



NCS Acoustics

DESIGN · MANUFACTURE · INSTALL



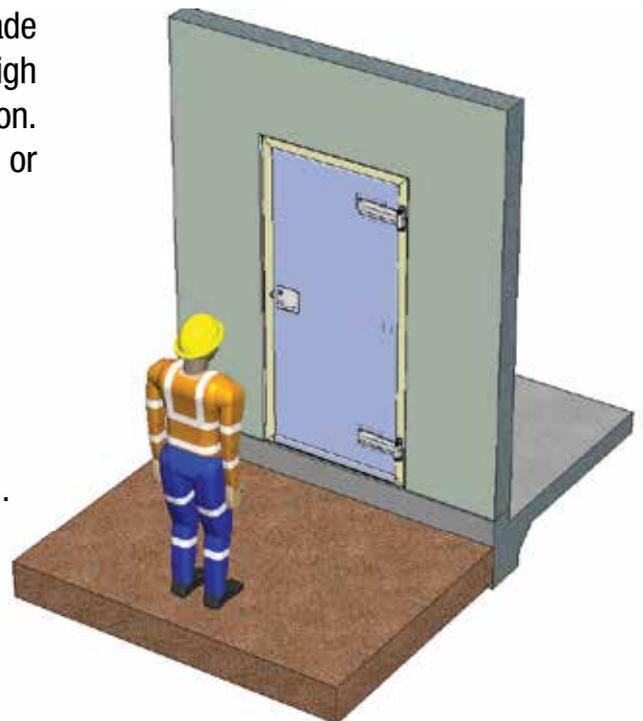
D100 Series Acoustic Doors

DS100 Single Acoustic Door, DD100 Double Acoustic Door Set



D100 Series Acoustic Doors are 100mm thick doors, made from durable sheet steel with an acoustic infill and a high quality compression seal for optimum noise reduction. They are suitable for high noise areas such as test or plant rooms and generator or machinery enclosures.

- Guaranteed to comply with specified performance.
- DS100 Single Door or DD100 Double Door Set.
- Manufactured to requirements, design options include; Adjacent Acoustic Louvres, Acoustic Windows, Interior Panic Bars, Lockable Hardware...
- Stainless steel heavy-duty hardware.
- Plain galvanised, powder-coated or epoxy paint finishes in a range of colours.



CONSTRUCTION

Made from durable sheet steel.

Suitable for most interior or exterior high noise environments.

Available in standard sizes for the DS100 Single Acoustic Door and the DD100 Double Acoustic Door Set or can be manufactured to requirements.

Incorporating high quality compression seals to the full perimeter of the door for optimum noise reduction.

Stainless steel heavy-duty hardware.

These are hinged doors, designed to open from 90° up to 180° for full clear access. Can be hinged left or right.

Doors can be customised, options include:

- Various latch options
- Interior panic bars
- Lockable hardware
- Hold backs
- Security bolts
- Automatic door closers
- Plain galvanised, powder-coated or epoxy paint finishes in a range of colours
- Active leaf (with overlap with seal) can be left or right DD100 Double Acoustic Door Set.

Standard doors are pre-hung in an RHS steel frame, typically 100x50mm section.

Doors can be customised for unique requirements such as vehicle access. Where light or view is required doors can be fitted with Acoustic Windows – see our Acoustics Windows brochure. Louvres for ventilation can also be incorporated into a single framed unit for ease of installation – see our range of Louvres.

For applications with infrequent access requirements, Acoustic Plugs are available, which are engineered much like doors but don't have hinges and latches.



ACOUSTIC PERFORMANCE (dB)

Model	Frequency (Hz)							
	STC	125	250	500	1k	2k	4k	8k
DS100 DD100	41	22	34	38	42	46	45	42

The figures are transmission loss as defined by ISO140-3:1995: Acoustics – Measurement of sound insulation in buildings and of building elements – Part 3: Laboratory measurements of airborne sound insulation of building elements.

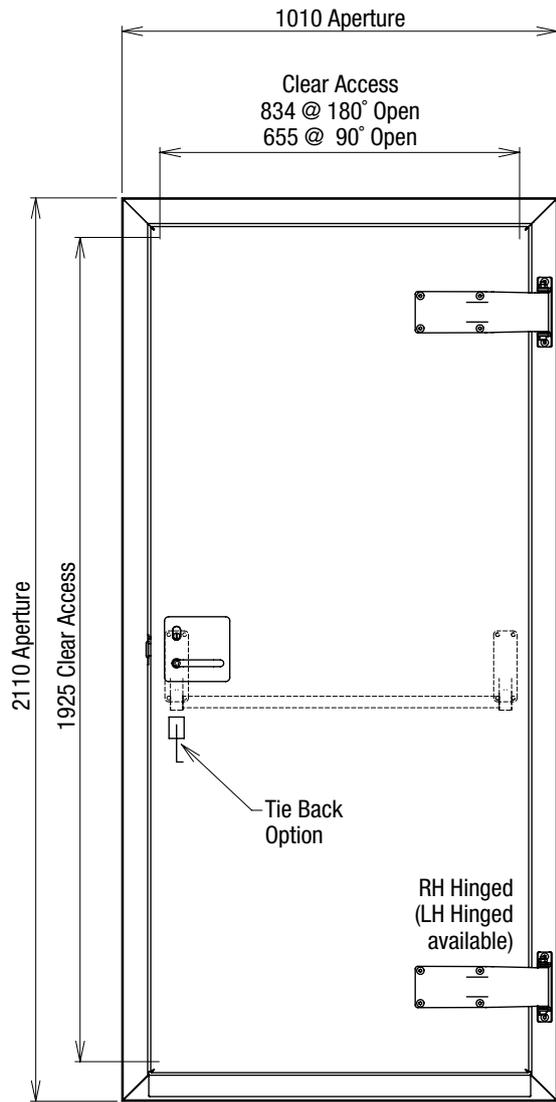
DIMENSIONS & MASS

Model	Dimensions (mm)		Mass* (kg)
	Aperture	Clear Access	
DS100 Single Door	H 2110 W 1010	H 1925 W 834@180° W 655@90°	150
DD100 Double Door Set	H 2110 W 2050	H 1925 W 1668 @180° W 1310 @90°	300

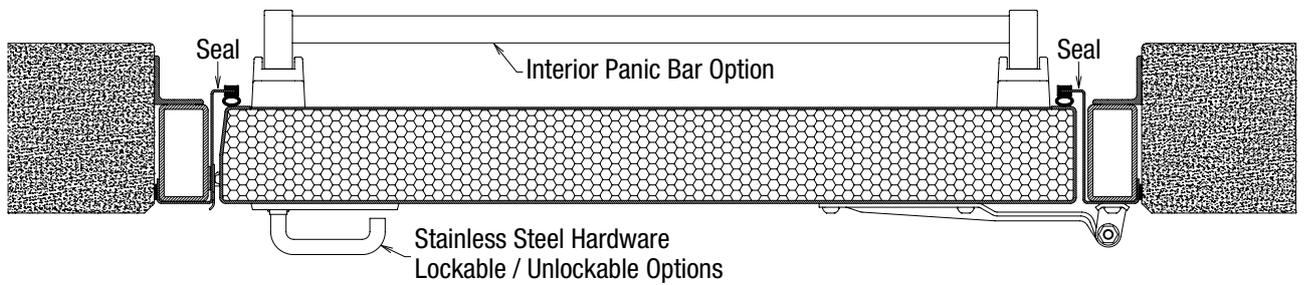
H = Height, W = Width. * Approximate Mass – includes leaf and frame.



DS100 Single Acoustic Door

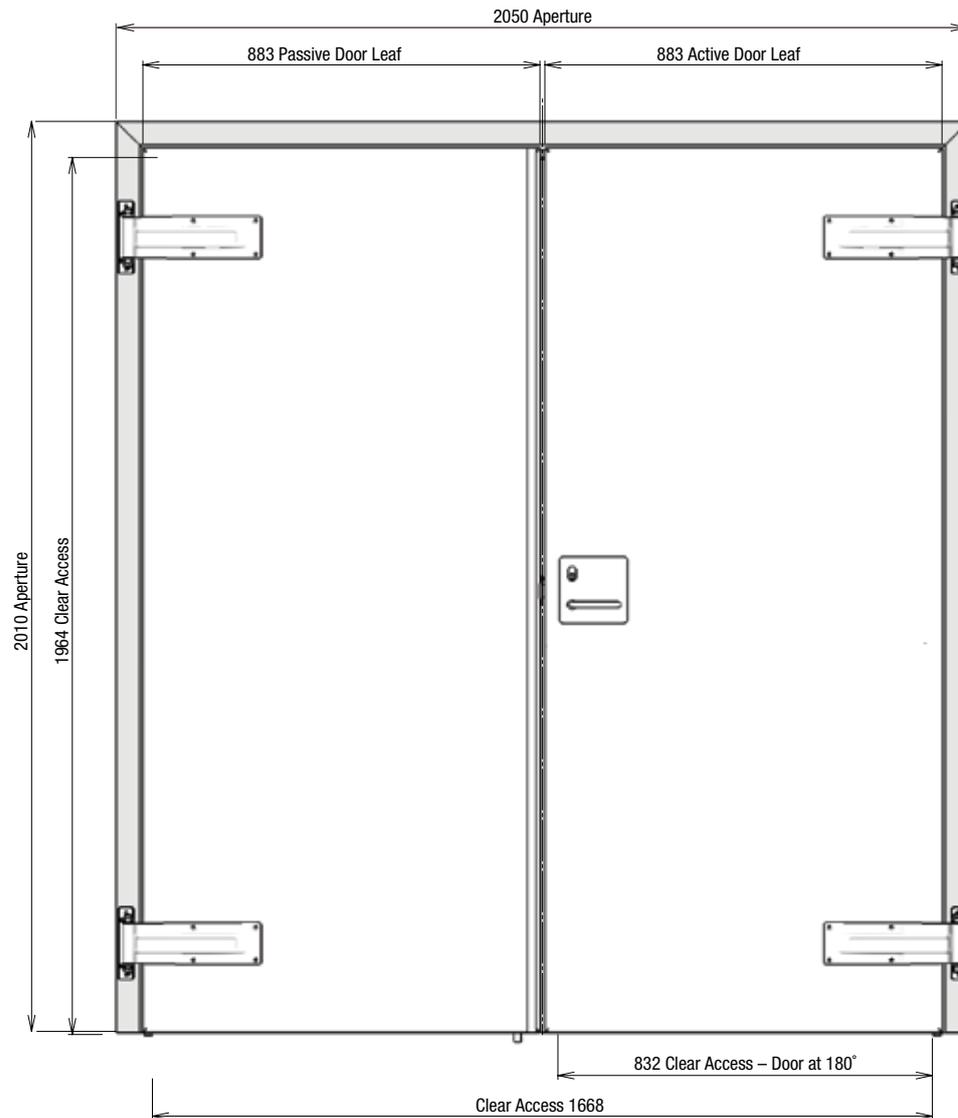


DS100 Single Acoustic Door Cross Section



Untrimmed

DD100 Double Acoustic Door Set



Client: Fletcher Construction

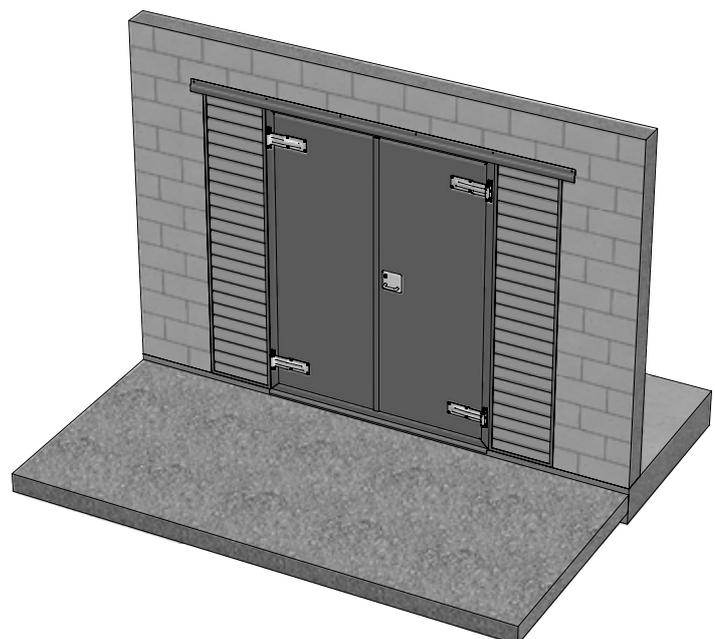
Project: Southern Cross Hospital,
North Harbour, Auckland

The DD100 Double Acoustic Door Set with QF Louvres, provides both noise control and ventilation in a single attractive unit.

The sheet steel construction is very robust for durability in an exterior high traffic location.

Features include interior panic bar, security bolts, lockable stainless steel hardware and powder-coat finish.

RHS framed with holes for easy installation. Installed with a nibbed sill and trimmed.

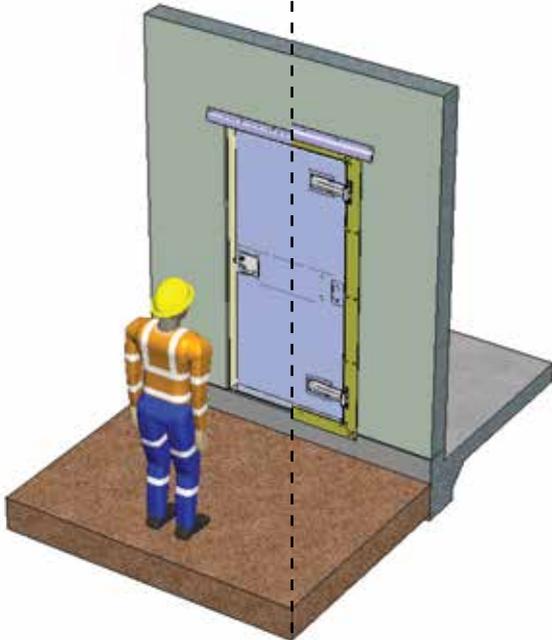


TYPICAL INSTALLATION

Doors are factory assembled and dispatched finished in their frame ready for installation. The RHS frame is typically 100x50mm section. Holes are provided in the RHS frame for fixing to the surrounding structure.

A range of acoustic flashing details are available to allow installation in various facades.

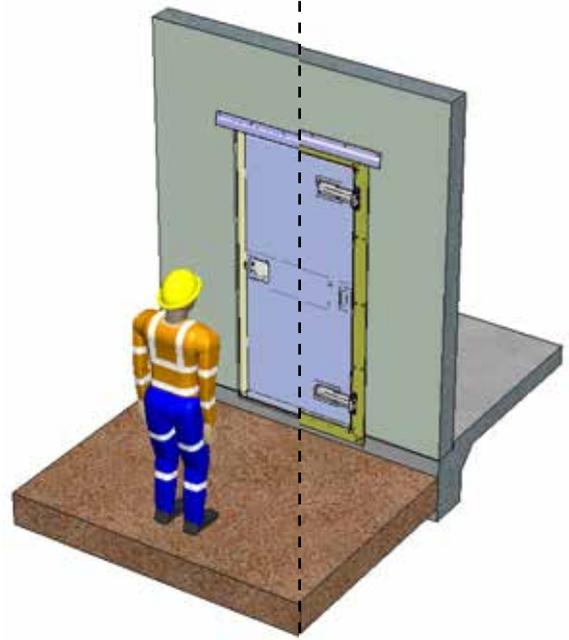
DS100 Nibbed Exterior Concrete Wall



DS100-R1
Untrimmed

DS100-R2
Trimmed

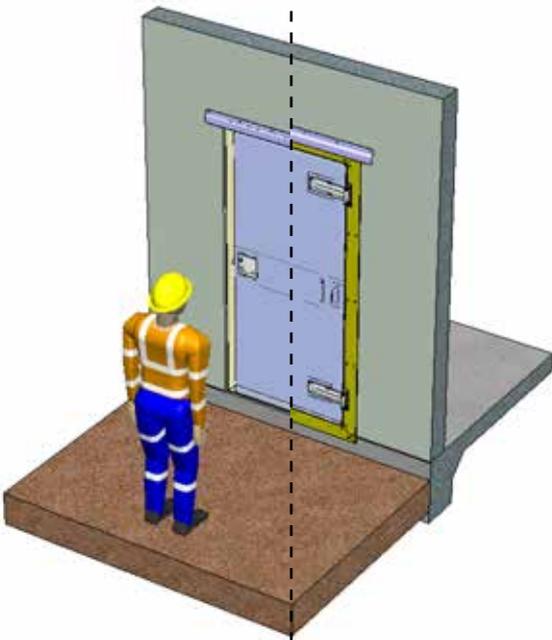
DS100 Rebated Exterior Concrete Wall



DS100-R5
Untrimmed

DS100-R6
Trimmed

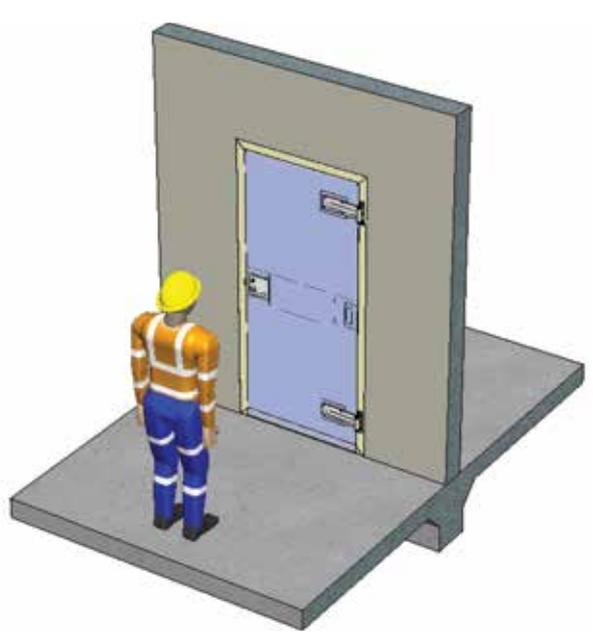
DS100 Flush Exterior Wall



DS100-R3
Untrimmed

DS100-R4
Trimmed

DS100-R7 Interior Concrete Wall



DS100-R7
Untrimmed

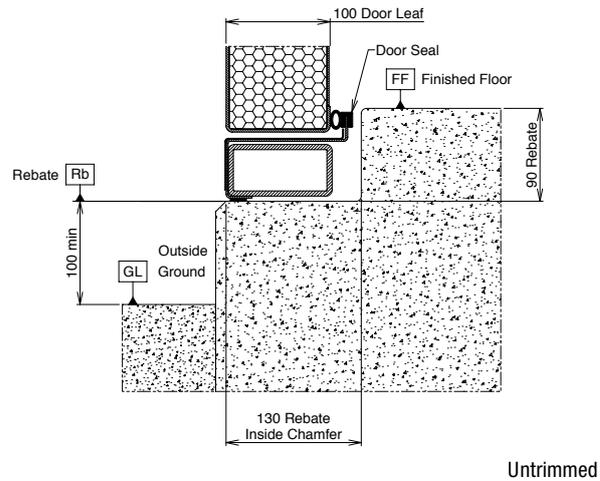
TYPICAL INSTALLATION

DS100-R8 Framed Structure

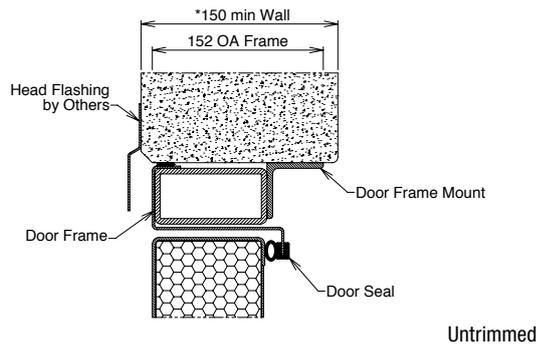


**DS100-R8
Untrimmed**

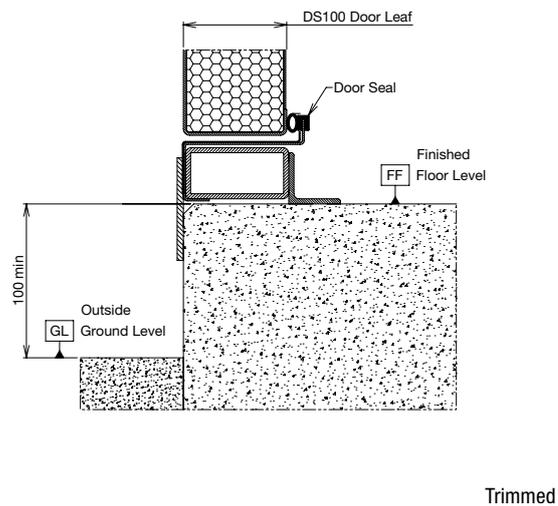
Typical Sill Rebated



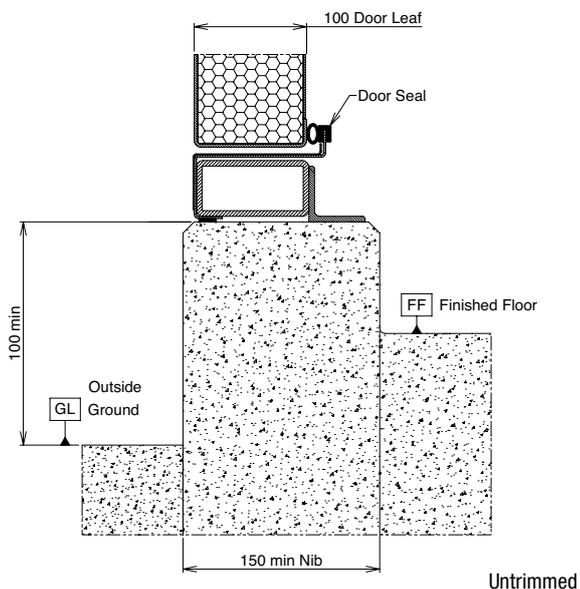
Typical Lintel



Typical Sill Flush



Typical Sill Nibbed



ADDITIONAL INFORMATION

Visit our website or contact us for information on installation, testing, monitoring, maintenance services and technical guides.



Got a question? Call us to discuss
with an experienced engineer:

+64 9 269 0001

Or visit our website for more information:

www.ncsacoustics.co.nz

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