General

- The main or general purpose and usage of illbruck ME508 Duo EW/F membrane is to provide a continuous primary air and vapour seal around the entire window perimeter between a glazed window and the internal structural opening reveal.
- illbruck ME508 Duo EW/F can be used in solid wall, timber frame, traditional brick and block cavity wall reveals and is also suitable for windows projecting from an SFS wall. Various widths are available.
- This method statement offers general guidance for successful application.

Preparation

- All surfaces should be clean, dry, dust, grease and debris free.
- If applying the illbruck ME508 Duo EW/F membrane to the internal face of the glazed frame, profile protection tape should be removed. illbruck ME508 should be bonded directly to the frame substrate and not a soft removable layer.
- In cold weather (below 5°C) the use of an illbruck Primer such as AT140 may be required.
- AT140 should be applied (e.g. to a SFS reveal) in one thin brush-on coat.

Recommended Application Sequence: (ME508 applied in “E” format)

illbruck ME508 Duo EW/F is supplied in a dual format for convenience:

- “E” format is applied to the internal face of the glazed frame using the single self-adhesive strip 20mm wide situated on the fully self-adhesive backed face of the membrane.
- “W” format utilises the 20mm self-adhesive strip on the front face of the membrane which is pre-adhered to the window frame perimeter prior to the window being plumbed and fixed into the opening. This method statement does not deal with “W” format applications.

1. Cut four sections of ME508 Duo EW/F approx. 300 mm long. These will be used to complete the seal in the corners. Form one corner at a time.
2. Fold the cut section of the membrane at 90° per Fig.1. Make a cut across the line of the upper “W”self-adhesive liner on the printed face to coincide with the corner. Using a seam roller and a solid surface underneath make a distinct crease marking the centre of the membrane.
3. Starting at either the left or right-hand horizontal sill, ensure that the formed corner will locate satisfactorily in the corner of the reveal.
4. Remove the “W” liner and reform the 3D corner per Fig.2 using the creases you have made and also remove the liner on the opposite membrane face, bonding the corner to the window frame face with the 20mm wide self-adhesive on the reverse face. A minimum contact of 10mm to the frame should be achieved.
5. Remove the adjacent liner, also on the reverse face and bond to the reveal, ensuring that a 90° bend is achieved with the membrane tight in the corner and without any gaps through which air leakage could occur.
6. If the membrane has a further release liner on the fully backed face, remove this and continue bonding the corner. Once located as desired apply firm pressure to the membrane by rolling over the top using an illbruck seam roller.
7. Repeat for the remaining three corners. Each corner should be per Fig.3.
8. Cut lengths of membrane to suit each side with a minimum 50 mm overlap onto each corner previously applied.

9. Starting at the sill, remove the 20 mm wide liner on the reverse face and bond to the internal window frame face with a minimum 10 mm wide bond overlap. Once the length is bonded to the frame from corner to corner, remove the 20 mm wide and adjacent liner on the reverse face and bond the membrane to the reveal, ensuring that there are no creases or air bubbles. Use the palm of the hand to smooth out the membrane and remove the second wider liner if applicable. Once the complete length is applied, consolidate the bond by using an illbruck seam roller.

10. Repeat for the other three sides, starting at the jambs and then the head.

11. Once completed the membrane seal should be continuous with overlapping corner sections and without gaps in the corners. If any gaps remain or the fixing lugs are not fully covered – cut small patches to size and overlap any areas that remain unsealed to maintain continuity. If it is not possible to complete this with the patching method, use illbruck SP525 Frame & Façade Sealant & Adhesive.