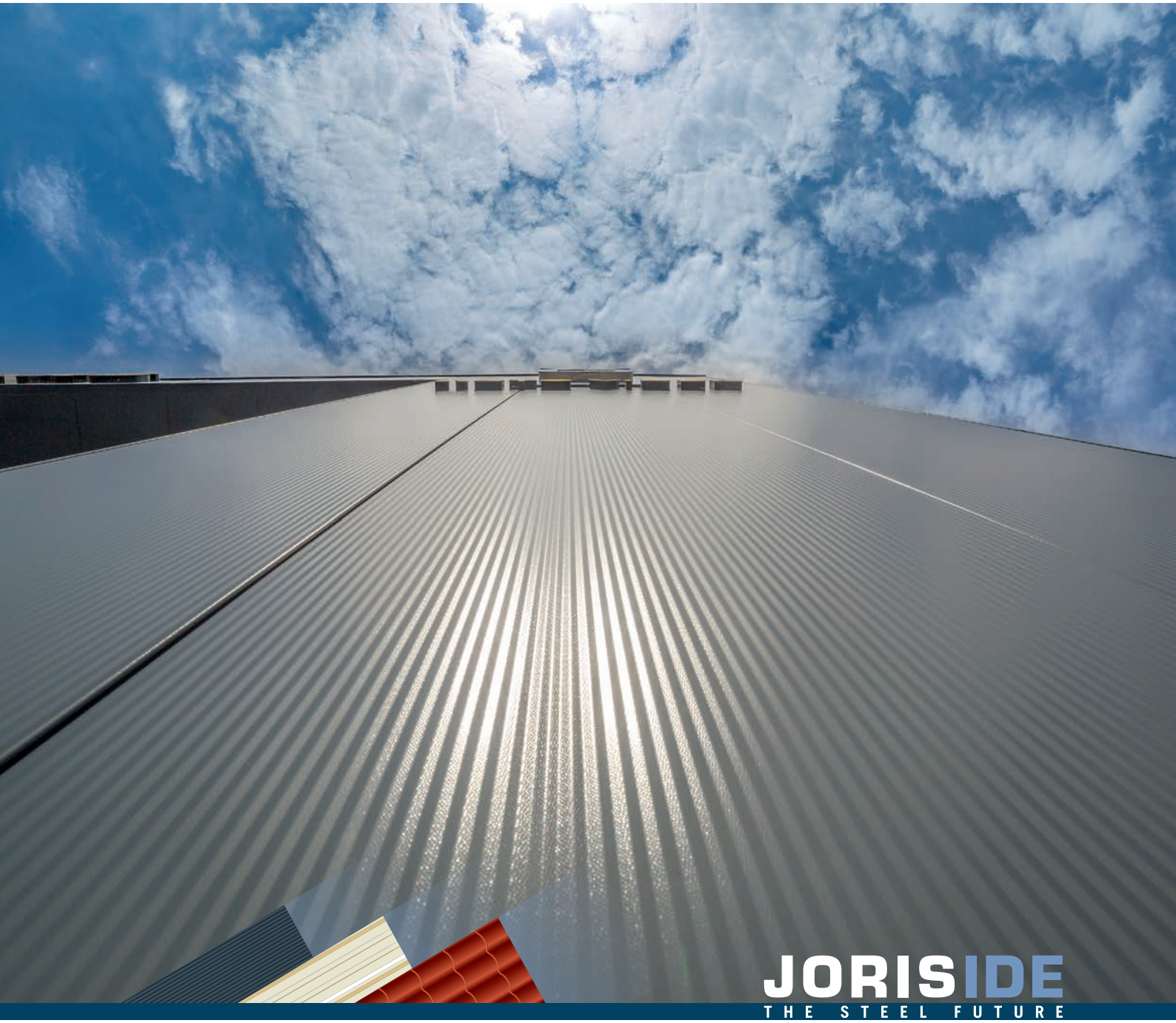
JI WALL 1000SF PIR

Installation guide UK

MR074 / 0620



JORISIDE
THE STEEL FUTURE

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JI Wall 1000SF PIR

Installation guide UK

With an array, of different finishes and colours the JI Wall 1000SF PIR is the perfect panel for Industrial, Commercial or even Residential applications.

This LPCB approved panel is used horizontally or vertically according to personal preferences.

The Joris Ide group has more than 3 decades of experience, processes 300.000 tonnes of steel per year, has 17 production sites in 8 countries with the help of more than 1000 employees. Joris Ide, your dedicated partner.

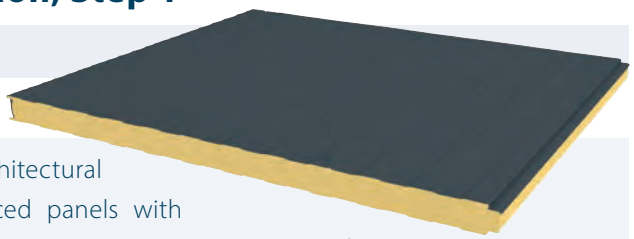
JI Wall 1000SF PIR for offices.

JI Wall 1000SF PIR in a commercial application.

JI Wall 1000SF PIR in an industrial application.

JI Wall 1000SF PIR - Vertical application, Step 1

JI Wall 1000SF PIR

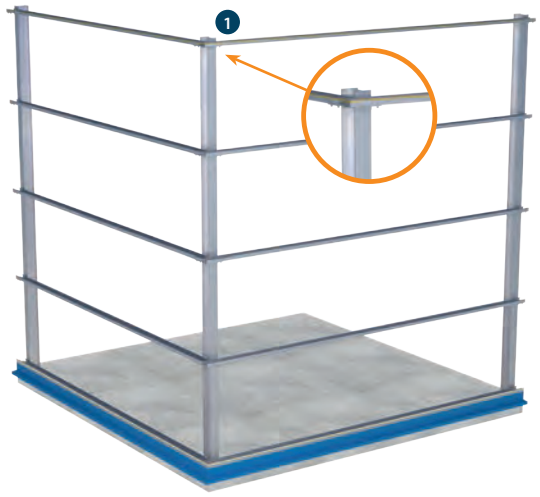


With the JI Wall 1000SF PIR, Joris Ide allows for an architectural solution by combining the horizontal or vertical placed panels with accessories in different aesthetic finishes, coatings and color throughout a wide range of external profiles. In this way the building can be designed as unique.

The JI Wall 1000SF PIR has a LPCB certificate and can be used as a firewall when mounted in accordance to Fire report. (more details on page 7) The panels are to be placed as indicated with 1 and 2. (Panels can be mounted upside-down starting on the opposite side depending on the predominant wind direction).

The accessories numbered with (1), (2), ...are detailed at the end of the brochure

Cladding Rails - Vertical



Cladding Rails fixed to cleats mounted directly on columns. 1 x strip of Butyl tape air sealant 6 mm x 5 mm ❶ applied on top and bottom rails.

Cladding Rails - Extensions

An extension of the cladding rails ❷ is recommended to provide bearing for fixings of panels.

First Panel

First panel should be installed ensuring it is correctly fitted and installed within accepted tolerances. It will be reference to the other panels.

First Panel - Detail

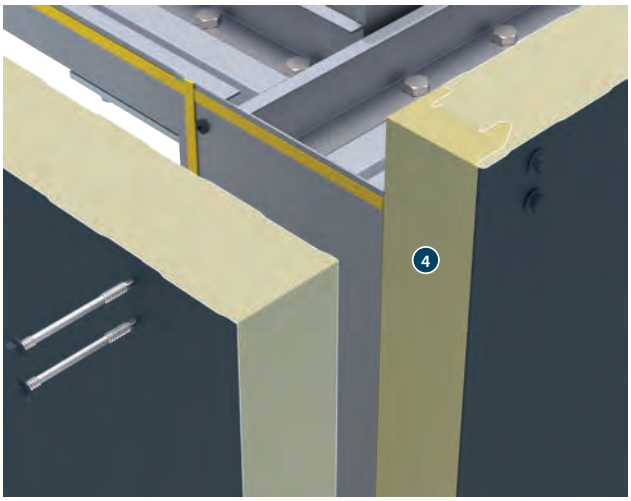
An internal flashing ❸ sealed with 1 x strip of Butyl tape air sealant 6 mm x 5 mm ❶ . 2 x through fixings should be used at corner position on each support. (Fixings will be covered by the external flashing.)

The accessories numbered with (1), (2), ...are detailed at the end of the brochure

JI Wall 1000SF PIR - Vertical application, Step 2

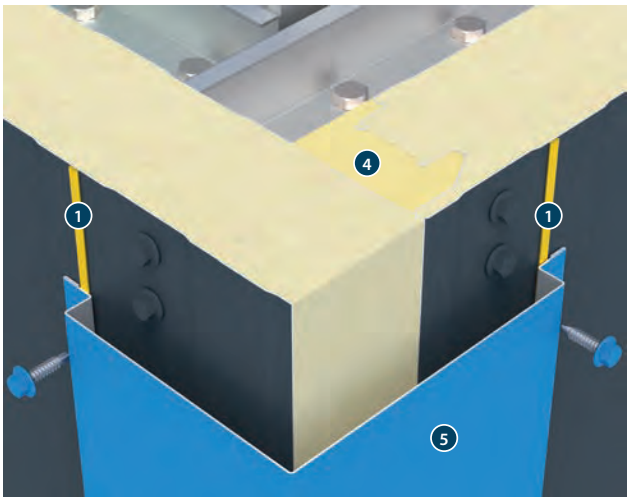
Joris Ide is able to provide the best finishings for your building with a range of products that include sealants, flashings and fixings. Flashings can be ordered with the same coating and colour as the sandwich panels. Stainless steel fixings will provide resistance to the most severe environment. More info on page 12.

External Corner



A fire rated site-applied foam insulation ❹ to be used on female joint of panel to fill junction. Both panels should be fixed with 2 x through fixings.

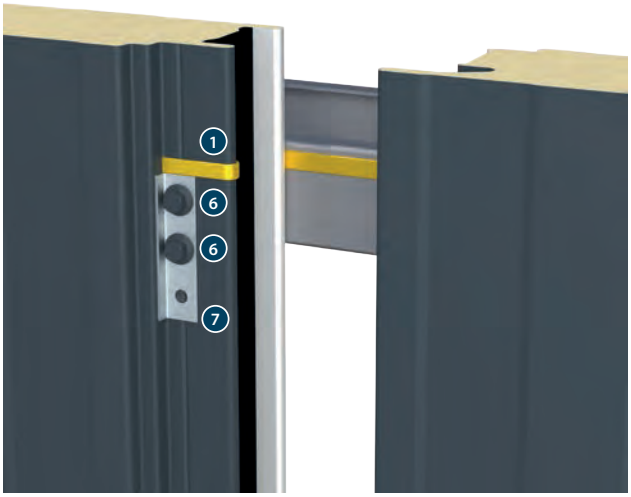
External Corner - Finishing



The corner flashing ❺ should be fixed to both panels with stitchings at every 450 mm. A strip of butyl tape air sealant 6 mm x 5 mm ❶ between flashing and panels should be used.

The accessories numbered with (1), (2), ...are detailed at the end of the brochure

Side Joint - Top



Panels to be fixed with min. 2 x main fixings (fasteners) 6 and 1 x spreader plate 7. 1 x strip of butyl tape air sealant 6 mm x 5 mm 1 at top of spreader plate.

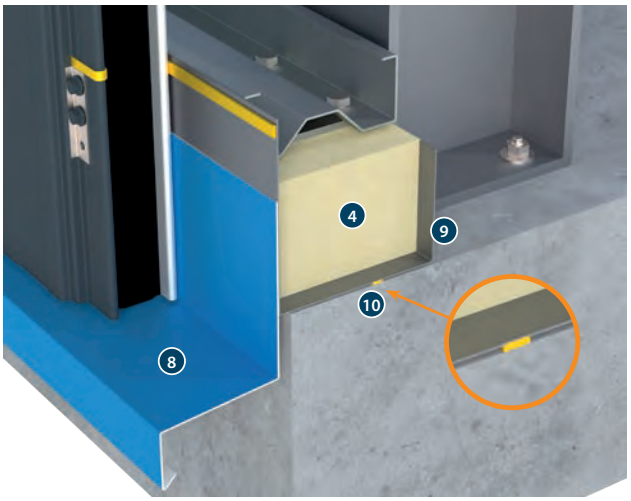
Side Joint - Bottom

A second panel should be placed at the same level as first panel. Joint of second panel will cover fixings and spreader plate making this panel a "secret fixing panel".

Closing Wall

Last panel to be cut on site on measure to close the corner.

Bottom Drip



Panels should be placed at min. 5 mm from drip flashing 8. A fire rated site-applied foam insulation 4 to be used behind closure flashing 9 to minimize the thermal bridge. A gun-grade butyl sealant 10 before placing the closure flashing.

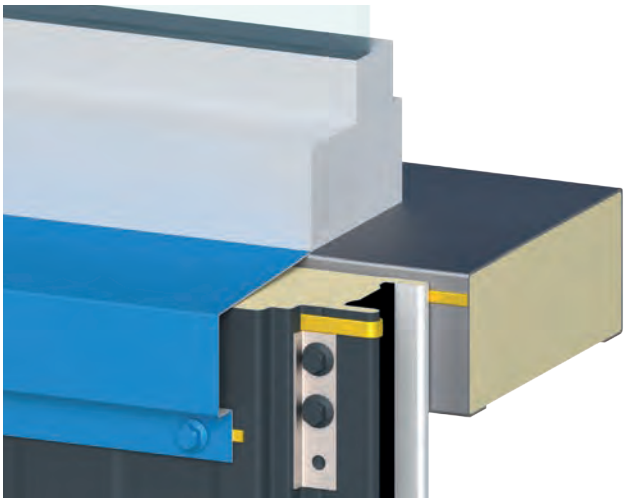
The accessories numbered with (1), (2), ...are detailed at the end of the brochure

JI Wall 1000SF PIR - Vertical application, Step 3

End Joint

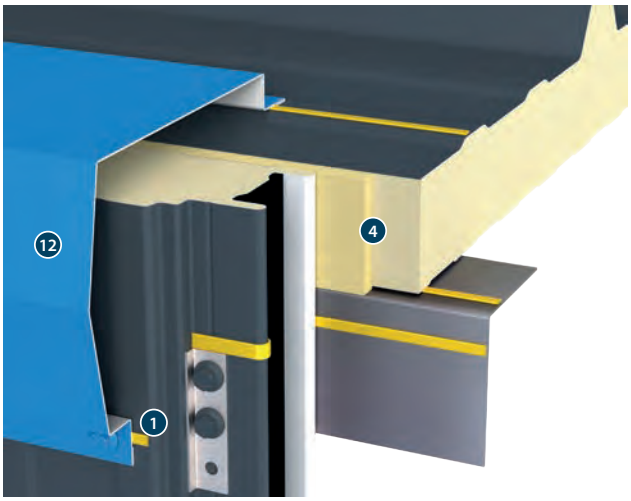
An extension to the support 11 should be fixed to the main rails to allow the bearing width to fix both panels. A drip flashing 8 should be fixed to the bottom panel.

End Joint - Window Frame



When a window frame is used at the rails level, panels should be closed and protected like in a verge detail.

External Verge - Finishing



A fire rated site applied foam insulation 4 between roof and wall panels. Verge flashing 12 should be fixed to both panels with stitchings at every 450 mm. A strip of butyl tape air sealant 6 mm x 5 mm 1 between flashing and panels.

Extra information

This installation guide can be supplemented by the information presented in the JI Roof PIR Installation guide. Verge details or eaves detail should be taken from the JI Roof PIR Installation guide.

The accessories numbered with (1), (2), ...are detailed at the end of the brochure

Firewall

JI Wall 1000SF PIR can be used as fire wall and will give protection from the inside when mounted in accordance with the fire test report. The JI Wall 1000SF PIR has a LPCB (Loss Prevention Certification Board EXT-B). Grade (certificate No : 700a to LPS181 : Part 1 : Issue 1) and can contribute to the firewall with up to 120 min integrity and 20 min insulation.

LPS 1181
Cert/LPCB ref. N° 700a

Secondary Supports / Rails

The panel must be limited to a maximum of 4000 mm. The secondary support system must be a 'Fire Wall' system, which contains slotted connections and nylon washers to relieve stresses induced by thermal expansion.

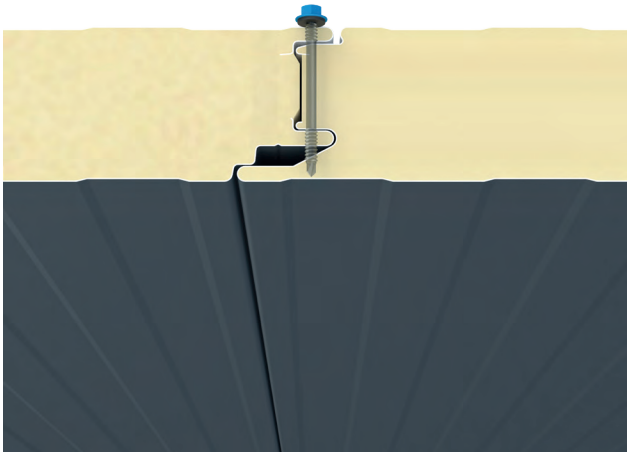
Primary Fasteners

All primary fasteners must be the high threaded type manufactured from anti-corrosion carbon steel or stainless steel complete with washer and cap. The fixings are subject to cladding design conditions and wind loading. To comply with the requirements of BS6399: Part 2: 1997 it may be necessary to provide additional fixings in areas of high local suction.

Secondary Fasteners

Joints between panels to be stitched at 300 mm centres.

Side Joint - Firewall



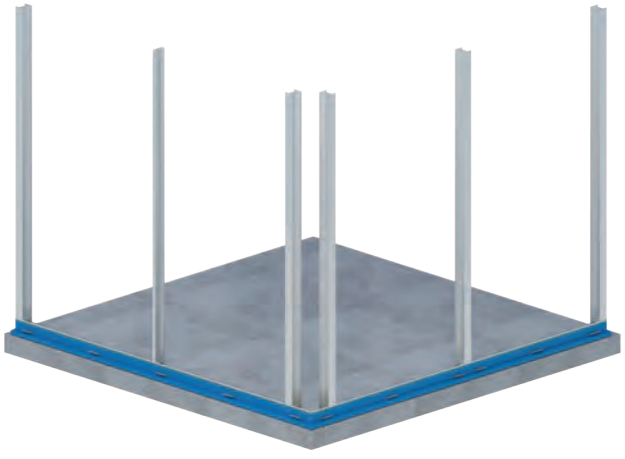
JI Wall 1000SF PIR has proven to achieve more than 120 min integrity and more than 20 min insulation when fixed with stitchings on the inside at every 300 mm.

JI Wall 1000SF PIR - Horizontal application, Step 1

JI Wall 1000SF PIR

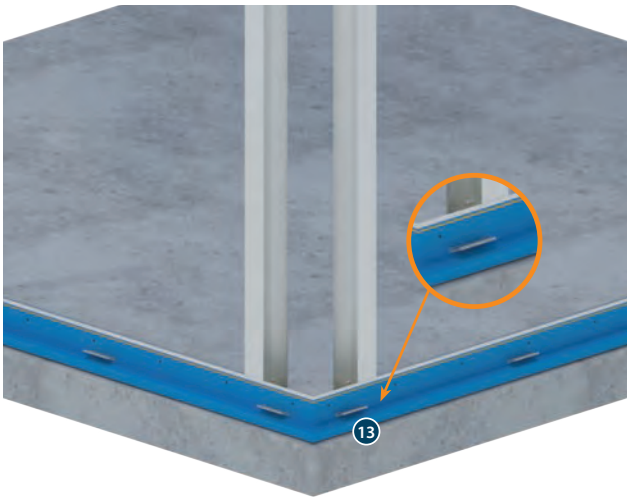
With the JI Wall 1000SF PIR, Joris Ide allows for an architectural solution by combining the horizontal or vertical placed panels with accessories in different aesthetic finishes, coatings and color throughout a wide range of external profiles. In this way the building can be designed as unique.

Cladding Rails - Horizontal



Horizontal panels can be directly fixed to the main columns without requiring secondary steelwork.

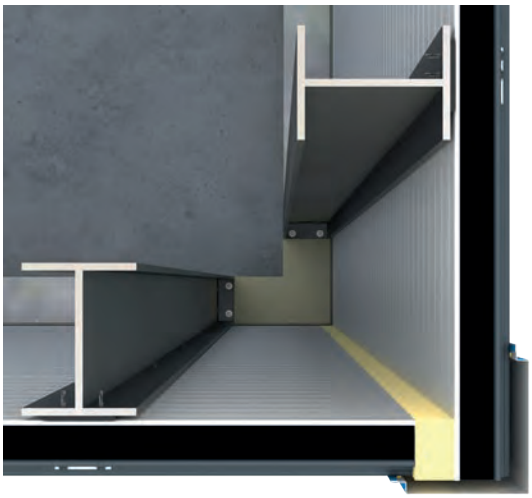
Corner - Structural Columns



Panels bearer 13 at the end of panels and at max. every 1500 mm fixed to bottom structural element.

The accessories numbered with (1), (2), ...are detailed at the end of the brochure

Columns Arrangement - Option 1

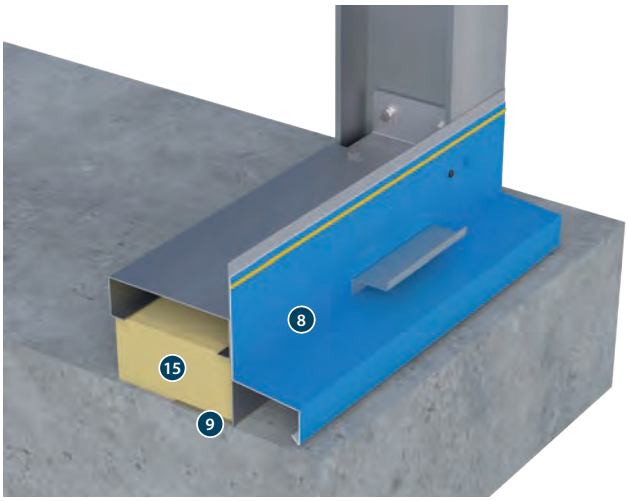


A building with 2 columns at the corner will make the panels working as a cantilever on both walls. The maximum cantilever is limited to 300 mm (subject to design approval).

Columns Arrangement - Option 2

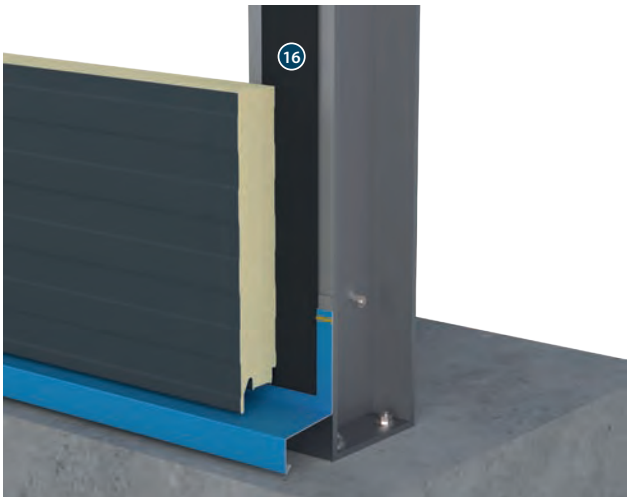
The corner column will only provide bearing support to one side/wall. A cold formed fixed to the web of the columns 14 is recommended to provide the required support to both walls.

Bottom Drip



PIR board insulation 15 and fire rated site applied foam insulation 4 to fill any gaps. An internal closure flashing 9 placed over a strip of butyl tape air sealant 6 mm x 5 mm 1. The drip flashing 8 is fixed to the internal closure.

External Cill

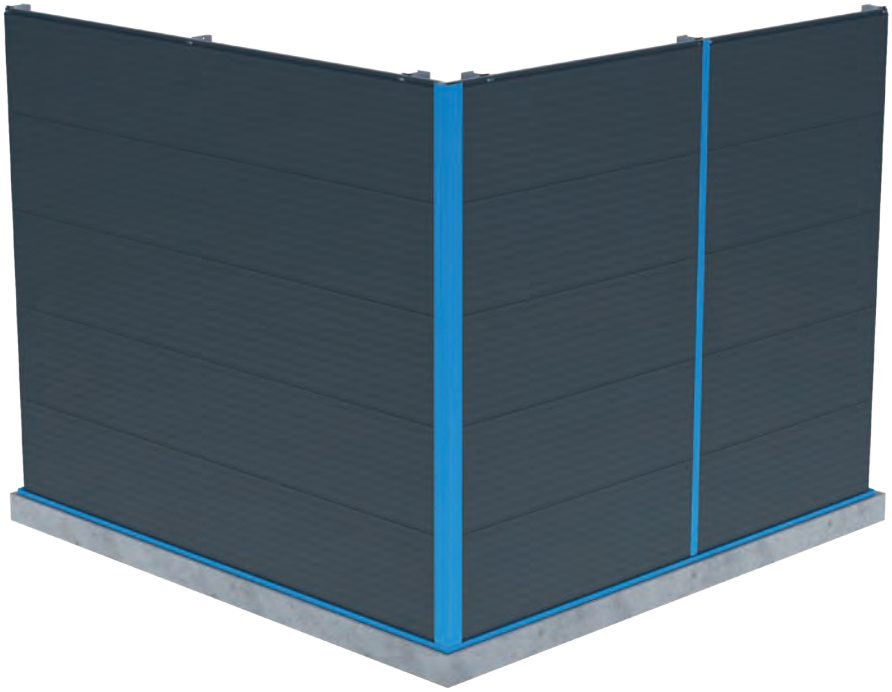


Before placing the horizontal panels, it is recommended to use an EPDM band 16 to protect the contact between panels and structural columns.

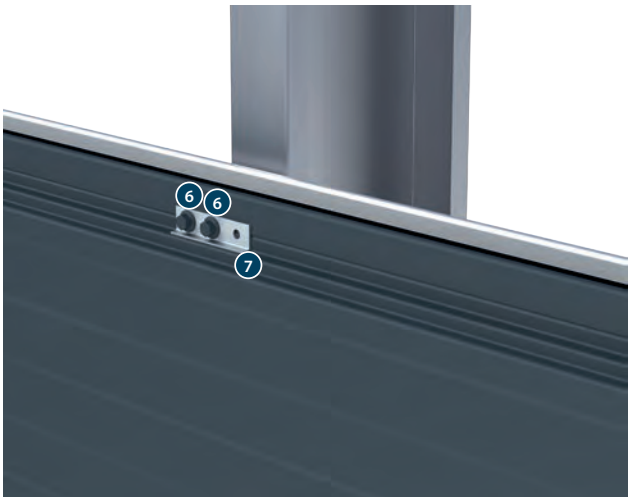
The accessories numbered with (1), (2), ...are detailed at the end of the brochure

JI Wall 1000SF PIR - Horizontal application, Step 2

Joris Ide is able to provide the best finishings for your building with a range of products that include sealants, flashings and fixings. Flashings can be ordered with the same coating and colour as the sandwich panels. Stainless steel fixings will provide resistance to the most severe environment. More info on page 14.

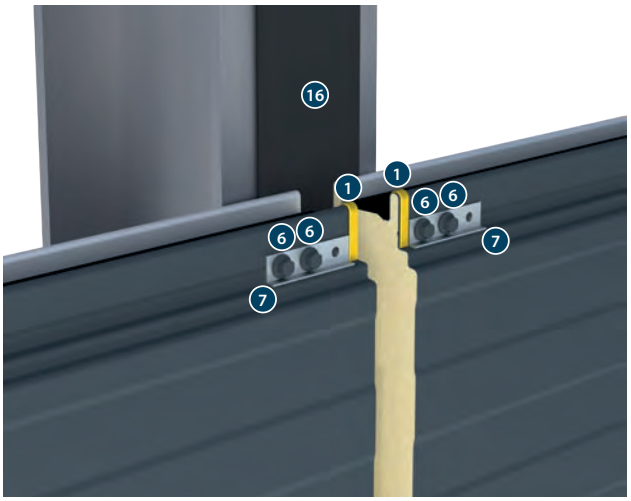


Intermediate Support



The panels must be fixed to intermediate supports with a min. of 2 main fixings (fasteners) 6 and 1 spreader plate 7.

Vertical Joint



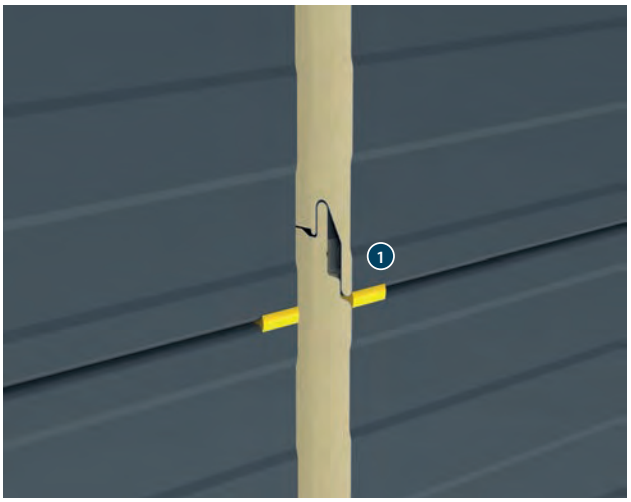
When 2 panels meet each other at one columns, an EPDM band 16 is required to protect the contact between panels and strctural element. Both panels are to be fixed with min. 2 main fixings (fasteners) 6 and 1 spreader plate 7. Strip of butyl tape air sealant 6 mm x 5 mm 1 is recommended at the end of each panel.

The accessories numbered with (1), (2), ...are detailed at the end of the brochure

Side Joint

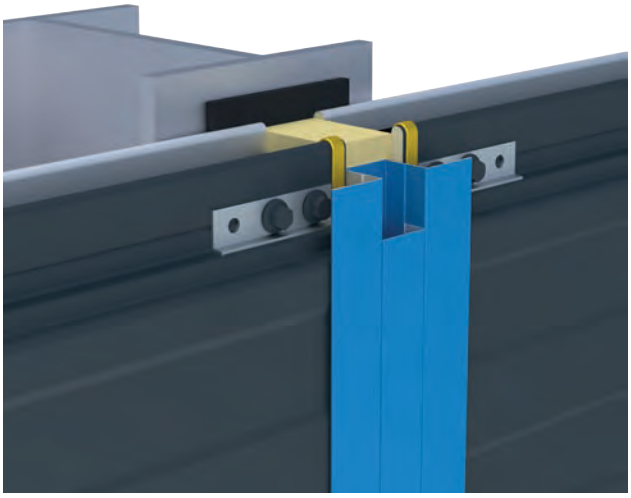
A second panel should be mounted next to the first one. The side joint should cover the fixings and spreader plate.

End Joint



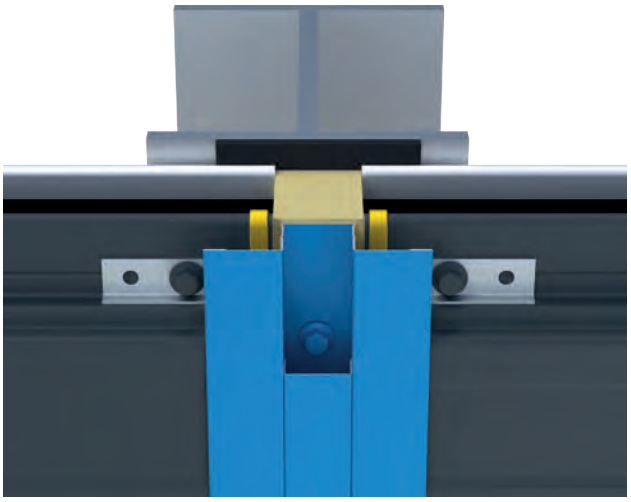
1 x strip of butyl tape air sealant 6 mm x 5 mm ❶ at the end of panels to protect the intersection.

Vertical Joint - View 1



A fire rated site-applied foam insulation ❹ should be used before placing the top hat that will cover the vertical joint. The contact between the top hat and the panels should be protected with 1 x strip of butyl tape air sealant 6 mm x 5 mm ❶ on each side.

Vertical Joint - View 2



The top hat should be fixed with fixings at every 450 mm. In order to avoid the web of the columns, a minor deviation might be required to allow the fixing to pass through the flange of the structural element.

The accessories numbered with (1), (2), ...are detailed at the end of the brochure

Accessories

Fasteners

Steel section fasteners

Steel Purlin Thickness	Panel thickness (mm)	A2 Stainless Steel Fasteners		Carbon Steel Fasteners	
		Light steel section (1,2 - 3,2 mm) 6	Heavy steel section (4 - 12,5 mm) 6	Light steel section (1,2 - 3,2 mm) 6	Heavy steel section (4 - 12,5 mm) 6
1,2 - 3,2 mm	60	BM-LS75-S16	BM-HS75-S16	LS57-A16	HS75-S16
	80	BM-CPLS100-S16	BM-CPHS105-S16	CPLS85-S16	CPHS105-S16
	100	BM-CPLS115-S16	BM-CPHS125-S16	CPLS115-S16	CPHS125-S16
	120	BM-CPLS135-S16	BM-CPHS150-S16	CPLS135-S16	CPHS150-S16
	150	BM-CPLS180-S16	BM-CPHS190-S16	CPLS150-S16	CPHS185-S16

Steel Purlin Thickness	Panel thickness (mm)	A2 / Carbon	Panel bearer fasteners	
		Stitchers	Light steel section (1,2 - 3,2 mm)	Heavy steel section (4 - 12,5 mm)
1,2 - 3,2 mm	60	(BM)-LS25-S16	(BM)-LS25-S16	BM-HS38-S16
	80			
	100			
	120			
	150			

6 is the references presented on construction details

Sealants

Butyl tape air sealant 6 mm x 5 mm

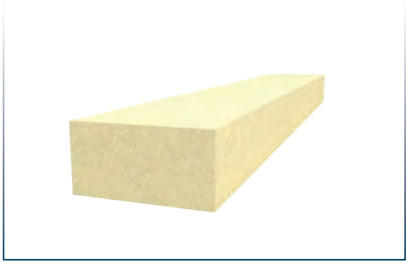
High quality pressure sensitive butyl sealant Available in grey - 9,6 m a roll
(reference 1 on construction details)

Fire rated site-applied foam insulation

High thermal performance insulation applied on site to reduce energy losses by thermal bridging. (reference 4 on construction details)

Gun grade butyl sealant

High quality blend of rubber, fillers and polymer in gun-grade form.
(reference 10 on construction details)



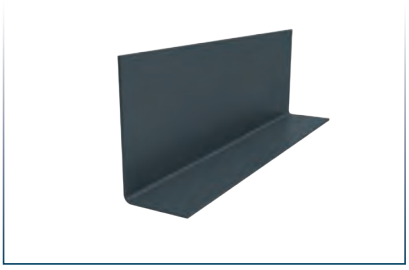
PIR board insulation

(reference 15 on construction details)

EPDM band

(reference 16 on construction details)

Flashings and others

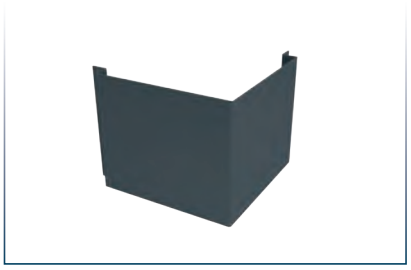


Extension to cladding rails

Galvanized steel with the same protection as rails
(reference 2 on construction details)

Duopitch ridge internal flashing

Same color and finish as inner sheet
(Option for reference 3 on construction details)

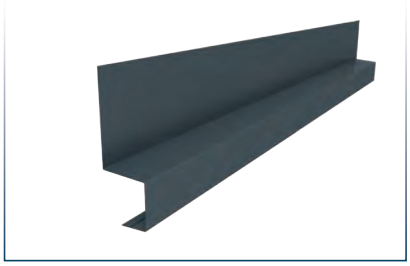


Corner flashing

Same color and finish as outer sheet
(Option for reference 5 on construction details)

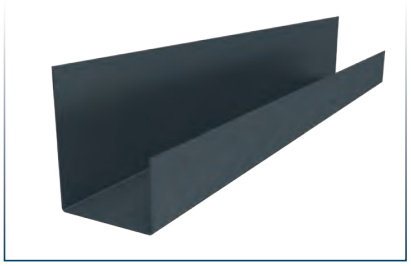
Spreader plate

Delivered with sandwich panels.
(Option for reference 7 on construction details)



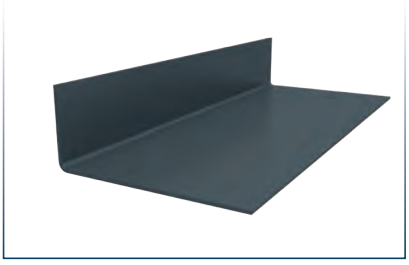
Drip flashing

Galvanized steel with the same protection as rails.
(Option for reference 8 on construction details)



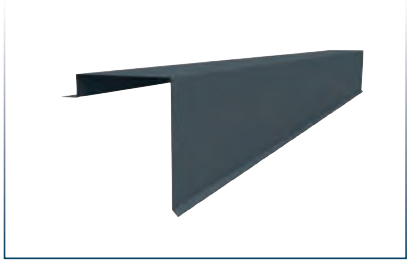
Closure flashing

Galvanized steel with the same protection as rails.
(Option for reference 9 on construction details)



Extension to the support

Galvanized steel with the same protection as rails.
(Option for reference 11 on construction details)



Verge flashing

Same color and finish as outer sheet
(Option for reference 12 on construction details)

Panels bearer

Same color and finish as outer sheet.
(Option for reference 13 on construction details)






With more than 30 years of experience, Joris Ide represents a guarantee of quality in the construction market. We bring solutions to all your problems: acoustic, aesthetic, fire, thermal. Joris Ide, the essential partner for all your projects.

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