

# The Carpenters' College Award for Craftsmanship

## 2023 - 2024 Window Frame with Pivot Sash

### INSTRUCTIONS TO CANDIDATE

**NOTE** All **dimensions** are in millimetres and all finished sizes stated. All **slopes are 7 °** including all weatherings. The window frame and pivot sash is to be made from the best quality softwood. All the figures given with each instruction relates to the cutting list item numbers. Any design and/or constructional detail that is not given is left to the candidates' own initiative and is to be carried out in conjunction with good commercial and industrial practice and in keeping with the overall design of the frame and sash.

Prepare and assemble the Window Frame with Pivot Sash in every aspect, mortised and tenoned in the traditional way. All surfaces are to be left smooth and free from scratches, and suitable for a clear finish. It must, however, be left in the white; any further treatment of the timber will be penalised.

The **frame** jambs (3) are mortised and tenoned to the head (1) and sill (2) in the traditional way and should be glued and wedged (15) together. A mortar groove 20mm x 6mm is to be worked to the outer sides of the frame. A 6mm x 6mm rebate is to be incorporated around the external edge of the frame to accommodate a non-hardening sealant, (not included). The head is to have a slot to allow for trickle ventilation, (the internal and external grills are not included in the project). The rebate for the jambs (3) and head (1) is 15mm x 33mm, but is 12mm x 33mm for the sill (2) as there is a 7 ° slope to the base section. There is a projection sill (4) to be fitted into the 15mm x 6mm groove in the main sill (2). Sill (2) also has a 9mm x 9mm groove for the fitting of an internal window board (not included).

The **sash** is to be constructed using the finger joint technique between the stiles (7) and the top rail (5) and bottom rail (6); the joints should be glued and star nailed. The stiles have a similar moulding but the head and sill mouldings are different. The rebate for the double glazed unit (16) is 33mm x 15mm to also accommodate the glazing bead. However, the double glazed unit (16) is not included. The glazing bead (8&9) should be mitred at all corners and pinned in position ie 3mm in from the external face of the sash.

The **pivot bead** has a reverse section to the side sections (11) but the top and bottom sections are similar. The top half of the pivot bead (11) is screwed to the jambs of the frame. However, the bottom half of the pivot bead is fixed to the bottom half of the sash.

NB Please note that the position of the centre of the knuckle of the back flap hinges (12) is 12mm above the vertical centre line of the sash. See also the detail drawing showing the position of the sloping cut 15 ° to the pivot beads each side. The top and bottom sections of the pivot bead (10) are similar.

Candidates should ensure that the finished project shall appear as attractive as possible and the judging will be on accuracy, good shape, dimensions, fit of joints, flatness and smoothness of finish

For the benefit of senior candidates from colleges who have included this project in their term work scheme, for course work assessment, the piece has been designed to cover various fields of activity tasks.

All work must only be carried out by the participating candidate under strict supervision and having passed prior training at appropriate grades.

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### **Packing and Dispatch:**

The work should be securely cased and labelled for return. Parcel Post should accept this size of package at most depots.