



Fire Rated Air Bricks - "FRAB"

Fire Rating

- The FRAB range achieves an overall fire rating of A2-s1,d0 as required by Approved Document B
- The individual component fire ratings are:

Component	Fire Rating
0.9mm galvanised sheet steel	A1 as per European Commission Paper 96/603/EC
RAL colour powder coating	A2-s1,d0

Regulations

- The Vectaire Fire Rated Air Brick range is suitable for use in association with the following:
 - The Building Regulations Approved Document B, Regulation 7(2) including 2025 amendments
 - Building Regulations (Northern Ireland) Technical Booklets
 - Building (Scotland) Technical Handbook

0.9mm Galvanised Sheet Steel

Property	Value
Mechanical Properties	DX51
Zinc Coating	Z275
Spangle	M
Surface Quality	A
Surface Treatment	C - Skin Passing

RAL Colour Powder Coating

- 30% matt finish powder coating

IP Rating

- The 500mm length versions of the range conform to the requirements of IPX3 rating for water ingress

Corrosion

- Corrosion in steel is an electrochemical process that oxidises the iron in the steel. Oxidation occurs as a result of the chemical reaction between steel and oxygen, where steel is consumed converting iron to corrosion products. Paints are barrier coatings that, when applied and used properly, give sufficient corrosion protection to steel for many common applications.

Galvanisation

- The main mechanism by which galvanised coatings protect steel is by providing an impervious barrier that does not allow moisture to contact the steel and therefore prevents corrosion. The metallic zinc coating has excellent adhesion, abrasion, and corrosion resistance.

Galvanised coatings will not degrade as with other barrier coatings such as paint. The protection offered by a galvanised coating is proportional to its thickness and to the corrosion rate.

- The second shielding mechanism is zinc's ability to protect steel galvanically. When zinc and steel are in contact in the presence of an electrolyte, a current will flow from the steel to the zinc, so that the zinc becomes an anodic electron-producing region while the steel is cathodic and consumes electrons, preventing it from combining with oxygen and forming rust.
- When base steel is exposed, such as at a cut edge or scratch, the steel is cathodically protected by the sacrificial corrosion of the zinc coating as zinc is more electronegative than steel. Therefore a zinc coating will not be undercut by rusting steel because the steel adjacent to the zinc coating cannot corrode. Any exposure of the underlying steel, due to severe coating damage or a cut edge, will not result in corrosion of the steel until the adjacent zinc has been consumed.

Maintenance

- The Vectaire FRAB range should be regularly cleaned by wiping with a damp cloth. Do not use abrasive or solvent cleaners.

General

- Very low airflow resistance
- Available in 3 sizes:
 - 204mm x 60mm x 500mm
 - 220mm x 90mm x 500mm
 - 208mm x 130mm x 500mm
- Non-bezelled or bezelled - bezelled models suitable for exterior cladding
- Metal ducting available in standard 500mm length with custom lengths available on request
- Metal straight, 45° and 90° connectors available in all three sizes
- Available in 5 colours:
 - brown - RAL8016
 - white - RAL9016
 - terracotta - RAL8004
 - grey - RAL7012
 - beige - RAL1001
- Custom colours and sizes available on request
- Blades integral with airbrick and therefore will not loosen
- Performance tested to BS EN13141-2-20
- Designed to fit into walls during building works
- Free Areas:
 - 204 x 60mm size - 11,007 mm², 90% free area
 - 220 x 90mm size - 18,222 mm², 92% free area
 - 208 x 130mm size - 24,660 mm², 91% free area
- Registered designs
- Made in the UK

- Please contact your Vectaire representative via Head Office on 01494 522333 for any assistance.
- An electronic copy of this specification is available on request.