

HORIZONTAL RAINSCREEN CAVITY BARRIER



CONCEPT CONVERSIONS LTD
Fire, Acoustic & Thermal Insulation

COMMERCIAL

Data Sheet 1004 v2.0.2

The CCL HRCB is a fire resistant barrier designed to prevent the spread of fire and smoke in open state cavities where a continuous vented air layer is required within the façade design.

Description:

The CCL HRCB range is designed for use in ventilated façades, with cavities up to 300mm, where either 25mm or 50mm ventilated air layers are specified.

Manufactured using high density, non-combustible rock mineral wool combined with heat activated, high expansion intumescent, the barriers are mechanically fixed to the outer face of the inner substrate to prevent the spread of fire and smoke through the cavity zone.

Suitable for use on masonry and SFS wall types, the CCL HRCB range achieves fire ratings ranging from 60 to 180 minutes integrity and insulation*.

The CCL HRCB range are manufactured to suit the required cavity width, may also be trimmed on site when appropriate in order to meet building tolerances and may be paired with the CCL VRCB full fill barriers to complete the system.

The CCL HRCB range has been tested in accordance with the principles of BS EN1363-1 and ASFP TDG19.



*When installed in accordance with the tested build up

PERFORMANCE & STANDARDS

Performance & Standards

Vented Air Layer (mm)	Inner Substrate	Outer Substrate	Thermal Insulation Layer	Minimum Cavity Width (mm)	Maximum Cavity Width (mm)	Integrity (e)	Insulation (i)
25	AAC	AAC	Stone Wool	75	300	60	60
25	AAC	AAC	Stone Wool	75	300	120	60
25	AAC	AAC	Stone Wool	75	300	180	90
50	AAC	AAC	Stone Wool	100	300	60	60
50	AAC	AAC	Stone Wool	100	300	90	60
25	SFS**	AAC	Stone Wool	75	300	60	60
25	SFS**	AAC	Stone Wool	75	300	120	60
50	SFS**	AAC	Stone Wool	100	300	60	60
50	SFS**	AAC	Stone Wool	100	300	90	60

Fire Test performance to BS EN 1363-1 and principles of ASFP TDG19 (2017) carried out at Warrington Fire test numbers 532080, 534222 & 537366.

*AAC = Autoclaved Aerated Concrete **SFS = Steel Frame with 12mm non-Combustible Cementitious board



The CCL HRCB range can be easily specified, ordered and identified using the unique colour coded band on the uppermost surface. This band contains information on the fire performance and suitable air gap, along with a QR code linking back to the BSi identify data base.

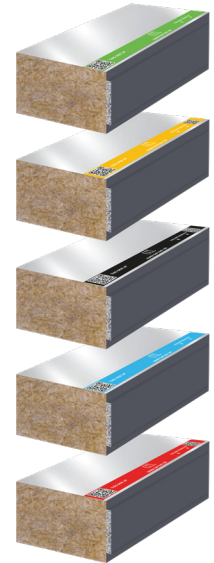
The CCL HRCB range are mechanically fixed to the substrate using the unique CCL Multi bracket, with 2 brackets supplied per barrier. Further brackets may be ordered as required.

SPECIFICATION



Product Selector

Integrity (e)	Insulation (i)	Vented Air Gap (mm)	Colour	Product Code
60	60	25	Green	HRCB60/60 Green
120	60	25	Orange	HRCB120/60 Orange
180	90	25	Black	HRCB180/90 Black
60	60	50	Blue	HRCB60/60 Blue
90	60	50	Red	HRCB90/60 Red



Bracket Selector

Barrier Size	Orientation	Product Code
Up to 85mm wide barriers	With 50mm side facing into the cavity	HRCBB080
Up to 120mm wide barriers	With 80mm side facing into the cavity	HRCBB080
Up to 165mm wide barriers	With 120mm side facing into the cavity	HRCBB160
Up to 275mm wide barriers	With 160mm side facing into the cavity	HRCBB160



HANDLING & INSTALLATION



Products are supplied on showerproof shrink wrapped pallets, and should be stored in conditions out of direct sunlight and protected from the elements. The factory packaging is intended for protection during shipment and for short term job site storage. It is not intended for protection against the elements during long term outside storage. For long term storage, we recommend the product is stored indoors, in a dry location with the factory packaging removed. Product should not be stored in areas that flood, that may result in the product standing in water. Product should be a minimum of 102 mm (4 inches) above dry ground and kept on a solid flat surface.



INSTALLATION

The CCL HRCB range should be mounted on brackets to the inner structural surface, using the CCL Multi bracket at a minimum of two per linear metre, or at a maximum of 500mm centres.

The CCL Multi bracket is secured to the inner surface using appropriate fixing for the substrate.

The cavity barrier is then pushed onto the bracket at the mid depth (thickness) point, with the intumescent layer facing into the open cavity / airspace.

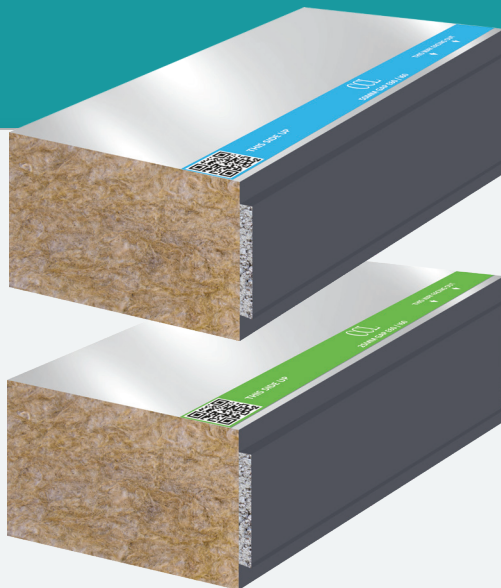
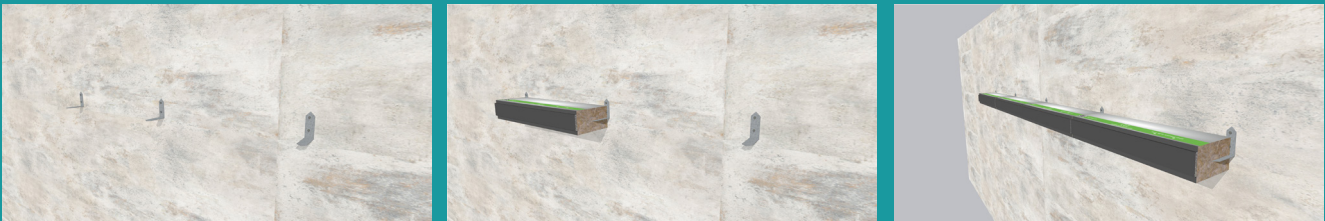
Ensure the barrier is penetrated with the multi bracket to a minimum of 60% and is secured firmly against the inner structure, aiming for zero gaps between the barrier and the substrate.

Should any small gaps (<5mm) be present, due to substrate tolerances, they should be filled using intumescent mastic.

All joints with subsequent lengths of barrier, or at junctions with support rails and vertical barriers, must be tightly butt jointed ensuring there are no gaps.

The upper joint should be sealed with CCL foil tape, taking care not to apply tape over the intumescent layer.

Once installation is complete the CCL HRCB should be checked to ensure there are no gaps, that the joints are sealed as above, and that the intumescent layer is free from restrictions or obstructions which may prevent it from expanding.



PRODUCT IDENTIFICATION

Prior to installation, the CCL HRCB should be checked to ensure the performance matches the project requirement.

This can be carried out quickly onsite by checking the colour of the strip on the upper surface of the barrier, which details the fire performance as well as the air gap as shown opposite.

Additionally the CCL HRCB contains information showing the correct orientation for the barrier to be installed, along with the QR code linking to the BSi. identify database.



DISCLAIMER

It is the responsibility of the customer to make the final choice when selecting products for use in construction projects. CCL provide data in good faith, however the information provided is not a recommendation and decisions are not carried out by CCL. Where relevant, CCL products should be installed in line with test certification and in build ups that match the specific test. In presenting any technical information we cannot claim to serve in any but an advisory capacity and can undertake no liability since the actual conditions and circumstance of use are beyond our control.