

RV | CAVITY BARRIERS FOR CLADDING / RAINSCREEN – VERTICAL

Technical Data Sheet

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SIDERISE[®]
integrity in all we do

Acoustic, fire and thermal insulation specialists

Application

SIDERISE RV vertical cavity barriers for rainscreen cladding are used to full fill the void between the external envelope and internal structure.

The construction offers excellent resistance to the passage of both smoke and fire. Additionally, by fully sealing the void, they assist ventilated façades to function by maintaining air pressurisation compartmentation.

Importantly, their unique stonewool lamella core construction enables the vertical barriers to accommodate the serviceability movement normally associated with rainscreen façades.

Intersections between horizontal and vertical cavity barriers are simply abutted. The leading edge compresses directly against the external envelope. No intumescent strip is required.

Third-Party Certification

SIDERISE is the first manufacturer to achieve Third-Party Certification for Rainscreen Cavity Barriers.

For full details of SIDERISE RV certified products, including the testing and scope of our Third-Party Certification, please refer to Warringtonfire ewcl⁵ Certificate Number ME 5101.

This Certificate is available for download from our online Technical Resources or by contacting our Technical Support department: technical@siderise.com

Product Description

SIDERISE RV vertical cavity barriers are installed within the cavity formed between the rainscreen facade and the inner structural wall using appropriate SIDERISE support brackets. Brackets are available in either galvanised mild steel (G) or stainless steel (S).

SIDERISE RV vertical cavity barriers for rainscreen cladding applications consist of a non-combustible stonewool lamella core, with reinforced aluminium foil faces, giving an overall reaction to fire performance of Class 'A1' to EN 13501-1. The standard product length is 1200mm.

Fire Performance

Product Fire Performance

SIDERISE RV vertical cavity barriers have been tested in accordance with EN 1366-4: 2006+A1: 2010. The cavity barriers maintained integrity (E) and insulation (I) requirements as detailed in Table 1.

The tests have been undertaken to assess the ability of the vertical cavity barrier products to reinstate the fire resistance of a lightweight aerated concrete supporting construction. This is the standard assembly for testing such cavity barrier products as it allows the performance of the individual barrier to be classified.

System Fire Performance

SIDERISE cavity barrier products have been used in a growing number of large-scale system tests such as BS 8414(1&2) and NFPA 285. These may be used to evaluate the performance of the SIDERISE cavity barriers within a complete cladding system. The rules for evaluation of results from BS 8414 are subsequently defined in BS 9414.

For information regarding performance and assembly details in system tests please contact the Façades team.

TABLE 1 : Product fire performance

Product type	Product fire classification			Thickness (mm)	Void range (mm)
	Integrity (E)	Insulation (I)	Classification (EI)		
RV-90/30	90	30	30	75	26 - 450
RV-90/60	90	60	60	90	26 - 450
RV-120/120	120	120	120	120	26 - 450

Please note :-

Fire classification rating in the above tables refers to performance in product fire tests to EN1366-4:2006+A1: 2010.

The products have been additionally incorporated in large scale system tests. Please contact the Façades team for further information.

In all cases, we recommend that the specifier and user review the specific project configuration regarding available large-scale system test data and in light of the latest National Building Regulations, local Building Code and/or government advice. For voids greater than 450mm, please contact the Facades team for further information.

Table 2: Support Brackets

Product Type	Voids (mm)				
	26-50	51-150	151-240	241-300	301-450
RV-90/30	N/A	B65/110	B195	B355	B355
RV-90/60	N/A	B65/110	B195	B355	B355
RV-120/120	N/A	B65/110	B195	B355	B355

Support Brackets

Support brackets should be installed at 600mm fixing centres (300mm from each end).

The brackets are supplied as standard in 1mm galvanised mild steel (G) or stainless steel (S), in a flat form for site folding. They incorporate pre-notched indents to aid this process.

Lengths of the barrier are secured with these dedicated brackets, which impale the product at mid thickness to a depth of 75% of void.

The brackets are drilled on-site and secured to the inner structural wall using non-combustible steel anchors or screws. These fixings are not supplied by SIDERISE.

Please see separate installation instructions and installation video available on our website.

Please note:

For voids up to 50mm: measured cavity +5mm compression is required; for voids greater than 50mm: measured cavity + 10mm compression is required.

SIDERISE RH horizontal cavity barriers are installed so that they terminate each side of the SIDERISE RV vertical cavity barriers.

Thermal Performance

Thermal conductivity: $\lambda_{10} = 0.038$ W/m.K (tested foil to foil)

Technical Specification

Table 3: SIDERISE RV vertical cavity barriers

Property	Value
Form Supplied	Sheets : 1200mm x 1200mm (UK and EU); 1200mm x 1150mm (RoW); Pre-cut strips: 1200mm long and supplied in width to suit advised void size.
Colour	No colour. Stonewool exposed to leading edge
Finish	Aluminium foil to surfaces exposed to cavity
Density	Nominal 75 kg/m ³
Thermal Conductivity	$\lambda_{10} = 0.038$ W/m.K (tested foil to foil)
Void sizes	RV-90/30 permissible for voids up to 450mm
	RV-90/60 permissible for voids up to 450mm
	RV-120/120 permissible for voids up to 450mm
Fire Resistance	For product fire performance see Table 1
Reaction to fire	Class 'A1' to EN 13501-1

Environmental

SIDERISE RV vertical cavity barriers for rainscreen cladding 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 upon request or via download from the website:

- NBS Specification Clause
- Safety Data Sheet
- Installation Instructions

Technical Support

Technical Services Team: technical@siderise.com

SITE SERVICES SUPPORT

SIDERISE offers 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: site.services@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.

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