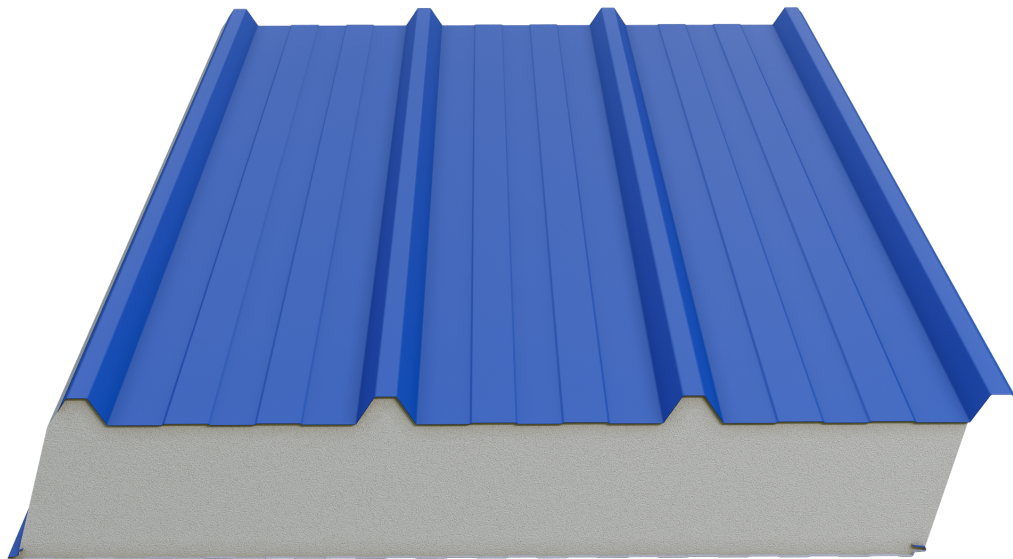


N4 - UK Roof and Wall Panel



It has 4 ribs which is lateral connected sandwich panel. Its biggest advantage is that it enables fast assembly thanks to lateral connected panel connection. This product enables wide gaps to be passed safely with its indented form. It has a joint detail with angle.

Production Plant

UK

Product Application

- Industrial Buildings
- Military Buildings
- Public Buildings
- Agricultural Buildings
- Sports Facilities
- Construction Site Buildings
- Silos
- Hypermarkets
- Shopping Centers
- Storehouse Halls
- Administrative Buildings

and all other concrete structures with steel or prefabricated load bearing systems.

Performance Advantages

It has a joint detail with angle.
 Fast and trouble-free installation saves both time and labor.
 It has high performance in sound insulation as well as heat insulation.
 Thanks to its colorful surface, there is no need for additional coatings such as plaster or paint.
 There are surface paint (Polyester, PvdF, Plastisol, PVC) options suitable for the place of use.
 Color selection can be made from the RAL catalogue.
 It does not deteriorate, rot or mold over time.

Cross Section



Thickness: 40-50-60-80-100-120-140-160-180-200 mm

| | |
|-----------------------|----------------------------------|
| Modular Width | 1,000 mm |
| Minimum Length | 2 meters |
| Maximum Length | Depends on transport conditions. |

SmartCore – PIR Properties

| | |
|--|---|
| Density (EN 1602) | PIR: 40 (± 2) kg/m ³ & SmartCore: 41 (± 2) kg/m ³ |
| Thickness | 40-50-60-80-100-120-140-160-180-200 mm |
| Thermal Conductivity (EN 13165) | PIR: 0.022-0.024 W/mK & SmartCore: 0.018-0.019 W/mK |
| Reaction to Fire (13501) | PIR: B-s2,d0 & SmartCore: B-s2,d0 |

Thermal Conductivity Table for SmartCore Panels

| Panel Thickness | U Thermal Conductivity (W/m ² K) | R Thermal Resistance (m ² K/W) | R Thermal Resistance (ft ² °F h/Btu) |
|-----------------|---|---|---|
| 40 mm | 0,43 | 2,350 | 13,343 |
| 50 mm | 0,35 | 2,880 | 16,353 |
| 60 mm | 0,29 | 3,400 | 19,305 |
| 80 mm | 0,22 | 4,460 | 25,324 |
| 100 mm | 0,18 | 5,510 | 31,286 |
| 120 mm | 0,15 | 6,560 | 37,248 |
| 140 mm | 0,13 | 7,610 | 43,210 |
| 160 mm | 0,12 | 8,670 | 49,228 |
| 180 mm | 0,10 | 9,720 | 55,190 |
| 200 mm | 0,09 | 10,770 | 61,152 |

According to EN 14509

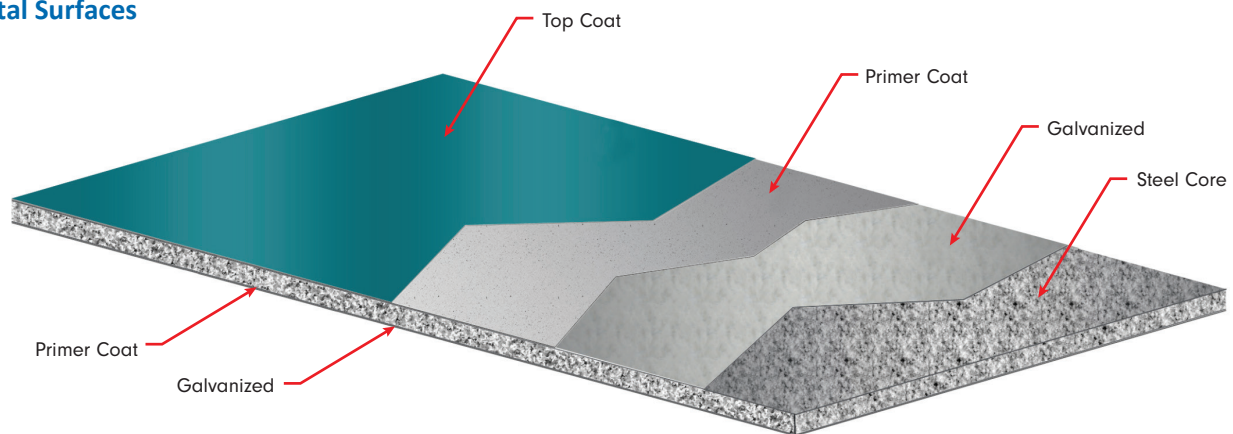
While every effort has been made to ensure the accuracy of the information provided in this document, Assan Panel and its subsidiaries accept no responsibility for any errors or for content that may be misleading. Any recommendations or descriptions regarding product use or application are offered for general guidance only. Assan Panel and its subsidiaries accept no liability in respect thereof. Assan Panel reserves the right to make changes to this document at any time without prior notice.

Thermal Conductivity Table for PIR Panels

| Panel Thickness | U Thermal Conductivity (W/m ² K) | R Thermal Resistance (m ² K/W) | R Thermal Resistance (ft ² °F h/Btu) |
|-----------------|---|---|---|
| 40 mm | 0,51 | 1,970 | 11,186 |
| 50 mm | 0,42 | 2,400 | 13,627 |
| 60 mm | 0,35 | 2,840 | 16,126 |
| 80 mm | 0,27 | 3,710 | 21,065 |
| 100 mm | 0,22 | 4,570 | 25,948 |
| 120 mm | 0,18 | 5,440 | 30,888 |
| 140 mm | 0,16 | 6,310 | 35,828 |
| 160 mm | 0,14 | 7,180 | 40,768 |
| 180 mm | 0,12 | 8,050 | 45,708 |
| 200 mm | 0,11 | 8,920 | 50,648 |

According to EN 14509

Metal Surfaces



Prepainted Galvanized Steel Surface

| | |
|---------------------------------------|---|
| Metal Type | h 8 0 |
| External Facing Thickness | 50 |
| Internal Facing Thickness | 40 |
| Thickness Tolerance (EN 10143) | V |
| Steel Quality (EN 10327) | oGrade (S220GD+Z, S250GD+Z, S280GD+Z, S320GD+Z, S350GD+Z) |
| Paint Type | h h 7 h |

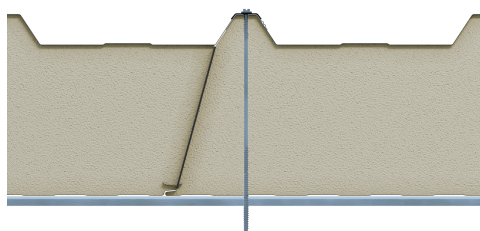
Tolerance Values

| Panel Length | Panel Thickness | Panel Cover Width | Rectangularity |
|---|-------------------|-------------------------|--|
| If L <= 3,000 mm ± 5 mm; If L > 3,000 mm ± 10 mm | D ≤ 100 mm ± 2 mm | ± 2 mm for all profiles | s ≤ 0.6% of the nominal cover thickness (w). / (Width x 0.006) |


Standard Package


| Thickness (mm) | 40 | 50 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 |
|-----------------|----|----|----|----|-----|-----|-----|-----|-----|-----|
| Quantity | 20 | 18 | 14 | 10 | 9 | 8 | 7 | 6 | 5 | 4 |


Joint Details



NOVA 4 (PIR) PANEL FOR ROOF LOAD SPAN TABLE

| Core Thickness (mm) | Load Type kN/m ² | Span length (L) (m) | | | | | | | | | | | | | | | |
|--|-------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | 1.25 | 1.50 | 1.75 | 2.00 | 2.25 | 2.50 | 2.75 | 3.00 | 3.25 | 3.50 | 3.75 | 4.00 | 4.25 | 4.50 | 4.75 | 5.00 |
| SINGLE SPAN  | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 2.39 | 1.85 | 1.50 | 1.25 | 1.06 | 0.93 | 0.81 | 0.71 | 0.62 | 0.49 | 0.37 | - | - | - | - | - |
| | Suction (kN/m ²) | -3.84 | -3.06 | -2.36 | -1.75 | -1.35 | -1.08 | -0.90 | -0.76 | -0.65 | -0.56 | -0.50 | - | - | - | - | - |
| | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 2.67 | 2.11 | 1.74 | 1.48 | 1.27 | 1.11 | 0.99 | 0.88 | 0.78 | 0.70 | 0.58 | 0.45 | 0.35 | 0.27 | - | - |
| | Suction (kN/m ²) | -4.50 | -3.67 | -2.74 | -2.04 | -1.59 | -1.27 | -1.05 | -0.89 | -0.76 | -0.66 | -0.58 | -0.52 | 0.00 | -0.42 | - | - |
| | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 2.95 | 2.37 | 1.99 | 1.71 | 1.49 | 1.31 | 1.16 | 1.04 | 0.94 | 0.85 | 0.76 | 0.65 | 0.53 | 0.42 | 0.34 | 0.27 |
| | Suction (kN/m ²) | -5.19 | -4.14 | -3.12 | -2.33 | -1.82 | -1.46 | -1.21 | -1.02 | -0.88 | -0.76 | -0.67 | -0.59 | -0.53 | -0.48 | -0.44 | -0.40 |
| | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 3.50 | 2.90 | 2.49 | 2.18 | 1.93 | 1.73 | 1.55 | 1.40 | 1.26 | 1.14 | 1.04 | 0.96 | 0.87 | 0.77 | 0.65 | 0.54 |
| | Suction (kN/m ²) | -6.23 | -4.85 | -3.88 | -2.92 | -2.28 | -1.84 | -1.52 | -1.28 | -1.10 | -0.96 | -0.84 | -0.75 | -0.67 | -0.60 | -0.55 | -0.50 |
| a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | |
| Pressure (kN/m ²) | 4.06 | 3.43 | 2.99 | 2.66 | 2.38 | 2.15 | 1.95 | 1.77 | 1.61 | 1.47 | 1.34 | 1.22 | 1.12 | 1.03 | 0.95 | 0.86 | |
| Suction (kN/m ²) | -7.11 | -5.58 | -4.59 | -3.51 | -2.75 | -2.22 | -1.84 | -1.55 | -1.32 | -1.15 | -1.01 | -0.90 | -0.80 | -0.72 | -0.66 | -0.60 | |
| a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | |
| Pressure (kN/m ²) | 4.62 | 3.96 | 3.50 | 3.14 | 2.84 | 2.58 | 2.35 | 2.15 | 1.96 | 1.79 | 1.64 | 1.51 | 1.38 | 1.27 | 1.17 | 1.08 | |
| Suction (kN/m ²) | -8.01 | -6.32 | -5.22 | -4.10 | -3.22 | -2.60 | -2.15 | -1.81 | -1.55 | -1.34 | -1.18 | -1.04 | -0.94 | -0.85 | -0.77 | -0.70 | |
| a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | |
| Pressure (kN/m ²) | 5.46 | 4.77 | 4.28 | 3.88 | 3.54 | 3.24 | 2.97 | 2.72 | 2.50 | 2.30 | 2.11 | 1.94 | 1.79 | 1.65 | 1.52 | 1.40 | |
| Suction (kN/m ²) | -9.37 | -7.45 | -6.18 | -4.98 | -3.92 | -3.22 | -2.62 | -2.21 | -1.89 | -1.64 | -1.44 | -1.27 | -1.13 | -1.02 | -0.93 | -0.85 | |
| a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | |
| Pressure (kN/m ²) | 6.01 | 5.31 | 4.80 | 4.37 | 4.01 | 3.68 | 3.38 | 3.11 | 2.86 | 2.63 | 2.42 | 2.23 | 2.06 | 1.90 | 1.76 | 1.62 | |
| Suction (kN/m ²) | -10.28 | -8.20 | -6.82 | -5.57 | -4.38 | -3.55 | -2.94 | -2.47 | -2.12 | -1.83 | -1.61 | -1.42 | -1.27 | -1.14 | -1.03 | -0.95 | |

| Core Thickness (mm) | Load Type kN/m ² | Span length (m) | | | | | | | | | | | | | | | |
|--|-------------------------------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| | | 1.25 | 1.50 | 1.75 | 2.00 | 2.25 | 2.50 | 2.75 | 3.00 | 3.25 | 3.50 | 3.75 | 4.00 | 4.25 | 4.50 | 4.75 | 5.00 |
| DOUBLE SPAN  | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 2.39 | 1.85 | 1.50 | 1.18 | 0.97 | 0.80 | 0.67 | 0.57 | 0.49 | - | - | - | - | - | - | - |
| | Suction (kN/m ²) | -3.50 | -2.60 | -2.04 | -1.66 | -1.35 | -1.08 | -0.90 | -0.76 | -0.65 | - | - | - | - | - | - | - |
| | b (mm) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 2.67 | 2.11 | 1.60 | 1.26 | 1.02 | 0.86 | 0.72 | 0.62 | 0.53 | 0.46 | - | - | - | - | - | - |
| | Suction (kN/m ²) | -3.74 | -2.81 | -2.21 | -1.81 | -1.52 | -1.27 | -1.05 | -0.89 | -0.76 | -0.66 | - | - | - | - | - | - |
| | b (mm) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 2.95 | 2.21 | 1.68 | 1.33 | 1.08 | 0.91 | 0.77 | 0.66 | 0.57 | 0.50 | - | - | - | - | - | - |
| | Suction (kN/m ²) | -3.98 | -3.01 | -2.38 | -1.96 | -1.65 | -1.42 | -1.21 | -1.02 | -0.88 | -0.76 | - | - | - | - | - | - |
| | b (mm) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | |
| Pressure (kN/m ²) | 3.29 | 2.39 | 1.83 | 1.46 | 1.19 | 1.00 | 0.87 | 0.75 | 0.65 | 0.57 | 0.50 | 0.45 | - | - | - | - | |
| Suction (kN/m ²) | -4.43 | -3.38 | -2.70 | -2.23 | -1.89 | -1.63 | -1.43 | -1.27 | -1.10 | -0.96 | -0.84 | -0.75 | - | - | - | - | |
| b (mm) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | |
| a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | |
| Pressure (kN/m ²) | 3.48 | 2.55 | 1.98 | 1.58 | 1.31 | 1.10 | 0.96 | 0.83 | 0.72 | 0.64 | 0.56 | 0.50 | 0.45 | - | - | - | |
| Suction (kN/m ²) | -4.85 | -3.73 | -3.00 | -2.49 | -2.11 | -1.83 | -1.61 | -1.43 | -1.29 | -1.15 | -1.01 | -0.90 | -0.80 | - | - | - | |
| b (mm) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | |
| a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | |
| Pressure (kN/m ²) | 3.67 | 2.71 | 2.11 | 1.70 | 1.41 | 1.19 | 1.02 | 0.90 | 0.79 | 0.70 | 0.62 | 0.55 | 0.50 | 0.45 | - | - | |
| Suction (kN/m ²) | -5.24 | -4.06 | -3.28 | -2.73 | -2.32 | -2.01 | -1.77 | -1.58 | -1.42 | -1.29 | -1.18 | -1.04 | -0.94 | -0.85 | - | - | |
| b (mm) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | |
| a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | |
| Pressure (kN/m ²) | 3.93 | 2.94 | 2.31 | 1.87 | 1.56 | 1.32 | 1.13 | 1.00 | 0.88 | 0.78 | 0.70 | 0.62 | 0.56 | 0.51 | 0.46 | 0.42 | |
| Suction (kN/m ²) | -5.78 | -4.52 | -3.67 | -3.07 | -2.62 | -2.28 | -2.01 | -1.79 | -1.61 | -1.47 | -1.35 | -1.24 | -1.13 | -1.02 | -0.93 | -0.85 | |
| b (mm) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | |
| a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | |
| Pressure (kN/m ²) | 4.09 | 3.08 | 2.43 | 1.98 | 1.65 | 1.40 | 1.20 | 1.05 | 0.94 | 0.83 | 0.74 | 0.67 | 0.60 | 0.54 | 0.49 | 0.45 | |
| Suction (kN/m ²) | -6.13 | -4.81 | -3.92 | -3.28 | -2.81 | -2.44 | -2.15 | -1.92 | -1.74 | -1.58 | -1.45 | -1.34 | -1.24 | -1.14 | -1.03 | -0.95 | |
| b (mm) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | |

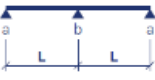
| Core Thickness (mm) | Load Type kN/m ² | Span length (m) | | | | | | | | | | | | | | | |
|--|-------------------------------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| | | 1.25 | 1.50 | 1.75 | 2.00 | 2.25 | 2.50 | 2.75 | 3.00 | 3.25 | 3.50 | 3.75 | 4.00 | 4.25 | 4.50 | 4.75 | 5.00 |
| TRIPLE SPAN  | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 2.39 | 1.85 | 1.50 | 1.25 | 1.06 | 0.93 | 0.81 | 0.71 | 0.62 | 0.54 | 0.40 | 0.42 | 0.37 | 0.33 | - | - |
| | Suction (kN/m ²) | -3.84 | -3.06 | -2.36 | -1.75 | -1.35 | -1.08 | -0.90 | -0.76 | -0.65 | -0.56 | -0.50 | -0.44 | -0.40 | -0.36 | - | - |
| | b (mm) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 2.67 | 2.11 | 1.74 | 1.48 | 1.25 | 1.04 | 0.90 | 0.77 | 0.67 | 0.59 | 0.52 | 0.46 | 0.41 | 0.37 | - | - |
| | Suction (kN/m ²) | -4.32 | -3.25 | -2.58 | -2.04 | -1.59 | -1.27 | -1.05 | -0.89 | -0.76 | -0.66 | -0.58 | -0.52 | 0.00 | -0.42 | - | - |
| | b (mm) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 2.95 | 2.37 | 1.99 | 1.61 | 1.31 | 1.10 | 0.95 | 0.82 | 0.71 | 0.62 | 0.55 | 0.49 | 0.44 | 0.40 | 0.36 | - |
| | Suction (kN/m ²) | -4.54 | -3.43 | -2.74 | -2.27 | -1.82 | -1.46 | -1.21 | -1.02 | -0.88 | -0.76 | -0.67 | -0.59 | -0.53 | -0.48 | -0.44 | - |
| | b (mm) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | |
| Pressure (kN/m ²) | 3.50 | 2.83 | 2.17 | 1.73 | 1.42 | 1.20 | 1.02 | 0.90 | 0.79 | 0.70 | 0.62 | 0.56 | 0.50 | 0.45 | 0.41 | 0.37 | |
| Suction (kN/m ²) | -4.95 | -3.79 | -3.04 | -2.53 | -2.16 | -1.84 | -1.52 | -1.28 | -1.10 | -0.96 | -0.84 | -0.75 | -0.67 | -0.60 | -0.55 | -0.50 | |
| b (mm) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | |
| a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | |
| Pressure (kN/m ²) | 4.06 | 2.98 | 2.30 | 1.85 | 1.53 | 1.29 | 1.11 | 0.98 | 0.86 | 0.76 | 0.68 | 0.61 | 0.55 | 0.50 | 0.46 | 0.41 | |
| Suction (kN/m ²) | -5.34 | -4.12 | -3.33 | -2.78 | -2.38 | -2.08 | -1.84 | -1.55 | -1.32 | -1.15 | -1.01 | -0.90 | -0.80 | -0.72 | -0.66 | -0.60 | |
| b (mm) | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | |
| a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | |
| Pressure (kN/m ²) | 4.25 | 3.12 | 2.42 | 1.96 | | | | | | | | | | | | | |

NOVA 4 (PIR) WALL PANEL LOAD SPAN TABLE

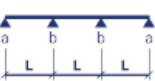
| Core Thickness (mm) | Load Type kN/m ² | Span length (L) (m) | | | | | | | | | | | | | | | |
|---------------------|-------------------------------|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 1.25 | 1.50 | 1.75 | 2.00 | 2.25 | 2.50 | 2.75 | 3.00 | 3.25 | 3.50 | 3.75 | 4.00 | 4.25 | 4.50 | 4.75 | 5.00 |
| 40 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 3.06 | 2.30 | 1.85 | 1.54 | 1.32 | 1.15 | 1.03 | 0.94 | 0.85 | 0.78 | 0.71 | 0.63 | - | - | - | - |
| 50 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 3.62 | 2.76 | 2.22 | 1.86 | 1.60 | 1.41 | 1.25 | 1.13 | 1.03 | 0.95 | 0.88 | 0.80 | 0.72 | 0.65 | - | - |
| 60 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 4.16 | 3.19 | 2.59 | 2.18 | 1.88 | 1.65 | 1.47 | 1.33 | 1.21 | 1.11 | 1.03 | 0.97 | 0.88 | 0.80 | 0.73 | 0.66 |
| 80 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 5.19 | 4.04 | 3.30 | 2.79 | 2.42 | 2.13 | 1.91 | 1.72 | 1.57 | 1.45 | 1.34 | 1.25 | 1.16 | 1.09 | 1.00 | 0.92 |
| 100 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 6.20 | 4.86 | 3.99 | 3.39 | 2.94 | 2.60 | 2.33 | 2.11 | 1.93 | 1.77 | 1.64 | 1.53 | 1.43 | 1.35 | 1.27 | 1.18 |
| 120 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 6.78 | 5.65 | 4.68 | 3.98 | 3.46 | 3.07 | 2.75 | 2.49 | 2.28 | 2.10 | 1.95 | 1.81 | 1.70 | 1.60 | 1.51 | 1.43 |
| 150 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 6.78 | 5.65 | 4.84 | 4.24 | 3.76 | 3.39 | 3.08 | 2.82 | 2.60 | 2.42 | 2.26 | 2.12 | 1.99 | 1.88 | 1.78 | 1.69 |
| 170 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 6.78 | 5.65 | 4.84 | 4.24 | 3.76 | 3.39 | 3.08 | 2.82 | 2.60 | 2.42 | 2.26 | 2.12 | 1.99 | 1.88 | 1.78 | 1.69 |



| Core Thickness (mm) | Load Type kN/m ² | Span length (m) | | | | | | | | | | | | | | | |
|---------------------|-------------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 1.25 | 1.50 | 1.75 | 2.00 | 2.25 | 2.50 | 2.75 | 3.00 | 3.25 | 3.50 | 3.75 | 4.00 | 4.25 | 4.50 | 4.75 | 5.00 |
| 40 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 3.06 | 2.30 | 1.85 | 1.54 | 1.32 | 1.15 | 1.03 | 0.94 | 0.85 | 0.78 | 0.71 | 0.63 | - | - | - | - |
| 50 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 3.62 | 2.76 | 2.22 | 1.79 | 1.48 | 1.26 | 0.91 | 0.55 | 0.32 | 0.18 | - | - | - | - | - | - |
| 60 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 4.12 | 3.07 | 2.40 | 1.94 | 1.61 | 1.37 | 1.12 | 0.75 | 0.46 | 0.28 | 0.16 | - | - | - | - | - |
| 80 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 4.60 | 3.46 | 2.73 | 2.22 | 1.86 | 1.59 | 1.37 | 1.18 | 0.82 | 0.53 | 0.33 | 0.20 | - | - | - | - |
| 100 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 5.05 | 3.84 | 3.04 | 2.49 | 2.09 | 1.79 | 1.55 | 1.37 | 1.19 | 0.86 | 0.57 | 0.37 | 0.23 | - | - | - |
| 120 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 5.47 | 4.19 | 3.34 | 2.74 | 2.31 | 1.98 | 1.72 | 1.51 | 1.35 | 1.16 | 0.86 | 0.59 | 0.39 | 0.26 | - | - |
| 150 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 5.73 | 4.68 | 3.75 | 3.10 | 2.61 | 2.24 | 1.96 | 1.73 | 1.54 | 1.38 | 1.26 | 1.26 | 0.70 | 0.49 | 0.34 | 0.23 |
| 170 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 5.73 | 4.78 | 4.01 | 3.32 | 2.81 | 2.41 | 2.11 | 1.86 | 1.66 | 1.49 | 1.35 | 1.22 | 0.95 | 0.68 | 0.49 | 0.34 |



| Core Thickness (mm) | Load Type kN/m ² | Span length (m) | | | | | | | | | | | | | | | |
|---------------------|-------------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 1.25 | 1.50 | 1.75 | 2.00 | 2.25 | 2.50 | 2.75 | 3.00 | 3.25 | 3.50 | 3.75 | 4.00 | 4.25 | 4.50 | 4.75 | 5.00 |
| 40 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 3.06 | 2.30 | 1.85 | 1.54 | 1.32 | 1.15 | 0.93 | 0.67 | 0.49 | 0.38 | 0.29 | 0.23 | - | - | - | - |
| 50 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 3.62 | 2.76 | 2.22 | 1.86 | 1.60 | 1.40 | 1.02 | 0.82 | 0.60 | 0.46 | 0.36 | 0.28 | 0.23 | 0.19 | - | - |
| 60 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 4.16 | 3.19 | 2.59 | 2.18 | 1.88 | 1.65 | 1.27 | 0.99 | 0.73 | 0.55 | 0.43 | 0.34 | 0.27 | 0.22 | - | - |
| 80 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 5.18 | 3.92 | 3.12 | 2.57 | 2.18 | 1.88 | 1.65 | 1.28 | 1.28 | 0.77 | 0.59 | 0.47 | 0.37 | 0.30 | 0.25 | 0.21 |
| 100 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 5.60 | 4.27 | 3.42 | 2.83 | 2.40 | 2.08 | 1.83 | 1.63 | 1.26 | 1.26 | 0.79 | 0.62 | 0.50 | 0.40 | 0.33 | 0.27 |
| 120 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 5.73 | 4.60 | 3.69 | 3.07 | 2.61 | 2.27 | 2.00 | 1.78 | 1.60 | 1.22 | 1.22 | 0.80 | 0.64 | 0.52 | 0.42 | 0.35 |
| 150 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 5.73 | 4.78 | 4.09 | 3.41 | 2.91 | 2.53 | 2.23 | 1.99 | 1.79 | 1.63 | 1.31 | 1.31 | 0.88 | 0.71 | 0.58 | 0.48 |
| 170 | a (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| | Pressure (kN/m ²) | 5.73 | 4.78 | 4.10 | 3.58 | 3.09 | 2.69 | 2.38 | 2.12 | 1.91 | 1.74 | 1.59 | 1.24 | 1.24 | 0.86 | 0.70 | 0.58 |



- Notes:
- Steel thickness ext/int: 0,50/0,40mm
 - Values have been calculated using the method described in EN 14509, for color group 3 (dark colors)
 - Values have been calculated using the limit state method described in EN 14509: 2013. Taking imposed loads, temperature and creep into account.
 - The following deflection limits have been used:
Pressure loading L/100
Suction loading L/100
 - Design criteria Safety factors on loads: ULS 1.5 (variable) 1.35 (permanent) / SLS 1.
Safety factors on material: Wrinkling of face: ULS 1.25 / SLS
1.1. Shear of core: ULS 1.3 / SLS 1.08.
SLS Summer temperature: Outside 55°C / Inside 25°C,
Winter temperature: Outside -20°C / Inside -25°C.
 - In order to conduct the calculations some data from table E6 and rates originating from table E8 stipulated in a standard EN 14509 were applied.
 - The loads calculated in the load-span table are unfactored loads.
 - The actual wind suction resisted by the panel is dependent on the number of fasteners.
 - The fastener calculation should be carried out in accordance with the appropriate standards.
 - For intermediate values linear interpolation may be used.
 - The allowable steelwork tolerance between bearing planes of adjacent supports have to be aligned with EN1090-2

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