

General notes on span tables for wall panels with hidden fixing

Note the following:

- The characteristic loads are to be determined according to the terms of valid standards and eurocodes.
- Choose the minimal supporting width from wind pressure, wind suction and **wind suction (cp1 values)** for hidden fixing for the respective case of application.
- Colour groups I (very light), II (light) and III (dark) – see approval.
- This span table is valid for buildings with normal interior climate (no cold store or ripening facilities).
- Valid supporting widths are stated in meters (m), supporting widths in millimetres (mm), see example below. Valid supporting widths for hidden fixing only apply for the type of fixing mentioned in the table. Other types of fixing are to be calculated separately. Values for the calculation are to be taken from the approval, enclosure 2a.
- The stated supporting widths apply to multi-span beams and direct attachment up to max. 3 screws per intermediate support line and meter. When using more than 3 screws per meter, the crush tension needs to be checked according the requirements of the approval.
- Deflection amounts to a maximum of L/200 under consideration of all unfavourable loads according to approval.
- In each case a separate proof for fixing material is required (for tensile load of wind suction and temperature, for pulling-out of the subconstruction and for screw-head-deflection).

Example:

from wind pressure table:

| |
|-------------|
| 40 |
| 5,70 |
| 60 |

- end support width necessary (mm)
- valid supporting width (m)
- intermediate support width necessary (mm)

valid supporting width
= 3,44 m

Visible Fixing
= 5,70 m

Hidden Fixing
= 4,05 m

from wind suction table:

| |
|-------------|
| 6,13 |
|-------------|

- valid supporting width (m)

from table wind suction with hidden fixing:

| |
|-------------|
| 4,05 |
|-------------|

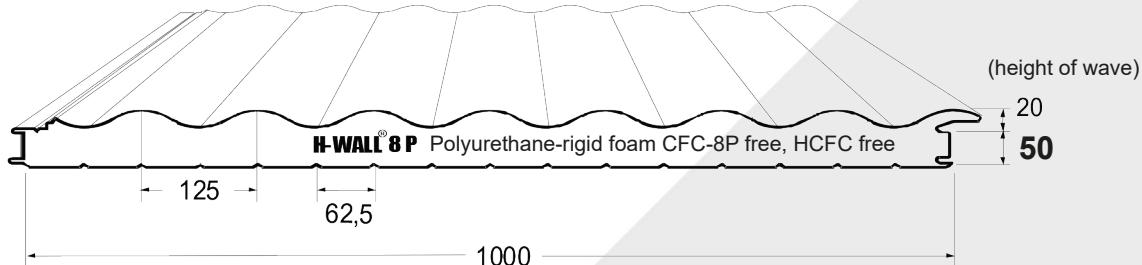
- valid supporting width (m)

Span Table 24-05

As of 10 / 2018

H-Wall 8P (W/S) s/d= 50/70 mm $t_n = 0,60 / 0,45 \text{ mm}$, S320GD

Max. valid supporting widths stated in the following are calculated according to approval Z-10.49-516 with additions from 23rd June 2011 in accordance with EN 14509. The directions for the application of the table can be gathered from the frontpage.



Wind Pressure Loads

| Stat. System | Colour Group | Wind Pressure Load in kN / m ² | | | | | | | | | | |
|-----------------|-----------------|-------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | 0,25 | 0,30 | 0,40 | 0,50 | 0,60 | 0,80 | 1,00 | 1,25 | 1,50 | 1,75 | 2,00 |
| single span | I, II, III | 40 6,87 | 40 6,60 | 40 6,13 | 40 5,71 | 40 5,38 | 40 4,89 | 40 4,52 | 45 4,15 | 50 3,83 | 55 3,58 | 59 3,37 |
| dual span | I, II | 40 6,50 | 40 6,07 | 40 5,47 | 40 5,06 | 40 4,71 | 40 3,55 | 40 2,92 | 40 2,43 | 40 2,10 | 40 1,86 | 40 1,68 |
| dual span | III | 40 6,50 | 40 6,07 | 40 5,47 | 40 5,06 | 40 4,40 | 40 3,42 | 40 2,86 | 40 2,41 | 40 2,10 | 40 1,87 | 40 1,69 |
| multiple span | I, II | 40 8,40 | 40 7,74 | 40 6,80 | 40 6,18 | 40 4,88 | 40 3,57 | 40 2,89 | 40 2,38 | 40 2,04 | 40 1,81 | 40 1,63 |
| multiple span | III | 40 8,40 | 40 7,74 | 40 6,80 | 40 5,29 | 40 4,32 | 40 3,28 | 40 2,70 | 40 2,26 | 40 1,96 | 40 1,75 | 40 1,59 |
| | | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |

Wind Suction Loads

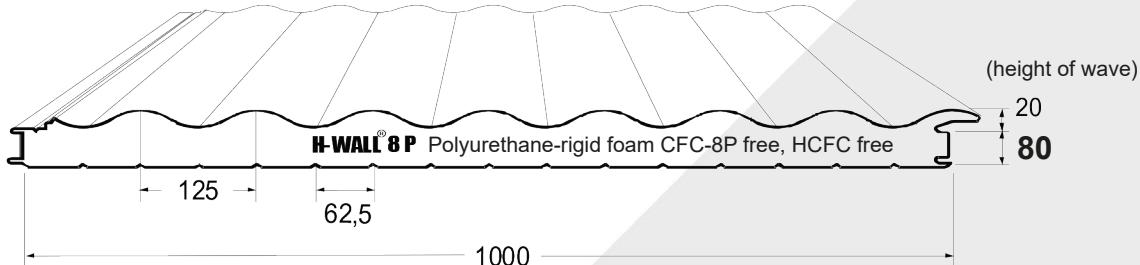
| Stat. System | Colour Group | Wind Suction Load in kN / m ² | | | | | | | | | | |
|-----------------|-----------------|------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | 0,25 | 0,30 | 0,40 | 0,50 | 0,60 | 0,80 | 1,00 | 1,25 | 1,50 | 1,75 | 2,00 |
| single span | I, II, III | 5,84 | 5,67 | 5,39 | 5,15 | 4,79 | 4,16 | 3,72 | 3,34 | 3,05 | 2,83 | 2,66 |
| dual span | I, II, III | 7,40 | 6,76 | 5,86 | 5,24 | 4,79 | 4,16 | 3,72 | 3,34 | 3,05 | 2,83 | 2,66 |
| multiple span | I, II, III | 7,40 | 6,76 | 5,86 | 5,24 | 4,79 | 4,16 | 3,72 | 3,34 | 3,05 | 2,83 | 2,66 |

Span Table 24-08

As of 10 / 2018

H-Wall 8P (W/S) s/d=80/100 mm t_n = 0,60 / 0,45 mm, S320GD

Max. valid supporting widths stated in the following are calculated according to approval Z-10.49-516 with additions from 23rd June 2011 in accordance with EN 14509. The directions for the application of the table can be gathered from the frontpage.



Wind Pressure Loads

| Stat. System | Colour Group | Wind Pressure Load in kN / m ² | | | | | | | | | | |
|---------------|--------------|-------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | 0,25 | 0,30 | 0,40 | 0,50 | 0,60 | 0,80 | 1,00 | 1,25 | 1,50 | 1,75 | 2,00 |
| single span | I, II, III | 40 9,44 | 40 8,97 | 40 8,20 | 40 7,61 | 40 7,16 | 45 6,43 | 51 5,83 | 58 5,30 | 64 4,91 | 70 4,62 | 76 4,39 |
| dual span | I, II | 40 9,44 | 40 8,97 | 40 8,20 | 40 6,08 | 40 5,67 | 40 4,20 | 40 3,43 | 40 2,84 | 40 2,44 | 40 2,15 | 40 1,93 |
| dual span | III | 40 7,78 | 40 7,28 | 40 6,57 | 40 6,08 | 40 5,27 | 40 4,06 | 40 3,38 | 40 2,83 | 40 2,46 | 40 2,18 | 40 1,96 |
| multiple span | I, II | 40 10,05 | 40 9,25 | 40 8,14 | 40 7,37 | 40 5,84 | 40 4,19 | 40 3,36 | 40 2,74 | 40 2,35 | 40 2,07 | 40 1,86 |
| multiple span | III | 40 10,05 | 40 9,25 | 40 8,14 | 40 6,39 | 40 5,13 | 40 3,84 | 40 3,84 | 40 2,62 | 40 2,27 | 40 2,01 | 40 1,82 |
| | | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 61 | 63 | 65 |

Wind Suction Loads

| Stat. System | Colour Group | Wind Suction Load in kN / m ² | | | | | | | | | | |
|---------------|--------------|------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | 0,25 | 0,30 | 0,40 | 0,50 | 0,60 | 0,80 | 1,00 | 1,25 | 1,50 | 1,75 | 2,00 |
| single span | I, II, III | 8,18 | 7,91 | 7,15 | 6,40 | 5,85 | 5,07 | 4,54 | 4,06 | 3,71 | 3,44 | 3,22 |
| dual span | I, II, III | 9,04 | 8,25 | 7,15 | 6,40 | 5,85 | 5,07 | 4,54 | 4,06 | 3,71 | 3,44 | 3,22 |
| multiple span | I, II, III | 9,04 | 8,25 | 7,15 | 6,40 | 5,85 | 5,07 | 4,54 | 4,06 | 3,71 | 3,44 | 3,22 |

Wind Suction Loads with Consideration for hidden fixing

At end support = 2 screws, at intermediate support = 2 screws with Z-saddle

| Stat. System | Colour Group | Wind Suction Load in kN / m ² | | | | | | | | | | |
|---------------|--------------|------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | 0,25 | 0,30 | 0,40 | 0,50 | 0,60 | 0,80 | 1,00 | 1,25 | 1,50 | 1,75 | 2,00 |
| single span | I, II, III | 8,18 | 7,91 | 7,15 | 5,76 | 4,80 | 3,60 | 2,88 | 2,30 | 1,92 | 1,65 | 1,44 |
| dual span | I, II | 9,04 | 8,26 | 6,15 | 4,78 | 3,90 | 2,86 | 2,28 | 1,84 | 1,56 | 1,35 | 1,20 |
| | III | 9,04 | 7,99 | 5,65 | 4,30 | 3,46 | 2,50 | 2,00 | 1,63 | 1,39 | 1,22 | 1,09 |
| multiple span | I, II | 9,04 | 8,26 | 7,15 | 5,94 | 4,70 | 3,17 | 2,29 | 1,69 | 1,33 | 1,15 | 1,03 |
| | III | 9,04 | 8,26 | 7,15 | 5,89 | 4,70 | 3,19 | 2,29 | 1,69 | 1,33 | 1,15 | 1,03 |

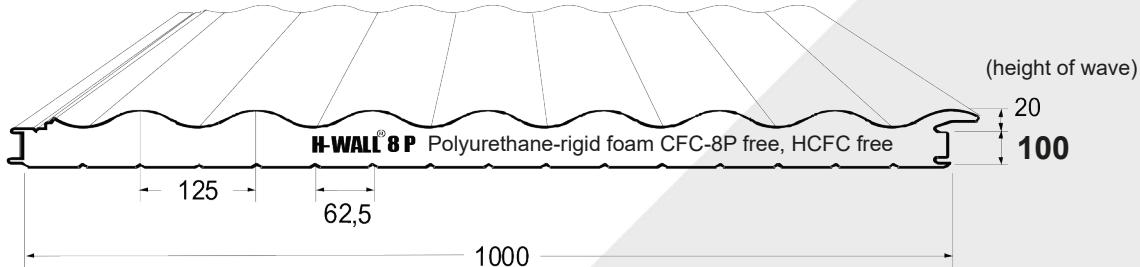
Span Table 24-10

As of 10 / 2018

H-Wall 8P (W/S) s/d = 100/120 mm

$t_n = 0,60 / 0,45 \text{ mm}$, S320GD

Max. valid supporting widths stated in the following are calculated according to approval Z-10.49-516 with additions from 23rd June 2011 in accordance with EN 14509. The directions for the application of the table can be gathered from the frontpage.



Wind Pressure Loads

| Stat. System | Colour Group | Wind Pressure Load in kN / m ² | | | | | | | | | | |
|-----------------|-----------------|-------------------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | 0,25 | 0,30 | 0,40 | 0,50 | 0,60 | 0,80 | 1,00 | 1,25 | 1,50 | 1,75 | 2,00 |
| single span | I, II, III | 40 10,99 | 40 10,38 | 40 9,47 | 40 8,59 | 41 7,89 | 48 6,91 | 54 6,25 | 62 5,66 | 68 5,24 | 75 4,91 | 81 4,65 |
| dual span | I, II | 40 8,50 | 40 7,95 | 40 7,17 | 40 6,64 | 40 6,24 | 40 4,67 | 40 3,80 | 40 3,12 | 40 2,68 | 40 2,36 | 40 2,11 |
| dual span | III | 40 8,50 | 40 7,95 | 40 7,17 | 40 6,64 | 40 5,89 | 40 4,50 | 40 3,73 | 40 3,12 | 40 2,70 | 40 2,39 | 40 2,15 |
| multiple span | I, II | 40 11,00 | 40 10,13 | 40 8,90 | 40 8,06 | 40 6,63 | 40 4,65 | 40 3,70 | 40 3,01 | 40 2,57 | 40 2,26 | 40 2,02 |
| multiple span | III | 40 11,00 | 40 10,13 | 40 8,90 | 40 7,30 | 40 5,75 | 40 4,26 | 40 3,47 | 40 2,87 | 40 2,48 | 40 2,20 | 40 1,98 |
| | | 60 | 60 | 62 | 70 | 69 | 65 | 64 | 65 | 67 | 69 | 70 |

Wind Suction Loads

| Stat. System | Colour Group | Wind Suction Load in kN / m ² | | | | | | | | | | |
|-----------------|-----------------|------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | 0,25 | 0,30 | 0,40 | 0,50 | 0,60 | 0,80 | 1,00 | 1,25 | 1,50 | 1,75 | 2,00 |
| single span | I, II, III | 9,67 | 9,12 | 7,90 | 7,07 | 6,46 | 5,60 | 5,01 | 4,48 | 4,10 | 3,80 | 3,55 |
| dual span | I, II, III | 9,99 | 9,12 | 7,90 | 7,07 | 6,46 | 5,60 | 5,01 | 4,48 | 4,10 | 3,80 | 3,55 |
| multiple span | I, II, III | 9,99 | 9,12 | 7,90 | 7,07 | 6,46 | 5,60 | 5,01 | 4,48 | 4,10 | 3,80 | 3,55 |

Wind Suction Loads with Consideration for hidden fixing

At end support and intermediate support = 2 screws with Z-saddle cap

| Stat. System | Colour Group | Wind Suction Load in kN / m ² | | | | | | | | | | |
|-----------------|-----------------|------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | 0,25 | 0,30 | 0,40 | 0,50 | 0,60 | 0,80 | 1,00 | 1,25 | 1,50 | 1,75 | 2,00 |
| single span | I, II, III | 9,69 | 9,12 | 7,90 | 7,07 | 6,46 | 5,60 | 4,97 | 3,98 | 3,32 | 2,84 | 2,49 |
| dual span | I, II | 9,99 | 9,12 | 7,90 | 6,34 | 5,20 | 3,82 | 3,03 | 2,44 | 2,05 | 1,78 | 1,57 |
| | III | 9,99 | 9,12 | 7,64 | 5,89 | 4,76 | 3,44 | 2,72 | 2,19 | 1,85 | 1,62 | 1,44 |
| multiple span | I, II | 9,99 | 9,12 | 7,90 | 7,07 | 6,45 | 4,76 | 3,76 | 3,76 | 2,96 | 2,44 | 2,08 |
| | III | 9,99 | 9,12 | 7,90 | 7,07 | 6,29 | 4,60 | 3,60 | 2,81 | 2,31 | 1,96 | 1,71 |