

1 Proposed 6-Panel Door
 1. Replica Door to Match Existing Door Type B Scale 1:10

Specification: Purpose made paneled door; wrought softwood, 25mm thick panels raised and fielded; mouldings worked on both sides. Rebeaded edges beaded. Purpose made door frames and lining set in wrought softwood as illustrated . 30 minutes fire resistant complete with intumescent strips and 25mm and a perco style self closing device machined for intumescent strips. Doors to incorporate smoke seals to jambs and head to fire doors. Intumescent paper beneath hinges and locks and around glazing where applicable. Doors to be supplied with exposed lippings to both long edges and laquered finish to both sides and edges. Check structural openings prior to ordering all doors and frames.

2. Section
Scale 1:10

3. Mould and Bead Detail

5. Proposed 4-Panel Door Type (2nd Floor)
 Replica Door to Match Existing Door Type F Scale 1:10

Specification: Purpose made paneled door; wrought softwood, 25mm thick panels raised and fielded; mouldings worked on both sides. Rebated edges beaded, purpose made door frames and lining set in wrought softwood as illustrated . 30 minutes fire resistant complete with intumescent strips and 25mm and a perco style self closing device machined for intumescent strips. Doors to incorporate smoke seals to jambs and head to fire doors. Intumescent paper beneath hinges and locks and around glazing where applicable. Doors to be supplied with exposed lippings to both long edges and laquered finish to both sides and edges. Check structural openings prior to ordering all doors and frames.

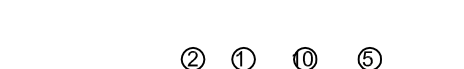

6. Section
Scale 1:10

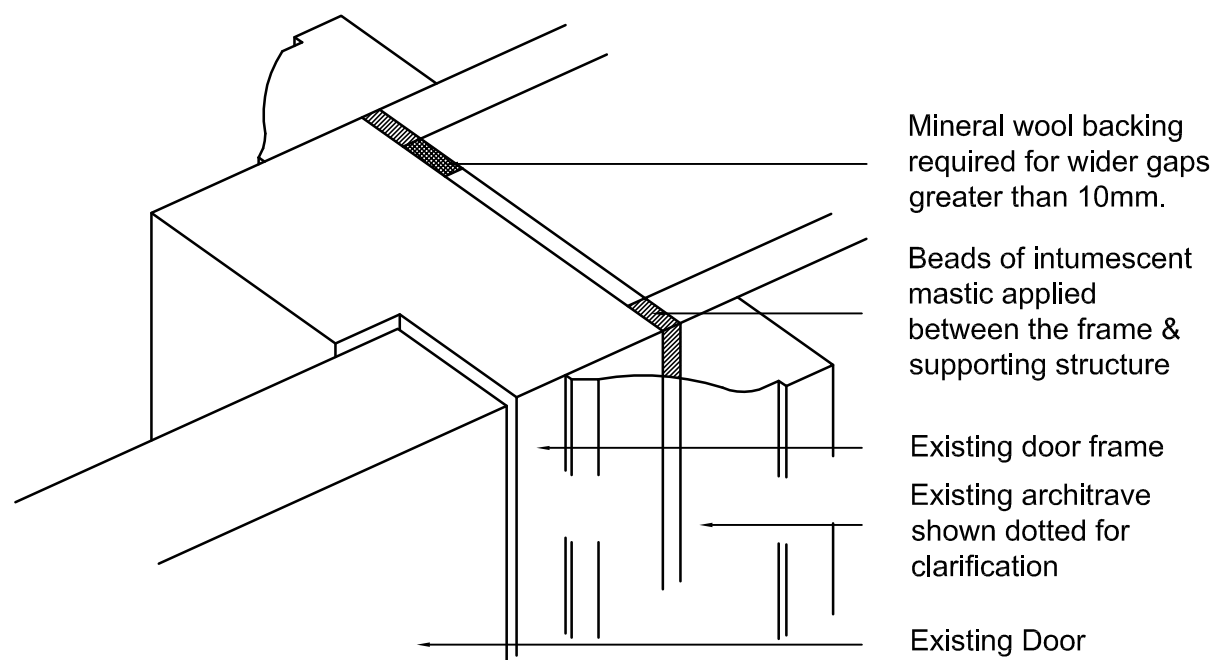
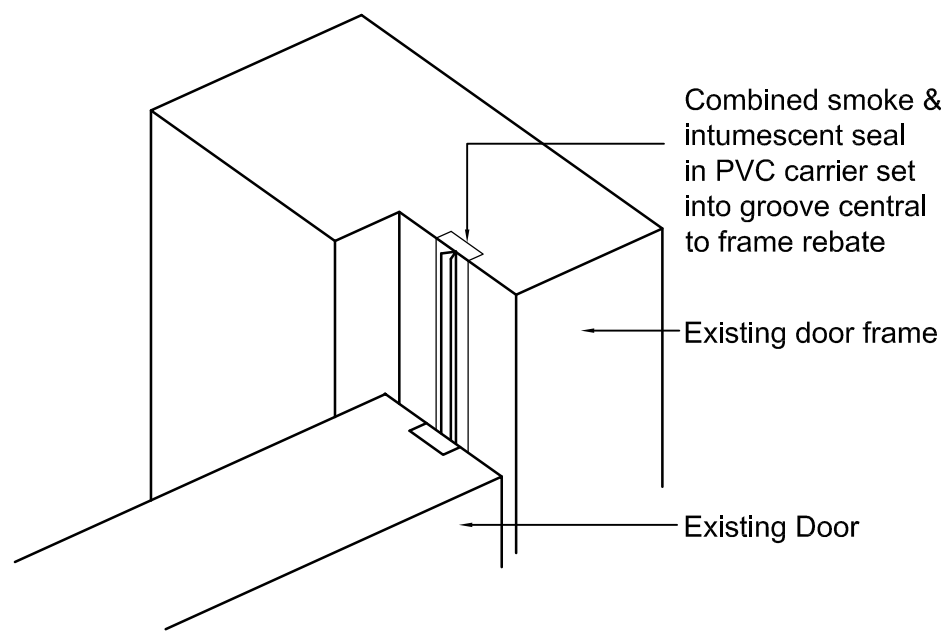
7. 4-Panel Mould Detail

	Minimum Panel Thickness (mm)	Fire Resistance	Comments
B	9	15	This method applicable to panels with maximum width across grain of 300mm. Where fixed panel beads hold panel in place (variantB2) it is necessary to bond the fixed beads to the sills, rails & muntins.
	12	20	
	≥ 20	25	
B1			This method of upgrading requires door to be partially or fully disassembled in many cases. Where integral panel beads are removed by cutting away the beads on one side they will need to be replaced by new beads machined on the same profile.
B2			
B3			

Key

- ① Intumescent paste
- ② Cross pinning 38mm long steel panel pins at 50mm in from each corner at maximum 150mm centres.
- ⑤ Butt joints in panels opened up & rebonded using heat resisting adhesive
- ⑥ 2mm sheet intumescent material bonded into slot cut in edge of panels. Depth of slot 5mm greater than width of fielded portion of panel.

	Minimum Panel Thickness (mm)	Fire Resistance	Comments
H	 < 19 ≥ 20	20 30	This method applicable to raised & fielded panels only with a maximum width across the grain of 300mm. NB - Method H is patented by Longden Doors Ltd, Parkwood Road, Sheffield, S. Yorks, S3 8AH.
H1			



9. Table 1: Methods of upgrading fire resistance of existing panels
N.T.S.

10. Recommended Fire Upgrading to Timber Panel Doors
N.T.S.