ENVIRO BUILD

HYPERION®

CLADDING

INSTALLATION & MAINTENANCE GUIDE

ENVIROBUILD.COM

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v4.0

CONTENTS

It is the customer's responsibility to determine the suitability of Hyperion Cladding for their particular private or commercial installation. It is solely the customer's responsibility to consult with their local building control to determine fire classification project requirements.

STORAGE & HANDLING

While composites are highly durable, to ensure their lasting beauty, please follow these important guidelines when storing, moving and working with Hyperion Cladding products

STORAGE

- Materials should always be covered until it is ready to be installed to maintain a clean surface. If stored outside use a non-translucent material
- All products should be stored flat and level, supported above the ground at 500mm intervals
- Battens used to separate and support stored material should be spaced no more than 500mm apart, to ensure the boards don't bow
- Stack units with banding and bottom supports aligned
- Pallets of cladding boards should not be stacked more than 4 pallets (3m) in height

HANDLING

- Hyperion Cladding materials should be handled with care when unloading
- When removing slats from a unit, lift the boards and set them down. Do not slide slats against each other when moving them
- Carry Hyperion Cladding boards on the edges for better support
- During construction, do not slide or drag any equipment across the boards
- The surface of the slats should be kept free of construction material and waste to prevent damage
- As the cladding boards are quite long, please ensure they are handled safely.
  We recommend that two people handle the boards during transportation

RECOMMENDED TOOLS FOR INSTALLING HYPERION FENCING

Standard woodworking tools can be used when working with Hyperion Cladding.
If you are unsure on how to use any tools, please consult the tool's manufacturer's user manual.

- Safety Glasses and relevant Personal Protection Equipment (PPE)
- Circular Saw - we recommend a thin kerf 40-tooth alternate top bevel finish blade to achieve the cleanest cuts. If cutting Manticore plastic battens, use a tungsten carbide blade
- Power Mitre Saw can also be useful for efficiency and bevelled edges
- Jig Saw
- Hand Drill - 3mm and countersink drill bits (can use all-in-one smart bit)
- Tape Measure
- Carpentry Square
- Spriti Level
- Impact Driver - use T15 secure drill bit supplied in all Hyperion hidden fastening packs, use low torque settings

CALCULATING MATERIALS

To determine how much Hyperion Cladding material you will require, you can either use detailed plans or follow the method below. Alternatively, feel free to call one of EnviroBuild's technical experts for assistance with planning your project by calling 0208 088 4888.

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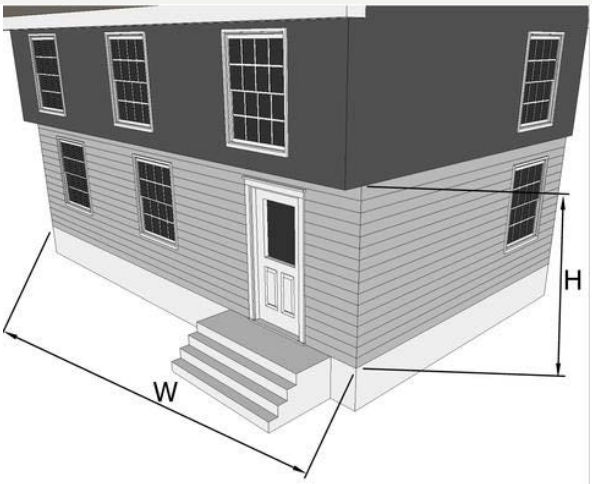

1 Start off by measuring your proposed cladding area(s) height and width (as above)

2 Plan which direction to install your cladding; horizontally or vertically. If the boards are installed horizontally, divide the wall height by the visible width of the board (150 mm)

The following example will use a Cladding area of 11m wide x 6m high:

Height = 6m, then 6m / 0.15m = 40 boards high

3 Now multiply the width of the wall by the number of boards high (given above), and divide this number by the longest length of the cladding board

Width = 11m, then (11m x 40 boards high) / 4m lengths = 110 of the 4m boards

Simply order this amount on our website and all the required material will be delivered to site.

TIPS FOR CALCULATING MATERIALS

- Always round up the number of boards required
- If the wall width is less than the 4m boards and you want no butt joints across the wall, simply order the calculated number of boards high
- For multiple cladding areas, follow the steps for each above and sum the quanitities together

INSTALLATION SPACING

Ensure the correct sized pilot holes are pre-drilled before screwing into all composite products to avoid splitting. Pre-drilled holes in cladding boards need to be at least 2 mm wider than the screw thread used to allow space for thermal expansion of the boards

SPACING HYPERION CLADDING PRODUCTS

Due to natural expansion and contraction of material with changes in temperature, please ensure the following gap requirements for all Hyperion Cladding products:

- Butt joints need to be min. 8mm for 4m length boards. When boards are trimmed down, te expansion gap should be min. 0.2% of the length of the board
- Plastic lumber batten butt joints should be gapped min. 20mm end to end
- A min. 20mm gap is required when abutting walls or other fixed objects
- A min. 20mm gap is required between the lowest board edge and the ground surface
- To allow air ventilation and drainage of rainwater, a cavity of no less than 38mm must be in place

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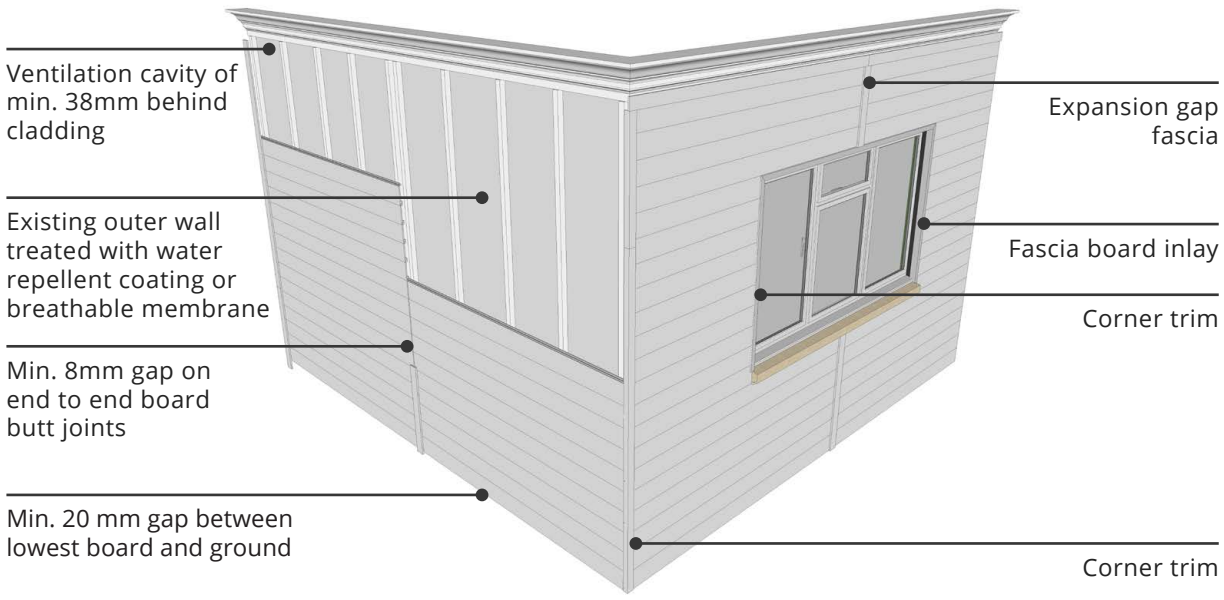


PLANNING SUPPORT STRUCTURE

Hyperion Cladding may be fixed to a property using the following methods:

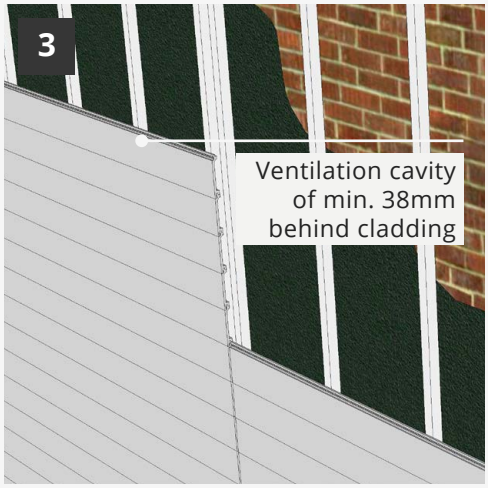
1. Preferably screwed to battens attached to sub-frame battening fixed to the wall
2. Screwed to battens fixed directly to the outer wall once a waterproof membrane or vapour barrier and non-compressible insulation is in place
3. For uneven or non-load bearing walls, the cladding may be fixed to battens on a self-supporting frame

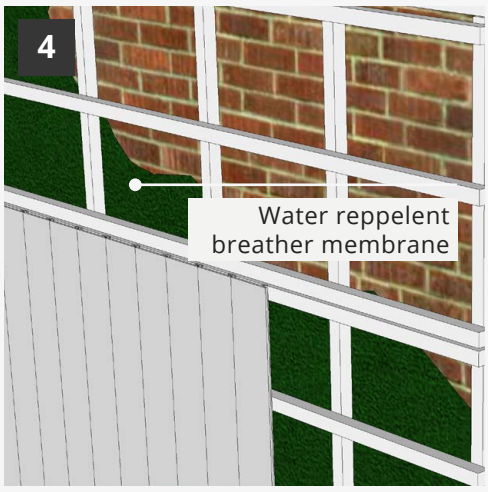
WATERPROOF MEMBRANE

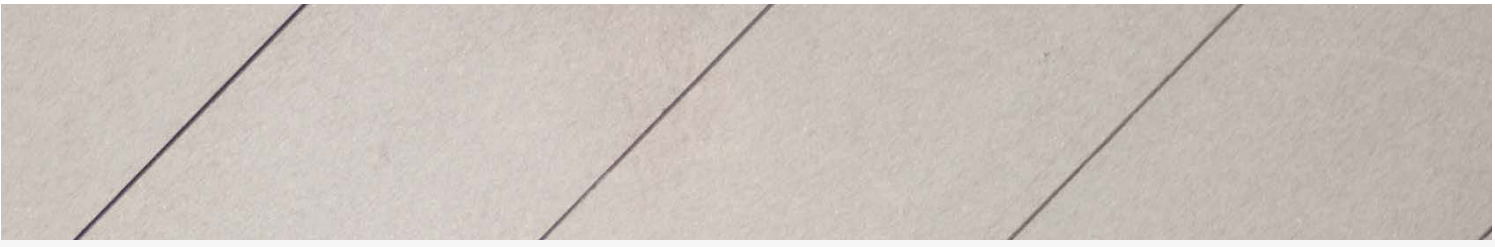
- A water repellent coating or breater membrane must be installed before battens are fixed, to protect walls from water penetration **(fig.3, fig. 4)**
- If water repellent insulation is used, it is not essential to use a breather membrane between battens fixed to a cavity wall

BATTENS

- Each batten must be fixed in min. 3 places
- Never use plastic battens for general construction
- A ventilation cavity of min. 38 mm must be in place behind the cladding boards (use battens min. 38 mm thick) to allow air ventilation and unrestricted drainage of rainwater that may penetrate cladding
- Any timber used must be pre-treated by an industrial process in accordance with BS8417 for a BSEN335:1. Use Class 3 application—Wood Protection Association Commodity Specification Code: C6 (NBS as Z12/120)
- Insect mesh should be used on cavity openings







HORIZONTAL CLADDING: SUPPORT

1 Fix either recycled plastic or treated timber battens at a maximum of 600 mm intervals to the supporting wall or structure **(fig.05)**

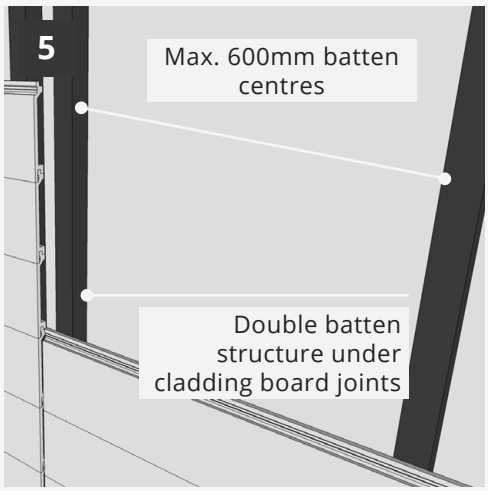
- Consult a building professional regarding vapour barriers and insulation for your project
- Where a vapour barrier is to be used, it should be breathable and positioned behind the battens to allow the cladding a minimum 38 mm airflow

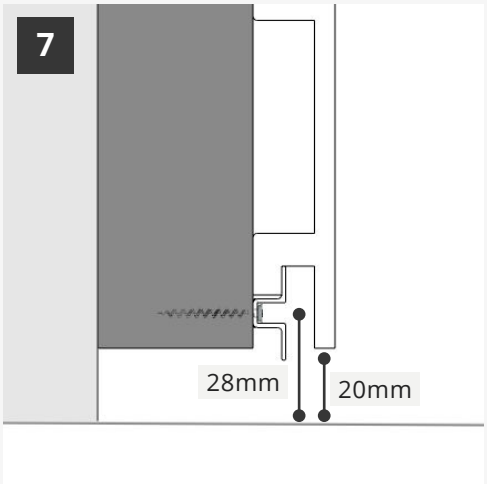
2 The first batten should be installed min. 20 mm from the ground. Using suitable A2 or A4 stainless steel countersunk screws , fix the battens into position at max. 600 mm centres

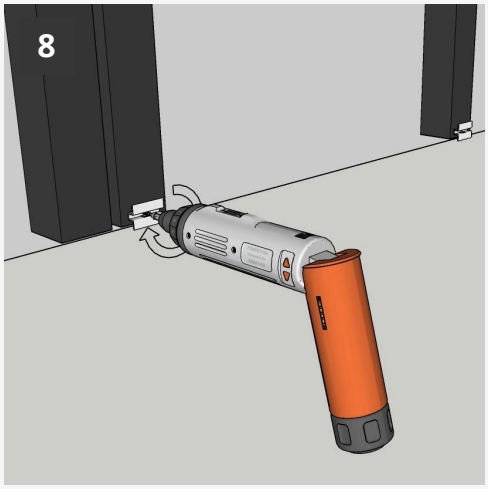
- Ensure all battens are level to the wall surface, using packers where appropriate
- A double batten structure should be installed for cladding board ends (butt joints)

3 Install additional wall battening around windows and doors **(fig.06)**

- For vertical cladding, it is recommend that counter battening is used to allow sufficient airflow. For more about vertical cladding please see **p.11**







1 Mark level lines on the battens for the first (lowest) row of hidden fasteners to be installed

- Ensure the centre of the fasteners are installed at least 28mm off the ground so that the board will sit a min. 20 mm off the ground surface **(fig.07)**

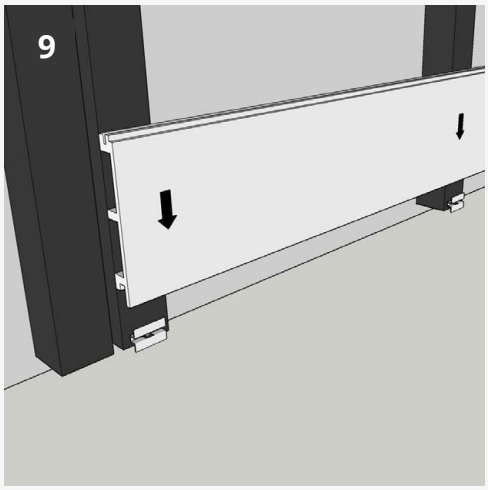
2 Fix the fasteners into each batten end with the screws provided **(fig.08)**. Use pilot holes to lower the risk of the batten splitting

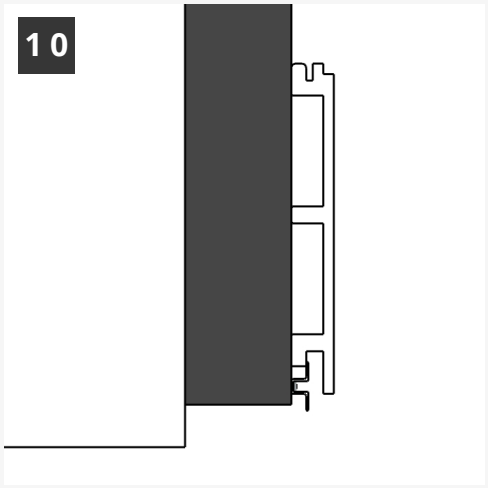
- Ensure the fasteners are firmly in place, but do not over drive the screw

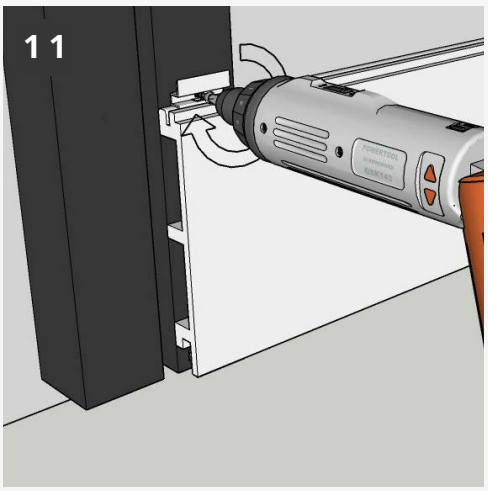
3 Slide the bottom cladding boards into position so that the bottom groove slides into the hidden fastener **(fig.09)**

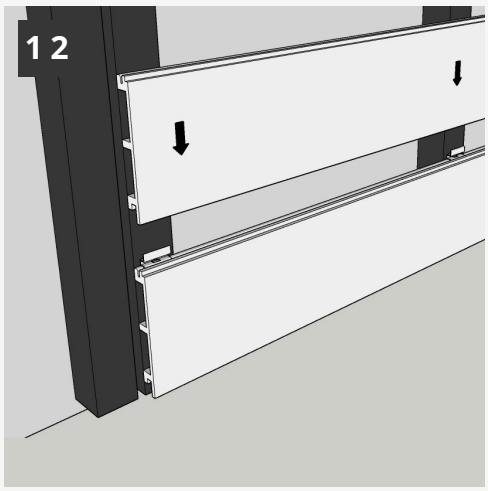
- It may be necessary to give the top edge of the cladding board a tap to ensure it is fully seated in the fasteners

4 The board will only be held in place at the bottom **(fig.10)** so hold it in place before the next step







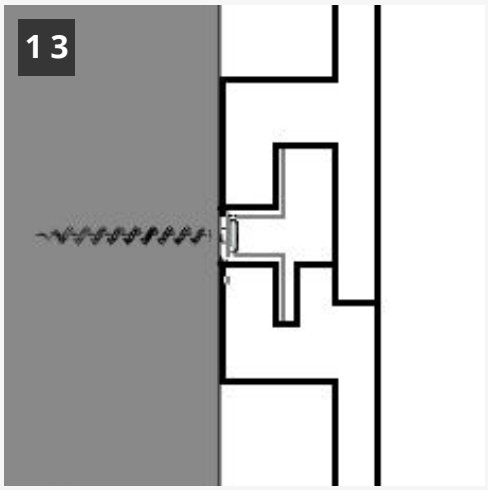


5 Once the first board is in place, place the next row of hidden fasteners into the top groove of the cladding board.

- Fix to the batten, be careful not to over tighten the screws **(fig.11)**

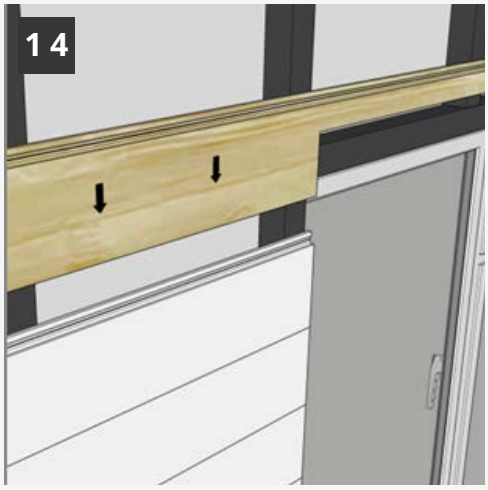
6 Once the first board has been installed, repeat steps 2-5, checking each board is properly sat in the fasteners **(fig.12)**. Slight adjustments maybe required

- The boards should neatly slot together **(fig.13)**
- Fix all boards until the top (or side for vertical) edge of the wall



7 Around objects such as doors and windows you may be required to shape boards to fit **(fig.14)**

- It is advisable to use fascia boarding anywhere where horizontal cladding meets a roof-line or a window ledge, or is going to butt up against a horizontal edge or barrier
- See **p.<?>** for more detail on installing fascia board



8 For information on finishing cladding around corners and openings **see p.14 - 16**

VERTICAL CLADDING: SUPPORT

For vertical cladding, it is recommend to use counter battening **(fig.17)** to allow sufficient drainage and airflow

- It is recommend to use battens with a 15° tilted top edge to shed water from the substructure and reduce water pooling

1 Fix either recycled plastic or treated timber battens at a maximum of 600 mm intervals to the supporting wall or structure **(fig.15)**
   - Consult a building professional regarding vapour barriers and insulation for your project
   - Where a vapour barrier is to be used, it should be breathable and positioned behind the battens to allow the cladding a minimum 38 mm airflow

2 The first batten should be installed min. 20 mm from the ground. Using suitable A2 or A4 stainless steel countersunk screws , fix the battens into position at max. 600 mm centres
   - Ensure all battens are level to the wall surface, using packers where appropriate
   - A double batten structure should be installed for cladding board ends (butt joints)

3 Install counter battening **(fig.17)**

4 Install additional wall battening around windows and doors **(fig.16)**
   - For vertical cladding, it is recommend that counter battening is used to allow sufficient airflow. For more about horizontal cladding please see **p. 8**

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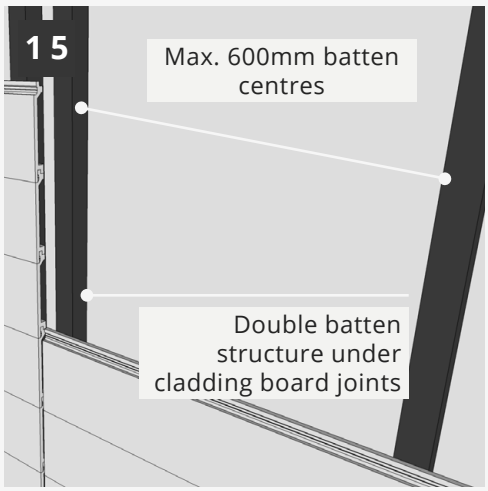

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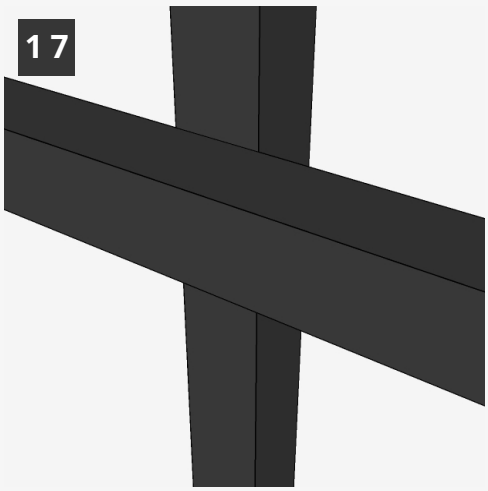

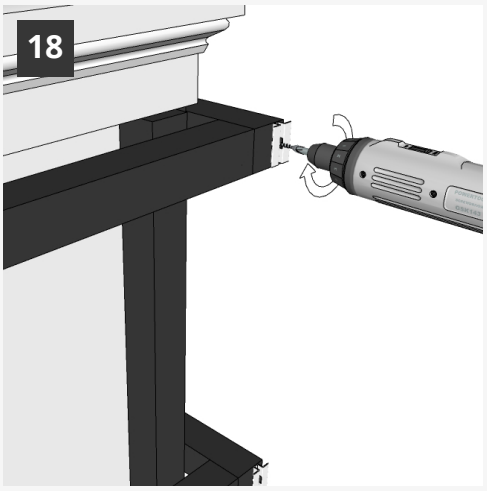

Always start your installation from the edge of the design **(fig.18)**

1 Mark level lines on the battens for the first column of hidden fasteners to be installed

2 Fix the fasteners firmly down into the battens **(fig.19)**

3 Pre-drill oversized hole at a 45° angle in the middle, side edge of the cladding board

4 Slide the first board into the first row of hidden fasteners **(fig.20)** ensuring the board sits min. 20 mm off the ground surface

5 Secure the middle of each board using a screw in the pre-drilled hole

6 With the board fully seated in the fasteners, install the next row of hidden fasteners along the top groove of the cladding board

7 Once secure, place the next cladding board in place and repeat until the end of the wall **(fig.21)**

8 Around objects such as doors and windows you may be required to shape boards to fit.

FINISHING CORNERS AND WINDOWS

1 To finish vertical cladding around corners you will need to use Hyperion Corner Trim and Fascia Board **(fig.22, fig. 23)**

For more about finishing with Corner Trim and Fascia Board **see p.15 - 16**

Note: Extra battens will be required around windows **(fig.23)**

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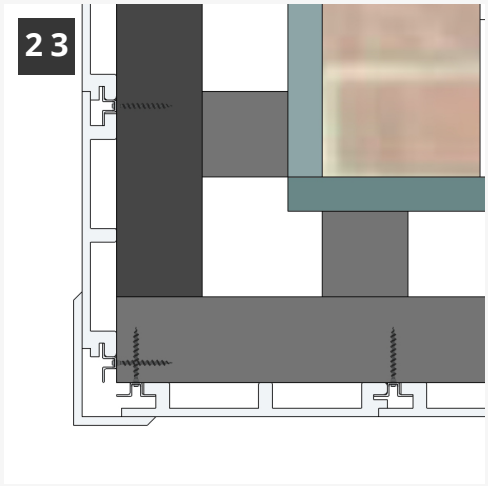

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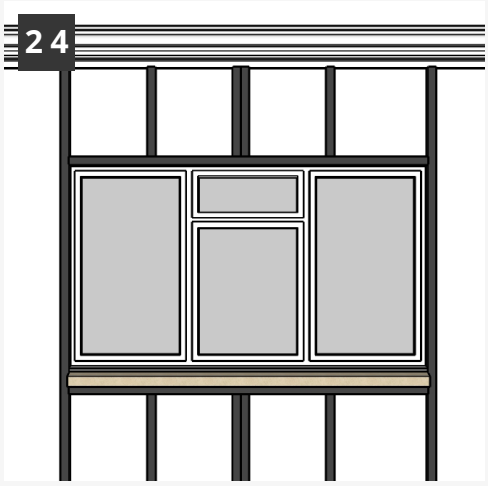


COVERING EXPANSION GAPS

1 Install a Hyperion Fascia Board to finish off and cover the top cladding board fixing groove (for horizontally installed cladding) **(fig.25)**

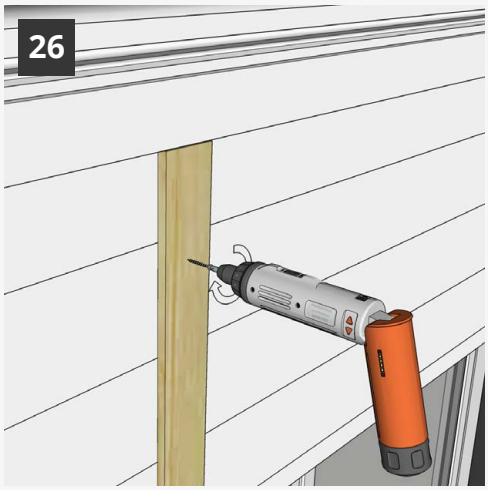
- Cut down the Fascia boards to size
- Place over the top cladding board groove
- Pre-drill through the board and screw into place with countersunk A2 or A4 Stainless Steel screws

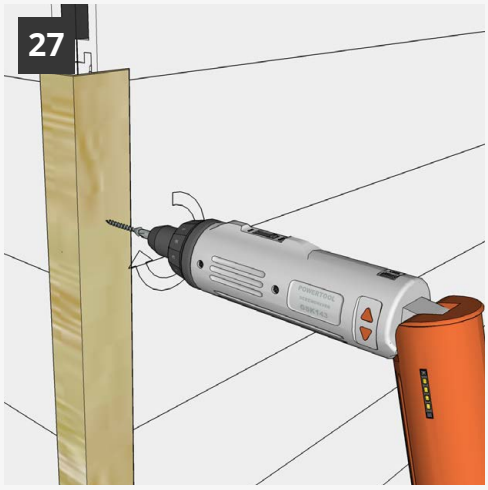
2 If required, you can use Fascia Board to cover expansion gaps **(fig.26)**

- Cut down the Fascia boards to size
- Place over the expansion gap to cover
- Pre-drill through the board and screw into place with countersunk A2 or A4 Stainless Steel screws
- For any openings to the ventilation cavity insect mesh should be installed

3 Install Hyperion Corner Nosing Trim to cover corners or edges **(fig.27)**

- Cut down the Corner Trims to size
- Place over the corner to cover, pre-drill through the trim and countersink
- Screw into place with countersunk A2 or A4 Stainless Steel screws





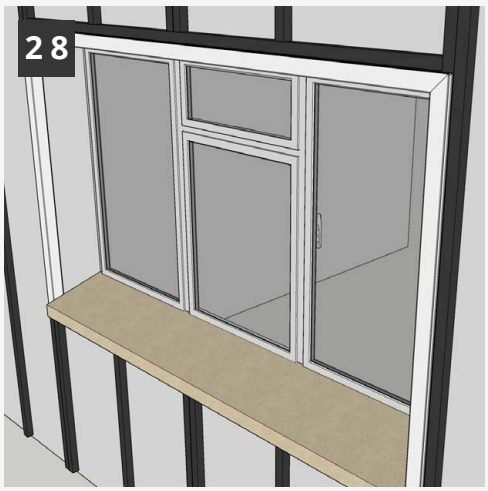
BEFORE YOU START

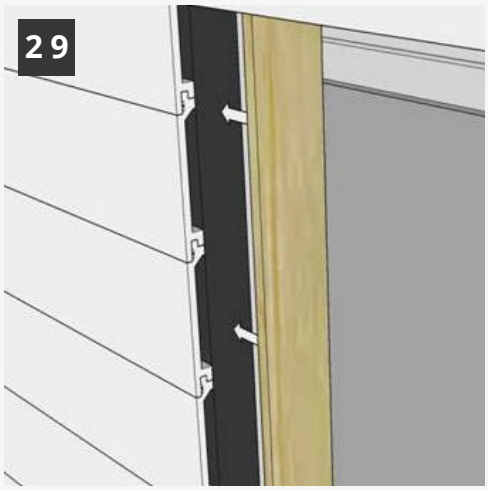
Additional battens will be required around doors and windows **(fig. 28)**

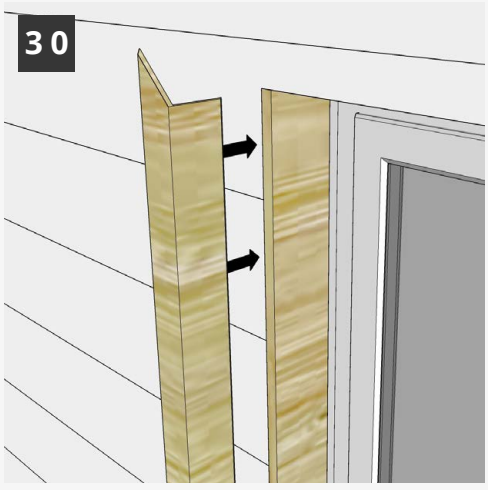
OPTION 1: FASCIA BOARDING

Hyperion Sentinel Fascia Board can be used to cover the cladding board edges and around window frames. This option can also be paired with corner trim around window frames and doors

1. Measure the amount of fascia board required and cut them down to size
2. Place over the desired area. Make sure the edge of the fascia board sits flush with the cladding surface **(fig.29)**
3. Pre-drill and countersink the boards
4. Screw into place with countersunk A2 or A4 Stainless Steel screws
5. If desired, the corner trim can then be placed over the fascia boards **(fig.30)**







OPTION 2: CORNER TRIM

Hyperion Sentinel Corner Trim can be used on its own or with Hyperion Fascia Boards to cover cladding board edges and exposed substructure at corners, doors and window frames

1 Measure the required amount of Hyperion Corner Trim and cut down to size

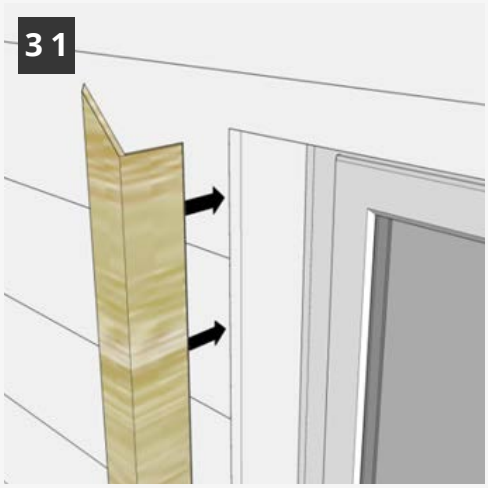
2 Mitre down at 45° Corner Trim ends, if they are being placed next to each other at the wall edges **(fig.31)**

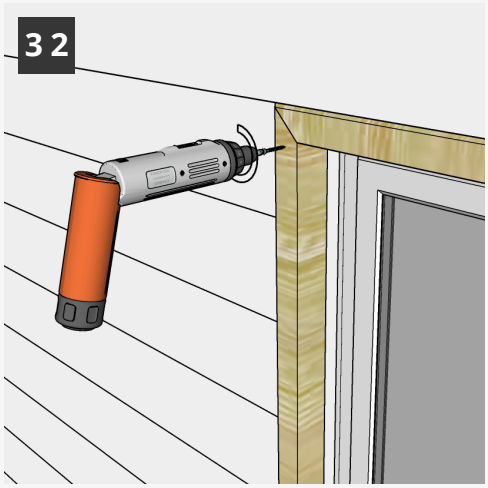
3 Place over the corner to cover, pre-drill and countersink through the trim **(fig.32)**

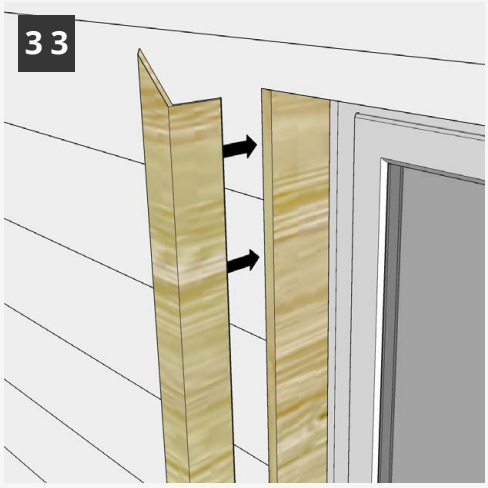
4 Screw into place with countersunk A2 or A4 Stainless Steel screws **(fig.32)**

5 If you are concerned about visible screws, coloured screws and screw-caps are available from general builders merchants

Corner Trim also can be combined with Fascia Boards to cover deeper window and door frames **(fig.33)**







MAINTENANCE & CARE

Hyperion products are low maintenance, however with a little cleaning you can help keep your outside space looking beautiful for longer. Please note that although Hyperion products are relatively colour stable, there may be some initial lightening of the Pioneer range products as the product naturally weathers over the first 8-10 weeks.

DIRT & GRIME

Maintaining a clean, dry surface is the best method for combating dirt, grime and mildew build up, where a periodic cleaning is all that may be required. Even though Hyperion products are formulated to inhibit mildew growth and staining, mildew stains can occur where moisture and dirt or pollen is present.

SCRAPES & SCRATCHES

Surface scratches and abrasions will fade after weathering. However, scrape and scratch marks can be eliminated by using a wire brush or coarse 60-80 grit sandpaper (Pioneer range products only). Simply brush/ sand in the direction of the grain on the product until the mark has gone. The treated area will weather back in approximately 8-10 weeks.

PAINTING & STAINING

EnviroBuild does not guarantee or recommend anything applied to Hyperion products, however it is still possible for Hyperion products to be to painted or stained. Wait until the product has completed its weathering process and ensure you have a clean and dry surface prior to applying any paint or stain. Always apply products in accordance with the manufacturer's application instructions.

SPOT STAINS

Many stains can be cleaned with soap or household de-greasing agent and warm water. Scrub and soak the affected area as soon as the stain occurs to ensure best results, then rinse off with warm water. For more stubborn stains we recommend using a composite specific cleaner for more effective stain removal. Only with very set stains, you may want to use coarse sandpaper (60-80 grit) and sand lightly (Pioneer range products only), always in the direction of the grain of the product (be careful if sanding the flat wood grained side of the Pioneer decking board as this can remove the enhanced wood grain effect).

Cleaned or sanded areas may lighten, which can require 8-10 weeks exposure to the sun to match the remaining product, depending on location and specific application. Due to the wood content, composite products, like any wood-based product, may experience a naturally occurring process called Extractive Bleeding (known as tea staining). This process can cause a temporary discoloration that will fade with time.

CLEANING

With the proper safety precautions Hyperion products can be washed with either soapy water and a soft bristled brush or with a power washer (recommended max. 1500psi pressure). You should ensure to spray in the direction of the grain of the boards and use a fan tip nozzle (min. 6 inches from surface) along with the proper cleaning product.

FAQS

Q. Where can I use Hyperion Cladding?
A. The versatile Hyperion product range can be used in a variety of locations, both residential and commercial. However as this is an external building covering, you must ensure you consult with your local building control to determine fire classification project requirements.

Q. What colours do your products come in?
A. Hyperion Cladding comes in a variety of colours. EnviroBuild has natural browns: Oak and Walnut, and modern greys: Granite, and Stone.

Q. Will the colour fade over time?
A. Hyperion Pioneer products will naturally lighten over the first 8-10 weeks and then will stabilize after this period.

Q. How do your products react when exposed to water?
A. Hyperion products are designed to take on very little water (c.1%). The products have a much lower absorption rate than timber which heavily reduces the likelihood of wet rot over a longer period of time.

Q. Does your cladding require painting or treating?
A. Hyperion products are already coloured so do not require painting at all. Also, due to the plastic content within Hyperion products there is no need for any further treatment. This also makes it easy to clean.

Q. Do you have recommended installers I can use?
A. EnviroBuild has an extensive network of recommended installers who are trusted to bring your plans to reality. These installers have been chosen for their high quality of work and professionalism, but as with any third party, it is recommend that you follow your own precautions before entering into a contract with them.

Q. What size boards does Hyperion Cladding come in?
A. Hyperion Sentinel Cladding boards come in 4.0 m length boards. Bespoke length boards can be ordered subject to minimum order quantity and extra lead times.

Q. Can I see Hyperion Cladding samples?
A. Simply go to www.envirobuild.com to order your samples.

Q. Anything else?
A. For any other technical, installation or care questions, go to www.envirobuild.com, call our technical team on 0208 088 4888, or email us at info@envirobuild.com