHESTER WALNUT



New WP 63 NOCE DA VINCI II



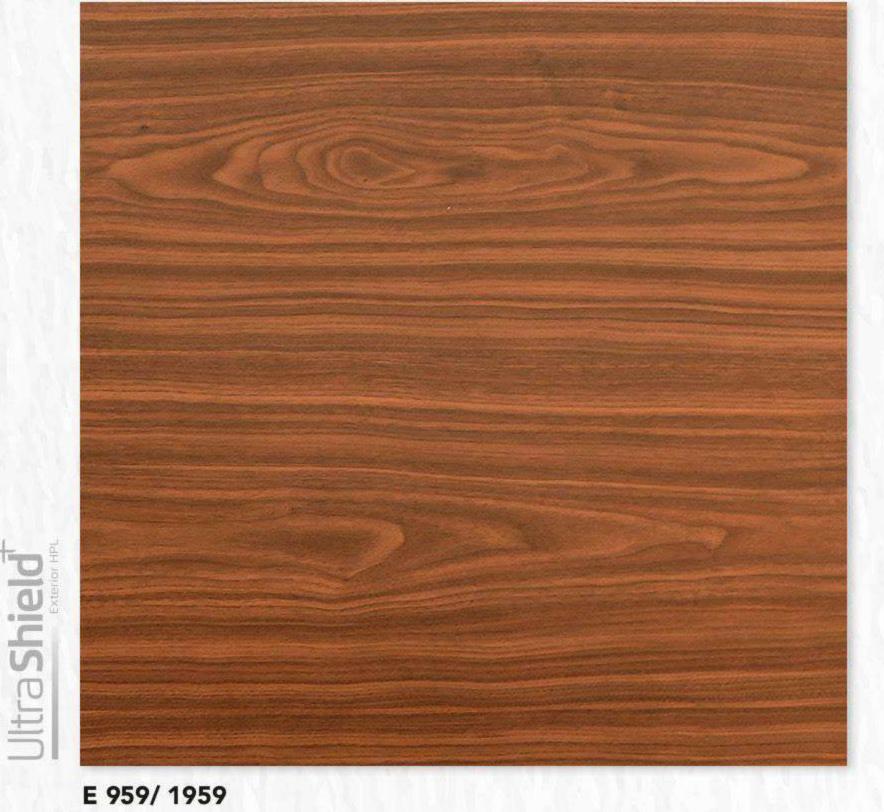
WP 54 WALNUT MARINO



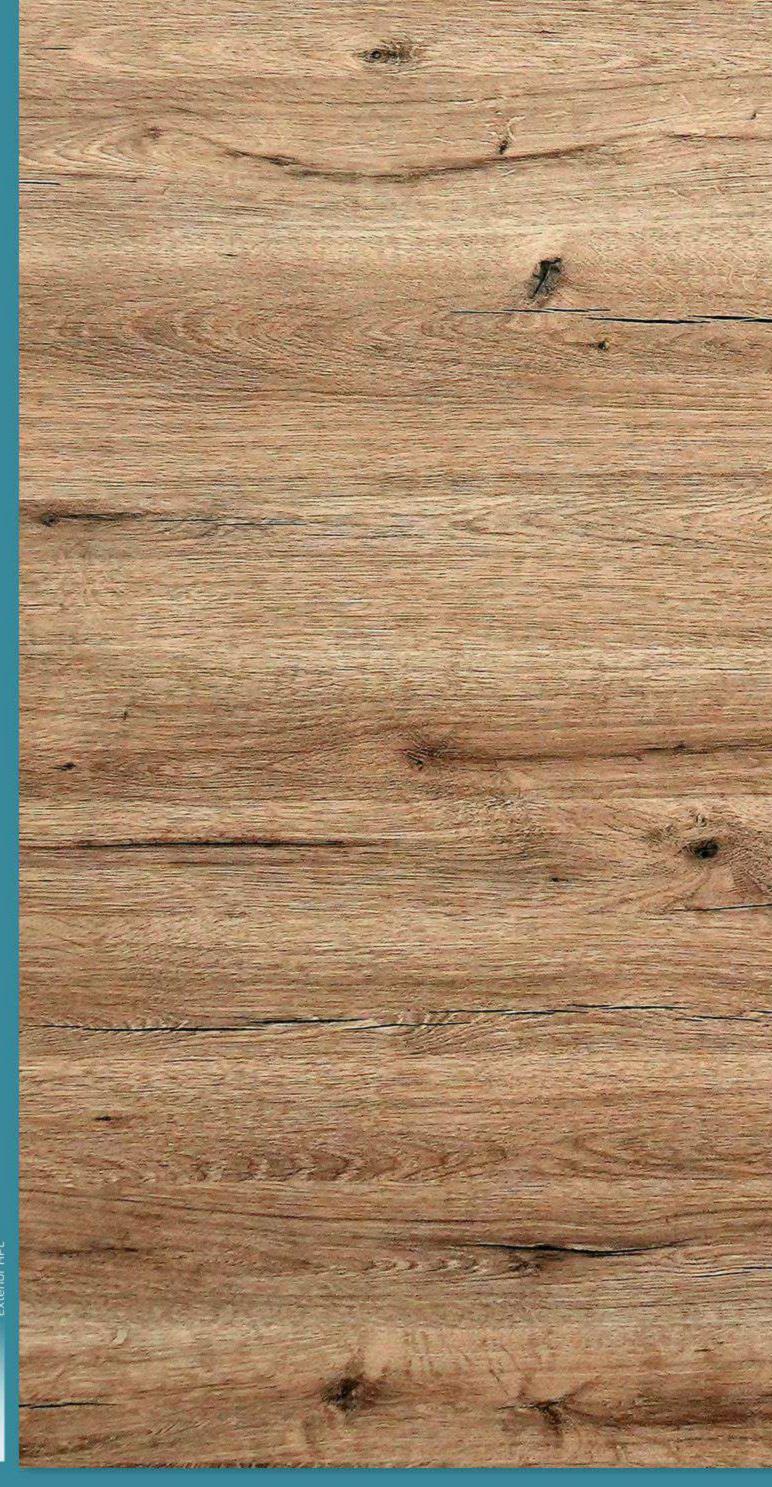
E 756/ 1756 LORRAINE WALNUT



WP 124 PRINCESS WALNUT



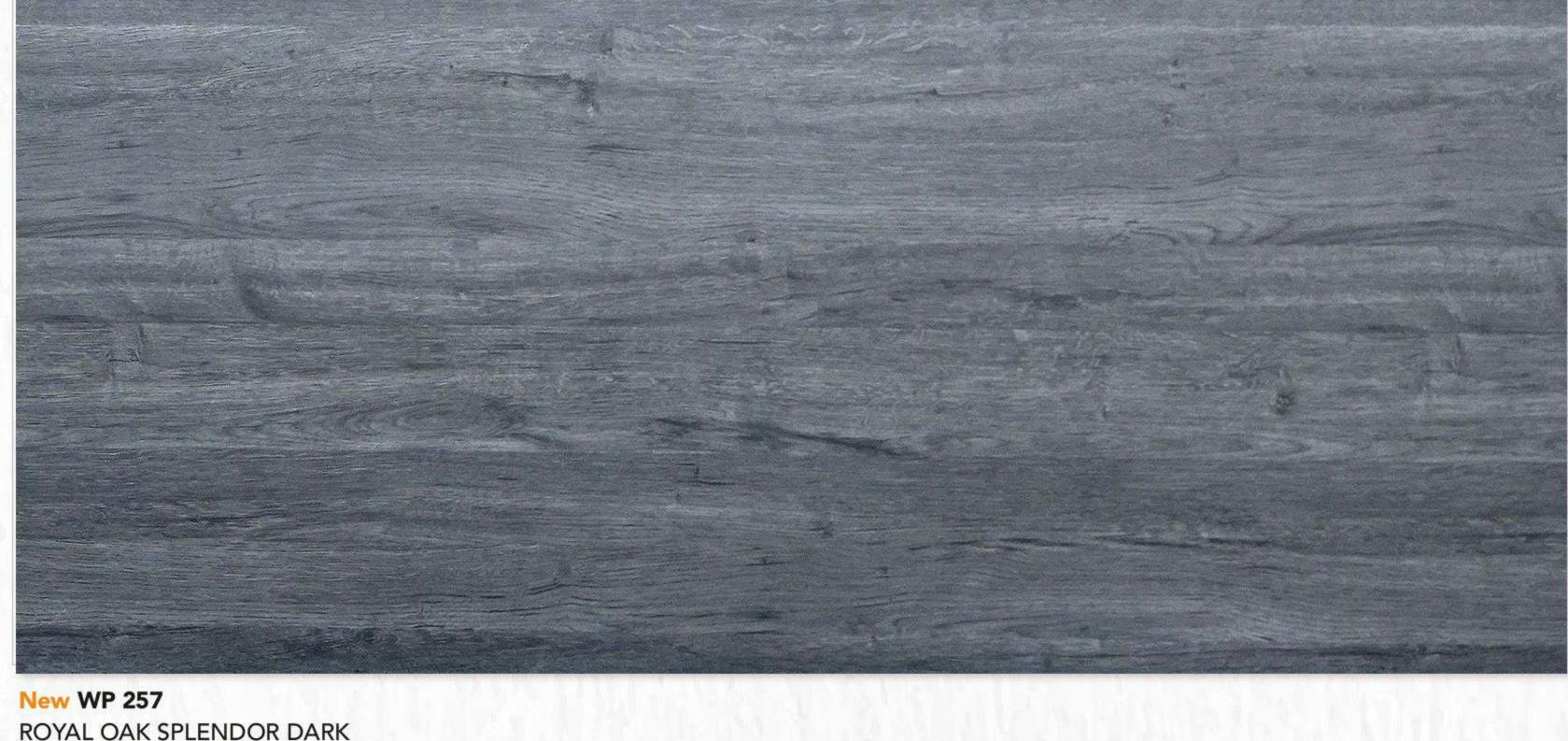
IMPERIAL WALNUT



NEW WP 256 COASTAL OAK HUE







ROYAL OAK SPLENDOR DARK



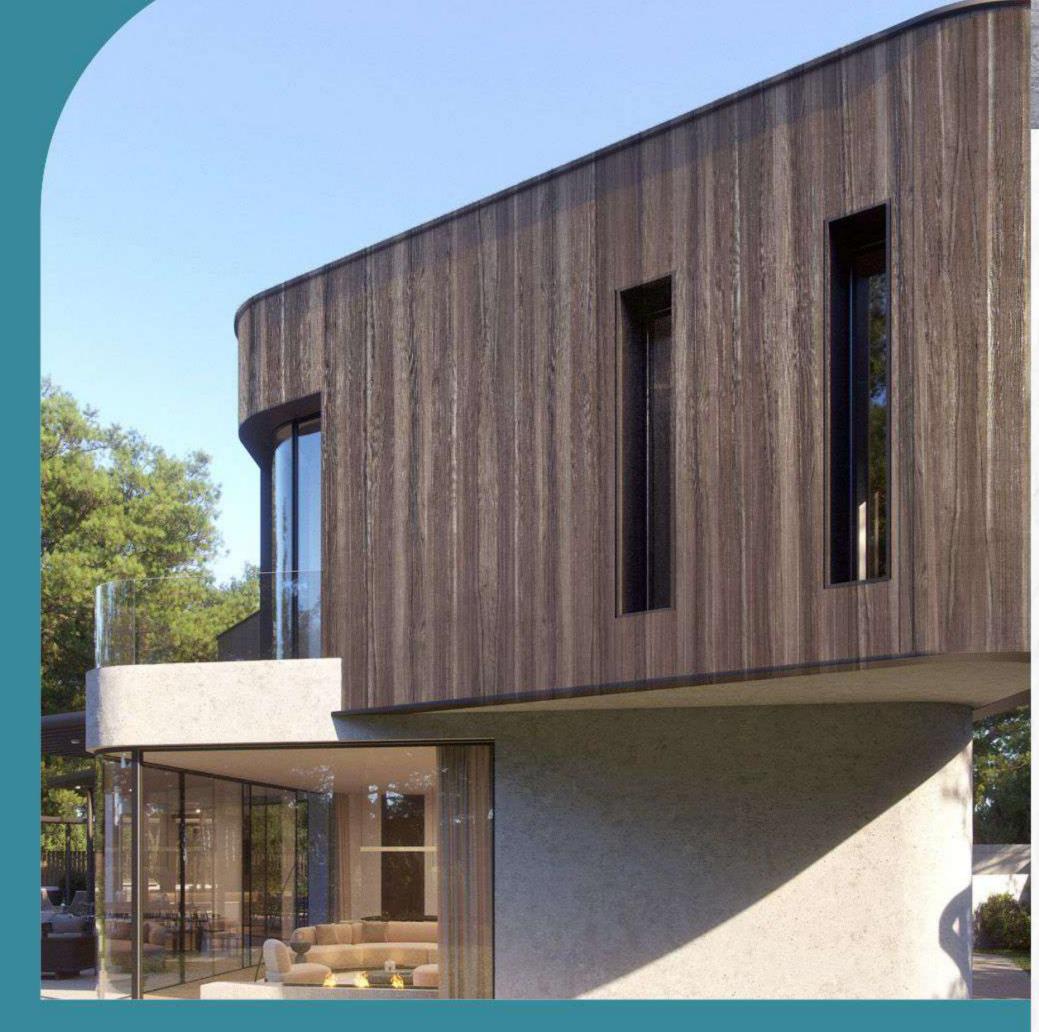
WP 112 CHESTERFIELD OAK DARK



WP 113 STEIFFER OAK DARK

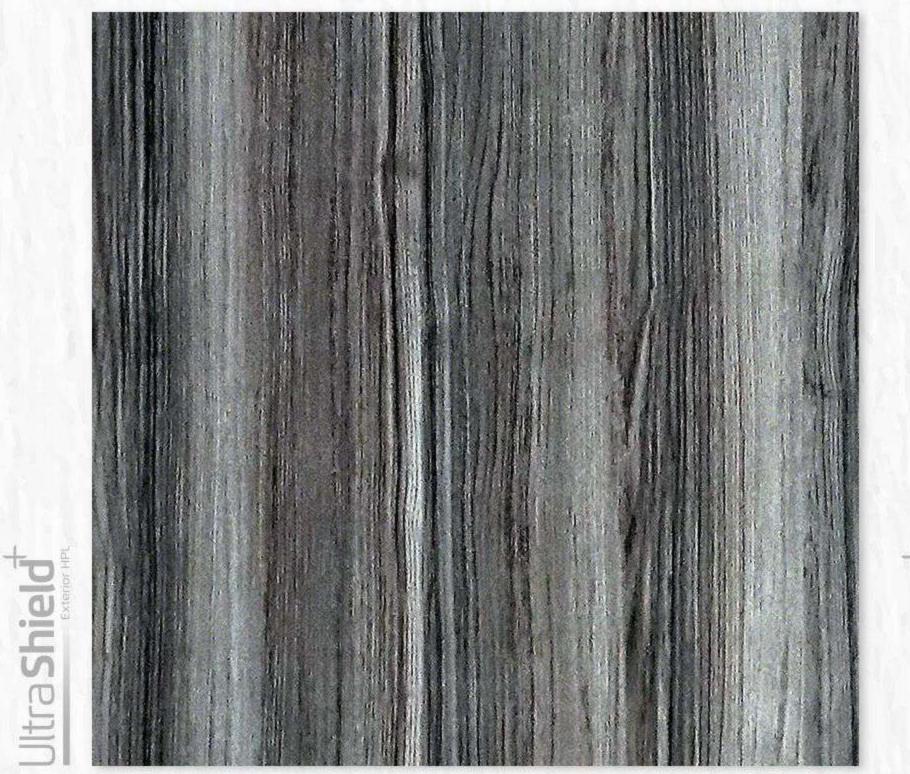
Ultra Shield Exterior HPL

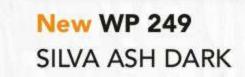
NEW WP 248 SILVA ASH













WP 67 ALMERIA ASH SMOKED

NEW E 757/1757 SAPELI CASCO

Sapeliany Mahogany

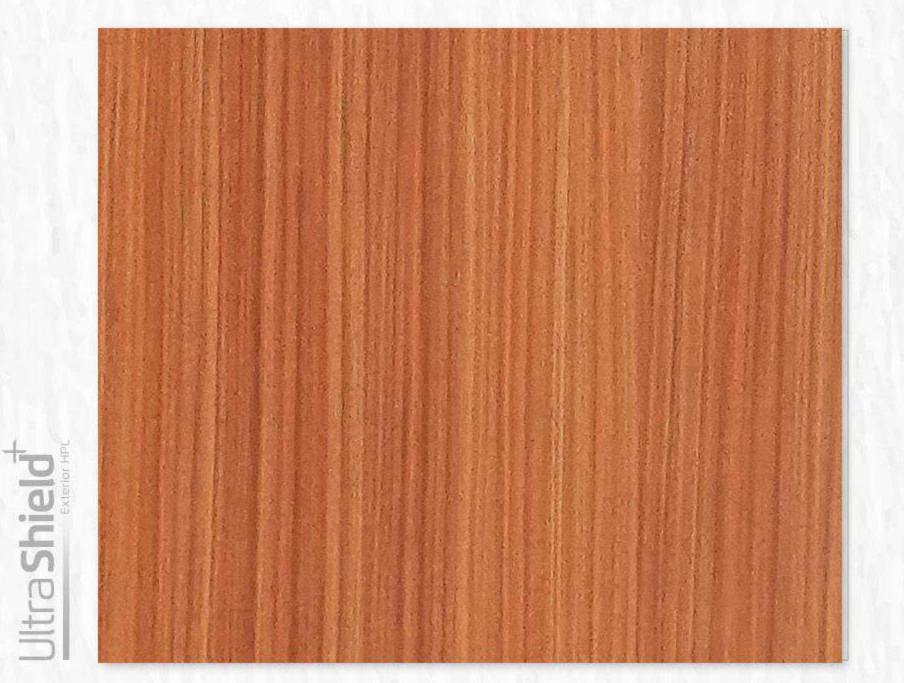


SAPELI

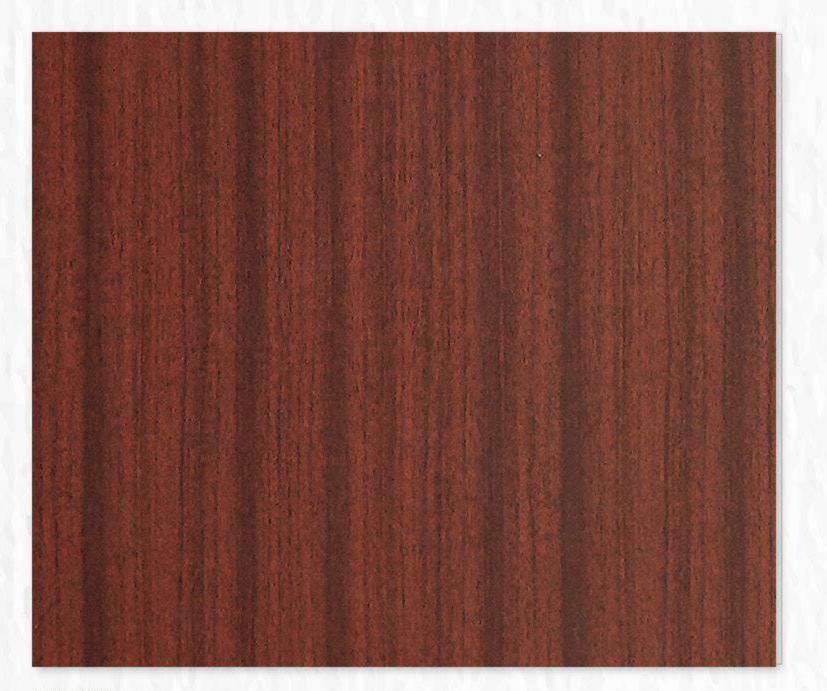


E 711/ 1711 SAPELI

MAHOGANY



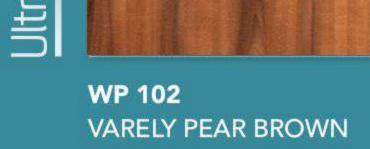
E 712/ 1712 MAHOGANY



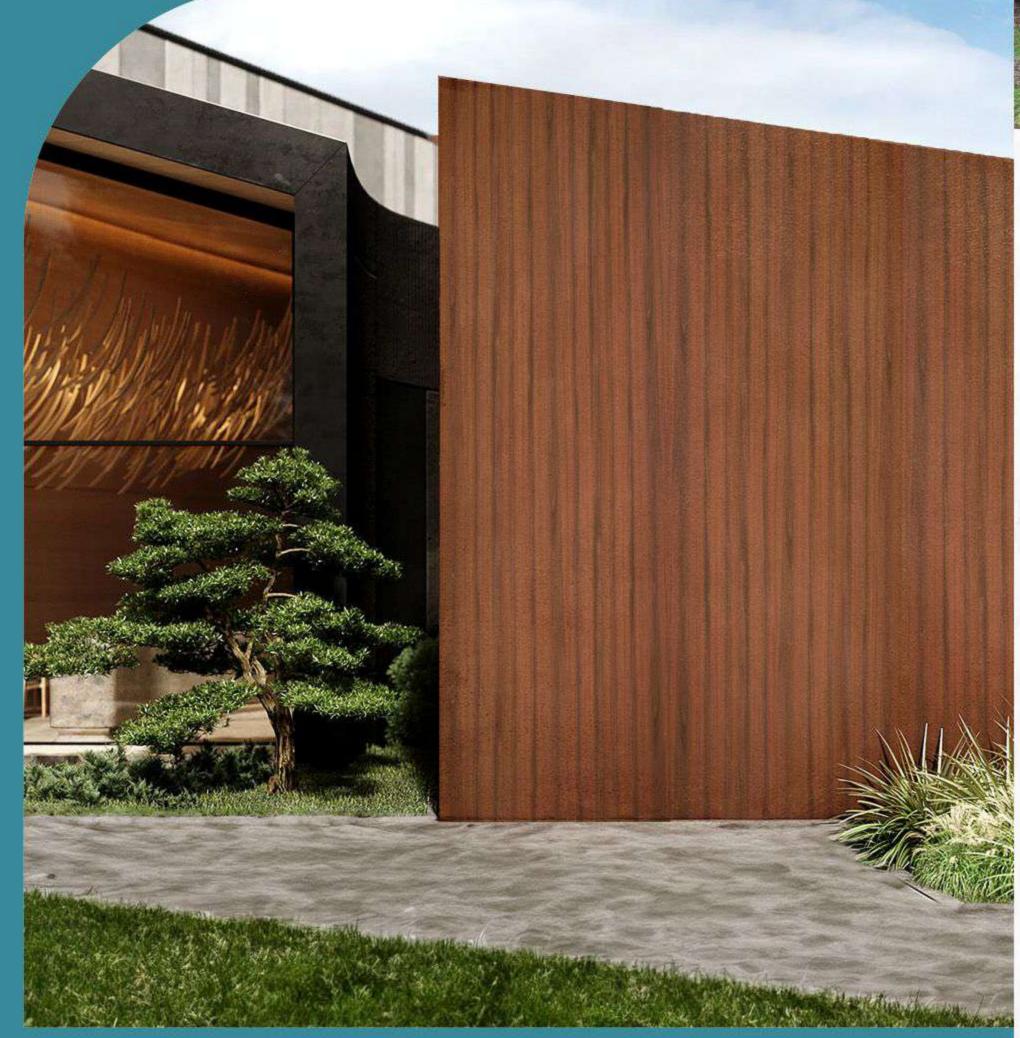
WP 80 SUPREME MAHOGANY

Shield

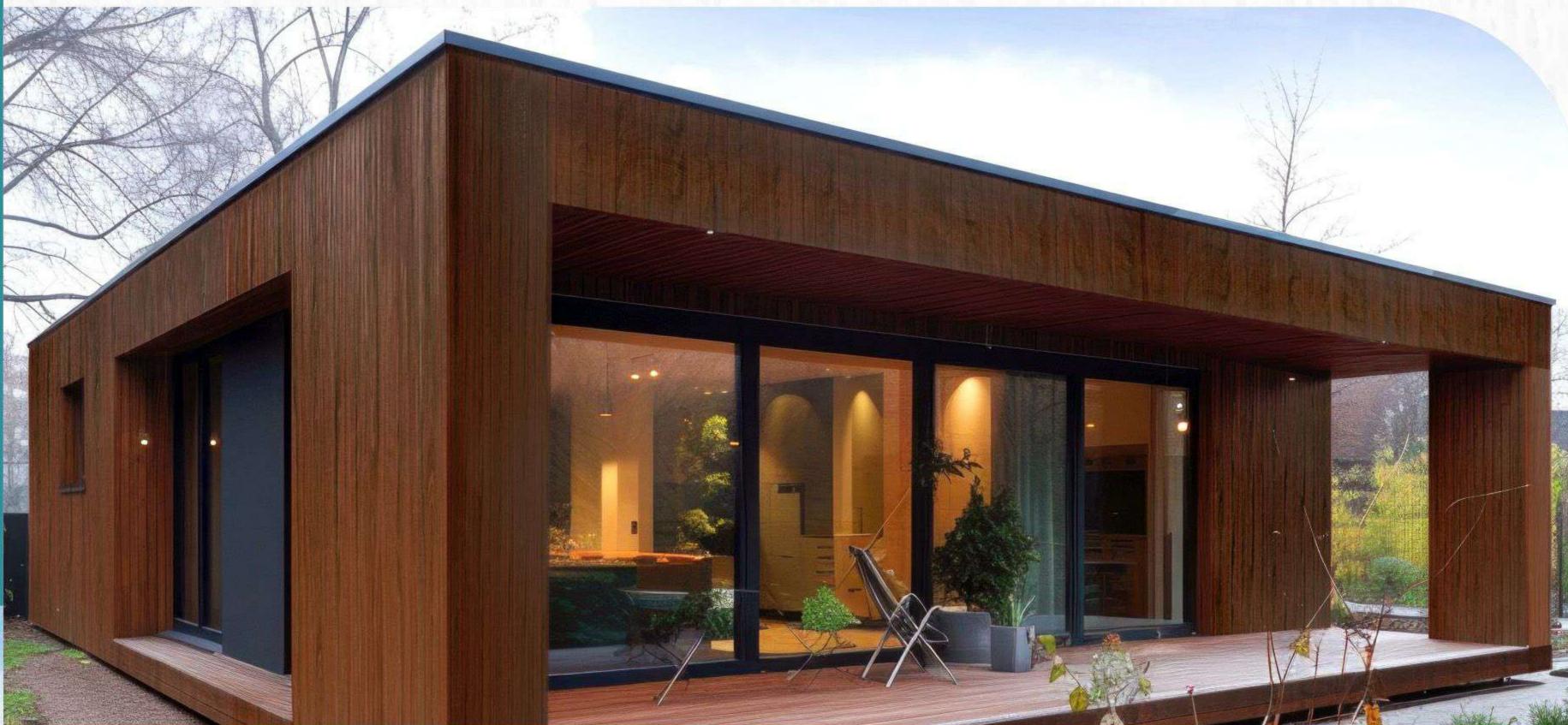






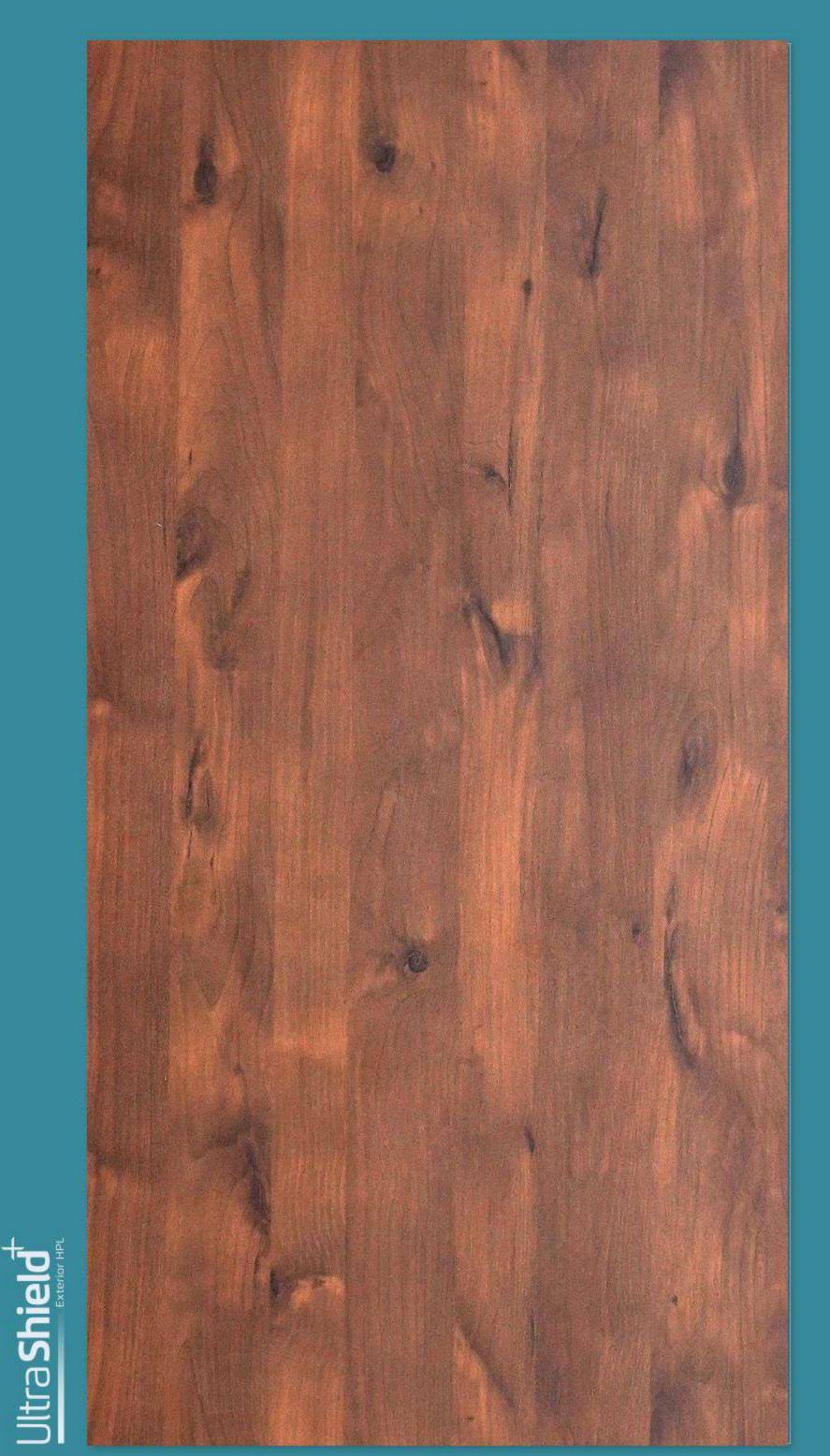






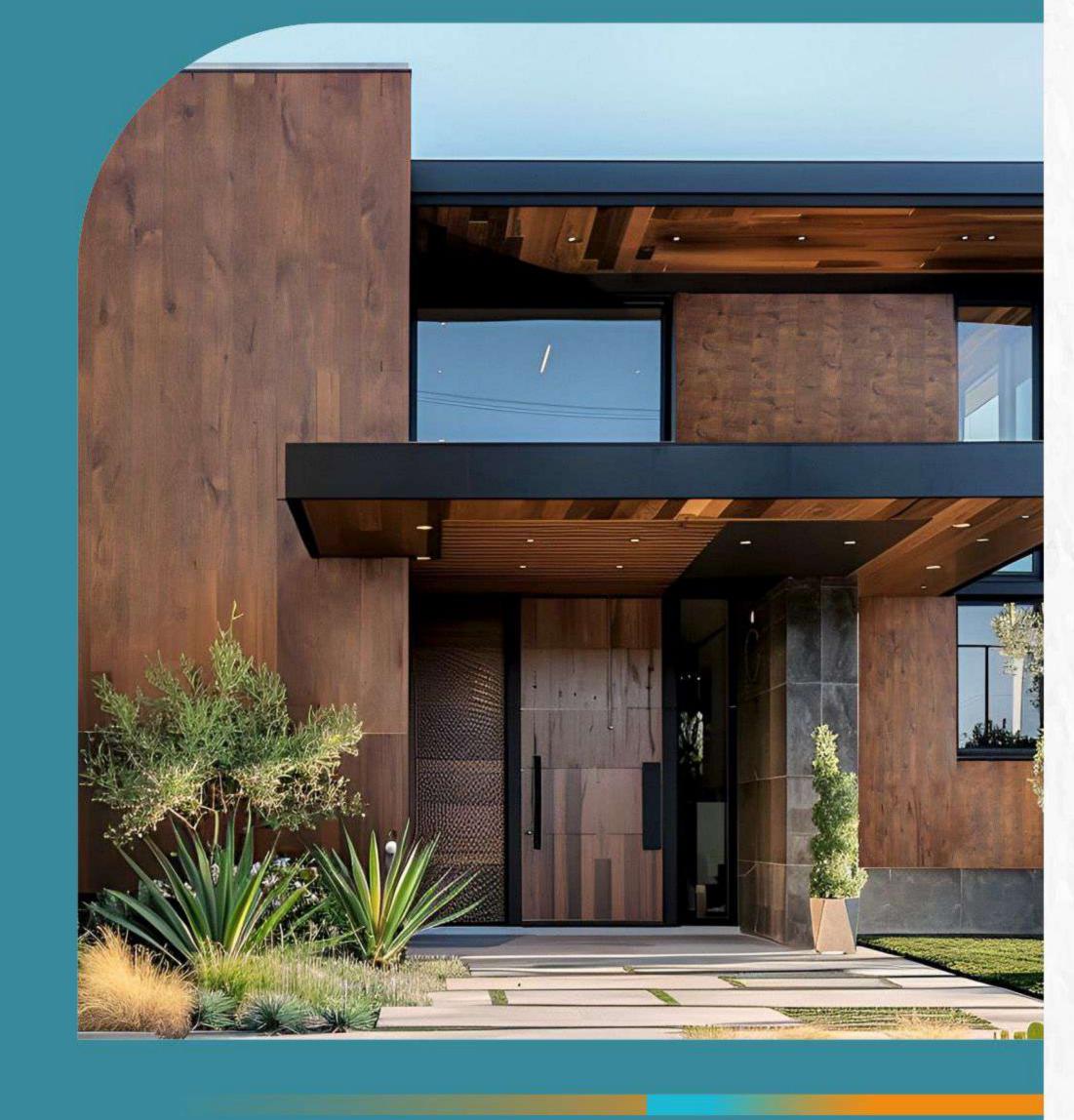


WP 103 VARELY PEAR DARK



NEW WP 160 COLOBRA

Design Usesign Usesign







New WP 198 LAKESHORE SMOKED

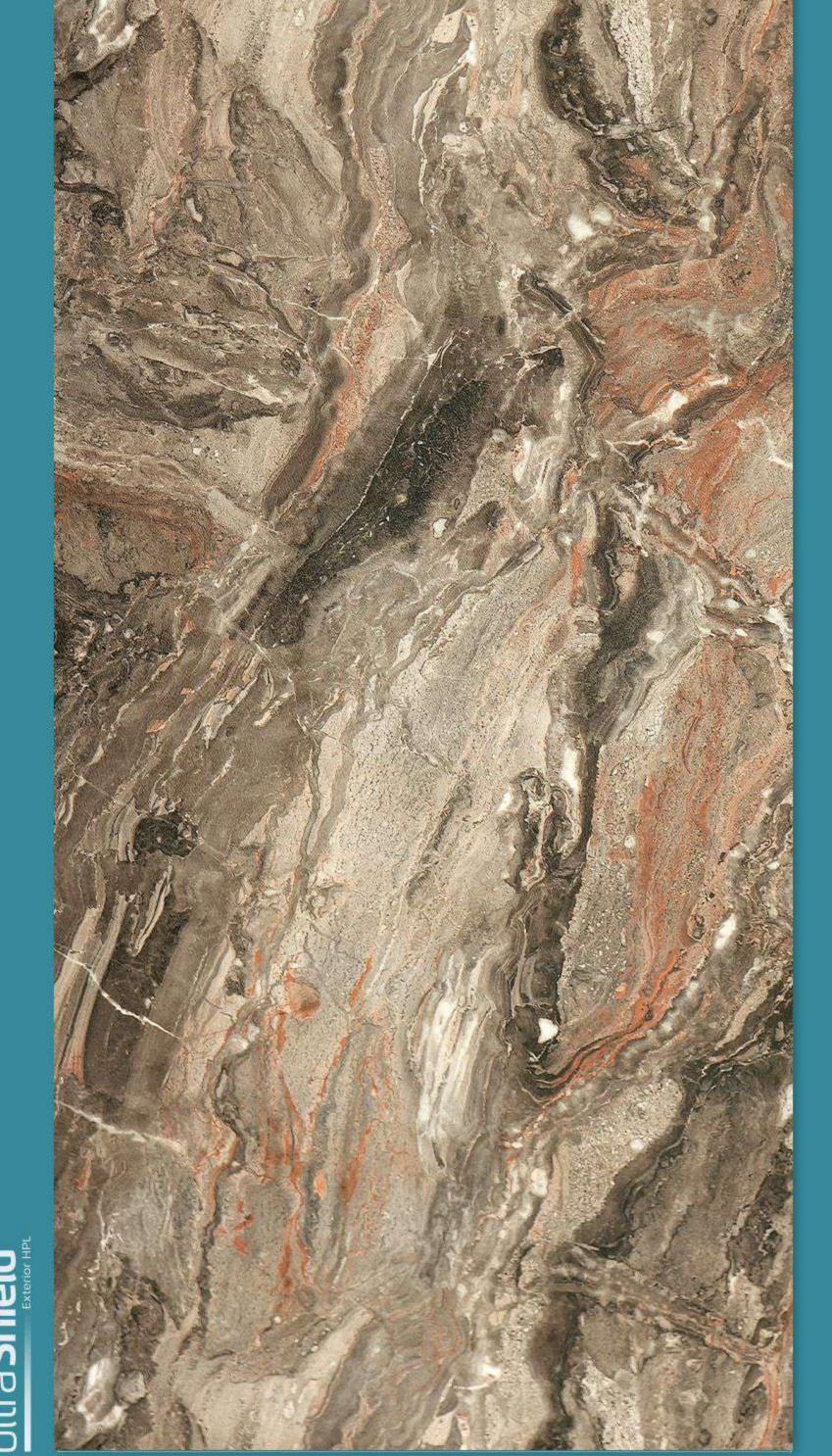


E 769/ 1769 GONCALO ALVEZ

tra Shield Extens the

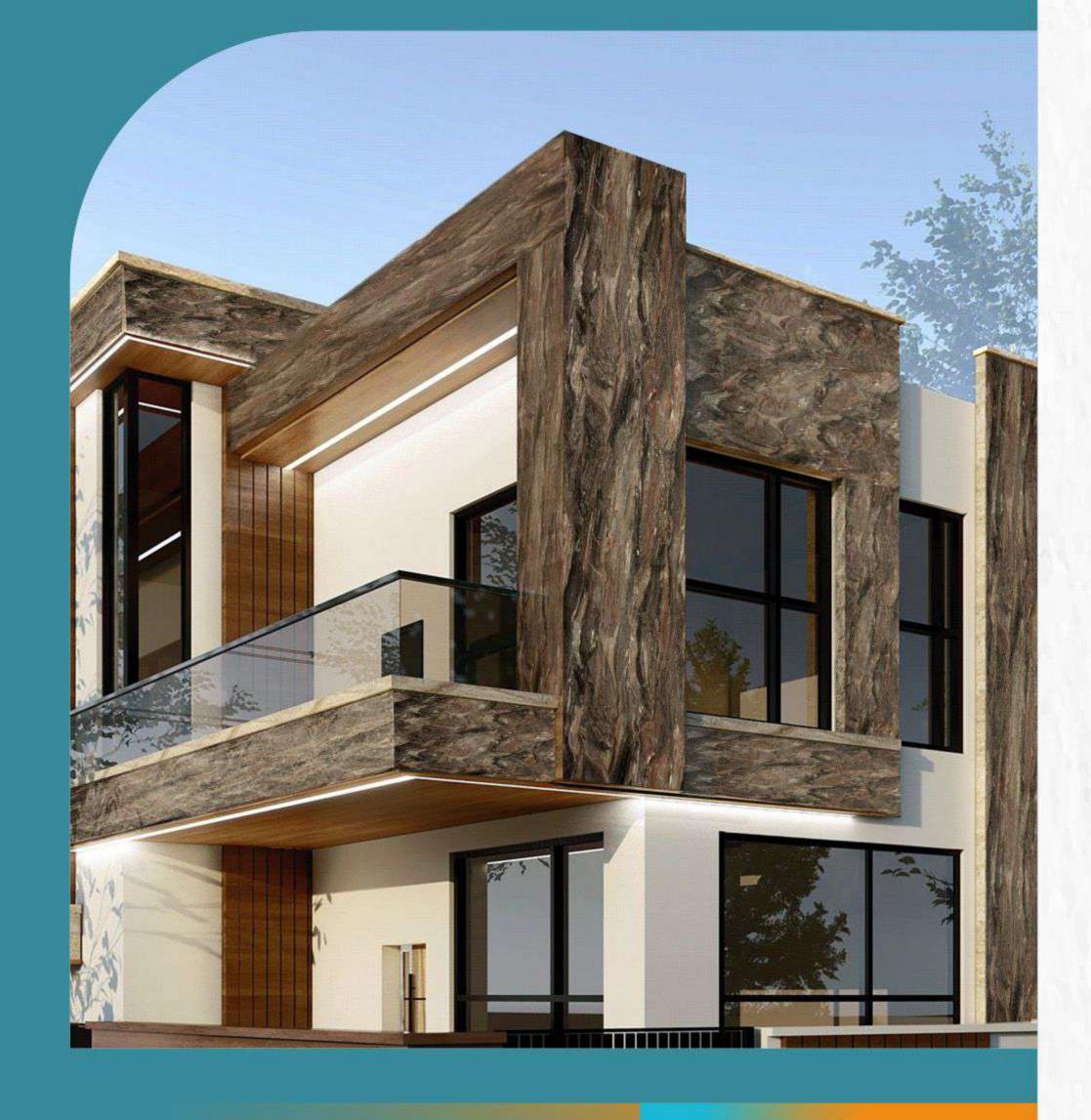






NEW Y 680 ITALIAN MARBLE

Stone





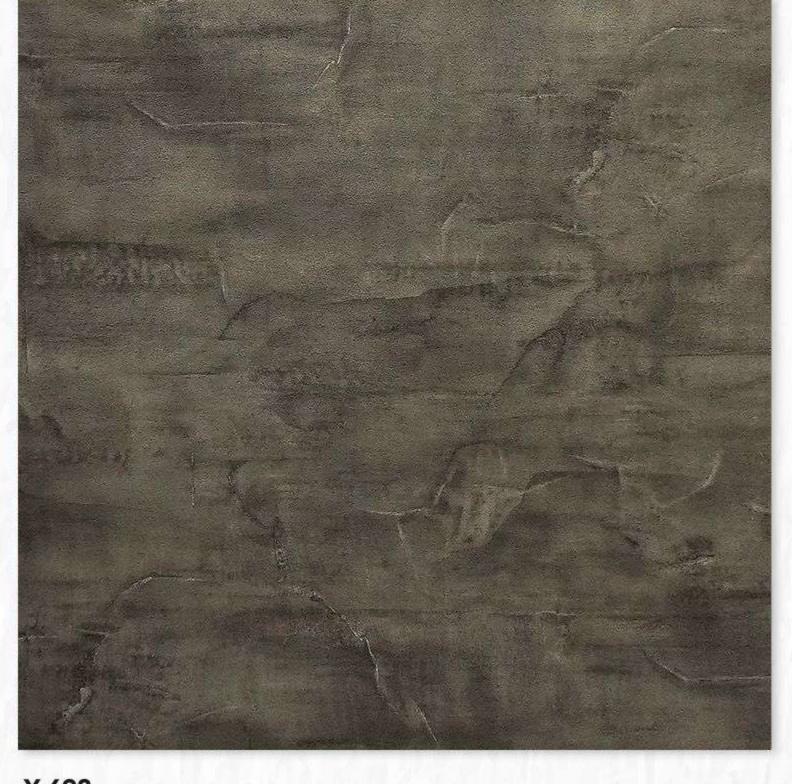
New Y 659 TITANIUM BLACK



Ultra Shield Extending

New Y 660 ORION

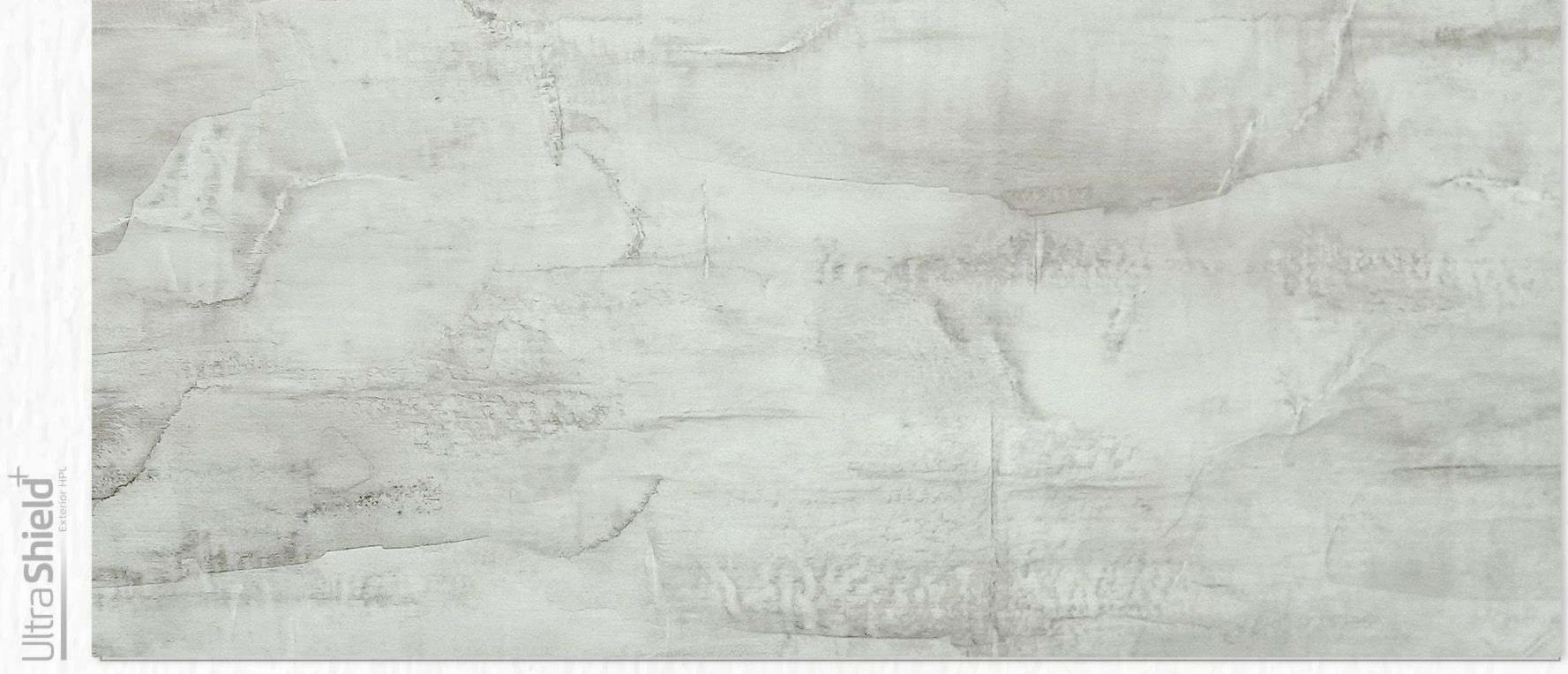
Ultra Shield Exterior HPL



Y 698 DARK SIDE WALK



WP 158 ROMANO TRAVERTINE



Y 699 GREY SIDE WALK







G 322/ 1322 ASH GREY

G 522/ 1522 GOTHIC GREY

Ultra Shield Extended

G 567/ 1567 SLATE GREY

Ultra Shield Exterior HPL

ULTRA SHIELD INSTALLATION SETUP



ULTRA SHIELD INSTALLATION GUIDE

ADHESIVE:

Adhesive system is simple system for rear ventilated facades and visible roof under faces. These systems require 50x25mm rectangular aluminium channel,10x30 size SS screw, PU sealant, VHB structural glazing tape, PU primer black etc. PU sealant & VHB tape should have good quality and resistance to UV radiation.



PROCESS:

- 1) Creation of Aluminium Structure: Make 6mm thru hole from back side & 20mm from front side on aluminium rectangular channel for screw fixing with channel and wall. Then mark screw position on wall with the help of rectangular channel for wall plug fixing. While plug fixing, provide space approx. 450 to 600mm between two channels as well as between two fasteners. Keep minimum 15mm distance of channel alignment from floor, sides & ceiling of wall area. Fix all plugs (approx. 30mm) to the marked area. Fix all rectangular channels with wall with the help of 10x30mm size screw.
- 2) Surface preparation and priming: Abrade (rough) both the bonding area (front side of the channel & backside of laminate surface) using either cleaning pad/scrubber/fine emery paper. Clean the roughed surfaces and apply black primer (recommended) on these bonding areas and allow to dry to leave a tack free film. Kindly note, primer coating on laminate backside surface is to be done just before bonding but before sealant application on the frame to get better bonding results.
- 3) VHB & Sealant application: Paste VHB tape & PU sealant on front side of framed aluminium channel. Always apply VHB tape before sealant as there is skin formation on sealant bead if exposed long in air. Apply the sealant as a triangular bead of 6-8mm base and height approx. 10-12mm away from the tape.
- 4) Panel Cladding: Align the compact laminate & fix the same on channel with the help of VHB channel & PU sealant. Apply pressure with a rubber roller or by hand. Kindly ensure proper alignment of panel before pressurized for bonding. Enough pressure should be applied so that both surfaces fully contact the tape. Fix other compact laminate in same fashion & maintain a minimum gap of 3- 4mm between two compact laminate. Kindly note to achieve maximum bonding strength, minimum 24 hours is required for optimum curing after installation process.

RIVET:

Rivets are used in a panel mounting application to secure two or more components together. The rivet is easily installed with access only required from one side of the assembly. These systems require substructure (50x25mm rectangular aluminium channel), 10x30 size SS screw, POP rivets etc.



PROCESS:

1) Creation of Aluminium Structure: The aluminium substructure (standard specified) generally consists of vertical support profiles/hollow sections are mounted on the wall using rivets/angle brackets.

Considering dimensional behaviour of laminate at relative humidity as well as effect of climatic temperature on metal sub-construction, there is need to make fixed points & sliding points t to fix the panels.

- a) **Fixed points:** Fixed points are used for uniform distribution & shrinkage movement. The diameter of the drill hole in Aica exterior clad must measure 5 to 6mm.
- b) Sliding point: The diameter of drill hole in Aica exterior cladding must be larger than the diameter of the fastening as per required expansion clearance. Thus is the shaft diameter of the fastening plus 2mm for every meter of cladding material from the fixed point. The head of the fastening must be big enough so that the hole in exterior clads is always covered.

Procedure: Make 6mm thru hole from back side and 20mm from front side on aluminium rectangular channel for screw fixing with channel and wall. Then mark screw position on wall with the help of rectangular channel for wall plug fixing. While plug fixing, provide space approx. 450 to 600mm between two channels as well as between two fasteners. Keep minimum 15mm distance of channel alignment from floor, sides & ceiling of wall area. Fix all plugs (approx. 30mm) to the marked area. Fix all rectangular channels on the wall with the help of 10x30mm size screw.

2) Panel Cladding: Mark the holes in the aluminium triangular substructure as well as in laminate panel for the rivet fixing. Make the drill in the compact laminate for Rivet fixing. While marking, keep rivet space in-between 20-80mm distance from corner as well as maintain minimum 450 to 600mm space in-between two Rivet. Compact laminate is then fixed with Rivet using Rivet gun on aluminium substructure. Fix the other panels in same fashion with maintaining a minimum gap of 3mm in-between two panels.

Important Note: Using rivets system, the mouthpiece drilling on the centre of the plate is opened with the same diameter as the rivet, other holes are opened 2-3 mm wider than the rivet diameters, thus enabling movement of clad panels in case of expansion. The placement of the holes should be minimum 20 mm & maximum 60mm distance from the plate edge and distance maximum 10 times of the material thickness.

Z-CLIP:

A Z-clip system involves installing clads on the wall structure (lip-up) and strips/clips on the back of the panel (lip down). Once the panel is "dropped" into place, blocking at the top of the panel keeps the compact laminate from being removed. This system required 50x25mm rectangular aluminium channel, Z-clip, 10x30 size SS screw, 8x6mm SS Screw etc.



PROCESS:

Creation of Aluminium Structure Using Z-clip:

Make 6mm thru hole from back side & 20mm from front side on aluminium rectangular channel for screw fixing with channel and wall. Then mark screw position on wall with the help of rectangular channel for wall plug fixing. While plug fixing, provide space approx. 450 to 600mm between two channels as well as between two fasteners. Keep minimum 15mm distance of channel alignment from floor, sides & ceiling of wall area. Fix all plug (approx.30mm) to the marked area. Fix all rectangular channels with wall with the help of 10x30mm size screw. Fix Z-clip on rectangular channel with the help of 8x6mm SS screw.

Keep minimum 450 to 600mm space in-between two Z-clip. Fix Z-clip on another side of exterior laminate in reverse fashion with the help of 8x6mm size SS screw. Then with the help of Z-clip, slide or hang laminate panel on framed rectangular channel. Fix all other laminate panels in same fashion with maintaining a minimum gap of 3mm in-between two compact laminate.

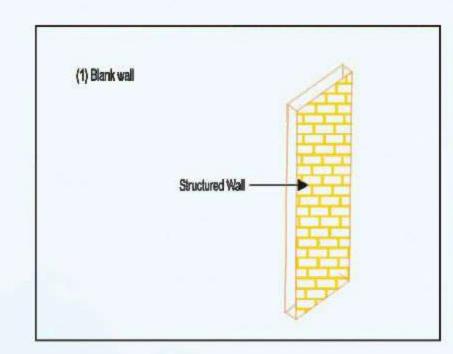
Important note in all above three procedures:

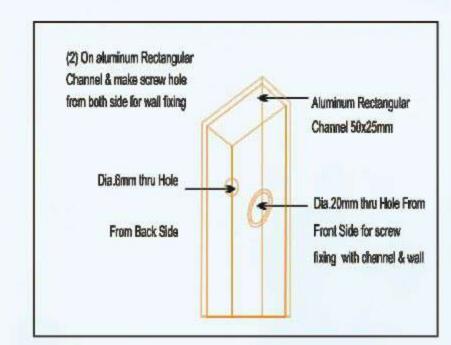
An efficient air circulation must be secured between Aica exterior wall cladding and the surface or the coating of the building. The blank grouting spaces allowed for ventilation between the plates should not be filled with any material. An efficient air circulation must be provided from the ground level of the plate to the top edge. A minimum of 50 cm2 space is required for every 1 meter width. If no air ventilation gap is reserved at the construction framework, deformation will occur on the exterior plates.

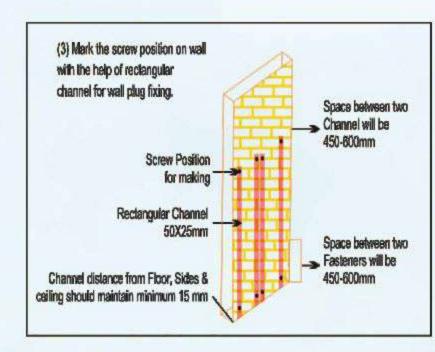


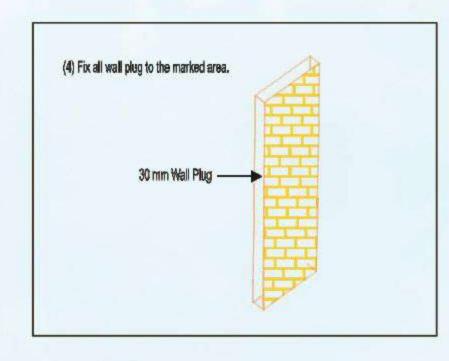
CLADDING LAYOUT

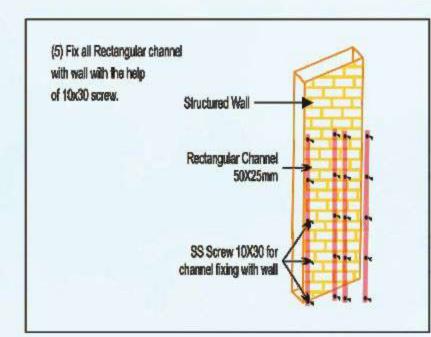
This diagram explains how to install Ultra Shield on the wall, making the installation process easy.

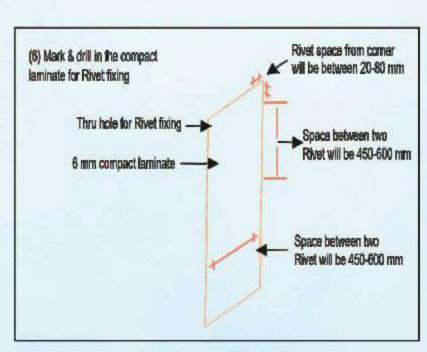


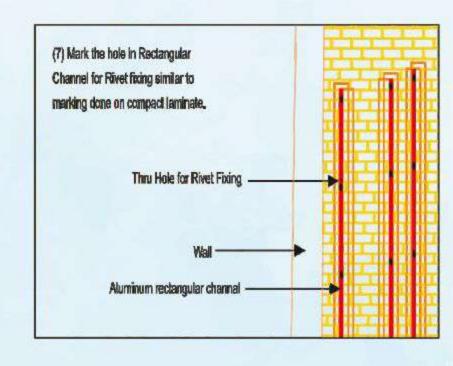


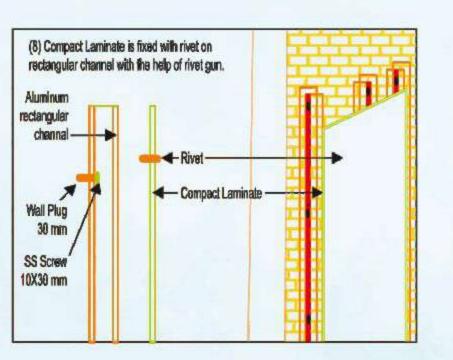


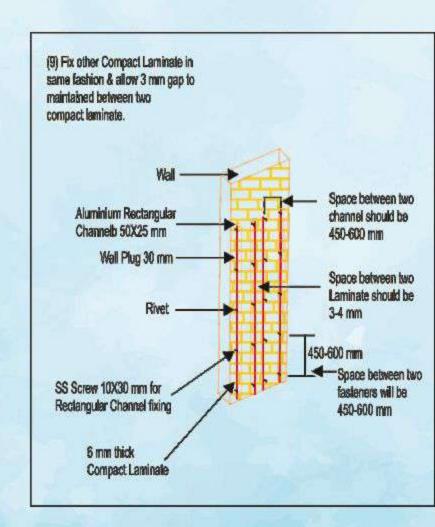


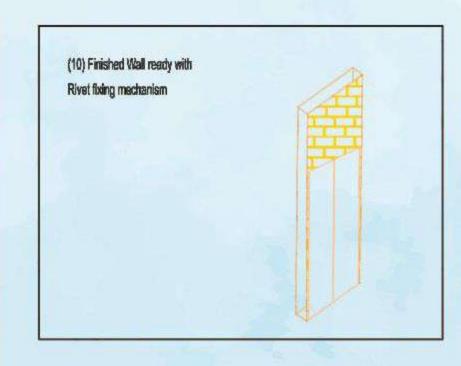












EFFICIENT MATERIAL HANDLING SOLUTIONS

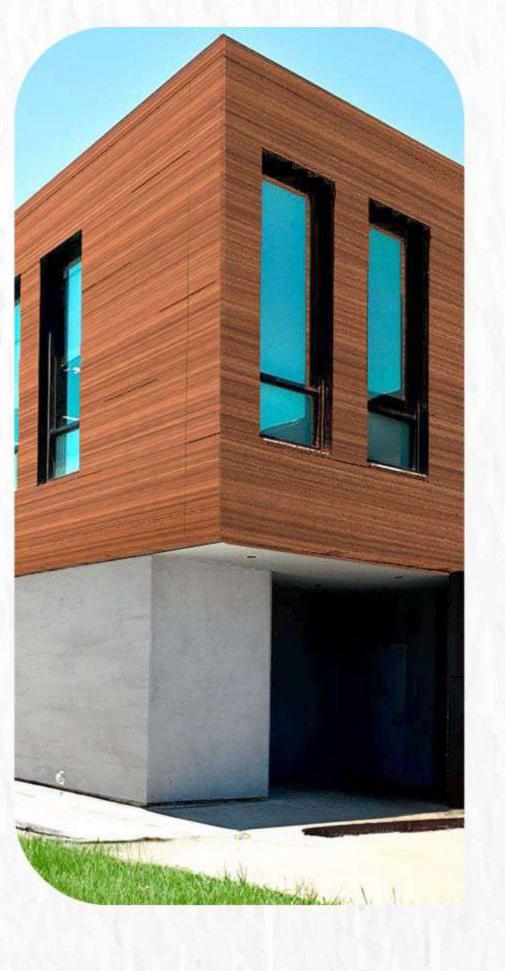
Seamlessly manage and store materials with our integrated systems that ensure efficiency and reliability.



AND

HANDLING

MATERIAL





Storage and Handling:

Use pallets during transportation of Outdoor wall cladding panel. The surface should be free from debris, grit or foreign bodies to protect the decorative surface. Avoid pushing of panels over one another. Always cut the panels with the long edge parallel to the length of the panel.

Ambient Conditions:

As far as possible try to maintain the same ambient conditions on both sides of the panel. Outdoor wall cladding sheets should be stored horizontally on a flat board with sufficient weight on top to keep the sheets flat. Cover the cladding sheets with a material impervious to water.

Fabrication Conditions:

Use proper tooling while working with Outdoor wall cladding, use spindle moulder or router to achieve a superior finish or a profiled edge. Cutter marks cannot be avoided completely but can be minimized feeding the work at a constant controlled speed. The edges of cladding should be chamfered to reduce the risk of edge impact damage.

Technical Specification

Technical Data For 'Ultra Shield, External Wall Cladding

ULTRASHIELD, EXTERNAL WALL CLADDING Compact laminate grade is a specially formulated laminate for exterior application. This product meets all properties as per BS EN 438-6.2016 Grade EDS & EDF materials. This grade is tested according to EN 438-2.19 & EN 438-2.29 for weather resistant properties as well to EN 13501-1 for fire resistant properties required for exterior grade application.

Exterior laminate is made with special type of synthetic polymers with acyclic coating technique provides superior weatherability, excellent UV-absorbance and heat lamination performance.

Properties and Typical Test Values for 6.0mm D/S Size 8'x4' laminate sheet.

Sr No.	Property as per EN 438-6:2016	Test Method (EN 438-2, Clause no.)	Unit	Require-ments	Typical Value Grade EDF
1. Sur	face quality_				
1.1	Dirt, spots and similar surface defects	4	mm²/m²	≤2	≤2
1.2	Fibers, hairs and scratches	4	mm²/m²	≤ 20	≤ 20
2. Din	nensional tolerances				
2.1	Thickness for 6.0mm	5	mm	+/-0.40	+/-0.40
2.2	Flatness	9	mm²/m	≤5	≤5
2.3	Size for 2440mm(L)x1220mm(W)	6	mm	#DIV/0!	#DIV/0!
2.4	Straightness of edges	7	mm²/m	≤ 1.5	≤ 1.5
2.5	Squareness	8	mm²/m	≤ 1.5	≤ 1.5
3. Phy	sical Properties				
3.1	Flexural Modules	EN ISO 178:2003	MPa (min)	9000	> 9000
3.2	Flexural Strength	EN ISO 178:2003	MPa (min)	80	> 80
3.3	Tensile Strength	EN ISO 527-2:1996	MPa (min)	60	> 60
3.4	Density	EN ISO 1183-1:2004	g/cm³	≥1.35	≥ 1.35
3.5	Resistance to Impact by large diameter ball (Drop height)	21	mm (min)	1800	>1800
3.6	Resistance to wet conditions	15	% (max) Mass increase	< 8	< 8 (EDF)
3.7	Dimensional stability @ elevated temperature (Cumulative dimensional change)	17	% (max)	< 0.30 (L) < 0.60 (T)	< 0.30 (L) < 0.60 (T)
4. We	ather resistance requirements				
4.1	Resistance to Climatic shocks	19	Rating (min)	4	4
4.2	Resistance to UV light		Gray scale Rating (not <3)	3	>3 (1500hrs exposure)
		28	Rating (min)	4	4 (1500 hrs exposure)
4.3	Resistance to artificial weathering (including light fastness)		Gray scale Rating (not worse than 3)	3	>3 (after 625 MJ/m2 radiant exposure)
		29	Rating (min)	4	4(625MJ/m2
5. Fir	e Performance	EN 135 01		0.00	
5.1	Fire reaction classification	EN 13823 (CSBI test) EN ISO 11925-2 (small burner test)	Classification	B-s2,d0	B-s2, d0 (EDF)

The figures in this table are typical measured values, not the values for guaranteeing. In case of any claims, the liability of the company is however limited to the cost of the product only.

AICA LAMINATES INDIA PVT. LTD.

Plot No. 23 to 26 & 45 to 48, Sector No-5, IIE- Pant Nagar Industrial Estate, Rudrapur-263153 (U.S. Nagar) Uttarakhand.

All Pictures are for illustrative purposes.







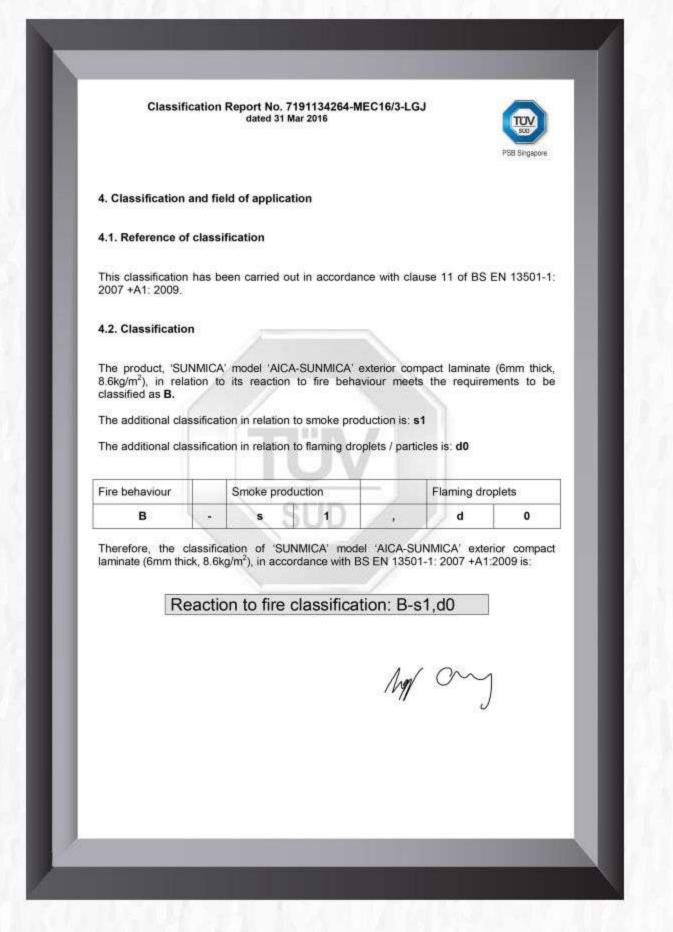












CARE AND MAINTENANCE

PROTECTION

AND

CARE

ASSET

To clean the surface, use a damp cloth or sponge and a mild soap or detergent. The use of cleaners containing abrasives, acids or alkalis may damage the decorative surface. Being anticorrosive and antibacterial in nature of cladding, there is no special maintenance apart from cleaning is required.



AICA LAMINATES warrants to the original consumer purchaser for 10 year color fastening warranty after date of purchase ("Warranty Period") that, under normal use and service, exterior laminate sheets are free from manufacturing defects and conform the properties as per specification of EN438 part 6:2016 standard & with the subject to following conditions.

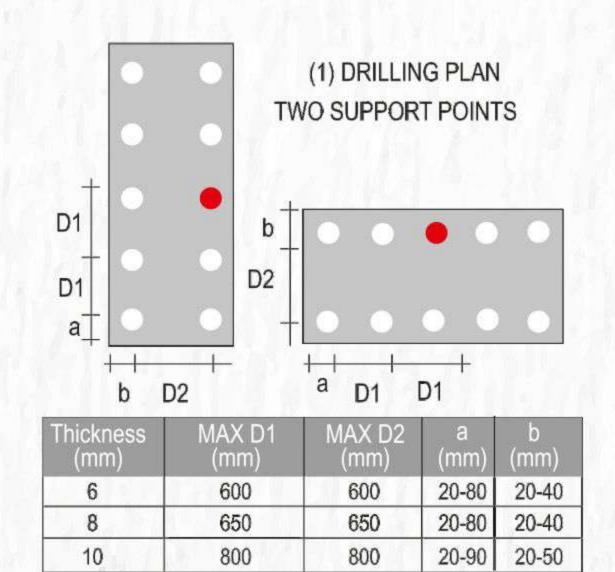
Slight homogenous variations & slight loss of brightness may take place in course of time of use & is acceptable as per EN438 part 6.

This warranty applies only to a Exterior Laminate Sheet.mer purchaser.

THIS WARRANTY IS NOT TRANSFERABLE. This warranty is expressly conditioned upon submission of proof of date of purchase.

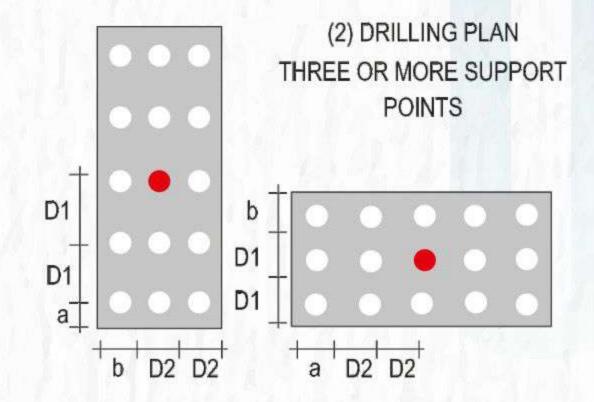
This warranty shall not apply to damage arising from improper fabrication or installation, exposure to the extreme temperatures, improper maintenance or repair, accidents, abuse or misuse.

DRILLING PATTERN



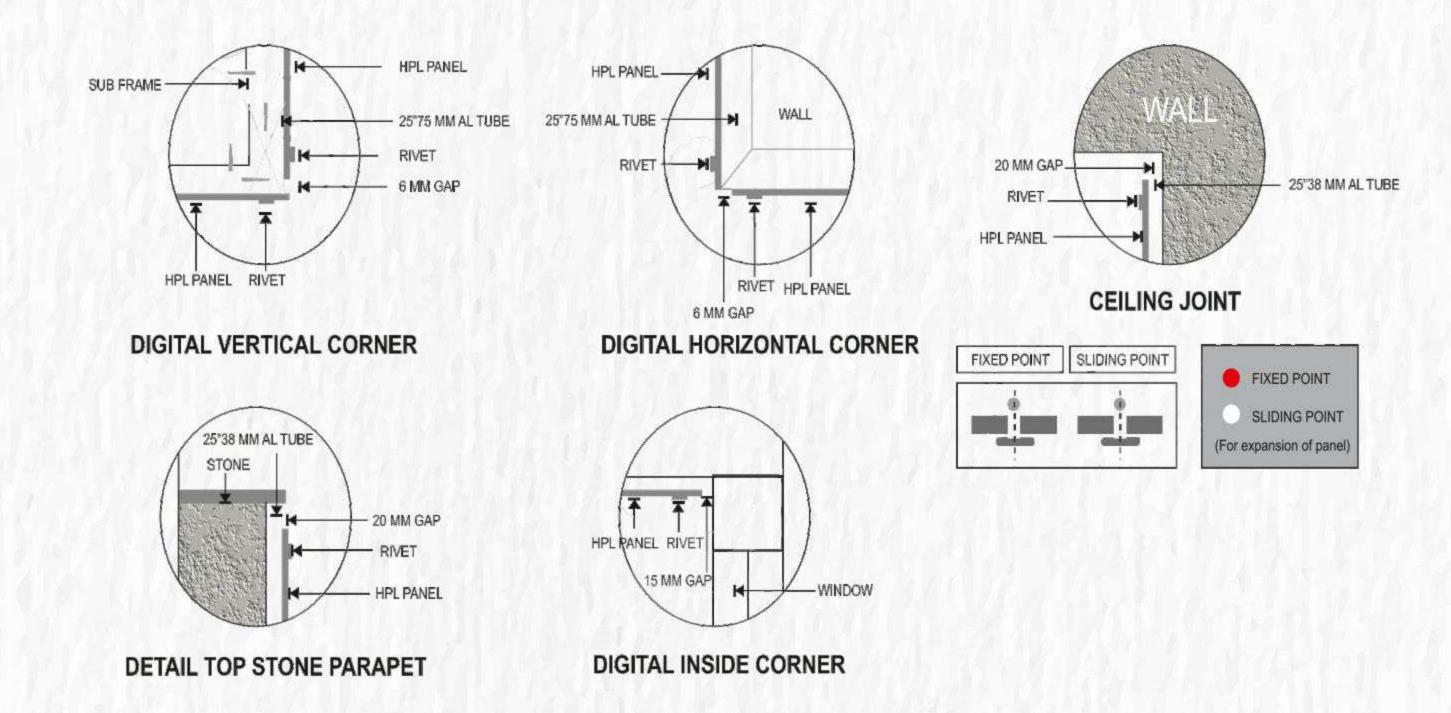
800

800



Thickness (mm)	MAX D1 (mm)	MAX D2 (mm)	a (mm)	b (mm)
6	660	600	20-80	20-40
8	700	700	20-80	20-40
10	950	950	20-90	20-50

INSTALLATION SYSTEM



BRANCH OFFICES AND CONTACT

	T (070) 075 417 40 075 41000 14 0007 4000 40		
Ahmedabad	T: (079) 27541749, 27541390, M: 9327403349	ahmedabad.sales@aicaindia.in	
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Bhubaneswar	M: 9711610478	hyderabad.sale@aicaindia.in	
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