



DECLARATION OF PERFORMANCE No. 29

1. Unique identification code of product type:

Sandwich panel with E-PIR polyisocyanurate core

SP2B40E-PIR	SP2E120E-PIR	SP2D60E-PIR
SP2B60E-PIR	SP2E140E-PIR	SP2D80E-PIR
SP2B80E-PIR	SP2E160E-PIR	SP2D100E-PIR
SP2B100E-PIR	SP2E180E-PIR	SP2D120E-PIR
SP2B110E-PIR	SP2E200E-PIR	SP2C80/40E-PIR
SP2B120E-PIR	SP2E120E-PIR B	SP2C100/60E-PIR
SP2B150E-PIR	SP2E140E-PIR B	SP2C120/80E-PIR
SP2B60E-PIR B	SP2E160E-PIR B	SP2C140/100E-PIR
SP2B80E-PIR B	SP2E120E-PIR ENERGY	SP2C160/120E-PIR
SP2B100E-PIR B	SP2E140E-PIR ENERGY	SP2C190/150E-PIR
SP2B110E-PIR B	SP2E160E-PIR ENERGY	SP2C210/170E-PIR
SP2B120E-PIR B	SP2E180E-PIR ENERGY	
SP2B150E-PIR B	SP2E200E-PIR ENERGY	
SP2B100E-PIR ENERGY	SP2E120E-PIR B ENERGY	
SP2B110E-PIR ENERGY	SP2E140E-PIR B ENERGY	
SP2B120E-PIR ENERGY	SP2E160E-PIR B ENERGY	
SP2B150E-PIR ENERGY		
SP2B100E-PIR B ENERGY		
SP2B110E-PIR B ENERGY		
SP2B120E-PIR B ENERGY		
SP2B150E-PIR B ENERGY		

Sandwich panel with E-PIRE polyisocyanurate core

SP2B80E-PIRE	SP2B80E-PIRE B
SP2B100E-PIRE	SP2B100E-PIRE B
SP2B110E-PIRE	SP2B110E-PIRE B
SP2B120E-PIRE	SP2B120E-PIRE B

2. Intended use: Self-supporting metal faced insulating panels for use in buildings; external walls, internal walls, ceilings and roofs.

Detailed intended use refers to the sandwich panel type – information in attachments to this declaration.

3. Manufacturer: Ruukki Polska Sp. z o.o.
ul. Jaktorowska 13, 96-300 Żyrardów, Poland
Oborniki branch
ul. Łukowska 7, 64-600 Oborniki, Poland

4. Authorized representative: not applicable
5. AVCP level: reaction to fire, fire resistance: 3; other properties: 4
- 6a. Harmonised standard: EN 14509:2013 "Self-supporting double skin metal faced insulating panels. Factory made products. Specifications"
- Notified body: Instytut Techniki Budowlanej (ITB) (1488)
FIRES S.R.O. (1396)
Eurofins Expert Services Oy (0809)
7. Declared performances: Technical product characteristics of specified product configuration are available in attachments to this Declaration of Performance.

The performance of the product identified above is in conformity with the set of declared performances. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

This Declaration of Performance is available on Ruukki web page:
<https://www.ruukki.com/building-envelopes/services-support/sandwich-panel-support/declaration-of-performance-for-sandwich-panels>

Signed for and on behalf of the manufacturer by:



Elżbieta Płaza
Certification Manager
Ruukki Construction

Helsinki, 08.06.2026

Declared technical characteristics of specified type of sandwich panel are available on the following pages:

ENERGY PANELS:

SP2B E-PIR Energy	Page 4
SP2B E-PIR B Energy	Page 5
SP2E E-PIR Energy	Page 6
SP2E E-PIR B Energy	Page 7

OTHER PANELS:

SP2B E-PIR	Page 8
SP2B E-PIR B	Page 9
SP2B E-PIRE	Page 10
SP2B E-PIRE B	Page 11
SP2D E-PIR	Page 12
SP2E E-PIR	Page 13
SP2E E-PIR B	Page 14
SP2C E-PIR	Page 15

Attachment 1 to Declaration of Performance 29

Panel type:						SP2B E-PIR ENERGY					
Reference to harmonized standard:						EN 14509:2013					
Intended use:						Internal or external walls					
Panel name:	SP2B 100 E-PIR ENERGY		SP2B 110 E-PIR ENERGY		SP2B 120 E-PIR ENERGY		SP2B 150 E-PIR ENERGY		Reference		
Year when CE mark was affixed:	15		20		23		24				
Thickness of external facing:	0,4* - 0,6						mm		(EN 10143)		
External facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095 S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095								(EN 10346)		
Coating of external facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²								(EN 10169)		
External facing profile:	L25, L, M, F, R28, R275, R550										
Thickness of internal facing:	0,4* - 0,6						mm		(EN 10143)		
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095 S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095								(EN 10346)		
Coating of internal facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²								(EN 10169)		
Internal facing profile:	L25, L, F										
Core material:	PIR										
Density of core material:	37				36				kg/m ³		
Nominal panel thickness:	100		110		120		152,5		mm		
Mass:	12,3		12,7		13,0		14,1		kg/m ²		
Mechanical resistance:											
Tensile strength:	0.10		0.10		0.10		0.10		MPa		
Shear strength:	0.09		0.09		0.09		0.09		MPa		
Reduced long term shear strength:	0.036		0.036		0.036		0.036		MPa		
Shear modulus (core):	3.00		3.00		3.00		2.65		MPa		
Compressive strength (core):	0.09		0.09		0.09		0.10		MPa		
Creep coefficient t=2000h:	NPD										
Creep coefficient t=100000h:	NPD										
Wrinkling strength (external face) at profiling L25:											
- in span	165		165		165		165		MPa		
- in span, elevated temperature	150		150		150		150		MPa		
- at internal support	115		115		115		115		MPa		
- at internal support, elevated temperature	103		103		103		103		MPa		
Wrinkling strength (external face) at profiling L, M:											
- in span	145		145		145		140		MPa		
- in span, elevated temperature	130		130		130		125		MPa		
- at internal support	115		115		115		115		MPa		
- at internal support, elevated temperature	103		103		103		103		MPa		
Wrinkling strength (external face) at profiling F, R28, R275, R550:											
- in span	90		90		90		90		MPa		
- in span, elevated temperature	81		81		81		81		MPa		
- at internal support	90		90		90		90		MPa		
- at internal support, elevated temperature	81		81		81		81		MPa		
Wrinkling strength (internal face) at profiling L25:											
- in span	165		165		165		165		MPa		
- at internal support	115		115		115		115		MPa		
Wrinkling strength (internal face) at profiling L:											
- in span	145		145		145		140		MPa		
- at internal support	115		115		115		103		MPa		
Wrinkling strength (internal face) at profiling F:											
- in span	90		90		90		90		MPa		
- at internal support	90		90		90		90		MPa		
Other properties:											
Thermal transmittance, U _g :	0.22		0.20		0.18		0.14		W/m ² K		
Thermal conductivity of the core, λ _{Declared} :	0.022								W/mK		
Reaction to fire:	B-s2, d0								Class (EN 13501-1)		
Fire resistance (wall, horizontal):	EI 15								Class (EN 13501-2)		
Fire resistance (wall, vertical):	EI 15								Class (EN 13501-2)		
External fire performance:	Not applicable										
Water permeability:	A								Class (EN 12865)		
Air permeability, pressure (per 1m ²):	n = 0,4812, C = 0,000972								(EN 12114)		
Air permeability, suction (per 1m ²):	n = 0,1976, C = 0,00261								(EN 12114)		
Water vapour permeability:	Impermeable										
Airborne sound insulation, R _w (C; C _p):	24 (-2; -4)								dB (EN ISO 717-1)		
Sound absorption, α _w :	0.10								(EN ISO 11654)		
Durability:	Pass - all colours										

* 0,4 mm facing is available only in L or L25 profiling

Detailed product/material specification is given on order confirmation or delivery documentation.

Attachment 2 to Declaration of Performance 29

Panel type:		SP2B E-PIR B ENERGY			
Reference to harmonized standard:	EN 14509:2013				
Intended use:	Internal or external walls				
Panel name:	SP2B 100 E-PIR B ENERGY	SP2B 110 E-PIR B ENERGY	SP2B 120 E-PIR B ENERGY	SP2B 150 E-PIR B ENERGY	Reference
Year when CE mark was affixed:	18	20	23	24	
Thickness of external facing:	0,4* - 0,6				mm (EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095 S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095				(EN 10346)
Coating of external facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²				(EN 10169)
External facing profile:	L25, L, M, R500, R250, R28, F				
Thickness of internal facing:	0,4* - 0,6				mm (EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095 S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095				(EN 10346)
Coating of internal facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²				(EN 10169)
Internal facing profile:	L25, L, F				
Core material:	PIR				
Density of core material:	37		36		kg/m ³
Nominal panel thickness:	100	110	120	152.5	mm
Mass:	12.3	12.7	13.1	14.1	kg/m ²
Mechanical resistance:					
Tensile strength:	0.10	0.10	0.10	0.10	MPa
Shear strength:	0.09	0.09	0.09	0.09	MPa
Reduced long term shear strength:	0.036	0.036	0.036	0.036	MPa
Shear modulus (core):	3.00	3.00	3.00	2.65	MPa
Compressive strength (core):	0.09	0.09	0.09	0.10	MPa
Creep coefficient t=2000h:	NPD				
Creep coefficient t=100000h:	NPD				
Wrinkling strength (external face) at profiling L25:					
- in span	165	165	165	165	MPa
- in span, elevated temperature	150	150	150	150	MPa
- at internal support	115	115	115	115	MPa
- at internal support, elevated temperature	103	103	103	103	MPa
Wrinkling strength (external face) at profiling L, M:					
- in span	145	145	145	140	MPa
- in span, elevated temperature	130	130	130	125	MPa
- at internal support	115	115	115	115	MPa
- at internal support, elevated temperature	103	103	103	103	MPa
Wrinkling strength (external face) at profiling R500, R250, R28, F:					
- in span	90	90	90	90	MPa
- in span, elevated temperature	81	81	81	81	MPa
- at internal support	90	90	90	90	MPa
- at internal support, elevated temperature	81	81	81	81	MPa
Wrinkling strength (internal face) at profiling L25:					
- in span	165	165	165	165	MPa
- at internal support	115	115	115	115	MPa
Wrinkling strength (internal face) at profiling L:					
- in span	145	145	145	140	MPa
- at internal support	115	115	115	103	MPa
Wrinkling strength (internal face) at profiling F:					
- in span	90	90	90	90	MPa
- at internal support	90	90	90	90	MPa
Other properties:					
Thermal transmittance, U _{g,ext} :	0.22	0.20	0.18	0.14	W/m ² K
Thermal conductivity of the core, λ _{Declared} :	0.022				W/mK
Reaction to fire:	B-s2, d0				Class (EN 13501-1)
Fire resistance (wall, horizontal):	EI 15				Class (EN 13501-2)
Fire resistance (wall, vertical):	EI 15				Class (EN 13501-2)
External fire performance:	Not applicable				
Water permeability:	A				Class (EN 12865)
Air permeability, pressure (per 1m ²):	n = 0,4812, C = 0,000972				(EN 12114)
Air permeability, suction (per 1m ²):	n = 0,1976, C = 0,00261				(EN 12114)
Water vapour permeability:	Impermeable				
Airborne sound insulation, R _w (C; C ₂):	24 (-2; -4)				dB (EN ISO 717-1)
Sound absorption, α _w :	0.10				(EN ISO 11654)
Durability:	Pass - all colours				

* 0,4 mm facing is available only in L or L25 profiling

Detailed product/material specification is given on order confirmation or delivery documentation.

Attachment 3 to Declaration of Performance 29

Panel type:		SP2E E-PIR ENERGY					
Reference to harmonized standard:		EN 14509:2013					
Intended use:		Internal or external walls					
Panel name:	SP2E 120 E-PIR ENERGY	SP2E 140 E-PIR ENERGY	SP2E 160 E-PIR ENERGY	SP2E 180 E-PIR ENERGY	SP2E 200 E-PIR ENERGY	Reference	
Year when CE mark was affixed:	15						
Thickness of external facing:	0,5 - 0,6						
External facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095, S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095						
Coating of external facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²						
External facing profile:	L25, L, M, F, R28, R275, R550						
Thickness of internal facing:	0,4* - 0,6						
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095, S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095						
Coating of internal facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²						
Internal facing profile:	L25, L, F						
Core material:	PIR						
Density of core material:	36	37	38			kg/m ³	
Nominal panel thickness:	120	140	160	180	200	mm	
Mass:	13.0	13.7	14.5	15.4	16.2	kg/m ²	
Mechanical resistance:							
Tensile strength:	0.10	0.10	0.10	0.10	0.10	MPa	
Shear strength:	0.09	0.09	0.09	0.09	0.09	MPa	
Reduced long term shear strength:	0.036	0.036	0.036	0.036	0.036	MPa	
Shear modulus (core):	3.00	3.00	2.65	2.47	2.30	MPa	
Compressive strength (core):	0.09	0.10	0.10	0.10	0.10	MPa	
Creep coefficient t=2000h:	NPD						
Creep coefficient t=100000h:	NPD						
Wrinkling strength (external face) at profiling L25:							
- in span	165	165	165	165	165	MPa	
- in span, elevated temperature	150	150	150	150	150	MPa	
- at internal support	115	115	115	115	115	MPa	
- at internal support, elevated temperature	103	103	103	103	103	MPa	
Wrinkling strength (external face) at profiling L, M:							
- in span	145	145	135	130	130	MPa	
- in span, elevated temperature	130	130	120	115	115	MPa	
- at internal support	115	115	103	103	103	MPa	
- at internal support, elevated temperature	103	103	92	92	92	MPa	
Wrinkling strength (external face) at profiling F, R28, R275, R550:							
- in span	90	90	90	90	90	MPa	
- in span, elevated temperature	81	81	81	81	81	MPa	
- at internal support	90	90	90	90	90	MPa	
- at internal support, elevated temperature	81	81	81	81	81	MPa	
Wrinkling strength (internal face) at profiling L25:							
- in span	165	165	165	165	165	MPa	
- at internal support	115	115	115	115	115	MPa	
Wrinkling strength (internal face) at profiling L:							
- in span	145	145	135	130	130	MPa	
- at internal support	115	115	103	103	103	MPa	
Wrinkling strength (internal face) at profiling F:							
- in span	90	90	90	90	90	MPa	
- at internal support	90	90	90	90	90	MPa	
Other properties:							
Thermal transmittance, U _{g,ext} :	0.18	0.16	0.14	0.12	0.11	W/m ² K	
Thermal conductivity of the core, λ _{Declared} :	0.022						
Reaction to fire:	B-s2, d0						
Fire resistance (wall, horizontal):	EI 30						
Fire resistance (wall, vertical):	EI 30						
External fire performance:	Not applicable						
Water permeability:	A						
Air permeability, pressure (per 1m ²):	n = 1,1439, C = 0,000128						
Air permeability, suction (per 1m ²):	n = 0,5712, C = 0,00775						
Water vapour permeability:	Impermeable						
Airborne sound insulation, R _w (C; C ₂):	24 (-2; -4)						
Sound absorption, α _w :	0.10						
Durability:	Pass - all colours						

* 0,4 mm internal facing is available for 120 -160 mm thick panel in L or L25 profiling

Detailed product/material specification is given on order confirmation or delivery documentation.

Attachment 4 to Declaration of Performance 29

Panel type:		SP2E E-PIR B ENERGY			
Reference to harmonized standard:		EN 14509:2013			
Intended use:		Internal or external walls			
Panel name:	SP2E 120 E-PIR B ENERGY	SP2E 140 E-PIR B ENERGY	SP2E 160 E-PIR B ENERGY	Reference	
Year when CE mark was affixed:	18				
Thickness of external facing:	0,5 - 0,6				
External facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095 S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095				
Coating of external facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²				
External facing profile:	L25, L, M, R500, R250, R28, F				
Thickness of internal facing:	0,4* - 0,6				
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095 S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095				
Coating of internal facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²				
Internal facing profile:	L25, L, F				
Core material:	PIR				
Density of core material:	36	37		kg/m ³	
Nominal panel thickness:	120	140	160	mm	
Mass:	13,1	13,8	14,6	kg/m ²	
Mechanical resistance:					
Tensile strength:	0.10	0.10	0.10	MPa	
Shear strength:	0.09	0.09	0.09	MPa	
Reduced long term shear strength:	0.036	0.036	0.036	MPa	
Shear modulus (core):	3.00	3.00	2.65	MPa	
Compressive strength (core):	0.09	0.10	0.10	MPa	
Creep coefficient t=2000h:	NPD				
Creep coefficient t=100000h:	NPD				
Wrinkling strength (external face) at profiling L25:					
- in span	165	165	165	MPa	
- in span, elevated temperature	150	150	150	MPa	
- at internal support	115	115	115	MPa	
- at internal support, elevated temperature	103	103	103	MPa	
Wrinkling strength (external face) at profiling L, M:					
- in span	145	145	135	MPa	
- in span, elevated temperature	130	130	120	MPa	
- at internal support	115	115	103	MPa	
- at internal support, elevated temperature	103	103	92	MPa	
Wrinkling strength (external face) at profiling R500, R250, R28, F:					
- in span	90	90	90	MPa	
- in span, elevated temperature	81	81	81	MPa	
- at internal support	90	90	90	MPa	
- at internal support, elevated temperature	81	81	81	MPa	
Wrinkling strength (internal face) at profiling L25:					
- in span	165	165	165	MPa	
- at internal support	115	115	115	MPa	
Wrinkling strength (internal face) at profiling L:					
- in span	145	145	135	MPa	
- at internal support	115	115	103	MPa	
Wrinkling strength (internal face) at profiling F:					
- in span	90	90	90	MPa	
- at internal support	90	90	90	MPa	
Other properties:					
Thermal transmittance, U _{g,s*} :	0.18	0.16	0.14	W/m ² K	
Thermal conductivity of the core, λ _{Declared} :	0.022				
Reaction to fire:	B-s2, d0				
Fire resistance (wall, horizontal):	EI 30				
Fire resistance (wall, vertical):	EI 30				
External fire performance:	Not applicable				
Water permeability:	A				
Air permeability, pressure (per 1m ²):	n = 1,1439, C = 0,000128				
Air permeability, suction (per 1m ²):	n = 0,5712, C = 0,00775				
Water vapour permeability:	Impermeable				
Airborne sound insulation, R _w (C; C ₂):	24 (-2; -4)				
Sound absorption, α _w :	0.10				
Durability:	Pass - all colours				

* 0,4 mm internal facing is available only in L or L25 profiling

Detailed product/material specification is given on order confirmation or delivery documentation.

Attachment 5 to Declaration of Performance 29

Panel type:	SP2B E-PIR								
Reference to harmonized standard:	EN 14509:2013								
Intended use:	Internal or external walls, ceilings								
Panel name:	SP2B 40 E-PIR	SP2B 60 E-PIR	SP2B 80 E-PIR	SP2B 100 E-PIR	SP2B 110 E-PIR	SP2B 120 E-PIR	SP2B 150 E-PIR	Reference	
Year when CE mark was affixed:	15			20		23		24	
Thickness of external facing:	0,4* - 0,6								
External facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095 S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095								
Coating of external facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²								
External facing profile:	L25, L, M, F, R28, R275, R550								
Thickness of internal facing:	0,4** - 0,6								
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095 S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095								
Coating of internal facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²								
Internal facing profile:	L25, L, F								
Core material:	PIR								
Density of core material:	40	37.5	37	36				kg/m ³	
Nominal panel thickness:	40	60	80	100	110	120	152.5	mm	
Mass:	10.0	10.8	11.5	12.3	12.6	13.0	14.1	kg/m ²	
Mechanical resistance:									
Tensile strength:	0.09	0.09	0.10	0.10	0.10	0.10	0.10	MPa	
Shear strength:	0.09	0.09	0.09	0.09	0.09	0.09	0.09	MPa	
Reduced long term shear strength:	0.036	0.036	0.036	0.036	0.036	0.036	0.036	MPa	
Shear modulus (core):	3.00	3.00	3.00	3.00	3.00	3.00	2.65	MPa	
Compressive strength (core):	0.09	0.09	0.09	0.09	0.09	0.09	0.10	MPa	
Creep coefficient t=2000h:	2.4	2.4	2.4	2.4	2.4	2.4	2.4		
Creep coefficient t=10000h:	7.0	7.0	7.0	7.0	7.0	7.0	7.0		
Wrinkling strength (external face) at profiling L25:									
- in span	120	120	165	165	165	165	165	MPa	
- in span, elevated temperature	108	108	150	150	150	150	150	MPa	
- at internal support	110	110	115	115	115	115	115	MPa	
- at internal support, elevated temperature	99	99	103	103	103	103	103	MPa	
Wrinkling strength (external face) at profiling L, M:									
- in span	120	120	145	145	145	145	140	MPa	
- in span, elevated temperature	108	108	130	130	130	130	125	MPa	
- at internal support	110	110	124	124	124	124	103	MPa	
- at internal support, elevated temperature	99	99	111	111	111	111	92	MPa	
Wrinkling strength (external face) at profiling F, R28, R275, R550:									
- in span	90	90	90	90	90	90	90	MPa	
- in span, elevated temperature	81	81	81	81	81	81	81	MPa	
- at internal support	90	90	90	90	90	90	90	MPa	
- at internal support, elevated temperature	81	81	81	81	81	81	81	MPa	
Wrinkling strength (internal face) at profiling L25:									
- in span	120	120	165	165	165	165	165	MPa	
- at internal support	110	110	115	115	115	115	115	MPa	
Wrinkling strength (internal face) at profiling L:									
- in span	120	120	145	145	145	145	140	MPa	
- at internal support	110	110	115	115	115	115	103	MPa	
Wrinkling strength (internal face) at profiling F:									
- in span	90	90	90	90	90	90	90	MPa	
- at internal support	90	90	90	90	90	90	90	MPa	
Resistance to repeated access load:	Passed								
Resistance to point load:	NPD			1.2 kN 5.0m		1.2 kN 6.0 m		MPa	
Other properties:									
Thermal transmittance, U _{d,t} :	0.56	0.36	0.27	0.22	0.20	0.18	0.14	W/m ² K	
Thermal conductivity of the core, λ _{Declared} :	0.022								
Reaction to fire:	B-s2, d0								
Fire resistance (wall, horizontal):	NPD			EI 15				Class (EN 13501-2)	
Fire resistance (wall, vertical):	NPD			EI 15				Class (EN 13501-2)	
Fire resistance (ceiling):	NPD								
External fire performance:	Not applicable								
Water permeability:	A								
Air permeability, pressure (per 1m ²), panels with gasket:	NPD			n = 0,4812, C = 0,000972					Class (EN 12865)
Air permeability, suction (per 1m ²), panels with gasket:	NPD			n = 0,1976, C = 0,00261					Class (EN 12114)
Air permeability, panels without gasket:	NPD								
Water vapour permeability:	Impermeable								
Airborne sound insulation, R _w (C; C _n):	24 (-2; -4)								
Sound absorption, α _w :	0.10								
Durability:	Pass - all colours								

* 0,4 mm external facing is available for 80 -150 mm thick panel in L or L25 profiling
** 0,4 mm internal facing is available only in L or L25 profiling

Detailed product/material specification is given on order confirmation or delivery documentation.

Attachment 6 to Declaration of Performance 29

Panel type:		SP2B E-PIR B							
Reference to harmonized standard:		EN 14509:2013							
Intended use:		Internal or external walls, ceilings							
Panel name:	SP2B 60 E-PIR B	SP2B 80 E-PIR B	SP2B 100 E-PIR B	SP2B 110 E-PIR B	SP2B 120 E-PIR B	SP2B 150 E-PIR B	Reference		
Year when CE mark was affixed:	21	18		20	23	24			
Thickness of external facing:	0,4* - 0,6						mm	(EN 10143)	
External facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095, S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095						(EN 10346)		
Coating of external facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²						(EN 10169)		
External facing profile:	L25, L, M R500, R250, R28, F								
Thickness of internal facing:	0,4** - 0,6						mm	(EN 10143)	
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095, S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095						(EN 10346)		
Coating of internal facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²						(EN 10169)		
Internal facing profile:	L25, L, F								
Core material:	PIR								
Density of core material:	37.5	37	36				kg/m ³		
Nominal panel thickness:	60	80	100	110	120	152.5	mm		
Mass:	10.8	11.6	12.3	12.7	13.1	14.1	kg/m ²		
Mechanical resistance:									
Tensile strength:	0.09	0.10	0.10	0.10	0.10	0.10	MPa		
Shear strength:	0.09	0.09	0.09	0.09	0.09	0.09	MPa		
Reduced long term shear strength:	0.036	0.036	0.036	0.036	0.036	0.036	MPa		
Shear modulus (core):	3.00	3.00	3.00	3.00	3.00	2.65	MPa		
Compressive strength (core):	0.09	0.09	0.09	0.09	0.09	0.10	MPa		
Creep coefficient t=2000h:	2.4	2.4	2.4	2.4	2.4	2.4			
Creep coefficient t=100000h:	7.0	7.0	7.0	7.0	7.0	7.0			
Wrinkling strength (external face) at profiling L25:									
- in span	120	165	165	165	165	165	MPa		
- in span, elevated temperature	108	150	150	150	150	150	MPa		
- at internal support	110	115	115	115	115	115	MPa		
- at internal support, elevated temperature	99	103	103	103	103	103	MPa		
Wrinkling strength (external face) at profiling L, M:									
- in span	120	145	145	145	145	140	MPa		
- in span, elevated temperature	108	130	130	130	130	125	MPa		
- at internal support	110	115	115	115	115	103	MPa		
- at internal support, elevated temperature	99	103	103	103	103	92	MPa		
Wrinkling strength (external face) at profiling R500, R250, R28, F:									
- in span	90	90	90	90	90	90	MPa		
- in span, elevated temperature	81	81	81	81	81	81	MPa		
- at internal support	90	90	90	90	90	90	MPa		
- at internal support, elevated temperature	81	81	81	81	81	81	MPa		
Wrinkling strength (internal face) at profiling L25:									
- in span	120	165	165	165	165	165	MPa		
- at internal support	110	115	115	115	115	115	MPa		
Wrinkling strength (internal face) at profiling L:									
- in span	120	145	145	140	140	140	MPa		
- at internal support	110	115	115	115	115	103	MPa		
Wrinkling strength (internal face) at profiling F:									
- in span	90	90	90	90	90	90	MPa		
- at internal support	90	90	90	90	90	90	MPa		
Resistance to repeated access load:	Passed								
Resistance to point load:	NPD		1.2 kN 5.0m		1.2 kN 6.0 m				
Other properties:									
Thermal transmittance, U _{0,2} :	0.36	0.27	0.22	0.20	0.18	0.14	W/m ² K		
Thermal conductivity of the core, λ _{Declared} :	0.022						W/mK		
Reaction to fire:	B-s2, d0						Class	(EN 13501-1)	
Fire resistance (wall, horizontal):	NPD					EI 15	Class	(EN 13501-2)	
Fire resistance (wall, vertical):	NPD					EI 15	Class	(EN 13501-2)	
Fire resistance (ceiling):	NPD								
External fire performance:	Not applicable								
Water permeability:	A						Class	(EN 12865)	
Air permeability, pressure (per 1m ²), panels with gasket:	NPD					n = 0,4812, C = 0,000972	(EN 12114)		
Air permeability, suction (per 1m ²), panels with gasket:	NPD					n = 0,1976, C = 0,00261	(EN 12114)		
Air permeability, panels without gasket:	NPD								
Water vapour permeability:	Impermeable								
Airborne sound insulation, R _w (C; C ₂):	24 (-2; -4)						dB	(EN ISO 717-1)	
Sound absorption, α _w :	0.10						(EN ISO 11654)		
Durability:	Pass - all colours								

* 0,4 mm external facing is available for 80 -150 mm thick panel in L or L25 profiling

** 0,4 mm internal facing is available only in L or L25 profiling

Detailed product/material specification is given on order confirmation or delivery documentation.

Attachment 7 to Declaration of Performance 29

Panel type:		SP2B E-PIRE				
Reference to harmonized standard:	EN 14509:2013					
Intended use:	Internal or external walls					
Panel name:	SP2B 80 E-PIRE	SP2B 100 E-PIRE	SP2B 110 E-PIRE	SP2B 120 E-PIRE	Reference	
Year when CE mark was affixed:	18		20	23		
Thickness of external facing:	0,4* - 0,6				mm (EN 10143)	
External facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095 S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095				(EN 10346)	
Coating of external facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²				(EN 10169)	
External facing profile:	L25, L, M					
Thickness of internal facing:	0,4 - 0,6				mm (EN 10143)	
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095 S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095				(EN 10346)	
Coating of internal facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²				(EN 10169)	
Internal facing profile:	L25					
Core material:	PIR					
Density of core material:	34,5				kg/m ³	
Nominal panel thickness:	80	100	110	120	mm	
Mass:	11,4	12,1	12,4	12,8	kg/m ²	
Mechanical resistance:						
Tensile strength:	0,08	0,08	0,08	0,08	MPa	
Shear strength:	0,09	0,09	0,09	0,09	MPa	
Reduced long term shear strength:	0,036	0,036	0,036	0,036	MPa	
Shear modulus (core):	3,0	3,0	3,0	3,0	MPa	
Compressive strength (core):	0,07	0,07	0,07	0,07	MPa	
Creep coefficient t=2000h:	NPD					
Creep coefficient t=100000h:	NPD					
Wrinkling strength (external face) at profiling L25:						
- in span	145	145	145	145	MPa	
- in span, elevated temperature	130	130	130	130	MPa	
- at internal support	95	95	95	95	MPa	
- at internal support, elevated temperature	80	80	80	80	MPa	
Wrinkling strength (external face) at profiling L, M:						
- in span	120	120	120	120	MPa	
- in span, elevated temperature	108	108	108	108	MPa	
- at internal support	80	80	80	80	MPa	
- at internal support, elevated temperature	70	70	70	70	MPa	
Wrinkling strength (internal face) at profiling L25:						
- in span	145	145	145	145	MPa	
- at internal support	100	100	100	100	MPa	
Other properties:						
Thermal transmittance, U _{d,s} †:	0,27	0,22	0,20	0,18	W/m ² K	
Thermal conductivity of the core, λ _{Declared} †:	0,022				W/mK	
Reaction to fire:	B-s2, d0				Class (EN 13501-1)	
Fire resistance (wall, horizontal):	NPD	EI 15			Class (EN 13501-2)	
Fire resistance (wall, vertical):	NPD					
External fire performance:	Not applicable					
Water permeability:	A				Class (EN 12865)	
Air permeability, pressure (per 1m ²), panels with gasket:	NPD	n = 0,4812, C = 0,000972			(EN 12114)	
Air permeability, suction (per 1m ²), panels with gasket:	NPD	n = 0,1976, C = 0,00261			(EN 12114)	
Air permeability, panels without gasket:	NPD					
Water vapour permeability:	Impermeable					
Airborne sound insulation, R _w (C; C ₂):	24 (-2; -4)				dB (EN ISO 717-1)	
Sound absorption, α _w †:	0,10				(EN ISO 11654)	
Durability:	Pass - all colours					

* 0,4 mm facing is available only in L25 profiling

Detailed product/material specification is given on order confirmation or delivery documentation.

Attachment 8 to Declaration of Performance 29

Panel type		SP2B E-PIRE B				
Reference to harmonized standard:	EN 14509:2013					
Intended use:	Internal or external walls					
Panel name:	SP2B 80 E-PIRE B	SP2B 100 E-PIRE B	SP2B 110 E-PIRE B	SP2B 120 E-PIRE B	Reference	
Year when CE mark was affixed:	18		20		23	
Thickness of external facing:	0,40* - 0,60					
External facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095 S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095				(EN 10346)	
Coating of external facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²				(EN 10169)	
External facing profile:	L25, L, M					
Thickness of internal facing:	0,40 - 0,60				mm (EN 10143)	
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095 S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095				(EN 10346)	
Coating of internal facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²				(EN 10169)	
Internal facing profile:	L25					
Core material:	PIR					
Density of core material:	34,5				kg/m ³	
Nominal panel thickness:	80	100	110	120	mm	
Mass:	11,4	12,1	12,4	12,8	kg/m ²	
Mechanical resistance:						
Tensile strength:	0,08	0,08	0,08	0,08	MPa	
Shear strength:	0,09	0,09	0,09	0,09	MPa	
Reduced long term shear strength:	0,036	0,036	0,036	0,036	MPa	
Shear modulus (core):	3,0	3,0	3,0	3,0	MPa	
Compressive strength (core):	0,07	0,07	0,07	0,07	MPa	
Creep coefficient t=2000h:	NPD					
Creep coefficient t=100000h:	NPD					
Wrinkling strength (external face) at profiling L25:						
- in span	145	145	145	145	MPa	
- in span, elevated temperature	130	130	130	130	MPa	
- at internal support	95	95	95	95	MPa	
- at internal support, elevated temperature	80	80	80	80	MPa	
Wrinkling strength (external face) at profiling L, M:						
- in span	120	120	120	120	MPa	
- in span, elevated temperature	108	108	108	108	MPa	
- at internal support	80	80	80	80	MPa	
- at internal support, elevated temperature	70	70	70	70	MPa	
Wrinkling strength (internal face) at profiling L25:						
- in span	145	145	145	145	MPa	
- at internal support	100	100	100	100	MPa	
Other properties:						
Thermal transmittance, U _{d,s} :	0,27	0,22	0,20	0,18	W/m ² K	
Thermal conductivity of the core, λ _{Declared} :	0,022				W/mK	
Reaction to fire:	B-s2, d0				Class (EN 13501-1)	
Fire resistance (wall, horizontal):	NPD	EI 15			Class (EN 13501-2)	
Fire resistance (wall, vertical):	NPD					
External fire performance:	Not applicable					
Water permeability:	A				Class (EN 12865)	
Air permeability, pressure (per 1m ²), panels with gasket:	NPD	n = 0,4812, C = 0,000972			(EN 12114)	
Air permeability, suction (per 1m ²), panels with gasket:	NPD	n = 0,1976, C = 0,00261			(EN 12114)	
Air permeability, panels without gasket:	NPD					
Water vapour permeability:	Impermeable					
Airborne sound insulation, R _w (C; C ₂):	24 (-2; -4)				dB (EN ISO 717-1)	
Sound absorption, α _w :	0,10				(EN ISO 11654)	
Durability:	Pass - all colours					

* 0,4 mm facing is available only in L25 profiling

Detailed product/material specification is given on order confirmation or delivery documentation.

Attachment 9 to Declaration of Performance 29

Panel type		SP2D E-PIR				
Reference to harmonized standard:	EN 14509:2013					
Intended use:	External walls					
Panel name:	SP2D 60 E-PIR	SP2D 80 E-PIR	SP2D 100 E-PIR	SP2D 120 E-PIR	Reference	
Year when CE mark was affixed:	15					
Thickness of external facing:	0,5 - 0,6					
External facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095, S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095					
Coating of external facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²					
External facing profile:	L, M, R500, R250, R28, F					
Thickness of internal facing:	0,4* - 0,6					
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095, S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095					
Coating of internal facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²					
Internal facing profile:	L25, L, F					
Core material:	PIR					
Density of core material:	38.5					
Nominal panel thickness:	60	80	100	120	mm	
Mass:	11.2	11.9	12.7	13.4	kg/m ²	
Mechanical resistance:						
Tensile strength:	0.09	0.09	0.09	0.09	MPa	
Shear strength:	0.09	0.09	0.09	0.09	MPa	
Reduced long term shear strength:	0.036	0.036	0.036	0.036	MPa	
Shear modulus (core):	3.00	3.00	3.00	3.00	MPa	
Compressive strength (core):	0.085	0.085	0.09	0.09	MPa	
Creep coefficient t=2000h:	NPD					
Creep coefficient t=100000h:	NPD					
Wrinkling strength (external face) at profiling L, M:						
- in span	120	140	140	140	MPa	
- in span, elevated temperature	108	126	126	126	MPa	
- at internal support	110	115	115	115	MPa	
- at internal support, elevated temperature	99	103	103	103	MPa	
Wrinkling strength (external face) at profiling R500, R250, R28, F:						
- in span	90	90	90	90	MPa	
- in span, elevated temperature	81	81	81	81	MPa	
- at internal support	90	90	90	90	MPa	
- at internal support, elevated temperature	81	81	81	81	MPa	
Wrinkling strength (internal face) at profiling L25:						
- in span	140	165	165	165	MPa	
- at internal support	115	115	115	115	MPa	
Wrinkling strength (internal face) at profiling L:						
- in span	120	140	140	140	MPa	
- at internal support	110	115	115	115	MPa	
Wrinkling strength (internal face) at profiling F:						
- in span	90	90	90	90	MPa	
- at internal support	90	90	90	90	MPa	
Other properties:						
Thermal transmittance, U _{g,s} *	0.38	0.28	0.22	0.18	W/m ² K	
Thermal conductivity of the core, λ _{declared} :	0.022					
Reaction to fire:	B-s2, d0					
Fire resistance (wall, horizontal):	NPD					
Fire resistance (wall, vertical):	NPD		EI 15-ef (i→o) / EI 15-ef (o→i)			
External fire performance:	Not applicable					
Water permeability:	A					
Air permeability:	NPD					
Water vapour permeability:	Impermeable					
Airborne sound insulation, R _w (C; C _w):	24 (-2; -4)					
Sound absorption, α _w :	0.10					
Durability:	Pass - all colours					

* 0,4 mm facing is available only in L or L25 profiling

Detailed product/material specification is given on order confirmation or delivery documentation.

Attachment 10 to Declaration of Performance 29

Panel type	SP2E E-PIR						
Reference to harmonized standard:	EN 14509:2013						
Intended use:	Internal or external walls, ceilings						
Panel name:	SP2E 120 E-PIR	SP2E 140 E-PIR	SP2E 160 E-PIR	SP2E 180 E-PIR	SP2E 200 E-PIR	Reference	
Year when CE mark was affixed:	15						
Thickness of external facing:	0,5 - 0,6					mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095, S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095						(EN 10346)
Coating of external facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²						
External facing profile:	L25, L, M, F, R28, R275, R550						
Thickness of internal facing:	0,4* - 0,6					mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095, S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095						(EN 10346)
Coating of internal facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²						
Internal facing profile:	L25, L, F						
Core material:	PIR						
Density of core material:	36	37		38		kg/m ³	
Nominal panel thickness:	120	140	160	180	200	mm	
Mass:	13.0	13.7	14.5	15.4	16.2	kg/m ²	
Mechanical resistance:							
Tensile strength:	0.10	0.10	0.10	0.10	0.10	MPa	
Shear strength:	0.09	0.09	0.09	0.09	0.09	MPa	
Reduced long term shear strength:	0.036	0.036	0.036	0.036	0.036	MPa	
Shear modulus (core):	3.00	3.00	2.65	2.47	2.30	MPa	
Compressive strength (core):	0.09	0.10	0.10	0.10	0.10	MPa	
Creep coefficient t=2000h:	2.4	2.4	2.4	2.4	2.4		
Creep coefficient t=100000h:	7.0	7.0	7.0	7.0	7.0		
Wrinkling strength (external face) at profiling L25:							
- in span	165	165	165	165	165	MPa	
- in span, elevated temperature	150	150	150	150	150	MPa	
- at internal support	115	115	115	115	115	MPa	
- at internal support, elevated temperature	103	103	103	103	103	MPa	
Wrinkling strength (external face) at profiling L, M:							
- in span	145	145	135	130	130	MPa	
- in span, elevated temperature	130	130	120	115	115	MPa	
- at internal support	115	115	103	103	103	MPa	
- at internal support, elevated temperature	103	103	92	92	92	MPa	
Wrinkling strength (external face) at profiling F, R28, R275, R550:							
- in span	90	90	90	90	90	MPa	
- in span, elevated temperature	81	81	81	81	81	MPa	
- at internal support	90	90	90	90	90	MPa	
- at internal support, elevated temperature	81	81	81	81	81	MPa	
Wrinkling strength (internal face) at profiling L25:							
- in span	165	165	165	165	165	MPa	
- at internal support	115	115	115	115	115	MPa	
Wrinkling strength (internal face) at profiling L:							
- in span	145	145	135	130	130	MPa	
- at internal support	115	115	103	103	103	MPa	
Wrinkling strength (internal face) at profiling F:							
- in span	90	90	90	90	90	MPa	
- at internal support	90	90	90	90	90	MPa	
Resistance to repeated access load:	Passed						
Resistance to point load:	1.2 kN 6.0 m						
Other properties:							
Thermal transmittance, U _{ds} :	0.18	0.16	0.14	0.12	0.11	W/m ² K	
Thermal conductivity of the core, λ _{Declared} :	0.022					W/mK	
Reaction to fire:	B-s2, d0					Class	(EN 13501-1)
Fire resistance (wall):	EI 30					Class	(EN 13501-2)
Fire resistance (wall):	EI 30					Class	(EN 13501-2)
Fire resistance (ceiling):	EI 30						
External fire performance:	Not applicable						
Water permeability:	A					Class	(EN 12865)
Air permeability, pressure (per 1m ²), panels with gasket:	n = 1,1439, C = 0,000128						
Air permeability, suction (per 1m ²), panels with gasket:	n = 0,5712, C = 0,00775						
Air permeability, panels without gasket:	NPD						
Water vapour permeability:	Impermeable						
Airborne sound insulation, R _w (C; C _w):	24 (-2; -4)					dB	(EN ISO 717-1)
Sound absorption, α _w :	0.10						
Durability:	Pass - all colours						

* 0,4 mm internal facing is available for 120 -160 mm thick panel in L or L25 profiling

Detailed product/material specification is given on order confirmation or delivery documentation.

Attachment 11 to Declaration of Performance 29

Panel type		SP2E E-PIR B			
Reference to harmonized standard:	EN 14509:2013				
Intended use:	Internal or external walls, ceilings				
Panel name:	SP2E 120 E-PIR B	SP2E 140 E-PIR B	SP2E 160 E-PIR B	Reference	
Year when CE mark was affixed:	18				
Thickness of external facing:	0,5 - 0,6				
External facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095 S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095				(EN 10346)
Coating of external facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²				(EN 10169)
External facing profile:	L25, L, M, R500, R250, R28, F				
Thickness of internal facing:	0,4* - 0,6				
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095 S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095				(EN 10346)
Coating of internal facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²				(EN 10169)
Internal facing profile:	L25, L, F				
Core material:	PIR				
Density of core material:	36		37		kg/m ³
Nominal panel thickness:	120	140	160		mm
Mass:	13.1	13.8	14.6		kg/m ²
Mechanical resistance:					
Tensile strength:	0.10	0.10	0.10		MPa
Shear strength:	0.09	0.09	0.09		MPa
Reduced long term shear strength:	0.036	0.036	0.036		MPa
Shear modulus (core):	3.00	3.00	2.65		MPa
Compressive strength (core):	0.09	0.10	0.10		MPa
Creep coefficient t=2000h:	2.4	2.4	2.4		
Creep coefficient t=100000h:	7.0	7.0	7.0		
Wrinkling strength (external face) at profiling L25:					
- in span	165	165	165		MPa
- in span, elevated temperature	150	150	150		MPa
- at internal support	115	115	115		MPa
- at internal support, elevated temperature	103	103	103		MPa
Wrinkling strength (external face) at profiling L, M:					
- in span	145	145	135		MPa
- in span, elevated temperature	130	130	120		MPa
- at internal support	115	115	103		MPa
- at internal support, elevated temperature	103	103	92		MPa
Wrinkling strength (external face) at profiling R500, R250, R28, F:					
- in span	90	90	90		MPa
- in span, elevated temperature	81	81	81		MPa
- at internal support	90	90	90		MPa
- at internal support, elevated temperature	81	81	81		MPa
Wrinkling strength (internal face) at profiling L25:					
- in span	165	165	165		MPa
- at internal support	115	115	115		MPa
Wrinkling strength (internal face) at profiling L:					
- in span	145	145	135		MPa
- at internal support	115	115	103		MPa
Wrinkling strength (internal face) at profiling F:					
- in span	90	90	90		MPa
- at internal support	90	90	90		MPa
Resistance to repeated access load:	Passed				
Resistance to point load:	1.2 kN 6.0 m				
Other properties:					
Thermal transmittance, U _{ds} *:	0.18	0.16	0.14		W/m ² K
Thermal conductivity of the core, λ _{Declared} :					W/mK
Reaction to fire:	B-s2, d0				Class (EN 13501-1)
Fire resistance (wall, horizontal):	EI 30				Class (EN 13501-2)
Fire resistance (wall, vertical):	EI 30				Class (EN 13501-2)
Fire resistance (ceiling):	EI 30				
External fire performance:	Not applicable				
Water permeability:	A				Class (EN 12865)
Air permeability, pressure (per 1m ²), panels with gasket:	n = 1,1439, C = 0,000128				(EN 12114)
Air permeability, suction (per 1m ²), panels with gasket:	n = 0,5712, C = 0,00775				(EN 12114)
Air permeability, panels without gasket:	NPD				
Water vapour permeability:	Impermeable				
Airborne sound insulation, R _w (C; C _v):	24 (-2; -4)				dB (EN ISO 717-1)
Sound absorption, α _w :	0.10				
Durability:	Pass - all colours				

* 0,4 mm internal facing is available only in L or L25 profiling

Detailed product/material specification is given on order confirmation or delivery documentation.

Attachment 12 to Declaration of Performance 29

Panel type		SP2C E-PIR							
Reference to harmonized standard:		EN 14509:2013							
Intended use:		Roof panel							
Panel name:	SP2C 80/40 E-PIR	SP2C 100/60 E-PIR	SP2C 120/80 E-PIR	SP2C 140/100 E-PIR	SP2C 160/120 E-PIR	SP2C 190/150 E-PIR	SP2C 210/170 E-PIR	Reference	
Year when CE mark was affixed:	15			20			15		
Thickness of external facing:	0,5 - 0,6								mm (EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZM140, S280GD+ZM120, S280GD+ZA255 S250GD+Z275, S250GD+Z190, S250GD+ZM140, S250GD+ZM120, S250GD+ZA255								(EN 10346)
Coating of external facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²								(EN 10169)
External facing profile:	T								
Thickness of internal facing:	0,4 - 0,6								mm (EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+ZA255, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100, S280GD+ZA095 S250GD+Z275, S250GD+Z190, S250GD+ZA255, S250GD+Z100, S250GD+ZM140, S250GD+ZM120, S250GD+ZM100, S250GD+ZA095								(EN 10346)
Coating of internal facing:	Polyester, GreenCoat Hiarc max, GreenCoat Pural BT Satin, GreenCoat Pural BT Metallic or other colour coating with PCS ≤ 4,0 MJ/m ²								(EN 10169)
Internal facing profile:	L25								
Core material:	PIR								
Density of core material:	37.5								kg/m ³
Nominal panel thickness:	40	60	80	100	120	150	170	mm	
Mass:	10.5	11.3	11.9	12.7	13.4	14.5	15.5	kg/m ²	
Mechanical resistance:									
Tensile strength:	0.07	0.07	0.07	0.07	0.07	0.07	0.07	MPa	
Shear strength:	0.10	0.10	0.10	0.10	0.10	0.09	0.09	MPa	
Reduced long term shear strength:	0.04	0.04	0.04	0.04	0.04	0.036	0.036	MPa	
Shear modulus (core):	3.00	3.00	3.00	3.00	3.00	2.50	2.00	MPa	
Compressive strength (core):	0.10	0.10	0.10	0.10	0.10	0.10	0.10	MPa	
Creep coefficient t=2000h:	2.4	2.4	2.4	2.4	2.4	2.4	2.4		
Creep coefficient t=10000h:	7.0	7.0	7.0	7.0	7.0	7.0	7.0		
Wrinkling strength (external face) at profiling T:									
- in span	250	250	250	250	250	230	215	MPa	
- in span, elevated temperature	250	250	250	250	250	230	215	MPa	
- at internal support	230	230	230	230	230	210	200	MPa	
- at internal support, elevated temperature	230	230	230	230	230	210	200	MPa	
Wrinkling strength (internal face) at profiling L25:									
- in span	125	120	115	110	110	105	100	MPa	
- at internal support	105	105	105	99	99	94	87	MPa	
Resistance to repeated access load:	Not suitable for occasional foot traffic for access or maintenance								
Other properties:									
Thermal transmittance, U _{g,s} :	0.50	0.34	0.26	0.21	0.18	0.15	0.13	W/m ² K	
Thermal conductivity of the core, λ _{declared} :	0.022								W/mK
Reaction to fire:	B-s2, d0								Class (EN 13501-1)
Fire resistance:	NPD			REI 20 / RE 30				Class (EN 13501-2)	
External fire performance:	B _{ROOF} (I1, I2, I3)								Class (CWFT)
Water permeability:	A								Class (EN 12865)
Air permeability:	NPD								
Water vapour permeability:	Impermeable								
Airborne sound insulation, R _w (C; C _w):	24 (-2; -4)								dB (EN ISO 717-1)
Sound absorption, α _w :	0.10								(EN ISO 11654)
Durability:	Pass - all colours								

Detailed product/material specification is given on order confirmation or delivery documentation.