



DECLARATION OF PERFORMANCE No. 54/MW/OBO

1. Unique identification code of product type:

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 | | SP2D100W ENERGY SP2D120W ENERGY SP2D140W ENERGY SP2D150W ENERGY SP2D160W ENERGY SP2D170W ENERGY SP2D180W ENERGY SP2D200W ENERGY SP2D230W ENERGY |
| SPB80WB | SPB80WB ENERGY | SPB100WIB | |
| SPB100WB | SPB100WB ENERGY | SPB120WIB | |
| SPB120WB | SPB120WB ENERGY | SPB140WIB | |
| SPB140WB | SPB140WB ENERGY | SPB150WIB | |
| SPB150WB | SPB150WB ENERGY | SPB160WIB | |
| SPB160WB | SPB160WB ENERGY | SPB170WIB | |
| SPB170WB | SPB170WB ENERGY | SPB180WIB | |
| SPB180WB | SPB180WB ENERGY | | |
| SPB200WB | SPB200WB ENERGY | | |
| SPB230WB | SPB230WB ENERGY | | SPC190/150W |

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

| | | |
|-----------|------------------|------------|
| 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 |
| 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 WSB, SPB WS ENERGY, SPB WSB ENERGY with mineral wool core

| | | | |
|----------|-----------|-----------------|------------------|
| SPB100WS | SPB100WSB | SPB100WS ENERGY | SPB100WSB ENERGY |
| SPB120WS | SPB120WSB | SPB120WS ENERGY | SPB120WSB ENERGY |
| SPB140WS | SPB140WSB | SPB140WS ENERGY | SPB140WSB ENERGY |
| SPB150WS | SPB150WSB | SPB150WS ENERGY | SPB150WSB ENERGY |
| SPB160WS | SPB160WSB | SPB160WS ENERGY | SPB160WSB ENERGY |
| SPB170WS | SPB170WSB | SPB170WS ENERGY | SPB170WSB ENERGY |
| SPB180WS | SPB180WSB | SPB180WS ENERGY | SPB180WSB ENERGY |
| SPB200WS | SPB200WSB | SPB200WS ENERGY | SPB200WSB ENERGY |
| SPB230WS | SPB230WSB | SPB230WS ENERGY | 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, 22.10.2019

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

ENERGY PANELS:

| | |
|--------------------------------------|--------|
| SPB W Energy / SPB WB Energy | Page 4 |
| SPB WF Energy / SPB WFB Energy | Page 5 |
| SPB WS Energy / SPB WSB Energy | Page 6 |
| SP2D W Energy | Page 7 |

OTHER PANELS:

| | |
|--------------------------|---------|
| SPB W / SPB WB | Page 8 |
| SPB WI / SPB WIB | Page 9 |
| SPB WF / SPB WFB | Page 10 |
| SPB WFI / SPB WFIB | Page 11 |
| SPB WS / SPB WSB | Page 12 |
| SP2D W | Page 13 |
| SPC W | Page 14 |

Attachment 1 to Declaration of Performance 54/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, S280GD+ZM140, S280GD+ZM120 | | | | | | | | | | | (EN 10346) |
| Coating of external facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | | | | | (EN 10169) |
| External facing profile (module 1100 mm): | L, M, R275, R550, F | | | | | | | | | | | |
| External facing profile (module 1000 mm): | L, M, R28, R250, R500, F | | | | | | | | | | | |
| Thickness of internal facing: | 0,50 - 0,60 | | | | | | | | | | mm | (EN 10143) |
| Internal facing - steel grade: | S280GD+Z275, S280GD+Z190, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100 | | | | | | | | | | | (EN 10346) |
| Coating of internal facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | | | | | (EN 10169) |
| Internal facing profile: | L, F | | | | | | | | | | | |
| Core material: | MW | | | | | | | | | | | |
| Density of core material: | 115 | | | | | | | | | | kg/m ³ | |
| Mass (module 1100 mm): | 19,6 | 21,9 | 24,2 | 26,5 | 27,6 | 28,8 | 29,9 | 31,1 | 33,4 | 36,8 | kg/m ² | |
| Mass (module 1000 mm): | 19,7 | 22,0 | 24,3 | 26,6 | 27,7 | 28,9 | 30,0 | 31,2 | 33,5 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 0,45 | |
| Wrinkling strength (external face): | | | | | | | | | | | | |
| - in span | 128 | 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 | 124 | MPa |
| - at central support | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | MPa |
| - at central support, elevated temperature | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | MPa |
| Wrinkling strength (internal face): | | | | | | | | | | | | |
| - in span | 128 | 128 | 128 | 128 | 128 | 128 | 128 | 128 | 128 | 128 | 128 | MPa |
| - at internal support | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | MPa |
| Other properties: | | | | | | | | | | | | |
| Thermal transmittance, U _{g,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, $\lambda_{\text{declared}}$: | 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 | | | | | | | | | | Class | (EN 12865) |
| Air permeability: | \leq 1,5 | | | | | | | | | | m ³ /m ² h | (EN 12114) |
| Water vapour permeability: | Impermeable | | | | | | | | | | | |
| Airborne sound insulation, R _w (C; C _v): | 33 (-1; -4) | 32 (-2; -4) | | | | | | | | | dB | (EN ISO 717-1) |
| Sound absorption, α_w : | 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 54/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: | 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, S280GD+ZM140, S280GD+ZM120 | | | | | | | | | (EN 10346) | | |
| Coating of external facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | | | (EN 10169) | | |
| External facing profile (module 1100 mm): | L, M, R275, R550, F | | | | | | | | | | | |
| External facing profile (module 1000 mm): | L, M, R28, R250, R500, F | | | | | | | | | | | |
| Thickness of internal facing: | 0,50 - 0,60 | | | | | | | | mm | (EN 10143) | | |
| Internal facing - steel grade: | S280GD+Z275, S280GD+Z190, S280GD+Z100 S280GD+ZM140, S280GD+ZM120, S280GD+ZM100 | | | | | | | | | (EN 10346) | | |
| Coating of internal facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | | | (EN 10169) | | |
| Internal facing profile: | L, F | | | | | | | | | | | |
| Core material: | MW | | | | | | | | | | | |
| Density of core material: | 120 | | | | | | | | kg/m ³ | | | |
| Mass (module 1100 mm): | 24,8 | 27,2 | 28,4 | 29,6 | 30,8 | 32,0 | 34,4 | 38,0 | kg/m ² | | | |
| Mass (module 1000 mm): | 24,9 | 27,3 | 28,5 | 29,7 | 30,9 | 32,1 | 34,5 | 38,1 | 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 | 0,09 | 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 | | | | |
| 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 temperature | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 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} : | 0,36 | 0,31 | 0,29 | 0,27 | 0,26 | 0,24 | 0,22 | 0,19 | W/m ² K | | | |
| Thermal conductivity of the core, $\lambda_{\text{Declared}}$: | 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 | | | | | | | | Class | (EN 12865) | | |
| Air permeability: | \leq 1,5 | | | | | | | | | | m ³ /m ² h | (EN 12114) |
| Water vapour permeability: | Impermeable | | | | | | | | | | | |
| Airborne sound insulation, R _w (C; C _{tr}): | 32 (-1; -4) | | | | | | | | dB | (EN ISO 717-1) | | |
| Sound absorption, α_w : | 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 54/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, S280GD+ZM140, S280GD+ZM120 | | | | | | | | | (EN 10346) | |
| Coating of external facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | | | (EN 10169) | |
| External facing profile (module 1100 mm): | L, M, R275, R550, F | | | | | | | | | | |
| External facing profile (module 1000 mm): | L, M, R28, R250, R500, F | | | | | | | | | | |
| Thickness of internal facing: | 0,50 - 0,70 | | | | | | | | | mm (EN 10143) | |
| Internal facing - steel grade: | S280GD+Z275, S280GD+Z190, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100 | | | | | | | | | (EN 10346) | |
| Coating of internal facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | | | (EN 10169) | |
| Internal facing profile: | L, F | | | | | | | | | | |
| Core material: | MW | | | | | | | | | | |
| Density of core material: | 120 | | | | | | | | | kg/m ³ | |
| Mass (module 1100 mm): | 22,4 | 24,8 | 27,2 | 28,4 | 29,6 | 30,8 | 32,0 | 34,4 | 38,0 | kg/m ² | |
| Mass (module 1000 mm): | 22,5 | 24,9 | 27,3 | 28,5 | 29,7 | 30,9 | 32,1 | 34,5 | 38,1 | 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: | 0,10 | 0,10 | 0,10 | 0,10 | 0,10 | 0,10 | 0,10 | 0,10 | 0,10 | MPa | |
| Reduced long term shear strength: | 0,04 | 0,04 | 0,04 | 0,04 | 0,04 | 0,04 | 0,04 | 0,04 | 0,04 | MPa | |
| Shear modulus (core): | 6,0 | 6,0 | 6,0 | 6,0 | 6,0 | 6,0 | 6,0 | 6,0 | 6,0 | 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=10000h: | 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 temperature | 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, $\lambda_{\text{Declared}}$: | 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 | | | | | | | | | Class (EN 12865) | |
| Air permeability: | \leq 1,5 | | | | | | | | | m ³ /m ² h (EN 12114) | |
| Water vapour permeability: | Impermeable | | | | | | | | | | |
| Airborne sound insulation, R _w (C; C _{tr}): | 32 (-2; -4) | | | | | | | | | dB (EN ISO 717-1) | |
| Sound absorption, α_w : | 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 54/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 | | | | | | | | | |
| External facing - steel grade: | S280GD+Z275, S280GD+Z190, S280GD+ZM140, S280GD+ZM120 | | | | | | | | | |
| Coating of external facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | | | |
| External facing profile: | L, M, R250, R500 | | | | | | | | | |
| Thickness of internal facing: | 0,50 - 0,60 | | | | | | | | | |
| Internal facing - steel grade: | S280GD+Z275, S280GD+Z190, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100 | | | | | | | | | |
| Coating of internal facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | | | |
| Internal facing profile: | L, F | | | | | | | | | |
| Core material: | MW | | | | | | | | | |
| Density of core material: | 115 | | | | | | | | | |
| Mass: | 22,5 | 24,8 | 27,1 | 28,2 | 29,4 | 30,5 | 31,7 | 34,0 | 37,4 | kg/m ³ |
| 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 temperature | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 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 _{ds} : | 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 | | | | | | | | | |
| Reaction to fire: | A2-s1, d0 | | | | | | | | | |
| Fire resistance: | EI60 / EI60 | EI 60 / EI 90 | | EI90/EI120 | EI120/EI120 | EI120/EI180 | EI 120 / EI 240 | | | Class (EN 13501-1) |
| External fire performance: | Not applicable | | | | | | | | | |
| Water permeability: | A | | | | | | | | | |
| Air permeability: | \leq 1,5 | | | | | | | | | |
| Water vapour permeability: | Impermeable | | | | | | | | | |
| Airborne sound insulation, R _w (C; C _{tr}): | 32 (-2; -4) | | | | | | | | | |
| Sound absorption, α_w : | 0,1 | | | | | | | | | |
| Durability: | Pass - all colours | | | | | | | | | |

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

Attachment 5 to Declaration of Performance 54/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, S280GD+ZM140, S280GD+ZM120 | | | | | | | | | | (EN 10346) |
| Coating of external facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | | | | (EN 10169) |
| External facing profile (module 1100 mm): | L, M, R275, R550, F | | | | | | | | | | |
| External facing profile (module 1000 mm): | L, M, R28, R250, R500, F | | | | | | | | | | |
| Thickness of internal facing: | 0,50 - 0,60 | | | | | | | | | | mm (EN 10143) |
| Internal facing - steel grade: | S280GD+Z275, S280GD+Z190, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100 | | | | | | | | | | (EN 10346) |
| Coating of internal facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | | | | (EN 10169) |
| Internal facing profile: | L, F | | | | | | | | | | |
| Core material: | MW | | | | | | | | | | |
| Density of core material: | 115 | | | | | | | | | | kg/m ³ |
| Mass (module 1100 mm): | 19,6 | 21,9 | 24,2 | 26,5 | 27,6 | 28,8 | 29,9 | 31,1 | 33,4 | 36,8 | kg/m ² |
| Mass (module 1000 mm): | 19,7 | 22,0 | 24,3 | 26,6 | 27,7 | 28,9 | 30,0 | 31,2 | 33,5 | 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 | 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 temperature | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 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 _{g,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, $\lambda_{\text{declared}}$: | 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 | | | | | | | | | | Class (EN 12865) |
| Air permeability: | \leq 1,5 | | | | | | | | | | m ³ /m ² h (EN 12114) |
| Water vapour permeability: | Impermeable | | | | | | | | | | |
| Airborne sound insulation, R _w (C; C _v): | 33 (-1; -4) | 32 (-2; -4) | | | | | | | | | dB (EN ISO 717-1) |
| Sound absorption, α_w : | 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 54/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, S280GD+ZM140, S280GD+ZM120 | | | | | | | | | (EN 10346) | |
| Coating of external facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | | | (EN 10169) | |
| External facing profile: | L | | | | | | | | | | |
| Thickness of internal facing: | 0,50 | | | | | | | | mm | (EN 10143) | |
| Internal facing - steel grade: | S280GD+Z275, S280GD+Z190, S280GD+Z100 S280GD+ZM140, S280GD+ZM120, S280GD+ZM100 | | | | | | | | | (EN 10346) | |
| Coating of internal facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | | | (EN 10169) | |
| Internal facing profile: | L | | | | | | | | | | |
| Core material: | MW | | | | | | | | | | |
| Density of core material: | 115 | | | | | | | | kg/m ³ | | |
| Mass (module 1100 mm): | 17,9 | 20,2 | 22,5 | 24,8 | 26,0 | 27,1 | 28,3 | 29,4 | kg/m ² | | |
| Mass (module 1000 mm): | 18,0 | 20,3 | 22,6 | 24,9 | 26,1 | 27,2 | 28,4 | 29,5 | 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 temperature | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 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, $\lambda_{\text{Declared}}$: | 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 | | | | | | | | Class | (EN 12865) | |
| Air permeability: | \leq 1,5 | | | | | | | | m ³ /m ² h | (EN 12114) | |
| Water vapour permeability: | Impermeable | | | | | | | | | | |
| Airborne sound insulation, R _w (C; C _t): | 33 (-1; -4) | 32 (-2; -4) | | | | | | | dB | (EN ISO 717-1) | |
| Sound absorption, α_w : | 0,1 | | | | | | | | | | |
| Durability: | Pass - all colours | | | | | | | | | | |

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

Attachment 7 to Declaration of Performance 54/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: | 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, S280GD+ZM140, S280GD+ZM120 | | | | | | | | | (EN 10346) | | |
| Coating of external facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | | | (EN 10169) | | |
| External facing profile (module 1100 mm): | L, M, R275, R550, F | | | | | | | | | | | |
| External facing profile (module 1000 mm): | L, M, R28, R250, R500, F | | | | | | | | | | | |
| Thickness of internal facing: | 0,50 - 0,60 | | | | | | | | mm | (EN 10143) | | |
| Internal facing - steel grade: | S280GD+Z275, S280GD+Z190, S280GD+Z100 S280GD+ZM140, S280GD+ZM120, S280GD+ZM100 | | | | | | | | | (EN 10346) | | |
| Coating of internal facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | | | (EN 10169) | | |
| Internal facing profile: | L, F | | | | | | | | | | | |
| Core material: | MW | | | | | | | | | | | |
| Density of core material: | 120 | | | | | | | | kg/m ³ | | | |
| Mass (module 1100 mm): | 24,8 | 27,2 | 28,4 | 29,6 | 30,8 | 32,0 | 34,4 | 38,0 | kg/m ² | | | |
| Mass (module 1000 mm): | 24,9 | 27,3 | 28,5 | 29,7 | 30,9 | 32,1 | 34,5 | 38,1 | 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 | 0,09 | 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 | | | | |
| 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 temperature | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 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} : | 0,36 | 0,31 | 0,29 | 0,27 | 0,26 | 0,24 | 0,22 | 0,19 | W/m ² K | | | |
| Thermal conductivity of the core, $\lambda_{\text{Declared}}$: | 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 | | | | | | | | Class | (EN 12865) | | |
| Air permeability: | \leq 1,5 | | | | | | | | | | m ³ /m ² h | (EN 12114) |
| Water vapour permeability: | Impermeable | | | | | | | | | | | |
| Airborne sound insulation, R _w (C; C _{tr}): | 32 (-1; -4) | | | | | | | | dB | (EN ISO 717-1) | | |
| Sound absorption, α_w : | 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 54/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: | 120 | 140 | 150 | 160 | 170 | 180 | Reference | | |
| Thickness of external facing: | 0,50 | | | | | | mm | (EN 10143) | |
| External facing - steel grade: | S280GD+Z275, S280GD+Z190, S280GD+ZM140, S280GD+ZM120 | | | | | | | (EN 10346) | |
| Coating of external facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | (EN 10169) | |
| External facing profile: | L | | | | | | | | |
| Thickness of internal facing: | 0,50 | | | | | | mm | (EN 10143) | |
| Internal facing - steel grade: | S280GD+Z275, S280GD+Z190, S280GD+Z100 S280GD+ZM140, S280GD+ZM120, S280GD+ZM100 | | | | | | | (EN 10346) | |
| Coating of internal facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | | | | | (EN 10169) | |
| Internal facing profile: | L | | | | | | | | |
| Core material: | MW | | | | | | | | |
| Density of core material: | 120 | | | | | | kg/m ³ | | |
| Mass (module 1100 mm): | 23,1 | 25,5 | 26,7 | 27,9 | 29,1 | 30,3 | kg/m ² | | |
| Mass (module 1000 mm): | 23,2 | 25,6 | 26,8 | 28,0 | 29,2 | 30,4 | kg/m ² | | |
| Mechanical resistance: | | | | | | | | | |
| Tensile strength: | 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 | MPa | | |
| Reduced long term shear strength: | 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 | MPa | | |
| Compressive strength (core): | 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 | | | |
| Creep coefficient t=100000h: | 0,45 | 0,45 | 0,45 | 0,45 | 0,45 | 0,45 | | | |
| Wrinkling strength (external face): | | | | | | | | | |
| - in span | 128 | 128 | 128 | 128 | 128 | 128 | MPa | | |
| - in span, elevated temperature | 124 | 124 | 124 | 124 | 124 | 124 | MPa | | |
| - at central support | 95 | 95 | 95 | 95 | 95 | 95 | MPa | | |
| - at central support, elevated temperature | 83 | 83 | 83 | 83 | 83 | 83 | MPa | | |
| Wrinkling strength (internal face): | | | | | | | | | |
| - in span | 128 | 128 | 128 | 128 | 128 | 128 | MPa | | |
| - at internal support | 110 | 110 | 110 | 110 | 110 | 110 | MPa | | |
| Other properties: | | | | | | | | | |
| Thermal transmittance, U _{d,s} : | 0,36 | 0,31 | 0,29 | 0,27 | 0,26 | 0,24 | W/m ² K | | |
| Thermal conductivity of the core, $\lambda_{\text{Declared}}$: | 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 | | | | | | Class | (EN 12865) | |
| Air permeability: | \leq 1,5 | | | | | | m ³ /m ² h | (EN 12114) | |
| Water vapour permeability: | Impermeable | | | | | | | | |
| Airborne sound insulation, R _w (C; C _t): | 32 (-1; -4) | | | | | | dB | (EN ISO 717-1) | |
| Sound absorption, α_w : | 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 54/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, S280GD+ZM140, S280GD+ZM120 | | | | | | | | | (EN 10346) | |
| Coating of external facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m ² | | | | | | | | | (EN 10169) | |
| External facing profile (module 1100 mm): | L, M, R275, R550, F | | | | | | | | | | |
| External facing profile (module 1000 mm): | L, M, R28, R250, R500, F | | | | | | | | | | |
| Thickness of internal facing: | 0,50 - 0,70 | | | | | | | | | mm (EN 10143) | |
| Internal facing - steel grade: | S280GD+Z275, S280GD+Z190, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100 | | | | | | | | | (EN 10346) | |
| Coating of internal facing: | Polyester, 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 (module 1100 mm): | 22,4 | 24,8 | 27,2 | 28,4 | 29,6 | 30,8 | 32,0 | 34,4 | 38,0 | kg/m ² | |
| Mass (module 1000 mm): | 22,5 | 24,9 | 27,3 | 28,5 | 29,7 | 30,9 | 32,1 | 34,5 | 38,1 | 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: | 0,10 | 0,10 | 0,10 | 0,10 | 0,10 | 0,10 | 0,10 | 0,10 | 0,10 | MPa | |
| Reduced long term shear strength: | 0,04 | 0,04 | 0,04 | 0,04 | 0,04 | 0,04 | 0,04 | 0,04 | 0,04 | MPa | |
| Shear modulus (core): | 6,0 | 6,0 | 6,0 | 6,0 | 6,0 | 6,0 | 6,0 | 6,0 | 6,0 | 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=10000h: | 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 temperature | 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, λ _{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 | | | | | | | | | Class (EN 12865) | |
| Air permeability: | ≤ 1,5 | | | | | | | | | m ³ /m ² h (EN 12114) | |
| Water vapour permeability: | Impermeable | | | | | | | | | | |
| Airborne sound insulation, R _w (C; C _{tr}): | 32 (-2; -4) | | | | | | | | | dB (EN ISO 717-1) | |
| Sound absorption, α _w : | 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 54/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, S280GD+ZM140, S280GD+ZM120 | | | | | | | | | | |
| Coating of external facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m ² | | | | | | | | | | |
| External facing profile: | L, M, R250, R500 | | | | | | | | | | |
| Thickness of internal facing: | 0,50 - 0,60 | | | | | | | | | mm (EN 10143) | |
| Internal facing - steel grade: | S280GD+Z275, S280GD+Z190, S280GD+Z100, S280GD+ZM140, S280GD+ZM120, S280GD+ZM100 | | | | | | | | | | |
| Coating of internal facing: | Polyester, Hiarc, Hiarc max, PVC, Csafe or other colour coating with PCS ≤ 4,0 MJ/m ² | | | | | | | | | | |
| Internal facing profile: | L, F | | | | | | | | | | |
| Core material: | MW | | | | | | | | | | |
| Density of core material: | 115 | | | | | | | | | kg/m ³ | |
| Mass: | 22,5 | 24,8 | 27,1 | 28,2 | 29,4 | 30,5 | 31,7 | 34,0 | 37,4 | 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 temperature | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 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 _{ds} : | 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, λ _{declared} : | 0,043 | | | | | | | | | W/mK | |
| Reaction to fire: | A2-s1, d0 | | | | | | | | | | |
| Fire resistance: | EI60 / EI60 | | EI60 / EI90 | | EI90/EI120 | EI120/EI120 | EI120/EI180 | EI120 / EI240 | | Class (EN 13501-2) | |
| External fire performance: | Not applicable | | | | | | | | | | |
| Water permeability: | A | | | | | | | | | Class (EN 12865) | |
| Air permeability: | ≤ 1,5 | | | | | | | | | | m ³ /m ² h (EN 12114) |
| Water vapour permeability: | Impermeable | | | | | | | | | | |
| Airborne sound insulation, R _w (C; C _v): | 32 (-2; -4) | | | | | | | | | dB (EN ISO 717-1) | |
| Sound absorption, α _w : | 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 54/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, S280GD+ZM140, S280GD+ZM120 | | | (EN 10346) |
| Coating of external facing: | Polyester, Hiarc, Hiarc max, Csafe or other colour coating with PCS \leq 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 S280GD+ZM140, S280GD+ZM120, S280GD+ZM100 | | | (EN 10346) |
| Coating of internal facing: | Polyester, Hiarc, Hiarc max, Csafe or other colour coating with PCS \leq 4,0 MJ/m ² | | | (EN 10169) |
| Internal facing profile: | L, F | | | |
| Core material: | MW | | | |
| Density of core material: | 115 | | | kg/m ³ |
| Mass: | 22,8 | 28,5 | 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 temperature | 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, $\lambda_{\text{Declared}}$: | 0,043 | | | W/mK |
| Reaction to fire: | A2-s1, d0 | | | Class (EN 13501-1) |
| Fire resistance: | REI 60 / RE 180 | | | Class (EN 13501-2) |
| External fire performance: | Broof | | | Class |
| Water permeability: | A | A | Class (EN 12865) | |
| Air permeability: | \leq 1,5 | \leq 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.