

VIVIX® Lap

HIGH PERFORMANCE WEATHERBOARD by FORMICA GROUP

Installation Guide

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Introduction to VIVIX® Lap Weatherboard

VIVIX Lap® by Formica Group is an advanced exterior cladding product that creates great looking facades, offers outstanding weather protection, is quick and easy to install and requires little maintenance.

Taking inspiration from traditional timber weatherboard cladding, VIVIX Lap is an overlap cladding system that utilises modern, lightweight, highly engineered planks. VIVIX Lap planks remove the need for coatings or treatments, edge sealing or painting, that are typically associated with wood and other cladding materials.

Perfectly balanced between form and function, VIVIX Lap is packed full of features and benefits, matching performance with outstanding aesthetics, either as full façade cladding or as a design feature in conjunction with other complementary materials. Colour co-ordinated fixings, profiles and trims create the perfect finish.

In VIVIX Lap, we have created a versatile, high performance cladding solution, that can be easily installed and most of all enjoyed and admired.

Make VIVIX Lap your exterior cladding choice.

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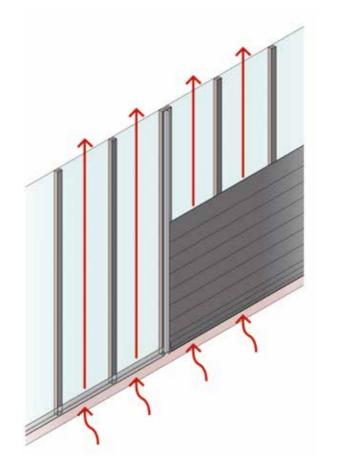
Rainscreen Principle

Utilising the 'Rainscreen Principle', VIVIX® Lap is an overlap cladding system that incorporates a ventilated cavity, providing continual movement of air within the system to regulate temperature and aid in moisture evaporation and drainage.

The 'Rainscreen Principle':

- Cladding acts as a protective screen against the elements
- The system incorporates an air cavity between the building wall and external cladding
- Any moisture penetrating the cladding, either drains out or is evaporated by circulating air, keeping the building dry and insulated

- The system enables a constant flow of air behind the cladding for temperature regulation in extreme environments (fig.1)
- Supports heat retention in winter
- Creates a cooling effect in summer



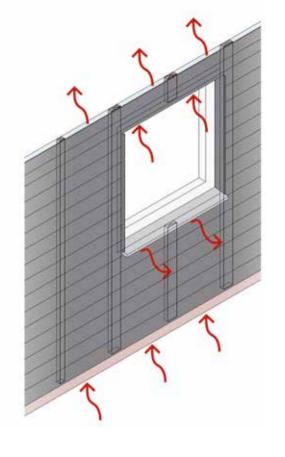


fig.1 - Ventilated Rainscreen

VIVIX® Lap Features & Benefits

VIVIX® Lap solid core planks consist of layers of specially selected papers, impregnated with thermosetting resins, fused together into robust, weather resistant cladding.

VIVIX Lap weatherboard offers many features and benefits:

High performance cladding

- UV & Weather Resistant
- Does not rot and is resistant to mold.
- Impact and abrasion resistant
- Highly resilient to cracking & chipping
- Practically maintenance free
- 10-year warranty
- Euroclass B-s1,d0 Fire Retardant Certificate in accordance with European regulation EN 13501-1
- Positive and negative wind load to CWCT standards
- ETAG034 accelerated weathering test

Low maintenance & easy to install cladding

- Pre-cut planks for quick installation
- Lightweight planks (4.6Kg per plank) compared to other cladding materials
- Ability to cut/modify planks as needed on site
- Minimal dust and mess created during cutting and installation process
- Simple drill and screw fix mechanism for fast fitting
- No sealants or painting required
- Complementary colour-matched profiles, trims and screws available to achieve the perfect finish
- Option to install on timber or steel framing
- Additional insulation can be built into the system to improve a buildings thermal efficiency

Versatile & flexible cladding

- Transform a building, quickly and cost effectively
- Suitable for residential and commercial buildings
- Over clad to refresh and rejuvenate old buildings
- Modern cladding solution for new builds
- System conceals the fixings, creating clean lines
- Use as a full façade or as a design feature
- System can be extended as the building grows
- Versatile for use on out buildings
- 8 essential plain colours and 4 True Scale wood decors available
- Complementary colour-matched profiles, trims and screws available to achieve the perfect finish

Sustainably manufactured cladding

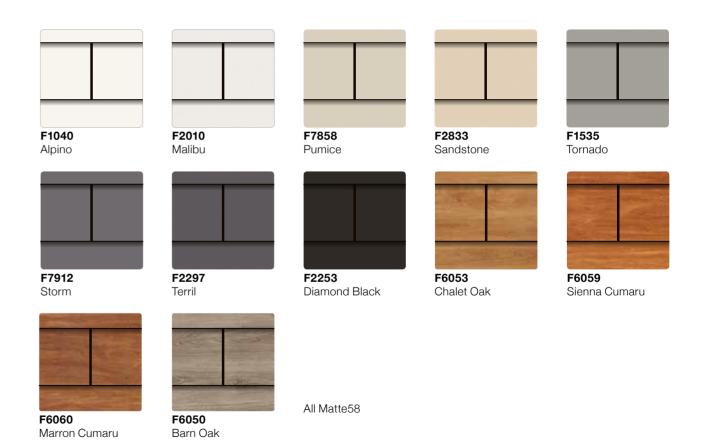
- FSC® certified laminate planks
- Carbon Reduction Label certified
- Life cycle assessed (LCA) in accordance with ISO 14044

VIVIX® Lap Dimensions & Specification

	VIVIX® Lap
Cladding style	Overlap
Fixing method	Screw fix
Plank length	2990mm
Plank height	180mm
Plank thickness	6mm
Grade	EDF
Decors	12
Texture	Matte58
Weight per plank	4.6Kg
Material per plank	0.54 m ²
Material per plank (visible once installed)	0.45 m ²

EDF - Exterior grade, severe use, flame retardant grade. Euroclass B-s1, d0 Fire Retardant Certificate in accordance with European regulation EN 13501-1.

VIVIX® Lap Weatherboard Range



VIVIX® Lap Planks - Size & Availability

	Range	Code	Decor	NCS®	RAL®
	Colors	F1040	Alpino	S 0502-G50Y	9010
	Colors	F2010	Malibu	S 1000-N	
	Colors	F7858	Pumice	S2005-Y20R	
	Colors	F2833	Sandstone	S2010-Y30R	
	Colors	F1535	Tornado	S 4500-N	7036
	Colors	F7912	Storm	S 6502-B	7015
19.70	Colors	F2297	Terril	S 7502-B	7016
	Colors	F2253	Diamond Black	S 9000-N	9011
	Woods	F6053	Chalet Oak		
	Woods	F6059	Sienna Cumaru		
	Woods	F6060	Marron Cumaru		
	Woods	F6050	Barn Oak		

Finish	Length (mm)	Width (mm)	Thickness (mm)	Weight Per Plank (Kg)	Grade
Matte 58	2990	180	6	4.6	EDF
Matte 58	2990	180	6	4.6	EDF
Matte 58	2990	180	6	4.6	EDF
Matte 58	2990	180	6	4.6	EDF
Matte 58	2990	180	6	4.6	EDF
Matte 58	2990	180	6	4.6	EDF
Matte 58	2990	180	6	4.6	EDF
Matte 58	2990	180	6	4.6	EDF
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VIVIX® Lap Fixings & Accessories



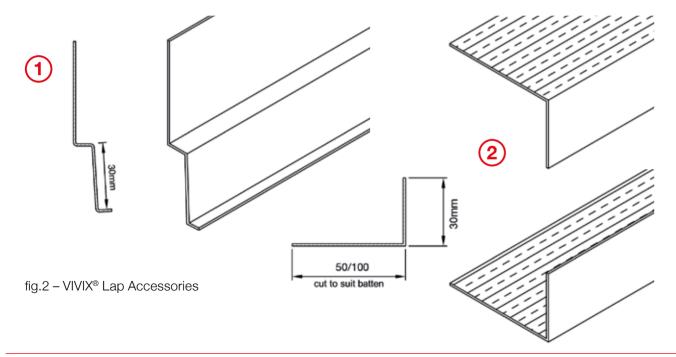
Stainless Steel **Drill Bit for Screw to Wood** (A4 grade) Sliding Points 28 (l) x 4.3 (d) x 6.5mm diameter 9.5mm (head dia.) 100 screws + Torx bit Stainless Steel **Drill Bit for Screw to Metal Fixed Points** (A4 grade) 4.3mm diameter 25 (l) x 4.2 (d) x 9.5mm (head dia.) 100 screws + Torx bit Available colours EPDM/Joint Gasket Self Adhesive 25m roll (I) x 50mm (w) 25m roll (I) x 105mm (w)

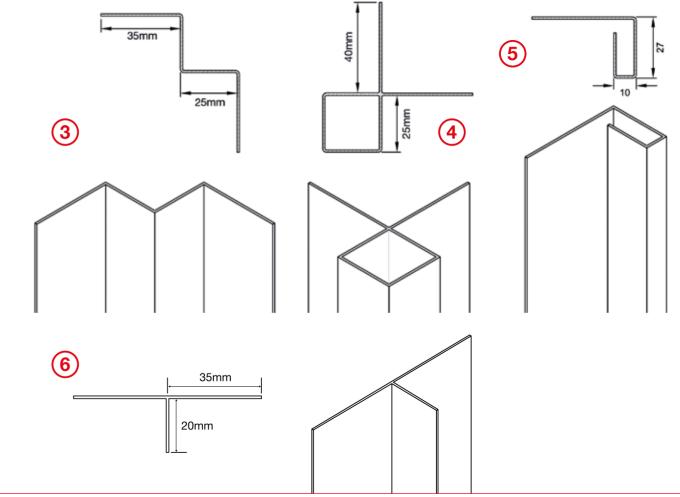
Powder coated profiles and screws are offered to provide the perfect finishing touch. Please note, powder coated colours are complementary to the VIVIX® Lap decors, they are not exact matches.

VIVIX® Lap Fixings & Accessories

- 1. Aluminium horizontal starter profile
- 2. Aluminium perforated closure
- **3.** Aluminium internal corner profile

- **4.** Aluminium external corner profile
- **5.** Aluminium edge profile
- **6.** Aluminium joint profile





VIVIX® Lap Fixings & Accessories

VIVIX® Lap	Plank decors		
	Range	Code	Decor
	Colors	F1040	Alpino
	Colors	F2010	Malibu
	Colors	F7858	Pumice
	Colors	F2833	Sandstone
	Colors	F1535	Tornado
	Colors	F7912	Storm
	Colors	F2297	Terril
	Colors	F2253	Diamond Black
3/1	Woods	F6053	Chalet Oak
	Woods	F6059	Sienna Cumaru
	Woods	F6060	Marron Cumaru
THE REAL PROPERTY.	Woods	F6050	Barn Oak

VIVIX® Lap Accessories Accessory colour matches		Screws to wood
	NCS®	SST
	S0502-G50Y	VA1040SST
	S1000-N	VA2010SST
	S2005-Y20R	VA7858SST
	S2010-Y30R	VA2833SST
	S4500-N	VA1535SST
	S6502-B	VA7912SST
	S7502-B	VA2297SST
	S9000-N	VA2253SST
	S5020-Y20R	VA6053SST
	S5040-Y30R	VA6059SST
	S6030-Y20R	VA6060SST
	S6010-Y10R	VA6050SST

		Horizontal starter profile	Perforated closure 50mm	Perforated closure 100mm
Range	Name	HST	PCL	PCL
All	Non decorative / factory finish	VA9999HST	VA0050PCL	VA0100PCL

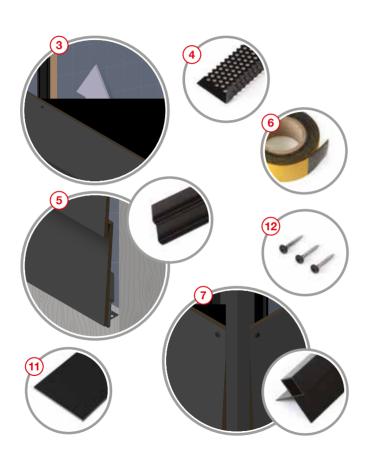
Screws to metal	Internal corner profile	External corner profile	Edge profile	Lap joint profile
SSM	ICP	ECP	EPR	LJP
VA1040SSM	VA1040ICP	VA1040ECP	VA1040EPR	VA1040LJP
VA2010SSM	VA2010ICP	VA2010ECP	VA2010EPR	VA2010LJP
VA7858SSM	VA7858ICP	VA7858ECP	VA7858EPR	VA7858LJP
VA2833SSM	VA2833ICP	VA2833ECP	VA2833EPR	VA2833LJP
VA1535SSM	VA1535ICP	VA1535ECP	VA1535EPR	VA1535LJP
VA7912SSM	VA7912ICP	VA7912ECP	VA7912EPR	VA7912LJP
VA2297SSM	VA2297ICP	VA2297ECP	VA2297EPR	VA2297LJP
VA2253SSM	VA2253ICP	VA2253ECP	VA2253EPR	VA2253LJP
VA6053SSM	VA6053ICP	VA6053ECP	VA6053EPR	VA6053LJP
VA6059SSM	VA6059ICP	VA6059ECP	VA6059EPR	VA6059LJP
VA6060SSM	VA6060ICP	VA6060ECP	VA6060EPR	VA6060LJP
VA6050SSM	VA6050ICP	VA6050ECP	VA6050EPR	VA6050LJP

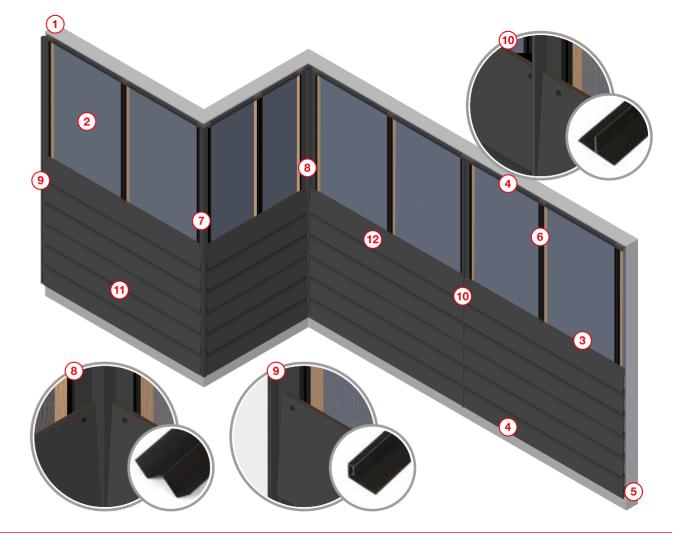
Drill bit fixed point 4.3mm	Drill bit sliding point 6.5mm	EPDM 50mm width	EPDM 105mm width
DFP	DSP	RJT	RJT
VA9999DFP	VA9999DSP	VA0050RJT	VA0105RJT

VIVIX® Lap Weatherboard Cladding System

Weatherboard system is made up of the following elements:

- Substructure, which transmits load to the structural wall (Timber battens/ Steel frames)
- 2. Breathable waterproof membrane
- 3. Air cavity
 Thermal insulation (if required)
- 4. Perforated Closure
- **5.** Horizontal Starter Profile
- **6.** EPDM Gasket
- 7. External Corner Profile
- 8. Internal Corner Profile
- **9.** Edge Profile
- **10.** Lap Joint Profile
- 11. VIVIX® Lap planks
- **12.** Plank fixing screws





Preparation – Tools & Equipment

To install VIVIX® Lap weatherboard cladding the following tools are recommended:

- Cladding design plan (see fig. 3)
- Sub frame (Timber battens or steel framing, with correct fixings and drill)
- Breathable waterproof membrane
- EPDM/ Gasket
- Spirit level
- VIVIX® Lap planks
- Screws for planks
- Drill for plank fixings
- 4.3mm drill bit for fixed points

- 6.5mm drill bit for sliding points
- Finishing profiles & trims
- Tape measure & pencil
- Personal Protective Equipment (PPE)
- Jig saw/ Mitre saw/ Circular saw
- Support timber sheet for drilling holes
- Gauge clamps are available from different manufacturers, to provide extra plank installation support if required

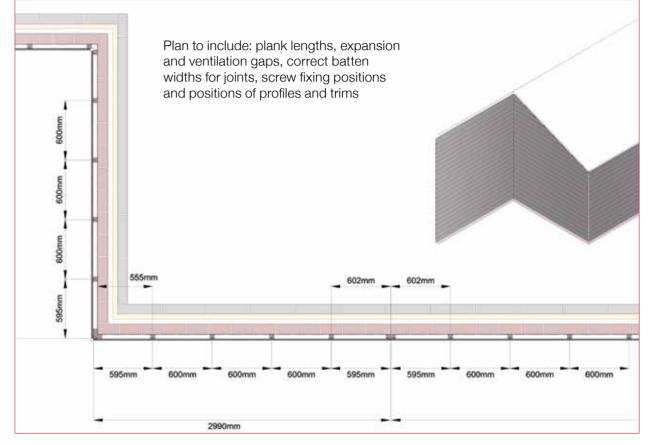


fig.3 - Cladding plan example

Storage/ Handling

- VIVIX® Lap planks are sold in packs.
- Prior to conditioning, Lap planks should be stored horizontally on flat pallets or bearers on a level surface in a dry, sheltered position (see fig.4)
- A pre-conditioning of 72 hours on site is required, remove all outer packaging
- Shield the protective film on the surface of the planks from solar radiation or heat sources
- The removable protective film should be removed from both sides before installation (see fig. 5)

- During conditioning, VIVIX Lap planks should be stored horizontally on flat pallets or bearers on a level surface and should be covered to limit moisture build-up, whilst ensuring adequate ventilation (see fig.6)
- Panels should be fully inspected prior to cutting, drilling or installation
- Packaging can be recycled
- Lift planks straight up, do not slide the planks against each other (see fig. 7)
- When carrying planks, it is recommended to wear gloves. Turn the planks onto their side/ hold by the edge (see fig. 8)

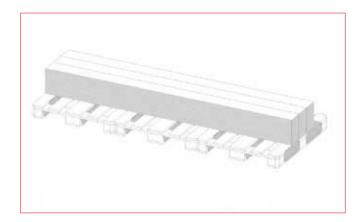


fig.4 - Store horizontally on a level surface

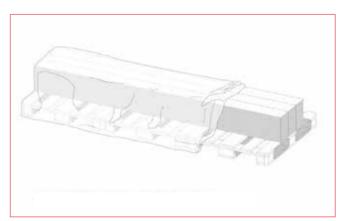


fig.6 - Cover during storage

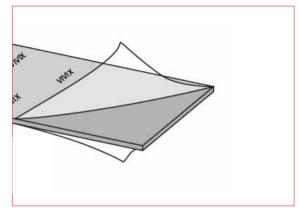


fig.5 – Remove protective film both sides

Storage/ Handling

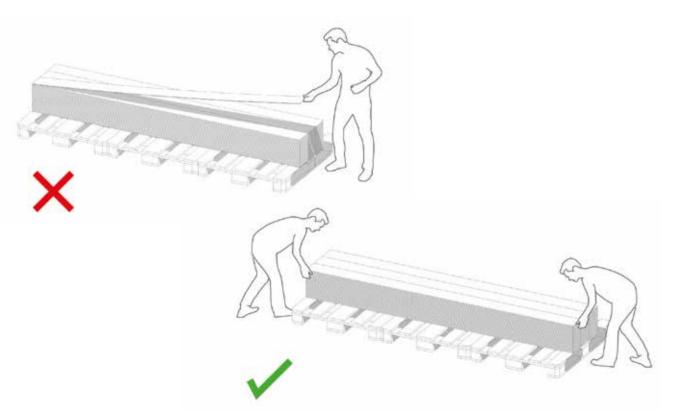


fig.7 - Do not slide planks/ Lift planks straight up

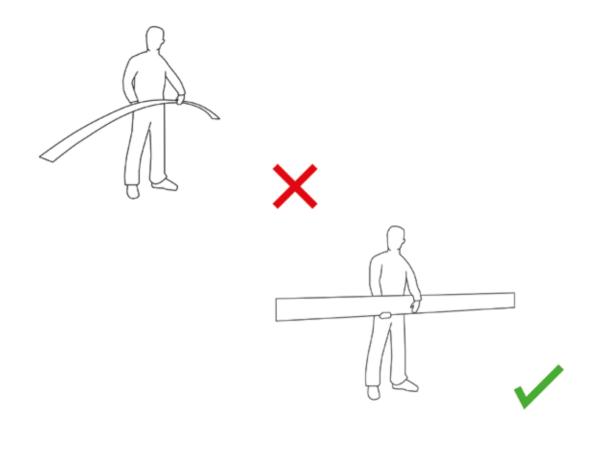


fig.8 – When carrying planks, wear gloves & hold in the middle, on its edge

Cutting

- VIVIX® Lap planks are suitable for cutting using a mitre saw, jig saw or circular saw
- For longer life and better performance tungsten carbide tipped (TCT) or polycrystalline (PCD) saws and cutters are recommended
- Optimise feed and height for smooth cuts
- Dependant on which method you use to cut the VIVIX Lap planks, one side may have a rougher finish. Ensure you plan to cut and install the smoothest side of the plank facing outwards

- Edge imperfections can be sanded or filed using a fine grade of sandpaper or a file (see fig.9)
- Round off corners at cut-outs to avoid stress cracks or cracking, recommended radius of 5-6mm (see fig.10)
- For more detailed Formica® Compact fabrication guidelines visit formica.com

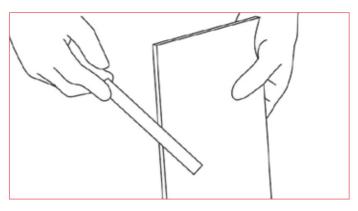


fig.9 – Edge imperfections can be sanded or filed

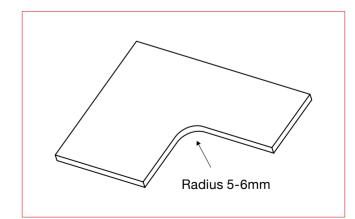


fig.10 – rounded corners of cut outs

Drilling

- Use hardened steel drill bits. VIVIX® Lap drill bits are available.
- Max. recommended fixing distance on VIVIX Lap planks is 600mm (minimum 2 fixings)
- Fixing distances can be reduced as required, to realise your cladding design
- Holes should be drilled 20mm from the top of each plank (see fig.11)

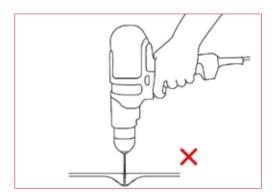
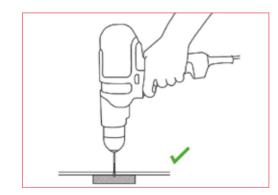


fig.12 - Drill with support sheet under plank

- When drilling, a support sheet should be placed under the Lap plank at the drill point, to prevent exit hole damage on the reverse of the plank (see fig.12)
- Min. recommended distance between plank end and drilled hole 20mm/ max distance 60mm

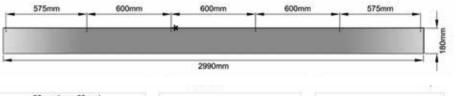


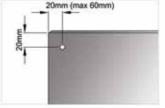
1 Fixed point per plank

- Each plank is recommended to have 1 fixed point (see fig.11)
- Drill a 4.3mm hole, the same diameter as the fixing screw (see fig. 13)
- This provides a fixed anchor.
- It is recommended to make the fixed point central.
- VIVIX Lap fixed point drill bit is available to purchase

Sliding points

- All other holes/ or sliding points, should be 6.5mm diameter (1.5 x the screw diameter) to allow natural movement of the V-Lap plank (see fig. 14)
- Ensure screws are located centrally in this hole
- VIVIX sliding point drill bit is available to purchase

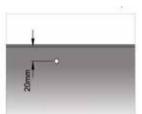




6.5mm diameter hole (sliding point) to be drilled 20mm from top of board and 20mm (max 60mm) from end of plank



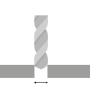
1 fixed point required for each board, with 4.3mm diameter hole drilled 20mm from top of board



6.5mm diameter holes (sliding points) to be drilled 20mm from top of board



4.3mm diameter fig.13 – Fix point



6.5mm diameter fig.14 – Sliding point

fig.11 - Drill hole parameters

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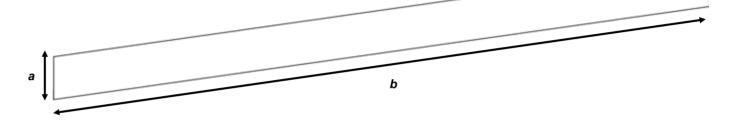
Wind Load Calculations

Calculations for façade systems - Loads to be taken into consideration

The loading to be factored into calculating the façade system is worked out using the weight of the planks themselves and the wind load.

The effects of variations in temperature or humidity do not need to be taken into account when the system has been calculated and executed properly.

The installer must take into account local wind load and national building regulations and increase number of fixings/ reduce fixing distances as appropriate.



Typical values for dimensional movement due to extreme change in relative humidity.

a	b
0.45-0.55 mm/ per plank	1.0 - 1.5mm/ per m
(height)	(length)

Thickness	6.0mm
Weight per plank	4.6kg

- VIVIX® Lap planks can be installed on both wooden and steel support structures
- It is important to create a cladding plan in advance, to ensure framing positions are correct to match cladding fixing points (see example in fig.3)
- Install vertical treated timber battens/ steel framing (see fig.15) at maximum 600mm centres
- Fixing distances can be reduced as required, to allow you to realise your cladding design

- Jointing timber battens must be a minimum 90mm wide, to accommodate 2 x end plank fixings (see fig.16)
- Intermediate timber battens must be a minimum of 40mm wide to accommodate 1 x central fixing (see fig.17)
- The installer must take into account local wind load and national building regulations and increase number of fixings/ reduce fixing distances as appropriate.

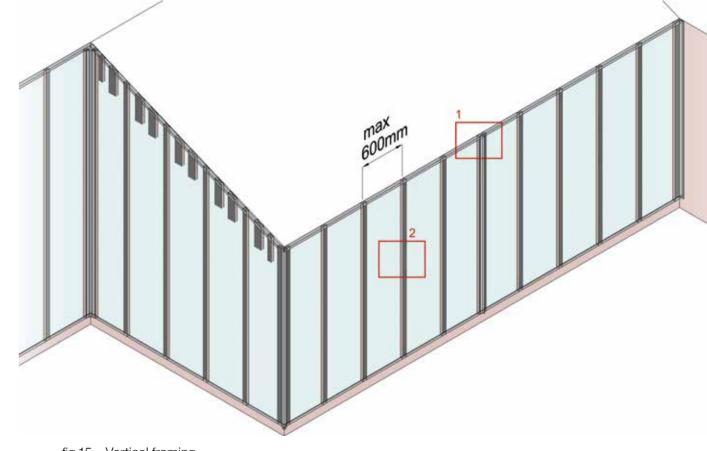
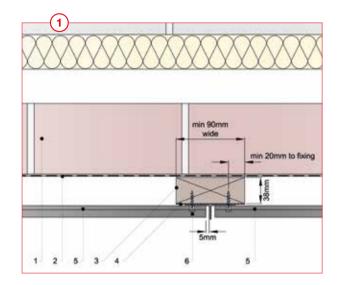
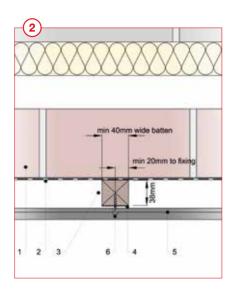


fig.15 - Vertical framing



- 1. Brick/ Blockwork wall
- 2. Breathable waterproof membrane
- 3. Treated timber batten
- 4. FPDM
- 5. VIVIX® Lap plank
- 6. Stainless steel wood screw

fig.16 - Jointing timber batten



- 1. Brick/ Blockwork wall
- 2. Breathable waterproof membrane
- 3. Treated timber batten
- 4. FPDM
- 5. VIVIX® Lap plank
- 6. Stainless steel wood screw

fig.17 - Intermediate timber batten

- Good practice is to include a breathable membrane behind the battens on structures susceptible to moisture ingress (e.g timber frame and metal stud)
- Minimum of 20mm air circulation space must be maintained behind the VIVIX® Lap planks to allow ventilation
- The cavity should not be closed off at the top or the bottom, or at door or window sections (see fig.1)
- The minimum distance between a solid object and VIVIX Lap planks is 5mm (such as walls, windows, doors, roofline and finishing profiles), to maintain ventilation and allow for movement and drainage
- It is recommended that the bottom of the battens/ framing has ground clearance of a minimum 160mm

- Treated timber battens not less than 26mm thickness should be used, to ensure the minimum recommended cavity depth.
- However, wall construction and framing specification must be calculated based on cladding weight, wind loads and the requirements of local building regulations.
- The depth of the cladding system can be increased as required to include insulation etc, however a clear 20mm cavity directly behind the VIVIX Lap planks must be maintained
- If additional insulation is required, horizontal battens/ framing can be installed to house the extra insulation
- Vertical battens/ framing should then be installed directly onto the horizontal battens/ framing

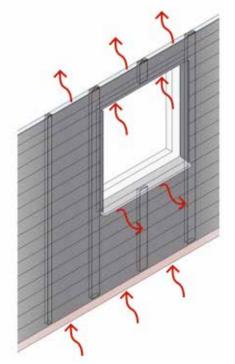


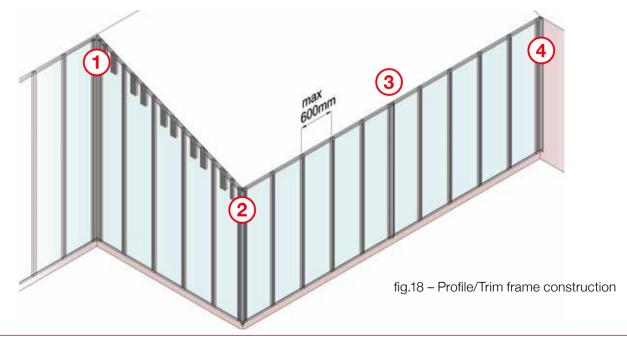
fig.1 - Ventilated Rainscreen

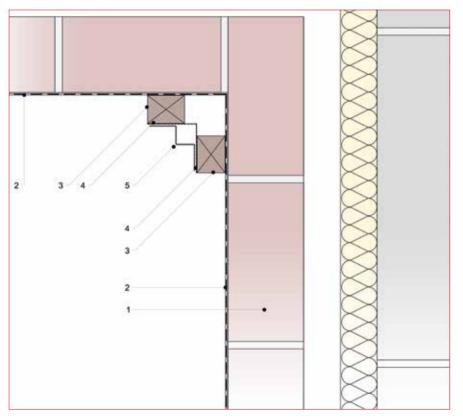
Framing & Clearances Summary	
Max. span	600mm
Min. ground clearance batten/plank	160/ 150mm
Min. cavity depth	20mm
Min. plank to plank joint gap	8mm
Plank to solid object (window, wall, roofline)	5mm

In advance of cladding, install additional framing (see fig.18) to support:

- Extra corner and joint framing to fix profiles and trims
- Perforated closures
- Starter trims
- EPDM gasket to timber battens

- Internal corner profiles (see fig. 18/detail 1)
- External corner profiles (see fig. 18/detail 2)
- Lap joint profiles (see fig. 18/detail 3)
- Edge profiles (see fig. 18/detail 4)

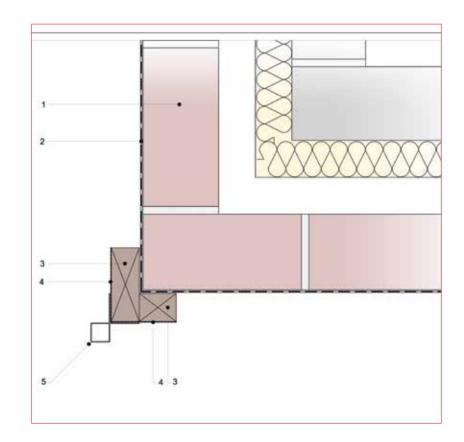




- 1. Brick/ Blockwork wall
- Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- 5. Internal Corner Profile



fig.18/ detail 1 – Internal Corner Profile construction

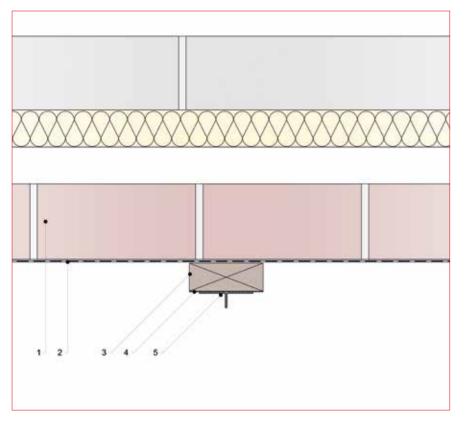


- 1. Brick/ Blockwork wall
- 2. Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- 5. External Corner Profile



fig.18/ detail 2 – External Corner Profile construction

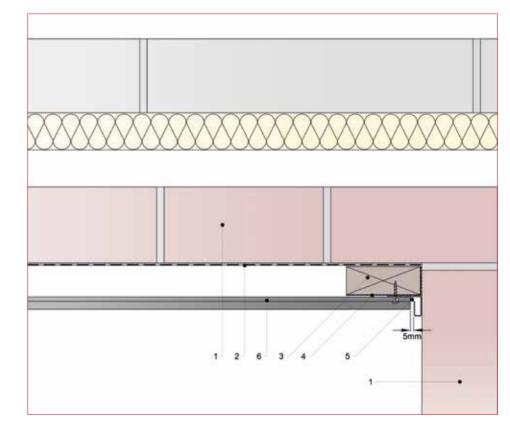
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- 1. Brick/ Blockwork wall
- Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- 5. Joint profile



fig.18/ detail 3 – Lap Joint Profile construction



- 1. Brick/ Blockwork wall
- 2. Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- 5. Edge Profile
- 6. VIVIX® Lap plank



fig.18/ detail 4 – Edge Profile construction

Perforated Closures

- A perforated closure trim is recommended along the top and bottom of the cavity, to protect from debris or foreign objects (see fig. 19)
- Also recommended for use on windows and doors
- Perforated to allow constant flow of air through the cladding system
- Perforated closures can be nailed or screwed to the top and underside of battens
- Fix perforated closure strips into position, before starting to fix VIVIX® Lap planks
- Standard closure sizes are available, they can also be trimmed down as necessary

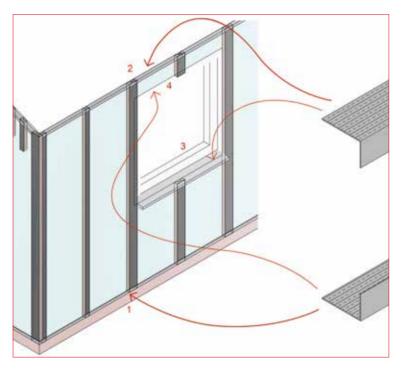
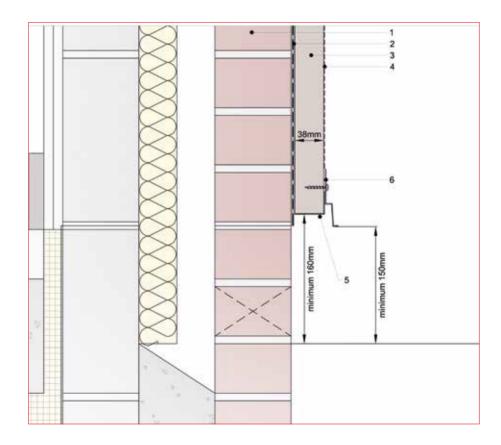


fig.19 - Perforated Closures

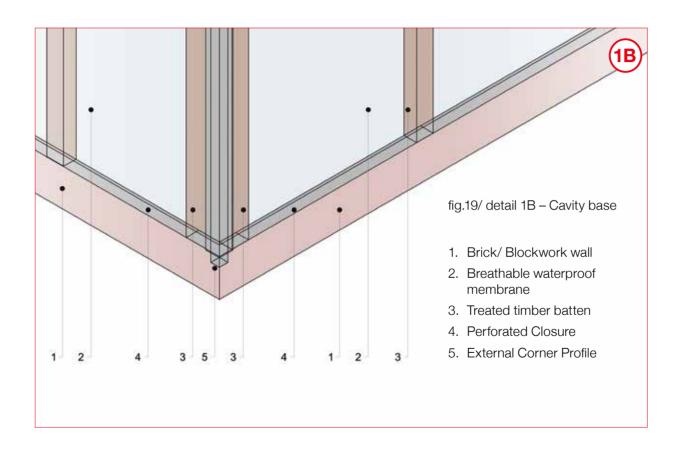


- 1. Brick/ Blockwork wall
- 2. Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- 5. Perforated Closure
- 6. Horizontal Starter Profile



fig.19/ detail 1A – Cavity base

Perforated Closures



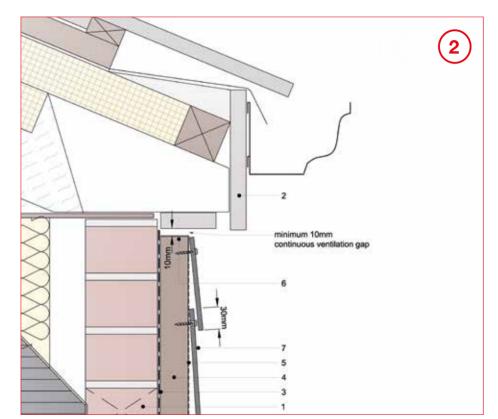
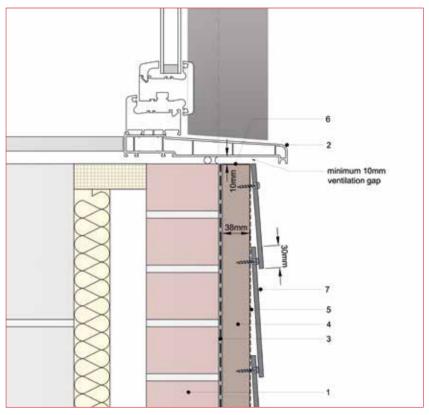


fig.19/ detail 2 - Cavity top

- 1. Brick/ Blockwork wall
- 2. Existing roof eaves and fascia board
- 3. Breathable waterproof membrane
- 4. Treated timber batten
- 5. EPDM
- 6. Perforated Closure
- 7. VIVIX® Lap plank

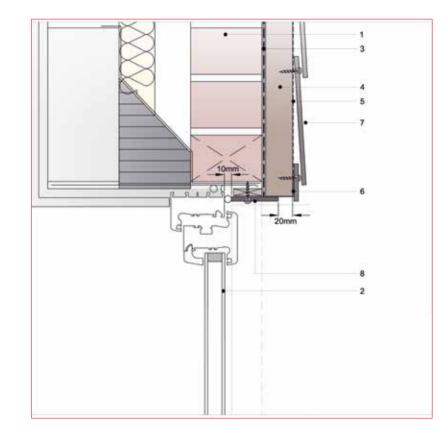
Perforated Closures



- 1. Brick/ Blockwork wall
- 2. New window with extended cill drip
- 3. Breathable waterproof membrane
- 4. Treated timber batten
- 5. EPDM
- 6. Perforated Closure
- 7. VIVIX® Lap plank



fig.19/ detail 3 - Window cill



- 1. Brick/ Blockwork wall
- 2. New window with extended cill drip
- 3. Breathable waterproof membrane
- 4. Treated timber batten
- 5. EPDM
- 6. Perforated Closure
- 7. VIVIX® Lap plank
- 8. Cut section of VIVIX Lap plank



fig.19/ detail 4 – Window head

Horizontal Starter Trim

- It is recommended to use a VIVIX® Lap Starter Trim
- It ensures the 1st plank achieves the optimum angle and support
- Fix starter trim along the base of the timber/ steel vertical frames, ensuring it is level and fix into position (see fig. 20)
- Ensure the bottom of the trim is lower than the base of the frame (10mm recommended), so the frame is fully concealed once the 1st plank is installed (see fig. 19/ detail 1A)
- Recommended clearance between the ground and bottom of the: starter trim minimum 150mm/ batten or frame 160mm
- Ensure gaps between lengths of starter trims are aligned with plank joints (see fig. 21)

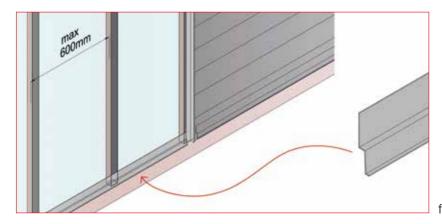
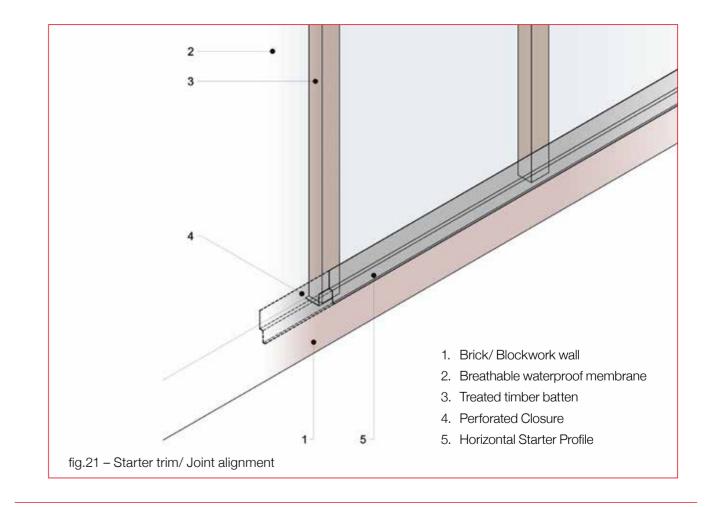
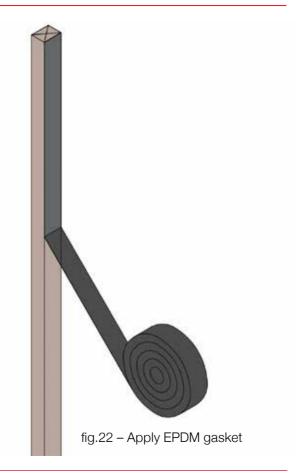


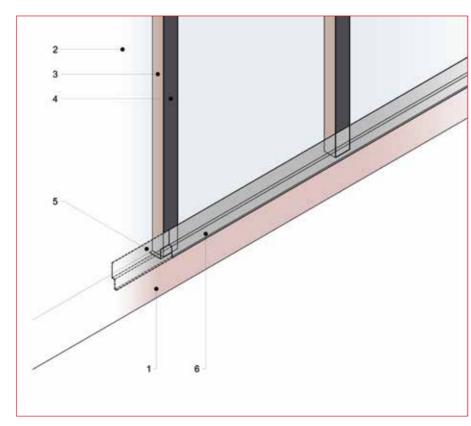
fig.20 - Starter trim



Applying EPDM Gasket

- We recommend using lengths of EPDM on the face of all timber battens (joint and intermediary battens)
- EPDM protects the timber from water/ moisture ingress
- Provides a flat/ consistent surface on each batten to affix VIVIX® Lap planks
- VIVIX Lap self adhesive EPDM is available to provide a simple application
- Non adhesive EPDM can also be applied using nails or can be stapled
- Ensure the EPDM is at least the width of the batten (it can overhang or be trimmed)
- Run EPDM from the top of the frame to the bottom of the frame (see fig. 22)
- Cut the EPDM neatly above the starter trim (see fig.23)
- For staggered open joints an additional layer of EPDM can be applied to conceal the top of the underneath plank (see fig. 29)



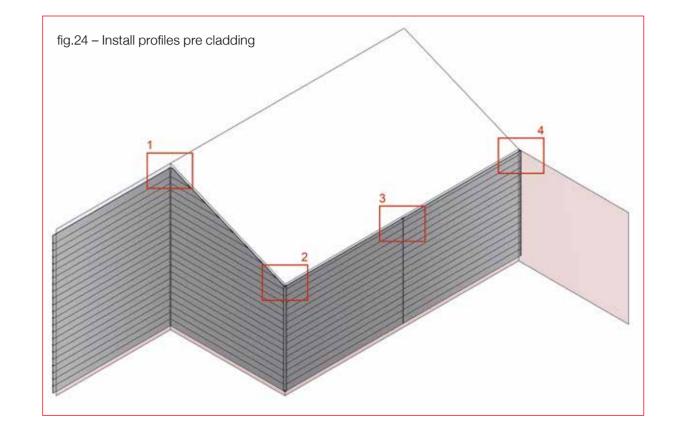


- 1. Brick/ Blockwork wall
- 2. Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- 5. Perforated Closure
- 6. Horizontal Starter Profile

fig.23 – Cut EPDM above starter trim

Corner & Joint Profiles

- After applying EPDM to timber battens, screw or nail profiles and trims into place, ensuring they are level and in the correct position (see fig. 24)
- Internal Corner Profiles (see fig.24/ detail 1A & 1B)
- External Corner Profiles (see fig.24/ detail 2A & 2B)
- **Joint Profiles** (see fig.24/ detail 3A & 3B)
- Jointing battens must be minimum 90mm wide & gaps between planks a minimum 8mm
- Edge Profiles (see fig.24/ detail 4A & 4B)
- Minimum distance between VIVIX® Lap planks and solid objects, including walls and profiles is 5mm
- Ensure gaps between starter trims are aligned with plank joints



Corner & Joint Profiles - Internal Corner Profiles

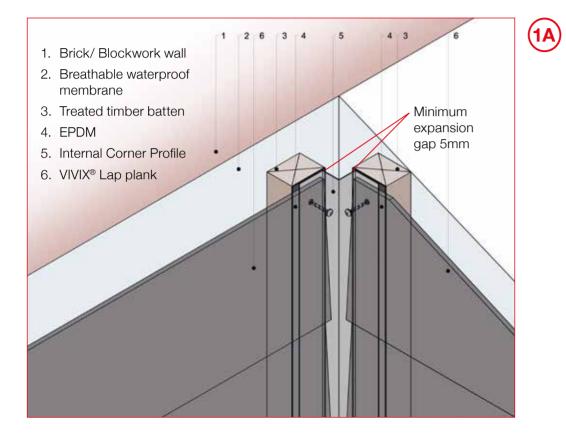
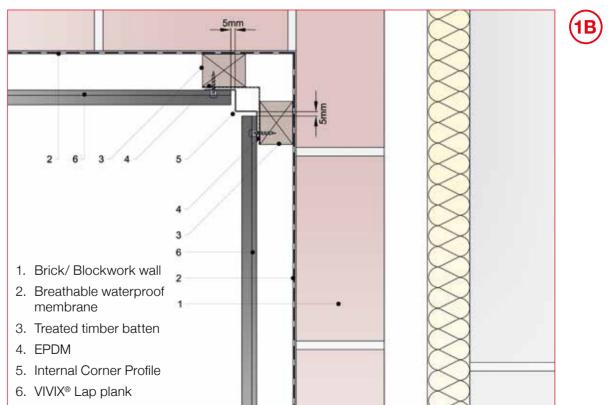
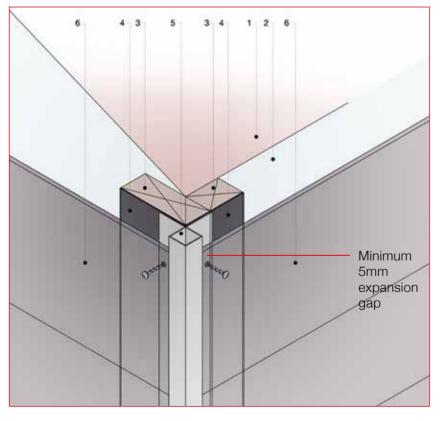


fig.24/ detail 1A & 1B - Internal Corner Profiles





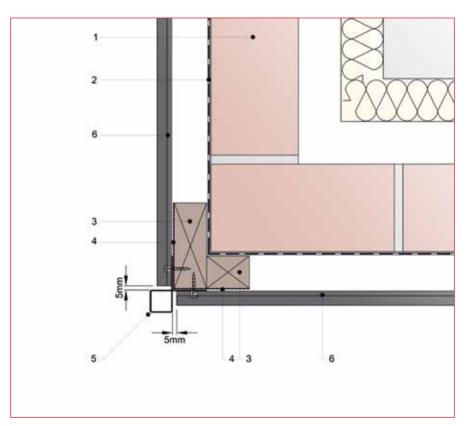
Corner & Joint Profiles - External Corner Profiles





- 1. Brick/ Blockwork wall
- 2. Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- External Corner Profile
- 6. VIVIX® Lap plank

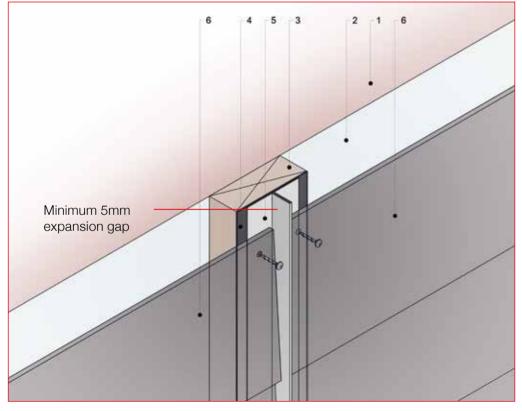
fig.24/ detail 2A & 2B - External Corner Profiles





- 1. Brick/ Blockwork wall
- 2. Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- 5. External Corner Profile
- 6. VIVIX® Lap plank

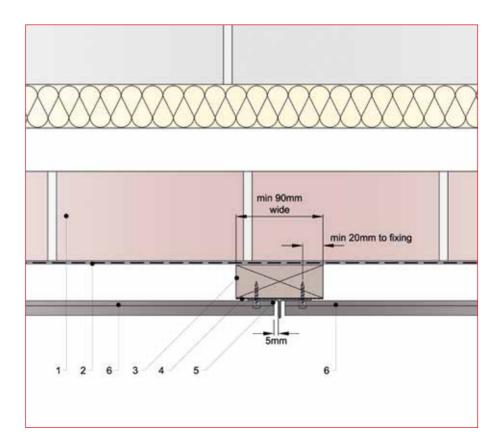
Corner & Joint Profiles - Lap Joint Profiles





- 1. Brick/ Blockwork wall
- Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- 5. Joint profile
- 6. VIVIX® Lap plank

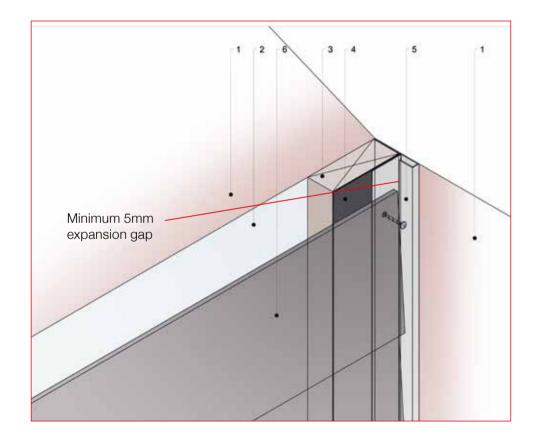
fig.24/ detail 3A & 3B - Lap Joint Profiles





- 1. Brick/ Blockwork wall
- 2. Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- Joint profile
- 6. VIVIX® Lap plank

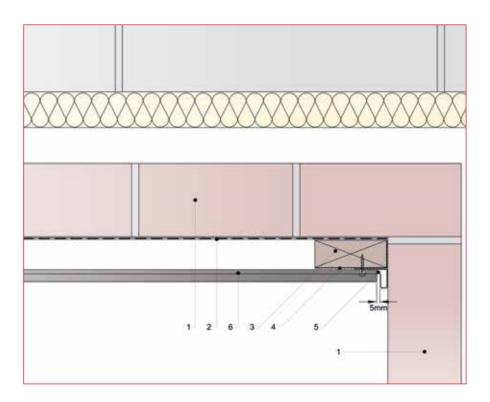
Corner & Joint Profiles - Edge Profiles





- 1. Brick/ Blockwork wall
- Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- 5. Edge Profile
- 6. VIVIX® Lap plank

fig.24/ detail 4A & 4B - Edge Profiles





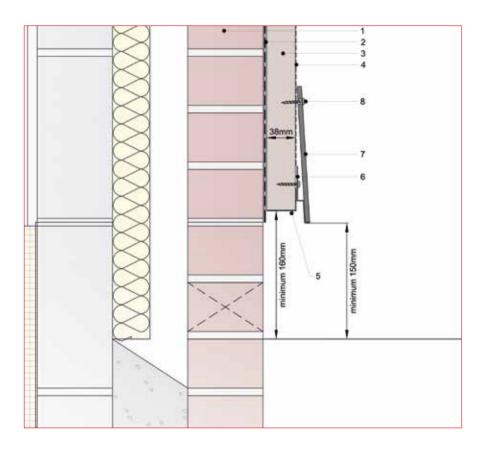
- 1. Brick/ Blockwork wall
- 2. Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- 5. Edge Profile
- 6. VIVIX® Lap plank

Installing the 1st Plank

- VIVIX® Lap planks can be installed on both wooden and steel supporting frames
- You should always clad from the base of the wall upwards
- Pre drill your 1st plank in accordance with your cladding plan
- Using a full length plank or a pre cut plank, accurately mark the position of each hole (see fig. 11)
- Holes must be:
 - 20mm from the top edge of the plank
 - a minimum 20mm from the plank end (max. 60mm)
 - a minimum 20mm from the external edge of the batten/ frame
 - VIVIX Lap planks should be fixed to each vertical batten/ frame
 - Maximum fixing span is 600mm (minimum 2 fixings)
- Once holes have been drilled, place the 1st VIVIX Lap plank onto the starter trim (see fig. 25)
- Align pre drilled holes with timber/ steel framing
- Fix into place using recommended screws for wood or steel (see fig. 26) using supplied torx bit
- Ensure screw location is central in the drilled hole



Installing the 1st Plank



- 1. Brick/ Blockwork wall
- Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- 5. Perforated Closure
- 6. Horizontal Starter Profile
- 7. VIVIX® Lap plank
- 8. Stainless steel wood screw

fig.26 - 1st plank, side view

Screw Fixing

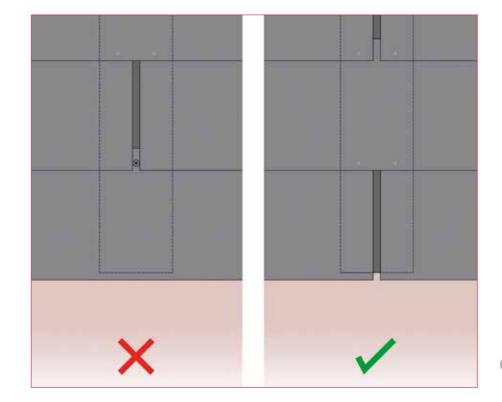
- Corrosion resistant stainless steel screws are recommended and are available as part of the VIVIX® Lap cladding programme
- Countersunk screws should not be used (see fig. 27)
- Recommendation to make the 1st fixing the "fixed/ anchor point" (1 required per plank), preferably the middle plank fixing (see fig.11)
- Ensure the plank is level and fix the remaining holes (sliding points)
- Specific VIVIX Lap screws are recommended, dependant if fixing to timber or a steel framing system, along with appropriate torx bit for your drill
- On timber framing, a minimum screw embedment of 20mm is recommended.
- On steel framing, screws must achieve minimum 7mm penetration
- Ensure screw location is central in the drilled hole



fig.27 - Recommended screws

Vertical Joints

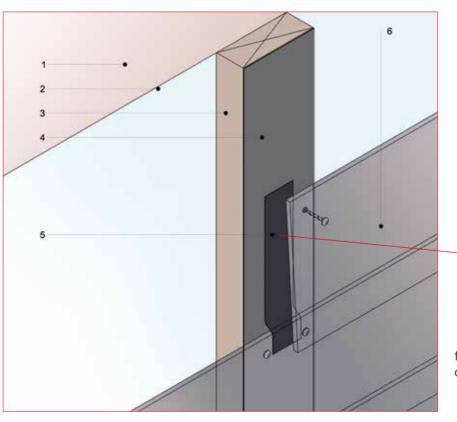
- The end of each VIVIX® Lap plank must align with a vertical batten/ frame, so it can be fixed
- Fixing must be a minimum 20mm from the plank end/ max. 60mm (see fig. 11)
- It is recommended that fixings are a minimum 20mm from the external edge of the batten/ frame
- VIVIX Lap planks should be fixed to each vertical batten/ frame
- For staggered cladding arrangements, the number of fixings and fixing positions should be mirrored exactly up the length of the batten for every plank (joint sections and non joint sections), to avoid having a visible fixing, to support the board edges and achieve a straight, flat plank (see fig.28)



Recommended screw positions

fig.28 - Staggered joints

Vertical Joints



- Brick/ Blockwork wall
- 2. Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- 5. Additional EPDM 50mm strip behind open joint
- 6. VIVIX® Lap plank

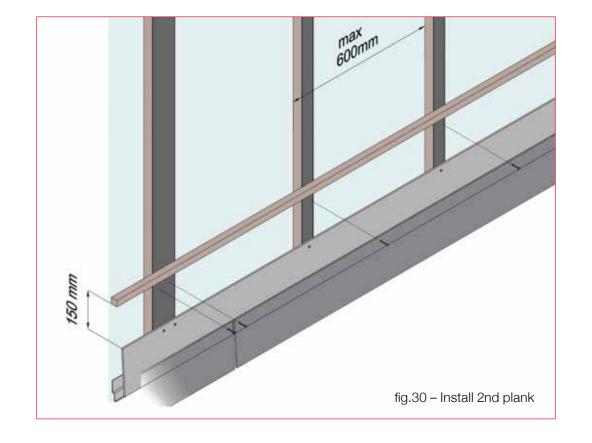
Minimum 8mm expansion gap

fig.29 – EPDM for staggered open joints

- For staggered open joints an additional layer of EPDM can be applied for aesthetic & weathering purposes (see fig. 29)
- For all joint battens, apply 105mm EPDM across full width of batten (trim as necessary)
- Then recommend cutting a 180mm length strip of 50mm wide EPDM
- Apply 50mm width EPDM centrally, starting 20mm above the top of the open joint
- Apply down the batten and overlap the top of the installed plank below (see fig. 29)
- EPDM strip should end 10mm above the bottom of the joint planks once installed
- Screw fix end of planks, outside the edge of the central 50mm strip
- A minimum jointing gap of 8mm is recommended between VIVIX® Lap planks, to allow for natural expansion/ contraction
- If using a jointing trim, ensure a minimum 5mm gap either side of the joint "beak" (see fig.24/ detail 3A & 3B)
- The distance between a solid object and the end of a VIVIX Lap plank must be min. 5mm (wall or a corner profile)
- Never butt joint VIVIX Lap planks

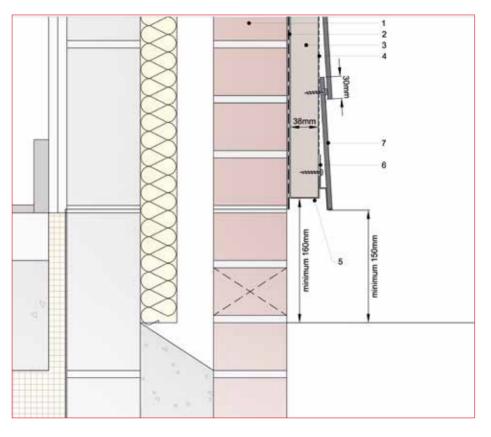
Installing the 2nd Plank+

- Once the 1st plank has been successfully installed (ensuring the plank is level) the 2nd plank can be installed directly above it
- Measure 150mm from the top of plank 1, this will give you the position of the top of plank 2
- A straight length of timber can be used as a guide for setting this position across the vertical frames (see fig. 30)
- Screw fixing on all planks is 20mm from the top of the plank (see fig.11)
- Plank 2 should overlap the top of plank 1 by 30mm (see fig. 31)
- Fixings are concealed by the next overlapping plank, creating clean, smooth lines
- VIVIX® Lap planks have a height of 180mm, once overlapped, 150mm height of plank face is visible
- The overlapping plank sits on top of the screw head of the plank below, creating a thin ventilation gap between each plank. It is important to ensure that this ventilation gap is maintained (see fig. 32)
- Continue this fixing method on all planks to the top of the façade
- VIVIX Lap planks should be fixed to each vertical batten/ frame
- Ensure joint gaps (8mm) and gaps to solid objects (5mm) are observed at all times



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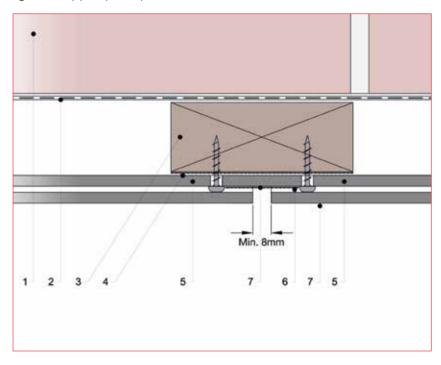
Installing the 2nd Plank+



- 1. Brick/ Blockwork wall
- 2. Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- 5. Perforated Closure
- 6. Horizontal Starter Profile
- 7. VIVIX® Lap plank

fig.31 – 2nd plank overlap

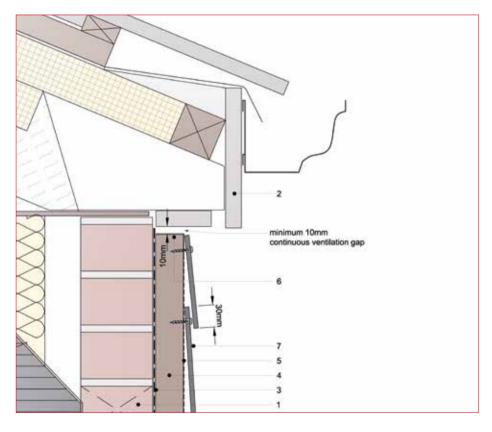
fig.32 - Lapped plank plan view



- 1. Brick/ Blockwork wall
- 2. Breathable waterproof membrane
- 3. Treated timber batten
- 4. EPDM
- 5. VIVIX® Lap plank
- 6. Overlapping plank sits on top of screw heads of plank below, creating ventilation gap
- 7. Additional EPDM 50mm strip behind open joint

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Installing the 2nd Plank+



- 1. Brick/ Blockwork wall
- 2. Existing roof eaves and fascia board
- 3. Breathable waterproof membrane
- 4. Treated timber batten
- 5. EPDM
- 6. Perforated Closure
- 7. VIVIX® Lap plank

fig.33 – Top plank fixing

- Fixings will be visible on the top row of planks, screws are colour matched to provide a discreet finish (see fig.33)
- Bespoke roofing trims can also be used to conceal fixings
- The top plank can be reduced in height/adjusted to fit the wall design (see fig. 34)

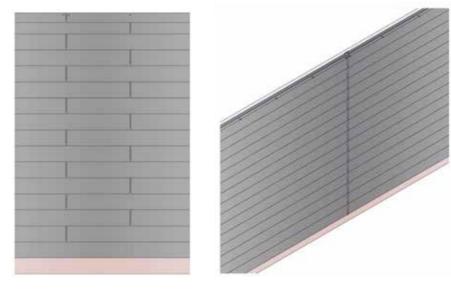
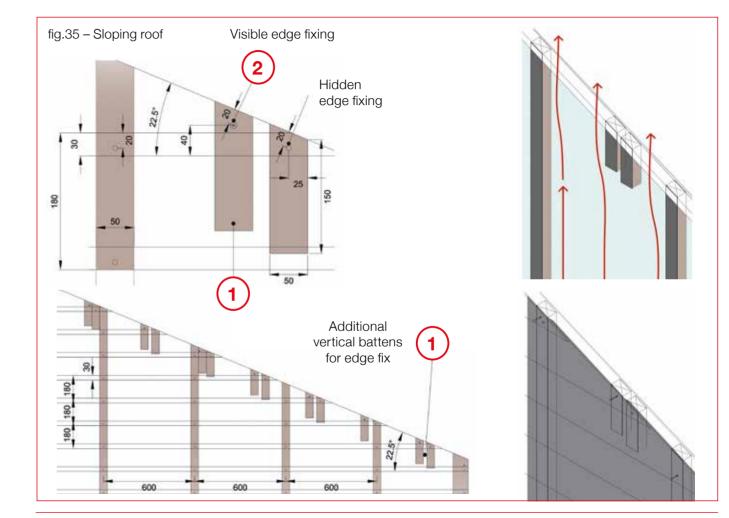


fig.34 - Clad wall

Gable Ends

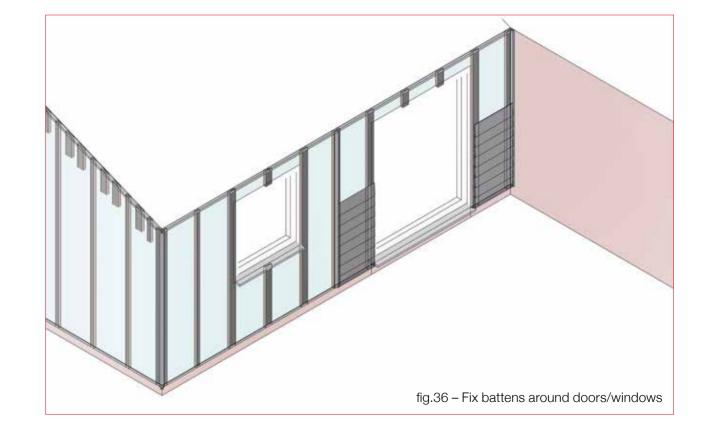
- Where the VIVIX® Lap planks meet a sloping roof, they need to be cut to a parallel angle (see fig. 35)
- Due to the angle of the planks, an additional (visible) fixing is required to secure the bottom edge
- Recommendation is to install additional vertical battens and EPDM gasket (short lengths) in between the main battens, at appropriate positions to fix the bottom edge of each plank (see fig.35/ detail 1)
- The cut planks should be fixed as normal 20mm from the top edge and a minimum 20mm/ maximum 60mm from the edge of the plank (see fig.35/ detail 2)
- The bottom edge (visible) fixing should be a minimum 40mm from the bottom plank edge, to ensure it fixes directly to the vertical batten and stays clear of the plank below (see fig.35/ detail 2)
- All fixings should be a minimum 20mm from the external edge of the batten/ frame
- Positioning of additional battens and bottom edge fixing points should be adapted depending on the angle of the sloping roof (fig. 35 is an example only)
- The distance between a solid object such as a soffit and the end of a VIVIX Lap plank must be min. 5mm
- A 20mm cavity directly behind the VIVIX Lap planks must be maintained and therefore additional verticals with adequate gaps are recommended to allow a constant flow of air



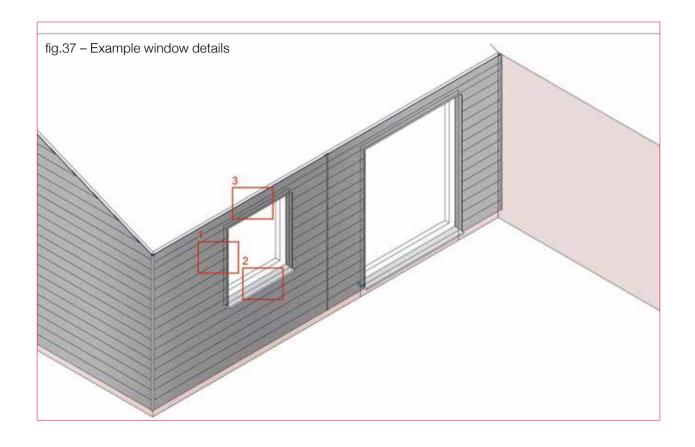
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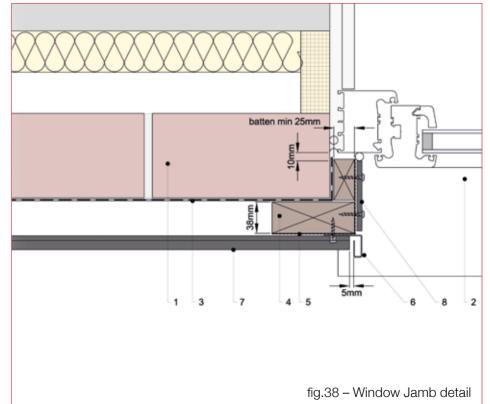
Windows & Doors

- It is important to incorporate additional vertical framing to the sides and above windows and doors, to ensure planks can be secured correctly (see fig.36)
- For window and door heads, a cut length of starter trim can be used to restart the cladding and provide the necessary angle and support
- As an alternative a flat strip of VIVIX® Lap plank can be cut down and used to create the angle for the 1st full plank (see fig. 40)
- 10mm ventilation gaps should be maintained top and bottom and each side of windows and doors (see fig. 39 & 40)
- A perforated closure trim is recommended along the top and bottom of the cavity, to protect from debris or foreign objects



Windows & Doors

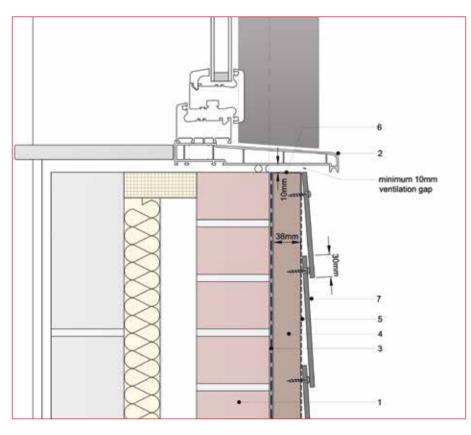






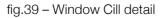
- 1. Brick/ Blockwork wall
- 2. New window with extended cill drip
- 3. Breathable waterproof membrane
- 4. Treated timber batten
- 5. EPDM
- Edge Profile
- 7. VIVIX® Lap plank
- 8. Cut section of VIVIX
 Lap plank on minimum
 26mm treated timber
 with EPDM strip. Allow
 space for window to
 open

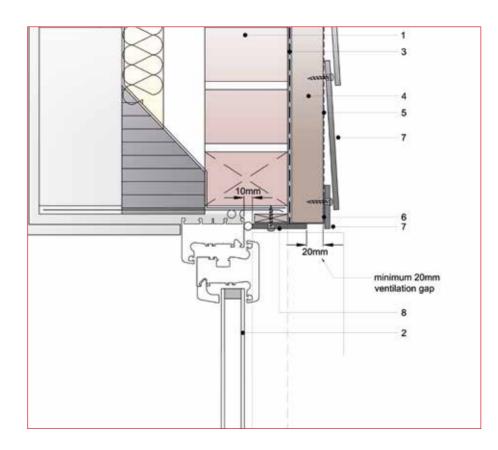
Windows & Doors





- 1. Brick/ Blockwork wall
- 2. New window with extended cill drip
- 3. Breathable waterproof membrane
- 4. Treated timber batten
- 5. EPDM
- 6. Perforated Closure
- 7. VIVIX® Lap plank







- Brick/ Blockwork wall
- 2. New window with extended cill drip
- 3. Breathable waterproof membrane
- 4. Treated timber batten
- 5. EPDM
- 6. Perforated Closure
- 7. VIVIX® Lap plank
- 8. Cut section of VIVIX Lap plank

fig.40 – Window Head detail

Cleaning & Maintenance

VIVIX® Lap planks require minimal cleaning or maintenance, general cleaning recommendations are provided:

DO:

- For general cleaning, use warm water, to which washing-up liquid has been added and use a soft, non-linting cloth (e.g. glove-lining fabric or soft sponge). This is also recommended to remove any visible residue following removal of the VIVIX Lap protective coating film
- In the event of heavier soiling, particularly grease, use only an antistatic cleaning liquid, the VIVIX planks can also be cleaned using a soft non-dyed cloth (washed glove-lining fabric) or sponge dipped in benzene-free petroleum ether (40-60° C, light naphtha)
- Be careful with rubbing pressure to avoid damaging the surface of the UV film on the panel
- Always test cleaning agents in an inconspicuous area, before cleaning the remaining surface

DO NOT:

- Never rub a dry surface
- Do not use abrasive scouring or sanding agents, clothes, abrasive pads or steel wool for cleaning, since they may damage the UV surface
- Never use aggressive solvents or harsh chemical detergents
- Never use mechanical cleaning systems, e.g. with rotating brushes, wiper blades etc

EXTREME SITUATIONS:

- In extreme situations, like graffiti removal, a low concentration isopropyl alcohol dilution can be used (must be less than 30% isopropyl alcohol concentration in water)
- After cleaning rinse fully with water
- Drying is best performed with an absorbent, non-linting cloth such as glove-lining fabric

Warranty

VIVIX® Lap planks are manufactured and tested to European Standard EN 438:2016 parts 6 & 7 and provide outstanding levels of colourfastness, UV and weather resistance, durability and cleanability.

VIVIX Lap planks are covered by a 10 year limited warranty in its primary function as rain screen cladding and against colour fade and delamination, provided VIVIX Lap recommended use, installation and maintenance guidelines are followed.

See **www.formica.com** for the most current technical data, which is the only authorised source for current technical information.



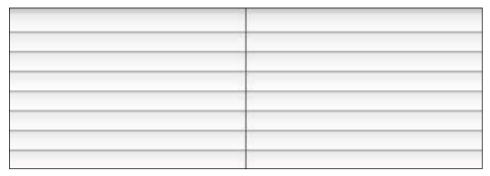
Cladding Check-list Summary

- A variety of cladding arrangements are possible with VIVIX® Lap planks (see fig. 41).
- It is recommended in advance of installation, to create a cladding plan. This will help to calculate framing requirements, location of fixing points and quantities of cladding planks, fixings and finishing profiles.
- Order all required materials in advance, to ensure availability of all relevant materials in advance of installation.
- Consideration needs to be given to local circumstances, for example building design, climate, wind load and local building regulations and independent advice from a certified construction professional is recommended.
- 5. Ensure you have the correct tools. In order to guarantee the performance of the cladding system, it is vitally important that fixing points are accurate and

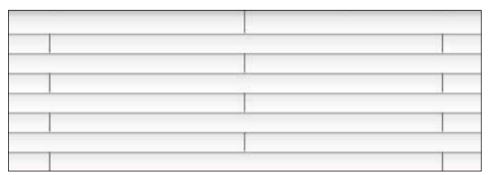
- correctly spaced, that holes are drilled to the correct size, that the correct fixings are used and that planks are cleanly cut.
- 6. Store, handle, process and install VIVIX Lap planks in accordance with the VIVIX Lap installer guide.
- 7. Ensure you have appropriate Personal Protective Equipment (PPE) and maintain a safe working environment.
- 8. Gauge clamps are available from different manufacturers, to provide extra plank installation support if required.
- On completion, ensure cladding is cleaned in accordance with VIVIX Lap installer guide.
- O. Leave a copy of the VIVIX Lap care and maintenance leaflet with the building owner, to ensure that ongoing maintenance of the cladding is in accordance with VIVIX Lap recommended guidelines.

Cladding Check-list Summary

Straight Joint Arrangement



Semi Pattern Arrangement



Random Arrangement

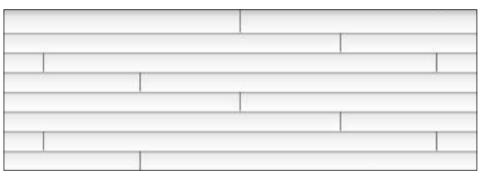
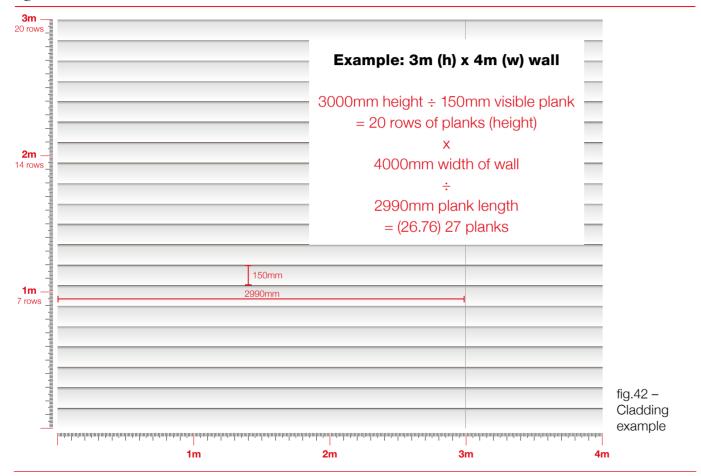


fig.41 – Variety of cladding arrangements

Quick Plank Calculation



Quick plank calculation guide:

- . Measure the height of the wall & divide by 150mm (Visible height of the plank), to calculate the number of rows of planks needed (round up to a full plank)
- 2. Measure the width of the wall & multiply by the number of rows
- 3. Divide by 2990mm (Lap plank length), to calculate number of planks required (round up to a full plank) see example in fig. 42

Additional considerations:

- Window/ door areas can be deducted
- Recommend factoring in 5-10% waste
- VIVIX® Lap planks are sold in packs of 4
- 1 x horizontal starter trim is needed for each 3m length of wall
- Minimum 6 screws are required per plank (100 per bag)
- EPDM should be applied on each batten (Full height of the support frame)

Detailed calculations should be made before ordering materials

General Information

Euroclass B-s1,d0 Fire Retardant Certificate in accordance with European regulation EN 13501-1.

VIVIX® planks are fabricated from VIVIX® architectural panels which are certified by the CE Mark to meet or exceed conformity with European consumer safety, health and environmental requirements.

VIVIX® Lap positive and negative wind load to CWCT standards and ETAG034 accelerated weathering tested.

Certificate for Quality Management Systems, (ISO 9001:2008), Lloyd's Register Quality Assurance Limited.

Formica Group are FSC® certified and comply with the requirements of FSC. Network of participating European Formica Group sites is shown on certificate number TT-COC-003588. FSC® certified laminates and compact panels are manufactured in Formica Group's European plants, including VIVIX® exterior façade panels.

General Information

This document serves as a general guide to good practice and constitutes no form of warranty or representation as to fitness for purpose in respect of the products and processes described in it.

Any information or products contained within this document must be verified and tested for suitability by the user for his or her particular purpose or specific application.

Consideration needs to be given to local circumstances, for example building design, climate, wind load and local building regulations and independent advice from a certified construction professional is recommended.

Contact Formica Group's Customer Service department if you are in doubt regarding the instructions in this document.

For further product information please visit our website formica.com

Formica Group is engaged in a continuing programme of research and development and users should check, on a regular basis, whether the information contained in this document has been updated.

Formica Group is committed to making sustainable principles and practices a part of everything we do. We strive to adhere to the highest ethical standards as we advance in our efforts to protect vital resources for future needs.

Notes

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