

Noise-Lock[®] Doors

Installation Instruction
Manual



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1. Objective

An introduction to the correct techniques and procedures for a safe IAC acoustic door installation.

Please follow the following instructions carefully to help you effectively and safely install the door, and achieve the desired acoustic performance. If you are unsure of any aspect during this process regarding safety, quality or performance, please contact your local IAC Acoustics representative for help and advice.

2. Preparation for Installation

2.1 Working Tools

- M6 internal hexagonal wrench
- M8 internal hexagonal wrench
- Socket spanner
- Portable hand drill
- Electric hand drill 110v
- Blade
- Plumb line
- Spirit level
- Measuring tape and / or laser
- Podium steps
- Power line
- Srew driver
- Mastic gun
- M8 expansion bolt
- Self tapping screw
- Cleaning agent

2.2 Personal Protective Equipment

- Safety Boots
- Safety Glasses / Eye Protection
- Gloves
- Hard Hat / Helmet

2.3 First Steps

Consult your Method Statement and Risk Assessment for the safe unpacking and movement of the IAC Noise-lock® acoustic door to the installation point.

2.4 Check the Installation Area

Clear all debris and foreign matter from around the wall opening and floor. Check each measurement from the approved drawing – structural / rough opening height, width, square and wall thickness.

Check the direction of the door opening and ensure there is no interference through the doors opening cycle from proposed closed position to 180 degrees open.

Check for potential issues which could affect the door installation or quality of final fit & finish, typically this is: an uneven floor surface in the closed position, an uneven or rising floor surface through the opening cycle, a poor quality wall finish or fixing point.

If any of these aspects occur please call your IAC Acoustics Project Manager for further advice & assistance.

Please note that all IAC Noise-lock® doors are pre-hung assemblies. Each leaf and frame is factory fitted and match marked to ensure proper alignment, acoustic seal and operation. Do not mix and match leaf / frame assemblies.

3. Installation

3.1 Threshold

Apply grey mastic along floor where threshold will rest.

3.2 Installation of the Door Frame

1. Offer one piece frame to aperture
2. Check Barafoam is fitted to the reverse of the front face of doorframe return.
3. Level and square frame by using packers supplied, check floor clearance allowing for floor covering.

Note: The tolerance of the perpendicularity and levelness is $\pm 1\text{mm}$

4. Fix with correct fixings as listed below:
 - a. Anchor bolts for brick & concrete
 - b. Resin anchors for blockwork
 - c. Machine screws for steelwork

(DO NOT OVER TIGHTEN AT THIS STAGE)

5. Pack out frame around fixings with spacers supplied
6. Tightly pack any gaps between frame & aperture with mineral wool and apply a good bead of grey mastic
7. Offer the rear architrave to the frame to check wall thickness and if necessary trim to required thickness
8. Fit barafoam to reverse of architrave
9. Insert male sections of frame and check for level and vertical alignment

3.3 Installation of the Door Leaf

- Hang leaf on door frame.
- Square leaf within frame by packing either/or top and bottom of the frame. Check for even gap between frame & leaf.

3.4 Finishing

Fully tighten all fixings, taking care not to distort frame.

Fix stainless steel threshold cover plate, bonding to the existing the door frame threshold with a thin layer of silicone sealant.

With the aid of masking tape very neatly apply silicone sealant around edges of doorframe to compensate for any deviations in the surfaces of structural walls.

Check the following:

1. Insert frame fixing bungs / caps / covers
2. Door opens correct way
3. Door leaf clearance
4. All seals are in with contact with door and frame
5. Adjust boot seal
6. Locks work easily (if applicable)

3.5 Acoustic Boot Seal

Adjust the acoustic boot seal to the correct position. Loosen the 2 screws at each side of the leaf (4 in total) and allow the seal to drop down.

Open the door 2-3 times so that the boot drops down to the correct compression level when closed, ensuring a good compressed contact with the threshold.

Once the position is achieved, open the door again and tighten the screws to complete the process. Finally check alignment is correct with a final operation of the leaf.

3.6 Cleaning / Handover

Clean the surface of the door with a non-abrasive proprietary cleaning product.

Demonstrate and instruct the user on the operation of the door and maintenance. Advise user to consult the O&M manual for further advice and maintenance.

Review the installation certificate of inspection with the user for final completion of the installation.

4. Double Door Additional Instructions

Follow all the same procedures for a single door installation, with the following additional steps

If the frame is split into two inverted L sections then use the supplied fixing kit to assemble before offering to the opening.

Repeat the single door installation steps, offering the inactive leaf to the frame prior to the active leaf.

Ensure that frame adjustments are undertaken when both leaves are installed, ensuring a consistent gap between leaf & frame all round.

5. Problem Solving

If opening is not square, floor is not even or walls not perpendicular then please halt the installation process and contact your IAC Acoustics Project Manager.

If installation is completed but door leaf will not close then check for interference from acoustic seals between hinges and / or leaf and frame.

Additionally check for any debris which could have entered the installation areas.

For a misaligned acoustic boot seal, check for any debris in the door opening area, or under the threshold creating an uneven surface. Additionally check that the screw heights on the boot seal are level so the seal is parallel to the floor / threshold.

On completion and correct setup of the frame and leaf, the gap between frame & host wall is uneven or larger than 5mm, please contact and review with your Project Manager and / or the clients' construction company. Remedial works maybe required by the contractor.

