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SIDERISE BB BALCONY BRACKET

Rapid fire stop solution to
complex detail allowing continuity
of cavity compartmentation

SIDERISE BB BALCONY BRACKET

Private outdoor space can often be a commodity compromised in populous towns and cities with ever-rising skylines. This is where the balcony presents its opportunity. The value of outdoor space in residential, leisure and commercial properties rises with its utility. One of the functions and benefits of a balcony include enabling users to benefit from outdoor space when in an elevated structure for improved well-being in addition to being an aesthetic design feature.

Balcony design has been subject to significant changes in recent years, as legislative changes have defined the fire requirements of external balconies in England and Wales and now form part of the external wall; classified as a "specified attachment".

Typically in modern construction there can be a challenge to maintain the cavity barriers around balcony anchors. This is due to reduced floor height and ceiling finishes and thinner concrete floor slabs.

Therefore it is not always possible to pass a cavity barrier under or over the balcony brackets. In the past this has resulted in time-consuming ad-hoc solutions and adaptation of the cavity barriers to treat these details.

Application

Siderise BB Balcony Bracket provides a rapid solution to a complex detail and allows continuity of cavity compartmentation when abutted either side by Siderise Cavity Barriers and Fire Stops such as:

- **Siderise EW** - Cavity Barriers and Firestops for use in external masonry wall build-ups
- **Siderise RH/RV** - Cavity Barriers for use in ventilated façade build-ups
- **Siderise CH** - Cavity Barriers for use in non-ventilated façade build-ups
- **Siderise CW** - Firestops for use in curtain wall façade build-ups

Siderise BB has been tested to EN 1363-1:2012 (WF 409690/426636) and achieved over 2 hours of fire performance - 120 minutes Integrity / Insulation (EI 120).

These products represent an ideal combination of qualified performance and practical installation.

Balcony bracket connectors come in a wide range of styles and sizes, therefore project specific advice for your application should be sought from Technical Services.

Siderise BB is available in two primary forms with the following minimum clearances:

- **Siderise BB-CB** - 55mm above the connector and 55mm below
- **Siderise BB-FB** - 15mm above the connector and 50mm below.

Selection advice regarding the appropriate BB system for a given application is always available

PRODUCT DESCRIPTION

Siderise BB-CB comprises of a low resin content stone wool insulation core which is pre-compressed internally to form a resilient strip. The material is faced with a reinforced aluminium foil which is an effective smoke barrier.

Siderise BB-CB balcony bracket kit comprises of 4 pre-cut interlocking sections which encapsulate the balcony bracket connection.

Siderise BB-FB comprises of a high-density stone wool insulation, the material is faced with a reinforced aluminium foil which is an effective smoke barrier.

Siderise BB-FB balcony bracket kit comprises of sections of pre-cut insulation which are then assembled on site to encapsulate the balcony bracket connection.

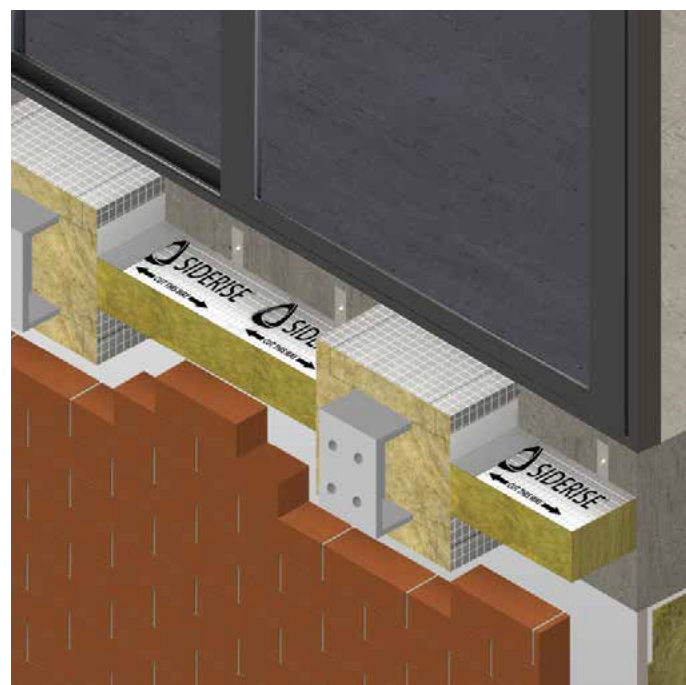


One Hyde Park, London

Installation guidance

Siderise BB Cavity Barrier solutions should be installed in accordance with PD 6697:2019 - 'Recommendations for the design of masonry structures to BS EN 1996-1-1 and BS EN 1996-2' when used in conjunction with Siderise EW in external masonry wall build-ups.

*Must be installed with a DPC extending a minimum of 25mm into the cavity either side of where the product contacts the brickwork. DPC to be sourced separately.



Fire performance

Siderise BB-CB is manufactured from non-combustible stonewool and is rated A1 to EN 13501-1 as a stand-alone material and is covered in a re-inforced aluminium foil.

Siderise BB-CB has a calculated Reaction to Fire classification of 'A2' to EN 13501-1 via gross calorific value (GCV) calculation based on EN ISO 1716:2018 test data.

Siderise BB-FB is manufactured from non-combustible stonewool faced with reinforced aluminium foil and is rated A1 to EN 13501-1.

Both Siderise BB options have been tested to EN ISO 1363-1:2012 and achieved 120 minutes Integrity and 120 Insulation giving a fire performance rating of EI 120 (Warrington Fire test report no. 409690/426636).

Thermal performance

Thermal conductivity : λ_{10}

Siderise BB-CB = 0.038 W/m.K (tested foil to foil)

Siderise BB-FB = 0.042 W/m.K (tested foil to foil)

*Damp Proofing

When used in conjunction with an external masonry wall, it must be damp-proofed in accordance with PD6697:2019 - 'Recommendations for the design of masonry structures to BS EN 1996-1-1 and BS EN 1996-2'.

Table 1: Resistance to Fire to EN1363-1

Product Type	Integrity (E) (minutes)	Insulation (I) (minutes)	Classification (EI) (minutes)
Siderise® BB-CB	120	120	EI 120
Siderise® BB-FB	120	120	EI 120

A balcony not only provides additional living space, but also easy access to fresh air and the great outdoors

Technical Specification

Table 2: Product Properties

Property	Value
Reaction to Fire	BB-CB Classification to EN 13501-1 : 'A2' BB-FB Classification to EN 13501-1 : 'A1'
Resistance to Fire	Classification to EN 13501-2. Please see Table 1 : EI 120
Thermal Conductivity	BB-CB λ_{10} = 0.038 W/m.K (tested foil to foil) BB-FB λ_{10} = 0.042 W/m.K (tested foil to foil)
Chemical	The base stone wool is chemically inert. An aqueous extract of the rock wool is neutral (pH7) or slightly alkaline. Resistant to most acids and weak alkaline solutions.
Biological	Vermin and rot proof and does not encourage the growth of fungi, moulds or bacteria.
Effect of water	Non-hygroscopic. Unaffected by humid atmosphere. Must be suitably damp proofed in accordance with codes of practice for masonry constructions.
Compatibility	Compatible with all normal building materials.
Maintenance	No maintenance required unless disturbed.
Handling	Easy to handle but should be treated with due care to ensure material integrity and shape are maintained.
Storage	Store in dry conditions.

Riverlight, London



Environmental

Siderise BB Systems are environmentally friendly:

- They contain no Volatile Organic Compounds (VOCs) and no very Volatile Organic Compounds (vVOCs).
- Zero Ozone Depleting Potential
- Zero Global Warming Potential
- Recyclable

Additional information

The following information is available for download via the website:

- NBS Specification Clauses
- Standard Details
- Safety Data Sheet
- Installation Instructions

Products available

Siderise offers a number of ancillary products to complement the BB Systems, these include:

Spiral Fixings which are required as part of the BB-CB/FB kit and must be installed as per the Installation Instructions.

Siderise Aluminium Jointing Tape must be used at all joints and intersections:

- RFT120/45 (120mm wide x 45m rolls) Adhesive backed, Supplied in boxes of 8

Siderise Fire & Acoustic Sealant may be used for small gaps and undulations: FS120/310ML/WH (310ml cartridge) Supplied in boxes of 25

Specification support

Siderise offer specifiers support from initial enquiry and technical consultation to project realisation. NBS draft specifications are provided for standard products and applications and can be tailored to suit specific project performance requirements.

Technical & Sales support

Sales support

Sales Team

T: +44 (0) 1656 730833
E: enquiries@siderise.com

Technical support

Technical Services Team

T: +44 (0) 1656 730833
E: technical.services@siderise.com

Site Services support

Siderise offer a range of services to contractors and installers. These include toolbox product installation and site installation inspection and reporting (subject to availability and by agreement).

Site Services Team

T: +44 (0) 1656 730833
E: site.services@siderise.com

System testing support

Siderise can provide assistance and advice for large scale system testing to BS EN, NFPA, ASTM and AS standards.

Testing Support Team

T: +44 (0) 1656 730833
E: firetesting@siderise.com

Context

The information in this datasheet is believed to be accurate at the date of publication. Siderise has a policy of continuous product improvement and reserves the right to alter or amend the specifications of products without prior notice. Siderise does not accept responsibility for the consequences of using the products described outside of the recommendations within this datasheet. Expert advice should be sought where there is any doubt about the correct specification or installation of Siderise products.

BY YOUR SIDE®

Siderise Insulation

Passive fire solutions for the building envelope

United Kingdom

Siderise Group, Forge Industrial Estate,
Maesteg, UK, CF34 0AY
T: +44 (0) 1656 730833 | F: +44 (0) 1656 812509

Middle East & India

Siderise Middle East Fz LLC, Office 132,
Al Shafar Investment Building,
Al Quoz Industrial Area 1, Dubai, UAE
T: +971 (0) 4 580 4999

Asia Pacific

Siderise (Asia Pacific) Pte. Ltd. 80 Robinson Road,
#02-00 Singapore 068898
T: +65-963 19310

www.siderise.com

Siderise Special Products

Engineered acoustic solutions for equipment manufacture and construction

Siderise (Special Products) Ltd

Lady Lane Industrial Estate
Hadleigh, Suffolk, IP7 6BQ
T: +44 (0) 1473 827695

