

FacadeGard[™]

Open State Cavity Barrier

Fire rated barriers for ventilated rainscreen facade protection.







Technical Data Sheet

Edition 4 Published: December 2023

High performance facade protection...



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KEY BENEFITS

- Class leading fire protection for ventilated facades
- Allows movement of air & moisture to drain from system
- Voids up to 550mm
- Air Gaps up to 50mm
- Fire Resistance up to 120mins
- Tested in accordance with ASFP TGD19
- Ventilated void closure ≤ 5mins
- Assumed working life of 25 years
- Non-combustible core
- 'Dry fit' solution, no cure time
- Fast installation using steel brackets or direct fixings
- Available in multiple sizes & made to order



Introduction

FacadeGard[™] Open State Cavity Barrier (OSCB) is developed to protect the voids between the outer facade and the inner construction element of the building. The product is designed for use in a ventilated facade. FacadeGard[™] OSCB allows for 25mm or 50mm linear air gaps to ensure movement of air and drain any moisture within the facade. In the event of a fire the intumescent outer edge of the product will expand and close the ventilation gap between the product and the facade preventing the passage of fire and smoke from one compartment to another.

Testing

The BOSS FacadeGard[™] Open State Cavity Barrier (OSCB) range has been tested in accordance with ASFP TGD19: "Open State" Cavity Barrier used in External Envelope or Fabric of Buildings. This test method specifies a procedure for determining the fire resistance of 'open state' cavity barriers when subjected to the standard fire exposure conditions and performance criteria stipulated in EN 1363- 1:2020. This method is applicable to non-loadbearing, horizontally oriented 'open-state' cavity barriers, which are used to provide fire separation within cavity voids such as those located between an external envelope and the face of a building. The tests have been undertaken to assess the ability of the FacadeGard[™] OSCB systems to reinstate the fire resistance rigid/aerated concrete supporting construction. This is the standard assembly for testing such systems as performance of the barriers can then be classified.

Intended areas of Use

- Between inner substrate & external building envelope.
- Voids between rainscreen facade & slab edge.
- In conjunction with vertical cavity barriers.
- Where movement of air and moisture is required.
- Systems to cover void ranges from 2mm-550mm.



Above: FacadeGard[™] used at MacDonald Jones Stadium Newcastle Australia.



FacadeGard[™] Open State Cavity Barrier

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Product Advantages

- Class leading fire protection for ventilated facades
- Allows movement of air & moisture to drain from system
- Voids up to 550mm
- Air Gaps up to 50mm
- Fire Resistance up to 120mins
- Tested in accordance with ASFP TGD19
- Ventilated void closure ≤ 5mins
- Assumed working life of 25 years
- Non-combustible core
- 'Dry fit' solution, no cure time
- Fast installation using stainless steel brackets or direct fixings
- Available in multiple sizes & made to order



Product Specification

Technical Inform	nation
Total void size	≤ 550mm
Air Gap	≤ 50mm
Fire Resistance	Up to 120 minutes tested in accordance with ASFP TGD 19
Ventilation Void	≤ 5 minutes
Closure Time	s 5 minutes
Density	Mineral Fibre 80kg/m ³
Brackets	Stainless Steel – 25mm wide x 1.5mm min thickness. 390mm or 635mm* length. *For product size wider than 300mm (w) use 635mm
Fixings	Bracket Fixings – 2 x 75mm Long x 8mm Dia Blue Tip Screw Bolts.
Other Approvals	3 rd Party Approved – IFCC – IFCC 1672 Certification

Physical Specification		
Product Code	Product Name	Product Size
FG1-75	FacadeGard+™ FG1	1000mm Long x 75mm Thick x Custom Depth
FG2-75	FacadeGard+™ FG2	1000mm Long x 75mm Thick x Custom Depth
FG3-120	FacadeGard+™ FG3	1000mm Long x 120mm Thick x Custom Depth
FG4-120	FacadeGard+™ FG4	1000mm Long x 120mm Thick x Custom Depth
FG5-120	FacadeGard+™ FG5	1000mm Long x 120mm Thick x Custom Depth
FGSX-25	FacadeGard-SX™ X25	2mm Thick x 75mm Wide x 25m Long Roll
FGSX-251	FacadeGard-SX™ X25	2mm Thick x 75mm Wide x 1m Long Pieces
FGSX-50	FacadeGard-SX [™] X50	4mm Thick x 75mm Wide x 12.5m Long Roll
FGSX-501	FacadeGard-SX™ X50	4mm Thick x 75mm Wide x 1m Long Pieces





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OPEN STATE CAVITY BARRIER SYSTEM FG1

Product

- **1.** FacadeGard+[™] Open State Cavity Barrier FG1-75
- 2. Stainless Steel Brackets
- **3.** FacadeGard-SS[™] Solid State Cavity Barrier

Maximum Void Size	Performance (mins)
50-500mm*	Integrity: 90
	Insulation: 30
Maximum Air Gap	Product Dimensions
Maximum Air Gap 25mm	Product Dimensions Length: 1000mm



Installation

- FacadeGard+[™] OSCB cavity barrier is installed in the voids between the outer rainscreen facade and the inner construction element of the building.
- Any insulation fitted to the inner construction element of the building should be cut away where FacadeGard+[™] OSCB is to be installed.
- Specified Stainless Steel brackets should be fixed to substrate using 2 x 75mm Long x 8mm Dia Blue Tip Screw Bolts. (If not using BOSS brackets please seek technical advice for the suitability). 3 brackets per 1000mm piece should be fixed at 250mm, 500mm and 750mm. Minimum 1.5mm Thick Bracket. When selecting length of bracket. You need to take into account the overall width of the product.
- FacadeGard+™ OSCB should be then placed on to the brackets. The brackets must span 75% of the width of the product.
- Once the FacadeGard+[™] OSCB is installed, tape over all joints/junctions with silver foil tape ensuring all abutting edges are sealed.

Additional Notes

Fire Resistance

FacadeGard[™] OSCB has been tested in accordance with ASFP TGD 19 Fire Resistance Test for 'Open-State' Cavity Barriers used in the external envelope or fabric of buildings.

In the test a representative sample of an 'open-state' cavity barrier is exposed to a specified regime of heating and pressure as specified in EN 1363-1. The fire resistance performance of the test specimen is also monitored as stipulated by this standard and the results are expressed as the time for which the appropriate criteria have been satisfied.

* 50 - 77mm voids not included in the IFC 3rd Party Certificate Scope





OPEN STATE CAVITY BARRIER SYSTEM FG2

Product

- 1. FacadeGard+[™] Open State Cavity Barrier FG2-75
- 2. Stainless Steel Brackets
- 3. FacadeGard-SS[™] Solid State Cavity Barrier

Maximum Void Size	Performance (mins)
54 – 350mm*	Integrity: 60
	Insulation: 30
Maximum Air Gap	Product Dimensions
50mm	Length: 1000mm

Height: 75mm



Installation

- FacadeGard+[™] OSCB cavity barrier is installed in the voids between the outer rainscreen facade and the inner construction element of the building.
- Any insulation fitted to the inner construction element of the building should be cut away where FacadeGard+™ OSCB is to be installed.
- Specified Stainless Steel brackets should be fixed to substrate using 2 x 75mm Long x 8mm Dia Blue Tip Screw Bolts. (If not using BOSS brackets please seek technical advice for the suitability). 3 brackets per 1000mm piece should be fixed at 250mm, 500mm and 750mm. Minimum 1.5mm Thick Bracket. When selecting length of bracket. You need to take into account the overall width of the product.
- FacadeGard+[™] OSCB should be then placed on to the brackets. The brackets must span 75% of the width of the product.
- Once the FacadeGard+[™] OSCB is installed, tape over all joints/junctions with silver foil tape ensuring all abutting edges are sealed.

Additional Notes

Fire Resistance

FacadeGard[™] OSCB has been tested in accordance with ASFP TGD 19 Fire Resistance Test for 'Open-State' Cavity Barriers used in the external envelope or fabric of buildings.

In the test a representative sample of an 'open-state' cavity barrier is exposed to a specified regime of heating and pressure as specified in EN 1363-1. The fire resistance performance of the test specimen is also monitored as stipulated by this standard and the results are expressed as the time for which the appropriate criteria have been satisfied.

* 54 - 104mm voids not included in the IFC 3rd Party Certificate Scope







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OPEN STATE CAVITY BARRIER SYSTEM FG3

Product

- 1. FacadeGard+[™] Open State Cavity Barrier FG3-120
- 2. Stainless Steel Brackets
- 3. FacadeGard-SS[™] Solid State Cavity Barrier

Mauimum Air Can	Due duet Dimensione
52 – 527mm*	Integrity: 120 Insulation: 120
Maximum Void Size	Performance (mins)

Maximum Air Gap	Product Dimensions
25mm	Length: 1000mm
	Height: 120mm



Installation

- FacadeGard+™ OSCB cavity barrier is installed in the voids between the outer rainscreen facade and the inner construction element of the building.
- Any insulation fitted to the inner construction element of the building should be cut away where FacadeGard+[™] OSCB is to be installed.
- Specified Stainless Steel brackets should be fixed to substrate using 2 x 75mm Long x 8mm Dia Blue Tip Screw Bolts. (If not using BOSS brackets please seek technical advice for the suitability). 3 brackets per 1000mm piece should be fixed at 250mm, 500mm and 750mm. Minimum 1.5mm Thick Bracket. When selecting length of bracket. You need to take into account the overall width of the product.
- FacadeGard+[™] OSCB should be then placed on to the brackets. The brackets must span 75% of the width of • the product.
- Once the FacadeGard+[™] OSCB is installed, tape over all joints/junctions with silver foil tape ensuring all abutting edges are sealed.

Additional Notes

Fire Resistance

FacadeGard™ OSCB has been tested in accordance with ASFP TGD 19 Fire Resistance Test for 'Open-State' Cavity Barriers used in the external envelope or fabric of buildings.

In the test a representative sample of an 'open-state' cavity barrier is exposed to a specified regime of heating and pressure as specified in EN 1363-1. The fire resistance performance of the test specimen is also monitored as stipulated by this standard and the results are expressed as the time for which the appropriate criteria have been satisfied.

* 50 - 77mm voids not included in the IFC 3rd Party Certificate Scope.





OPEN STATE CAVITY BARRIER FG4

Product

- 1. FacadeGard+[™] Open State Cavity Barrier FG4-120
- 2. Stainless Steel Brackets
- 3. FacadeGard-SS[™] Solid State Cavity Barrier

Maximum Void Size	Performance (mins)
54- 354mm	Integrity: 90
	Insulation: 60
355-550mm	Integrity: 60
	Insulation: 60

Maximum Air Gap	Product Dimensions
50mm	Length: 1000mm
	Height: 120mm



Installation

- FacadeGard+™ OSCB cavity barrier is installed in the voids between the outer rainscreen facade and the inner construction element of the building.
- Any insulation fitted to the inner construction element of the building should be cut away where FacadeGard+™ ٠ OSCB is to be installed.
- Specified Stainless Steel brackets should be fixed to substrate using 2 x 75mm Long x 8mm Dia Blue Tip Screw ٠ Bolts. (If not using BOSS brackets please seek technical advice for the suitability). 3 brackets per 1000mm piece should be fixed at 250mm, 500mm and 750mm. Minimum 1.5mm Thick Bracket. When selecting length of bracket. You need to take into account the overall width of the product.
- FacadeGard+[™] OSCB should be then placed on to the brackets. The brackets must span 75% of the width of the ٠ product.
- Once the FacadeGard+[™] OSCB is installed, tape over all joints/junctions with silver foil tape ensuring all abutting edges are sealed.

Additional Notes

Fire Resistance

FacadeGard[™] OSCB has been tested in accordance with ASFP TGD 19 Fire Resistance Test for 'Open-State' Cavity Barriers used in the external envelope or fabric of buildings.

In the test a representative sample of an 'open-state' cavity barrier is exposed to a specified regime of heating and pressure as specified in EN 1363-1. The fire resistance performance of the test specimen is also monitored as stipulated by this standard and the results are expressed as the time for which the appropriate criteria have been satisfied.

* 54 - 104mm voids not included in the IFC 3rd Party Certificate Scope





OPEN STATE CAVITY BARRIER FG5

Product

- 1. FacadeGard+[™] Open State Cavity Barrier FG5-120
- 2. Stainless Steel Brackets
- 3. FacadeGard-SS[™] Solid State Cavity Barrier

Maximum Void Size	Performance (mins)
52-527mm	Integrity: 90 Insulation: 90
Maximum Air Gap	Product Dimensions

waximum Air Gap	Product Dimensions
25mm	Length: 1000m
	Depth: 120mm



Installation

- FacadeGard+[™] OSCB cavity barrier is installed in the voids between the outer rainscreen facade and the inner construction element of the building.
- Any insulation fitted to the inner construction element of the building should be cut away where FacadeGard+™ OSCB is to be installed.
- Specified Stainless Steel brackets should be fixed to substrate using 2 x 75mm Long x 8mm Dia Blue Tip Screw Bolts. (If not using BOSS brackets please seek technical advice for the suitability). 3 brackets per 1000mm piece should be fixed at 250mm, 500mm and 750mm. Minimum 1.5mm Thick Bracket. When selecting length of bracket. You need to take into account the overall width of the product.
- FacadeGard+[™] OSCB should be then placed on to the brackets. The brackets must span 75% of the width of the product.
- Once the FacadeGard+™ OSCB is installed, tape over all joints/junctions with silver foil tape ensuring all abutting edges are sealed.

Additional Notes

Fire Resistance

FacadeGard[™] OSCB has been tested in accordance with ASFP TGD 19 Fire Resistance Test for 'Open-State' Cavity Barriers used in the external envelope or fabric of buildings.

In the test a representative sample of an 'open-state' cavity barrier is exposed to a specified regime of heating and pressure as specified in EN 1363-1. The fire resistance performance of the test specimen is also monitored as stipulated by this standard and the results are expressed as the time for which the appropriate criteria have been satisfied.

* 54 - 77mm voids not included in the IFC 3rd Party Certificate Scope





FacadeGard-SX[™] X25

Product

1. FacadeGard-SX[™] Open State Cavity Barrier X25 2. 75 mm long x 8 mm diameter non-combustible screw bolts

Maximum Void Size	Performance (mins)
2-27mm	Integrity: 90
	Insulation: 60

Maximum Air Gap	Product Dimensions
25mm	Length: 25m
	Depth: 75mm



Installation

- FacadeGard-SX[™] OSCB X25 is 2mm thick x 75mm wide intumescent strip designed to be installed in the voids between the outer rainscreen facade and the inner construction element of the building.
- FacadeGard-SX[™] OSCB X25 is supplied in the form of a 25m roll or 1m long pieces for ease of use and versatility. Unroll the necessary length of FacadeGard-SX[™] OSCB X25 as required and remove the plastic strip from adhesive side of FacadeGard-SX[™] OSCB X25 prior to installation.
- 75 mm long x 8 mm diameter non-combustible screw bolts must be used to fix the FacadeGard-SX[™] OSCB X25 directly to the inner element of construction where Fire Resistance is required, at a maximum 250mm centres ensuring the screed side is facing inwards.

Additional Notes

Fire Resistance

FacadeGard[™] OSCB has been tested in accordance with ASFP TGD 19 Fire Resistance Test for 'Open-State' Cavity Barriers used in the external envelope or fabric of buildings.

In the test a representative sample of an 'open-state' cavity barrier is exposed to a specified regime of heating and pressure as specified in EN 1363-1. The fire resistance performance of the test specimen is also monitored as stipulated by this standard and the results are expressed as the time for which the appropriate criteria have been satisfied.





FacadeGard-SX[™] X50

Product

1. FacadeGard-SX[™] Open State Cavity Barrier X50 2. 75 mm long x 8 mm diameter non-combustible screw bolts

Maximum Void Size	Performance (mins)
4 – 54mm	Integrity: 60 Insulation: 30
Maximum Air Can	Broduct Dimonsions

Maximum Air Gap	Product Dimensions
50mm	Length: 12.5m
	Depth: 75mm



Installation

- FacadeGard-SX[™] OSCB X50 is 4mm thick x 75mm wide intumescent strip designed to be installed in the voids between the outer rainscreen facade and the inner construction element of the building.
- FacadeGard-SX[™]OSCB X50 is supplied in the form of a 12.5m long roll or pre cut 1m long pieces for ease of use and versatility. Unroll the necessary length of FacadeGard-SX[™] OSCB X50 as required and remove the plastic strip from adhesive side of FacadeGard-SX[™] OSCB X50 prior to installation.
- 75 mm long x 8 mm diameter non-combustible screw bolts must be used to fix the FacadeGard-SX[™] OSCB X50 directly to the inner element of construction where Fire Resistance is required, at a maximum 250mm centres ensuring the screed side is facing inwards.

Additional Notes

Fire Resistance

FacadeGard[™] OSCB has been tested in accordance with ASFP TGD 19 Fire Resistance Test for 'Open-State' Cavity Barriers used in the external envelope or fabric of buildings.

In the test a representative sample of an 'open-state' cavity barrier is exposed to a specified regime of heating and pressure as specified in EN 1363-1. The fire resistance performance of the test specimen is also monitored as stipulated by this standard and the results are expressed as the time for which the appropriate criteria have been satisfied.





BOSS FIRE SYSTEM MATRIX

For specific summary information on other approved systems relevant to the BOSS range of products please refer to the BOSS Fire System Matrix. The BOSS Fire System Matrix is a filterable summary document containing information to help select the appropriate system relevant to your building application. Associated Test and Assessment Reports are also available for download from the Resources page at <u>bossfire.com.au/resources</u>.

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This document may be superseded by new versions. If you are unsure of whether this document is a current publication, please call us on +61 2 9531 8591 to confirm.

LIMITATION

BOSS Passive Fire Pty Ltd has provided the above technical information in good faith and to the best of its knowledge. This information was deemed to be correct at the time of publication. Should any data come to BOSS Passive Fire's attention relating to the fire resistance or performance of the product described BOSS Passive Fire reserve the right to amend this report.

BOSS Passive Fire strive to constantly improve and develop products so this information may change without notice.

The information contained herein has been developed as a guide only and it does not constitute a guarantee of compliance of all applications. Each project and/or application may have specific requirements and you should investigate these carefully. Ensure that you have read and understood the appropriate certification relative to your needs, and ensure you seek acceptance from the Certifying Authority or compliance inspector before installation. For updates on the range of BOSS Fire[®] certification please contact BOSS Technical Services on +61 2 9531 8591.

FURTHER INFORMATION

For additional technical information on the performance of BOSS FacadeGard[™] products and systems, other BOSS Fire[®] products or any other BOSS Fire[®] related information please contact us on:

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