





JI ROOF PIR

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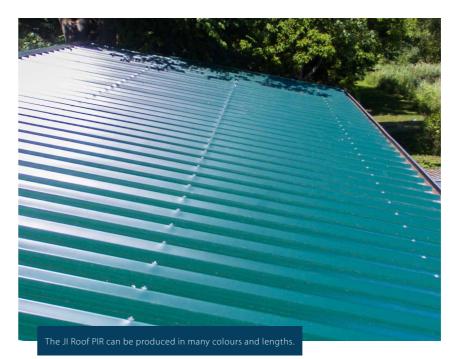
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Insulated panels (PIR core)

The JI Roof PIR is a very diverse user product For not only Industrial, but also residential or Agricultural Application.

Due to its trapezoidal outer sheet It is ideal to take additional loads such as solar panels or even roof tiles.



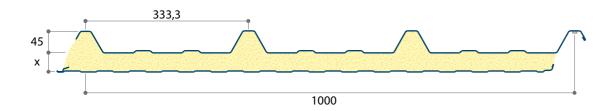




The Joris Ide group has more than 3 decades of experience, processes 370.000 tonnes of steel per year, has 16 production sites over 5 countries with the help of more than 1100 employees. Joris Ide, your dedicated partner.

Description

The JI Roof PIR LPCB certified Trapezoidal Insulated Roof Panel is used for pitched roofs or horizontal and vertical wall application and an external insulated cladding panel for industrial, commercial and public buildings. Due to its metal inner and outer sheet, it combines thermal resistance with big spans. The minimum pitch to be applied is 4° or more after deflection.



Weight and thermal performance

Core thickness (mm)	30*	40	60	80	100	120	150
Overall thickness (mm)	75	85	105	125	145	165	195
U-value (W/m²K)	0,68	0,52	0,36	0,25	0,20	0,17	0,14
Weight (Kg/m²)	10,38	10,76	11,52	12,28	13,04	13,78	14,94
Rw (dB)	24 (-2;-4)	24 (-2;-4)	24 (-1;-4)	25 (-2;-4)	26 (-2;-5)	26 (-2;-4)	27 (-2;-5)

Calculated in accordance to European product standard EN 14509. * 30 mm is not LPCB approved

Maximum recommended span length

	30	40	60	80	100	120	150
Single span	1,48	1,80	2,32	2,61	2,70	2,81	2,93
Double span	1,22	1,80	2,32	2,61	2,70	2,81	2,93
Multiple span	1,22	1,80	2,32	2,61	2,70	2,81	2,93

recommended span length based on 2,00 KN/m² - assumptions of span/load table must be taken into account.

System key benefits

- Applicable as roof and wall panel for renovations and new buildings.
- Easy handling, mounting and fitting.
- Composite panel allows a faster installation time than standard built-up systems.
- JI Roof PIR is produced according to the EN ISO 9001.
- The JI Roof PIR is CE-marked.
- Approved product by LPCB (Loss Prevention Certification Board) (40 to 150 mm core thickness).
- Wide range of colours and coatings available for top sheet according to your project (please consult our Colorflow).

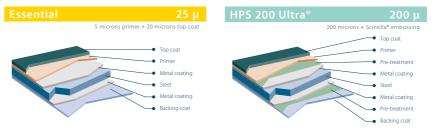
- Production facility ISO 14001 certified.
- High thermal performance PIR foam.
- Environmental sustainable PIR foam with zero ozone depletion and a low global warming potential.
- Inner sheet comes as standard in 15 μ Polyester with a RAL 9002 colour.
- JI Roof PIR is available in lengths up to 16 m The minimum cut back is 50 mm.
- Integrated insulated polycarbonate roof lights are available.
- Matching single skin profiles in metal or polycarbonate are available.

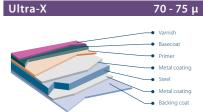
Materials

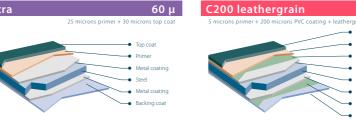
A1. External weather sheet

Joris Ide offers one of the widest ranges in coatings and colours which can be defined per project and building requirements. Please consult our colorflow brochure for detailed information.











A2. Internal liner sheet

Internal conditions of a building can vary; Joris Ide can offer a wide range to suit heavy-duty environments such as humidity and ammoniac. Please consult our colorflow brochure for detailed information.

- 15 μ Polyester RAL 9002 (standard)
- 25 μ Polyester
- Colorfarm 35µ
- PVC Foodsafe 150 μ PVC
- HPS 200 μ

A3. Insulation core

JI Roof PIR insulated panels are made with a high thermal performance and environmental sustainable PIR foam with zero ozone depletion and a low global warming potential.

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Confidex® Guarantee by Tata Steel

For over 20 years the Confidex® Guarantee from Tata Steel has remained best in class. Confidex® is the product performance guarantee for Colorcoat HPS200 Ultra®, when used in an external conventional building envelope application namely roof and wall cladding using single skin, built-up or composite panel construction in industrial and commercial buildings. Confidex® offers the longest and most comprehensive guarantee for pre-finished steel in Europe.

Key features include;

- Extended guarantee cover for up to 40 years on Colorcoat HPS200 Ultra®.
- No requirement for annual inspections or maintenance to validate the guarantee.
- Covers cut edges produced under factory controlled conditions for the entire guarantee period.
- Backed by years of worldwide product testing and real world experience.
- Provides cover for roof pitches down to 1° and no distinction between different roof pitches above that.
- Offered directly to the building owner and provides a contractual relationship between Tata Steel and the building owner.
- Fully transferable should building ownership change.
- Helps reduce the level of risk for each part of the supply chain.
- Quick and simple online registration form.

Other warranties

With Confidex® registration





Whilst Confidex® has always been restricted to the weathering performance of the external cladding, Tata Steel has recognised the growing emergence of demanding internal environment projects, such as energy from waste plants, and may offer a non-Confidex® warranty on a case by case basis for Colorcoat HPS200 Ultra® used internally.

Application specific warranties are also available for non-standard cladding applications; i.e residential roofs, flashings and sectional roller shutter doors.



Please have a look at our customer portal at www.joriside.com for more information about the guarantee.

Regions covered by the Confidex® Guarantee



Notes

- Figures under the Coastal heading are for buildings within 1 km of any coast.
- Full terms and conditions of the Confidex® Guarantee are on the online application form, available from www.colorcoat-online.com/registration.
- Confidex® must be registered within 3 months of the building completion date for the guarantee to be valid.
- The Confidex® Guarantee periods on the diagram above are applicable to Zone 1 and Zone 2. For more information visit www.colorcoat-online.com/ confidexmap.

Colorcoat HPS200 Ultra and Confidex are trademarks of Tata Steel UK Limited.



Performance

Environmental

The JI Roof PIR corresponds to the BRE Global Green Guide online generic specification Galvanised steel rafters and joists, composite profiled roof cladding (steel inner lining, pentane blown PIR insulation, coated steel outer skin) (ref. 812550001) which achieves a summary rating of A+ within pitched roofs. The production facility is ISO 14001 certified.

Fire

The JI Roof PIR is classified B-s1,d0 when tested to BS EN 13501-1:2013 and has a LPCB (Loss Prevention Certification Board EXT-B Grade (certificate No: 700a to LPS181: Part 1: Issue 1) for 40-150 mm core thickness.

Panel	Appli	cation	Gauge	Fire res	istance [*]	Grade	Core	LPCB	
Pallel	Roof	Wall	(mm)	Integrity (min)	Insulation (min)	Grade	Core	LFCB	
JI Roof PIR		•	40-150	-	-	EXT-B	PIR	700a/18	
JI Roof PIR	•		40-150	-	-	EXT-B	PIR	700a/19	
JI Roof PIR		• **	40-150	65	15	EXT-A15	PIR	700a/20	

Please check redbooklive (www.redbooklive.com) for notes on installation ... Only vertical

Construction details to obtain the classifications above

Primary fasteners:

- Roof application (Ext-B): Minimum 1 fixing per valley.
- Wall application (Ext-B / Ext-A15): Minimum 1 fixing per valley.

Secondary fasteners:

- Roof application: Side laps and flashings to be stitched at maximum 450 mm.
- Wall application (Ext-B): Side laps to be stitched at maximum 500 mm.
- Wall application (Ext-A15): Side laps to be stitched at maximum 300 mm.

Secondary Supports to obtain the Ext-A15:

- The panels 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.

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Performance

Assumptions:

- The span/load table is valid for roof application. Panel self-weight has been taken into account. For intermediate values, liner interpolation may be used.
- Values have been calculated using the method described in BS EN 14509:2013 for light and medium coloured panels (Colour group I-II).
- Deflection limit for short term loads: L/200.
- The minimum required width for end and intermediate supports is 50 mm.
- Calculation of fasteners have not been included.
- In the case of double or triple span conditions, this span/load table can only be used when all spans are equal or when the difference between the spans is less than 10%.
- The span/load table gives the capacity of the panel to carry short term loads. Any creep effect due to snow accumulation or other long-term loads have not been taken into account.

Spantable Load type (kN/m²)

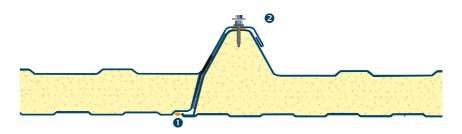
Thickness												Spar	n (m)									
(mm)			1,30	1,40	1,50	1,60	1,70	1,80	1,90	2,00	2,10	2,20	2,30	2,40	2,50	2,60	2,70	2,80	2,90	3,00	3,10	3,20
		Single	3,20	2,79	2,47	2,20	1,98	1,79	1,63	1,48	1,36	1,24	1,15	1,06	0,95	0,80	0,64	0,49	0,38	0,26		
	Pressure	Double	1,93	1,78	1,66	1,55	1,45	1,37	1,29	1,22	1,17	1,11	1,06	1,00	0,94	0,89	0,83	0,78	0,73	0,69	0,65	0,61
30		Multiple	1,93	1,78	1,66	1,55	1,45	1,37	1,29	1,22	1,17	1,11	1,06	1,00	0,94	0,89	0,83	0,78	0,73	0,69	0,65	0,61
30		Single	3,75	3,33	2,94	2,65	2,40	2,17	1,98	1,83	1,69	1,57	1,46	1,37	1,27	1,15	1,03	0,92	0,82	0,73	0,64	0,56
	Suction	Double	3,75	3,33	2,94	2,65	2,40	2,17	1,98	1,83	1,69	1,57	1,46	1,37	1,27	1,20	1,13	1,06	1,00	0,95	0,90	0,86
		Multiple	3,75	3,33	2,94	2,65	2,40	2,17	1,98	1,83	1,69	1,57	1,46	1,37	1,27	1,20	1,13	1,06	1,00	0,95	0,90	0,86
		Single	3,41	3,15	2,88	2,58	2,34	2,14	1,97	1,80	1,66	1,54	1,43	1,33	1,23	1,16	1,08	1,00	0,95	0,89	0,84	0,78
	Pressure	Double	3,41	3,15	2,88	2,58	2,34	2,14	1,97	1,80	1,66	1,54	1,43	1,33	1,23	1,16	1,08	1,00	0,95	0,89	0,84	0,79
40		Multiple	3,41	3,15	2,88	2,58	2,34	2,14	1,97	1,80	1,66	1,54	1,43	1,33	1,23	1,16	1,08	1,00	0,95	0,89	0,84	0,79
40		Single	4,25	3,79	3,41	3,09	2,83	2,59	2,38	2,20	2,05	1,91	1,79	1,68	1,58	1,48	1,41	1,33	1,25	1,19	1,14	1,08
	Suction	Double	4,25	3,79	3,41	3,09	2,83	2,59	2,38	2,20	2,05	1,91	1,79	1,68	1,58	1,48	1,41	1,33	1,25	1,19	1,14	1,08
		Multiple	4,25	3,79	3,41	3,09	2,83	2,59	2,38	2,20	2,05	1,91	1,79	1,68	1,58	1,48	1,41	1,33	1,25	1,19	1,14	1,08
		Single	3,81	3,54	3,30	3,10	2,89	2,67	2,48	2,32	2,16	2,01	1,89	1,77	1,67	1,57	1,48	1,40	1,32	1,24	1,18	1,13
	Pressure	Double	3,81	3,54	3,30	3,10	2,89	2,67	2,48	2,32	2,16	2,01	1,89	1,77	1,67	1,57	1,48	1,40	1,32	1,24	1,18	1,13
		Multiple	3,81	3,54	3,30	3,10	2,89	2,67	2,48	2,32	2,16	2,01	1,89	1,77	1,67	1,57	1,48	1,40	1,32	1,24	1,18	1,13
60		Single		4,85	4,43	4,09	3,78	3,53	3,30	3,08	2,89	2,72	2,56	2,42	2,29	2,17	2,07	1,96	1,87	1,78	1,70	1,62
	Suction	Double		4,40	3,92	3,50	3,19	2,90	2,66	2,45	2,27	2,11	1,96	1,85	1,73	1,64	1,55	1,47	1,41	1,34	1,27	1,22
		Multiple		4,85	4,43	4,09	3,78	3,50	3,23	2,98	2,77	2,59	2,42	2,27	2,14	2,01	1,91	1,82	1,73	1,65	1,58	1,50
		Single	4,00	3,72	3,47	3,25	3,06	2,89	2,74	2,61	2,47	2,35	2,23	2,11	2,00	1,90	1,80	1,71	1,63	1,54	1,47	1,40
	Pressure	Double	4,00	3,72	3,47	3,25	3,06	2,89	2,74	2,61	2,47	2,35	2,22	2,09	1,96	1,85	1,73	1,63	1,53	1,45	1,37	1,30
		Multiple	4,00	3,72	3,47	3,25	3,06	2,89	2,74	2,61	2,47	2,35	2,23	2,11	2,00	1,90	1,80	1,71	1,63	1,54	1,47	1,40
80		Single	.,00	57.2	5, 17	4,97	4,67	4,39	4,13	3,90	3,69	3,50	3,32	3,16	3,00	2,86	2,73	2,61	2,49	2,39	2,28	2,19
	Suction	Double	4,88	4,31	3,85	3,46	3,14	2,88	2,65	2,45	2,27	2,12	1,98	1,86	1,74	1,66	1,57	1,49	1,42	1,36	1,29	1,23
	Suction	Multiple	1,00	1,51	4,55	4,13	3,75	3,42	3,15	2,92	2,71	2,54	2,38	-	2,12	2,00	1,91	1,81	1,73	1,66	1,59	1,51
		Single	4,16	3,86	3,60	3,38	3,18	3,00	2,85	2,70	2,58	2,46	2,35	2,25	2,17	2,08	2,00	1,91	1,83	1,74	1,67	1,60
	Pressure	Double	4,16	3,86	3,60	3,38	3,18	3,00	2,85	2,70	2,58	2,46	2,35	2,25	2,12	1,99	1,87	1,75	1,66	1,56	1,48	1,41
		Multiple	4,16	3,86		3,38	3,18	3,00	2,85	2,70	2,58	2,46	2,35	2,25	2,17	2,08	2,00	1,91	1,83	1,74	1,67	1,60
100		Single	1,10	3,00	3,00	3,30	3,10	3,00	4,88	4,64	4,42	4,21	4,02		3,68	3,52	3,38	3,24	3,11	2,98	2,86	2,75
	Suction	Double	4,69	4,15	3,71	3,36	3,03	2 78	2,56	2,38	2,21	2,06	1,93	1,81	1,71	1,62	1,53	1,46	1,39	1,33	1,26	1,22
	Suction	Multiple	1,00	4,85	4,33	3,92	3,56	3,25	3,00	2,79	2,61	2,44	2,28	2,15	2,04	1,94	1,84	1,75	1,68	1,61	1,54	1,47
		Single	4,32	4,01	3,74	3,51	3,30	3,12	2,96	2,81	2,68	2,55	2,44	2,34	2,24	2,16	2,08	2,00	1,94	1,88	1,82	1,75
	Pressure	Double	4,32	4,01	3,74	3,51	3,30	3,12	2,96	2,81	2,68	2,55	2,44		-	2,12	2,00	1,89	1,78	1,69	1,60	1,52
	ricssurc	Multiple	4,32	4,01	3,74	3,51	3,30	3,12	2,96	2,81	2,68	2,55	2,44	-	2,24	2,16	2,08	2,00	1,94	1,88	1,82	1,75
120		Single	7,52	7,01	3,77	3,31	3,30	3,12	2,50	2,01	2,00	4.94	4,75	4,56	4,38	4,20	4,03	3,88	3,74	3,59	3,42	3,21
	Suction	Double	1 75	1 25	3,79	3 11	3,14	2,88	2,65	2 /15	2,28	2,13	1,99	1,88	1,77	1,68	1,59	1,51	1,45	1,38	1,32	1,26
	Juction	Multiple	4,73	4.88		3,96	3,61	3.31	3,05	2,83	2,65	2,49	2,34	2,20	2,09	1,98	1,89	1,80	1,72	1,66	1,59	1,52
		Single	4,50	4,00	3,90	3,66	3,44	3,25	3,08	2,03	2,79	2,49	2,55	2,44	2,09	2,25	2,17	2,10	2,02	1,95	1,89	1,83
	Pressure	Double	4,50	4,18	3,90	3,66	3,44	3,25	3,08	2,93	2,79	2,66	2,55	_	2,35	2,25	2,17	2,05	1,95	1,84	1,74	1,66
	riessure	Multiple	4,50	4,18	-	3,66	3,44	3,25	3,08	2,93	2,79	2,66	2,55	_	2,35	2,25	2,13	2,10	2,02	1,04	1,74	1,83
150		Single	4,50	+,10	3,90	3,00	3,44	3,23	3,08	2,73	2,19	2,00	2,33	2,44	2,33	2,23	4,94	4,71	4,38	4,06	3,80	3,57
	Custia	Double	1 01	4.20	2 00	2 50	2 20	2.05	2 71	2.52	2 25	2.10	2.00	1.04	1 02	1 72		_	-	-		-
	Suction	Multiple	4,81	-	-		3,20	-	2,71	-	2,35	-		1,94	-	1,73	1,65	1,57	1,49	1,43	1,38	1,32
		multiple					3,63							2,23			1,92	1,84	1,75	1,68	1,62	1,55

For design loads/spans out of the presented range or for other cases that doesn't fit within the assumptions presented above, please contact the technical assistance department of Joris Ide

Steel grade: S280GD, external sheet 0,60 mm, internal sheet 0,40 mm.

Dimensions and tolerances

Minimum cutback: 50 mm – maximum cutback: 350 mm (no cutback: not possible) Cutback 25 mm for wall application (on demand) Panels can be manufactured for placing left to right and right to left as per your requirements.*

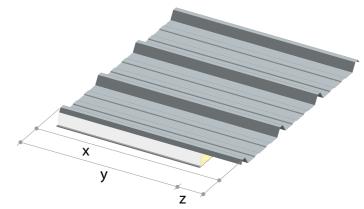


- 1. Seal in the side lap.
- 2. Seal under the crown of the overlap.

Minimum insulation length of panels

30 mm	mini 2250
40 mm	2250
60 mm	2250
80 mm	2250
100 mm	2250
120 mm	2000
150 mm	2000

Cut-back system



- x. Panel length
- y. Insulation length
- z. Cut-back

Product tolerance

Length < 3000 mm	± 5 mm
Length > 3000 mm	± 10 mm
Width (mm)	± 2 mm
Gauge (mm)	± 2 mm

Product tolerances [According to EN 14509]

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MR046/0122

^{*} See Instalation Guide

Certifications, quality and durability

The JI Roof PIR is manufactured according to the ISO 9001 and is assembled from high-quality raw materials which are selected by a detailed supply chain management and in-house laboratory controls. The Joris Ide plant in Zwevezele is ISO 14001 certified. The product is produced to the highest quality standards such as EN 14509. The JI Roof PIR carries the product conformity according to the European legislation and therefore all packs are CE-marked and carry the Declaration of Performance.







Assessed to ISO 9001:2015

Assessed to ISO 14001:2015

Assessed to OHSAS 18001:2007





LPS 1181: Cert/LPCB 700a

Accessories

Joris Ide can supply accessories such as foam fillers, flashings, matching outer single skin sheets and integrated polycarbonate roof lights.

Maintenance composite panels

Joris Ide advises to do an annual inspection of the panels and to carry out any remedial work identified during inspection.

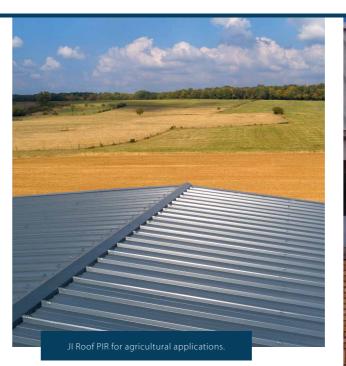
The maintenance & cleaning frequency is dependant on the application environment and actual pollution conditions of the composite panel. Exterior used panels need to be cleaned once per year. For interior used panels, the cleaning is dependant on the actual pollution conditions.

The cleaning of building walls should be made from up to down manually or by suitable cleaning facilities. Please notice that any cleaner which includes corrosive material is forbidden to be used for the cleaning. Specific cleaning processes as follow:

- Use plenty of clean water to wash the panel's surface;
- Use soft cloth with diluted detergent to wipe the panel's surface softly;
- Use clean water again to wash the stains off;
- Check the panel's surface and special cleaning with detergent is needed, if some parts are still not
- Use clear water to wash the panels' surface till all stains have been washed out.

Notice:

Please don't clean if the panel's surface is hot (over 40 °C) because too fast volatility of the water will do harm to the coating. Please notice especially that suitable detergent should be chosen. Generally neutral detergent is OK. Please don't use strong alkaline detergent, such as potassium hydroxide, sodium hydroxide and also please don't use strong acid detergent, abrasive detergent and paint soluble detergent. We would suggest to clean a small part as an experiment before carrying out thorough cleaning of the whole project.









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





