

## General notes on span tables for wall panels

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 and wind suction 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), necessary support widths in millimetres (mm), see example below.
- Deflection amounts to a maximum of  $L/200$  under consideration of all unfavourable loads according to approval.
- The stated supporting widths apply to multi-span beams and direct attachment up to max. 5 screws per intermediate support line and meter. When using more than 5 screws per meter, the crush tension needs to be checked according the requirements of the 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	→ end support width necessary (mm)
<b>5,05</b>	→ valid supporting width (m)
60	→ intermedediate support width necessary (mm)

from wind suction table:

<b>4,73</b>	→ valid supporting width (m)
-------------	------------------------------

**valid supporting width = 4,73 m**  
(lowest value of both tables)

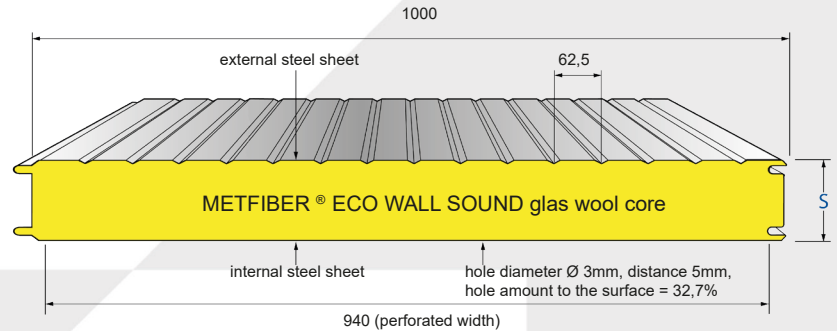
# Span table 12A-10

state 10 / 2018

## METFIBER ECO Wall SOUND 100 mm

$t_N = 0,60 / 0,60$  mm

Max. valid supporting widths stated in the following table are calculated for Metecno glass wool sandwich panels with reduced crush tension according to approval Z-10.49-613. For the perforated steel sheets the lack of usable supporting surface or respectively reduced steel thickness according to EN 1993-1-3 needs to be taken into consideration. Sandwich panels with perforated steel sheets are not regulated according to DIN EN 14509. Instructions for the application of the table can be gathered from the front page.



### Wind pressure load

stat. system	colour group	wind pressure load in kN / m <sup>2</sup>										
		0,25	0,30	0,40	0,50	0,60	0,80	1,00	1,25	1,50	1,75	2,00
1-panel	I, II, III	40 <b>9,42</b>	43 <b>8,60</b>	49 <b>7,45</b>	55 <b>6,66</b>	60 <b>6,08</b>	69 <b>5,26</b>	78 <b>4,71</b>	83 <b>4,04</b>	83 <b>3,36</b>	83 <b>2,88</b>	83 <b>2,52</b>
2-panel	I	40 <b>4,64</b> 60	40 <b>4,52</b> 60	40 <b>4,32</b> 60	40 <b>4,16</b> 69	40 <b>4,03</b> 80	50 <b>3,82</b> 101	60 <b>3,66</b> 121	72 <b>3,51</b> 145	83 <b>3,36</b> 166	83 <b>2,88</b> 166	83 <b>2,52</b> 166
	II	40 <b>4,64</b> 60	40 <b>4,52</b> 60	40 <b>4,32</b> 60	40 <b>4,16</b> 69	40 <b>4,03</b> 80	50 <b>3,82</b> 101	60 <b>3,66</b> 121	72 <b>3,51</b> 145	83 <b>3,36</b> 166	83 <b>2,88</b> 166	83 <b>2,52</b> 166
	III	40 <b>4,36</b> 60	40 <b>4,36</b> 60	40 <b>4,32</b> 60	40 <b>4,16</b> 69	40 <b>4,03</b> 80	50 <b>3,82</b> 101	60 <b>3,66</b> 121	72 <b>3,51</b> 145	83 <b>3,36</b> 166	83 <b>2,88</b> 166	83 <b>2,52</b> 166
3-panel	I	40 <b>5,27</b> 60	40 <b>5,01</b> 60	40 <b>4,62</b> 61	40 <b>4,34</b> 72	41 <b>4,13</b> 82	50 <b>3,82</b> 101	59 <b>3,59</b> 118	70 <b>3,38</b> 139	80 <b>3,32</b> 159	83 <b>2,88</b> 166	83 <b>2,52</b> 166
	II	40 <b>5,27</b> 60	40 <b>5,01</b> 60	40 <b>4,62</b> 61	40 <b>4,34</b> 72	41 <b>4,13</b> 82	50 <b>3,82</b> 101	59 <b>3,59</b> 118	70 <b>3,38</b> 139	80 <b>3,32</b> 159	83 <b>2,88</b> 166	83 <b>2,52</b> 166
	III	40 <b>5,16</b> 60	40 <b>5,01</b> 60	40 <b>4,62</b> 61	40 <b>4,34</b> 72	41 <b>4,13</b> 82	50 <b>3,82</b> 101	59 <b>3,59</b> 118	70 <b>3,38</b> 139	80 <b>3,32</b> 159	83 <b>2,88</b> 166	83 <b>2,52</b> 166

### Wind suction load

stat. system	colour group	wind pressure load in kN / m <sup>2</sup>										
		0,25	0,30	0,40	0,50	0,60	0,80	1,00	1,25	1,50	1,75	2,00
1-panel	I, II, III	<b>8,06</b>	<b>7,35</b>	<b>6,37</b>	<b>5,70</b>	<b>5,20</b>	<b>4,50</b>	<b>4,03</b>	<b>3,60</b>	<b>3,29</b>	<b>2,88</b>	<b>2,52</b>
2-panel	I	<b>5,98</b>	<b>5,98</b>	<b>5,98</b>	<b>5,70</b>	<b>5,20</b>	<b>4,50</b>	<b>4,03</b>	<b>3,60</b>	<b>3,29</b>	<b>2,88</b>	<b>2,52</b>
	II	<b>5,98</b>	<b>5,76</b>	<b>5,37</b>	<b>5,08</b>	<b>4,86</b>	<b>4,50</b>	<b>4,03</b>	<b>3,60</b>	<b>3,29</b>	<b>2,88</b>	<b>2,52</b>
	III	<b>3,95</b>	<b>3,90</b>	<b>3,80</b>	<b>3,71</b>	<b>3,64</b>	<b>3,51</b>	<b>3,40</b>	<b>3,30</b>	<b>3,20</b>	<b>2,88</b>	<b>2,52</b>
3-panel	I	<b>8,06</b>	<b>7,35</b>	<b>6,37</b>	<b>5,70</b>	<b>5,20</b>	<b>4,50</b>	<b>4,03</b>	<b>3,30</b>	<b>3,20</b>	<b>2,88</b>	<b>2,52</b>
	II	<b>7,55</b>	<b>7,01</b>	<b>6,25</b>	<b>5,70</b>	<b>5,20</b>	<b>4,50</b>	<b>4,03</b>	<b>3,60</b>	<b>3,29</b>	<b>2,88</b>	<b>2,52</b>
	III	<b>4,04</b>	<b>3,94</b>	<b>3,76</b>	<b>3,63</b>	<b>3,52</b>	<b>3,34</b>	<b>3,20</b>	<b>3,07</b>	<b>2,96</b>	<b>2,87</b>	<b>2,52</b>

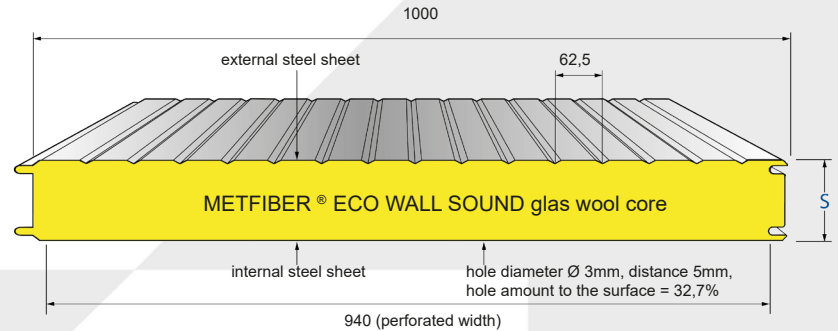
# Span table 12A-12

state 10 / 2018

## METFIBER ECO Wall SOUND 120 mm

$t_N = 0,60 / 0,60$  mm

Max. valid supporting widths stated in the following table are calculated for Metecno glass wool sandwich panels with reduced crush tension according to approval Z-10.49-613. For the perforated steel sheets the lack of usable supporting surface or respectively reduced steel thickness according to EN 1993-1-3 needs to be taken into consideration. Sandwich panels with perforated steel sheets are not regulated according to DIN EN 14509. Instructions for the application of the table can be gathered from the front page.



### Wind pressure load

stat. system	colour group	wind pressure load in kN / m <sup>2</sup>										
		0,25	0,30	0,40	0,50	0,60	0,80	1,00	1,25	1,50	1,75	2,00
1-panel	I, II, III	46 <b>8,76</b>	50 <b>8,76</b>	58 <b>8,76</b>	65 <b>7,83</b>	71 <b>7,15</b>	80 <b>6,06</b>	80 <b>4,85</b>	80 <b>3,88</b>	80 <b>3,23</b>	80 <b>2,77</b>	80 <b>2,42</b>
2-panel	I	40 <b>3,42</b> 60	40 <b>3,39</b> 60	40 <b>3,33</b> 60	40 <b>3,27</b> 60	40 <b>3,22</b> 64	41 <b>3,14</b> 83	50 <b>3,06</b> 101	61 <b>2,98</b> 123	72 <b>2,91</b> 144	80 <b>2,77</b> 160	80 <b>2,42</b> 160
	II	40 <b>3,42</b> 60	40 <b>3,39</b> 60	40 <b>3,33</b> 60	40 <b>3,27</b> 60	40 <b>3,22</b> 64	41 <b>3,14</b> 83	50 <b>3,06</b> 101	61 <b>2,98</b> 123	72 <b>2,91</b> 144	80 <b>2,77</b> 160	80 <b>2,42</b> 160
	III	40 <b>3,42</b> 60	40 <b>3,39</b> 60	40 <b>3,33</b> 60	40 <b>3,27</b> 60	40 <b>3,22</b> 64	41 <b>3,14</b> 83	50 <b>3,06</b> 101	61 <b>2,98</b> 123	72 <b>2,91</b> 144	80 <b>2,70</b> 160	80 <b>2,42</b> 160
3-panel	I	40 <b>3,02</b> 60	40 <b>2,98</b> 60	40 <b>2,92</b> 60	40 <b>2,86</b> 60	40 <b>2,81</b> 60	40 <b>2,73</b> 72	44 <b>2,66</b> 88	53 <b>2,58</b> 106	62 <b>2,25</b> 125	71 <b>2,46</b> 142	80 <b>2,41</b> 159
	II	40 <b>3,02</b> 60	40 <b>2,98</b> 60	40 <b>2,92</b> 60	40 <b>2,86</b> 60	40 <b>2,81</b> 60	40 <b>2,73</b> 72	44 <b>2,66</b> 88	53 <b>2,58</b> 106	62 <b>2,25</b> 125	71 <b>2,46</b> 142	80 <b>2,41</b> 159
	III	40 <b>3,02</b> 60	40 <b>2,98</b> 60	40 <b>2,92</b> 60	40 <b>2,86</b> 60	40 <b>2,81</b> 60	40 <b>2,73</b> 72	44 <b>2,66</b> 88	53 <b>2,58</b> 106	62 <b>2,25</b> 125	71 <b>2,46</b> 142	80 <b>2,41</b> 159

### Wind suction load

stat. system	colour group	wind pressure load in kN / m <sup>2</sup>										
		0,25	0,30	0,40	0,50	0,60	0,80	1,00	1,25	1,50	1,75	2,00
1-panel	I, II, III	<b>8,69</b>	<b>7,93</b>	<b>6,87</b>	<b>6,15</b>	<b>5,61</b>	<b>4,86</b>	<b>4,35</b>	<b>3,88</b>	<b>3,23</b>	<b>2,77</b>	<b>2,42</b>
2-panel	I	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,23</b>	<b>2,77</b>	<b>2,42</b>
	II	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,23</b>	<b>2,77</b>	<b>2,42</b>
	III	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,64</b>	<b>3,54</b>	<b>3,23</b>	<b>2,77</b>	<b>2,42</b>
3-panel	I	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,23</b>	<b>2,77</b>	<b>2,42</b>
	II	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,23</b>	<b>2,77</b>	<b>2,42</b>
	III	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,25</b>	<b>3,23</b>	<b>2,77</b>	<b>2,42</b>

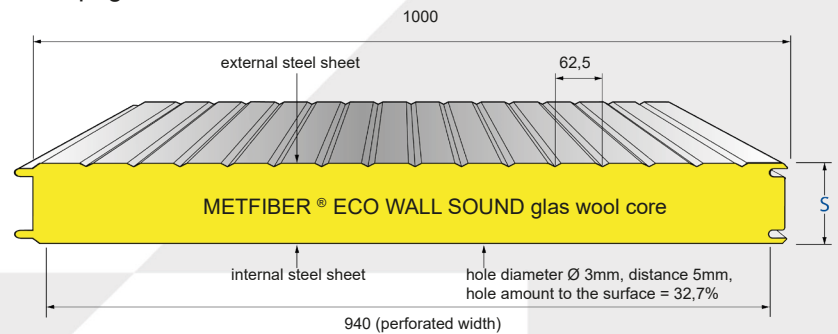
# Span table 12A-15

state 10 / 2018

## METFIBER ECO Wall SOUND 150 mm

$t_N = 0,60 / 0,60$  mm

Max. valid supporting widths stated in the following table are calculated for Metecno glass wool sandwich panels with reduced crush tension according to approval Z-10.49-613. For the perforated steel sheets the lack of usable supporting surface or respectively reduced steel thickness according to EN 1993-1-3 needs to be taken into consideration. Sandwich panels with perforated steel sheets are not regulated according to DIN EN 14509. Instructions for the application of the table can be gathered from the front page.



### Wind pressure load

stat. system	colour group	wind pressure load in kN / m <sup>2</sup>										
		0,25	0,30	0,40	0,50	0,60	0,80	1,00	1,25	1,50	1,75	2,00
1-panel	I, II, III	51 <b>9,80</b>	56 <b>9,80</b>	65 <b>9,80</b>	72 <b>8,76</b>	79 <b>8,00</b>	91 <b>6,93</b>	100 <b>6,07</b>	100 <b>4,86</b>	100 <b>4,04</b>	100 <b>3,47</b>	100 <b>3,03</b>
2-panel	I	40 <b>3,83</b> 60	40 <b>3,79</b> 60	40 <b>3,72</b> 60	40 <b>3,66</b> 60	40 <b>3,60</b> 71	46 <b>3,51</b> 93	56 <b>3,42</b> 113	69 <b>3,34</b> 138	81 <b>3,26</b> 161	92 <b>3,19</b> 184	100 <b>3,03</b> 200
	II	40 <b>3,83</b> 60	40 <b>3,79</b> 60	40 <b>3,72</b> 60	40 <b>3,66</b> 60	40 <b>3,60</b> 71	46 <b>3,51</b> 93	56 <b>3,42</b> 113	69 <b>3,34</b> 138	81 <b>3,26</b> 161	92 <b>3,19</b> 184	100 <b>3,03</b> 200
	III	40 <b>3,83</b> 60	40 <b>3,79</b> 60	40 <b>3,72</b> 60	40 <b>3,66</b> 60	40 <b>3,60</b> 71	46 <b>3,51</b> 93	56 <b>3,42</b> 113	69 <b>3,34</b> 138	81 <b>3,26</b> 161	92 <b>3,19</b> 184	100 <b>3,03</b> 200
3-panel	I	40 <b>3,37</b> 60	40 <b>3,34</b> 60	40 <b>3,26</b> 60	40 <b>3,20</b> 62	40 <b>3,14</b> 62	40 <b>3,05</b> 81	49 <b>2,97</b> 98	60 <b>2,89</b> 119	70 <b>2,82</b> 140	79 <b>2,75</b> 159	89 <b>2,70</b> 178
	II	40 <b>3,37</b> 60	40 <b>3,34</b> 60	40 <b>3,26</b> 60	40 <b>3,20</b> 62	40 <b>3,14</b> 62	40 <b>3,05</b> 81	49 <b>2,97</b> 98	60 <b>2,89</b> 119	70 <b>2,82</b> 140	79 <b>2,75</b> 159	89 <b>2,70</b> 178
	III	40 <b>3,37</b> 60	40 <b>3,34</b> 60	40 <b>3,26</b> 60	40 <b>3,20</b> 62	40 <b>3,14</b> 62	40 <b>3,05</b> 81	49 <b>2,97</b> 98	60 <b>2,89</b> 119	70 <b>2,82</b> 140	79 <b>2,75</b> 159	89 <b>2,70</b> 178

### Wind suction load

stat. system	colour group	wind pressure load in kN / m <sup>2</sup>										
		0,25	0,30	0,40	0,50	0,60	0,80	1,00	1,25	1,50	1,75	2,00
1-panel	I, II, III	<b>9,72</b>	<b>8,88</b>	<b>7,69</b>	<b>6,88</b>	<b>6,28</b>	<b>5,44</b>	<b>4,86</b>	<b>4,35</b>	<b>3,97</b>	<b>3,47</b>	<b>3,03</b>
2-panel	I	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>3,97</b>	<b>3,47</b>	<b>3,03</b>
	II	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>3,97</b>	<b>3,47</b>	<b>3,03</b>
	III	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>4,07</b>	<b>3,97</b>	<b>3,47</b>	<b>3,03</b>
3-panel	I	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,47</b>	<b>3,03</b>
	II	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,03</b>	<b>3,03</b>
	III	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,63</b>	<b>3,03</b>	<b>3,03</b>

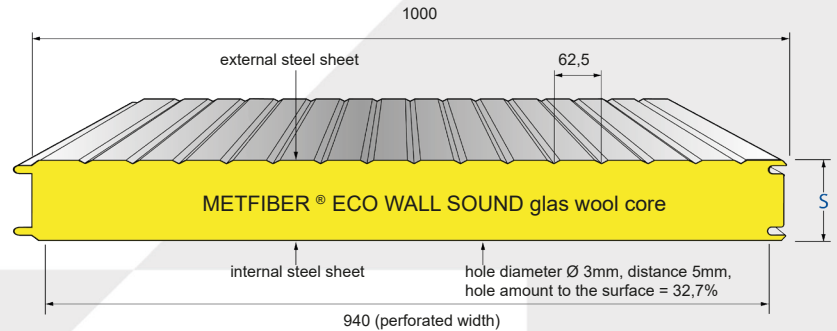
# Span table 12A-20

state 10 / 2018

## METFIBER ECO Wall SOUND 200 mm

$t_N = 0,60 / 0,60$  mm

Max. valid supporting widths stated in the following table are calculated for Metecno glass wool sandwich panels with reduced crush tension according to approval Z-10.49-613. For the perforated steel sheets the lack of usable supporting surface or respectively reduced steel thickness according to EN 1993-1-3 needs to be taken into consideration. Sandwich panels with perforated steel sheets are not regulated according to DIN EN 14509. Instructions for the application of the table can be gathered from the front page.



### Wind pressure load

stat. system	colour group	wind pressure load in kN / m <sup>2</sup>										
		0,25	0,30	0,40	0,50	0,60	0,80	1,00	1,25	1,50	1,75	2,00
1-panel	I, II, III	59 <b>9,24</b>	65 <b>9,24</b>	75 <b>9,24</b>	83 <b>9,24</b>	91 <b>9,24</b>	106 <b>8,00</b>	118 <b>7,16</b>	132 <b>6,40</b>	134 <b>5,40</b>	134 <b>4,63</b>	134 <b>4,05</b>
2-panel	I	40 <b>4,42</b> 60	40 <b>4,38</b> 60	40 <b>4,30</b> 60	40 <b>4,23</b> 70	41 <b>4,16</b> 82	53 <b>4,05</b> 107	65 <b>3,96</b> 131	79 <b>3,85</b> 159	93 <b>3,76</b> 186	107 <b>3,69</b> 213	119 <b>3,62</b> 239
	II	40 <b>4,42</b> 60	40 <b>4,38</b> 60	40 <b>4,30</b> 60	40 <b>4,23</b> 70	41 <b>4,16</b> 82	53 <b>4,05</b> 107	65 <b>3,96</b> 131	79 <b>3,85</b> 159	93 <b>3,76</b> 186	107 <b>3,69</b> 213	119 <b>3,62</b> 239
	III	40 <b>4,42</b> 60	40 <b>4,38</b> 60	40 <b>4,30</b> 60	40 <b>4,23</b> 70	41 <b>4,16</b> 82	53 <b>4,05</b> 107	65 <b>3,96</b> 131	79 <b>3,85</b> 159	93 <b>3,76</b> 186	107 <b>3,69</b> 213	116 <b>3,62</b> 239
3-panel	I	40 <b>3,90</b> 60	40 <b>3,85</b> 60	40 <b>3,77</b> 60	40 <b>3,70</b> 61	40 <b>3,64</b> 72	46 <b>3,52</b> 93	57 <b>3,43</b> 113	69 <b>3,34</b> 138	80 <b>3,25</b> 161	92 <b>3,18</b> 184	103 <b>3,12</b> 206
	II	40 <b>3,90</b> 60	40 <b>3,85</b> 60	40 <b>3,77</b> 60	40 <b>3,70</b> 61	40 <b>3,64</b> 72	46 <b>3,52</b> 93	57 <b>3,43</b> 113	69 <b>3,34</b> 138	80 <b>3,25</b> 161	92 <b>3,18</b> 184	103 <b>3,12</b> 206
	III	40 <b>3,90</b> 60	40 <b>3,85</b> 60	40 <b>3,77</b> 60	40 <b>3,70</b> 61	40 <b>3,64</b> 72	46 <b>3,52</b> 93	57 <b>3,43</b> 113	69 <b>3,34</b> 138	80 <b>3,25</b> 161	92 <b>3,18</b> 184	103 <b>3,12</b> 206

### Wind suction load

stat. system	colour group	wind pressure load in kN / m <sup>2</sup>										
		0,25	0,30	0,40	0,50	0,60	0,80	1,00	1,25	1,50	1,75	2,00
1-panel	I, II, III	<b>10,00</b>	<b>10,00</b>	<b>8,88</b>	<b>7,94</b>	<b>7,25</b>	<b>6,28</b>	<b>5,62</b>	<b>5,02</b>	<b>4,59</b>	<b>4,25</b>	<b>3,97</b>
2-panel	I	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,59</b>	<b>4,25</b>	<b>3,97</b>
	II	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,59</b>	<b>4,25</b>	<b>3,97</b>
	III	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,70</b>	<b>4,58</b>	<b>4,46</b>	<b>3,97</b>
3-panel	I	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>3,97</b>
	II	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>3,97</b>
	III	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,20</b>	<b>4,08</b>	<b>3,96</b>