

Best doors PR 60 Door Set -/60/60sm

The Best PR60 is a side hung door set. The door set configuration may be single leaf or pair, finished with a variety of facings and hung in a steel or timber frame.

The thickness of the PR60 door leaf is 48mm with an approximate leaf weight of 27kg/m²

Wall Type	Jamb Type	Maximum Fire Resistance Rating Stability/Integrity/Insulation	Door Application	Max Leaf Height (mm)	Max Leaf Width (mm)
Steel Stud Wall Timber Stud Wall Masonry Wall	Timber	-/60/60sm	Single	2700	1020
			Pair	2700	1020
Steel Stud Wall Timber Stud Wall Masonry Wall	Steel	-/60/60sm	Single	3000	1500
			Pair	3000	1500
Korok / Speedpanel	Steel	-/60/30sm	Single & Pair	2400	1200
				2700	1050
Korok	Timber	-/60/60sm	Single	2197	920
James Hardie®	Steel	-/60/30sm	Single	2400	1020

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.
- Meeting stiles for doors installed into Korok walls are restricted to J-Section or Bullnose.
- Timber framed doorsets in Korok walls have limited installation options. Please see the installation section for details.
- Timber jambs are not possible for doors installed into James Hardie walls
- Insulation ratings must be notified at time of pricing for steel frames. Maximum insulation ratings shown. Some wall applications will have a maximum 30 minute insulation rating.
- Door sets with leaves larger than 2700 x 1200 are not intended for frequent use, we recommend they be typically either held open or closed with compliant hardware in normal operation.
- JHETGJ60 is the only approved James Hardie fire rated wall system.
- Minimum width for a fire door leaf is governed by the need to fit a compliant closer. Typically, 400mm is the practical minimum.

Product Options

LEAF FACINGS

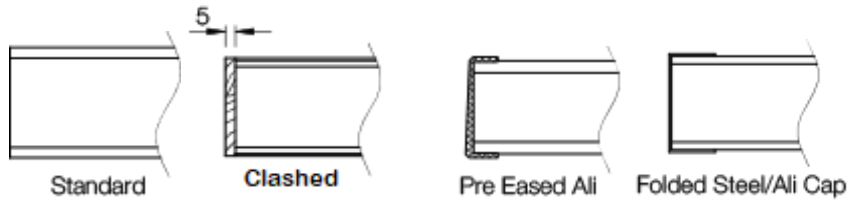
MDF	Fire Rated Formica *
Plywood	High pressure laminate
Timber Veneers *	up to 1.5mm thick (e.g. Lamindex, Formica)
Metal Sheet, mild or stainless (0.6 – 1.0mm) *	Decorative timber mouldings/panels
Acrovyn *	Aluminium sheet (0.3 – 1mm) *
Korogard *	Sheet Vinyl (1.25 – 2mm)
	Lamindex Decoral *

Notes:

1. Of the above facings only those marked * may extend around the door edge.
2. Steel frames are required where metal capping is used.
3. Standard Paint Quality doors are allowed 'non-clashed' to provide best surface for finish painting.
4. Other facings may be available, please contact Best Doors to discuss further options.

LEAF EDGES

The leaf edges listed below are available for the PR60 door set



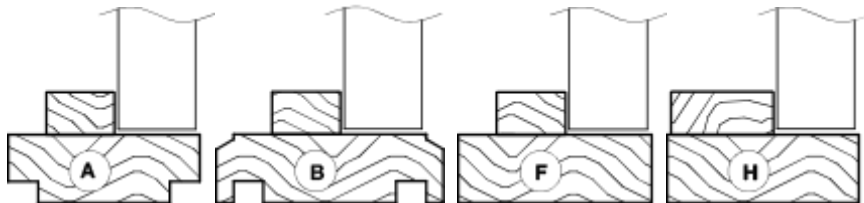
Notes: Metal cappings are not available for James Hardie wall.

FRAME TYPES & PROFILES

Timber Frame

The timber frame profiles listed below are available for the PR60 door set.

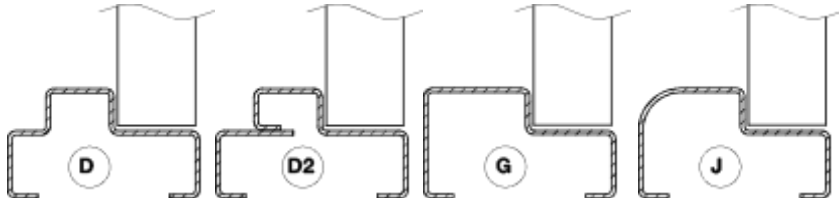
Timber density requirements exclude some species of timber.



Steel Frame

The steel frame profiles listed below are available for the PR60 door set.

The PR60 door set is available in the two-part steel frame system for fixing to walls already lined.



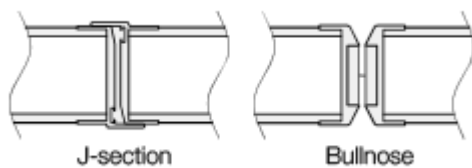
Notes:

D2 not available with sidelights and overlights, and are not compliant in Speedwall, Koroc or James Hardie wall.

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

Jambs may be connected to timber stud, steel stud or concrete masonry.

The minimum specification for each wall type is:

- Precast concrete (100mm thickness) or grouted blockwork (minimum 140mm thickness).
- Timber or steel stud plasterboard walls of FRR -/60/60 or above. Note that steel framed PR60 door sets may only be installed in walls of minimum stud size ex 100x50mm (Gib® Fire Rated Systems).

- Universal Wall systems GBUW 60a or GBUW 60b
- Gib Weatherline Rigid Air Barrier Systems GW TLE 60a, GW TLE 60b, GW TLP 60, GW SE 60 and GW SP 60
- Speedpanel & Korok walls (51mm, 64mm or 78mm)
- James Hardie JHETGJ60 fire rated wall system.
- Boral 25mm shaftliner wall (Note special installation details and size restrictions apply refer Best Doors for details)

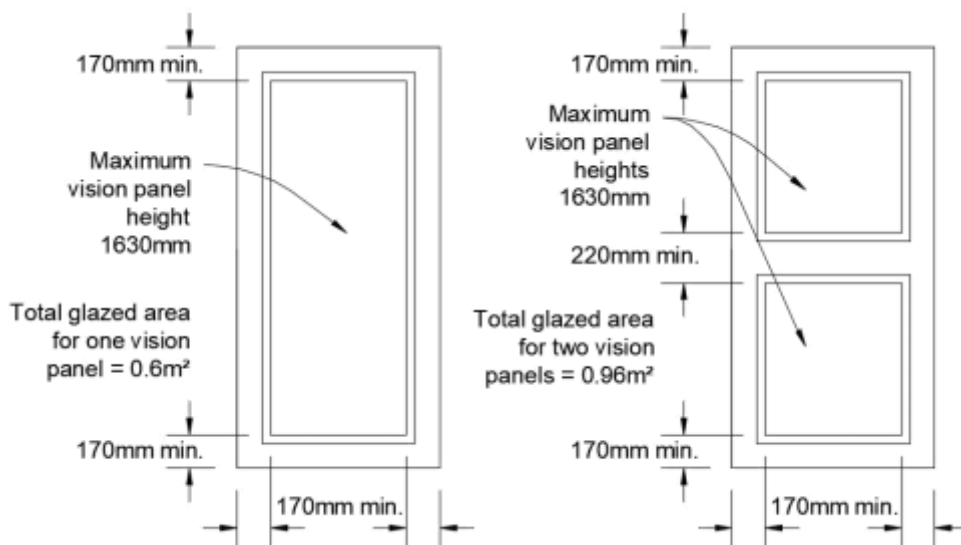
Product Optional Extras

Notes:

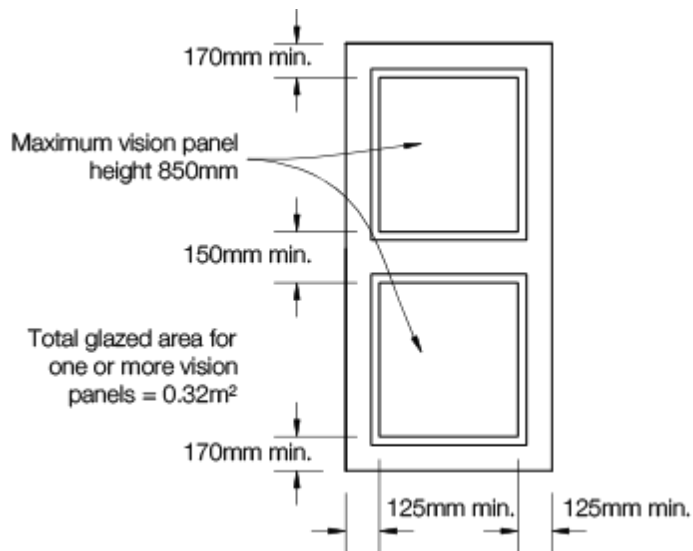
1. Please note that the height and width of the vision panel must still fall within the maximum glazed area.
2. Glazing types marked with * indicate Grade A Safety glass.
3. Circular vision panels are not available with Pyrobel glazing.
4. Pyrobel is not suitable for exterior doors.

Glazing details for Pyrobel glazed vision panels

Glazing Type	Maximum Glazed Area		Max Height (mm)	Max Width (mm)	Glazing Bead		FRR with Vision Panel	
	Per VP	Total			Timber	Aluminum	Up to 0.065m ²	Over 0.065m ²
Pyrobel*	0.6m ²	0.96m ²	1630	950	√	√	-/60/60	-/60/30
Georgian Wired	0.32m ²	0.32m ²	850	950		√	-/60/60	-/60/-
Firelite	0.32m ²	0.32m ²	850	950		√	-/60/60	-/60/-
Robax	0.32m ²	0.32m ²	850	950		√	-/60/60	-/60/-
Pyran*	0.32m ²	0.32m ²	850	950		√	-/60/60	-/60/-

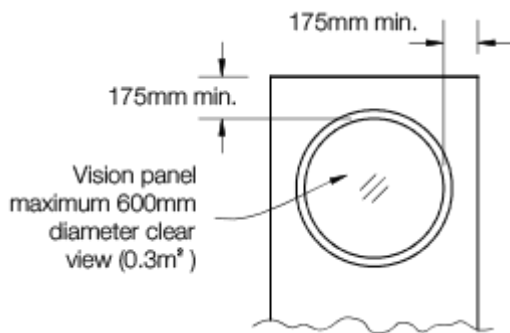


Glazing details for other glazing types

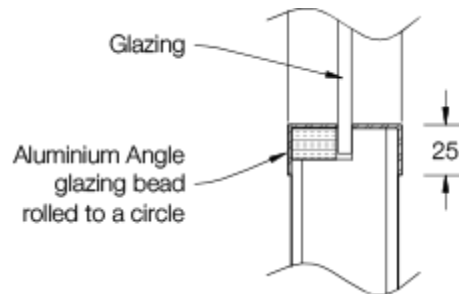


CIRCULAR VISION PANELS

Size allowance

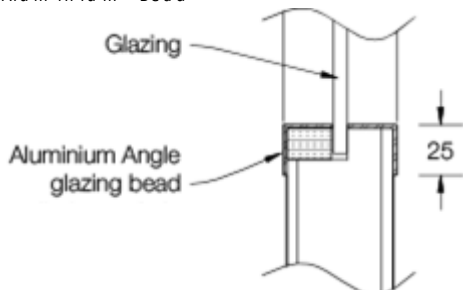


Standard Cross Section

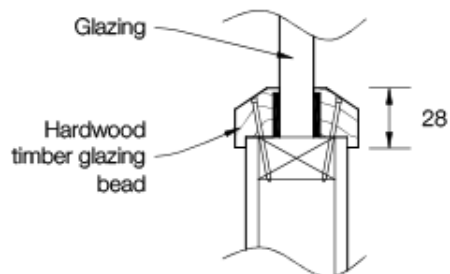


STANDARD VISION PANEL CROSS SECTIONS

Aluminium Bead



Timber Bead



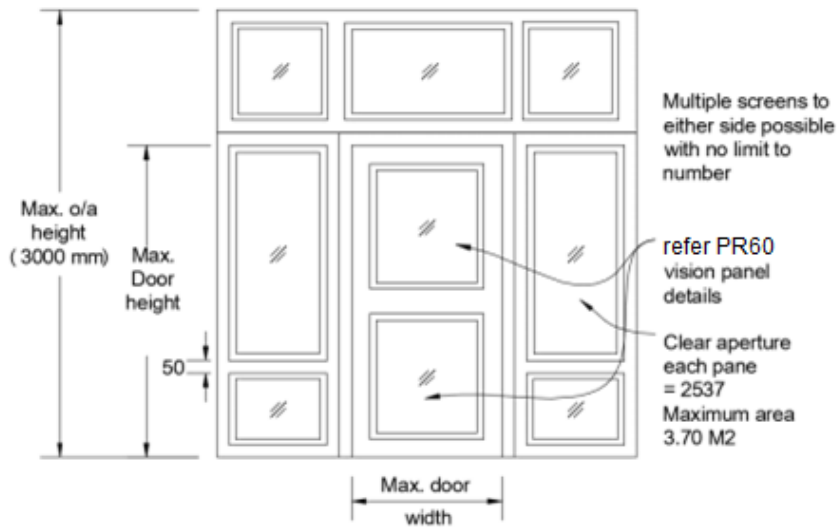
*Pyrobel only

TIMBER FRAMED SIDELIGHT & OVERLIGHT - PYROBEL GLAZING

Elevation

The Pyrobel glazing system can include panes of up to 2537h or 2537w, up to a maximum glazed area of 3.70m²

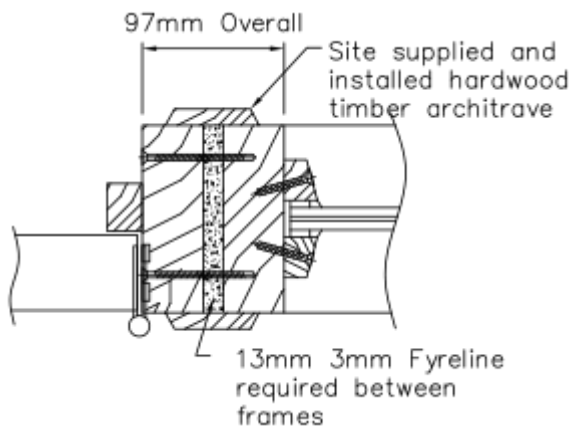
Pyrobel is not suitable for exterior use.



Detail

For the PR60 system, the separate glazed sidelight is connected to the fire door frame with a layer of 13mm plasterboard between. The joint is covered by a timber architrave as illustrated below. Door set, sidelite and overlite will be made and dispatched separately for on site assembly. 13mm Fyrelite and architraves not supplied by Best Doors.

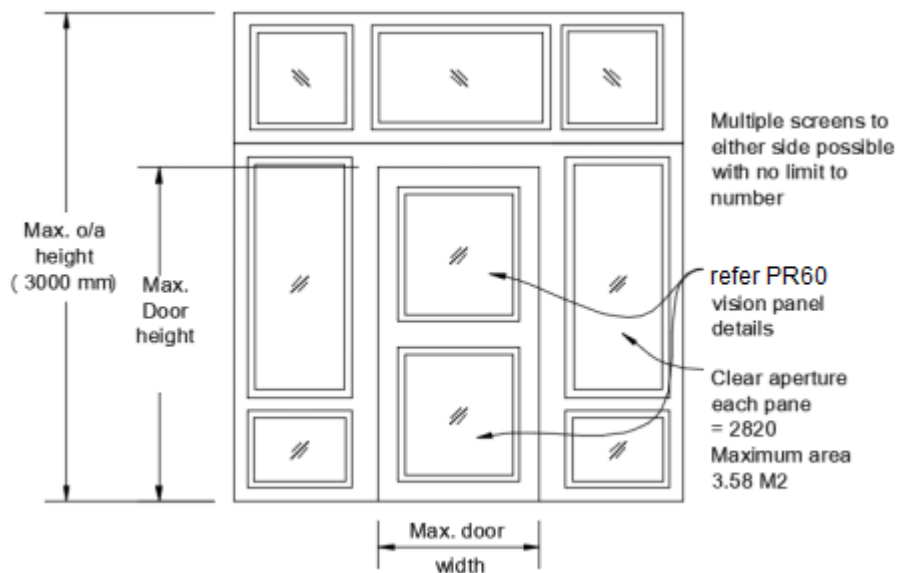
Sidelights & overlites are not available in Korok walls.



STEEL FRAMED SIDELIGHT & OVERLIGHT

Elevation

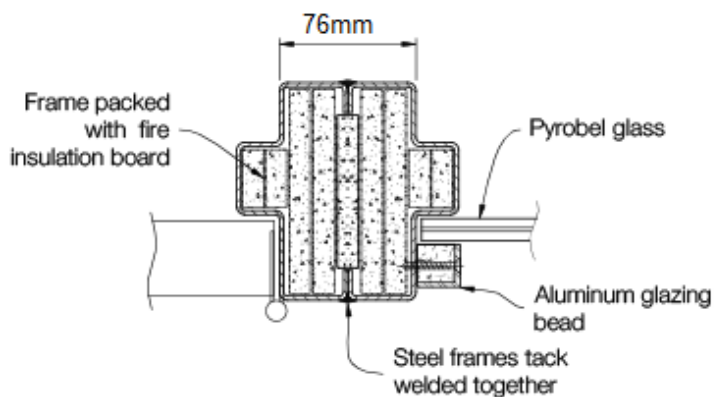
The steel framed glazing system can include panes of up to 2820h or 2820w, up to a maximum glazed area of 3.58m²



Detail

The steel frame between the window and the door must be packed with fire insulation board. Unit is required to be factory welded therefore practical limitations of size need to be considered for freight. Powder coat finish is not available.

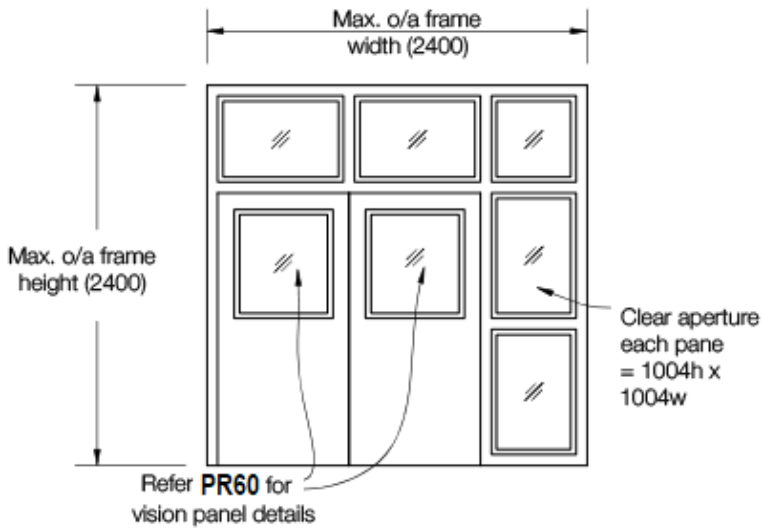
Sidelights & overlights are not available in Korok walls.



Note: Pyrobel glazing can be used for interior applications only.

SIDE LIGHTS - OTHER GLAZING

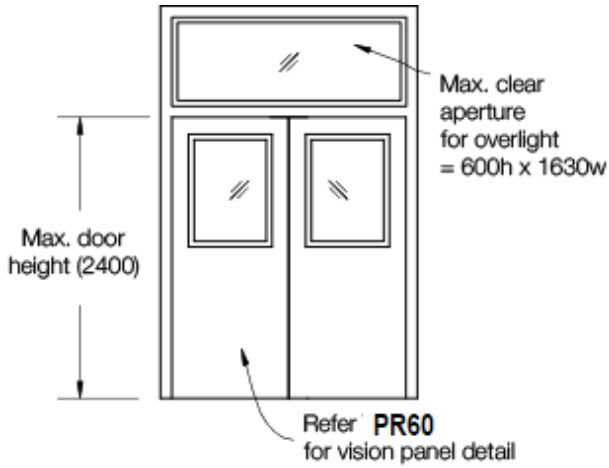
Sidelight and overlights in a glazed steel framed unit are available to a maximum overall frame size 2400 x 2400 mm.



Sidelights & overlights are not available in Korok walls.

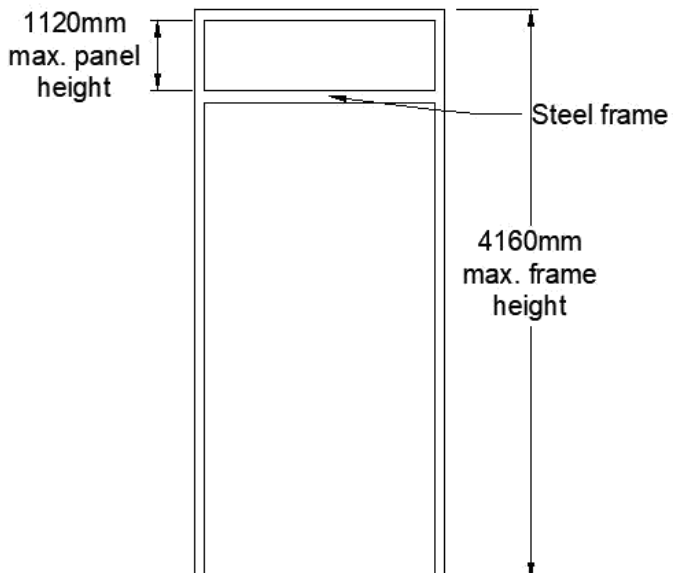
OVERLIGHTS

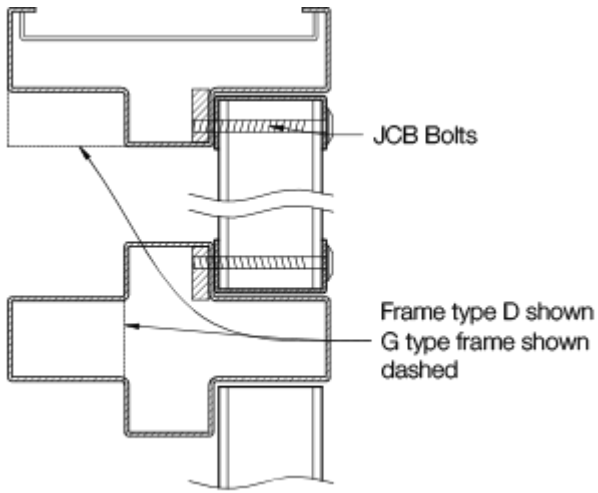
An overlight of maximum clear aperture 600h x 1630w is available in a steel framed door set with clear glazing.



Transom Overpanels

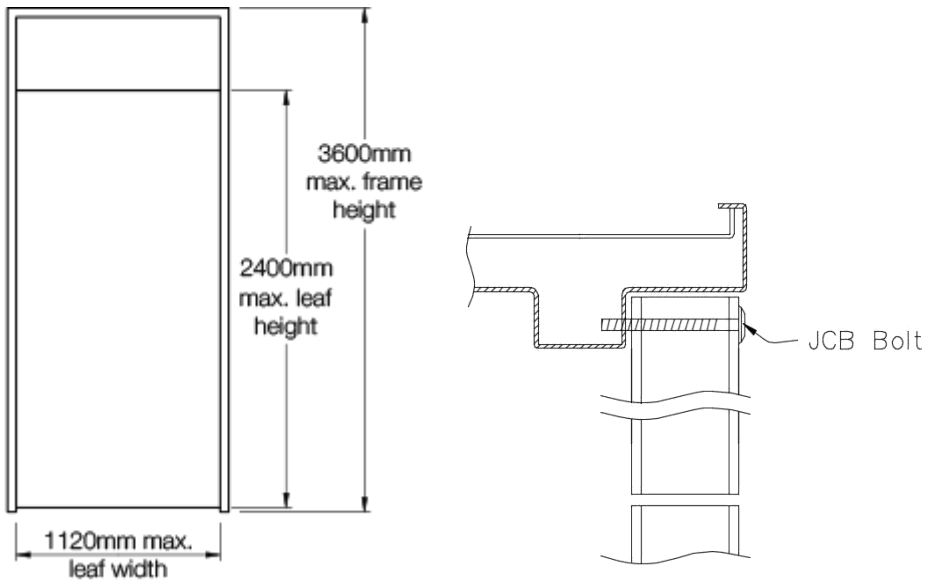
Overpanels with transom are available in steel jamb to an overall height of 4160mm in a single or paired door set.





Transomless Overpanels

An overpanel without transom is available in steel jambs to an overall height of 3600mm with maximum door leaf dimensions 2400x1200mm, in single leaf only.



Sidelights, Overlights and Panels are not available for door sets installed into Speedwall, Koroc or James Hardie wall.

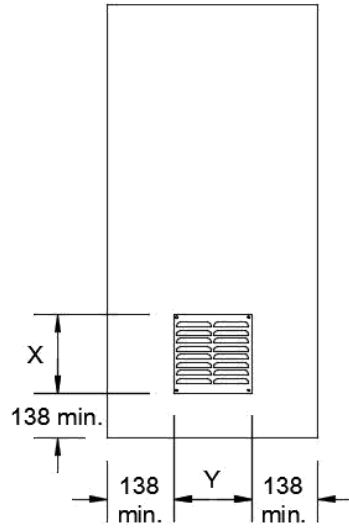
ADDITIONAL DOOR OPTIONS

PUSH OR KICKPLATES

Push plates or kickplates can be of the below permitted materials and can be either surface mounted or recessed flush. Fixing may be via screws or contact adhesive only.

- Steel (mild or Stainless)
- Vinyl Sheets up to 2mm
- Formica
- Acrovyn 4000
- Korogard

VENTILATION GRILLES



Lorient LVH intumescent grilles are available in the following sizes:

- 300 x 300 mm
- 450 x 450 mm
- 600 x 300 mm
- 600 x 600 mm

Two such Intumescent grilles may be fitted to each leaf separated from each other and hardware by at least 300 mm (only one 600 x 600 mm grille allowed per leaf).

Fire rating for doors with ventilation grilles is -/60/30.

Please note that fire doors with ventilation grilles cannot be certified as 'Smoke' control door sets.

Drop shutter grilles are not an option on this doorset.

Ventilation grilles are not suitable for exposed exterior doors. Grilles in exterior doors require an additional, custom made cover plate.

ADJACENT DOORS

Adjacent fire rated doors are permitted provided the central mullion is grouted, reinforced steel. Maximum leaf width is 1200 mm. Maximum width of the coupled doorsets is 7500 mm overall (max. 3 pair doorsets in a sequence).

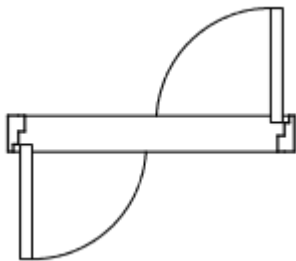
Adjacent fire rated doors are not permitted installed into Speedwall or James Hardie wall.

DECORATIVE TIMBER MOULDINGS AND PANELS

Nominal 43 x 12mm untreated timber mouldings or 20mm thick panels are permitted on the facings provided they are kept 50mm from the leaf edge or vision panel.

RESTAURANT FUNCTION

A door set can be supplied with a modified frame (timber or steel) allowing two door leaves to open in opposite directions. Maximum door height is 2400 mm.



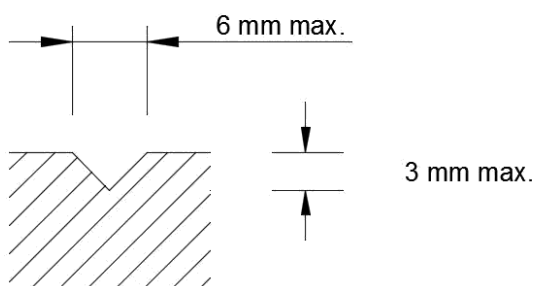
Restaurant function door sets are not permitted installed into Speedwall, Koroc or James Hardie wall.

V-GROOVES

V-grooves can be machined into the leaf facings for aesthetic purposes.

The following restrictions apply:

- Only available in timber framed doorsets
- Leaf facing has to be MDF or ply
- Facing thickness is increased to 6 mm
- Leaf requires concealed intumescent to both vertical stiles and head



DECORATIVE PANELS

Decorative panels (stone, glass, MDF, plasterboard, hardboard or greenboard) can be added to one face of the door leaf provided:

- Panel is glue fixed (no screws or nails)
- Additional weight is less than 20 kg per hinge
- Leaf dimensions are 2400 x 1020 or less
- Leaf is hung in a steel frame

Panels to be installed on site by others. They can be either glued directly to the face of the leaf or onto timber battens glued to the leaf.

If the decorative panel is on the hinge face of the leaf, please specify extended "wide throw" hinges.

Decorative panels on push face of leaf may not extend under the frame stop.

Please note that special hardware items may be required (e.g. extended spindles).

Decorative panels are not allowed in conjunction with vision panels.

Thermal Insulation

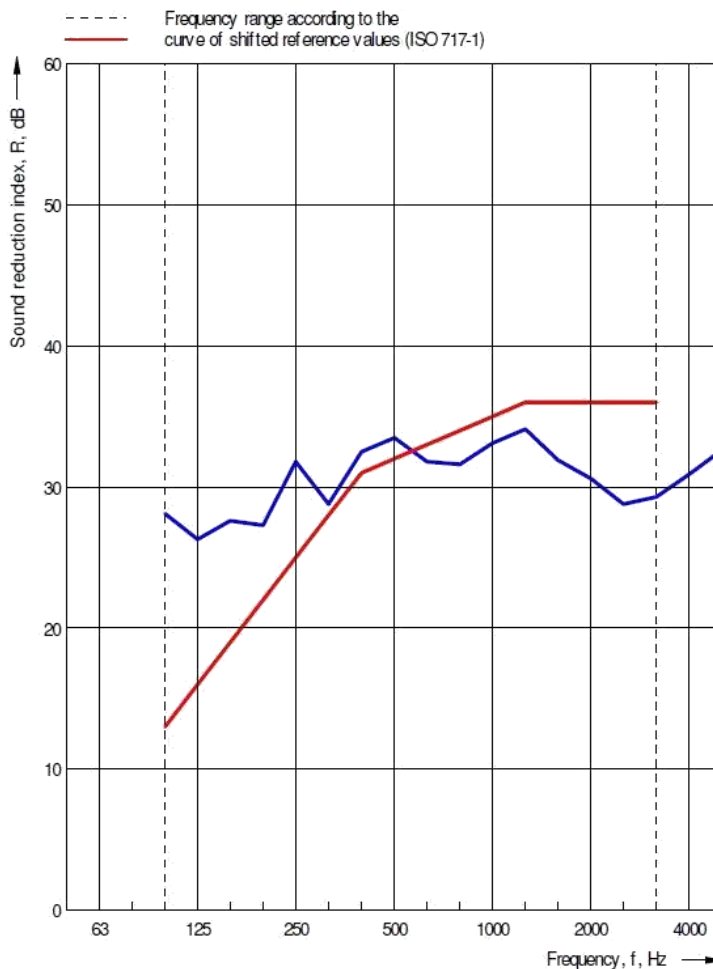
This door leaf has a thermal insulation rating (R-value) of 0.645 Km²/W.

Acoustical performance graphs

Plywood or MDF faces: Rw 32 / STC 31:

Size of test opening: 4.20 m²
 Mass per unit area: 27 kg/m²
 Temperature: 17.0 °C
 Air humidity: 90 %
 Source room volume: 62.3 m³
 Receiving room volume: 56.0 m³

Frequency f [Hz]	R 1/3 octave [dB]
50	
63	
80	
100	28.1
125	26.3
160	27.6
200	27.3
250	31.8
315	28.8
400	32.5
500	33.5
630	31.8
800	31.6
1,000	33.1
1,250	34.1
1,600	31.9
2,000	30.6
2,500	28.8
3,150	29.3
4,000	30.9
5,000	32.6

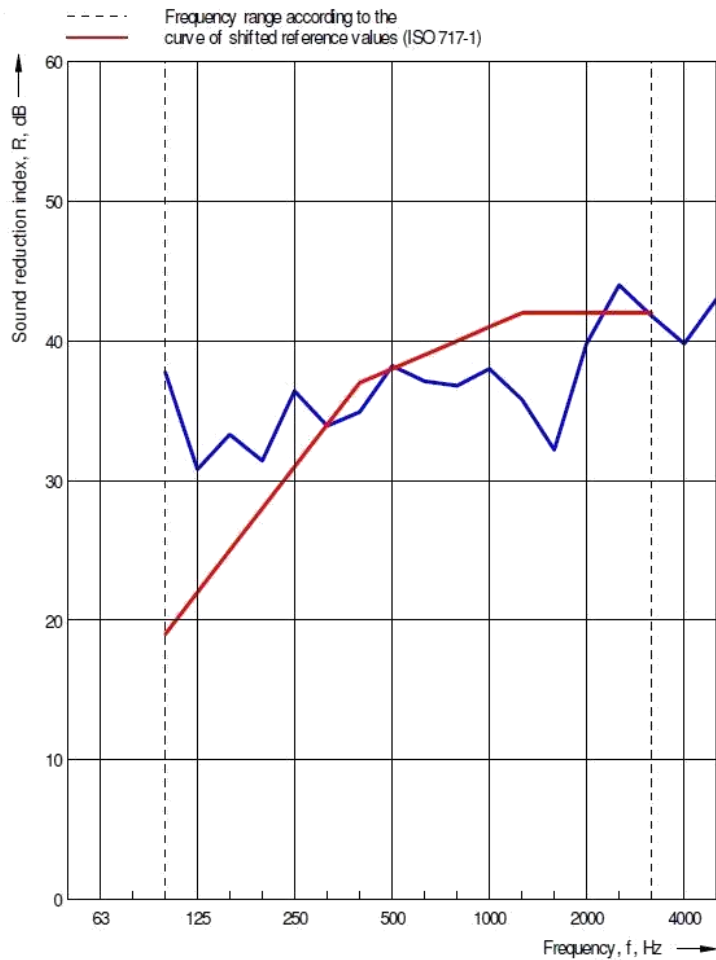


Rating according to ISO 717-1			
$R_w(C;C_p) = 32 (-1; -1)$ dB	$C_{50-3150} =$ dB	$C_{50-5000} =$ dB	$C_{100-5000} = -1$ dB
Evaluation based on laboratory measurement results obtained in one-third-octave bands by an engineering method.	$C_{tr,50-3150} =$ dB	$C_{tr,50-5000} =$ dB	$C_{tr,100-5000} = -1$ dB

Steel faces: Rw 38 / STC 36:

Size of test opening: 4.20 m²
 Mass per unit area: 27 kg/m²
 Temperature: 17.0 °C
 Air humidity: 90 %
 Source room volume: 62.3 m³
 Receiving room volume: 56.0 m³

Frequency f [Hz]	R 1/3 octave [dB]
50	
63	
80	
100	37.8
125	30.8
160	33.3
200	31.4
250	36.4
315	33.9
400	34.9
500	38.2
630	37.1
800	36.8
1,000	38.0
1,250	35.8
1,600	32.2
2,000	39.8
2,500	44.0
3,150	41.8
4,000	39.8
5,000	43.0



Rating according to ISO 717-1	$C_{50-3150} = \text{dB}$	$C_{50-5000} = \text{dB}$	$C_{100-5000} = -1 \text{ dB}$
$R_w(C;C_v) = 38 (-1;-2) \text{ dB}$	$C_{tr,50-3150} = \text{dB}$	$C_{tr,50-5000} = \text{dB}$	$C_{tr,100-5000} = -2 \text{ dB}$
Evaluation based on laboratory measurement results obtained in one-third-octave bands by an engineering method.			

TECHNICAL COMPLIANCE STATEMENT

The PR60 fire door complies with the requirements of NZS 4520 Fire-resistant doorsets when installed in accordance with Best Doors' Installation Instructions into a complying fire-resistant wall, and when fitted with approved hardware.

NZS 4520 is referenced in the New Zealand Building Code Acceptable Solutions (Appendix C 6.1.1)

Best Doors PR60 fire doors have been successfully fire-tested in accordance with AS1530.4, as referenced in NZS 4520 and in Appendix C 5.1.1.

The fire resistance achieved by the PR60 was FRR -/60/60

The PR60 has been tested to and met the physical endurance requirements of NZS 4520 Appendix A.

The PR60 fire door will satisfy the requirements of NZBC, B2 "Durability" under conditions of use, installation and maintenance specified by Best Doors, or specific contractual guarantees, whichever are overriding.

This door is not tested for water ingress in exterior installations and we make no statement as to its suitability under NZBC E2 "External moisture". All exterior doors should be given as much shelter as possible and be fitted with appropriate flashing systems.