# **Acoustic Door Specification**Noise-Lock® D-63 Steel Acoustic Door

IAC Acoustics
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#### Construction

Door Structure

Each leaf shall be 128mm thick, fabricated from 2.0mm thick steel sheet filled with sound absorbing and damping elements. Leaf shall be internally reinforced to accept hardware.

**Frame** 

Architectural split frame shall be fabricated from 2.0mm thick steel sheets, channels and plates and to be filled with sound absorbing and damping elements. Additional structural elements incorporated into the builders' wall may be required to support the door assembly, please refer to IAC Acoustics for more information.

**Acoustic Seals** 

Side and head of door and frame shall each receive three sets of acoustic seals. An acoustic labyrinth shall be created when door is in closed position. Bottom of door leaf shall contain continuous gravity-activated seal which shall compress against steel threshold as door is closed.

Pre-hung

Assembly and adjustment of door leaf, frame, acoustic seals and hinges shall take place at factory to ensure ease of installation, reliable operation and maintenance of acoustic performance. The entire doorset shall be shipped to job site ready to install and operate.

**Hinges** 

Shall be by IAC, CAM lift design, painted to match the door.

**Preparation** 

Door leaf and frame shall be predrilled and tapped in accordance with manufacturer's templates to accept specified hardware.

## Vision Panel (if applicable)

Not advised

#### Colour / Finishes

Leaf and frame to be polyester powder coated to standard RAL colours.

### **Furniture**

To be confirmed - factory fit and assembly.

## **Acoustic Rating**

Rw (C; Ctr) 63 (-2; -9) dB to achieve minimum R'w58dB once installed (subject to flanking).

STC-64(dB) to achieve minimum NIC 59 once installed (subject to flanking).

Certified Laboratory performance in single leaf arrangement as follows:

Frequency (Hz)	50	63	80	100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k
1/3 Octave Sound Transmission Loss (dB)	-	-	-	36	44	51	53	58	58	59	62	63	63	65	66	65	66	67	70	70	-	-	-	-
Frequency (Hz)	63			125			250			500			1k			2k			4k		8k			
Full Octave Sound Transmission Loss (dB)	-			40			56			61			64			66			70			-		

