

# JI SHIELD

The Joris Ide Built-Up Systems

MR139 / 0122



**JORISIDE**  
THE STEEL FUTURE



## Index

JI Shield Built-up System explained	2
System key benefits	2
Properties	2
Fire resistance	3
Technical support	3
Description on Thermal & Acoustic performances	4
JI Shield Built-up System	6
Roof 1	6
Roof 2	7
Roof 3	8
Wall Vertical 1	9
Wall Vertical 2	10
Wall Vertical 3	11
Wall Vertical 4	12
Wall Horizontal 1	13
Wall Horizontal 2	14
Wall Horizontal 3	15
Wall Horizontal 4	16



*Joris Ide NV. is not responsible for printing errors and / or any differences between the images in this catalogue and the final product delivered. Joris Ide NV reserves the right to modify the technical specifications at any time without prior notice.*

## JI Shield

### The Joris Ide Built-Up Systems

Manufacturing an extensive range of insulated and non-insulated metal roof and wall cladding products for more than 30 years, the Joris Ide Group is a hugely significant supplier of metal products to the construction industry across Europe.

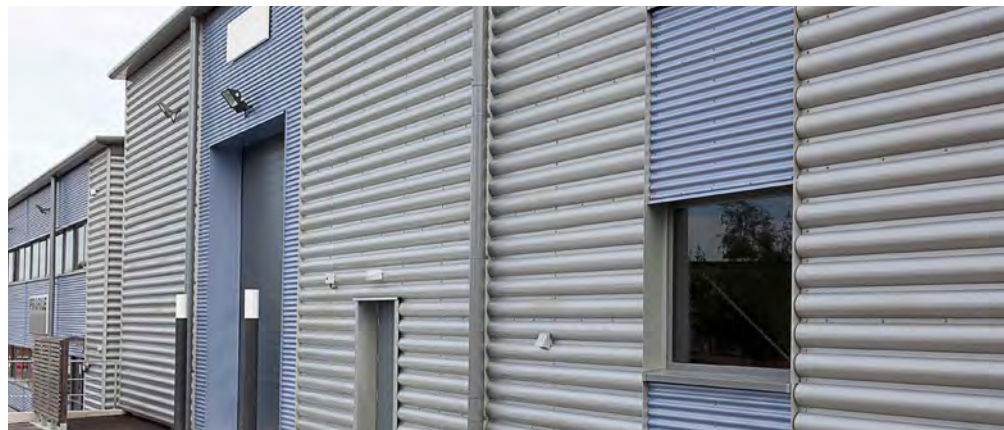
As our research and development is at the centre of the success, we at Joris Ide developed the JI Shield Systems.

In order to give the specialist contractor and architect. Easily understandable access to the appropriate construction details with test data leaving nothing to doubt.

We encapsulated a wealth of data, gathered over years of Joris Ide's extensive research and testing, with regard to acoustics, thermal, structural and airtightness to allow our customers ultimate confidence in the real performance of the system.



*JI Shield Built-up System - West Midlands project*



*High performance systems for offices - Merseyside project*



*Thermal and acoustic performances given by the Wall Vertical 1 system*

## JI Shield Built-up System explained

As one of the largest European manufacturers of roof and wall systems, Joris Ide supply market leading built-up systems. Trapezoidal roof and walls systems (as well as sinusoidal walls systems) which are over-purlin constructions incorporating insulation, liner sheet, spacer and all other system components. The quality of materials and manufacture, combined with the high levels of performance achieved by the systems, makes JI Shield Systems the leading choice explaining why the corporate strapline is 'The Steel Future'.

## System key benefits

The JI Shield System is guaranteed to provide a minimum useful life up to 25 years for each and every component supplied by Joris Ide and installed in the system. The Guarantee promises that the System supplied:

- Includes material that is and will remain fit for purpose up to 25 years in combination with the different coatings for the outer sheets available
- Will achieve the published structural, thermal, fire and acoustic performance when installed correctly and in compliance with the manufacturer's recommendations
- Includes materials that are recyclable following demolition
- Includes material or components manufactured under Quality Assured systems conforming to ISO 9001:2008 to ISO 14001:2004 Environmental Standards

## Properties

The JI Shield system has been constructed so that it gives a multitude of options, based on aesthetic performance, bespoke thermal, fire and acoustic performances.

To contribute to the savings on energy, the JI Shield Systems provides excellent air tightness, with buildings featuring JI Shield roofs and walls systems achieving air permeability levels of just  $10 \text{ m}^3/\text{h}/\text{m}^2$ , a superb performance.

As well as highly efficient air tightness, the Psi values for linear details are equally thrifty and further energy saving options such as high reflective liner and integrated roof lights can be easily incorporated.

The growing library of BIM objects and CAD details have recently been complemented by a new Part L Design Check capability, which makes it even easier to use JI Shield Systems to meet the requirements of the entire building.

There are three main performance criteria that need to be considered for acoustic systems, which are: sound reduction; sound absorption and sound intensity. JI Shield Systems can provide solutions for all of the above and have been verified by extensive testing.

Contact the technical department for any specific requirements.



## Fire resistance

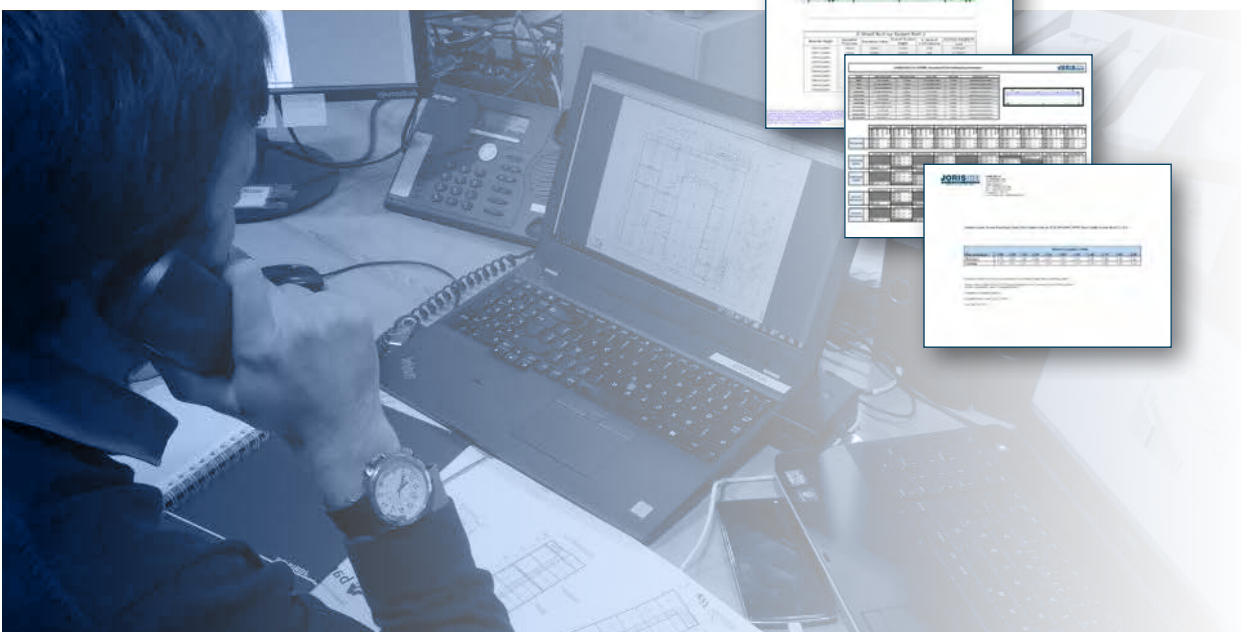
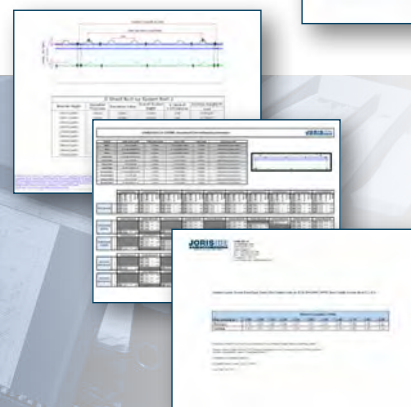
Jl Shield Systems for walls are available rated to fire resistance performance of 120 minutes' integrity and 15 minutes' insulation. Wall systems have been tested at Exova Warrington Fire having inherent fire resistance performance of 120 minutes' integrity and 15 minutes' insulation. Refer details to our technical team for exact specifications and peace of mind.

## Technical support

Joris Ide's technical assistance team is there to assist and guide the customer during the design and construction of the system to ensure its intended performance.

Next a detailed library of construction details, we can support you with:

- Load/span calculations of all structural components used
- Verification of U-values
- Simulations of different acoustic requirements
- Assistance on fire walls
- NBS Specifications



## Description on Thermal & Acoustic performances

Systems	Outer sheet Profile	Outer sheet Gauge
Roof 1	JIC 32-167-1000	0,70 mm
Roof 2	JIC 32-200-1000 (MW5R)	0,70 mm
Roof 3	JIC 32-200-1000 (MW5RS)	0,70 mm
Vertical Wall 1	JIC 32-200-1000 (MW5C)	0,50 mm
Vertical Wall 2	JIC 32-167-1000	0,50 mm
Vertical Wall 3	JIC 50-200-1000	0,50 mm
Vertical Wall 4	JIC 19-76-990 (13.5-3)	0,50 mm
Horizontal Wall 1	JIC 32-200-1000 (MW5C)	0,70 mm
Horizontal Wall 2	JIC 32-167-1000	0,70 mm
Horizontal Wall 3	JIC 50-200-1000	0,70 mm
Horizontal Wall 4	JIC 19-76-990 (13.5-3)	0,70 mm

### Roof systems

	U=0,48 (W/m <sup>2</sup> K)				U=0,40 (W/m <sup>2</sup> K)				U=0,25 (W/m <sup>2</sup> K)				U=0,23 (W/m <sup>2</sup> K)				U=0,21 (W/m <sup>2</sup> K)			
	Bracket Depth (mm)	R <sub>v</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>v</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>v</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>v</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>v</sub> (dB)	Fire Perf.	System Depth (mm)
<b>1</b>	100	41	-	133	120	41	-	153	185	45	-	218	200	45	-	233	220	45	-	253
<b>2</b>	100	41	-	133	120	41	-	153	185	45	-	218	200	45	-	233	220	45	-	253
<b>3</b>	100	41	-	133	120	41	-	153	185	45	-	218	200	45	-	233	220	45	-	253

### Vertical Wall systems

	U=0,37 (W/m <sup>2</sup> K)				U=0,35 (W/m <sup>2</sup> K)				U=0,31 (W/m <sup>2</sup> K)				U=0,30 (W/m <sup>2</sup> K)				U=0,29 (W/m <sup>2</sup> K)			
	Bracket Depth (mm)	R <sub>v</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>v</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>v</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>v</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>v</sub> (dB)	Fire Perf.	System Depth (mm)
<b>1</b>					120	37	*	153					140	37	*	173				
<b>2</b>					120	37	*	153					140	37	*	173				
<b>3</b>					120	37	*	171					140	37	*	191				
<b>4</b>	120	37	*	140					140	37	*	160					150	37	*	170
<b>1</b>					200	39	*	233					220	39	*	253				
<b>2</b>					200	39	*	233	220	39	*	253								
<b>3</b>					200	39	*	251	220	39	*	271					240	39	*	291
<b>4</b>	200	39	*	220					220	39	*	240								

### Horizontal Wall systems

	U=0,45 (W/m <sup>2</sup> K)				U=0,43 (W/m <sup>2</sup> K)				U=0,37 (W/m <sup>2</sup> K)				U=0,36 (W/m <sup>2</sup> K)				U=0,32 (W/m <sup>2</sup> K)			
	Bracket Depth (mm)	R <sub>v</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>v</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>v</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>v</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>v</sub> (dB)	Fire Perf.	System Depth (mm)
<b>1</b>					100	37	-	133					120	37	*	153				
<b>2</b>					100	37	-	133					120	37	*	153				
<b>3</b>					100	37	-	151					120	37	*	171				
<b>4</b>	100	37	-	120					120	37	*	140					140	40	*	160
<b>1</b>					160	40	*	193					180	42	*	213	200	42	*	233
<b>2</b>					160	40	*	193					180	42	*	213	200	42	*	233
<b>3</b>					160	40	*	211					180	42	*	231	200	42	*	251
<b>4</b>	160	40	*	180					180	42	*	200					200	42	*	220

Liner Profile	Liner Gauge	Full System name
JIC 32-200-1000 (MW5L)	0,70 mm	Ji Shield Build-up System Roof 1
JIC 32-200-1000 (MW5L)	0,70 mm	Ji Shield Build-up System Roof 2
JIC 32-200-1000 (MW5L)	0,70 mm	Ji Shield Build-up System Roof 3
JIC 19-167-1000	0,40 mm	Ji Shield Build-up System Wall V1
JIC 19-167-1000	0,40 mm	Ji Shield Build-up System Wall V2
JIC 19-167-1000	0,40 mm	Ji Shield Build-up System Wall V3
JIC 19-167-1000	0,40 mm	Ji Shield Build-up System Wall V4
JIC 19-167-1000	0,40 mm	Ji Shield Build-up System Wall H1
JIC 19-167-1000	0,40 mm	Ji Shield Build-up System Wall H2
JIC 19-167-1000	0,40 mm	Ji Shield Build-up System Wall H3
JIC 19-167-1000	0,40 mm	Ji Shield Build-up System Wall H4

Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	U (W/m <sup>2</sup> K)
240	45	-	273	0,19
240	45	-	273	0,18
240	45	-	273	0,16
240	45	-	273	0,15
240	45	-	273	0,14

Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	U (W/m <sup>2</sup> K)
150	37	*	183	0,28
150	37	*	183	0,27
150	37	*	201	0,26
150	37	*	201	0,25
150	37	*	201	0,24

The thermal (U) and Acoustic (R<sub>w</sub>) values presented on this document were estimated considering the system arrangement as below:

- Roof systems assume bracket spacing at 1,20m and bars/purlins spacing at 1,50m.
- Vertical wall systems assume bracket spacing at 1,167m and bars/purlins at 1,80m.
- Horizontal wall systems assume brackets/purlins spacing at 1,50m and bars at 1,167m

Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	U (W/m <sup>2</sup> K)
140	40	*	173	0,31
140	40	*	173	0,31
140	40	*	191	0,31

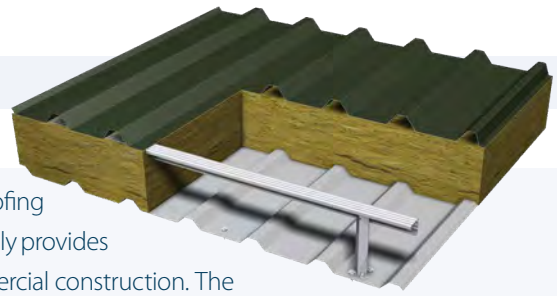
#### Fire Performances (According to BS476 Part 22):

\* 120 minutes integrity / 15 minutes insulation

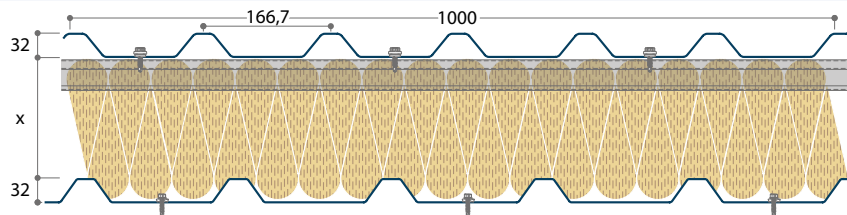
Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	U (W/m <sup>2</sup> K)
220	42	*	253	0,20
220	42	*	253	0,20
220	42	*	271	0,20
220	42	*	240	0,20

## JI Shield Built-up System

### Roof 1



The JI Shield Built-up System Roof 1 gives a warranted metal roofing system which features a 0,70 mm outer and 0,70 mm liner. The assembly provides a highly cost-effective roof system that is ideal for all types of commercial construction. The full build-up results into an outstanding thermal, fire and acoustic system performance. A unique benefit of the JI Shield Built-up System Roof 1 is the aesthetically pleasing 6 crowns JIC 32-167-1000 outer sheet.



## Performances

Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)				
U=0,48 (W/m <sup>2</sup> K)				U=0,40 (W/m <sup>2</sup> K)				U=0,25 (W/m <sup>2</sup> K)				U=0,23 (W/m <sup>2</sup> K)				U=0,21 (W/m <sup>2</sup> K)			
100	41	-	133	120	41	-	153	185	45	-	218	200	45	-	233	220	45	-	253
U=0,19 (W/m <sup>2</sup> K)				U=0,18 (W/m <sup>2</sup> K)				U=0,16 (W/m <sup>2</sup> K)				U=0,15 (W/m <sup>2</sup> K)				U=0,14 (W/m <sup>2</sup> K)			
240	45	-	273	260	47	-	293	280	47	-	313	300	47	-	333	320	47	-	353

## Standards and assumptions

- The Thermal (U) and Acoustic (RW) values presented on this document were estimated assuming bracket spacing at 1,20 m and bar/purlin spacing at 1,50 m
- The thermal performance of the profiled metal cladding construction detailed on this document has been calculated in accordance with BR443 (March 2006) and EN ISO 6946
- The acoustic performance of the profiled metal cladding construction detailed below has been predicted using a computer programme developed under a research contract and in accordance to the MCRMA recommendations

## Components

### Outer sheet

Profile	JIC 32-167-1000
Gauge	0,70 mm
Coatings	C200 leathergrain 200μ, Ultra 60μ

### Liner

Profile	JIC 32-200-1000 (MW5L)
Gauge	0,70 mm
Coatings	BWLE

### Insulation

Material	Glass Wool insulation
----------	-----------------------

### Other accessories

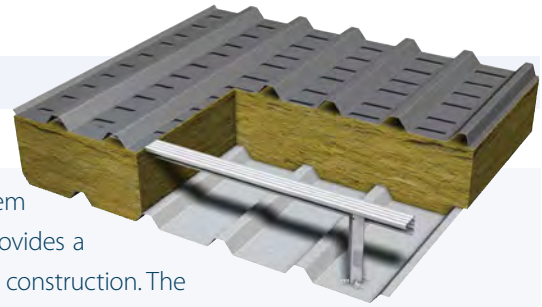
JI Bar & bracket, fixings, sealants and other approved Shield components
--

Please contact the Joris Ide Technical team for further installation drawings, product information or design assistance for your project

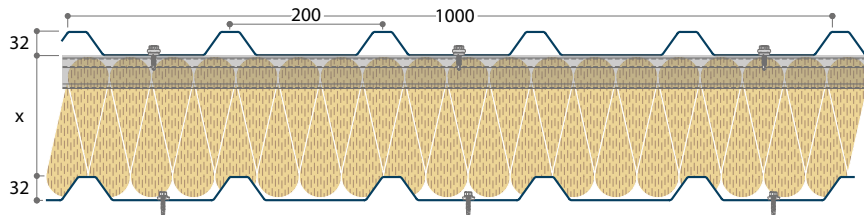


## JI Shield Built-up System

### Roof 2



The JI Shield Built-up System Roof 2 gives a warranted metal roofing system which features a 0,70 mm outer and 0,70 mm liner. The assembly provides a highly cost-effective roof system that is ideal for all types of commercial construction. The full build-up results into an outstanding thermal, fire and acoustic system performance. The typical aspect for the JI Shield Built-up System Roof 2 is the robustness of the JIC 32-200-1000 (MW5R) outer sheet.



## Performances

Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)
U=0,48 (W/m <sup>2</sup> K)				U=0,40 (W/m <sup>2</sup> K)				U=0,25 (W/m <sup>2</sup> K)				U=0,23 (W/m <sup>2</sup> K)				U=0,21 (W/m <sup>2</sup> K)			
100	41	-	133	120	41	-	153	185	45	-	218	200	45	-	233	220	45	-	253
U=0,19 (W/m <sup>2</sup> K)				U=0,18 (W/m <sup>2</sup> K)				U=0,16 (W/m <sup>2</sup> K)				U=0,15 (W/m <sup>2</sup> K)				U=0,14 (W/m <sup>2</sup> K)			
240	45	-	273	260	47	-	293	280	47	-	313	300	47	-	333	320	47	-	353

## Standards and assumptions

- The Thermal (U) and Acoustic (RW) values presented on this document were estimated assuming bracket spacing at 1,20 m and bar/purlin spacing at 1,50 m
- The thermal performance of the profiled metal cladding construction detailed on this document has been calculated in accordance with BR443 (March 2006) and EN ISO 6946
- The acoustic performance of the profiled metal cladding construction detailed below has been predicted using a computer programme developed under a research contract and in accordance to the MCRMA recommendations

## Components

### Outer sheet

Profile	JIC 32-200-1000 (MW5R)
Gauge	0,70 mm
Coatings	C200 leathergrain 200μ, Ultra 60μ

### Liner

Profile	JIC 32-200-1000 (MW5L)
Gauge	0,70 mm
Coatings	BWLE

### Insulation

Material	Glass Wool insulation
----------	-----------------------

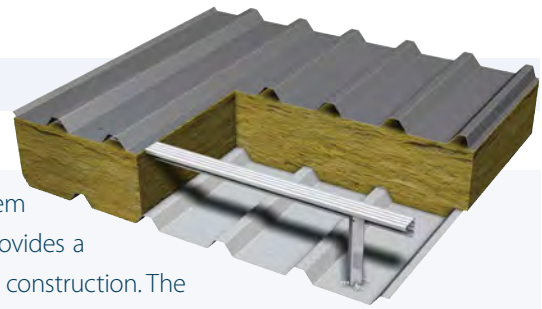
### Other accessories

JI Bar & bracket, fixings, sealants and other approved Shield components
--

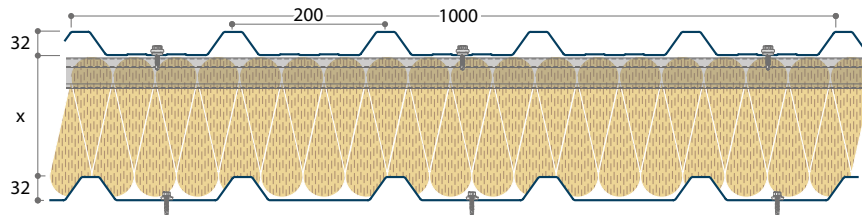
Please contact the Joris Ide Technical team for further installation drawings, product information or design assistance for your project

## JI Shield Built-up System

### Roof 3



The JI Shield Built-up System Roof 3 gives a warranted metal roofing system which features a 0,70 mm outer and 0,70 mm liner. The assembly provides a highly cost-effective roof system that is ideal for all types of commercial construction. The full build-up results into an outstanding thermal, fire and acoustic system performance. The JI Shield Built-up System Roof 3 provides a robust JIC 32-200-1000 outer sheet with strength and aesthetically enhancing swages.



## Performances

Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)
U=0,48 (W/m <sup>2</sup> K)				U=0,40 (W/m <sup>2</sup> K)				U=0,25 (W/m <sup>2</sup> K)				U=0,23 (W/m <sup>2</sup> K)				U=0,21 (W/m <sup>2</sup> K)			
100	41	-	133	120	41	-	153	185	45	-	218	200	45	-	233	220	45	-	253
U=0,19 (W/m <sup>2</sup> K)				U=0,18 (W/m <sup>2</sup> K)				U=0,16 (W/m <sup>2</sup> K)				U=0,15 (W/m <sup>2</sup> K)				U=0,14 (W/m <sup>2</sup> K)			
240	45	-	273	260	47	-	293	280	47	-	313	300	47	-	333	320	47	-	353

## Standards and assumptions

- The Thermal (U) and Acoustic (RW) values presented on this document were estimated assuming bracket spacing at 1,20 m and bar/purlin spacing at 1,50 m
- The thermal performance of the profiled metal cladding construction detailed on this document has been calculated in accordance with BR443 (March 2006) and EN ISO 6946
- The acoustic performance of the profiled metal cladding construction detailed below has been predicted using a computer programme developed under a research contract and in accordance to the MCRMA recommendations

## Components

### Outer sheet

Profile	32-200-1000 (MW5RS)
Gauge	0,70 mm
Coatings	C200 leathergrain 200μ, Ultra 60μ

### Liner

Profile	JIC 32-200-1000 (MW5L)
Gauge	0,70 mm
Coatings	BWLE

### Insulation

Material	Glass Wool insulation
----------	-----------------------

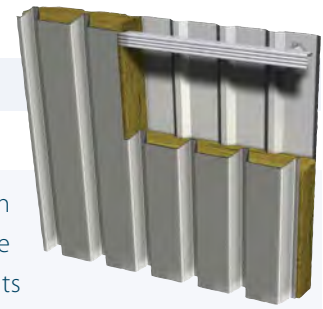
### Other accessories

JI Bar & bracket, fixings, sealants and other approved Shield components
--

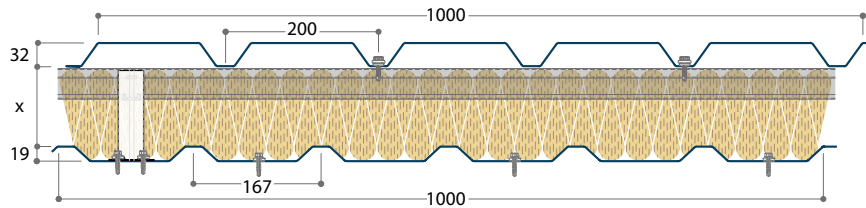
Please contact the Joris Ide Technical team for further installation drawings, product information or design assistance for your project

## JI Shield Built-up System

### Wall Vertical 1



The JI Shield Built-up System Wall Vertical 1 gives a warranted metal wall system which features a 0,50 mm outer and 0,40 mm liner. This assembly provides a highly cost-effective wall system that is ideal for all types of commercial construction. The full build-up results into an outstanding thermal, fire and acoustic system performance. The typical aspect for the JI Shield Built-up System Wall Vertical 1 is the robustness of the JIC 32-200-1000 (MW5C) outer sheet.



## Performances

Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)
U=0,35 (W/m <sup>2</sup> K)				U=0,30 (W/m <sup>2</sup> K)				U=0,28 (W/m <sup>2</sup> K)				U=0,26 (W/m <sup>2</sup> K)				U=0,25 (W/m <sup>2</sup> K)			
120	37	*	153	140	37	*	173	150	37	*	183	160	37	*	193	170	39	*	203
U=0,24 (W/m <sup>2</sup> K)				U=0,21 (W/m <sup>2</sup> K)				U=0,19 (W/m <sup>2</sup> K)											
180	39	*	213	200	39	*	233	220	39	*	253								

\* 120 minutes integrity / 15 minutes insulation (According to BS476 Part 22)

## Standards and assumptions

- The Thermal (U) and Accoustic (RW) values presented on this document were estimated assuming bracket spacing at 1,167 m and bar/purlin spacing at 1,80 m
- The thermal performance of the profiled metal cladding construction detailed on this document has been calculated in accordance with BR443 (March 2006) and EN ISO 6946
- The acoustic performance of the profiled metal cladding construction detailed below has been predicted using a computer programme developed under a research contract and in accordance to the MCRMA recommendations

## Components

### Outer sheet

Profile	JIC 32-200-1000 (MW5RC)
Gauge	0,50 mm
Coatings	C200 leathergrain 200μ, Ultra 60μ

### Liner

Profile	JIC 19-167-1000
Gauge	0,40 mm
Coatings	BWLE

### Insulation

Material	Glass Wool insulation
----------	-----------------------

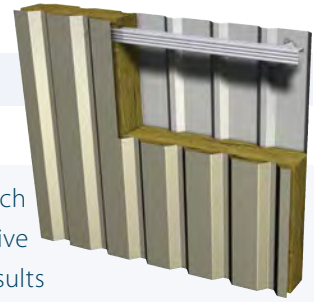
### Other accessories

JI Bar & bracket, fixings, sealants and other approved Shield components
--

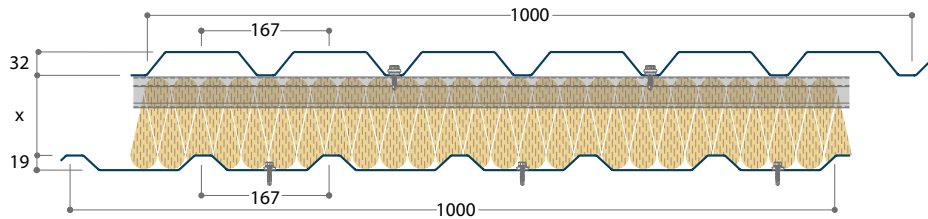
Please contact the Joris Ide Technical team for further installation drawings, product information or design assistance for your project

## JI Shield Built-up System

### Wall Vertical 2



The JI Shield Built-up System Wall Vertical 2 gives a warranted metal wall system which features a 0,50 mm outer and 0,40 mm liner. This assembly provides a highly cost-effective wall system that is ideal for all types of commercial construction. The full build-up results into an outstanding thermal, fire and acoustic system performance. A unique benefit of the JI Shield Built-up System Wall Vertical 2 is the aesthetically pleasing 6 crowns JIC 32-167-1000 outer sheet.



## Performances

Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)
U=0,35 (W/m <sup>2</sup> K)				U=0,30 (W/m <sup>2</sup> K)				U=0,28 (W/m <sup>2</sup> K)				U=0,27 (W/m <sup>2</sup> K)				U=0,25 (W/m <sup>2</sup> K)			
120	37	*	153	140	37	*	173	150	37	*	183	160	37	*	193	170	39	*	203
U=0,24 (W/m <sup>2</sup> K)				U=0,21 (W/m <sup>2</sup> K)				U=0,20 (W/m <sup>2</sup> K)											
180	39	*	213	200	39	*	233	220	39	*	253								

\* 120 minutes integrity / 15 minutes insulation (According to BS476 Part 22)

## Standards and assumptions

- The Thermal (U) and Accoustic (RW) values presented on this document were estimated assuming bracket spacing at 1,167 m and bar/purlin spacing at 1,80 m
- The thermal performance of the profiled metal cladding construction detailed on this document has been calculated in accordance with BR443 (March 2006) and EN ISO 6946
- The acoustic performance of the profiled metal cladding construction detailed below has been predicted using a computer programme developed under a research contract and in accordance to the MCRMA recommendations

## Components

### Outer sheet

Profile	JIC 32-167-1000
Gauge	0,50 mm
Coatings	C200 leathergrain 200μ, Ultra 60μ

### Liner

Profile	JIC 19-167-1000
Gauge	0,40 mm
Coatings	BWLE

### Insulation

Material	Glass Wool insulation
----------	-----------------------

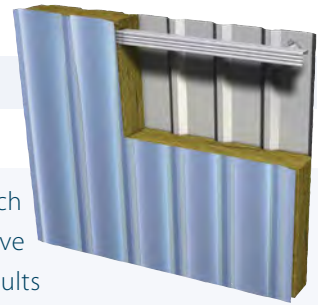
### Other accessories

JI Bar & bracket, fixings, sealants and other approved Shield components
--

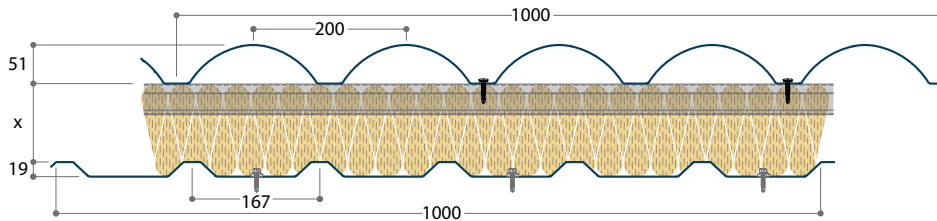
Please contact the Joris Ide Technical team for further installation drawings, product information or design assistance for your project

## JI Shield Built-up System

### Wall Vertical 3



The JI Shield Built-up System Wall Vertical 3 gives a warranted metal wall system which features a 0,50 mm outer and 0,40 mm liner. This assembly provides a highly cost-effective wall system that is ideal for all types of commercial construction. The full build-up results into an outstanding thermal, fire and acoustic system performance. The typical aspect for this system is the aesthetical design of the JIC 50-200-1000 outer sheet.



## Performances

Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)				
U=0,35 (W/m <sup>2</sup> K)				U=0,30 (W/m <sup>2</sup> K)				U=0,28 (W/m <sup>2</sup> K)				U=0,27 (W/m <sup>2</sup> K)				U=0,25 (W/m <sup>2</sup> K)			
120	37	*	171	140	37	*	191	150	37	*	201	160	37	*	211	170	39	*	221
U=0,24 (W/m <sup>2</sup> K)				U=0,21 (W/m <sup>2</sup> K)				U=0,20 (W/m <sup>2</sup> K)				U=0,18 (W/m <sup>2</sup> K)							
180	39	*	231	200	39	*	251	220	39	*	271	240	39	*	291				

\* 120 minutes integrity / 15 minutes insulation (According to BS476 Part 22)

## Standards and assumptions

- The Thermal (U) and Accoustic (RW) values presented on this document were estimated assuming bracket spacing at 1,167 m and bar/purlin spacing at 1,80 m
- The thermal performance of the profiled metal cladding construction detailed on this document has been calculated in accordance with BR443 (March 2006) and EN ISO 6946
- The acoustic performance of the profiled metal cladding construction detailed below has been predicted using a computer programme developed under a research contract and in accordance to the MCRMA recommendations

## Components

### Outer sheet

Profile	JIC 50-200-1000
Gauge	0,50 mm
Coatings	C200 leathergrain 200μ

### Liner

Profile	JIC 19-167-1000
Gauge	0,40 mm
Coatings	BWLE

### Insulation

Material	Glass Wool insulation
----------	-----------------------

### Other accessories

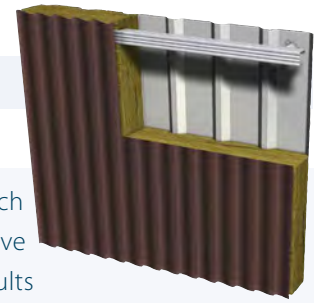
JI Bar & bracket, fixings, sealants and other approved Shield components
--

Please contact the Joris Ide Technical team for further installation drawings, product information or design assistance for your project

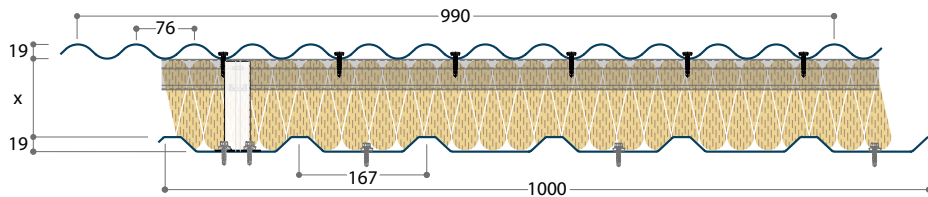


## JI Shield Built-up System

### Wall Vertical 4



The JI Shield Built-up System Wall Vertical 4 gives a warranted metal wall system which features a 0,50 mm outer and 0,40 mm liner. This assembly provides a highly cost-effective wall system that is ideal for all types of commercial construction. The full build-up results into an outstanding thermal, fire and acoustic system performance. The JI Shield Built-up System Wall Vertical 4 differentiates itself by the slim sinusoidal outer sheet.



## Performances

Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)				
U=0,37 (W/m <sup>2</sup> K)				U=0,31 (W/m <sup>2</sup> K)				U=0,29 (W/m <sup>2</sup> K)				U=0,27 (W/m <sup>2</sup> K)				U=0,26 (W/m <sup>2</sup> K)			
120	37	*	140	140	37	*	160	150	37	*	170	160	37	*	180	170	37	*	190
U=0,24 (W/m <sup>2</sup> K)				U=0,22 (W/m <sup>2</sup> K)				U=0,20 (W/m <sup>2</sup> K)											
180	39	*	200	200	39	*	220	220	39	*	240								

\* 120 minutes integrity / 15 minutes insulation (According to BS476 Part 22)

## Standards and assumptions

- The Thermal (U) and Acoustic (RW) values presented on this document were estimated assuming bracket spacing at 1,167 m and bar/purlin spacing at 1,80 m
- The thermal performance of the profiled metal cladding construction detailed on this document has been calculated in accordance with BR443 (March 2006) and EN ISO 6946
- The acoustic performance of the profiled metal cladding construction detailed below has been predicted using a computer programme developed under a research contract and in accordance to the MCRMA recommendations

## Components

### Outer sheet

Profile	JIC 19-76-990 (13.5-3)
Gauge	0,50 mm
Coatings	C200 leathergrain 200μ, Ultra 60μ

### Liner

Profile	JIC 19-167-1000
Gauge	0,40 mm
Coatings	BWLE

### Insulation

Material	Glass Wool insulation
----------	-----------------------

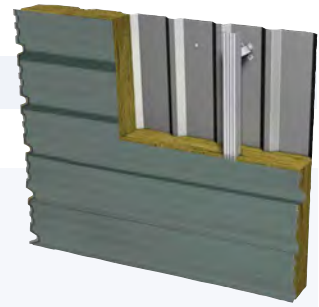
### Other accessories

JI Bar & bracket, fixings, sealants and other approved Shield components
--

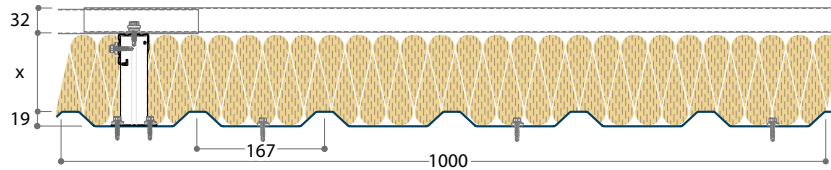
Please contact the Joris Ide Technical team for further installation drawings, product information or design assistance for your project

## JI Shield Built-up System

### Wall Horizontal 1



The JI Shield Built-up System Wall Horizontal 1 gives a warranted metal wall system which features a 0,70 mm outer and 0,40 mm liner. This assembly provides a highly cost-effective wall system that is ideal for all types of commercial construction. The full build-up results into an outstanding thermal, fire and acoustic system performance. The typical aspect for the JI Shield Built-up System Wall Horizontal 1 is the robustness of the JIC 32-200-1000 (MW5C) outer sheet.



## Performances

Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)
U=0,43 (W/m <sup>2</sup> K)				U=0,36 (W/m <sup>2</sup> K)				U=0,31 (W/m <sup>2</sup> K)				U=0,27 (W/m <sup>2</sup> K)				U=0,24 (W/m <sup>2</sup> K)			
100	37	-	133	120	37	*	153	140	40	*	173	160	40	*	193	180	42	*	213
U=0,22 (W/m <sup>2</sup> K)				U=0,20 (W/m <sup>2</sup> K)															
200	42	*	233	220	42	*	253												

\* 120 minutes integrity / 15 minutes insulation (According to BS476 Part 22)

## Standards and assumptions

- The thermal (U) and Acoustic (R<sub>w</sub>) values presented on this document were estimated assuming brackets/purlins spacing at 1,50 m and bars at 1,167 m
- The thermal performance of the profiled metal cladding construction detailed on this document has been calculated in accordance with BR443 (March 2006) and EN ISO 6946
- The acoustic performance of the profiled metal cladding construction detailed below has been predicted using a computer programme developed under a research contract and in accordance to the MCRMA recommendations

## Components

### Outer sheet

Profile	JIC 32-200-1000 (MW5RC)
Gauge	0,70 mm
Coatings	C200 leathergrain 200μ, Ultra 60μ

### Liner

Profile	JIC 19-167-1000
Gauge	0,40 mm
Coatings	BWLE

### Insulation

Material	Glass Wool insulation
----------	-----------------------

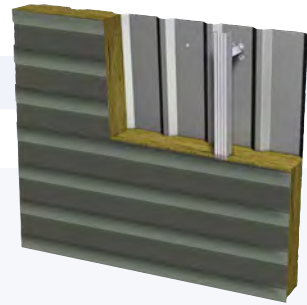
### Other accessories

JI Bar & bracket, fixings, sealants and other approved Shield components
--

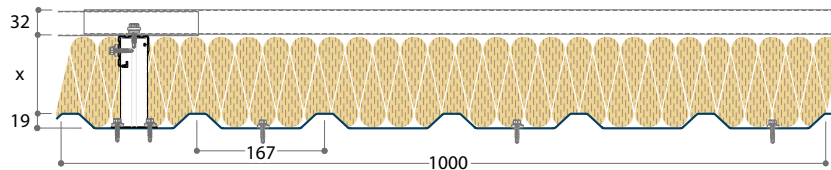
Please contact the Joris Ide Technical team for further installation drawings, product information or design assistance for your project

## JI Shield Built-up System

### Wall Horizontal 2



The JI Shield Built-up System Wall Horizontal 2 gives a warranted metal wall system which features a 0,70 mm outer and 0,40 mm liner. This assembly provides a highly cost-effective wall system that is ideal for all types of commercial construction. The full build-up results into an outstanding thermal, fire and acoustic system performance. A unique benefit of the JI Shield Built-up System Wall Horizontal 2 is the aesthetically pleasing 6 crowns JIC 32-167-1000 outer sheet.



## Performances

Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)
U=0,43 (W/m <sup>2</sup> K)				U=0,36 (W/m <sup>2</sup> K)				U=0,31 (W/m <sup>2</sup> K)				U=0,27 (W/m <sup>2</sup> K)				U=0,24 (W/m <sup>2</sup> K)			
100	37	-	133	120	37	*	153	140	40	*	173	160	40	*	193	180	42	*	213
U=0,22 (W/m <sup>2</sup> K)				U=0,20 (W/m <sup>2</sup> K)															
200	42	*	233	220	42	*	253												

\* 120 minutes integrity / 15 minutes insulation (According to BS476 Part 22)

## Standards and assumptions

- The Thermal (U) and Acoustic (RW) values presented on this document were estimated assuming bracket spacing at 1,20 m and bar/purlin spacing at 1,50 m
- The thermal performance of the profiled metal cladding construction detailed on this document has been calculated in accordance with BR443 (March 2006) and EN ISO 6946
- The acoustic performance of the profiled metal cladding construction detailed below has been predicted using a computer programme developed under a research contract and in accordance to the MCRMA recommendations

## Components

### Outer sheet

Profile	JIC 32-167-1000
Gauge	0,70 mm
Coatings	C200 leathergrain 200μ, Ultra 60μ

### Liner

Profile	JIC 19-167-1000
Gauge	0,40 mm
Coatings	BWLE

### Insulation

Material	Glass Wool insulation
----------	-----------------------

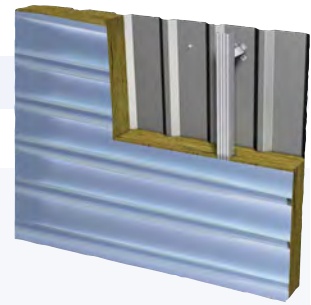
### Other accessories

JI Bar & bracket, fixings, sealants and other approved Shield components

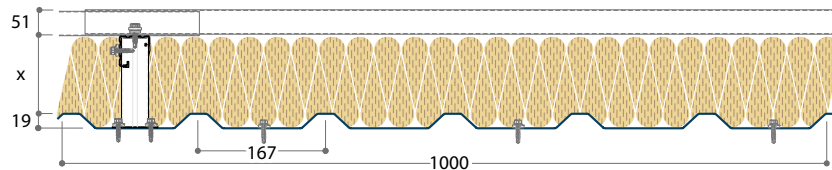
Please contact the Joris Ide Technical team for further installation drawings, product information or design assistance for your project

## JI Shield Built-up System

### Wall Horizontal 3



The JI Shield Built-up System Wall Horizontal 3 gives a warranted metal wall system which features a 0,70 mm outer and 0,40 mm liner. This assembly provides a highly cost-effective wall system that is ideal for all types of commercial construction. The full build-up results into an outstanding thermal, fire and acoustic system performance. The typical aspect for this system is the aesthetical design of the JIC 50-200-1000 outer sheet.



## Performances

Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)
U=0,43 (W/m <sup>2</sup> K)				U=0,36 (W/m <sup>2</sup> K)				U=0,31 (W/m <sup>2</sup> K)				U=0,27 (W/m <sup>2</sup> K)				U=0,24 (W/m <sup>2</sup> K)			
100	37	-	151	120	37	*	171	140	40	*	191	160	40	*	211	180	42	*	231
U=0,22 (W/m <sup>2</sup> K)				U=0,20 (W/m <sup>2</sup> K)															
200	42	*	251	220	42	*	271												

\* 120 minutes integrity / 15 minutes insulation (According to BS476 Part 22)

## Standards and assumptions

- The thermal (U) and Acoustic (R<sub>w</sub>) values presented on this document were estimated assuming brackets/purlins spacing at 1,50 m and bars at 1,167 m
- The thermal performance of the profiled metal cladding construction detailed on this document has been calculated in accordance with BR443 (March 2006) and EN ISO 6946
- The acoustic performance of the profiled metal cladding construction detailed below has been predicted using a computer programme developed under a research contract and in accordance to the MCRMA recommendations

## Components

### Outer sheet

Profile	JIC 50-200-1000
Gauge	0,70 mm
Coatings	C200 leathergrain 200μ, Ultra 60μ

### Liner

Profile	JIC 19-167-1000
Gauge	0,40 mm
Coatings	BWLE

### Insulation

Material	Glass Wool insulation
----------	-----------------------

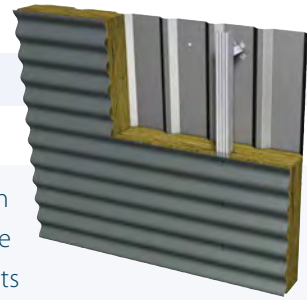
### Other accessories

JI Bar & bracket, fixings, sealants and other approved Shield components
--

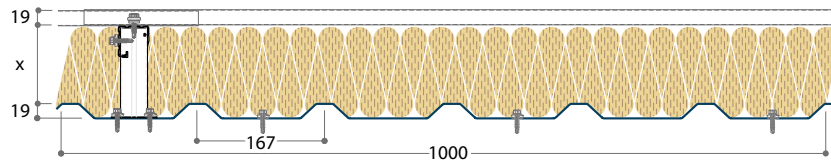
Please contact the Joris Ide Technical team for further installation drawings, product information or design assistance for your project

## JI Shield Built-up System

### Wall Horizontal 4



The JI Shield Built-up System Wall Horizontal 4 gives a warranted metal wall system which features a 0,70 mm outer and 0,40 mm liner. This assembly provides a highly cost-effective wall system that is ideal for all types of commercial construction. The full build-up results into an outstanding thermal, fire and acoustic system performance. The JI Shield Built-up System Wall Horizontal 4 differentiates itself by the slim sinusoidal outer sheet.



## Performances

Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)	Bracket Depth (mm)	R <sub>w</sub> (dB)	Fire Perf.	System Depth (mm)
U=0,45 (W/m <sup>2</sup> K)				U=0,37 (W/m <sup>2</sup> K)				U=0,32 (W/m <sup>2</sup> K)				U=0,28 (W/m <sup>2</sup> K)				U=0,25 (W/m <sup>2</sup> K)			
100	37	-	120	120	37	*	140	140	40	*	160	160	40	*	180	180	42	*	200
U=0,22 (W/m <sup>2</sup> K)				U=0,20 (W/m <sup>2</sup> K)															
200	42	*	220	220	42	*	240												

\* 120 minutes integrity / 15 minutes insulation (According to BS476 Part 22)

## Standards and assumptions

- The thermal (U) and Acoustic (R<sub>w</sub>) values presented on this document were estimated assuming brackets/purlins spacing at 1,50 m and bars at 1,167 m
- The thermal performance of the profiled metal cladding construction detailed on this document has been calculated in accordance with BR443 (March 2006) and EN ISO 6946
- The acoustic performance of the profiled metal cladding construction detailed below has been predicted using a computer programme developed under a research contract and in accordance to the MCRMA recommendations

## Components

### Outer sheet

Profile	JIC 19-76-990 (13.5-3)
Gauge	0,70 mm
Coatings	C200 leathergrain 200μ, Ultra 60μ

### Liner

Profile	JIC 19-167-1000
Gauge	0,40 mm
Coatings	BWLE

### Insulation

Material	Glass Wool insulation
----------	-----------------------

### Other accessories

JI Bar & bracket, fixings, sealants and other approved Shield components
--

Please contact the Joris Ide Technical team for further installation drawings, product information or design assistance for your project





*Integrated building project in South Yorkshire.*



*JIC 32-200-1000, Ultra 60µ coating.*



*Commercial building project in Leicestershire.*



*A long-lasting solution for your building.*





**Joris Ide Ltd.**

A9, Elmbridge Court, Gloucester GL3 1JZ, United Kingdom  
T +44 (0)1452 412 069 F +44 (0)1452 358 025 [sales@joriside.co.uk](mailto:sales@joriside.co.uk)

**Joris Ide nv/sa**

Hille 174, 8750 Zwevezele, Belgium  
T +32 (0)51 61 07 77 F +32 (0) 5161 07 79 [info@joriside.be](mailto:info@joriside.be)

