



# Envello Rainscreen Cladding

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# History Matters

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## Our Timeline

James Douglass started up Stonemarket cast paving. Sold in 1998.



Jerry Douglass was inspired to create a wood free decking board.



Voted one of the top 1000 companies in the UK to inspire Britain.



ISO9001, ISO14001, ISO18001 accredited.



Launch of Bullnose board.  
Launch of Enhanced Grain board in Brushed Basalt.



Launch of DuoSpan and DuoLift.  
Launch of new colour Antique Oak.  
Voted one of the top 1000 companies to inspire Britain.



1976

1998

2003

2007

2014

2015

2016

2017

2018

2019

2020

2021



Elmdene started to cast stone look planters made from PU foam.



After years of development, the first Millboard hit the market.



18 countries begin to import Millboard.



Expansion of the factory facilities and streamlining of production.

Approved Installer scheme is Launched.



Launch of the London Design Hub.  
Launch of the Outdoor Design Hub.

Launch of new colour Burnt Cedar.



Launch of Envello Cladding.

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# Innovative Materials – Millboard Envello



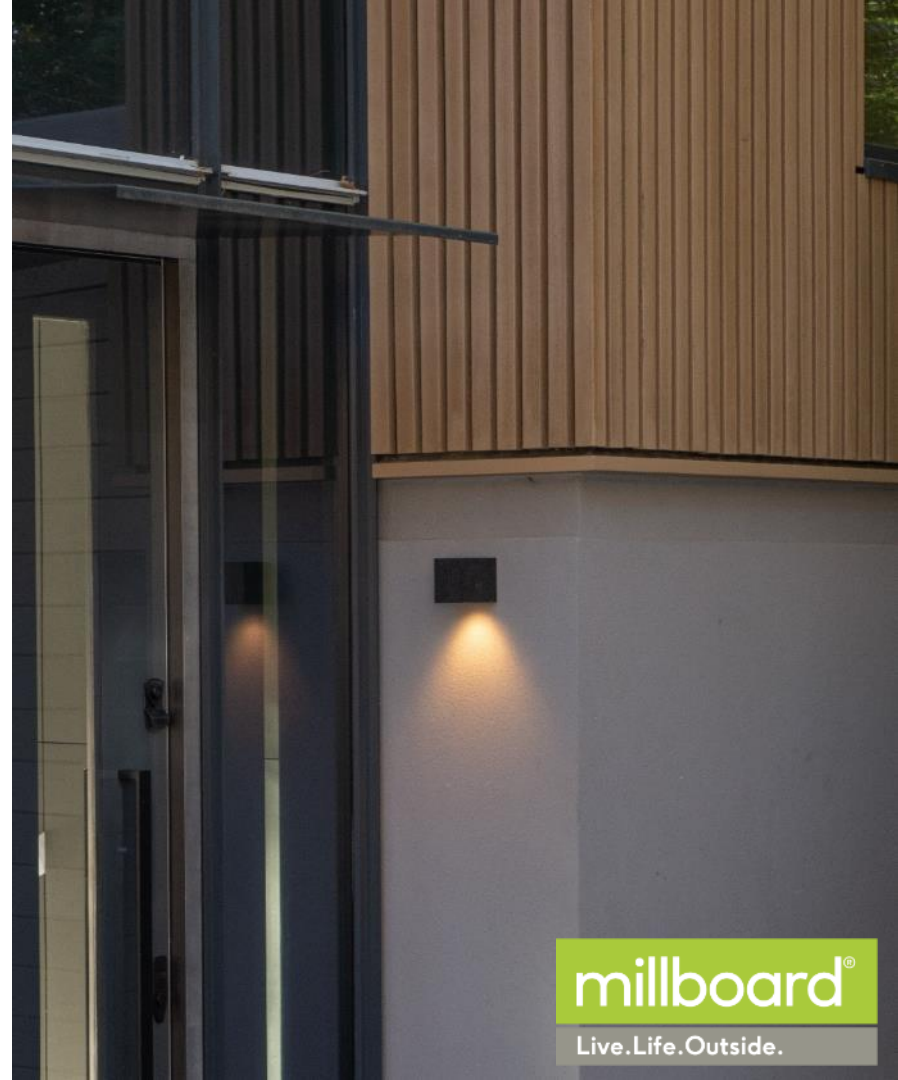
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# Standard Envello Applications

- Residential buildings (under 18m)
- Commercial buildings
- Garden rooms
- Home offices
- Furniture
  - Street furniture
  - Cycle Shelters
- Outdoor kitchens

\*All areas subject to government regulations/building control



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# The rainscreen cladding options

- Timber
  - + Natural look, strong, can be coated, easy to work with, cheap initial price
  - Fades, maintenance, leaching, warps, cups, twists, rots, visible fixings, install time, insect infestation
- Modified Timber
  - + More stable, durable, less leaching, more water & rotting resistant
  - Prone to cracking, brittle, fades, stains, more expensive
- PVCu
  - + Cheap, readily available, variety of finishes, low maintenance, long lengths
  - Fake appearance, can fade, twist, crack, susceptible to damage, will move, flimsy
- WPC (Wood Plastic Composite)
  - + Low maintenance, can be cheap, variety of finishes, consistent dimensions
  - Looks fake, will fade, algae growth, will expand/contract, can stain, can become brittle, warps and buckles in heat
- Fibre Cement
  - + low maintenance, fireproof, stable, available as big panels
  - Efflorescence, ends must be sealed, pressed flat grain look, hard surface so can chip/scratch, can be awkward to install, flimsy



# Envello Cladding Board

## Shadow Line

- Flat grained board
- Horizontal or Vertical
- 200x18x3600mm
- Actual 'installed width' 181mm
- Boards needed per sqm 1.53



Smoked Oak



Golden Oak



Burnt Cedar



Antique Oak



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# Shadow Line Images



# Envello Cladding Board

## Board & Batten

- Vertical or Horizontal
- Carefully designed profiles for water run-off
- 200x28x3200mm
- Actual 'installed width' 181mm
- Boards needed per sqm 1.73
- Four board patterns on one profile



Smoked Oak



Golden Oak



Burnt Cedar



Antique Oak



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# Key features of Board & Batten

Four different  
grain patterns  
– not  
moulded out  
of one piece  
of timber



# Board and Batten Images



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# Key features of Envello Cladding



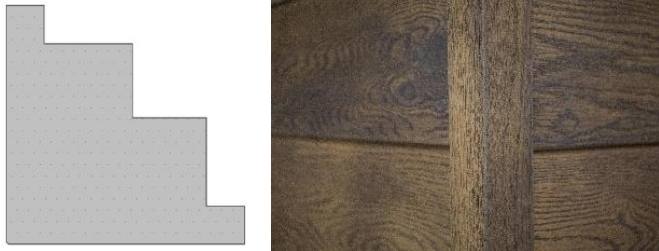
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# Envello Edging Profiles – Shadow Line

## External Corner profile

- For use with the Shadow Line
- 50x50x3050mm
- Hides any potential shrinkage
- Gives definition to the corner
- Available in the four colours



## Internal Corner profile

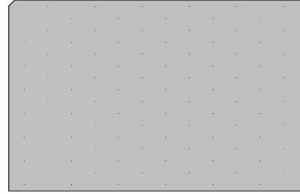
- For use with the Shadow Line
- 38x38x3050mm
- Hides any potential shrinkage
- Gives definition to the corner
- Available in the four colours



# Envello Accessories – Edging

## Square edging

- Mainly for use with the Board and Batten
- 50x32x3200mm
- Used around windows/doors
- Available in every Millboard colour



## Fascia Boards

- For use around window/door reveals and soffits
- 146x16x3200mm
- Available in every Millboard colour



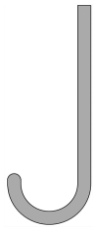
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# Envello Accessories – Aluminium profile

## Horizontal Starter Trim J

- Used to start the cladding at the bottom
- For horizontal cladding
- 25x10x2500mm



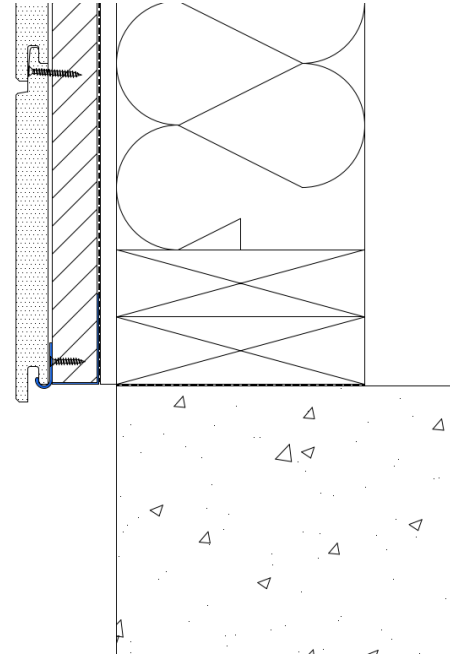
## Vertical Starter Trim L

- Used to start the cladding at the bottom
- For vertical cladding
- 25x13x2500mm



## Perforated Closure

- Used to prevent insects/rodent entering the cavity
- Allows airflow
- 50x25x3000mm



# Envello Accessories - Battens

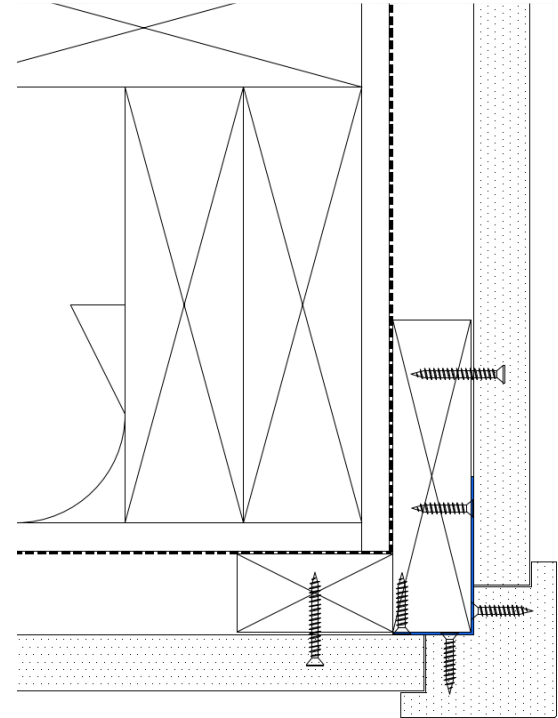
## Plas-Pro 25x50mm batten

- Battens used to fix all the components to
- Full non-rot system
- 50x25x3000mm



## Plas-Pro 100x25mm

- Battens used at the corner of the building for a greater fixing point
- 100x25x3000mm



# Envello Accessories - Fixings

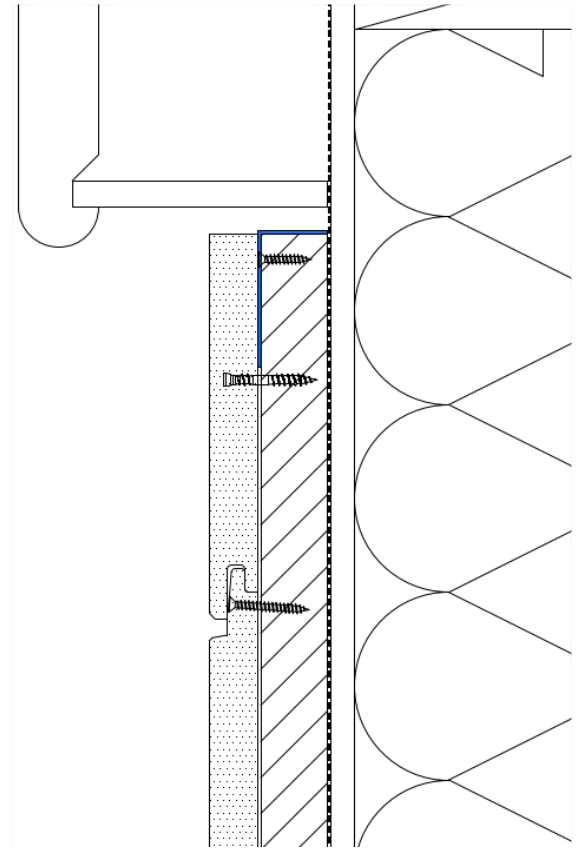
## Cladding Board Fixings

- Fixings used for the Envello boards
- Fixing through the tongue
- A2 Stainless Steel
- 3.5x30mm



## Cladding Accessories Fixings

- Fixings used for the corner profiles, starter trims and perforated closures
- A2 Stainless Steel
- 3.5x20mm





# Fire Safety

- Is not a non-combustible product (not A1 or A2 rated), therefore cannot be used where these ratings are required (high-rise buildings)
- Designed for use as an alternative to timber cladding, therefore is to be used where timber would traditionally be used
- Residential low-level buildings are low risk – generally little or no fire requirement below 18m over 1m from boundary
- Envello used on a building can be classified as an ‘unprotected area’
  - The amount used on a building is dependent on the distance to the boundary
  - All in accordance with Approved Document B



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# Ventilation

- Ventilation for the control of moisture is a key element
- A continuous airflow from bottom to top is vital for long term durability
- Minimum 19mm open cavity should always be provided behind the cladding
- Minimum 10mm continuous gap left at the top and bottom of the system
- Perforated Closures used to stop insects/rodents entering cavity



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# Fixings and Wind Testing

- In house fixings testing – shear testing and pull through testing
- Testing to CWCT/BS EN 13116 for - Wind resistance – serviceability & safety:
  - $\pm 2400$  pascals serviceability – Pass
  - $\pm 3600$  pascals safety – Pass



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# Summary

- UV stable 2K hand-tinted coating – Resists fading
- No leaching or releasing of tannins
- No painting, sealing or staining needed
- Hand moulded from Oak – Natural look
- Sustainable product – Recycled fillers
- Specially designed tongue and groove
- Hidden fixings
- Lastane® surface resists damages
- No specialist tools needed
- Dimensionally stable
- Resistant to Algae

# Cladding Project Images





THANK YOU

Any questions?

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