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BROWN PAPER
DECORATIVE LAMINATES

XTERIO

A product by
ACE MICA
Decorative Laminates

FIRE RETARDANT

BROWN PAPER
DECORATIVE LAMINATES

XTERIO

A product by **Ace Mica**

FIRE RETARDANT

EXTERIOR GRADES LAMINATES

Available in 8' x 4' & 10' x 4'

FOAM

DIE PUNCH

FOAM

BROWN PAPER
DECORATIVE LAMINATES

XTERIO

A product by **Ace Mica**

ACTUAL THICKNESS SAMPLE

FIRE RETARDANT

UNMATCHED FEATURES

- FIRE RESISTANT
- EXCELLENT ANTI -GRAFFITI PROPERTIES
- CHEMICAL RESISTANT
- ENERGY EFFICIENT
- MATCHING RIVETS
- ANTI -DUST
- MOISTURE RESISTANT
- ENVIRONMENT FRIENDLY
- LOW VOC EMISSION
- RESISTANCE TO ACID RAINS
- CORROSION RESISTANT
- TERMITE RESISTANT
- ANTI - BACTERIAL AND ANTI - FUNGAL
- ACOUSTIC RESISTANCE
- CAN WITHSTAND EXTREME WEATHER
- SUPERIOR LIGHT FASTNESS PERFORMANCE (UV RESISTANCE)

BROWN PAPER DECORATIVE LAMINATES | XTERIO

A product by **Ace Mica**

STANDARD SIZE:	4’ x 8’ | 1220 mm x 2440 mm 4’ x 10’ | 1220 mm x 3050 mm
STANDARD THICKNESS:	6 mm (9 mm against order)
TEXTURE:	Suede

Let our enamouring style
elevate your space

EXT 10014

Available in 8'x4' & 10'x4'

EXT 10014 HZ

Available in 8'x4' & 10'x4'

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BROWN PAPER DECORATIVE LAMINATES | XTERIO

EXT 10013

Available in 8'x4' & 10'x4'

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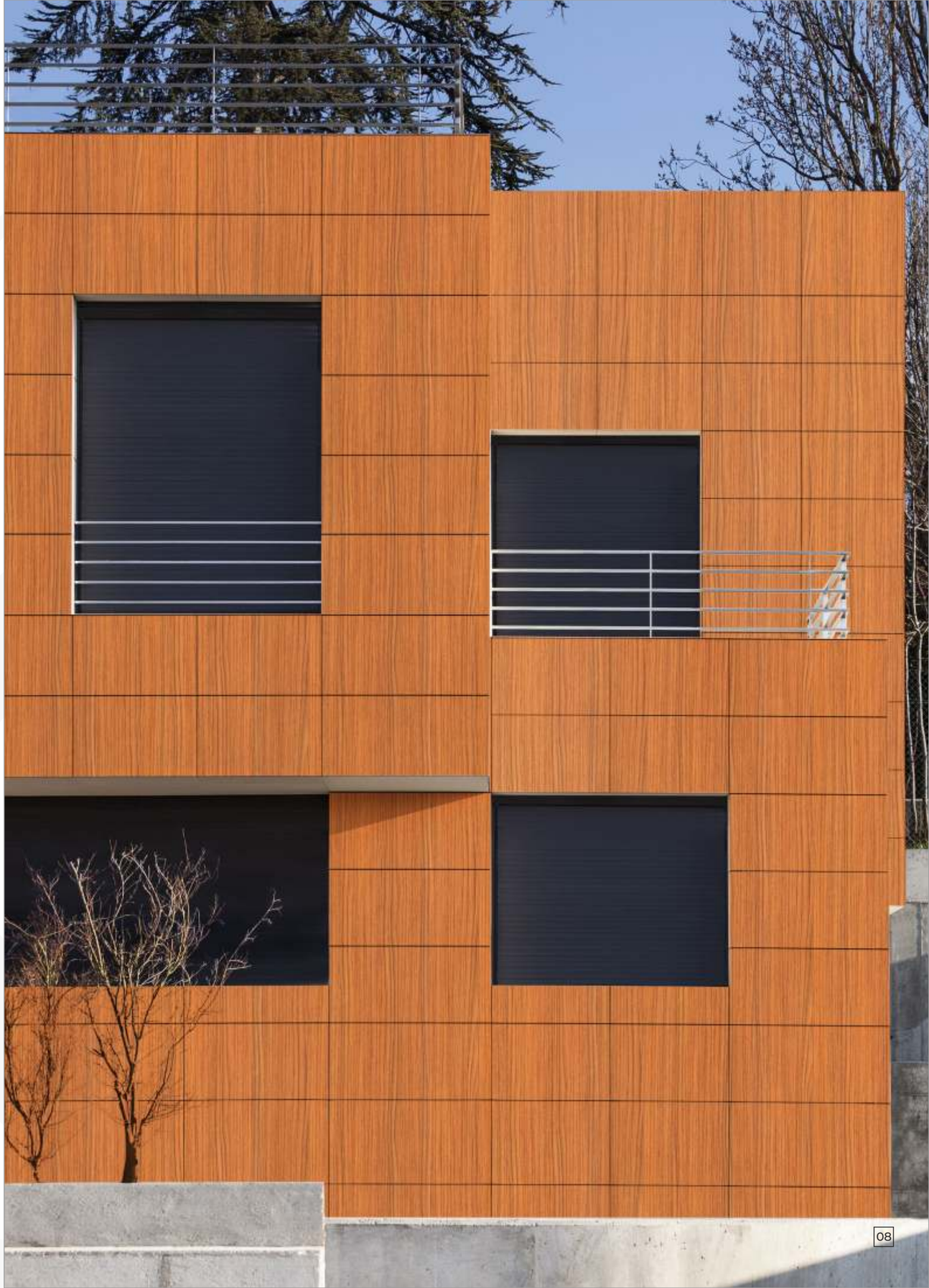
FIRE RETARDANT

EXT 10015

Available in 8'x4' & 10'x4'



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BROWN PAPER DECORATIVE LAMINATES | XTERIO

EXT 9235

Available in 8'x4' & 10'x4'

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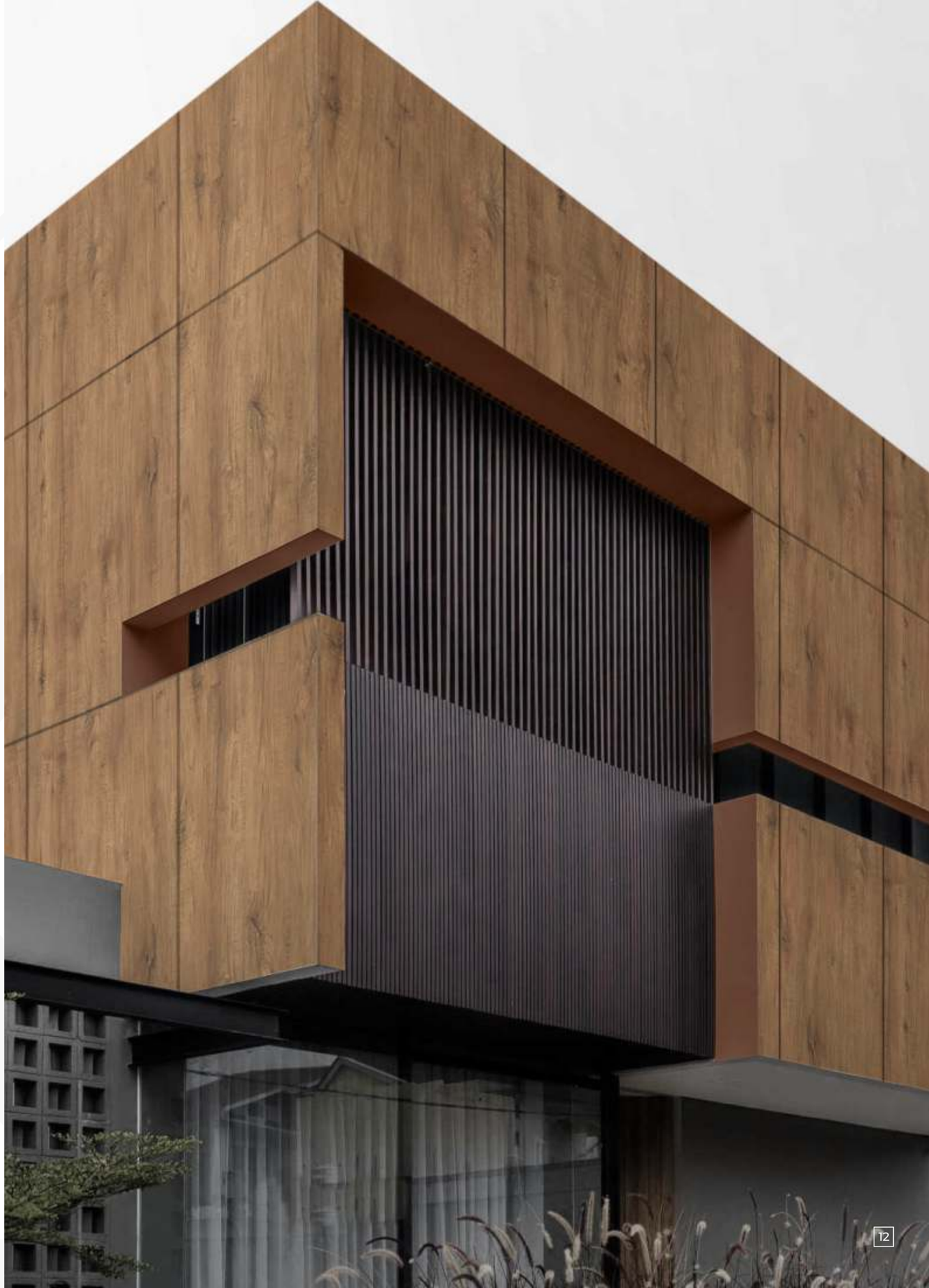
FIRE RETARDANT

EXT 9145

Available in 8'x4' & 10'x4'



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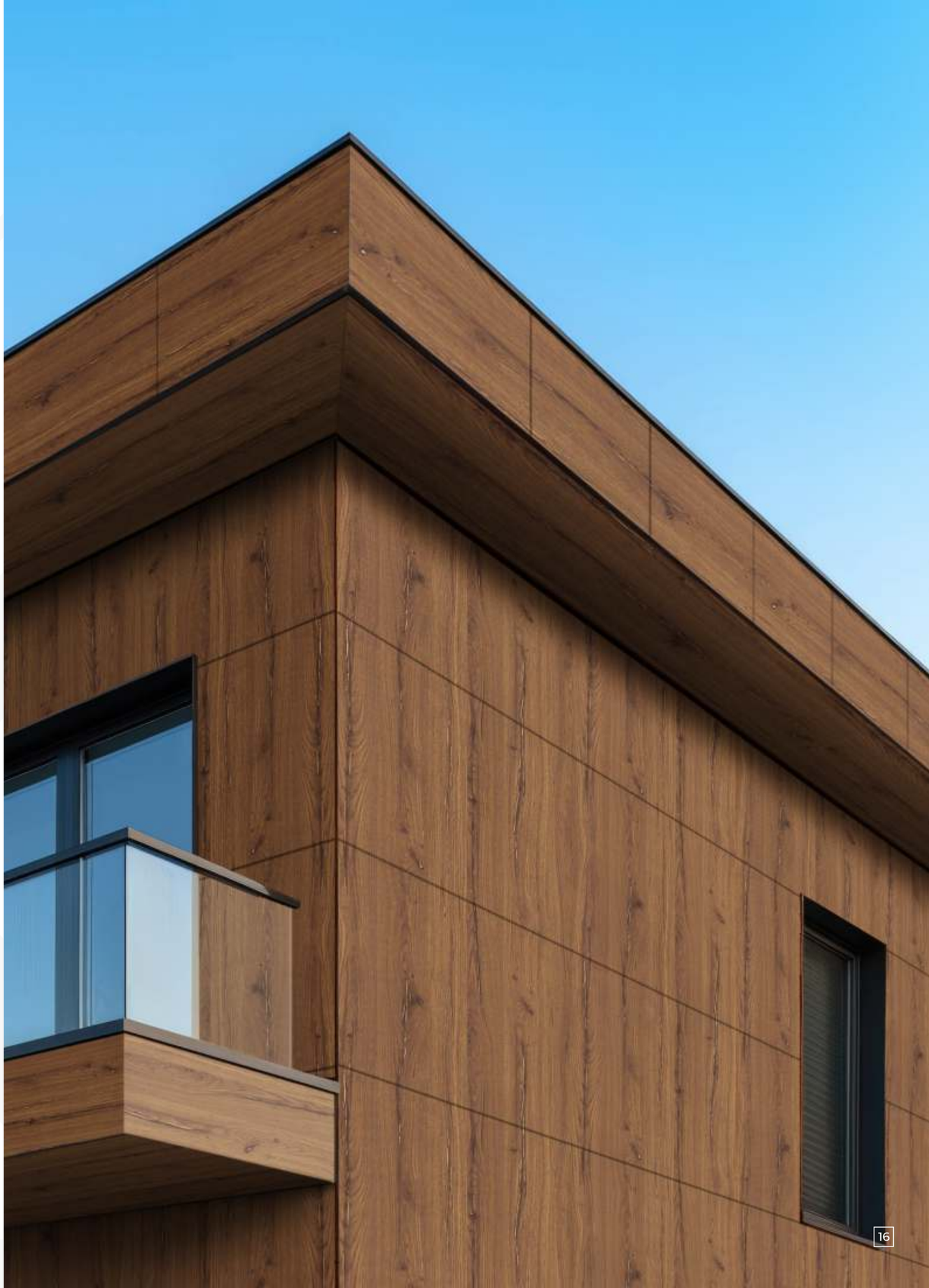
BROWN PAPER DECORATIVE LAMINATES | XTERIO

EXT 8099

Available in 8'x4' & 10'x4'

EXT 8096

Available in 8'x4' & 10'x4'



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BROWN PAPER DECORATIVE LAMINATES | XTERIO

EXT 8056

Available in 8'x4' & 10'x4'

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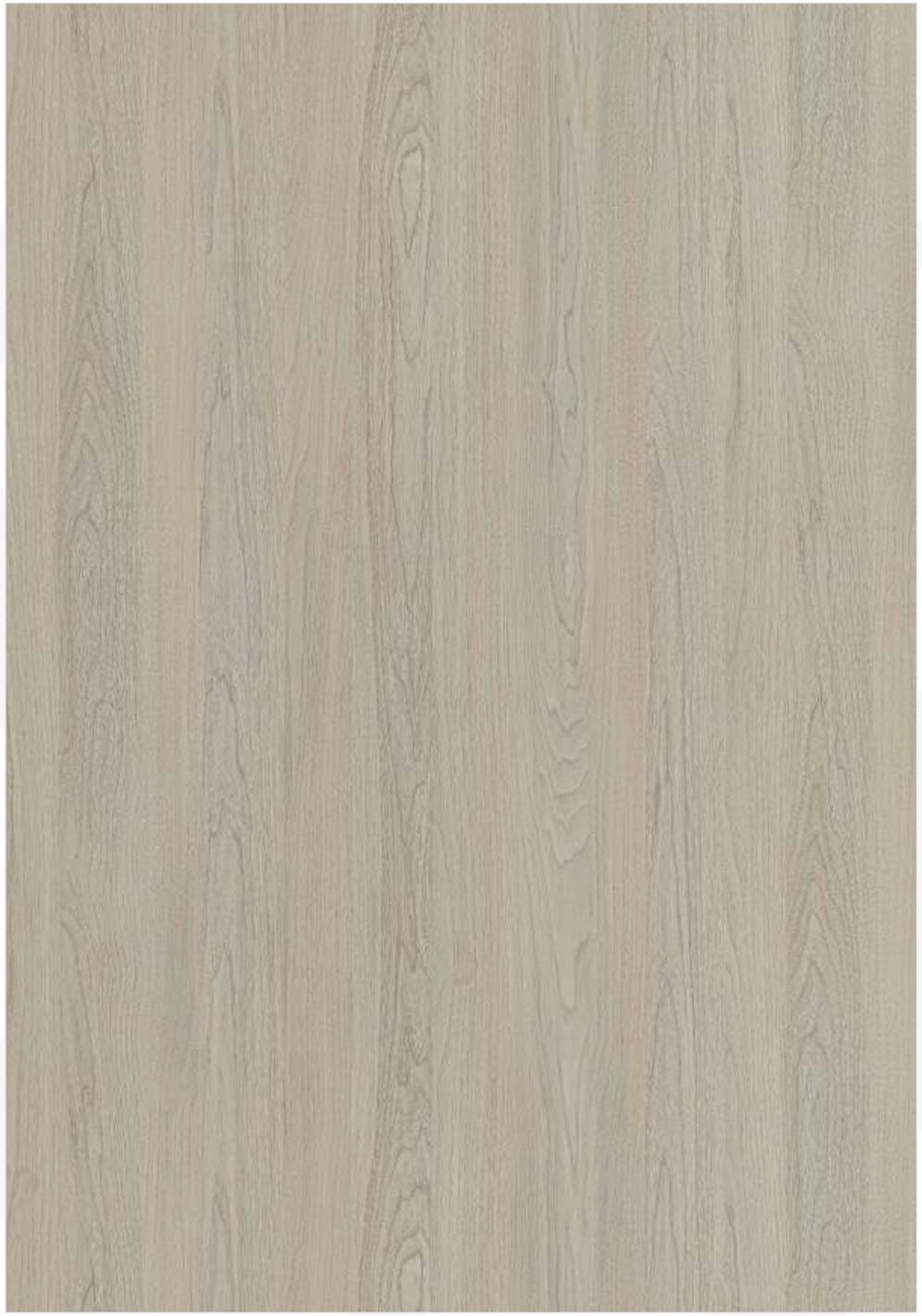
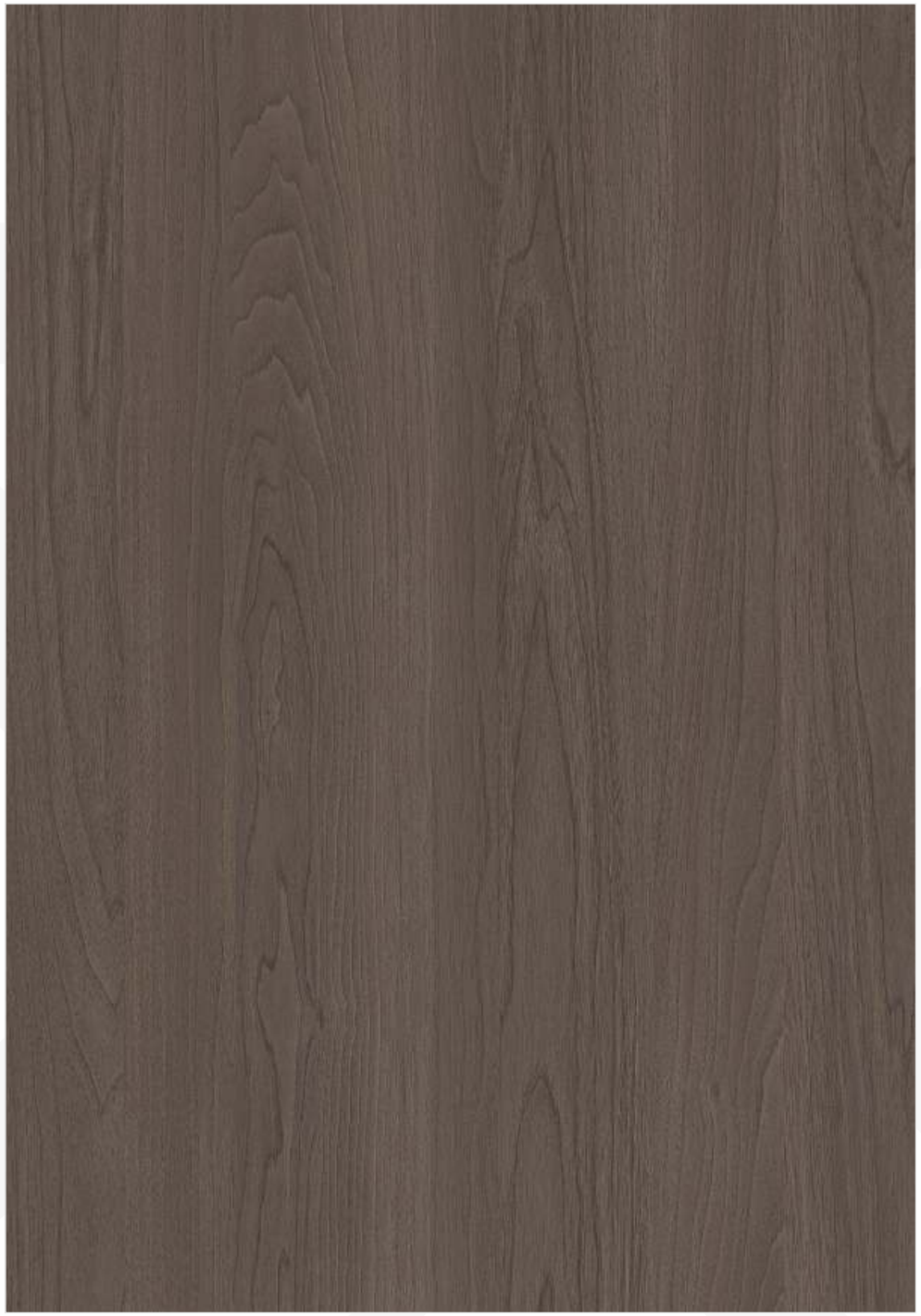
FIRE RETARDANT



EXT 8097

Available in 8'x4' & 10'x4'



EXT 8098

Available in 8'x4' & 10'x4'

INSTALLATION METHODS

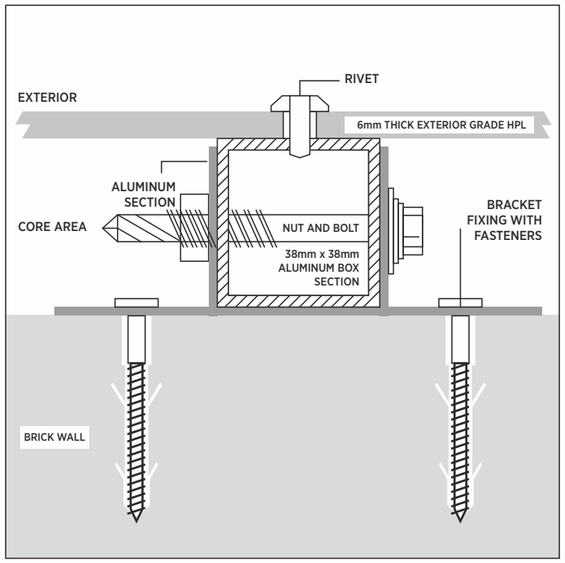
Brown Paper Xterio CLADS panels behave similarly to wood under varying weather conditions, expanding when absorbing moisture and contracting when releasing moisture. Therefore, it is crucial to consider these properties during installation to ensure proper compensation clearance. The recommended expansion gaps between panels should be 8-10mm for uniform expansion. Additionally, one fixed point should be established, with the other fixing points designed as non-fixed points.

Method 1: Installation with Rivets
A: Installation on an Aluminium Box Section Substructure
(Practice in Asian Countries)

Brown Paper Xterio CLADS panels, available in 6mm thicknesses, are suitable for the rivetted system on an aluminium substructure. This method is commonly applied to high-rise buildings.

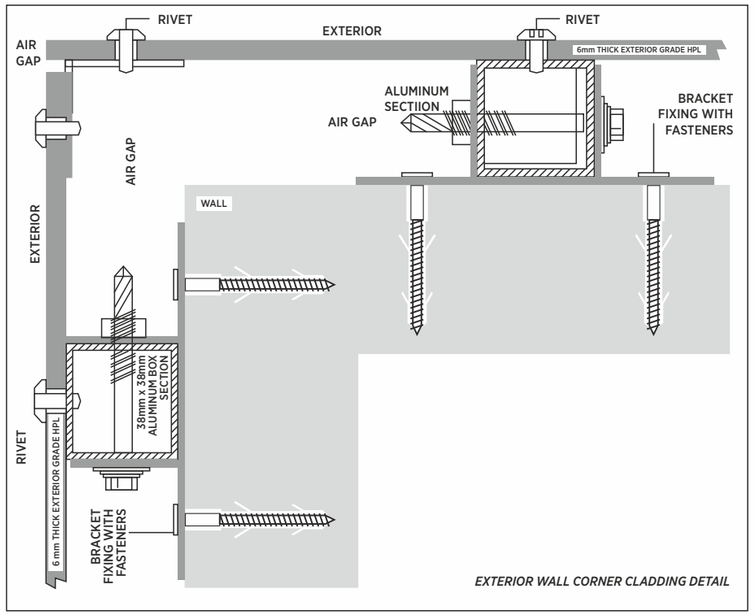
Substructure Specifications:
The aluminium substructure must comply with regional stroke standards and be installed according to the manufacturer's specifications. It primarily consists of vertical support profiles mounted on the wall using pie brackets. Given the material properties of Brown Paper Xterio CLADS panels, both fixed and sliding points are necessary to secure the panels.

$$\frac{\text{X or Y (in mm)}}{500} = \text{Expansion Clearance}$$

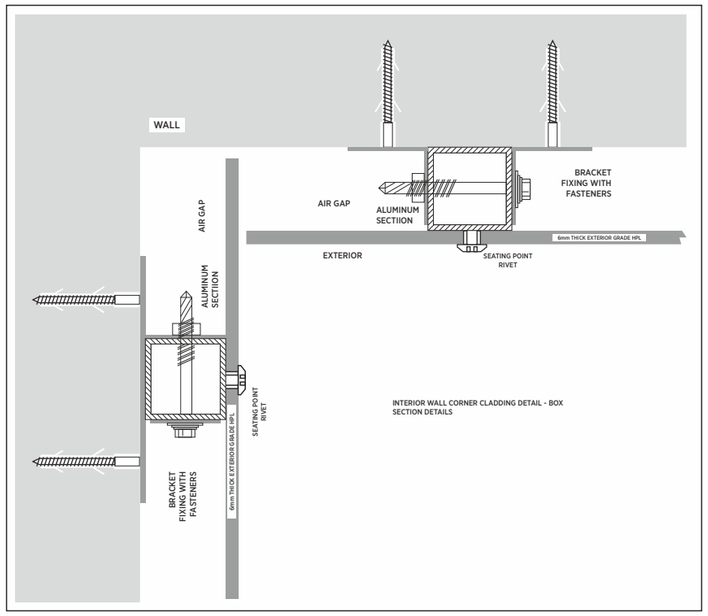


▶ VENTILATED FACADE SYSTEM DETAIL

INSTALLATION METHODS



◀ EXTERIOR WALL CORNER CLADDING DETAIL



◀ INTERIOR CORNER WALL CLADDING DETAIL

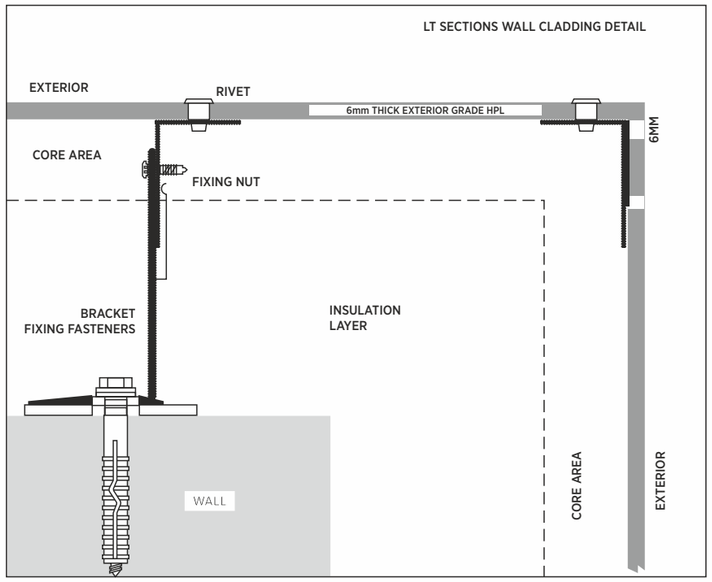
INSTALLATION METHODS

B: Installation on an Aluminium LT Section Substructure

Brown Paper Xterio CLADS panels of 6mm are also suitable for the riveted system on an aluminium LT section substructure. This system is commonly applied to high-rise buildings.

Substructure Specifications:
The aluminium substructure must conform to regional stroke standards and be installed according to the manufacturer's specifications. The substructure primarily consists of vertical support profiles mounted on the wall using angle brackets. Due to the material properties of Brown Paper Xterio CLADS panels, both fixed and sliding points need to be incorporated to properly secure the panels.

$$\frac{\text{X or Y (in mm)}}{500} = \text{Expansion Clearance}$$



◀ VENTILATED FACADE SYSTEM DETAIL

INSTALLATION METHODS

Method 2: Fastening with the Glue System (Without Rivets)
Application: Applicable up to 10-meter height only

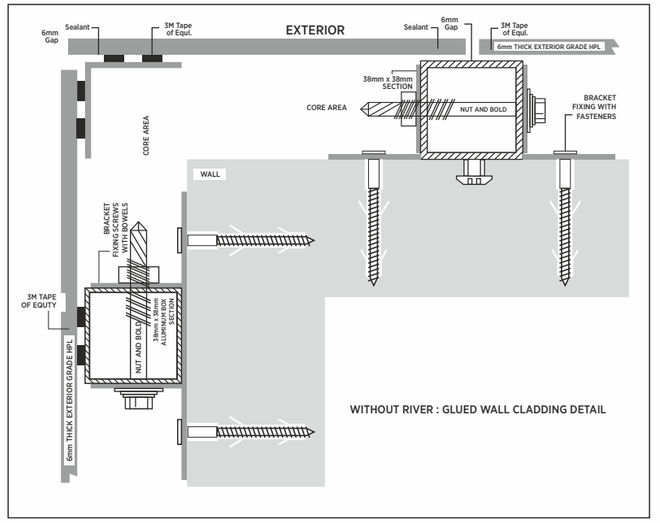
An alternative to visible mechanical fixing with rivets is glueing the Brown Paper Xterio CLADS facade panels using specially developed glueing systems. This method is suitable for normal planed aluminium substructures and is a clean and simple solution for rear-ventilated facades, attics, visible roof undersides, reveals, and more.

Prerequisites:
Permission must be sought from the authorized building officials of the region/country.

Products Used for Bonding High-Pressure Laminates with the Panel Lock System:
- DOW Corning 896 Sealants or Equivalent
- 3M™ VHB™ G23F Structural Glazing Tape or Equivalent** (Tape thickness 6mm, as per panel size and design)
- 3M PU Primer OS1200 or Equivalent

Both the sealant and VHB tapes are highly durable and resistant to UV radiation. While the VHB tape provides immediate holding strength and ensures consistent sealant bead thickness, the 540 PU sealant offers additional anchorage against possible cleavage stresses on the edges due to wind load.

Effective Conditions:
- Temperature below 35°C
- Humidity at 55% ± 5%
- Dust-free atmosphere



◀ GLUED WALL SYSTEM CLADDING DETAIL

INSTALLATION METHODS

Working sequence for installing Brown Paper Xterio CLADS using secret glued fastening system:

Following are the steps in general, to be followed for getting the optimum results.
- Aluminium Substructure Creation
- Surface Preparation & Priming
- VHB & Sealant Application
- Panel Cladding

Brown Paper Xterio CLADS INSTALLATION GUIDELINES

A: SURFACE PREPARATION & PRIMING

- Abrasion: The bonding area on both the metal frame surface and backside of the Brown Paper Xterio CLADS are abraded using a Scoth Brite pad/fine emery paper. Do not use a coarse abrasive product, use emery paper finer than #220 grit. Abrasion will remove any scales/oxide/LSE coating, and will also improve adhesion by creating very fine scratches.

- Surface Cleaning: The surface is cleaned of dust after the abrasion first with a dry cloth and then with OS1200 cleaner or equivalent. Do the cleaning by wiping a single direction and allow the solvent to evaporate.

- Priming: To promote the adhesion and for a durable bond the surface needs to be primed – with OS1200 or equivalent. The primer can be applied either with a brush or with a swab, to get a uniform coating on the surface. The primer should be continuous with a single wipe in one direction. Soak the swab with enough primer to achieve this in one stroke, it is not recommended to reverse the direction of the swab while applying primer. The primer should be applied only on the bonding areas and allowed to dry. The surface preparation of the Brown Paper Xterio CLADS panel is done just before bonding but before sealant application on the frame. The bonding should be completed at the earliest to avoid any dust accumulation on the surface.

B: VHB TAPES & SEALANT APPLICATION

- VHB Application: It is advised to apply VHB Tape before opening the sealant pack, as extended exposure of sealant bead will cause skin formation. Unwind a sufficient length of VHB tape from the roll, hold the edge of the tape, and leave the portion where it is touched by the fingers outside. Press the tape end to the frame, align the tape to the outer edge of the frame, and press the tape down from one edge to the other. It is recommended to use 3M HTA or equivalent for bubble-free application of the tape. Give an overlap wherever the tape needs to be joined, and then cut the overlapping edges of the tape to get a neat butt-joint. Press the tape with squeegee or rubber roller to ensure proper surface contact and to initiate the flow.

INSTALLATION GUIDELINES

- **Sealant Application:** It is recommended to apply the sealant as a triangular bead of 6-8 mm base and height approx. 10-12 mm away from the tape. The nozzle of the sealant sausage/cartridge is cut at proper length with a “V” notch to get the triangular bead with the dimensions mentioned. The sealant application and cladding should be completed within the skin formation time of the sealant, restrict the area of application in one go accordingly. Apply sealant as a continuous bead with uniform dimensions. The triangular shape of the bead will help to get the maximum contact area between the sealant and panel when squeezed and to get a near rectangular bead.

C: PANEL CLADDING

Remove the liner from the tape, place the panel to be bonded over the tape, and sealant bead, without pressing. At this point, the panel can be moved to get a proper alignment, as it is not touched on the tape surface. Make sure that there is not much movement while aligning, once the panel touches the sealant bead, to avoid any contamination the tape bonding surface with sealant. Once the alignment is properly done, push the panel to lock it in place and then press down with a rubber roller or by hand pressure. Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Enough pressure should be applied so that both surfaces fully contact the tape, the bond strength will increase as the adhesive flows onto the surface.

Please note using the gluing system for installing Brown Paper Xterio CLADS panels needs optimum curing time so as to attain the best possible bonding for or VHB tape, at room temperature between the aluminium substructure and compact laminate panels.

- 50% of the ultimate strength in 20 minutes
- 90% after 24 Hrs.
- 100% strength is attained after 72 Hrs.

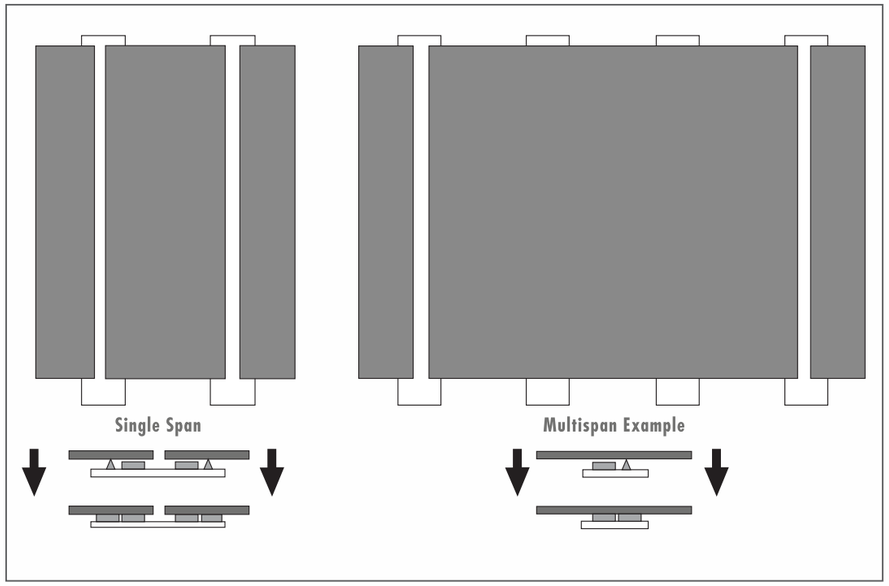
The sealant cure rate depends on the temperature and humidity and is mentioned in the technical data sheet.

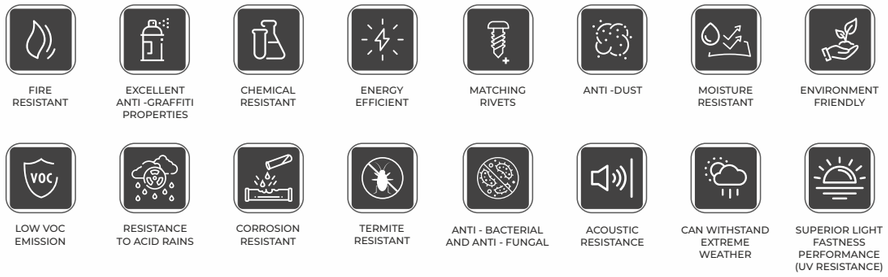
Important Points to Remember:

- Surface preparation is a basic requirement to ensure proper adhesive contact to the base surface.
- VHB won’t allow any air to pass through it. Apply it without air bubbles.
- Don’t use VHB/sealant bead in pieces but use in continuous length.
- Complete the bonding before the skin formation happens on the sealant bead.
- Pressing down the tape is necessary to initiate flow and to ensure proper surface contact.
- Follow the safety instructions & handling precautions given in the respective datasheets/MSDS, while handling solvents and primer

INSTALLATION GUIDELINES

FOR GLUED INSTALLATION (SPACING OF THE VERTICAL SUPPORT CONSTRUCTION)		
Panel Thickness	**Maximum Fastening Spacing Single Span Panel**	**Maximum Fastening Spacing Double Span Panel**
6 mm	350 mm	400 mm





TECHNICAL SPECIFICATIONS

THE SUPERIOR TECHNOLOGY

The Technology from Brown Paper Xterio R&D team makes Brown Paper Xterio CLADS a sturdy product that can withstand extreme weather conditions and makes it perfect for exterior use. This technology/process of making the product is based on three main pillars:

St. No.	PROPERTIES	TEST METHOD	ATTRIBUTES OF PERFORMANCE	UNIT OF MEASUREMENT	RESULTS (AS PER EN 438-7)
1	**DIMENSIONAL PROPERTIES**				
1.1	Thickness	EN 438-2.5	Thickness tolerance	6 mm	5<T < 8:0,4
1.2	Size	EN 438-2.6	Length and width	8	+- 10 / - 0
1.3	Straightness of edges	EN 438-2.7	Straightness of edges	mm/m	<1, 5
1.4	Squareness	EN 438-2.8	Squareness	mm/m	<1, 5
1.5	Flatness	EN 438-2.9	Flatness (measured on full size sheet).	mm/m	2,00T < 6, 0 : 8
2	**PHYSICAL PROPERTIES**				
2.1	Flexural Modulus	EN ISO 1 78	Stress	Mpa	> 9000
2.2	Flexural Strength	EN ISO 1 78	Stress	Mpa	> 80
2.3	Tensile Strength	EN ISO 527-2	Stress	Mpa	> 60
2.4	Density	EN ISO 1183	Density	gm/cm.	> 1,35
2.5	Resistance to impact with large diameter ball	EN 438-2.21	Indent. dia 10mm 2 < T< 6mm Drop Height Indent. dia 10rnm T> 6mm - Drop Height	min. min.	> 1400 > 1800
2.6	Resistance to Wet Conditions	EN 438-2.15	Mass increase -2 0 T< 5mm Mass increase -2 > T< 5mm Appearance	max. % max. % Rating	EGS/EDS- <7, EGS/EDS- <10 EGS/ED5- <5, EGS/EDS- <8 > 4
2.7	Dimensional stability at elevated temperatures	EN 438-2.17	Cumulative dimensional change- 2 < T< 5mm Cumulative dimensional change- 2 > T< 5mm	Longitudinal % Transversal % Longitudinal % Transversal %	<0 , 80 <0 , 30 <0 , 60 <0 , 60
3					
3.1	Resistance to Climatic Shock	EN 438-2.19	Thermal Shock Resistance - Appearance	Rating	> 4
3.2	Resistance to Artificial Weathering	EN 438-2.29	Contrast	Grey scale rating	> 3

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FIRE RETARDANT