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MANUFACTURING TOLERANCES FOR REHAU TOTAL70

1. The overall width and height of an assembled frame shall be within a permissible deviation of +/- 2mm from the work sheet size when measured at +/- 5 degrees centigrade of the manufacturing room temperature. (Minimum manufacturing room temperature should be maintained above 14 degrees). For assemblies with outer frames having 3 or more joints per frame member (mullions or transoms), the permissible deviation shall be 3mm for frames split into 2 or 3 sections (typically 4 or 6 panes) and 4mm where the frame is split into 4 or 5 sections (typically 8 or 10 panes).
2. Frame assemblies shall be such that they can be installed squarely within a maximum difference in the diagonal of 4mm.
3. The overall width and height of a Casement/Door Sash shall be within a permissible deviation of +/- 2mm from the work sheet size when measured under the same conditions as 1. above.
4. The gap between sash and frame in any window or door shall be in accordance with the design requirements, in any case this gap shall be such as to ensure both an effective weather-seal between the weather-strip and frame, and the proper functioning of the hardware. The overlap of the sash to outer frame is designed to be 8mm. The overlap should not be less than 6mm or greater than 9mm.

Please note: on all Rehau T70 chamfered and sculptured windows the sash should be set so that on the lock side the overlap is no more than 7mm on the opposite side the overlap should be 8mm (the sash size will automatically have been adjusted to allow for this by the computer software).

5. Glazing beads should be cut to fit the glazing rebate and should be within +0/-1mm of the rebate opening

Please refer to example drawings overleaf.

VARIABLES

There are three variables which can affect the finished size of a frame. These are: Frame piece size, Transom/Mullion size and Vee Notch depth. In addition the welder burn off must be working correctly. This should be 6mm for all Mitre and Vee joints.

It is not easy to define tolerances for these variables; for example if a transom on a Top/Fixed window is 2mm over size this would normally be regarded as well over tolerance, but if the Vee Notch Depths were say 1mm too deep the window would actually measure up correctly. As always the best method is to pay careful attention to the accuracy of these variables especially on frames over 2 panes wide. Outer Frames and Transom/Mullion pieces should be cut to within +/- 0.5mm of the worksheet size - there are exceptions to this.

Secondly the Vee Notch size should be accurate to the factory specification sheet. The maximum variation in the Vee Notch should be no more than +/- 0.5mm. If a Vee Notch is undersize after cutting it can be reworked by cutting to the correct depth on the manual Vee Notch saw. If a Vee Notch is too deep, by no more than 1mm, it may be used if the window has not more than one Transom or Mullion, however the Transom/Mullion size must be exact, this would then produce a frame with a 2mm discrepancy (bowed in) which would be within the manufacturing tolerances set out above. Vee Notches should be checked regularly when cutting (a minimum of one in 10). All butt welded Vee Notches should be checked.

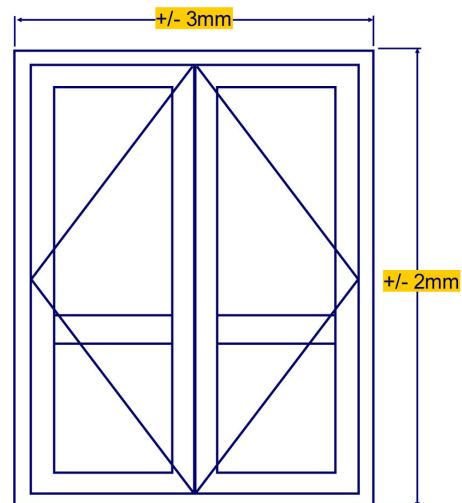
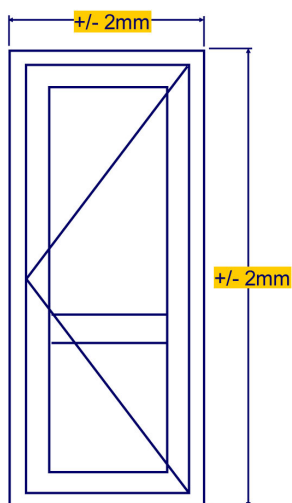
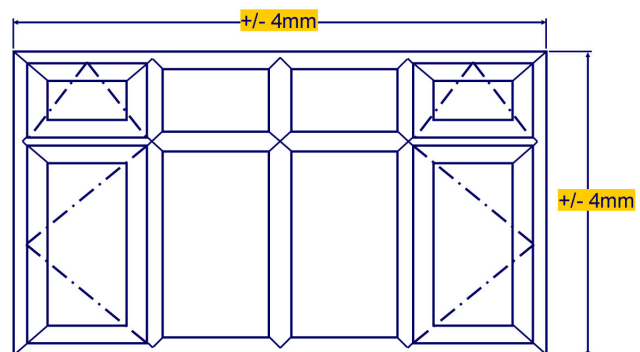
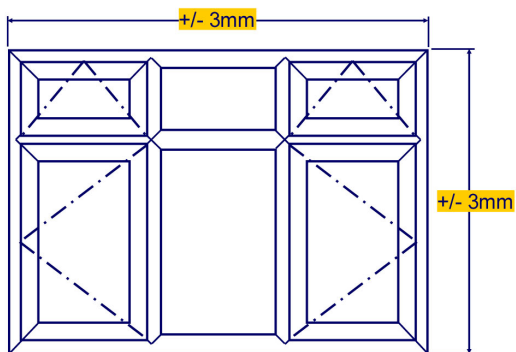
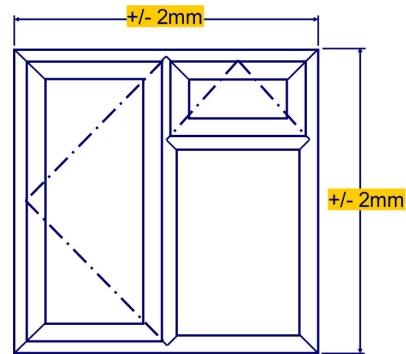
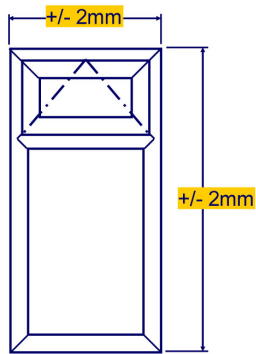
As an example if we assume that all cut bars and Vee Notches on the 8 pane window shown over are 0.5mm over size (within tolerance) then when welded the width of the frame when measured at the top and bottom would be 1.5mm over size and when measured across the Transom the width would be 1mm over, well within the tolerance laid down.

For further assistance, call 01702 613733

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EXAMPLES OF MANUFACTURING TOLERANCES

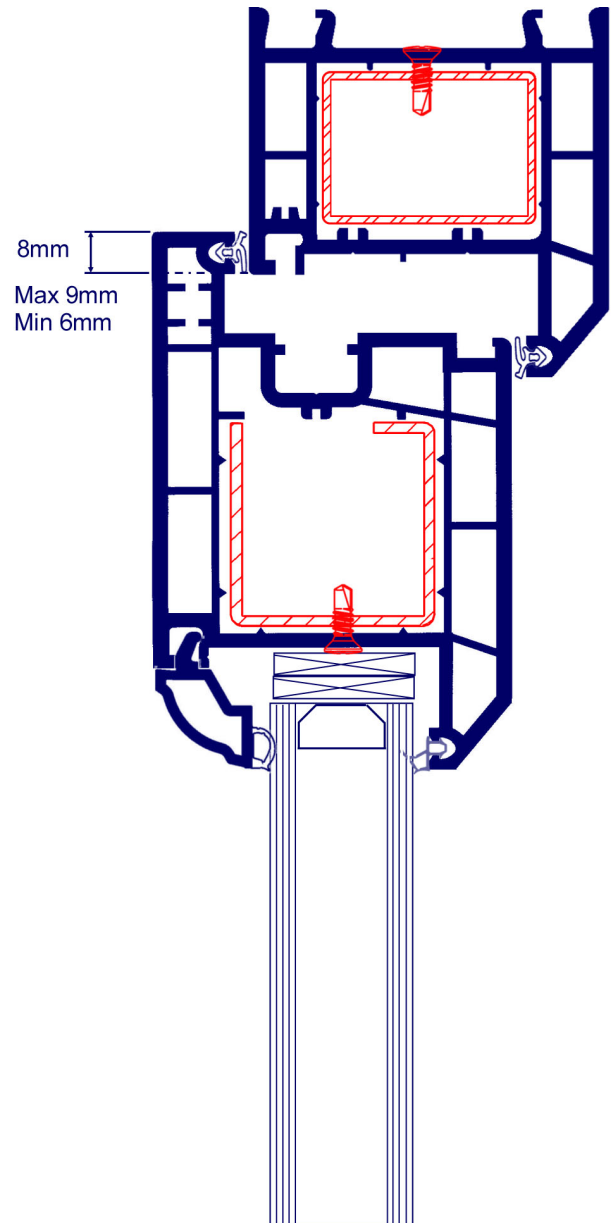
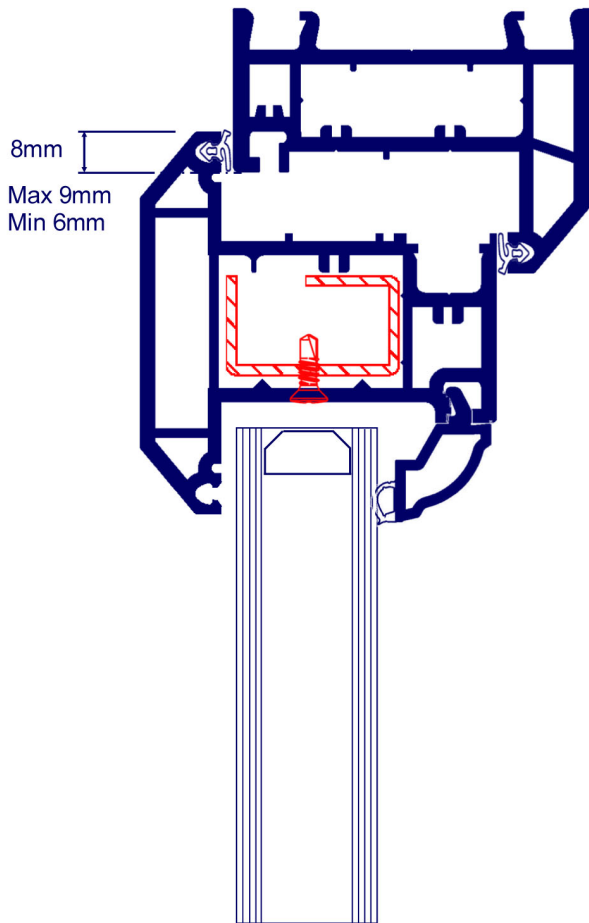


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MANUFACTURING TOLERANCES - SASH TO FRAME



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