

## **Installation Instruction Guide**

### **ME060 A2 Air and Vapour Control Membrane**

[www.illbruck.co.uk](http://www.illbruck.co.uk)

## ME060 A2 Air and Vapour Control Membrane

Illbruck ME060 is a laminated, aluminium foil faced glass fibre reinforced, air and vapour control membrane used on the interior side of lightweight steel and timber frame systems. ME060 has a reaction to fire classification of A2-s1, d0 to EN 13501-1.

### Materials required:

- Illbruck ME060 Air and vapour control membrane
- Illbruck ME315 Total protection tape
- Illbruck ME322 VV EW Foil tape (or alternatively ME480 Butyl band)
- Tremco TF448 Double sided butyl bonding tape
- Illbruck AT140 Primer
- Illbruck SP025 Fire Membrane adhesive

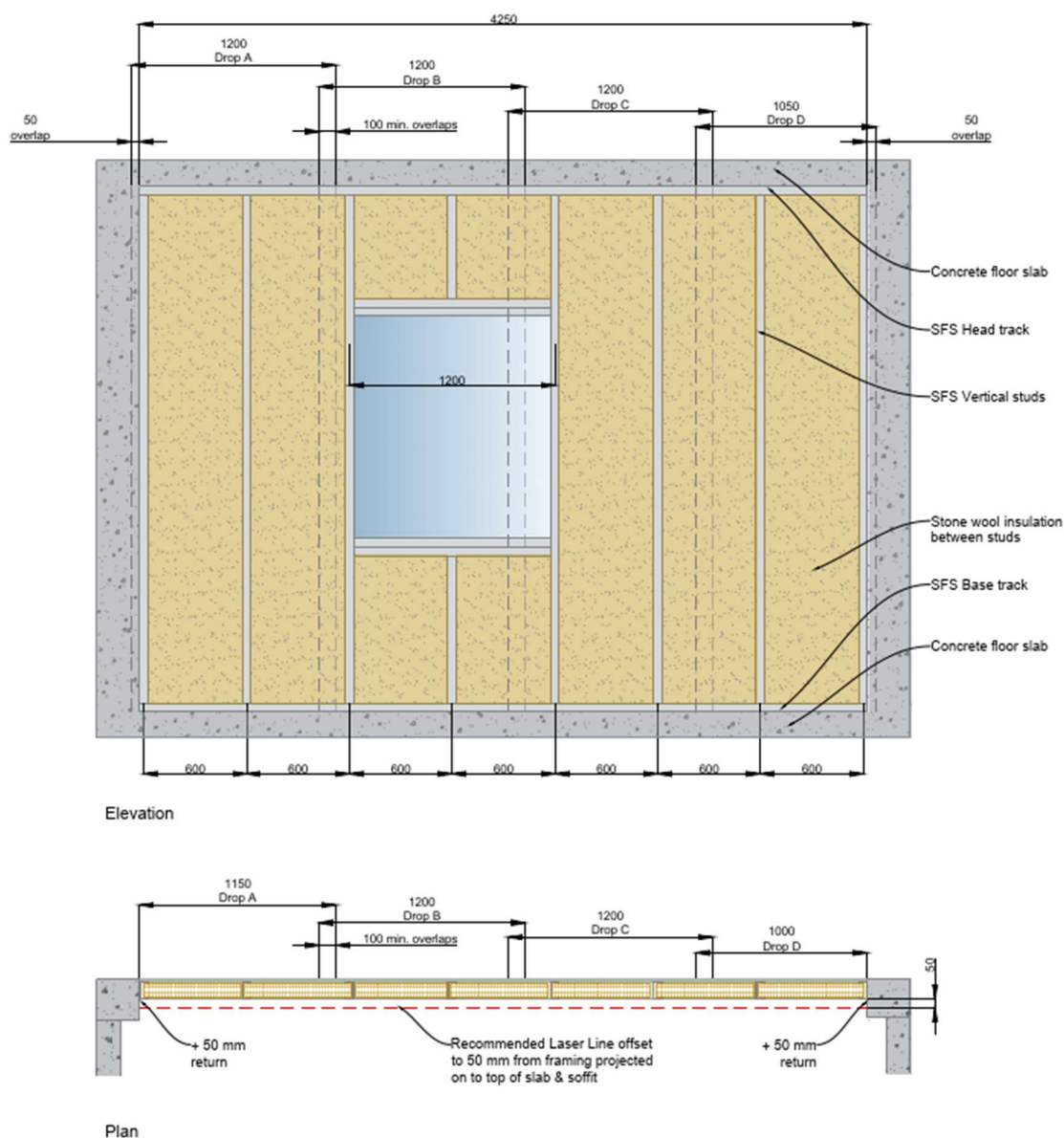
### Tools and Accessories:

- Sharp retractable bladed knife and /or Illbruck cutting shears
- Laser or chalk line to mark out 50 mm offsets
- 2" disposable paint brushes
- Pots for decanting AT140 Primer
- Stout seam roller
- Bench or table wide enough to accommodate the width of ME060 and long enough to accommodate the required cut lengths
- A 'Sharpie' marker

### Before commencing work:

Ensure the working area is dry and free from dust, debris and other obstructions including other trades.

### Step 1:

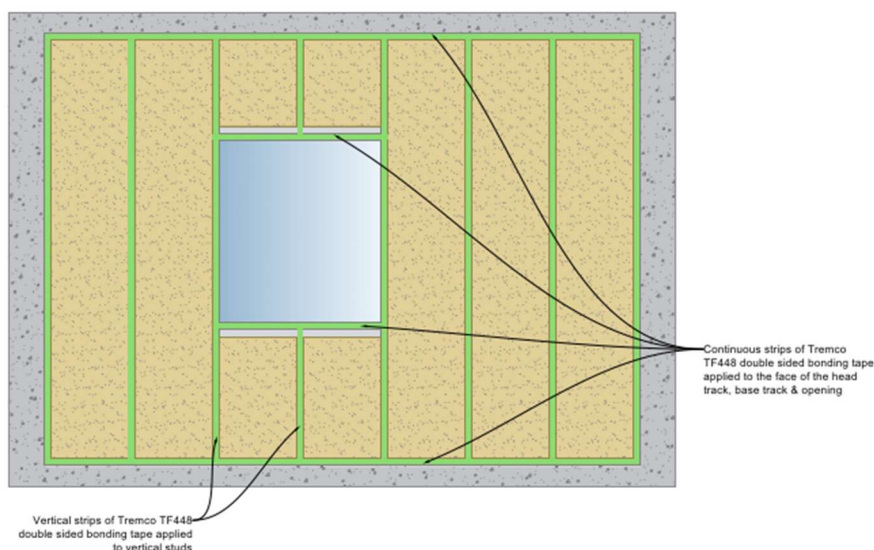


ME060 is supplied in 1200 mm width so it is best applied from the top down (vertically like hanging wallpaper).

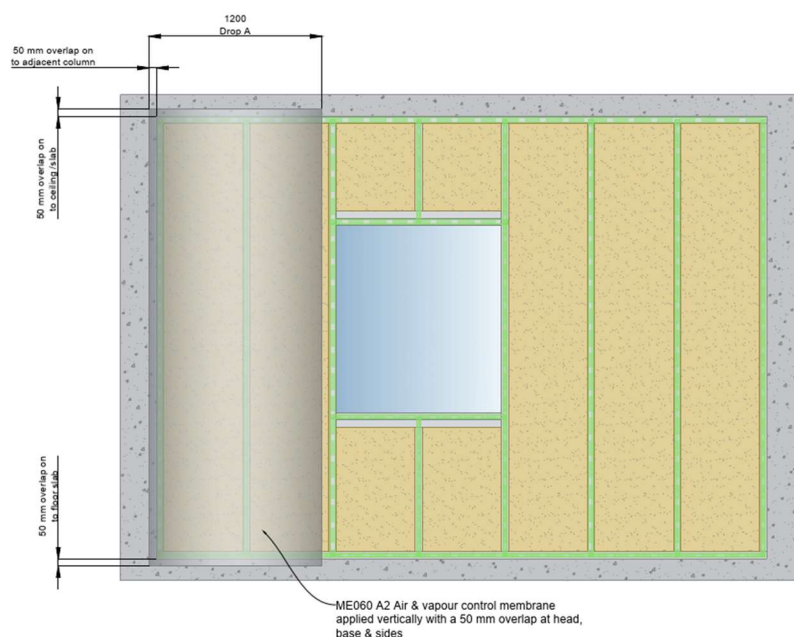
Initially work out how the number drops required to cover the bay, taking account that the ME060 should form an overlap with the adjacent drop by 100 mm minimum (there is no maximum).

In the example shown above, a total of four drops are required marked up as A to D. Drops A and D abut columns where the ME060 should return inward onto the columns by 50 mm. The column interfaces and returns should always be factored into the calculation.

### Steps 2 & 3:



Apply a continuous strip of Tremco TF448 double sided bonding tape to the base track and vertical studs. Apply further continuous strips to the head track, head and base of the opening and to the studs inside of the opening. Note: 6 mm x 6 mm continuous beads of SP025 Fire Membrane adhesive may be used in lieu of TF448 if preferred. Apply the beads as you approach each sectional drop.

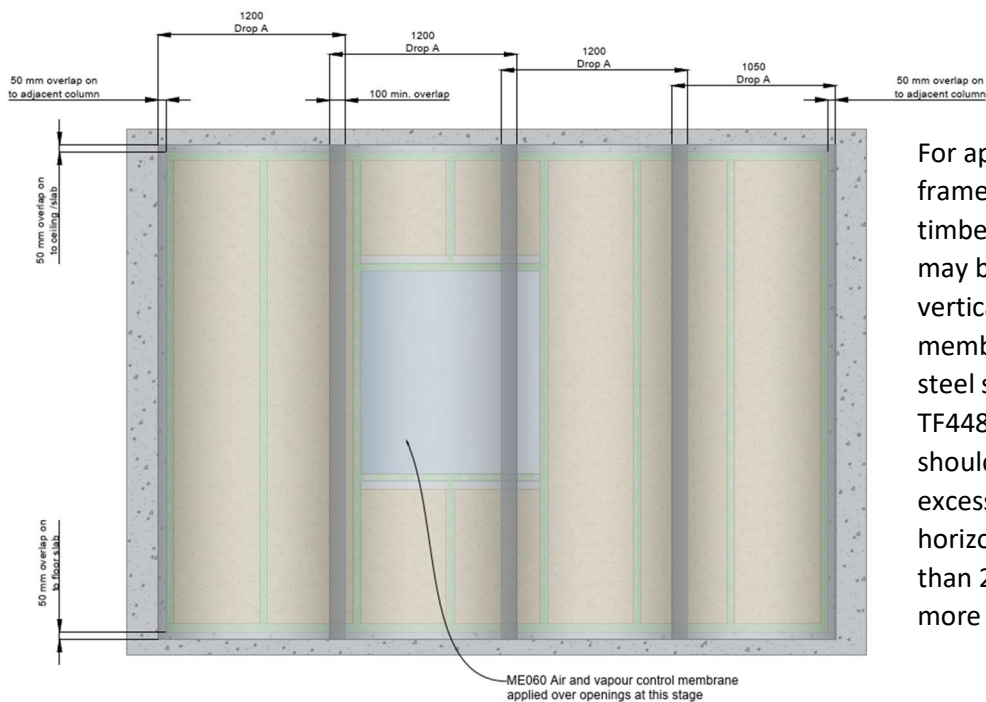


Lay the ME060 down on a flat surface, e.g. a make shift table or similar, measure and cut a length of ME060 to suit the height allowing for a 50 mm excess at the top and bottom that will be turned inwards at the head and base. The excess will be sealed to the floor slab, or column in a later step.

Align the section of the ME060 vertically and press the membrane on to the TF448 double sided adhesive tape to secure it in place.

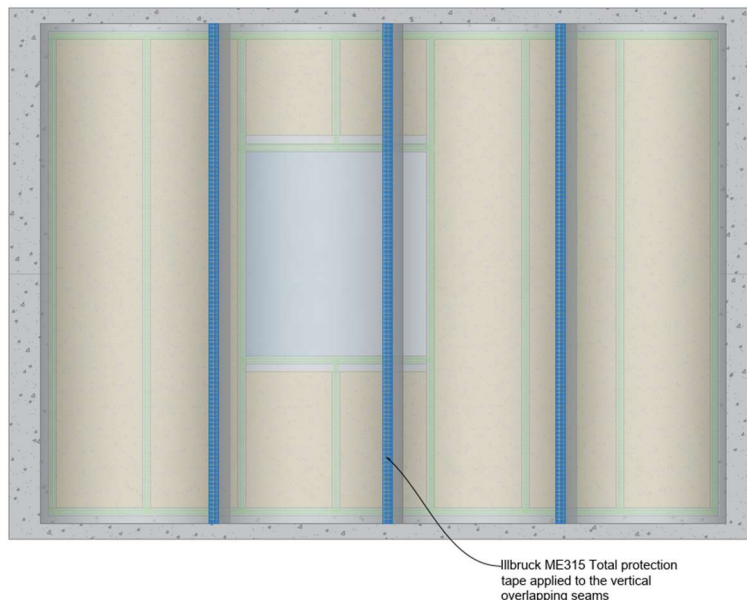


### Steps 4 & 5:



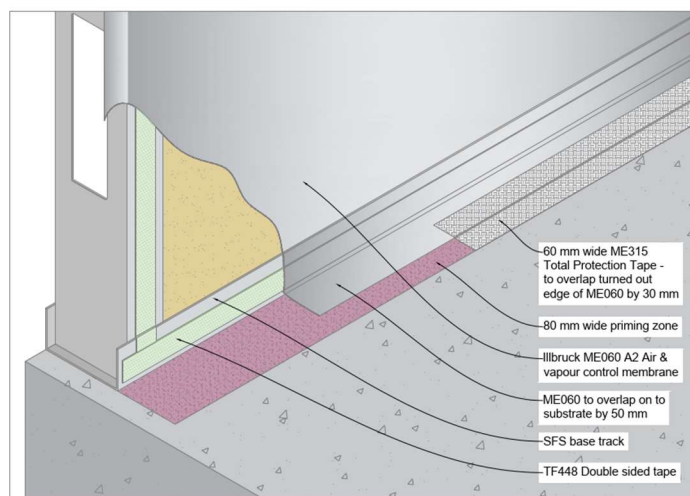
For applications to timber framed open panels or timber stud-work, ME060 may be secured to the vertical and horizontal members with stainless steel staples instead of TF448 or SP025. Staples should not be used excessively, e.g. vertical or horizontal spacing not less than 250 mm and not more than 450 mm.

Repeat Step 3 for the remaining drops B to D by forming overlaps with the preceding drop by a minimum of 100 mm or whatever the calculated drop requires. During the initial installation, cover all openings with the ME060 membrane.



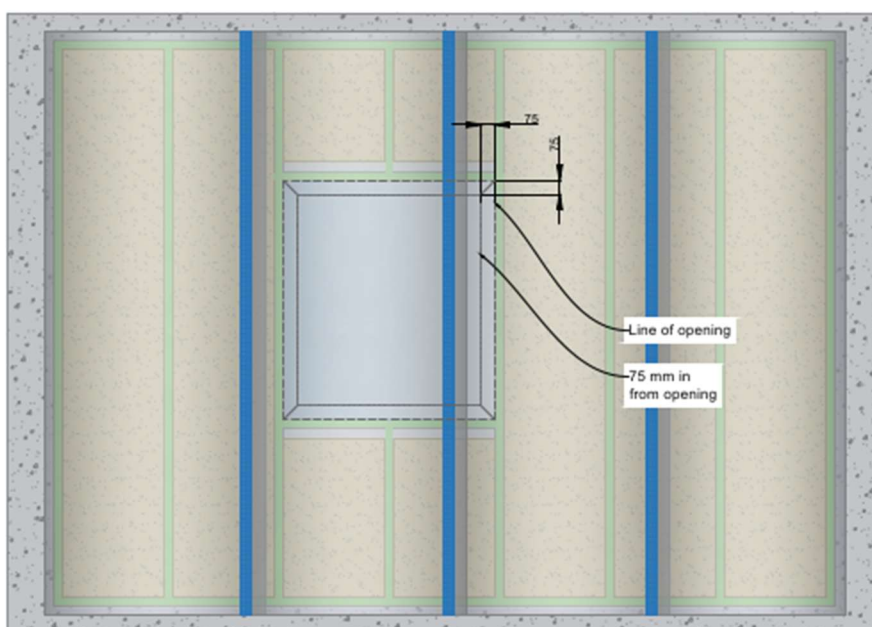
Apply 60 mm wide continuous strips of ME315 Total protection tape to the vertical overlapping seams of the ME060 membrane between adjacent drops. Ensure that the tape is firmly bonded and is free of wrinkles or bubbles.

### Steps 6 & 7:



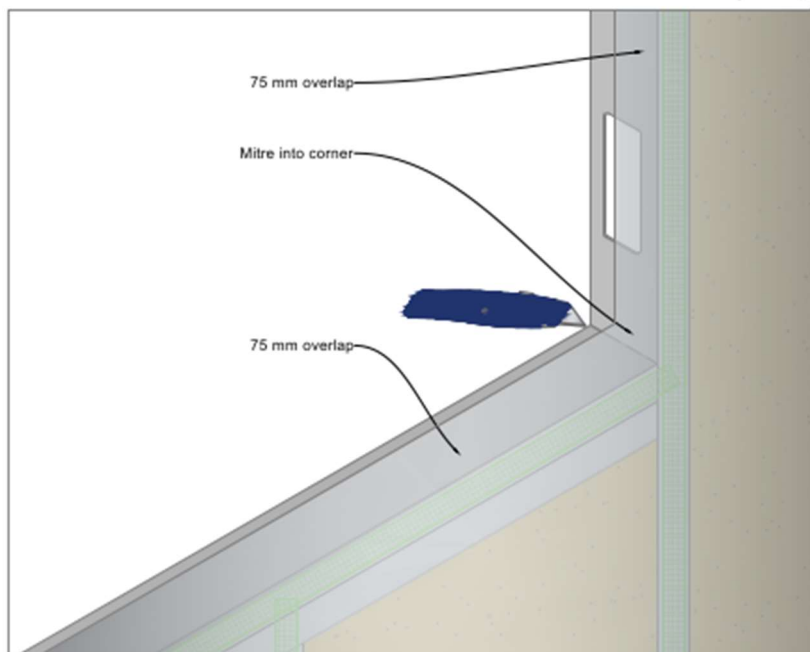
Under the turned in section of the ME060 vapour barrier, apply a thin coat of AT140 primer with a 2" wide brush to any concrete interfaces to aid bonding. Apply AT140, to the soffit, top of slab and columns in an 80 mm wide band and allow to flash off (approximately 10 mins in warm weather).

When the primer is touch dry, apply a continuous length of 60 mm wide ME315 Total protection tape to the turned inwards 50 mm section of the ME060 vapour barrier. Apply the ME315 tape so it is firmly bonded and bubble and wrinkle free, the installed ME315 should overlap 50/50 with the membrane and structure to seal the terminated edge of the installation onto the structure.

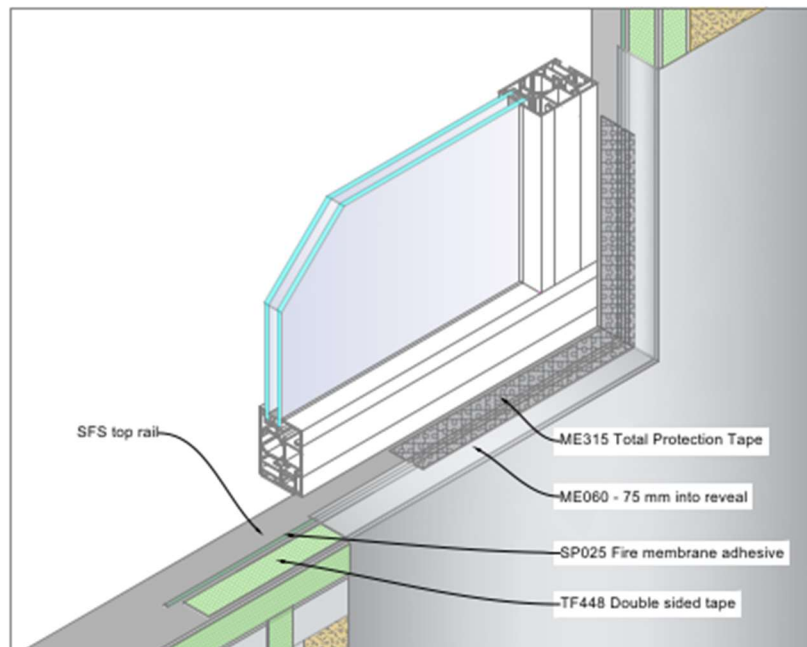


Mark out a square/rectangle with a 'Sharpie' where the window or door opening occurs, leaving a border 75 mm smaller than the structural opening on all sides. Taking care, use a retractable bladed knife, cut a hole where you have marked out the border and discard the section of redundant ME060 membrane.

### Step 8 & 9



Using a sharp retractable knife or shears, cut a 45 degree mitre at the corners to enable the 'flaps' to be turned inwards in to the reveal.



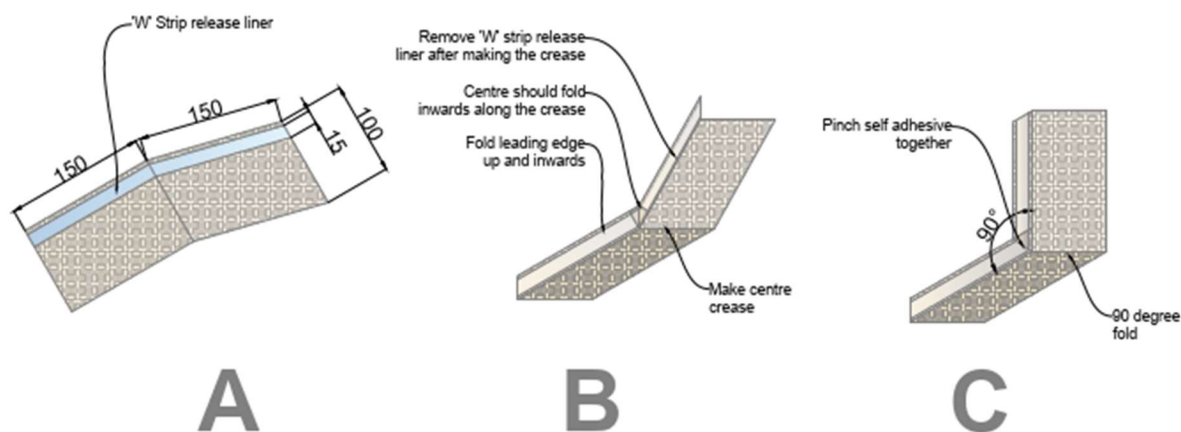
The turned in flaps need to be fully sealed to the SFS around the perimeter of the opening. There are 3 options:

Option 1. (*Good*). Apply strips of ME315 Total Protection tape overlapping 50/50 with the ME060 and the light steel substrates.

Option 2. (*Better*). Apply a continuous 6 mm diameter bead of SP025 Fire Membrane adhesive 15 mm inside of the terminated edge. Bed the ME060 on to the adhesive bead and consolidate the bond by applying pressure with a seam roller until 2-5 mm of squeeze out is visible along the whole run.

Option 3. (*Best*). Apply a 50 mm wide strip of TF448 double sided tape to the perimeter of the opening 15-20 mm from the terminated edge and then seal the loose edge with SP025 Fire Membrane adhesive as described above.

### Fabricating an internal 3D corner section



Stage A - Cut 4 No lengths of ME322 VV EW Foil tape 300 mm long. Fold the two ends of each piece together and make a crease down the centre. Apply pressure along the fold with a seam roller to define the crease. Note – the foil face should be face down, the off-white texture should be facing upwards with the 'W' self-adhesive strip visible.

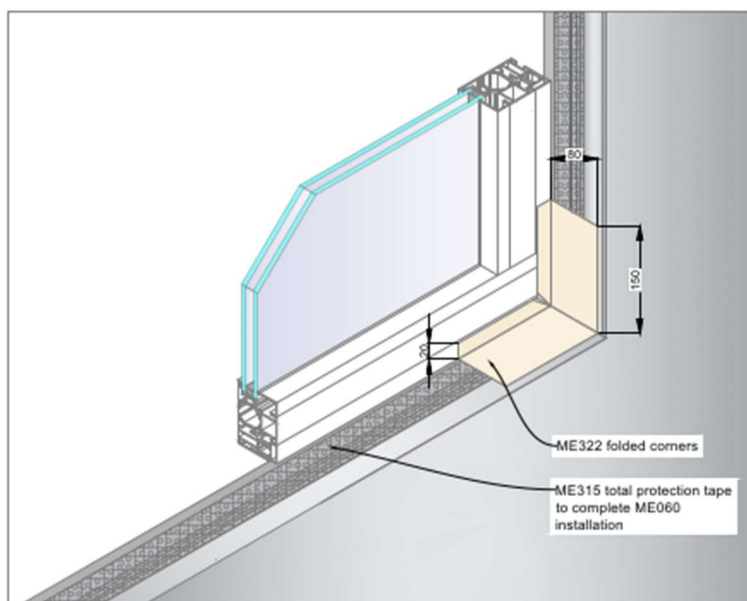
Stage B - Open up the folded and creased lengths and re-fold pinching the centre of the self-adhesive strip inwards to make further creases to enable a 90 degree L shape. Assign a section of each corner and dry fit the formed corner to check that it comfortably sits tightly in each of the corners. You will need to invert the top corner sections ensuring that the 'E' strip on the foil face is aligned with the frame.

Stage C - Unfold each length once again and remove the 'W' strip. Reform the 90 degree 'L' shape and pinch the now active 'W' self-adhesive strip to connect and hold the profile at 90 degrees.

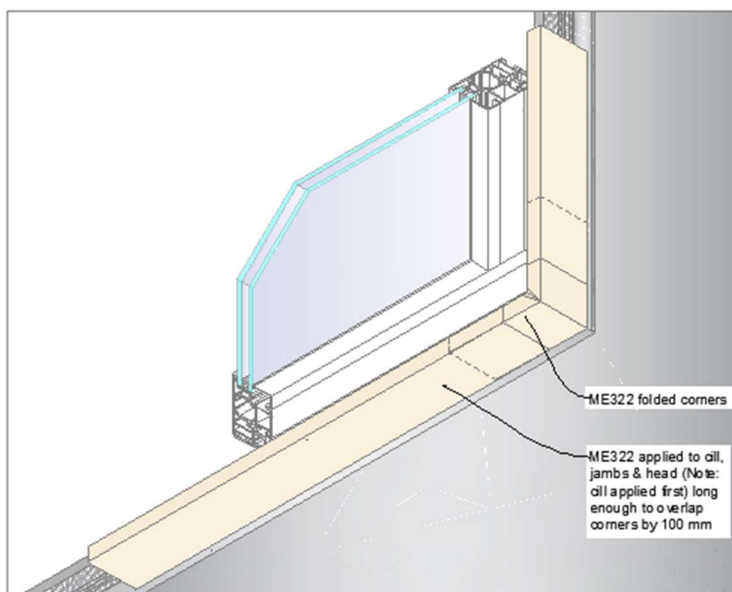
A similar method is employed when ME480 Butyl Band has been specified in lieu of ME322 – seek advice from the CPG Field Service Team or your local Area Sales Manager.



### Final connection to window frame:



Self-adhere the preformed corner sections to cill, jambs and head. Ensure the corner sections sit flush at 90 degrees. The leading edge 'E' self-adhesive strip is removed and a 20 mm connection to the face of the frame is required. Remove the main release liner and adhere to the ME060 vapour barrier. Once adhered, apply pressure and consolidate in place with a seam roller.



Cut sections of ME322 VV EW Foil tape (or alternatively ME480 Butyl band) for cill, jamb and head, long enough to allow a 100 mm overlap with the pre-applied formed corners.

Apply the cill section first, followed by the jambs, with the head section applied last. Your application is now complete.