MAB
Metal Air Brick Installation Manual

1.0 SAFETY INFORMATION

1.1 Symbols

REFER TO INSTRUCTION MANUAL

Read and understand the installation and maintenance manual before installing or maintaining this product.

1.2 Important Information

This manual contains important information on the safe and appropriate assembly, transport, commissioning, operation, maintenance, disassembly and simple troubleshooting of the product.

While the product has been manufactured according to the accepted rules of current technology, there is still a danger of personal injury or damage to equipment if the following general safety instructions and the warnings contained in these instructions are not complied with.

- **Read these instructions completely and thoroughly before working with the product.**
- **Keep these instructions in a location where they are accessible to all users at all times.**
- **Always include the operating instructions when you pass the product on to third parties.**

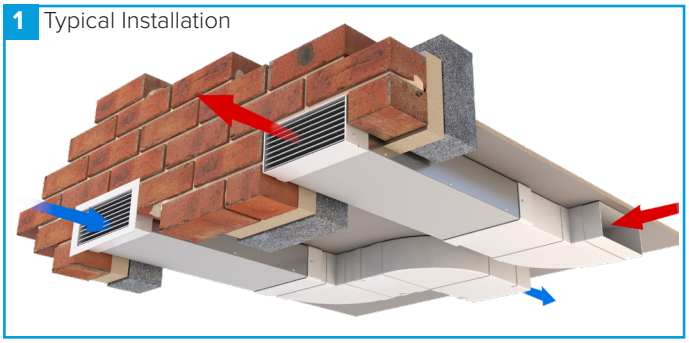
1.3 Personal Protective Equipment

The following minimum Personal Protective Equipment (PPE) is recommended when interacting with Nuaire product:

- **Protective Steel Toed Shoes -** when handling heavy objects.
- **Full Finger Gloves (Marigold PU800 or equivalent) -** when handling sheet metal components.

Nuaire would always recommend a site specific risk assessment by a competent person to determine if any additional PPE is required.

1 Typical Installation



2.0 INTRODUCTION

The Metal Air Brick (MAB) range of products addresses fire safety regulations in high-rise buildings with a storey at least 18m above ground level to Regulation 7(2) and Building Regulations, Approved Document B.

In Scotland this height has been lowered to a storey more than 11m above ground level in accordance with Building (Scotland) technical handbook 2019: domestic and non-domestic, Section 2.7.

The building regulation 7(2) requires any materials used for the external wall, or attachments to the wall, have at least a classification 'A2 - s1, d0' to BS EN 13501-1 to reduce the risk of fire spread over the wall.

The metal air brick range of products meet this fire class requirement. With the base material being considered fire class 'A1' without the need for testing as per 96/603/EC European Commission directive "materials to be considered as reaction to fire Class A without the need for testing".

All air bricks are available in a variety of powder coated RAL colours to maintain the external appearance of the building. All powder coated options are fire class 'A2 - s1, d0' to BS EN 13501-1.

It is strongly recommended this product be considered in any building design with a storey 11m (or above) ground level. Even if the building regulation states 'at least 18m'.

2.1 Code Description

1	-	2	-	3	-	4
MAB	-	220X126	-	WH	-	B

1. Range:	**MAB**	= Metal Air Brick
2. Duct Size:	**204v60**	= 204 x 60 mm
	220X90	= 220 x 90 mm
	220X126	= 220 x 126 mm
3. Colour:	**BR**	= Brown (RAL 8011)
	BK	= Black (RAL 9017)
	COT	= Cotswold (RAL 1014)
	G	= Grey (RAL 7046)
	TC	= Terracotta (RAL 8004)
	WH	= White (RAL 9016)
4. Bezel	**B**	= Bezelled version
	blank	= Non-bezelled version

2.2 Kit Contents

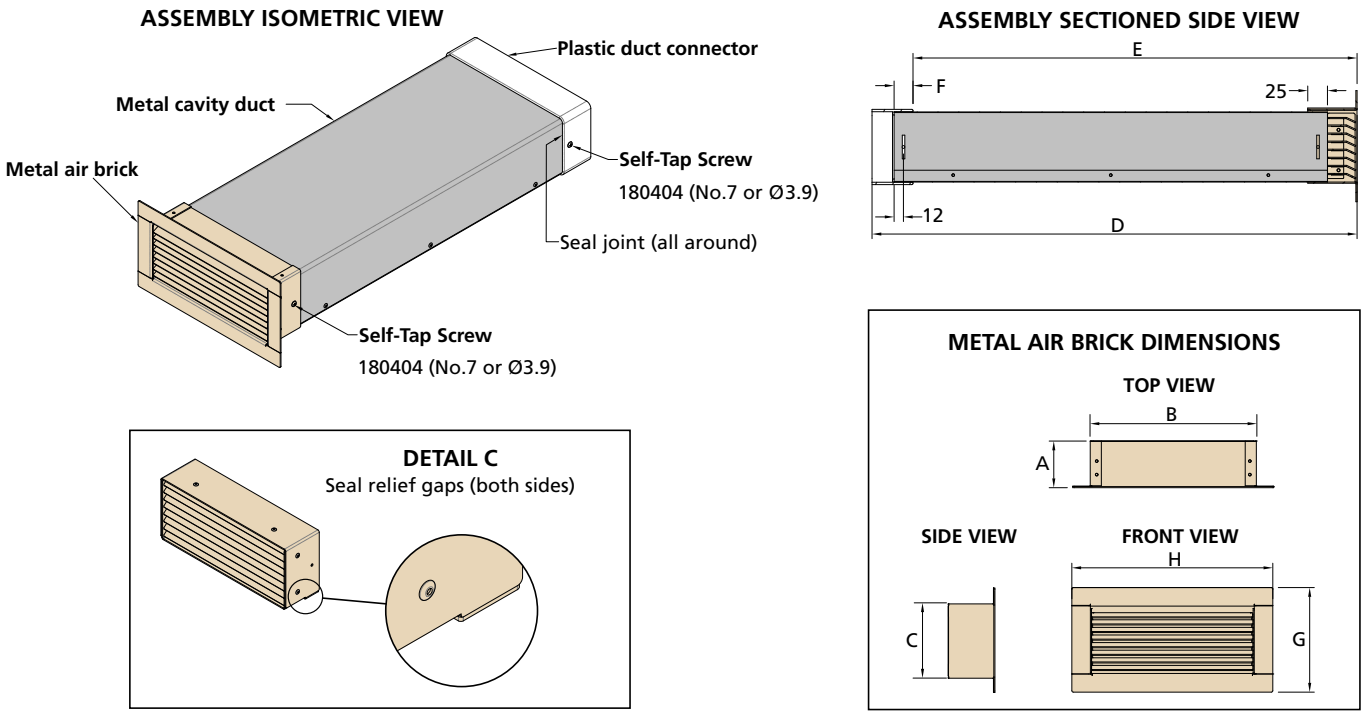
1x Metal Air Brick (MAB)

4x Self-Tap Screw (180404)

2.3 Dimensions (mm)

2.3.1 Dimensional Diagram

2 MAB Dimensions (mm)



2.3.2 Dimensions Table

Unit Code	Dimensions (mm)							
	A	B	C	D	E	F	G	H
MAB-204X60	60	208	64	612	560	25	n/a	n/a
MAB-220X90	60	224	94	613	560	24	n/a	n/a
MAB-220X126	60	224	130	613	560	25	n/a	n/a
MAB-204X60-B	62	209	65	614	563	25	111	255
MAB-220X90-B	62	225	96	615	563	24	141	271
MAB-220X126-B	62	227	133	615	563	25	177	271

2.4 Assembly Components

The following table notes what components should be used with each size of the metal air brick.

Unit Code	Duct Connector	Metal Cavity Duct
MAB-204X60	PVC520WH	MCD-204X60-055
MAB-220X90	PVC920WH	MCD-220X90-055
MAB-220X126	PVC977WH	MCD-220X126-055
MAB-204X60-B	PVC520WH	MCD-204X60-055
MAB-220X90-B	PVC920WH	MCD-220X90-055
MAB-220X126-B	PVC977WH	MCD-220X126-055

3.0 MECHANICAL INSTALLATION

Installation must be completed by competent persons, in accordance with good industry practice and should conform to all governing and statutory bodies i.e. IEE, CIBSE, etc.

Ensure the metal duct slopes on a negative gradient towards the outside wall as outlined in the NHBC Domestic Ventilation Compliance Guide.

When metal air bricks are used with metal duct they must be fixed to the required duct length before installing into the fabric of the building.

The metal air brick/duct must be fire sealed to the inner wall.

- Fit metal air brick to front of metal cavity duct. (Ensuring no paint damage occurs on powder coated finish).
- Secure metal air brick to metal duct using (2x) No. 7 Self-Tapping screws (supplied).
- Seal joint between air brick and metal duct using intumescent sealant (ensure a complete seal).
- Fit plastic duct adaptor to rear of metal cavity duct.
- Secure duct adaptor to metal duct using (2x) No. 7 Self-Tapping screw (supplied). Ensure the screw position is correct in relation to the hole on the metal duct (Figure 2).
- Seal joint between plastic adaptor and metal duct using a non-setting acrylic sealant (ensure a complete seal).
- Install remaining plastic duct system in accordance with standard practice.

4.0 MAINTENANCE

It is important that maintenance checks are recorded and that the schedule is always adhered to, in all cases, the previous report should be referred to.

4.1 Routine Maintenance

- Clean air brick with a damp cloth and treat any areas of corrosion.
- Check for any blockages in the air brick and remove if present.

5.0 END-OF-LIFE & RECYCLING

Where possible Nuaire use components which can be largely recycled when the product reaches its end-of-life:

- Sheet metal parts, aluminium extrusion, heating/cooling coils and other metallic items can be segregated and fully recycled.
- EPP, plastic ducting, nylon corner pieces, plastic heat exchangers, packaging material and other plastic components can be segregated into mixed plastic and widely recycled.
- Cardboard packaging, wood, used filters and other paper components can be largely recycled or fully processed in energy from waste centres.
- Remaining Items can be further segregated and processed in accordance with the zero waste hierarchy. Please call After Sales Support for further information on items not listed above.

6.0 AFTER SALES & REPLACEMENT PARTS

For technical assistance or further product information, including spare parts and replacement components, please contact the After Sales Department.

If ordering spares please quote the serial number of the unit together with the part number, if the part number is not known please give a full description of the part required. The serial number will be found on the identification plate attached to the unit casing.

Telephone 02920 858 400
aftersales@nuaire.co.uk

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