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# Rangewood<sup>®</sup>

primed OSB weatherboard



**VULCAN**

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primed OSB weatherboard

## Contents

Warranty	4
Battening	6
Cladding Fixing	8
Caulking	10
Accessories	10
Paint finishing	11
Maintenance	11
Lapboard details	12
Panel details	14

## Introduction

The Rangewood® pre-primed engineered timber system provides tremendous satisfaction for specifier, carpenter and end-user. Its OSB stability, lively appearance, ease of installation and 50 year warranty give a new dimension to modern methods of construction, and sustainability.

Rangewood® is versatile, robust and natural – the specifier's choice. It offers the best of both worlds – the warmth and appearance of timber weatherboarding without the problems associated with real wood. Vulcan Cladding Systems will assist to achieve the desired end result. Any size of project will be attended to with the same level of expertise.

Oriented Strand Board (OSB) is a leading construction material used in floors, walls and roofs because the moisture resistance of the modern bonding resins ensures reliable long term performance. OSB is used extensively in timber framed structures because it is light and strong, and can be machined.

The lesser grade OSB is traditionally used for jobs such as temporary site hoardings and crating. The OSB used in construction is a denser board with a higher resin and wax content. The strands of softwood are laid down in 3 layers, each layer orientated at 90° to the next, then bound together under intense heat and pressure giving its amazing strength and longevity.



## Applications

Suited to any commercial or domestic new build or refurbishment project where external weatherboarding is required, Rangewood® is ideal for

- Conservation areas to give traditional appeal
- Overcladding and lightweight rainscreen
- Fascia / soffit new build and renovation
- Modern construction methods (steel or timber frame)
- External signwriting using smooth panels

## Advantages

Rangewood® offers considerable advantages to both builders and end-users

- The appearance of solid wood without knots, voids or imperfections.
- No timber selection to avoid defective wood; makes fixing quicker and cheaper
- Consistent and well defined cedar woodgrain
- Moisture resistant
- Will not crack, splinter, dent, warp, shrink or split
- Treated to resist insect and fungal attack
- Strong and dimensionally stable
- Already primed for painting after installation
- Primer provides added weather-resistance and durability
- Less paint absorption (lower finishing costs) than plywood, solid timber or fibre reinforced cement
- Can be cut just like ordinary timber weatherboarding
- Less waste than with real timber products
- Sustainable and recyclable

## Product Range

Available in a range of matching components, Rangewood® is designed to create complete cladding solutions. All products offer a lively woodgrain effect. For full technical details, see pages 12 – 15.

- Lapboard planks
- Grooved interlocking panels
- Trim Sections for corners
- Fascia Board
- Soffit sheets (smooth or woodgrain)

## Manufacture

Rangewood® weatherboarding products are engineered under tightly controlled conditions, from the raw materials to the final edge coatings. The end result is a superior, stable and durable cladding product.

The Rangewood® manufacturing process combines treated timber strands with an exterior resin binder under intense heat and pressure. The woodgrain texture is embossed into the surface, providing continuity of definition and visible depth of grain. A resin saturated paint overlay is fused to the engineered substrate, giving a tough surface that is quick and easy to paint.

## Environment

Rangewood® cladding boards use 100% sustainable forestry-certified timber, from small diameter, rapidly regenerated trees. The engineered Oriental Strand Board products have greater durability and use raw materials more efficiently than traditional products, therefore have low environmental impact. Bonded using low-emitting, safe resins.





## Installation

Installing **Rangewood®** is quick and easy because no special cutting or fastening tools are required. The Lapboard 4880mm lengths provide fast coverage giving installation cost savings and fewer joints. Grooved Panel is available up to 3050mm long x 1220mm wide, also giving excellent coverage with the ability to be cut to shape. Caulking is applied to joints and any visible nail holes prior to painting.

The completed cladding should be painted with 2 coats of good quality paint suitable for external timber within 12 weeks of installation.

## Maintenance

We recommend repainting **Rangewood®** weatherboarding on a maximum five year interval depending on the type, quality, application method and amount of paint originally used. Other factors to consider include climate, exposure and colour. In general, the degree of wear or erosion of the old paint dictates the repainting. Refer to maintenance notes on page 11.

Preparation for maintenance is minimal; usually a clean down followed by one coat.

## Warranty

**Rangewood®** products are designed and manufactured to high standards. The products are warranted to be free from defects in materials, workmanship and design. When properly applied, finished and maintained, they are also warranted to remain free from fungal degradation, cracking, peeling, separating, chipping, flaking or rupturing of surface overlay for the warranty period. Each of the products carries a limited 50-year warranty.



# Batten layout

For Rangewood® cladding sheets and weatherboard, like any ordinary timber planking, continuous airflow from bottom to top is vital for the long term stability of the product and battens. We have illustrated some typical situations on domestic and commercial properties which will help architects and builders understand the simple requirements. If these are not adhered to, the warranties will be invalid and costly adjustments will be necessary. Vulcan can accept no responsibility for incorrect installation.

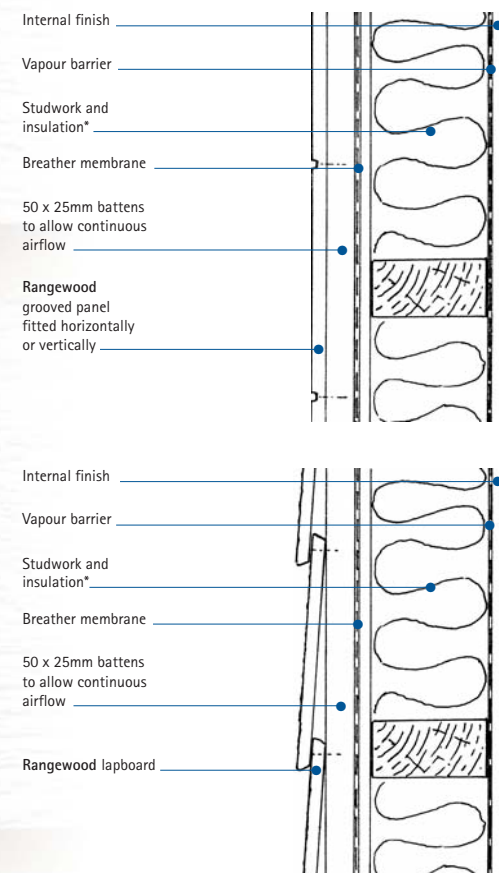


## Sequence of work

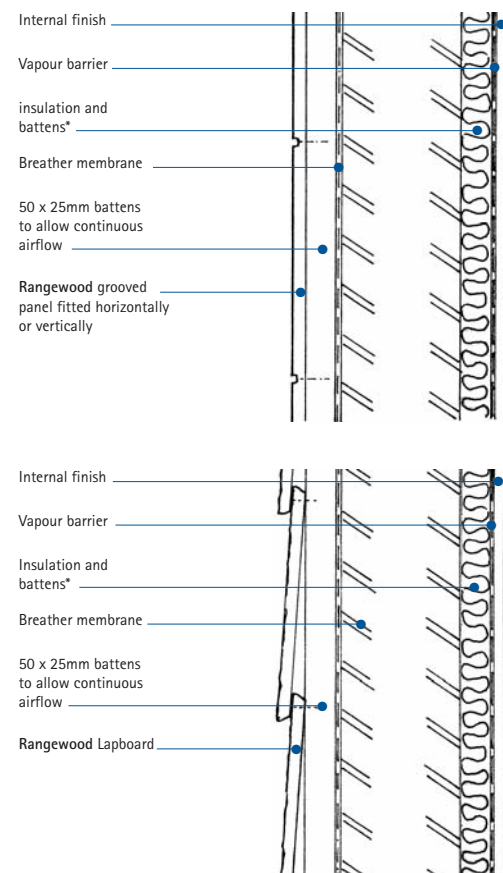
1. Establish batten starting-point allowing for cladding drip edge to be minimum 150mm above ground level.
2. Attach membrane to the building from the batten starting-point.
3. Fix corner battens, pack straight and vertical.
4. Using string lines, ascertain line of facade.
5. Fix battens around door/window openings and pack to string line.
6. Fix intermediate battens as instructions below:
  - Lapboard** 11mm thick: max. 610mm c/c
  - Grooved Panel** 11mm thick:
    - Fixed horizontally max. 610mm c/c
    - Fixed vertically max. 407mm c/c
7. Add short battens to strengthen the bottom edge and keep the flymesh straight.

**NOTE:** The ends of all planks and panels should be fixed to a batten, so PLAN where the battens should be fixed, particularly with the panels, to reduce wastage.

## Typical Timber Frame Application



## Typical Brickwork Application



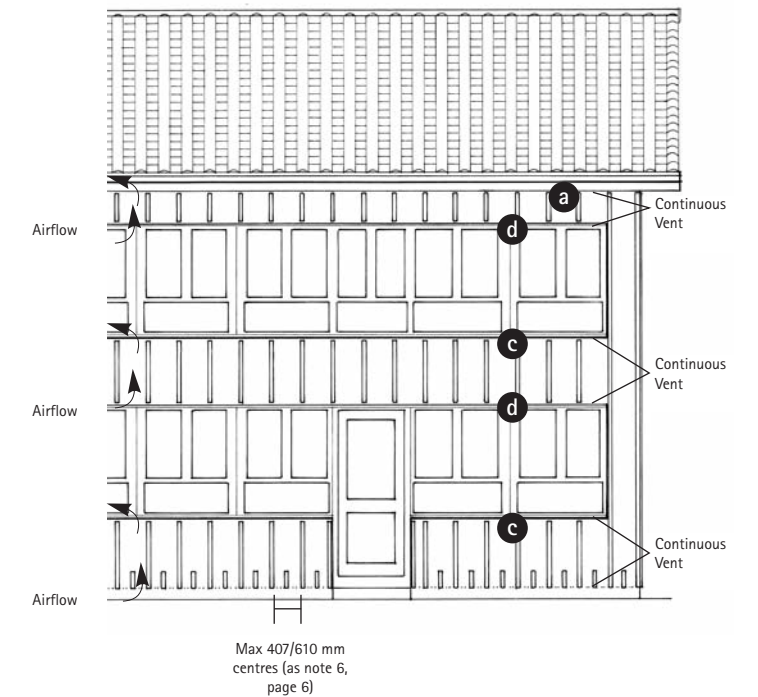
\*Indicative detail



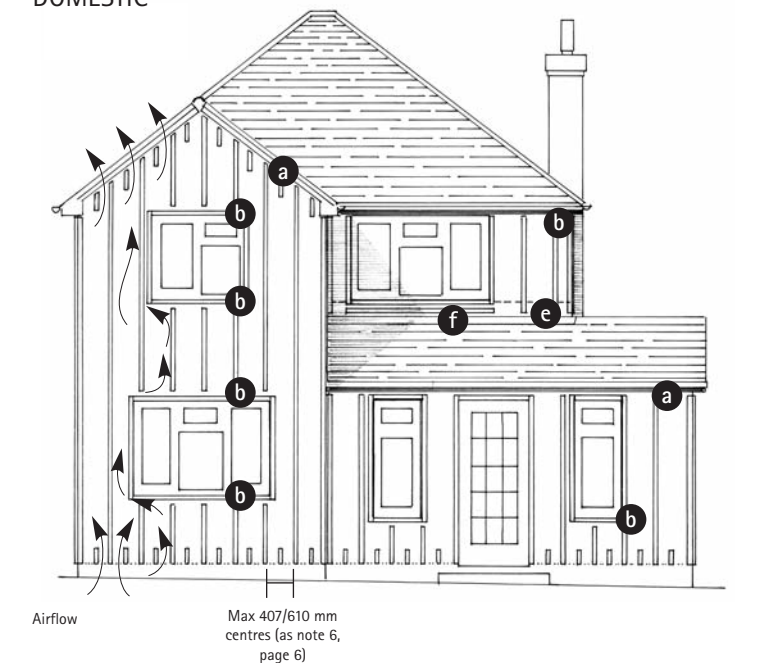
## Batten instructions

- a Below the soffit: cut vertical battens 10-15mm short and fit flymesh. At gable, add short vertical battens to support the angled planks.
- b For windows less than 3m long: fix battens around the opening. Cut vertical battens 50mm short, above and below, to allow airflow around the window.
- c Below windows longer than 3m, cut vertical battens 10-15mm short and fit flymesh (no horizontal battens below window).
- d Above windows longer than 3m, cut vertical battens level with window head and fit flymesh or vent strip (no horizontal battens above window).
- e Above lean-to roof or adjacent sloping roofs, leadwork should be installed before breather membrane and battens. Vertical battens to be cut 50mm above the roof level.
- f Shallow detail below windows – always ensure full airflow, i.e. with horizontal batten as shown or short vertical battens as b).

## COMMERCIAL



## DOMESTIC



Where the windows are more than 3m wide, the **commercial** type venting/battening should be used, with airflow above and below each window.

# Cladding installation

## Important fixing notes

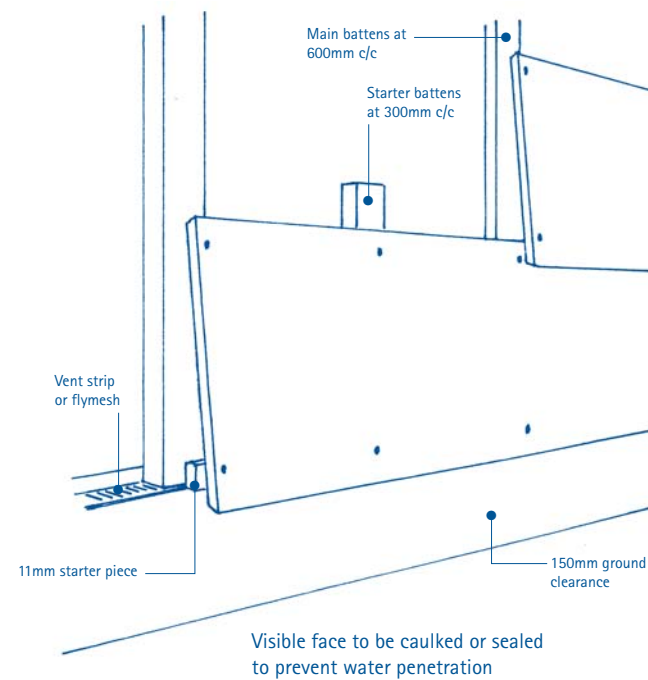
- Store the cladding under a waterproof sheet or in an unheated building to allow it to acclimatise. Store on flat pallet or level timber blocks.
- Do not install faulty or damaged boards.
- Screws or ringshank nails should be used; fixings should have full embedment in battens.
- All cladding should be at least 150mm above finished ground level; 50mm clearance from sloped roof surfaces, i.e. side-cheeks of dormer windows.
- Keep dry; seal ends and joints with latex acrylic caulking on the same day. Prevent water from getting on the reverse side.
- Insert sleeve and ventilation grille for air vents where holes are cut through the cladding, to prevent warm/moist air getting on the reverse side.
- Any water traps such as recessed fixings should be filled with caulking.
- Wood dust should not be inhaled; use a suitable mask at all times when in a machining environment.

When all battening and ventilation passages are complete, install the Rangewood® cladding as follows:



## Lapboard

1. Fix the corner sections, window and door framing/surrounds before fixing the planks. Carefully follow the section details on pages 12 and 13.
2. Bottom starter piece (2.44m long) to be fixed @ 300mm centres to the front of the battens; cut to finish on a batten.
3. First Lapboard plank positioned with minimum 25mm drip; ensure level and fix at 300mm centres. The drip edge should be face-fixed with countersunk fixings, then sealed with caulking (see caulking note on page 10).
4. Adjacent plank positioned with 6-8mm butt joint, fix as above and seal joint with caulking. At abutments to corner/window sections, leave 4mm gap to be caulked.
5. Subsequent planks to overlap the previous plank by 25mm. Fix using spirit level; fix from one end to avoid quilting.



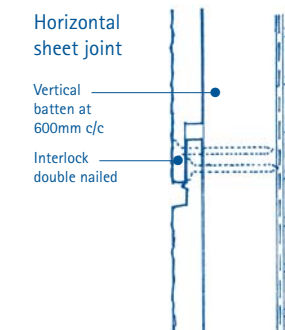
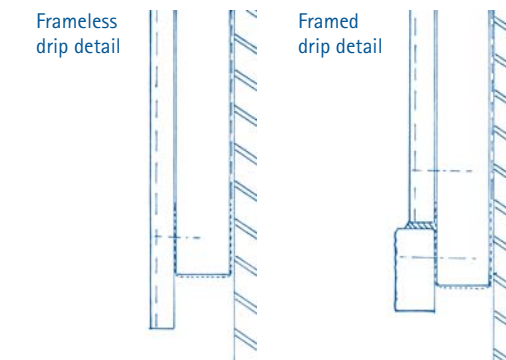
## Fascia/soffit cladding to rafters at 600mm c/c

Rangewood® 18mm Fascia and 11mm Soffit panels may be fixed directly to rafters at 600mm centres. Adequate airflow/ventilation must be provided in the eaves as shown in detail on page 13, detail 11.

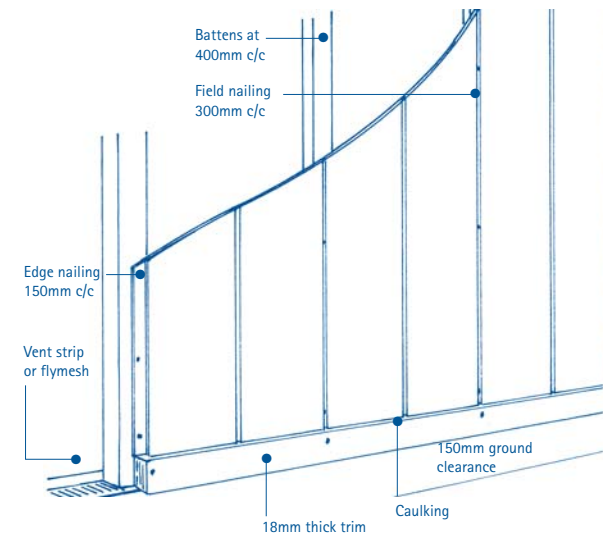


## Grooved Panel

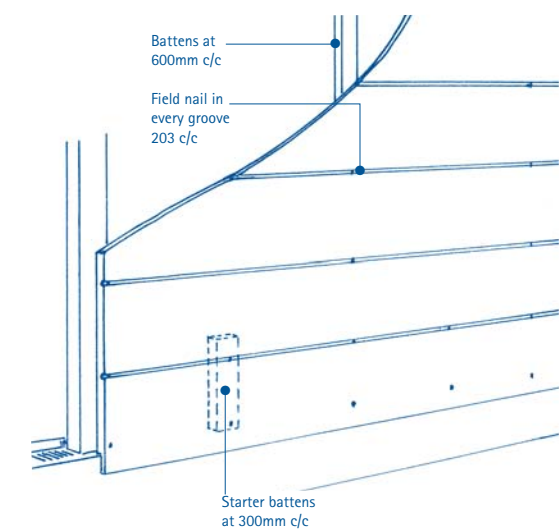
1. Follow the simple drawings on this page for starter details and nail spacing.
2. Fixed the corner sections, window / door framing and reveals (see details on pages 14 and 15).
3. When the trims are complete, the panels can be cut to size and fixed level, allowing for 4mm edge movement.
4. All joints and exposed fixings should be caulked the same day.



## Grooved panel fixed vertically



## Grooved panel fixed horizontally



## Caulking joints

NOTE: The correct caulking must be used. Caulking should be applied on the day of the cladding installation. Care should be taken due to fast drying time. Test workability on an off-cut. To make caulking easy to use, store in a dry area between 10–30°C.

1. Ensure that surfaces are clean and free of dust, grease or silicone etc.
2. Use a standard silicone gun. Cut caulking nozzle square and slightly wider than joint to be filled.
3. Apply caulking with a uniform pressure to the full space between boards, forming a slight bulge that will level when dry.
4. Extra caulking may be required after the first application has dried, or due to movement with weathering.

For alternative plank junctions, see details on pages 11 and 12



Nailing 10mm from end/19mm from edge



Lapboard butt joints allow 6–8mm gap, fixed to battens, stagger with previous plank. Grooved Panel trim junctions allow 4mm caulk joints.

## Accessories

1. Lapboard starter piece
2. Vent strip (pvc or aluminium)
3. Flymesh (pvc coated fiberglass)
4. Exterior Acrylic Caulking
5. Stainless drillscrews (steel fixing)
6. Stainless selftappers
7. Stainless ringshank nails
8. Galvanised Paslode ringshank nails



## Finishing

The Rangewood® pre-primed surface is ready to paint. Prior to painting:

- Prime any exposed timber board, i.e. cut edges
- Ensure the caulking is complete in joints and recessed fixings
- Make sure the boards are free of dust, dirt and stains

All exposed surfaces should be painted within 3 months of installation. Paint the Lapboard drip edge with a brush to ensure it is fully coated; the Panel grooves should also be brushed.

The first coat of paint may be sprayed or brushed prior to installation. For the best finish, the 2nd coat should be applied in situ upon completion of all junctions and caulked joints; this will blend the caulked joints with the cladding.

Good quality exterior paint must be used, such as Sadolin Superdec or Dulux Weathershield. Water-based, oil-based or alkyd paints are acceptable.

Finishes that are **not** recommended are woodstains, textured paints, trade emulsion paint and some vinyl-based paints. Please consult Vulcan Cladding Systems for technical support if required.

Follow paint manufacturer's application guidelines on temperature and moisture conditions.

NOTE: Due to variation in the paint mixing process it is important wherever possible to use paint with the same batch number on the same elevation. If further paint is required this should only be applied on separate elevations. Paint should be stirred thoroughly with a flat stirrer; stir 5 litres for 5 minutes! This will ensure that the ingredients such as colour pigment are evenly dispersed in the tin.



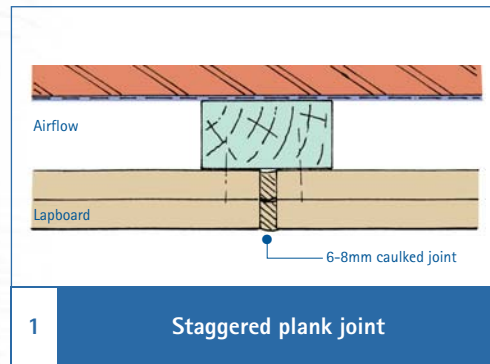
## Maintenance

Gloss level, colour and weather exposure of the paint will affect the period of time before re-coating is required. Periods between 5–8 years could be expected. Guarantees are not normally available from paint manufacturers.

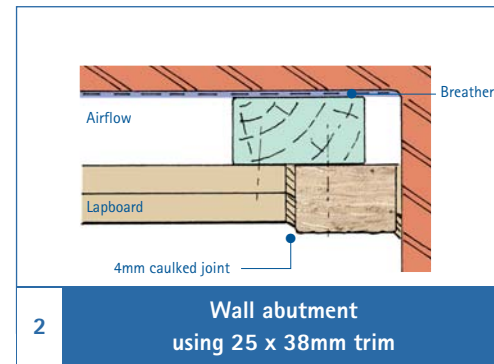
- Gloss paint will not maintain its original gloss level but will give a longer acceptable period before first maintenance. Standard gloss level is 85°, semi-gloss 60° and matt 30°.
- 2 coats will give better resistance to weather.
- Dark colours will fade more noticeably than light colours although the weatherability is no different.
- Regular cleaning will help to maintain the appearance.



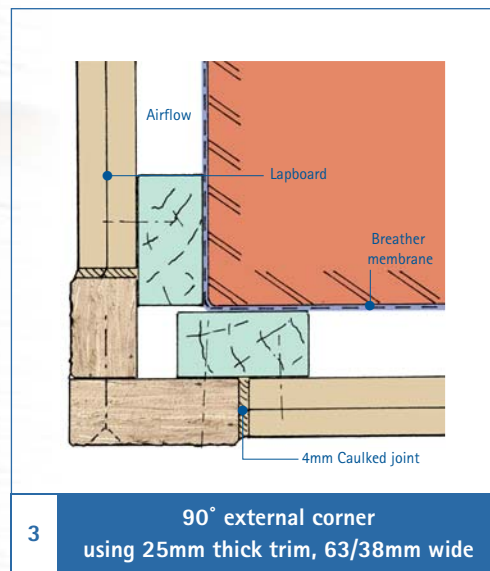
# Lapboard details



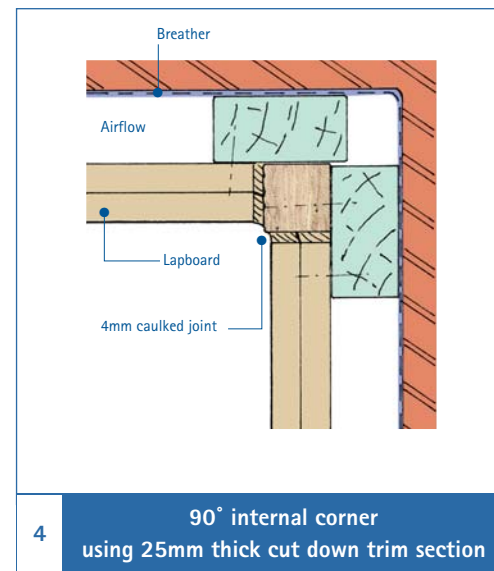
1 Staggered plank joint



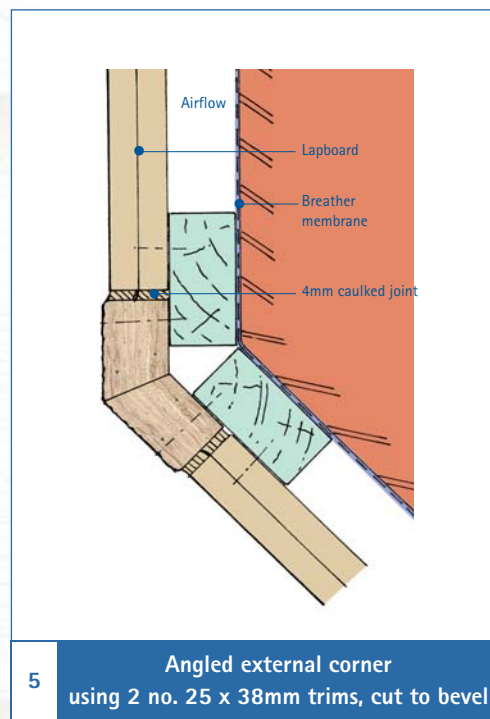
2 Wall abutment using 25 x 38mm trim



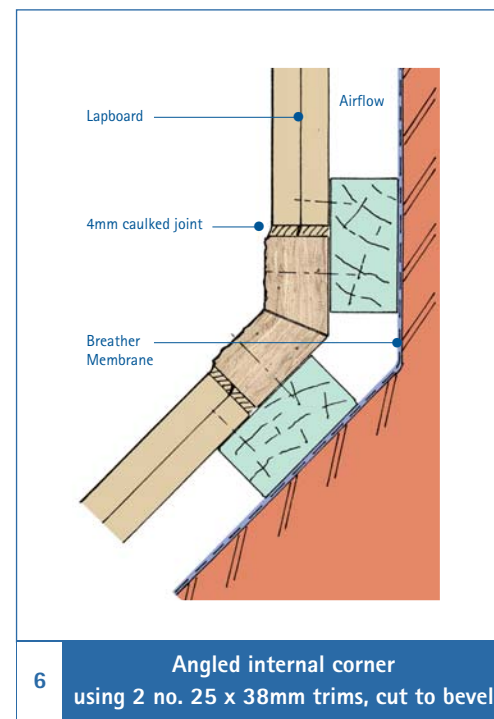
3 90° external corner using 25mm thick trim, 63/38mm wide



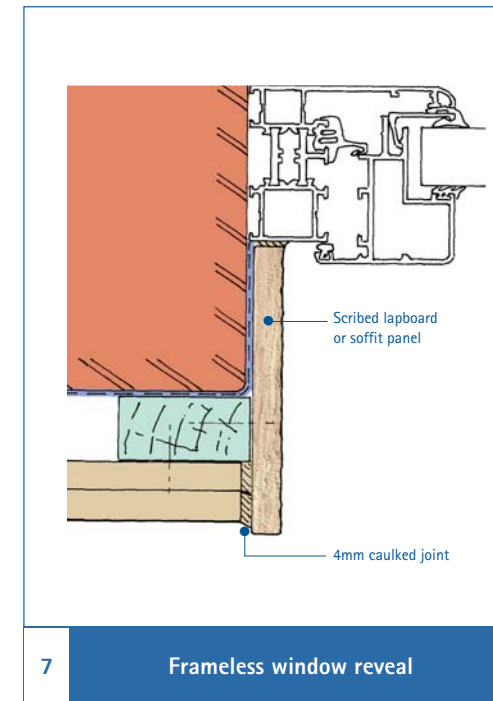
4 90° internal corner using 25mm thick cut down trim section



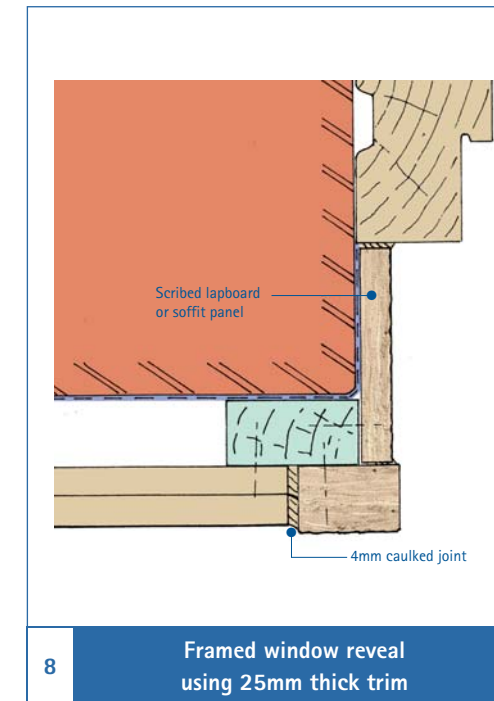
5 Angled external corner using 2 no. 25 x 38mm trims, cut to bevel



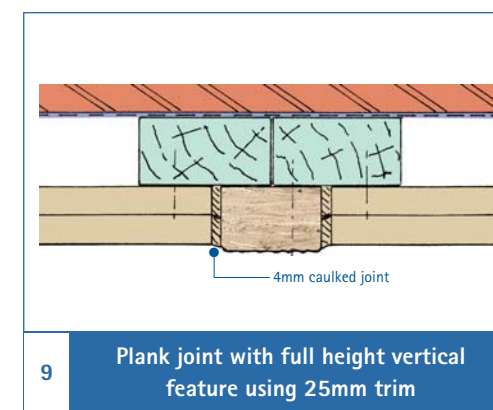
6 Angled internal corner using 2 no. 25 x 38mm trims, cut to bevel



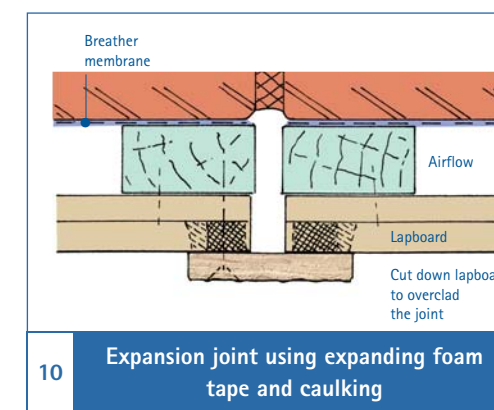
7 Frameless window reveal



8 Framed window reveal using 25mm thick trim

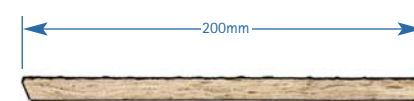


9 Plank joint with full height vertical feature using 25mm trim



10 Expansion joint using expanding foam tape and caulking

Lapboard 11mm thick  
Woodgrain texture  
2 bevel edges  
200 x 4880 mm



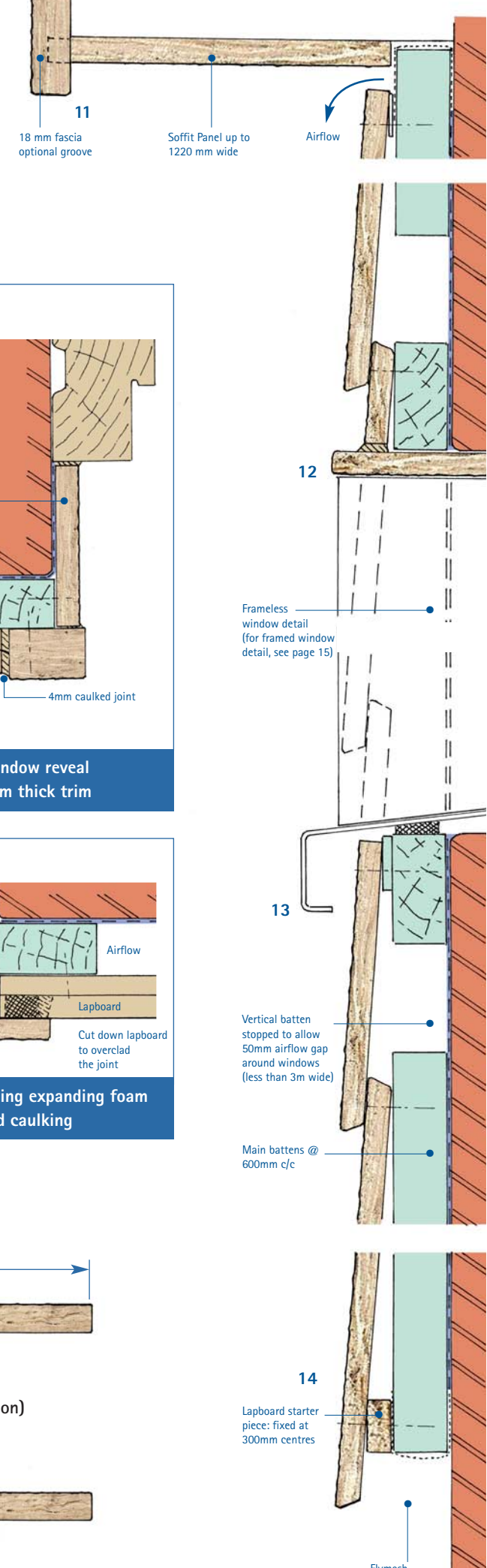
Fascia/trim 18mm thick  
Woodgrain texture  
Square edge  
185 x 4880 mm



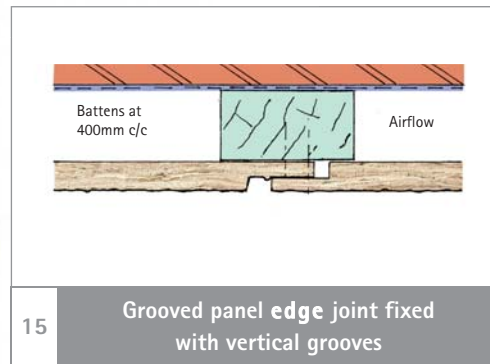
Trim sections 25 mm thick  
Woodgrain texture  
Square edges  
4880 mm long  
65/38 mm wide



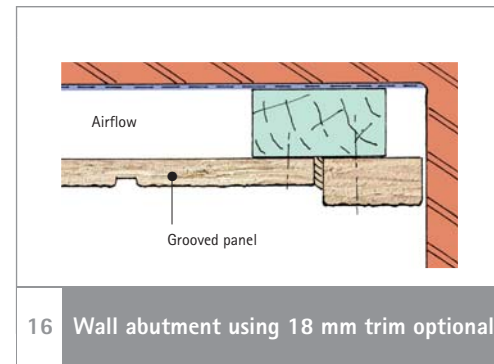
Fascia (ploughed back option)  
Woodgrain texture  
Square edges  
185 x 4880 mm



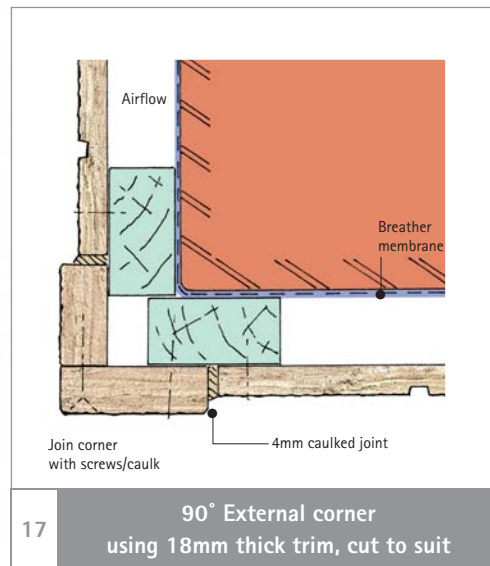
# Grooved Panel details



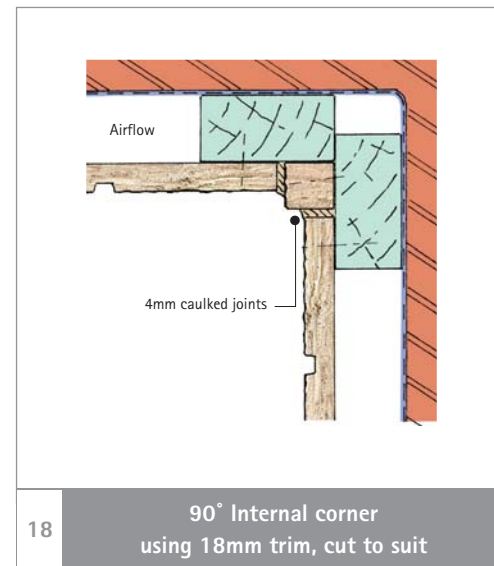
15 Grooved panel edge joint fixed with vertical grooves



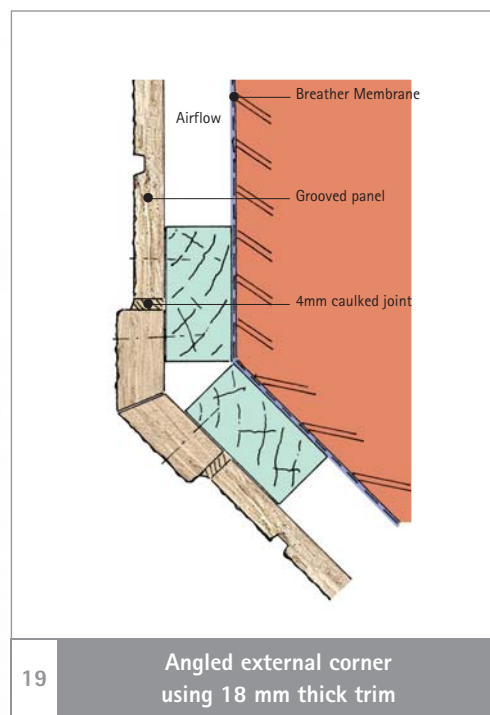
16 Wall abutment using 18 mm trim optional



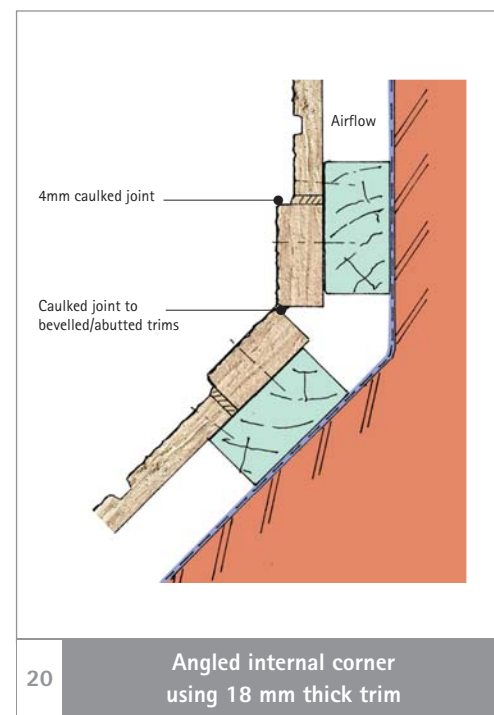
17 90° External corner using 18mm thick trim, cut to suit



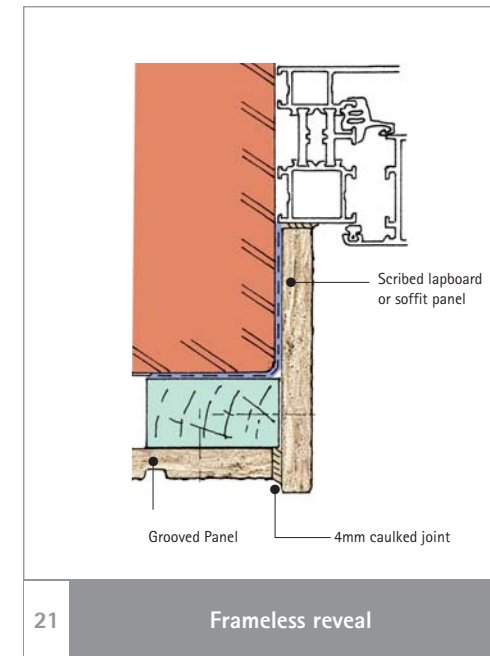
18 90° Internal corner using 18mm trim, cut to suit



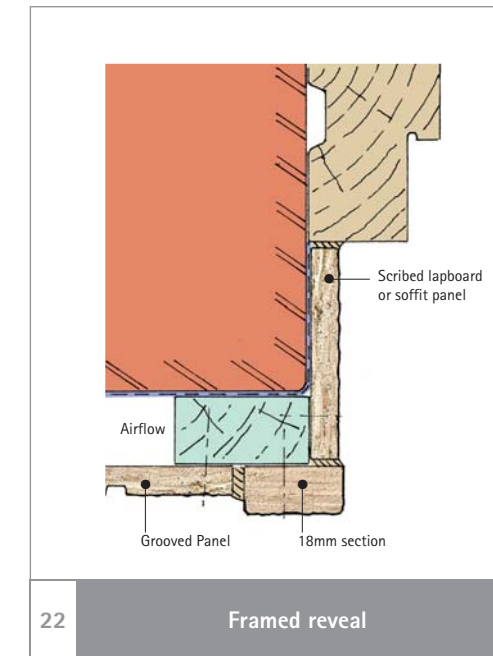
19 Angled external corner using 18 mm thick trim



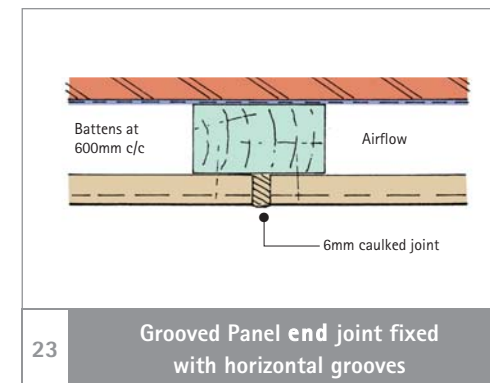
20 Angled internal corner using 18 mm thick trim



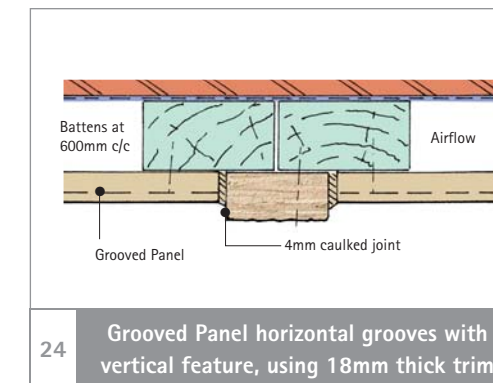
21 Frameless reveal



22 Framed reveal



23 Grooved Panel end joint fixed with horizontal grooves



24 Grooved Panel horizontal grooves with vertical feature, using 18mm thick trim

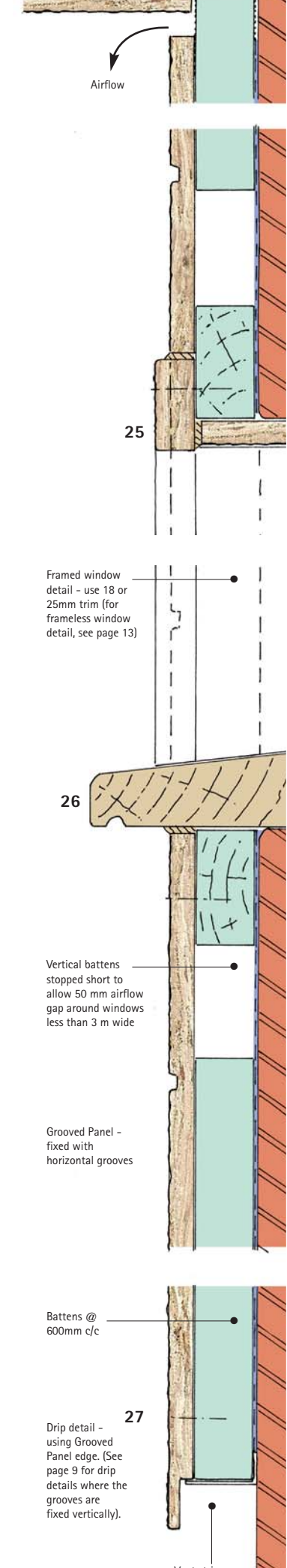
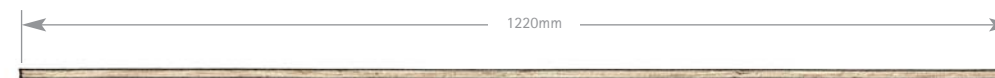
## Grooved Panel 11mm thick

Grooved at 203mm centres  
woodgrain texture  
Interlocking edges  
1220 x 2440/3050 mm



## Smooth or woodgrain texture soffit panel 11mm thick

Ungrooved  
Smooth/woodgrain texture  
Square edges  
1220 x 2440 mm





# VULCAN

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