CE

DECLARATION OF PERFORMANCE
No. 41/MW/OBO

1. Unique identification code of product type:

Sandwich panel SPB WEE, SPB WEEB, SPB WEE ENERGY, SPB WEEB ENERGY with mineral wool core

SPB160WEE	SPB160WEE ENERGY	SPB160WEEB	SPB160WEEB ENERGY
SPB170WEE	SPB170WEE ENERGY	SPB170WEEB	SPB170WEEB ENERGY
SPB180WEE	SPB180WEE ENERGY	SPB180WEEB	SPB180WEEB ENERGY
SPB200WEE	SPB200WEE ENERGY	SPB200WEEB	SPB200WEEB ENERGY
SPB230WEE	SPB230WEE ENERGY	SPB230WEEB	SPB230WEEB ENERGY

Sandwich panel SPB WE, SPB WEB, SPB WE ENERGY, SPB WEB ENERGY, SPB WEI, SPB WEIB, SP2D WE, SP2D WE ENERGY with mineral wool core

SPB80WE	SPB80WE ENERGY	SPB80WEI	SP2D100WE
SPB100WE	SPB100WE ENERGY	SPB100WEI	SP2D120WE
SPB120WE	SPB120WE ENERGY	SPB120WEI	SP2D140WE
SPB140WE	SPB140WE ENERGY	SPB140WEI	SP2D150WE
SPB150WE	SPB150WE ENERGY	SPB150WEI	SP2D160WE
SPB160WE	SPB160WE ENERGY	SPB160WEI	SP2D170WE
SPB170WE	SPB170WE ENERGY	SPB170WEI	SP2D180WE
SPB180WE	SPB180WE ENERGY	SPB180WEI	SP2D200WE
SPB200WE	SPB200WE ENERGY	SPB80WEIB	SP2D230WE
SPB230WE	SPB230WE ENERGY	SPB100WEIB	SP2D100WE ENERGY
SPB80WEB	SPB80WEB ENERGY	SPB120WEIB	SP2D120WE ENERGY
SPB100WEB	SPB100WEB ENERGY	SPB140WEIB	SP2D140WE ENERGY
SPB120WEB	SPB120WEB ENERGY	SPB150WEIB	SP2D150WE ENERGY
SPB140WEB	SPB140WEB ENERGY	SPB160WEIB	SP2D160WE ENERGY
SPB150WEB	SPB150WEB ENERGY	SPB170WEIB	SP2D170WE ENERGY
SPB160WEB	SPB160WEB ENERGY	SPB180WEIB	SP2D180WE ENERGY
SPB170WEB	SPB170WEB ENERGY		SP2D200WE ENERGY
SPB180WEB	SPB180WEB ENERGY		SP2D230WE ENERGY
SPB200WEB	SPB200WEB ENERGY		
SPB230WEB	SPB230WEB ENERGY		

Sandwich panel SPB WEF, SPB WEFB, SPB WEF ENERGY, SPB WEFB ENERGY, SPB WEFI, SPB WEFIB with mineral wool core

SPB150WEF	SPB150WEF ENERGY	SPB150WEFI
SPB160WEF	SPB160WEF ENERGY	SPB160WEFI
SPB170WEF	SPB170WEF ENERGY	SPB170WEFI
SPB180WEF	SPB180WEF ENERGY	SPB180WEFI
SPB200WEF	SPB200WEF ENERGY	SPB150WEFIB
SPB230WEF	SPB230WEF ENERGY	SPB160WEFIB
SPB150WEFB	SPB150WEFB ENERGY	SPB170WEFIB
SPB160WEFB	SPB160WEFB ENERGY	SPB180WEFIB
SPB170WEFB	SPB170WEFB ENERGY	
SPB180WEFB	SPB180WEFB ENERGY	
SPB200WEFB	SPB200WEFB ENERGY	
SPB230WEFB	SPB230WEFB ENERGY	

Sandwich panel SPB W, SPB WB, SPB W ENERGY, SPB WB ENERGY, SPB WI, SPB WIB, SP2D W, SP2D W ENERGY, SPC W with mineral wool core

SPB80W	SPB80W ENERGY	SPB80WI	SP2D100W
SPB100W	SPB100W ENERGY	SPB100WI	SP2D120W
SPB120W	SPB120W ENERGY	SPB120WI	SP2D140W
SPB140W	SPB140W ENERGY	SPB140WI	SP2D150W
SPB150W	SPB150W ENERGY	SPB150WI	SP2D160W
SPB160W	SPB160W ENERGY	SPB160WI	SP2D170W
SPB170W	SPB170W ENERGY	SPB170WI	SP2D180W
SPB180W	SPB180W ENERGY	SPB180WI	SP2D200W
SPB200W	SPB200W ENERGY	SPB80WIB	SP2D230W
SPB230W	SPB230W ENERGY	SPB100WIB	SP2D100W ENERGY
SPB80WB	SPB80WB ENERGY	SPB120WIB	SP2D120W ENERGY
SPB100WB	SPB100WB ENERGY	SPB140WIB	SP2D140W ENERGY
SPB120WB	SPB120WB ENERGY	SPB150WIB	SP2D150W ENERGY
SPB140WB	SPB140WB ENERGY	SPB160WIB	SP2D160W ENERGY
SPB150WB	SPB150WB ENERGY	SPB170WIB	SP2D170W ENERGY
SPB160WB	SPB160WB ENERGY	SPB180WIB	SP2D180W ENERGY
SPB170WB	SPB170WB ENERGY		SP2D200W ENERGY
SPB180WB	SPB180WB ENERGY		SP2D230W ENERGY
SPB200WB	SPB200WB ENERGY		SPC140/100W
SPB230WB	SPB230WB ENERGY		SPC190/150W

Sandwich panel SPB WF, SPB WF ENERGY SPB WFB, SPB WFB ENERGY, SPB WFI, SPB WFIB with mineral wool core

SPB100WF	SPB100WF ENERGY	SPB100WFI
SPB120WF	SPB120WF ENERGY	SPB120WFI
SPB140WF	SPB140WF ENERGY	SPB140WFI
SPB150WF	SPB150WF ENERGY	SPB150WFI
SPB160WF	SPB160WF ENERGY	SPB160WFI
SPB170WF	SPB170WF ENERGY	SPB170WFI
SPB180WF	SPB180WF ENERGY	SPB180WFI
SPB200WF	SPB200WF ENERGY	SPB200WFI
SPB230WF	SPB230WF ENERGY	SPB230WFI
SPB100WFB	SPB100WFB ENERGY	SPB100WFIB
SPB120WFB	SPB120WFB ENERGY	SPB120WFIB
SPB140WFB	SPB140WFB ENERGY	SPB140WFIB
SPB150WFB	SPB150WFB ENERGY	SPB150WFIB
SPB160WFB	SPB160WFB ENERGY	SPB160WFIB
SPB170WFB	SPB170WFB ENERGY	SPB170WFIB
SPB180WFB	SPB180WFB ENERGY	SPB180WFIB
SPB200WFB	SPB200WFB ENERGY	SPB200WFIB
SPB230WFB	SPB230WFB ENERGY	SPB230WFIB

Sandwich panel SPB WS, SPB WS ENERGY, SPB WSB and SPB WSB ENERGY with mineral wool core

SPB100WS	SPB100WS ENERGY	SPB100WSB	SPB100WSB ENERGY
SPB120WS	SPB120WS ENERGY	SPB120WSB	SPB120WSB ENERGY
SPB140WS	SPB140WS ENERGY	SPB140WSB	SPB140WSB ENERGY
SPB150WS	SPB150WS ENERGY	SPB150WSB	SPB150WSB ENERGY
SPB160WS	SPB160WS ENERGY	SPB160WSB	SPB160WSB ENERGY
SPB170WS	SPB170WS ENERGY	SPB170WSB	SPB170WSB ENERGY
SPB180WS	SPB180WS ENERGY	SPB180WSB	SPB180WSB ENERGY
SPB200WS	SPB200WS ENERGY	SPB200WSB	SPB200WSB ENERGY
SPB230WS	SPB230WS ENERGY	SPB230WSB	SPB230WSB ENERGY

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

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:
http://www.ruukki.com/b2b/support/certificates-and-declarations/sandwich-panel-certificates-and-approvals

Signed for and on behalf of the manufacturer by:

Adam Korol
Senior Vice President
Building Components

Helsinki, 21.06.2018

Declared technical characteristics of specified type of mineral wool sandwich panels are available on the following pages:

ENERGY PANELS:

OTHER PANELS:

Attachment 1 to Declaration of Performance 41/MW/OBO

Panel type	**SPB WEE ENERGY, SPB WEEB ENERGY**						
Reference to harmonized standard:	EN 14509:2013						
Year when CE mark was affixed:	15						
Intended use:	Internal or external walls						
Panel thickness:	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,50 - 0,70					mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190						(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2						(EN 10169)
External facing profile:	L, M, R275, R550, F						
Thickness of internal facing:	0,50 - 0,60					mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100						(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2						(EN 10169)
Internal facing profile:	L, F						
Core material:	MW						
Density of core material:	70					kg/m^3	
Mass:	20,7	21,3	22,1	23,5	25,5	kg/m^2	
Mechanical resistance:							
Tensile strength:	0,055	0,055	0,055	0,055	0,055	MPa	
Shear strength:	0,035	0,035	0,035	0,035	0,035	MPa	
Reduced long term shear strength:	0,014	0,014	0,014	0,014	0,014	MPa	
Shear modulus (core):	1,05	1,05	1,05	1,05	1,05	MPa	
Compressive strength (core):	0,040	0,040	0,040	0,040	0,040	MPa	
Creep coefficient t=2000h:	-	-	-	-	-		
Creep coefficient t=100000h:	-	-	-	-	-		
Wrinkling strength (external face):							
- in span	75	75	75	75	75	MPa	
- in span, elevated temperature	65	65	65	65	65	MPa	
- at central support	-	-	-	-	-	MPa	
- at central support, elevated temparature	-	-	-	-	-	MPa	
Wrinkling strength (internal face):							
- in span	75	75	75	75	75	MPa	
- at internal support	-	-	-	-	-	MPa	
Other properties:							
Thermal transmittance, $U_{d,s}$:	0,23	0,22	0,21	0,19	0,16	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,038					W/mK	
Reaction to fire:	A2-s1, d0					Class	(EN 13501-1)
Fire resistance:	EI 60					Class	(EN 13501-2)
External fire performance:	Not applicable						
Water permeability:	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable						
Airborne sound insulation, $R_w(C; C_{tr})$:	29 (-4; -6)	29 (-4; -6)	29 (-4; -6)	29 (-4; -6)	29 (-4; -6)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours						

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

Attachment 2 to Declaration of Performance 41/MW/OBO

Panel type	**SPB WE ENERGY, SPB WEB ENERGY**											
Reference to harmonized standard:	EN 14509:2013											
Year when CE mark was affixed:	15											
Intended use:	Internal or external walls, ceilings											
Panel thickness:	**80**	**100**	**120**	**140**	**150**	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,50 - 0,70										mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190											(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2											(EN 10169)
External facing profile:	L, M, R275, R550, F											
Thickness of internal facing:	0,50 - 0,60										mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100											(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2											(EN 10169)
Internal facing profile:	L, F											
Core material:	MW											
Density of core material:	85										kg/m^3	
Mass:	18,9	18,1	19,9	21,7	22,9	23,6	24,7	25,4	27,2	30,1	kg/m^2	
Mechanical resistance:												
Tensile strength:	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,07	0,07	MPa	
Shear strength:	0,060	0,060	0,060	0,060	0,060	0,060	0,060	0,060	0,055	0,055	MPa	
Reduced long term shear strength:	0,035	0,035	0,035	0,035	0,035	0,035	0,030	0,030	0,028	0,028	MPa	
Shear modulus (core):	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	MPa	
Compressive strength (core):	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):												
- in span	110	110	110	110	110	110	110	110	110	110	MPa	
- in span, elevated temperature	104	104	104	104	104	104	104	104	104	104	MPa	
- at central support	72	72	72	72	72	72	72	72	72	72	MPa	
- at central support, elevated temparature	67	67	67	67	67	67	67	67	67	67	MPa	
Wrinkling strength (internal face):												
- in span	110	110	110	110	110	110	110	110	110	110	MPa	
- at internal support	85	85	85	85	85	85	85	85	85	85	MPa	
Other properties:												
Thermal transmittance, $U_{d,s}$:	0,54	0,41	0,32	0,28	0,26	0,24	0,23	0,22	0,20	0,17	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,043		0,040								W/mK	
Reaction to fire:	A2-s1, d0										Class	(EN 13501-1)
Fire resistance (wall):	NPD	EI 30	EI 60								Class	(EN 13501-2)
Fire resistance (ceiling):	NPD											
External fire performance:	Not applicable											
Water permeability:	A	A	A	A	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable											
Airborne sound insulation, $R_w(C; C_{tr})$:	29 (-2; -3)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours											

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

Attachment 3 to Declaration of Performance 41/MW/OBO

Panel type	**SPB WEF ENERGY, SPB WEFB ENERGY**							
Reference to harmonized standard:	EN 14509:2013							
Year when CE mark was affixed:	17							
Intended use:	Internal or external walls, ceilings							
Panel thickness:	**150**	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,50 - 0,70						mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190							(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2							(EN 10169)
External facing profile:	L, M, R275, R550, F							
Thickness of internal facing:	0,50 - 0,60						mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100							(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2							(EN 10169)
Internal facing profile:	L, F							
Core material:	MW							
Density of core material:	90						kg/m^3	
Mass:	22,9	23,6	24,7	25,4	27,2	30,1	kg/m^2	
Mechanical resistance:								
Tensile strength:	0,08	0,08	0,08	0,08	0,07	0,07	MPa	
Shear strength:	0,060	0,060	0,060	0,060	0,055	0,055	MPa	
Reduced long term shear strength:	0,030	0,030	0,030	0,030	0,028	0,028	MPa	
Shear modulus (core):	2,50	2,50	2,50	2,50	2,50	2,50	MPa	
Compressive strength (core):	0,06	0,06	0,06	0,06	0,06	0,06	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):								
- in span	110	110	110	110	110	110	MPa	
- in span, elevated temperature	104	104	104	104	104	104	MPa	
- at central support	72	72	72	72	72	72	MPa	
- at central support, elevated temparature	67	67	67	67	67	67	MPa	
Wrinkling strength (internal face):								
- in span	110	110	110	110	110	110	MPa	
- at internal support	85	85	85	85	85	85	MPa	
Other properties:								
Thermal transmittance, $U_{d,s}$:	0,26	0,24	0,23	0,22	0,20	0,17	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,040						W/mK	
Reaction to fire:	A2-s1, d0						Class	(EN 13501-1)
Fire resistance (wall):	EI 90		EI 120				Class	(EN 13501-2)
Fire resistance (ceiling):	EI 90		EI 120			NPD	Class	
External fire performance:	Not applicable							
Water permeability:	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2 h	(EN 12114)
Water vapour permeability:	Impermeable							
Airborne sound insulation, $R_w(C; C_{tr})$:	29 (-2; -3)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours							

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

Attachment 4 to Declaration of Performance 41/MW/OBO

Panel type	**SPB W ENERGY, SPB WB ENERGY**											
Reference to harmonized standard:	EN 14509:2013											
Year when CE mark was affixed:	15											
Intended use:	Internal or external walls, ceilings											
Panel thickness:	**80**	**100**	**120**	**140**	**150**	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,50 - 0,70										mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190											(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2											(EN 10169)
External facing profile:	L, M, R275, R550, F											
Thickness of internal facing:	0,50 - 0,60										mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100											(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2											(EN 10169)
Internal facing profile:	L, F											
Core material:	MW											
Density of core material:	115										kg/m^3	
Mass:	18,2	20,6	22,9	25,2	26,5	27,5	28,8	29,8	32,2	35,7	kg/m^2	
Mechanical resistance:												
Tensile strength:	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	MPa	
Shear strength:	0,062	0,062	0,062	0,062	0,062	0,062	0,062	0,062	0,062	0,062	MPa	
Reduced long term shear strength:	0,031	0,031	0,031	0,031	0,031	0,031	0,031	0,031	0,031	0,031	MPa	
Shear modulus (core):	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	MPa	
Compressive strength (core):	0,10	0,10	0,10	0,10	0,09	0,09	0,09	0,09	0,09	0,09	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):												
- in span	128	128	128	128	128	128	128	128	128	128	MPa	
- in span, elevated temperature	124	124	124	124	124	124	124	124	124	124	MPa	
- at central support	95	95	95	95	95	95	95	95	95	95	MPa	
- at central support, elevated temparature	92	92	92	92	92	92	92	92	92	92	MPa	
Wrinkling strength (internal face):												
- in span	128	128	128	128	128	128	128	128	128	128	MPa	
- at internal support	110	110	110	110	110	110	110	110	110	110	MPa	
Other properties:												
Thermal transmittance, $U_{d,s}$:	0,51	0,41	0,34	0,30	0,28	0,26	0,25	0,23	0,21	0,18	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,043										W/mK	
Reaction to fire:	A2-s1, d0										Class	(EN 13501-1)
Fire resistance (wall):	EI 30	EI 60		EI 90		EI 120					Class	(EN 13501-2)
Fire resistance (ceiling):	NPD											(EN 13501-2)
External fire performance:	Not applicable											
Water permeability:	A	A	A	A	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable											
Airborne sound insulation, $R_w(C; C_{tr})$:	33 (-1; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours											

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

Attachment 5 to Declaration of Performance 41/MW/OBO

Panel type	**SPB WF ENERGY, SPB WFB ENERGY**										
Reference to harmonized standard:	EN 14509:2013										
Year when CE mark was affixed:	17										
Intended use:	Internal or external walls, ceilings										
Panel thickness:	**100**	**120**	**140**	**150**	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,50 - 0,70									mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190										(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
External facing profile:	L, M, R275, R550, F										
Thickness of internal facing:	0,50 - 0,70									mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100										(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
Internal facing profile:	L, F										
Core material:	MW										
Density of core material:	115/120									kg/m^3	
Mass:	21,0	23,5	25,9	27,3	28,3	29,7	30,7	33,2	36,9	kg/m^2	
Mechanical resistance:											
Tensile strength:	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	MPa	
Shear strength:	0,062	0,062	0,062	0,062	0,062	0,062	0,062	0,062	0,062	MPa	
Reduced long term shear strength:	0,031	0,031	0,031	0,031	0,031	0,031	0,031	0,031	0,031	MPa	
Shear modulus (core):	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	MPa	
Compressive strength (core):	0,10	0,10	0,10	0,09	0,09	0,09	0,09	0,09	0,09	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):											
- in span	128	128	128	128	128	128	128	128	128	MPa	
- in span, elevated temperature	124	124	124	124	124	124	124	124	124	MPa	
- at central support	95	95	95	95	95	95	95	95	95	MPa	
- at central support, elevated temparature	92	92	92	92	92	92	92	92	92	MPa	
Wrinkling strength (internal face):											
- in span	128	128	128	128	128	128	128	128	128	MPa	
- at internal support	110	110	110	110	110	110	110	110	110	MPa	
Other properties:											
Thermal transmittance, $U_{d,s}$:	0,43	0,36	0,31	0,29	0,27	0,26	0,24	0,22	0,19	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,045									W/mK	
Reaction to fire:	A2-s1, d0									Class	(EN 13501-1)
Fire resistance (wall):	EI 120					EI 180		EI 240		Class	(EN 13501-2)
Fire resistance (ceiling):	EI 120								NPD	Class	(EN 13501-2)
External fire performance:	Not applicable										
Water permeability:	A	A	A	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable										
Airborne sound insulation, R_w(C; C_{tr}):	32 (-1; -4)	32 (-1; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours										

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

Attachment 6 to Declaration of Performance 41/MW/OBO

Panel type	**SPB WS ENERGY, SPB WSB ENERGY**										
Reference to harmonized standard:	EN 14509:2013										
Year when CE mark was affixed:	16										
Intended use:	Internal or external walls, ceilings										
Panel thickness:	**100**	**120**	**140**	**150**	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,60 - 0,70									mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190										(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
External facing profile:	L, M, R275, R550, F										
Thickness of internal facing:	0,50 - 0,70									mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100										(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
Internal facing profile:	L, F										
Core material:	MW										
Density of core material:	120									kg/m^3	
Mass:	21,0	23,5	25,9	27,3	28,3	29,7	30,7	33,2	36,9	kg/m^2	
Mechanical resistance:											
Tensile strength:	0,15	0,15	0,15	0,15	0,15	0,15	0,15	0,15	0,15	MPa	
Shear strength:	0,100	0,100	0,100	0,100	0,100	0,100	0,100	0,100	0,100	MPa	
Reduced long term shear strength:	0,040	0,040	0,040	0,040	0,040	0,040	0,040	0,040	0,040	MPa	
Shear modulus (core):	6,00	6,00	6,00	6,00	6,00	6,00	6,00	6,00	6,00	MPa	
Compressive strength (core):	0,12	0,12	0,12	0,12	0,12	0,12	0,12	0,12	0,12	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):											
- in span	180	180	180	180	180	180	180	180	180	MPa	
- in span, elevated temperature	165	165	165	165	165	165	165	165	165	MPa	
- at central support	109	105	101	99	97	94	91	85	77	MPa	
- at central support, elevated temparature	98	94	91	89	87	84	82	77	69	MPa	
Wrinkling strength (internal face):											
- in span	165	165	165	165	165	165	165	165	165	MPa	
- at internal support	134	130	125	123	121	115	110	99	83	MPa	
Other properties:											
Thermal transmittance, $U_{d,s}$:	0,43	0,36	0,31	0,29	0,27	0,26	0,24	0,22	0,19	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,045									W/mK	
Reaction to fire:	A2-s1, d0									Class	(EN 13501-1)
Fire resistance (wall):	EI 60		EI 90		EI 120					Class	(EN 13501-2)
Fire resistance (ceiling):	NPD										
External fire performance:	Not applicable										
Water permeability:	A	A	A	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable										
Airborne sound insulation, R_w(C; C_{tr}):	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours										

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

Attachment 7 to Declaration of Performance 41/MW/OBO

Panel type	**SP2D WE ENERGY**										
Reference to harmonized standard:	EN 14509:2013										
Year when CE mark was affixed:	15										
Intended use:	Internal or external walls										
Panel thickness:	**100**	**120**	**140**	**150**	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,50 - 0,70									mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190										(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
External facing profile:	L, M, R275, R550, F										
Thickness of internal facing:	0,50 - 0,60									mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100										(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
Internal facing profile:	L, F										
Core material:	MW										
Density of core material:	85									kg/m^3	
Mass:	18,5	20,3	22,1	23,2	23,9	24,9	25,8	27,6	30,2	kg/m^2	
Mechanical resistance:											
Tensile strength:	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08	MPa	
Shear strength:	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,055	0,055	MPa	
Reduced long term shear strength:	0,03	0,03	0,03	0,03	0,03	0,03	0,03	0,028	0,028	MPa	
Shear modulus (core):	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	MPa	
Compressive strength (core):	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):											
- in span	110	110	110	110	110	110	110	110	110	MPa	
- in span, elevated temperature	104	104	104	104	104	104	104	104	104	MPa	
- at central support	72	72	72	72	72	72	72	72	72	MPa	
- at central support, elevated temparature	67	67	67	67	67	67	67	67	67	MPa	
Wrinkling strength (internal face):											
- in span	110	110	110	110	110	110	110	110	110	MPa	
- at internal support	85	85	85	85	85	85	85	85	85	MPa	
Other properties:											
Thermal transmittance, $U_{d,s}$:	0,39	0,32	0,28	0,27	0,24	0,23	0,22	0,20	0,17	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,040									W/mK	
Reaction to fire:	A2-s1, d0									Class	(EN 13501-1)
Fire resistance:	EI 30 / EI 30		EI 60 / EI 60		EI60 /EI90	EI 60 / EI 120				Class	(EN 13501-2)
External fire performance:	Not applicable										
Water permeability:	A	A	A	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable										
Airborne sound insulation, $R_w(C; C_{tr})$:	30 (-1; -2)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours										

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

Attachment 8 to Declaration of Performance 41/MW/OBO

Panel type	**SP2D W ENERGY**										
Reference to harmonized standard:	EN 14509:2013										
Year when CE mark was affixed:	15										
Intended use:	Internal or external walls										
Panel thickness:	**100**	**120**	**140**	**150**	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,50 - 0,70									mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190										(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
External facing profile:	L, M, R275, R550, F										
Thickness of internal facing:	0,50 - 0,60									mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100										(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
Internal facing profile:	L, F										
Core material:	MW										
Density of core material:	115									kg/m^3	
Mass:	21,0	23,3	25,6	26,9	27,9	29,2	30,2	32,5	35,9	kg/m^2	
Mechanical resistance:											
Tensile strength:	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	MPa	
Shear strength:	0,062	0,062	0,062	0,062	0,062	0,062	0,062	0,062	0,062	MPa	
Reduced long term shear strength:	0,031	0,031	0,031	0,031	0,031	0,031	0,031	0,031	0,031	MPa	
Shear modulus (core):	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	MPa	
Compressive strength (core):	0,10	0,10	0,10	0,09	0,09	0,09	0,09	0,09	0,09	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):											
- in span	128	128	128	128	128	128	128	128	128	MPa	
- in span, elevated temperature	124	124	124	124	124	124	124	124	124	MPa	
- at central support	95	95	95	95	95	95	95	95	95	MPa	
- at central support, elevated temparature	92	92	92	92	92	92	92	92	92	MPa	
Wrinkling strength (internal face):											
- in span	128	128	128	128	128	128	128	128	128	MPa	
- at internal support	110	110	110	110	110	110	110	110	110	MPa	
Other properties:											
Thermal transmittance, $U_{d,s}$:	0,41	0,35	0,30	0,29	0,26	0,25	0,24	0,21	0,19	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,043									W/mK	
Reaction to fire:	A2-s1, d0									Class	(EN 13501-1)
Fire resistance:	EI60 / EI60		EI 60 / EI 90		EI90/EI120	EI120/EI120	EI120/EI180	EI 120 / EI 240		Class	(EN 13501-2)
External fire performance:	Not applicable										
Water permeability:	A	A	A	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable										
Airborne sound insulation, $R_w(C; C_{tr})$:	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours										

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

Attachment 9 to Declaration of Performance 41/MW/OBO

Panel type	**SPB WEE, SPB WEEB**						
Reference to harmonized standard:	EN 14509:2013						
Year when CE mark was affixed:	15						
Intended use:	Internal or external walls						
Panel thickness:	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,50 - 0,70					mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190						(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2						(EN 10169)
External facing profile:	L, M, R275, R550, F						
Thickness of internal facing:	0,50 - 0,60					mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100						(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2						(EN 10169)
Internal facing profile:	L, F						
Core material:	MW						
Density of core material:	70					kg/m^3	
Mass:	20,7	21,3	22,1	23,5	25,5	kg/m^2	
Mechanical resistance:							
Tensile strength:	0,055	0,055	0,055	0,055	0,055	MPa	
Shear strength:	0,035	0,035	0,035	0,035	0,035	MPa	
Reduced long term shear strength:	0,014	0,014	0,014	0,014	0,014	MPa	
Shear modulus (core):	1,05	1,05	1,05	1,05	1,05	MPa	
Compressive strength (core):	0,040	0,040	0,040	0,040	0,040	MPa	
Creep coefficient t=2000h:	-	-	-	-	-		
Creep coefficient t=100000h:	-	-	-	-	-		
Wrinkling strength (external face):							
- in span	75	75	75	75	75	MPa	
- in span, elevated temperature	65	65	65	65	65	MPa	
- at central support	-	-	-	-	-	MPa	
- at central support, elevated temparature	-	-	-	-	-	MPa	
Wrinkling strength (internal face):							
- in span	75	75	75	75	75	MPa	
- at internal support	-	-	-	-	-	MPa	
Other properties:							
Thermal transmittance, $U_{d,s}$:	0,23	0,22	0,21	0,19	0,16	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,038					W/mK	
Reaction to fire:	A2-s1, d0					Class	(EN 13501-1)
Fire resistance:	EI 60					Class	(EN 13501-2)
External fire performance:	Not applicable						
Water permeability:	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable						
Airborne sound insulation, $R_w(C; C_{tr})$:	29 (-4; -6)	29 (-4; -6)	29 (-4; -6)	29 (-4; -6)	29 (-4; -6)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours						

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

Attachment 10 to Declaration of Performance 41/MW/OBO

Panel type	**SPB WE, SPB WEB**											
Reference to harmonized standard:	EN 14509:2013											
Year when CE mark was affixed:	15											
Intended use:	Internal or external walls, ceilings											
Panel thickness:	**80**	**100**	**120**	**140**	**150**	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,50 - 0,70										mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190											(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2											(EN 10169)
External facing profile:	L, M, R275, R550, F											
Thickness of internal facing:	0,50 - 0,60										mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100											(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2											(EN 10169)
Internal facing profile:	L, F											
Core material:	MW											
Density of core material:	85										kg/m^3	
Mass:	18,9	18,1	19,9	21,7	22,9	23,6	24,7	25,4	27,2	30,1	kg/m^2	
Mechanical resistance:												
Tensile strength:	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,07	0,07	MPa	
Shear strength:	0,060	0,060	0,060	0,060	0,060	0,060	0,060	0,060	0,055	0,055	MPa	
Reduced long term shear strength:	0,035	0,035	0,035	0,035	0,035	0,035	0,030	0,030	0,028	0,028	MPa	
Shear modulus (core):	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	MPa	
Compressive strength (core):	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):												
- in span	110	110	110	110	110	110	110	110	110	110	MPa	
- in span, elevated temperature	104	104	104	104	104	104	104	104	104	104	MPa	
- at central support	72	72	72	72	72	72	72	72	72	72	MPa	
- at central support, elevated temparature	67	67	67	67	67	67	67	67	67	67	MPa	
Wrinkling strength (internal face):												
- in span	110	110	110	110	110	110	110	110	110	110	MPa	
- at internal support	85	85	85	85	85	85	85	85	85	85	MPa	
Other properties:												
Thermal transmittance, $U_{d,s}$:	0,54	0,41	0,32	0,28	0,26	0,24	0,23	0,22	0,20	0,17	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,043		0,040								W/mK	
Reaction to fire:	A2-s1, d0										Class	(EN 13501-1)
Fire resistance (wall):	NPD	EI 30	EI 60								Class	(EN 13501-2)
Fire resistance (ceiling):	NPD											
External fire performance:	Not applicable											
Water permeability:	A	A	A	A	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable											
Airborne sound insulation, $R_w(C; C_{tr})$:	29 (-2; -3)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours											

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

Attachment 11 to Declaration of Performance 41/MW/OBO

Panel type	**SPB WEI, SPB WEIB**									
Reference to harmonized standard:	EN 14509:2013									
Year when CE mark was affixed:	15									
Intended use:	Internal walls									
Panel thickness:	**80**	**100**	**120**	**140**	**150**	**160**	**170**	**180**	Reference	
Thickness of external facing:	0,50								mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190									(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2									(EN 10169)
External facing profile:	L, M, R275, R550, F									
Thickness of internal facing:	0,50								mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100									(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2									(EN 10169)
Internal facing profile:	L, F									
Core material:	MW									
Density of core material:	85								kg/m^3	
Mass:	18,5	17,7	19,5	21,3	22,2	23,1	24,0	24,9	kg/m^2	
Mechanical resistance:										
Tensile strength:	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08	MPa	
Shear strength:	0,060	0,060	0,060	0,060	0,060	0,060	0,060	0,060	MPa	
Reduced long term shear strength:	0,035	0,035	0,035	0,035	0,035	0,035	0,030	0,030	MPa	
Shear modulus (core):	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	MPa	
Compressive strength (core):	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):										
- in span	110	110	110	110	110	110	110	110	MPa	
- in span, elevated temperature	104	104	104	104	104	104	104	104	MPa	
- at central support	72	72	72	72	72	72	72	72	MPa	
- at central support, elevated temparature	67	67	67	67	67	67	67	67	MPa	
Wrinkling strength (internal face):										
- in span	110	110	110	110	110	110	110	110	MPa	
- at internal support	85	85	85	85	85	85	85	85	MPa	
Other properties:										
Thermal transmittance, $U_{d,s}$:	0,54	0,41	0,32	0,28	0,26	0,24	0,23	0,22	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,043		0,040						W/mK	
Reaction to fire:	A2-s1, d0								Class	(PN-EN 13501-1)
Fire resistance (wall):	NPD	EI 30	EI 60						Class	(PN-EN 13501-2)
External fire performance:	Not applicable									
Water permeability:	A	A	A	A	A	A	A	A	Class	(PN-EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2 h	(PN-EN 12114)
Water vapour permeability:	Impermeable									
Airborne sound insulation, R_w(C; C_{tr}):	29 (-2; -3)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	dB	(PN-EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1		(PN-EN ISO 11654)
Durability:	Pass - all colours									

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

Attachment 12 to Declaration of Performance 41/MW/OBO

Panel type	**SPB WEF, SPB WEFB**							
Reference to harmonized standard:	EN 14509:2013							
Year when CE mark was affixed:	17							
Intended use:	Internal or external walls, ceilings							
Panel thickness:	**150**	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,50 - 0,70						mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190							(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2							(EN 10169)
External facing profile:	L, M, R275, R550, F							
Thickness of internal facing:	0,50 - 0,60						mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100							(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2							(EN 10169)
Internal facing profile:	L, F							
Core material:	MW							
Density of core material:	90						kg/m^3	
Mass:	22,9	23,6	24,7	25,4	27,2	30,1	kg/m^2	
Mechanical resistance:								
Tensile strength:	0,08	0,08	0,08	0,08	0,07	0,07	MPa	
Shear strength:	0,060	0,060	0,060	0,060	0,055	0,055	MPa	
Reduced long term shear strength:	0,030	0,030	0,030	0,030	0,028	0,028	MPa	
Shear modulus (core):	2,50	2,50	2,50	2,50	2,50	2,50	MPa	
Compressive strength (core):	0,06	0,06	0,06	0,06	0,06	0,06	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):								
- in span	110	110	110	110	110	110	MPa	
- in span, elevated temperature	104	104	104	104	104	104	MPa	
- at central support	72	72	72	72	72	72	MPa	
- at central support, elevated temparature	67	67	67	67	67	67	MPa	
Wrinkling strength (internal face):								
- in span	110	110	110	110	110	110	MPa	
- at internal support	85	85	85	85	85	85	MPa	
Other properties:								
Thermal transmittance, $U_{d,s}$:	0,26	0,24	0,23	0,22	0,20	0,17	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,040						W/mK	
Reaction to fire:	A2-s1, d0						Class	(EN 13501-1)
Fire resistance (wall):	EI 90		EI 120				Class	(EN 13501-2)
Fire resistance (ceiling):	EI 90		EI 120			NPD	Class	
External fire performance:	Not applicable							
Water permeability:	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable							
Airborne sound insulation, $R_w(C; C_{tr})$:	29 (-2; -3)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours							

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

Attachment 13 to Declaration of Performance 41/MW/OBO

Panel type	**SPB WEFI, SPB WEFIB**					
Reference to harmonized standard:	EN 14509:2013					
Year when CE mark was affixed:	17					
Intended use:	Internal walls					
Panel thickness:	**150**	**160**	**170**	**180**	Reference	
Thickness of external facing:	0,50				mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190					(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2					(EN 10169)
External facing profile:	L, M, R275, R550, F					
Thickness of internal facing:	0,50				mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100					(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2					(EN 10169)
Internal facing profile:	L, F					
Core material:	MW					
Density of core material:	90				kg/m^3	
Mass:	22,2	23,1	24,0	24,9	kg/m^2	
Mechanical resistance:						
Tensile strength:	0,08	0,08	0,08	0,08	MPa	
Shear strength:	0,060	0,060	0,060	0,060	MPa	
Reduced long term shear strength:	0,035	0,035	0,030	0,030	MPa	
Shear modulus (core):	2,50	2,50	2,50	2,50	MPa	
Compressive strength (core):	0,06	0,06	0,06	0,06	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):						
- in span	110	110	110	110	MPa	
- in span, elevated temperature	104	104	104	104	MPa	
- at central support	72	72	72	72	MPa	
- at central support, elevated temparature	67	67	67	67	MPa	
Wrinkling strength (internal face):						
- in span	110	110	110	110	MPa	
- at internal support	85	85	85	85	MPa	
Other properties:						
Thermal transmittance, $U_{d,s}$:	0,26	0,24	0,23	0,22	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,040				W/mK	
Reaction to fire:	A2-s1, d0				Class	(PN-EN 13501-1)
Fire resistance (wall):	EI 90		EI 120		Class	(PN-EN 13501-2)
External fire performance:	Not applicable					
Water permeability:	A	A	A	A	Class	(PN-EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2 h	(PN-EN 12114)
Water vapour permeability:	Impermeable					
Airborne sound insulation, $R_w(C; C_{tr})$:	29 (-2; -3)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	dB	(PN-EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1		(PN-EN ISO 11654)
Durability:	Pass - all colours					

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

Attachment 14 to Declaration of Performance 41/MW/OBO

Panel type	**SPB W, SPB WB**											
Reference to harmonized standard:	EN 14509:2013											
Year when CE mark was affixed:	15											
Intended use:	Internal or external walls, ceilings											
Panel thickness:	**80**	**100**	**120**	**140**	**150**	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,50 - 0,70										mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190											(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2											(EN 10169)
External facing profile:	L, M, R275, R550, F											
Thickness of internal facing:	0,50 - 0,60										mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100											(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2											(EN 10169)
Internal facing profile:	L, F											
Core material:	MW											
Density of core material:	115										kg/m^3	
Mass:	18,2	20,6	22,9	25,2	26,5	27,5	28,8	29,8	32,2	35,7	kg/m^2	
Mechanical resistance:												
Tensile strength:	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	MPa	
Shear strength:	0,062	0,062	0,062	0,062	0,062	0,062	0,062	0,062	0,062	0,062	MPa	
Reduced long term shear strength:	0,031	0,031	0,031	0,031	0,031	0,031	0,031	0,031	0,031	0,031	MPa	
Shear modulus (core):	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	MPa	
Compressive strength (core):	0,10	0,10	0,10	0,10	0,09	0,09	0,09	0,09	0,09	0,09	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):												
- in span	128	128	128	128	128	128	128	128	128	128	MPa	
- in span, elevated temperature	124	124	124	124	124	124	124	124	124	124	MPa	
- at central support	95	95	95	95	95	95	95	95	95	95	MPa	
- at central support, elevated temparature	92	92	92	92	92	92	92	92	92	92	MPa	
Wrinkling strength (internal face):												
- in span	128	128	128	128	128	128	128	128	128	128	MPa	
- at internal support	110	110	110	110	110	110	110	110	110	110	MPa	
Other properties:												
Thermal transmittance, $U_{d,s}$:	0,51	0,41	0,34	0,30	0,28	0,26	0,25	0,23	0,21	0,18	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,043										W/mK	
Reaction to fire:	A2-s1, d0										Class	(EN 13501-1)
Fire resistance (wall):	EI 30	EI 60		EI 90		EI 120					Class	(EN 13501-2)
Fire resistance (ceiling):	NPD										Class	(EN 13501-2)
External fire performance:	Not applicable											
Water permeability:	A	A	A	A	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable											
Airborne sound insulation, $R_w(C; C_{tr})$:	33 (-1; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours											

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

Attachment 15 to Declaration of Performance 41/MW/OBO

Panel type	**SPB WI, SPB WIB**									
Reference to harmonized standard:	EN 14509:2013									
Year when CE mark was affixed:	17									
Intended use:	Internall walls									
Panel thickness:	**80**	**100**	**120**	**140**	**150**	**160**	**170**	**180**	Reference	
Thickness of external facing:	0,50								mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190									(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2									(EN 10169)
External facing profile:	L, M, R275, R550, F									
Thickness of internal facing:	0,50								mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100									(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2									(EN 10169)
Internal facing profile:	L, F									
Core material:	MW									
Density of core material:	115								kg/m^3	
Mass:	17,8	20,1	22,4	24,7	25,9	27,0	28,2	29,3	kg/m^2	
Mechanical resistance:										
Tensile strength:	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	MPa	
Shear strength:	0,062	0,062	0,062	0,062	0,062	0,062	0,062	0,062	MPa	
Reduced long term shear strength:	0,031	0,031	0,031	0,031	0,031	0,031	0,031	0,031	MPa	
Shear modulus (core):	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	MPa	
Compressive strength (core):	0,10	0,10	0,10	0,10	0,09	0,09	0,09	0,09	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):										
- in span	128	128	128	128	128	128	128	128	MPa	
- in span, elevated temperature	124	124	124	124	124	124	124	124	MPa	
- at central support	95	95	95	95	95	95	95	95	MPa	
- at central support, elevated temparature	92	92	92	92	92	92	92	92	MPa	
Wrinkling strength (internal face):										
- in span	128	128	128	128	128	128	128	128	MPa	
- at internal support	110	110	110	110	110	110	110	110	MPa	
Other properties:										
Thermal transmittance, $U_{d,s}$:	0,51	0,41	0,34	0,30	0,28	0,26	0,25	0,23	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,043								W/mK	
Reaction to fire:	A2-s1, d0								Class	(EN 13501-1)
Fire resistance (wall):	EI 30	EI 60		EI 90		EI 120			Class	(EN 13501-2)
External fire performance:	Not applicable									
Water permeability:	A	A	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2 h	(EN 12114)
Water vapour permeability:	Impermeable									
Airborne sound insulation, $R_w(C; C_{tr})$:	33 (-1; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours									

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

Attachment 16 to Declaration of Performance 41/MW/OBO

Panel type	**SPB WF, SPB WFB**										
Reference to harmonized standard:	EN 14509:2013										
Year when CE mark was affixed:	17										
Intended use:	Internal or external walls, ceilings										
Panel thickness:	**100**	**120**	**140**	**150**	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,50 - 0,70									mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190										(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
External facing profile:	L, M, R275, R550, F										
Thickness of internal facing:	0,50 - 0,70									mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100										(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
Internal facing profile:	L, F										
Core material:	MW										
Density of core material:	115/120									kg/m^3	
Mass:	21,0	23,5	25,9	27,3	28,3	29,7	30,7	33,2	36,9	kg/m^2	
Mechanical resistance:											
Tensile strength:	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	MPa	
Shear strength:	0,062	0,062	0,062	0,062	0,062	0,062	0,062	0,062	0,062	MPa	
Reduced long term shear strength:	0,031	0,031	0,031	0,031	0,031	0,031	0,031	0,031	0,031	MPa	
Shear modulus (core):	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	MPa	
Compressive strength (core):	0,10	0,10	0,10	0,09	0,09	0,09	0,09	0,09	0,09	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):											
- in span	128	128	128	128	128	128	128	128	128	MPa	
- in span, elevated temperature	124	124	124	124	124	124	124	124	124	MPa	
- at central support	95	95	95	95	95	95	95	95	95	MPa	
- at central support, elevated temparature	92	92	92	92	92	92	92	92	92	MPa	
Wrinkling strength (internal face):											
- in span	128	128	128	128	128	128	128	128	128	MPa	
- at internal support	110	110	110	110	110	110	110	110	110	MPa	
Other properties:											
Thermal transmittance, $U_{d,s}$:	0,43	0,36	0,31	0,29	0,27	0,26	0,24	0,22	0,19	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,045									W/mK	
Reaction to fire:	A2-s1, d0									Class	(EN 13501-1)
Fire resistance (wall):	EI 120					EI 180		EI 240		Class	(EN 13501-2)
Fire resistance (ceiling):	EI 120								NPD	Class	(EN 13501-2)
External fire performance:	Not applicable										
Water permeability:	A	A	A	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable										
Airborne sound insulation, R_w(C; C_{tr}):	32 (-1; -4)	32 (-1; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours										

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

Attachment 17 to Declaration of Performance 41/MW/OBO

Panel type	**SPB WFI, SPB WFIB**								
Reference to harmonized standard:	EN 14509:2013								
Year when CE mark was affixed:	17								
Intended use:	Internal walls								
Panel thickness:	**100**	**120**	**140**	**150**	**160**	**170**	**180**	Reference	
Thickness of external facing:	0,50							mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190								(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2								(EN 10169)
External facing profile:	L, M, R275, R550, F								
Thickness of internal facing:	0,50							mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100								(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2								(EN 10169)
Internal facing profile:	L, F								
Core material:	MW								
Density of core material:	115/120							kg/m^3	
Mass:	20,1	22,4	24,7	25,9	27,0	28,2	29,3	kg/m^2	
Mechanical resistance:									
Tensile strength:	0,10	0,10	0,10	0,10	0,10	0,10	0,10	MPa	
Shear strength:	0,062	0,062	0,062	0,062	0,062	0,062	0,062	MPa	
Reduced long term shear strength:	0,031	0,031	0,031	0,031	0,031	0,031	0,031	MPa	
Shear modulus (core):	3,08	3,08	3,08	3,08	3,08	3,08	3,08	MPa	
Compressive strength (core):	0,10	0,10	0,10	0,09	0,09	0,09	0,09	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):									
- in span	128	128	128	128	128	128	128	MPa	
- in span, elevated temperature	124	124	124	124	124	124	124	MPa	
- at central support	95	95	95	95	95	95	95	MPa	
- at central support, elevated temparature	92	92	92	92	92	92	92	MPa	
Wrinkling strength (internal face):									
- in span	128	128	128	128	128	128	128	MPa	
- at internal support	110	110	110	110	110	110	110	MPa	
Other properties:									
Thermal transmittance, $U_{d,s}$:	0,43	0,36	0,31	0,29	0,27	0,26	0,24	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,045							W/mK	
Reaction to fire:	A2-s1, d0							Class	(EN 13501-1)
Fire resistance (wall):	EI 120					EI 180		Class	(EN 13501-2)
External fire performance:	Not applicable								
Water permeability:	A	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable								
Airborne sound insulation, R_w(C; C_{tr}):	32 (-1; -4)	32 (-1; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours								

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

Attachment 18 to Declaration of Performance 41/MW/OBO

Panel type	**SPB WS, SPB WSB**										
Reference to harmonized standard:	EN 14509:2013										
Year when CE mark was affixed:	16										
Intended use:	Internal or external walls, ceilings										
Panel thickness:	**100**	**120**	**140**	**150**	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,60 - 0,70									mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190										(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
External facing profile:	L, M, R275, R550, F										
Thickness of internal facing:	0,50 - 0,70									mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100										(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
Internal facing profile:	L, F										
Core material:	MW										
Density of core material:	120									kg/m^3	
Mass:	21,0	23,5	25,9	27,3	28,3	29,7	30,7	33,2	36,9	kg/m^2	
Mechanical resistance:											
Tensile strength:	0,15	0,15	0,15	0,15	0,15	0,15	0,15	0,15	0,15	MPa	
Shear strength:	0,100	0,100	0,100	0,100	0,100	0,100	0,100	0,100	0,100	MPa	
Reduced long term shear strength:	0,040	0,040	0,040	0,040	0,040	0,040	0,040	0,040	0,040	MPa	
Shear modulus (core):	6,00	6,00	6,00	6,00	6,00	6,00	6,00	6,00	6,00	MPa	
Compressive strength (core):	0,12	0,12	0,12	0,12	0,12	0,12	0,12	0,12	0,12	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):											
- in span	180	180	180	180	180	180	180	180	180	MPa	
- in span, elevated temperature	165	165	165	165	165	165	165	165	165	MPa	
- at central support	109	105	101	99	97	94	91	85	77	MPa	
- at central support, elevated temparature	98	94	91	89	87	84	82	77	69	MPa	
Wrinkling strength (internal face):											
- in span	165	165	165	165	165	165	165	165	165	MPa	
- at internal support	134	130	125	123	121	115	110	99	83	MPa	
Other properties:											
Thermal transmittance, $U_{d,s}$:	0,43	0,36	0,31	0,29	0,27	0,26	0,24	0,22	0,19	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,045									W/mK	
Reaction to fire:	A2-s1, d0									Class	(EN 13501-1)
Fire resistance (wall):	EI 60		EI 90		EI 120					Class	(EN 13501-2)
Fire resistance (ceiling):	NPD										
External fire performance:	Not applicable										
Water permeability:	A	A	A	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable										
Airborne sound insulation, R_w(C; C_{tr}):	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours										

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

Attachment 19 to Declaration of Performance 41/MW/OBO

Panel type	**SP2D WE**										
Reference to harmonized standard:	EN 14509:2013										
Year when CE mark was affixed:	15										
Intended use:	Internal or external walls										
Panel thickness:	**100**	**120**	**140**	**150**	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,50 - 0,70									mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190										(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
External facing profile:	L, M, R275, R550, F										
Thickness of internal facing:	0,50 - 0,60									mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100										(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
Internal facing profile:	L, F										
Core material:	MW										
Density of core material:	85									kg/m^3	
Mass:	18,5	20,3	22,1	23,2	23,9	24,9	25,8	27,6	30,2	kg/m^2	
Mechanical resistance:											
Tensile strength:	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08	MPa	
Shear strength:	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,055	0,055	MPa	
Reduced long term shear strength:	0,03	0,03	0,03	0,03	0,03	0,03	0,03	0,028	0,028	MPa	
Shear modulus (core):	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	MPa	
Compressive strength (core):	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):											
- in span	110	110	110	110	110	110	110	110	110	MPa	
- in span, elevated temperature	104	104	104	104	104	104	104	104	104	MPa	
- at central support	72	72	72	72	72	72	72	72	72	MPa	
- at central support, elevated temparature	67	67	67	67	67	67	67	67	67	MPa	
Wrinkling strength (internal face):											
- in span	110	110	110	110	110	110	110	110	110	MPa	
- at internal support	85	85	85	85	85	85	85	85	85	MPa	
Other properties:											
Thermal transmittance, $U_{d,s}$:	0,39	0,32	0,28	0,27	0,24	0,23	0,22	0,20	0,17	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,040									W/mK	
Reaction to fire:	A2-s1, d0									Class	(EN 13501-1)
Fire resistance:	EI 30 / EI 30		EI 60 / EI 60		EI60 /EI90	EI 60 / EI 120				Class	(EN 13501-2)
External fire performance:	Not applicable										
Water permeability:	A	A	A	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable										
Airborne sound insulation, $R_w(C; C_{tr})$:	30 (-1; -2)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	29 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours										

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

Attachment 20 to Declaration of Performance 41/MW/OBO

Panel type	**SP2D W**										
Reference to harmonized standard:	EN 14509:2013										
Year when CE mark was affixed:	15										
Intended use:	Internal or external walls										
Panel thickness:	**100**	**120**	**140**	**150**	**160**	**170**	**180**	**200**	**230**	Reference	
Thickness of external facing:	0,50 - 0,70									mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190										(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
External facing profile:	L, M, R275, R550, F										
Thickness of internal facing:	0,50 - 0,60									mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100										(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2										(EN 10169)
Internal facing profile:	L, F										
Core material:	MW										
Density of core material:	115									kg/m^3	
Mass:	21,0	23,3	25,6	26,9	27,9	29,2	30,2	32,5	35,9	kg/m^2	
Mechanical resistance:											
Tensile strength:	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	MPa	
Shear strength:	0,062	0,062	0,062	0,062	0,062	0,062	0,062	0,062	0,062	MPa	
Reduced long term shear strength:	0,031	0,031	0,031	0,031	0,031	0,031	0,031	0,031	0,031	MPa	
Shear modulus (core):	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	MPa	
Compressive strength (core):	0,10	0,10	0,10	0,09	0,09	0,09	0,09	0,09	0,09	MPa	
Creep coefficient t=2000h:	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37		
Creep coefficient t=100000h:	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45	0,45		
Wrinkling strength (external face):											
- in span	128	128	128	128	128	128	128	128	128	MPa	
- in span, elevated temperature	124	124	124	124	124	124	124	124	124	MPa	
- at central support	95	95	95	95	95	95	95	95	95	MPa	
- at central support, elevated temparature	92	92	92	92	92	92	92	92	92	MPa	
Wrinkling strength (internal face):											
- in span	128	128	128	128	128	128	128	128	128	MPa	
- at internal support	110	110	110	110	110	110	110	110	110	MPa	
Other properties:											
Thermal transmittance, $U_{d,s}$:	0,41	0,35	0,30	0,29	0,26	0,25	0,24	0,21	0,19	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,043									W/mK	
Reaction to fire:	A2-s1, d0									Class	(EN 13501-1)
Fire resistance:	EI60 / EI60		EI 60 / EI 90		EI90/EI120	EI120/EI120	EI120/EI180	EI 120 / EI 240		Class	(EN 13501-2)
External fire performance:	Not applicable										
Water permeability:	A	A	A	A	A	A	A	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable										
Airborne sound insulation, $R_w(C; C_{tr})$:	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	32 (-2; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1		(EN ISO 11654)
Durability:	Pass - all colours										

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

Attachment 21 to Declaration of Performance 41/MW/OBO

Panel type	**SPC W**			
Reference to harmonized standard:	EN 14509:2013			
Year when CE mark was affixed:	15			
Intended use:	Roof panel			
Panel thickness:	**140/100**	**190/150**	Reference	
Thickness of external facing:	0,50 - 0,70		mm	(EN 10143)
External facing - steel grade:	S280GD+Z275, S280GD+Z190			(EN 10346)
Coating of external facing:	SP25, Hiarc, Hiarc max, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2			(EN 10169)
External facing profile:	T			
Thickness of internal facing:	0,50 - 0,60		mm	(EN 10143)
Internal facing - steel grade:	S280GD+Z275, S280GD+Z190, S280GD+Z100			(EN 10346)
Coating of internal facing:	SP25, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m^2			(EN 10169)
Internal facing profile:	L, F			
Core material:	MW			
Density of core material:	115		kg/m^3	
Mass:	22,0	27,6	kg/m^2	
Mechanical resistance:				
Tensile strength:	0,07	0,07	MPa	
Shear strength:	0,043	0,043	MPa	
Reduced long term shear strength:	0,022	0,022	MPa	
Shear modulus (core):	1,84	1,51	MPa	
Compressive strength (core):	0,10	0,10	MPa	
Creep coefficient t=2000h:	0,40	0,40		
Creep coefficient t=100000h:	0,62	0,62		
Wrinkling strength (external face):				
- in span	170	170	MPa	
- in span, elevated temperature	170	170	MPa	
- at central support	170	170	MPa	
- at central support, elevated temparature	170	170	MPa	
Wrinkling strength (internal face):				
- in span	110	110	MPa	
- at internal support	105	105	MPa	
Other properties:				
Thermal transmittance, $U_{d,s}$:	0,40	0,27	W/m^{2}K	
Thermal conductivity of the core, $\lambda_{Declared}$:	0,043		W/mK	
Reaction to fire:	A2-s1, d0		Class	(EN 13501-1)
Fire resistance:	REI 60		Class	(EN 13501-2)
External fire performance:	Broof		Class	
Water permeability:	A	A	Class	(EN 12865)
Air permeability:	≤ 1,5	≤ 1,5	m^3/m^2· h	(EN 12114)
Water vapour permeability:	Impermeable			
Airborne sound insulation, $R_w(C; C_{tr})$:	34 (-1; -4)	34 (-1; -4)	dB	(EN ISO 717-1)
Sound absorption, α_w:	0,10	0,10		(EN ISO 11654)
Durability:	Pass - all colours			

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