

## Best Doors Smoke Control Door Set -/-/ -sm

Best Smoke Control door sets are manufactured to comply with the requirements of the NZ Building Code (NZBC), set out in the Acceptable Solutions Appendix C, C6.1.2. They are required if doors are needed in smoke separations.

The door set configuration may be single leaf or pair, finished with a variety of facings and hung or pivoted in a timber or steel frame.

The minimum thickness of the Smoke Control leaf is 40mm with an approximate leaf weight of 27kg/m<sup>2</sup>

Wall Type	Fire Resistance Rating Stability/Integrity/Insulation	Door Application	Max Leaf Height (mm)	Max Leaf Width (mm)
Steel Stud Wall Timber Stud Wall Masonry Wall	-/-/ -sm	Single	3000	1500
		Pair	3000	1500

### Notes:

Please note that the maximum leaf width shown above is measured per door leaf.

The 'sm' above denotes that the door is available as a smoke control door set.

## Product Options

### LEAF FACINGS

MDF	Timber Veneers
Hardboard	High Pressure Laminate
Plywood	Sheet Vinyl
Oil Tempered Hardboard	Timber mouldings
Solid Timber (thickness up to 12mm, Rimu or denser)	

### Notes:

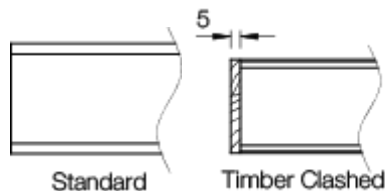
Standard Paint Quality doors are allowed 'non-clashed' to provide best surface for finish painting.

Other facings may be available, please contact Best Doors to discuss further options.

### LEAF EDGES

Paint quality doors have unclashed edges.

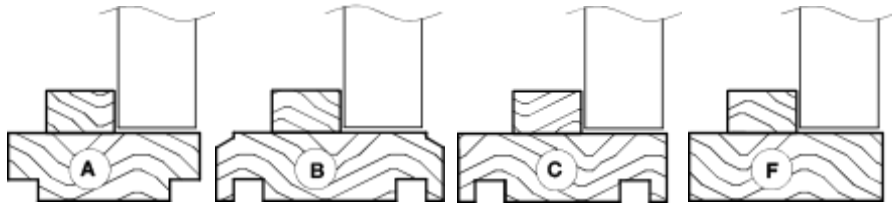
Timber veneer faced doors are clashed on the vertical edges with solid timber.



### FRAME TYPES & PROFILES

#### Timber Frame

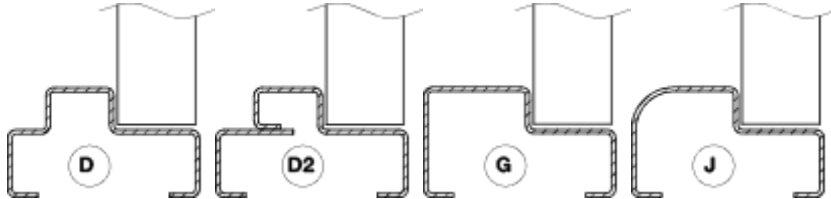
The timber frame profiles listed below are available for the Smoke Control door set



#### Steel Frame

The steel frame profiles listed below are available for the Smoke Control door set.

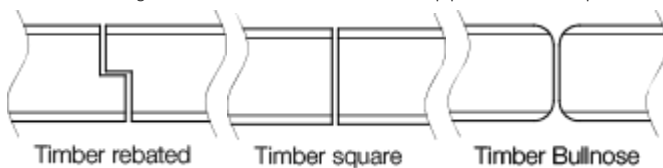
The Smoke Control door set is available in the two-part steel frame system for fixing to walls already lined.



For more in depth information on frame profiles and sizes, please see our Installation Instructions.

#### MEETING STILES

The meeting stiles listed below are applicable to paired door sets only.



#### WALL TYPES

Timber or steel frames may be connected to timber stud, steel stud, or concrete/masonry walls. Walls must be of non-combustible construction or else have a FRR of at least -/10/10.

#### Requirements Under the NZBC Acceptable Solutions

##### Smoke Seals

Smoke seals are required and "shall be in continuous contact with the mating element, and located so as to minimise interruption by hardware" (C6.1.2c).

Best Smoke Control doors utilise frame-mounted rubber seals or else brush seals fitted to the door leaf. Sill seals are not required in the Acceptable Solutions, but can be supplied fitted to the doors, typically as automatic drop seals.

##### Smoke Control Door Construction

As described in Appendix C, C6.1.2, smoke control doors have these characteristics:

Constructed with solid core leaves with leaf thickness of minimum 40mm.

If in timber frame, minimum 30mm thick timber

Vision panel cutouts no less than 150mm from the leaf edges

Maximum average clearances are:

- Leaf to frame 3mm
- Leaf to leaf 5mm
- Leaf to top of any floor covering 10mm

Additional facings are adhesive fixed

##### Self-Closing

All smoke control door leaves must be self-closing (Appendix C C6.1.4) and the self-closing device needs to be adjustable to meet the frictional forces requirements. A self-closer mechanism which activates in the event of a fire but does not operate at other times is acceptable (C6.1.5).

In C/A S3 (Risk Group SI) 4.6.4, smoke control doors in smoke separations subdividing a group sleeping area firecell need not be fitted with self-closers.

##### Latching

Latching of Smoke Control doors is not specifically required by the NZBC Acceptable Solutions, however positive latching may be required to provide adequate sealing against smoke. If present, the type of latching or other hardware used must not interfere with the ability of the door to self-close.

##### Frictional Forces

Requirements for the maximum forces required to open any smoke control door on an escape route are set out in Appendix C6.1.3.

## Product Optional Extras

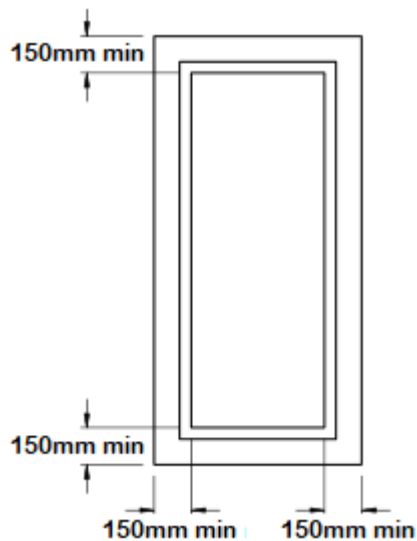
### Vision Panels

Glazing Type	Maximum Glazed Area	Max Height (mm)	Max Width (mm)	Glazing Bead	
				Timber	Aluminium
Toughened or Laminated Glazing	3.24 m <sup>2</sup>	2700	1200	✓	✓

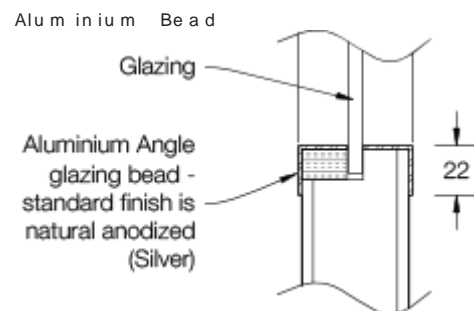
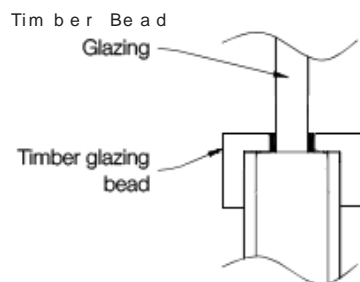
Notes:

Please note that the height and width of the vision panel must still fall within the maximum glazed area.

Glazing types marked with \* indicate Grade A Safety glass.



### STANDARD VISION PANEL CROSS SECTIONS



Sidelights and overlights are available for the smoke control door set to any practical sizes. Please contact Best Doors to discuss your requirements.

Overpanels are available for the smoke control door set to any practical sizes. Please contact Best Doors to discuss your requirements.

### PUSH OR KICKPLATES

Kickplates of most materials can be surface-mounted or screw-fixed to the Smoke Control door set.

### VENTILATION GRILLES

Door sets with ventilation grilles cannot be certified as Smoke Control door sets.

This door leaf has a thermal insulation rating (R-value) of 0.493 Km<sup>2</sup>/W .

**TECHNICAL COMPLIANCE STATEMENT**

Best Smoke Control door sets are manufactured to comply with the requirements of the NZ Building Code (NZBC), set out in the Acceptable Solutions Appendix C, C6.1.2