21/10/2026

**Data Sheet**

# Pacific AD400 Acoustic Door Set STC/Rw 43

## Description

The AD400 is a hinged flush panel door that is suitable for interior use, available as a single door or as a pair of doors, acoustic tested and designed to reduce sound transmission within buildings.

**For further information on this product, visit:**
https://www.pacificdoors.co.nz/products/acoustic/acoustic-doors/ad-400

## Product features:

**Product features:**

- STC 43 acoustic rating
- Single or pair
- 4 leaf facing options
- 2 glass options
- 9 frame options
- Suitable for interior use only
- Compatible with timber stud, steel stud and masonry wall
- Certified acoustic performance to ISO 140-3

## Product options

The thickness of the AD400 door leaf is 47mm with an approximate leaf weight of 35kg/m2.

| Wall Type | Acoustic Rating | Door Application | Max Leaf Height (mm) | Max Leaf Width (mm) |
|---|---|---|---|---|
| Steel Stud Wall<br>Timber Stud Wall<br>Masonry Wall | STC/Rw 43 | Single | 2700 | 1200 |
| | | Pair | 2700 | 12 |



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Notes:

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

**Wall Types**
Door sets must be installed carefully with particular attention to the sealing of gaps, including around the frame to wall junction.

**Leaf Facings**
The facings listed below are available for the AD400 door set

- MDF
- Timber Veneer
- HPL decorative laminate (e.g. Formica)
- Sheet Vinyl

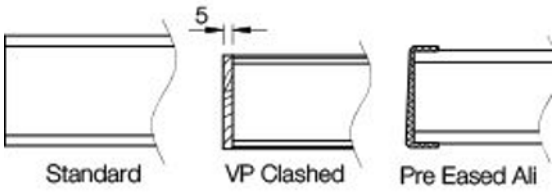
Notes:

1. Of the above facings only those marked * may extend around the door edge.
2. Other facings may be available, please contact Pacific Doors to discuss further options.

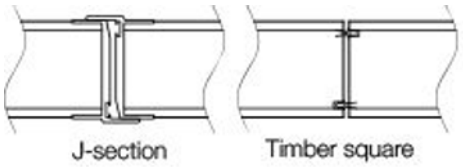
**Leaf Edges**
Paint-quality doors have unclashed edges.

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

Doors faced with decorative laminate or vinyl (e.g. Hospital doors) are capped on the vertical edges with an aluminium extrusion capping with natural anodised finish.




**Meeting Stiles**
The meeting stiles listed below are applicable to pair door sets only.




## Hardware and seals

**Hardware**
The AD400 requires suitable latching in order for the frame seals to fully seal the gap between door leaf and frame.

Practically any standard door hardware can be used on the AD400, however the proposed hardware must be advised to Pacific Door Systems Ltd to assess the suitability, before manufacture.

Any penetrations through the leaf should be packed with acoustic materials (e.g. batts) wherever possible.

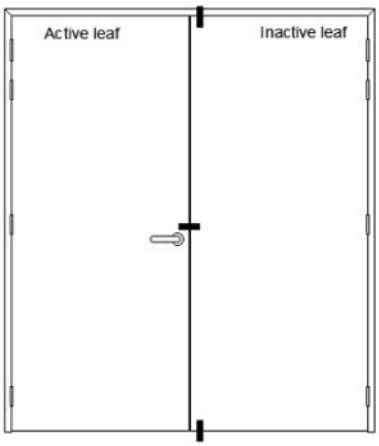


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Concealed hinges are not an option on this doorset.

Recommended latching points are shown in the below diagram. Pair doorsets require a designated inactive leaf which is secured top and bottom.



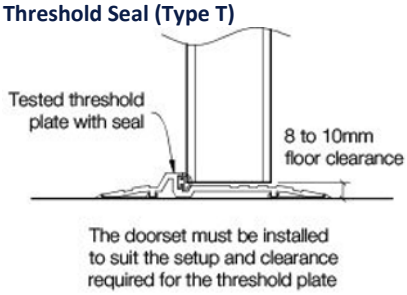



## Seals

**Frame seals**
The perimeter frame seals are self-adhesive seals mounted in the frame rebate, so are hidden when the door is closed.

**Bottom seals**
There are two options for the bottom seals:

**Threshold Seal (Type T)**

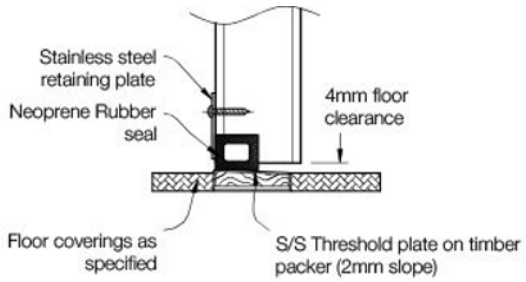



An aluminium threshold (natural anodised finish) with integral seal is fitted to the floor. In this case, there is no seal required in the bottom edge of the door leaf. The height of the gap between the finished floor level and the bottom of the door must be set up carefully during installation of the door set so that the door will engage with the threshold seal as intended.



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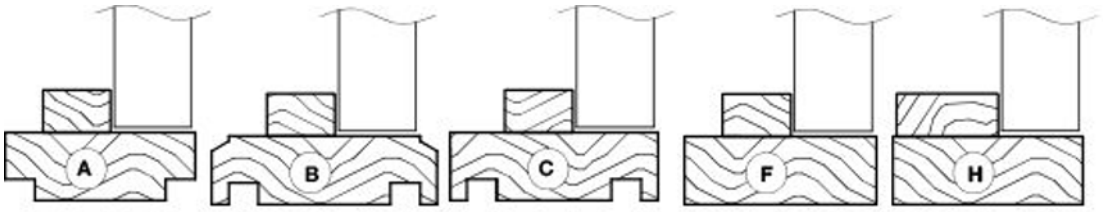
**Compression Seal (Type B)**



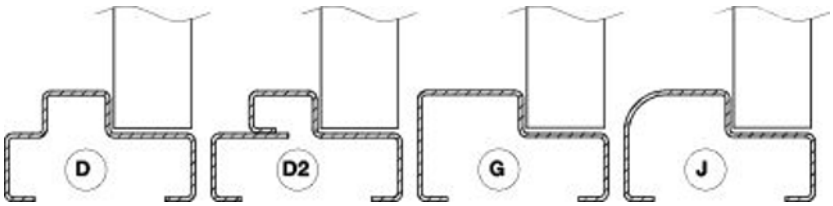

A neoprene seal on the bottom edge of the door leaf engages with a stainless steel threshold plate fitted to the floor.

## Frame types and profiles

**Timber Frame**
The timber frame profiles listed below are available for the AD400 door set.




**Steel Frame**
The steel frame profiles listed below are available for the AD400 door set.




Steel frames require packing of the frame during installation with fibrous insulation material (e.g. fibreglass, mineral wool or polyester batts).

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



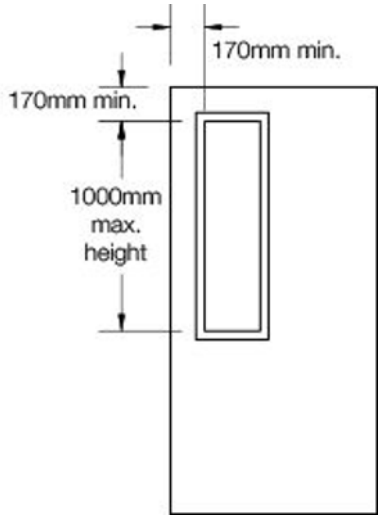
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## Vision panel

| Glazing Type | Maximum Glazed Area | Max Height (mm) | Max Width (mm) | Glazing Bead | | STC/Rw Rating |
|---|---|---|---|---|---|---|
| | | | | Timber | Aluminium | |
| Soundstop | 0.16m2 | 1000 | 860 | √ | √ | 43 |
| Soundstop | 0.45m2 | 1000 | 860 | √ | √ | 38 |

Notes:

1. Please note that the height and width of the vision panel must still fall within the maximum glazed area.
2. Ratings apply to a single vision panel per leaf.
3. Maximum glazed area is measured per door leaf.

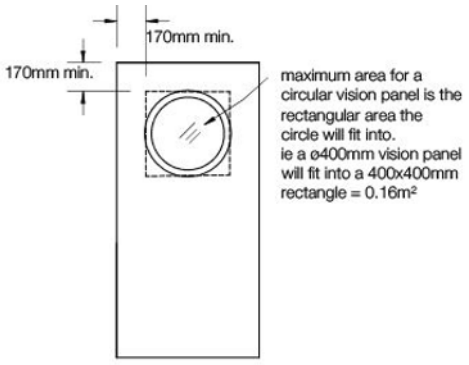




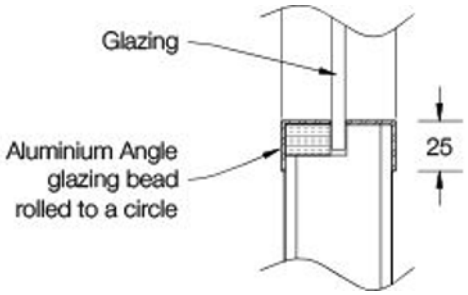

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**Circular Vision Panels**

Size allowance:

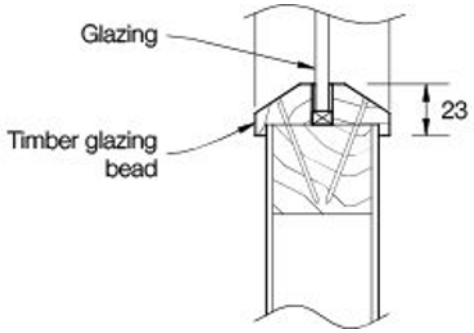



Standard Cross Section:

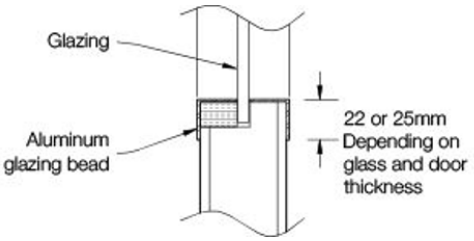



**Standard Vision Panel Cross Sections**

Timber Bead:




Aluminium Bead:




## Performance

**Smoke control**

AD-series acoustic doors are available with a smoke control rating (-/-/-/ SM). These doors comply with the NZBC C/AS2 C6.1.2 definition of smoke control doors.

**Thermal insulation**

This door leaf has a thermal insulation rating (R-value) of 0.739 Km2/W.



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## Acoustal performance graphs

| | | |
|---|---|---|
| Size of test opening: | 1.92 | m² |
| Mass per unit area: | 35.4 | kg/m² |
| Temperature: | 16.0 | °C |
| Air humidity: | 80 | % |
| Source room volume: | 62.3 | m³ |
| Receiving room volume: | 56.0 | m³ |

| Frequency f [Hz] | R 1/3 octave [dB] |
|---|---|
| 50 | 5.5 |
| 63 | 18.8 |
| 80 | 21.3 |
| 100 | 29.1 |
| 125 | 26.4 |
| 160 | 30.5 |
| 200 | 32.4 |
| 250 | 33.0 |
| 315 | 41.3 |
| 400 | 42.3 |
| 500 | 42.3 |
| 630 | 42.8 |
| 800 | 46.3 |
| 1,000 | 46.4 |
| 1,250 | 46.9 |
| 1,600 | 42.6 |
| 2,000 | 40.4 |
| 2,500 | 42.0 |
| 3,150 | 46.7 |
| 4,000 | 49.2 |
| 5,000 | 47.8 |




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Rating according to ISO 717-1

$R_w(C;C_{tr})$ = 43 (-1;-4) dB

Evaluation based on laboratory measurement results obtained in one-third-octave bands by an engineering method.

$C_{50\text{-}3150}$ = -3 dB

$C_{tr,50\text{-}3150}$ = -14 dB

$C_{50\text{-}5000}$ = -2 dB

$C_{tr,50\text{-}5000}$ = -14 dB

$C_{100\text{-}5000}$ = -1 dB

$C_{tr,100\text{-}5000}$ = -4 dB



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