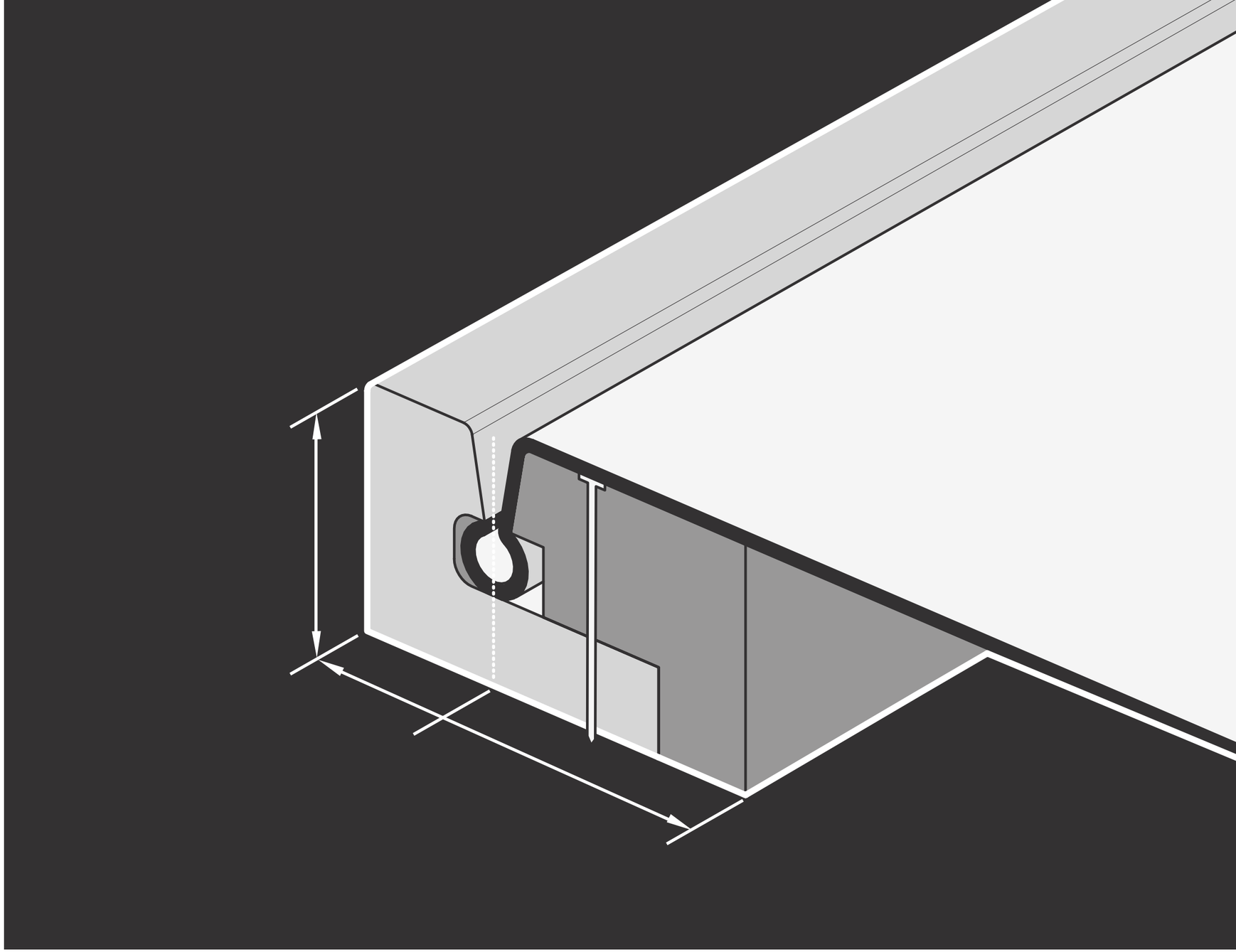
Installation Guide

Embrace® unites the tactile warmth of New Zealand Strong Wool with a timber frame to create an acoustic wall system. Made using wool with a carbon negative footprint of minus 8.6kg CO_2e. Plus, high-performance acoustic absorption and a new colour palette unique to our wool material.

GLOBAL GREENTAG CERTIFIED -8.6 kg CO_2e CARBON NEGATIVE

TRACEABLE SINGLE SOURCE NEW ZEALAND WOOL



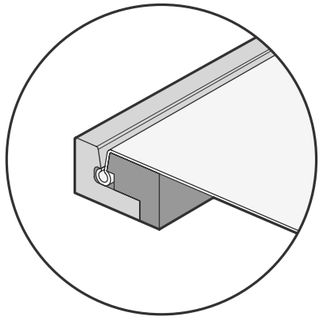
Autex Acoustics®

Embrace® Wall System

Install Process Overview

1. Product Overview

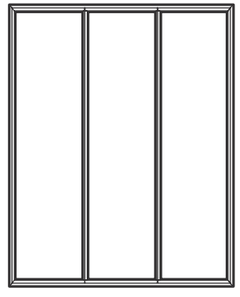
What can I expect to arrive to site?



Page 3 - 4

2. Frame Install

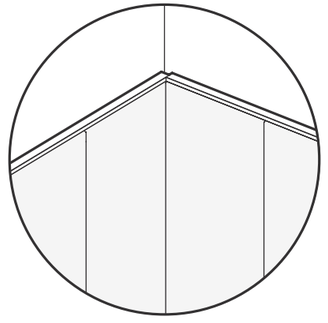
How do I install the framing?



Page 5 - 7

3. Complex Details

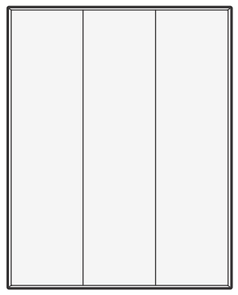
How do I install complex junctions?



Page 8 - 10

4. Wool Install

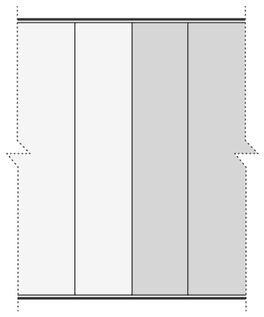
How do I install the wool fabric?



Page 11

5. Material Join

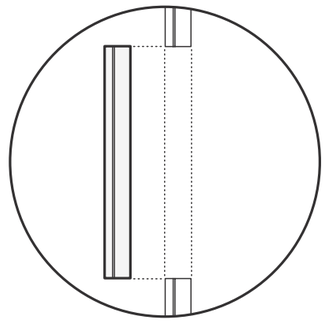
How do I join between the wool drops?



Page 12

6. Repairing Damage

How do I repair damaged product?



Page 13

Contents

Components

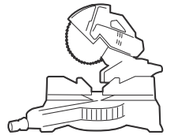
Timber Framing

This two-part framing system consists of A and B profiles that sit flush when assembled. To secure the frame to the substrate, the fixing must pass through both part A and part B, as shown.

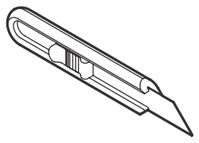
Wool Fabric

The wool felt is a stretch fabric designed to fix directly with the framing. It is available in 1600mm wide rolls, up to 21 metres in length. The fabric offers a horizontal stretch factor of up to 8%.

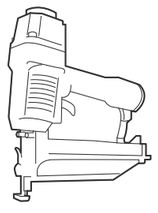
Tools Required for Installation



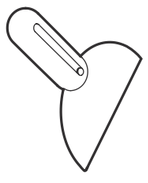
Drop Saw



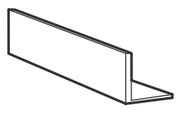
Knife



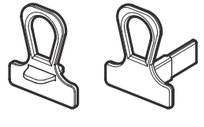
Brad Nailer



Plastering Trowel

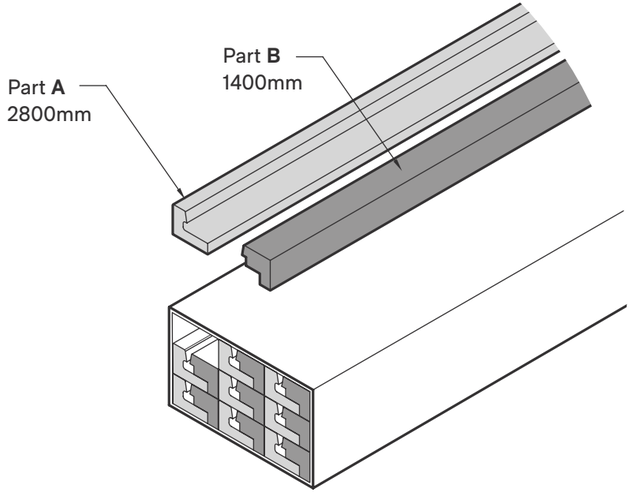


Straight Edge

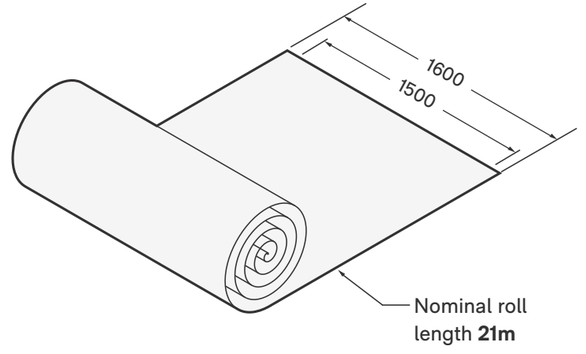


Autex Spacers
Supplied by Autex Acoustics.

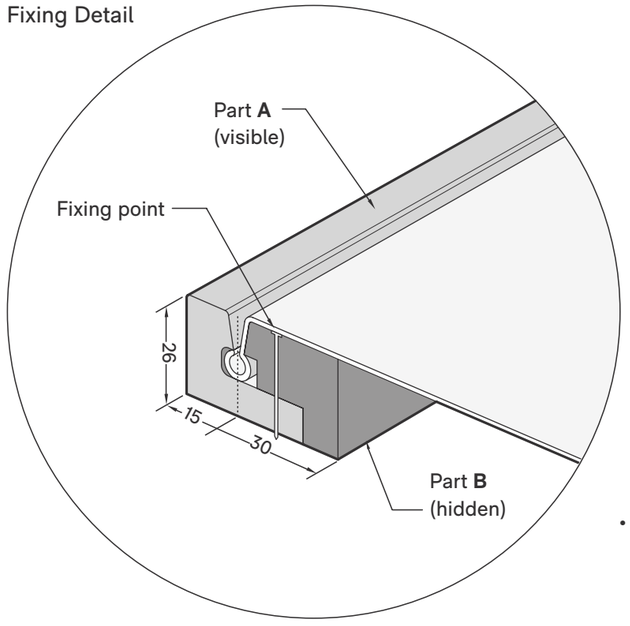
Timber Framing



Wool Fabric



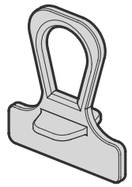
Fixing Detail



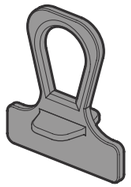
- **Note:** The intake centreline is 15mm from the external edge of part A and 30mm from the edge of part B. This centreline serves as the wool intake point.

Spacer Guide

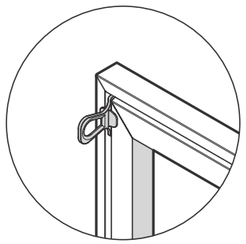
Flat Spacer

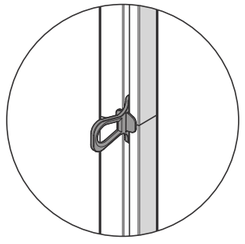


Standard Gauge
3.2mm



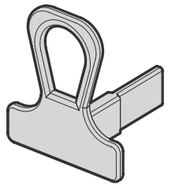
Material Join Gauge
4.0mm



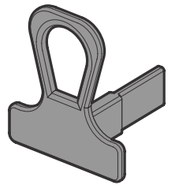


- The **Flat Spacer** is used to maintain a consistent gap between part A and B framing, ensuring optimal fixing and material intake for the wool fabric
- The flat spacer has two gauges: **standard gauge** and **material gauge**
- The **material join gauge** is used exclusively for junctions of material join battens, providing a larger gap for more material intake

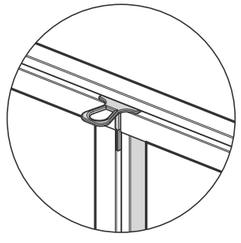
T - Spacer

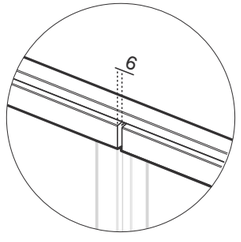


Standard Gauge
3.2mm

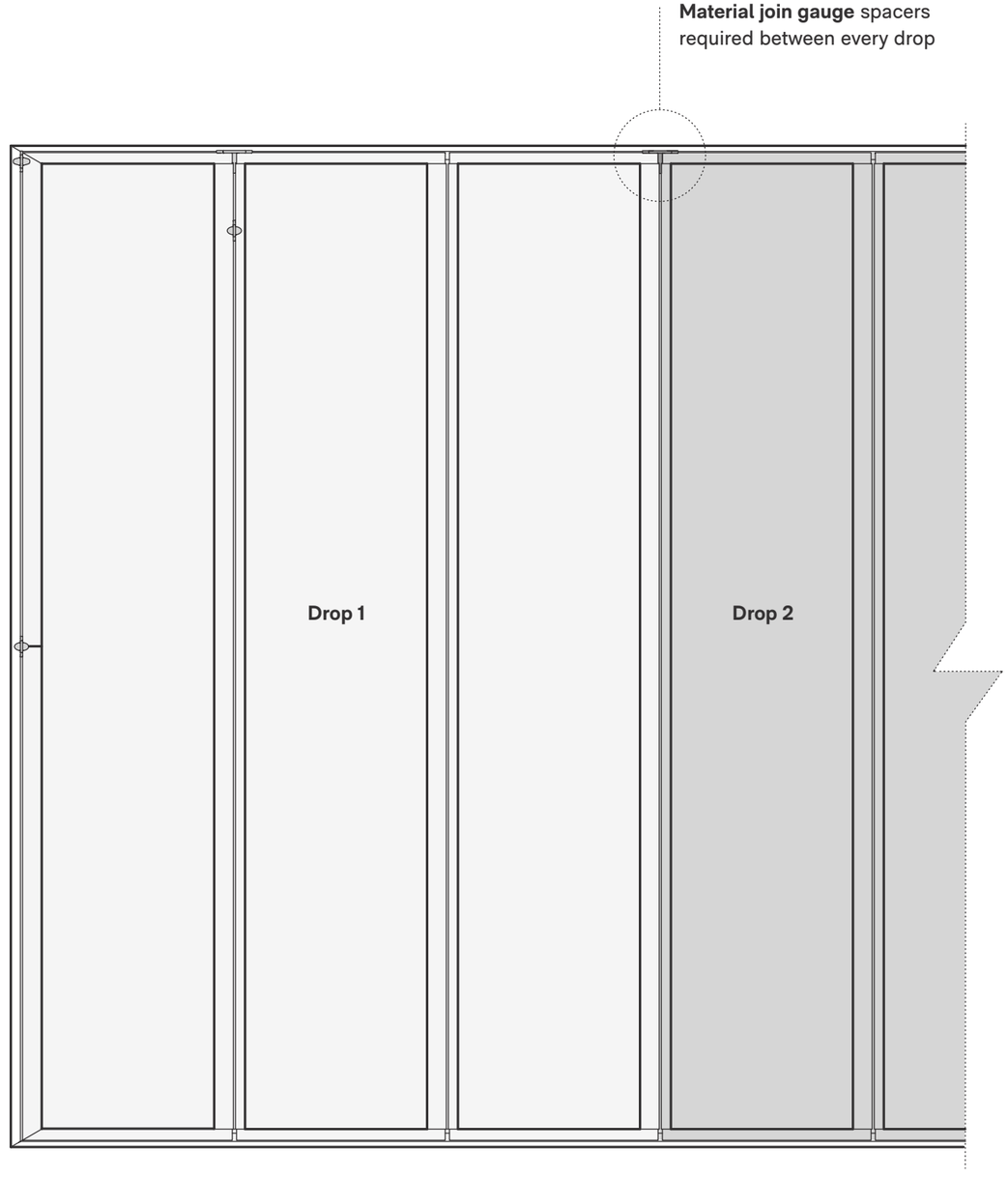


Material Join Gauge
4.0mm





- The **T-Spacer** is used to align junctions in the frame and maintain consistent gaps between part B along the outer edge. This 6mm gap between part B ensures a consistent material intake line, preventing the wool fabric from appearing pinched at junctions
- The T-Spacer also has two gauges: **standard gauge** and **material gauge**
- The **material join gauge** is used exclusively for junctions of material join battens, providing a larger gap for more material intake



External Frame 1 | 2

1. Check Materials

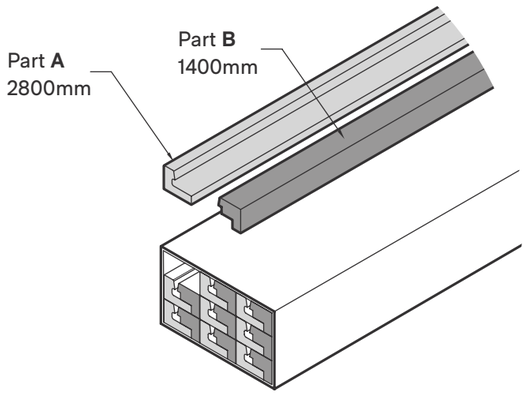
- Check that the materials have been supplied as ordered and are free from damage or faults
- All damages and faults must be reported to Autex Acoustics PRIOR to commencing the installation. No claims will be accepted where the job continues with obvious faults
- All material arrives as standard units: timber frames (2.8m kits), and wool fabric roll (nominal length 21m). All materials will be cut to length on-site by the installer

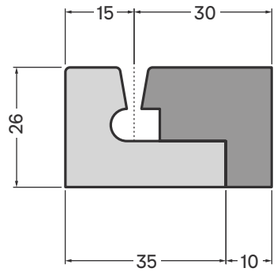
Disclaimer: All materials for this system are natural and bio-based, and therefore have a degree of variation

2. Measure Site

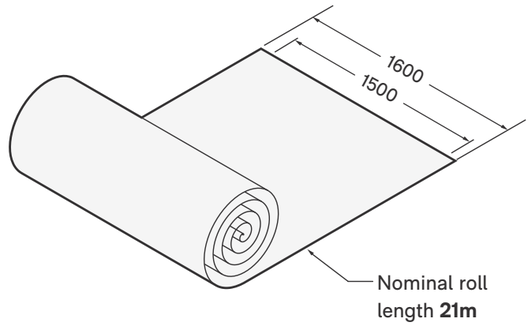
- Measure your site to ensure dimensions reflect your planned elevation and mark out your planned install
- We recommend using a laser level to ensure walls are plumb, and make adjustments as required

Timber Framing





Wool Fabric

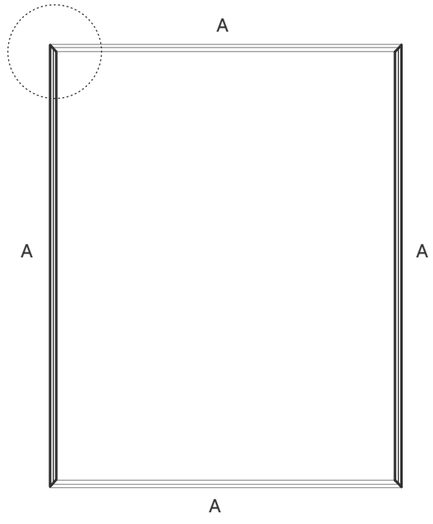


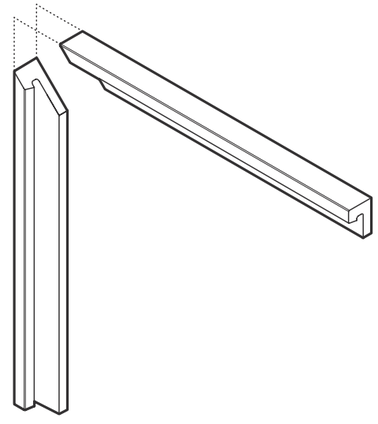
3. Attach External Part A:

- As this is the visible part of the frame once installed, particular care should be taken at this stage
- Begin by fixing the two vertical part A edges of the frame, cutting to length with mitred ends
- Following this, secure the outer horizontal edges

Tip:

- Use a straight edge to ensure timber is straight when installed, nailing the length as required
- Use these fixings for positioning, as additional fixings will be used through part B to secure the frame properly
- Ensure appropriate fixings for the substrate material are used to attach the frame





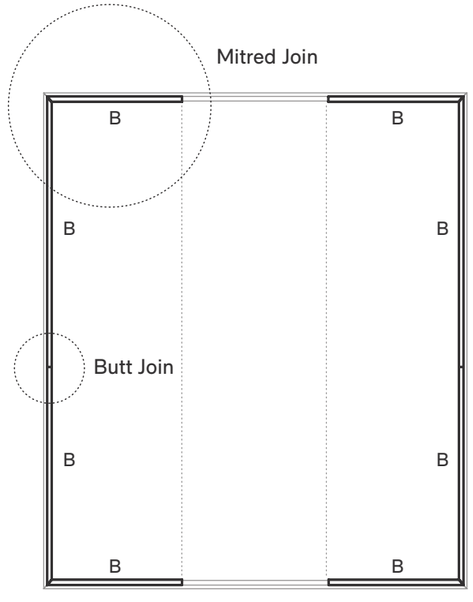
External Frame 2 | 2

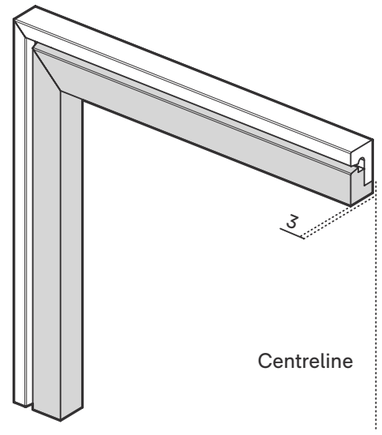
4. Attach Part B Corners:

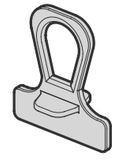
- Part B will overlap part A, forming the fixing point for the wool fabric. Start by fixing the mitred corners
- First, fix the **vertical** pieces of part B. These will be shorter than part A, so will require a butt-join along the length
- Then fix the **horizontal** corner pieces of part B. When cutting the straight end, ensure to cut 3mm short of the centreline position (see step 5 for junction spacing)

Tip:

- These corner pieces should have one mitred end and one straight-cut end
- Pre-cut your mitres, measure, and re-cut your straight ends for perfect fit
- Use standard gauge (3.2mm), Flat Spacers for positioning corner battens







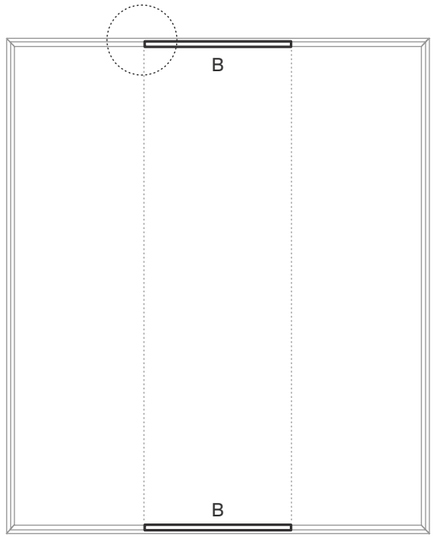
Flat Spacer

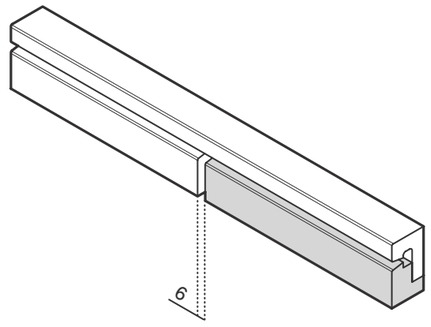
5. Horizontal Junctions:

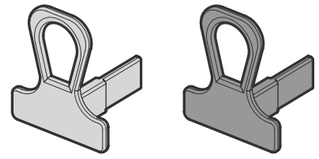
- Any remaining perimeter part B's require a 6mm space between each batten, to ensure wool fabric installs seamlessly at junctions
- Measure 6mm from the previous part B end, ensuring the centreline sits at the centre of this gap
- Fix batten using spacers
- Repeat these steps until all part B perimeters are fixed

Tip:

- Double check measurements as you progress through install
- Use a laser to ensure junctions vertically align
- As a rule of thumb, battens will be 6mm shorter than centreline dimensions provided in drawings







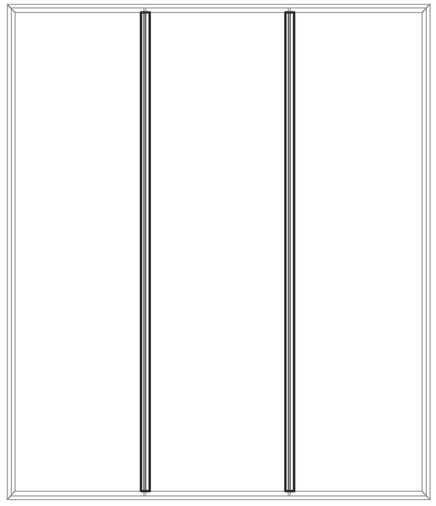
T-Spacer

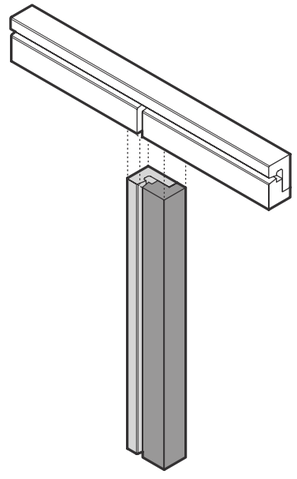
Internal Frame

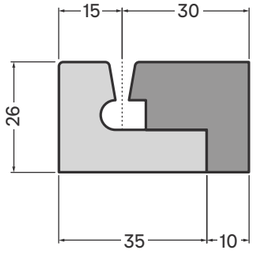
6. Fix Centre Battens

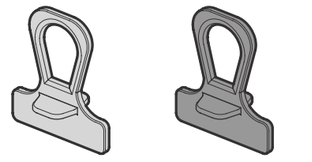
- Once all perimeter framing is secured, fix the centre battens. Align the intake with your pre-marked centreline positions
- Use spacers to ensure correct gap for material intake, and T-Spacers to align junctions

Reminder: use Material Join spacers for framing between wool drop.

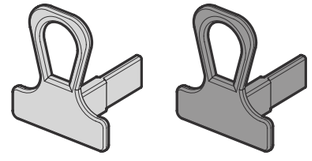








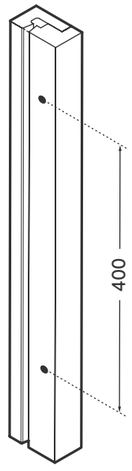
Flat Spacers

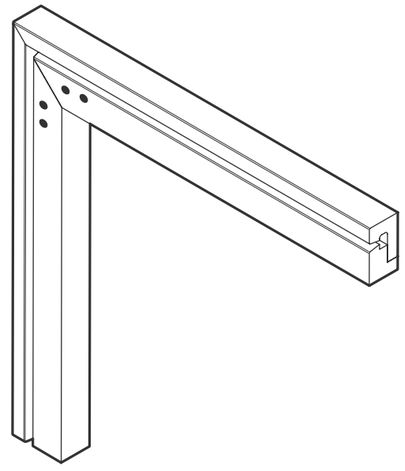


T-Spacers

7. Additional Fixings

- Apply additional fixings where necessary to ensure parts A and B are touching across the entire frame
- Add fixings at intervals of every 400mm to ensure stability and effectiveness of the framing system
- We recommend applying additional fixings on mitred junctions to prevent corners from pulling apart once wool fabric is pushed in





Cutout Frames

Cutout frames are necessary for details such as screen locations, doorways, and recessed cavities. Follow steps below to ensure clean install.

A) Position Cutout Frame

- First, complete external framing of part A (page 5), to ensure site dimensions are accurate
- Next, mark out your cutout frame position and fix part A, cutting mitre-joins at each end

B) Fix Internal Battens

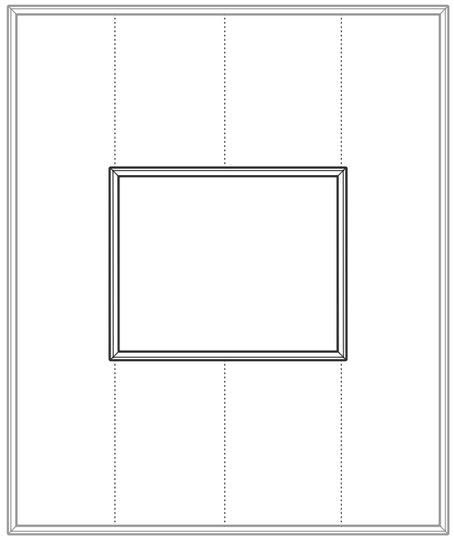
- When installing internal battens (page 7), start with the pieces connecting to the cutout frame
- Cut the lengths of the horizontal part B (see B-1) to align with the outer edge of the visible frame
- Once you have fixed these parts, align a full-length part B (see B-2) over the vertical sides of the cutout frame, and align with the external frame junctions
- Tuck the hidden part A underneath prior to fixing the length of the batten
- Ensure to use the appropriate spacers

Reminder: Use material join spacers for battens between wool fabric drops.

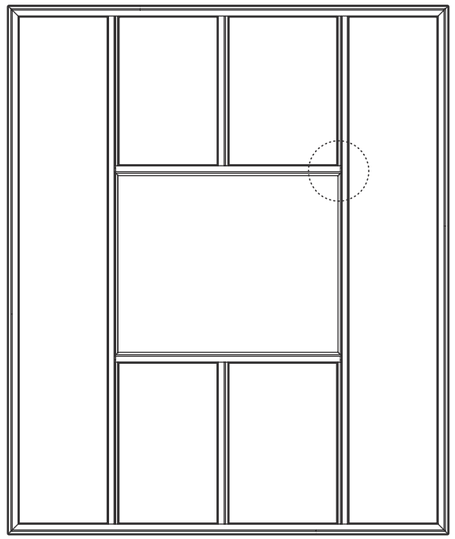
C) Fix Wool Fabric

(see page 11 - 12 for further detail)

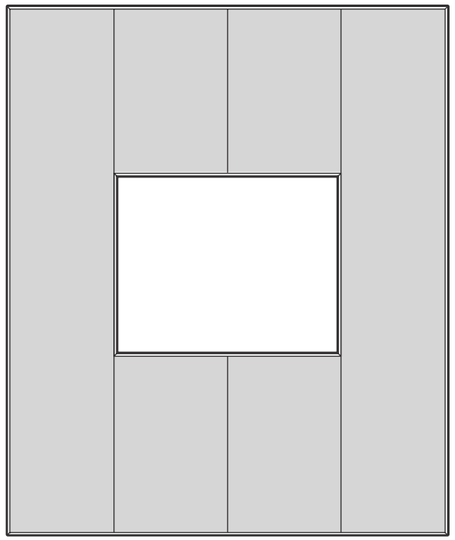
A. Position Cutout Frames

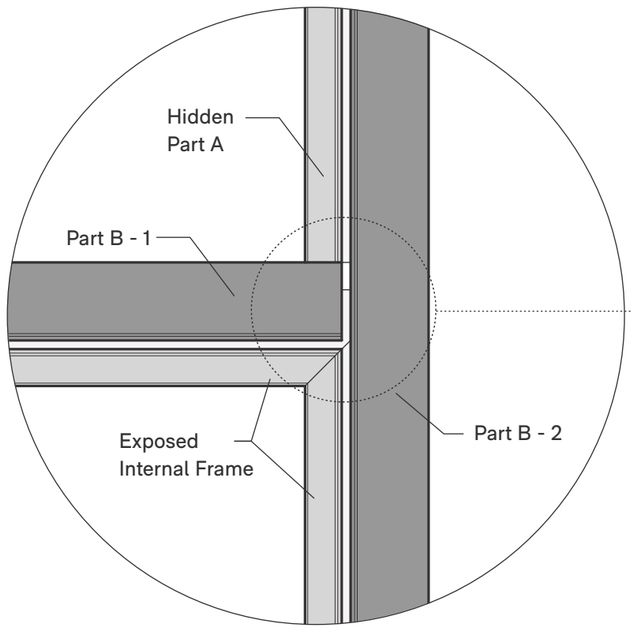


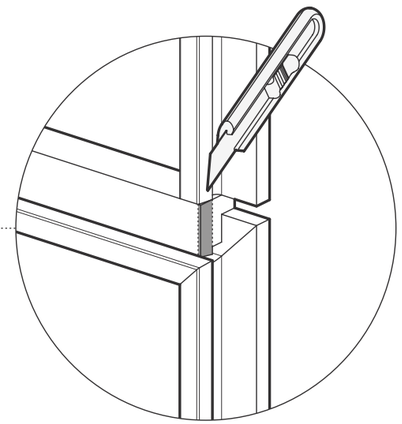
B. Fix Internal Battens



C. Fix Wool Fabric







Note: For seamless wool install at these junctions, shave the edge off horizontal part B ends (B-1) with a knife. This will match the intake line of vertical part A and avoid a visible pinch point.

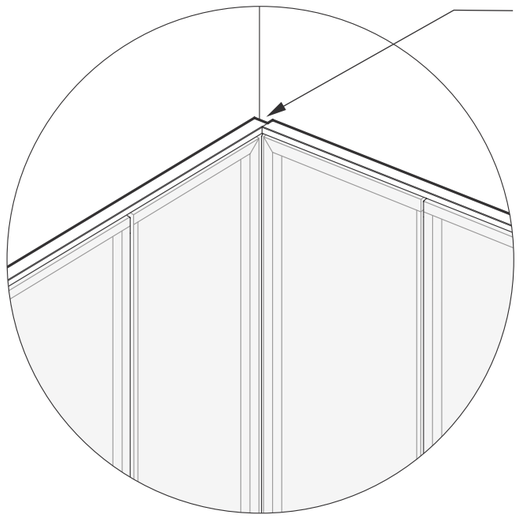
Corner Details

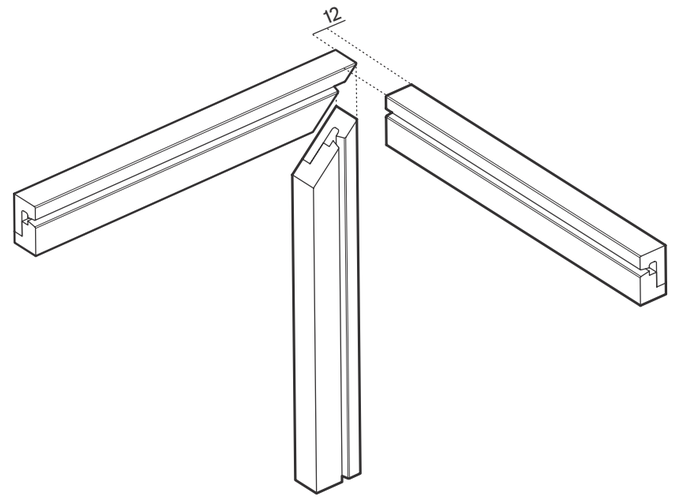
Internal Corners

Internal corners can be achieved with the Embrace Wall System, providing a continuous application across adjacent wall junctions.

Directions

- Set the first mitered frame edge 12mm away from the adjacent wall
- Butt-join the adjacent framing against this offset frame
- This ensures seamless continuity of the wool drop onto the perpendicular wall



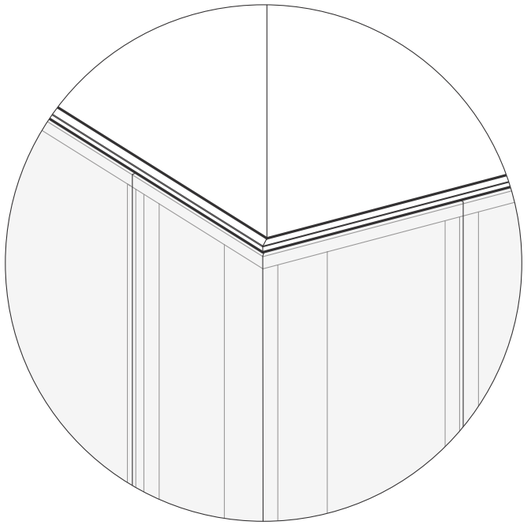


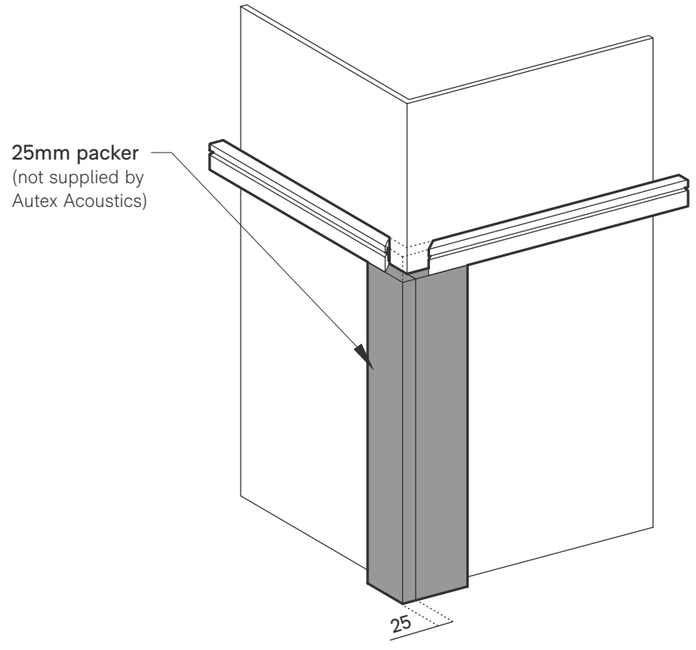
External Corners

External corners are possible with the Embrace Wall System, allowing seamless install wrapping around wall corners. An additional 25mm packer must be added to each side of the external corner to prevent the wool felt from waisting inward.

Directions

- Mitre frame ends (part A and B) depth-ways to join around the corner
- Fix the framing, joining them together around the external corner
- Fix 25mm packers on the corner to prevent the wool from waisting inward when stretched (packers not supplied by Autex Acoustics)





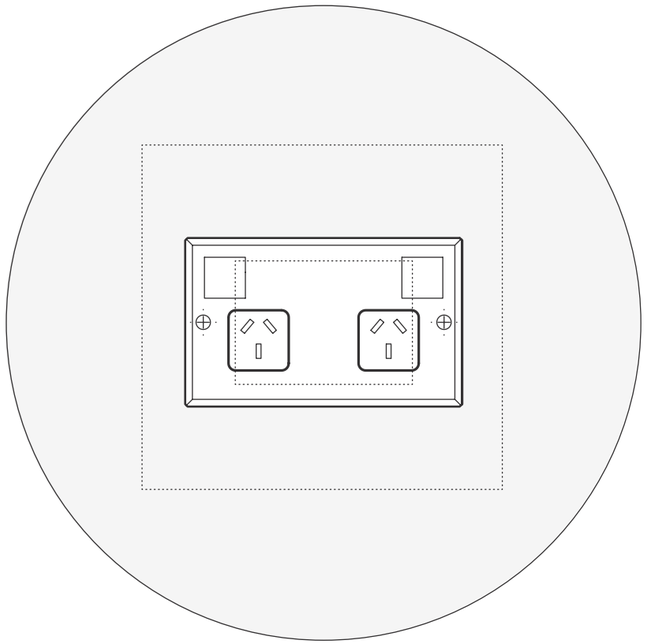
Power Outlets

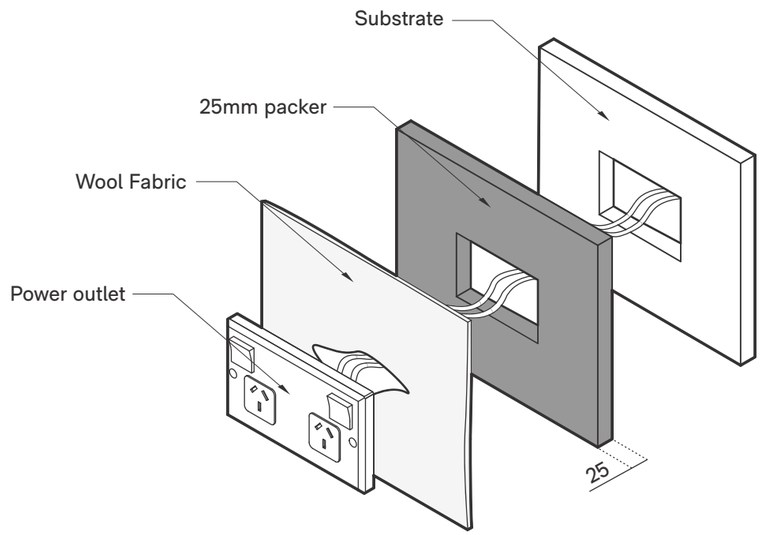
Packer: During frame install, fix a 25mm packer with an internal cut-out to match the the substrate hole (packer not supplied by Autex Acoustics).

Wool Fabric Installation: Complete the stretch wool installation process, ensuring the wool is securely in place around the cut-out.

Trim: Once you have completed the wool fabric installation, cut a slit in the wool ensuring it is small enough to conceal behind the fitting.
Pull the electrical wiring through the slit and connect to the power outlet.

Fixing: Secure the outlet through the wool fabric into the packer.





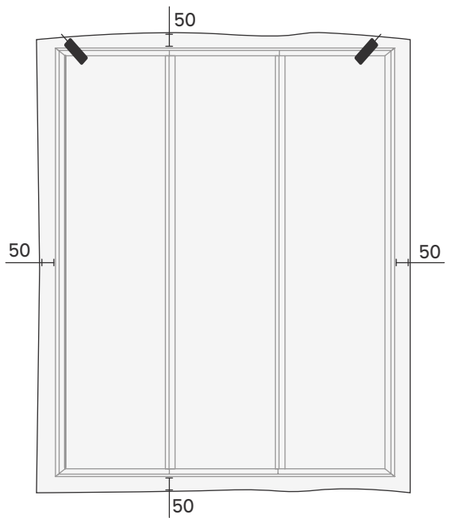
Disclaimer

- All electrical fittings must be removed and installed by a licensed electrician
- Ensure you receive electrical certification once work has been completed
- Please ensure the electrical fitting you are installing is suitable for this application, check the manufacturer's instructions for clearances and product installation guides

Wool Install

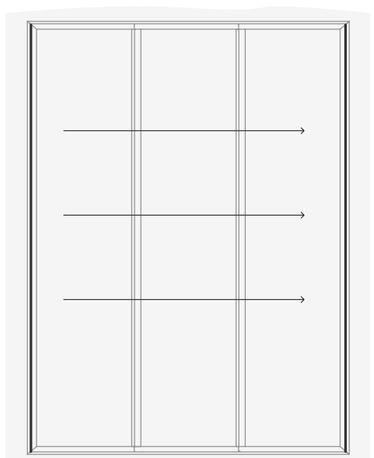
1. Pre-Installation Preparation

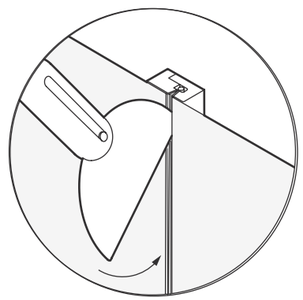
- Measure and cut your drop from the wool roll, ensuring it has at least 50mm excess on each side
- We suggest hanging the wool using clamps to help with alignment prior to fixing to the frame



2. Fix to External Vertical Battens

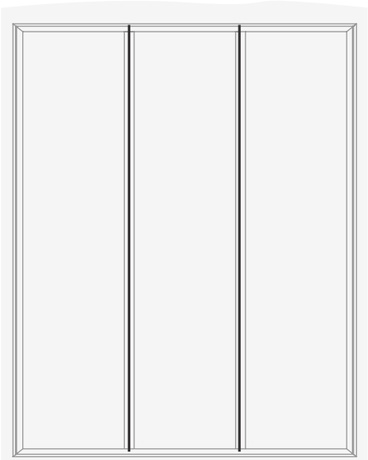
- Use a painters trowel to press wool into the frame, using the pointed edge and rocking down to pull further material into the frame
- Once you have fixed your first vertical edge, proceed to the opposite vertical edge, removing the clamps, pulling the wool taut, and ensuring alignment





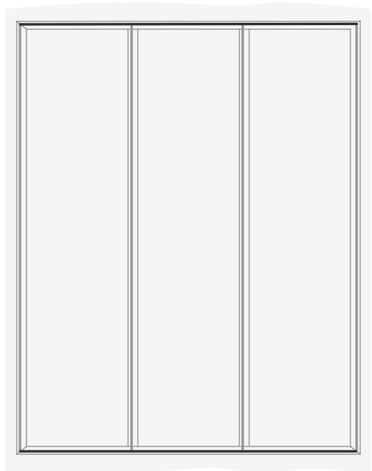
3. Fix to Remaining Inner Battens

- Fix the remaining vertical battens, starting at the top junction and working downwards
- Be cautious not to press the tool into the outer frame edge, as this can remain visible if damaged



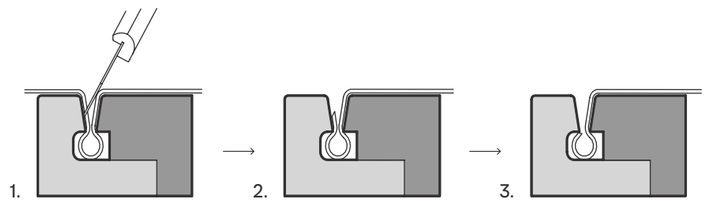
4. Fix to Horizontal Battens

- Ensure the fabric sits straight across the horizontal edge and fix into the battens

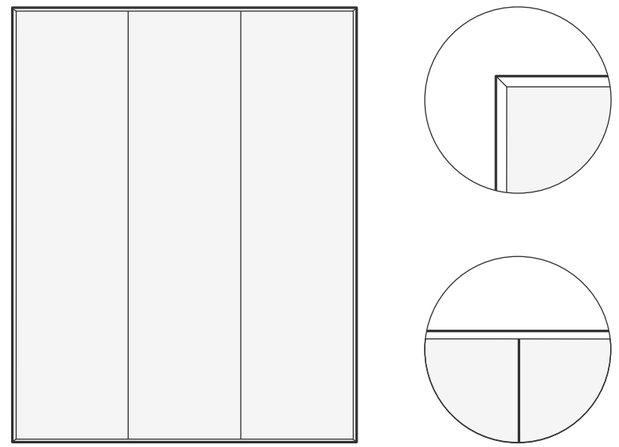


5. Trim Excess Material and Conceal Raw Edge

- After securing all the wool into the frame, trim excess material using a sharp blade along the outer edge as shown
- Push the trimmed edge further into the batten to conceal the raw edge of the fabric, using the same tool used to fix the wool



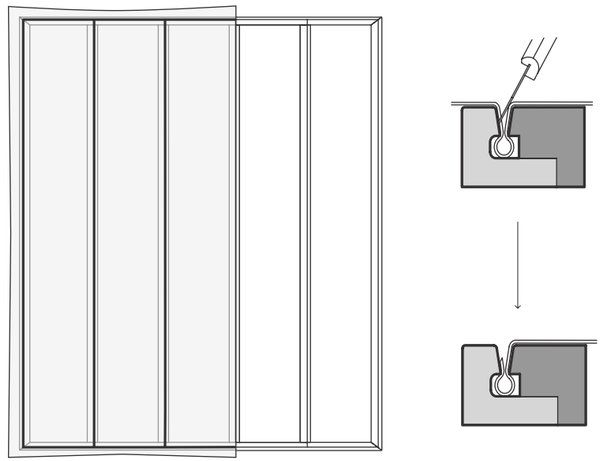
6. Complete



Material Join

1. Trim Excess Material and Conceal Raw Edge

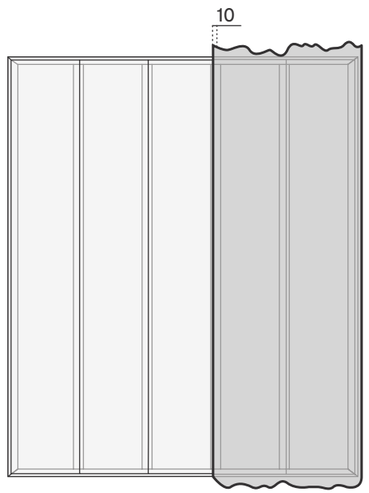
- After securing the previous drop into the frame, trim excess material using a sharp blade along the outer edge as shown
- Push the trimmed edge further into the batten to conceal the raw edge of the fabric, using the same tool used to fix the wool

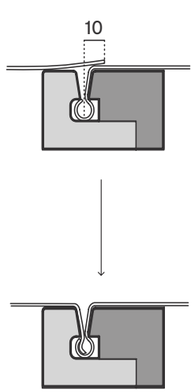


2. Hang New Material

- Hang the new material using the same clamping method, ensuring there is a 10mm overhang past the intended join, and accurate alignment along the join
- Begin fixing the material down the vertical batten. This may be slightly more challenging due to existing material in the join

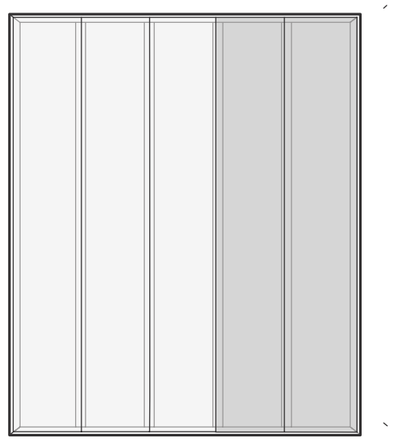
Tip: if you need to trim excess fabric from your second drop, you can press your trowel into the join and use this as a hard surface to cut against.





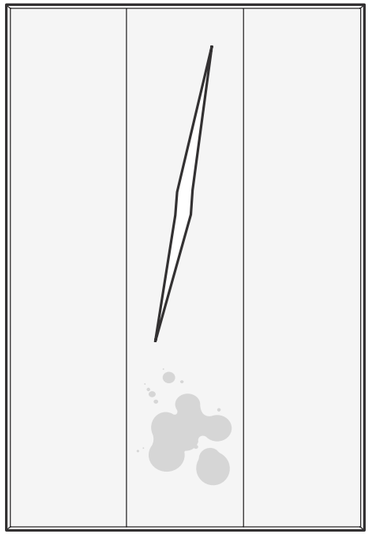
3. Continue Installation

- Once the material has been fixed to the entire length, repeat steps 4 - 8 of the wool install process



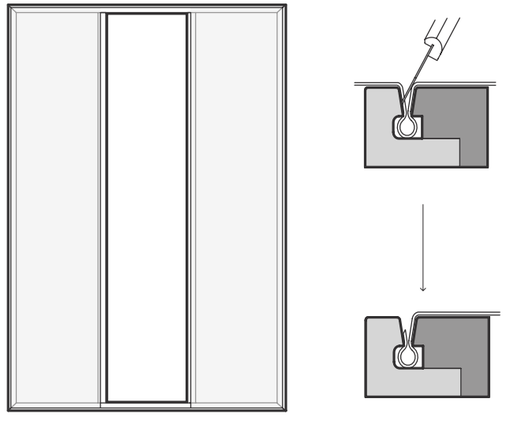
Repairing Damage

Wool



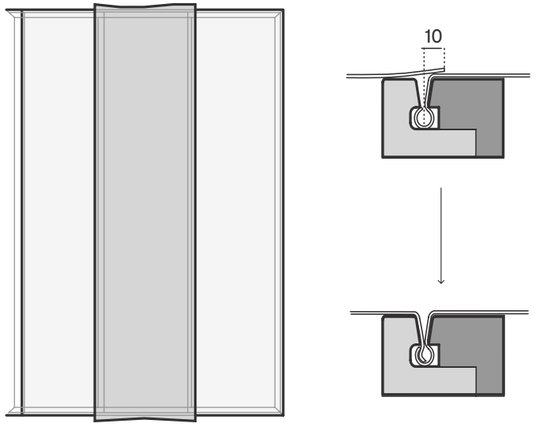
1. Trim Wool Back

- Trim the damaged wool section back to the nearest frame edges
- The cut must be precisely at the pinch point of the framing, removing the material on the edge, allowing for more material to be inserted into the join

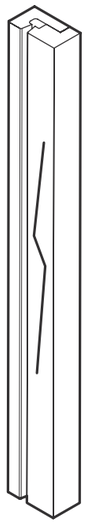


2. Wool Replacement

- Refer to ‘Material Join’ steps 2 - 3 (previous page) for best fixing method

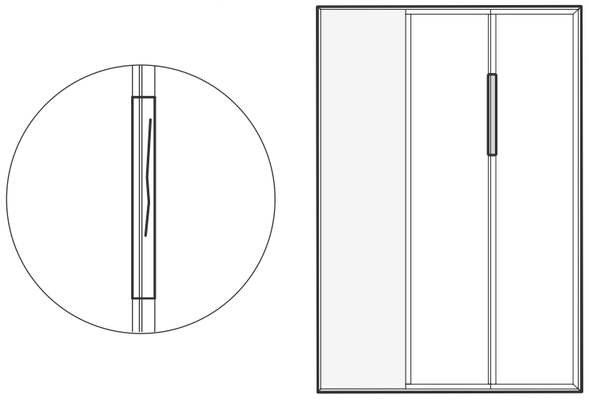


Batten



1. Trim Damaged Section

- It is possible to remove sections of damaged timber, using off-cuts to fill rather than replacing with full trims. This is not recommended for external, visible framing however
- Carefully pry it off the wall to remove it
- Measure and cut a section of batten to fit snugly into the gap. Secure it using the standard framing installation technique and following the spacer guide



2. Wool Replacement

If you needed to remove wool to replace timber pattens, please refer to ‘Material Join’ steps 2 - 3 (previous page) for best fixing method.