



Automatic calculating program available at [www.hi-light.com](http://www.hi-light.com)

### Example of Calculation for Non-Trafficable Horizontal Louvre Screen

1. Select loading in kPa for your project, screen situation and height from Wind Velocities Table on page 18.  
e.g. : Horizontally mounted screen located at least 0.2 x width of building away from building corners in Sydney TC3 @ 10 metres high — Load = 0.82 kPa
2. Multiply pressure (0.82 kPa) x horizontal louvre profile reduction factor (0.65) = 0.5 kPa wind load
3. From Span Tables on page 16
 

<b>SS203/43</b> maximum span for 0.5 kPa load	= 2200 mm
<b>SS203/60</b> maximum span for 0.5 kPa load	= 2600 mm
<b>SS323/60</b> maximum span for 0.5 kPa load	= 3400 mm

### Example of Calculation for Vertical Grating Screen

1. Select loading in kPa for your project, screen situation and height from Wind Velocities Table on page 18.  
e.g.: Vertically mounted screen located at building corners in Brisbane TC2 @ 15 metres high. Load = 1.74kPa
2. Multiply pressure (1.74kPa) x corner proximity factor (2.0) = 3.48kPa.
3. Multiply pressure (3.48kPa) x vertical grating profile reduction factor (0.60) = 2.08 kPa wind load.
4. From Span Tables on page 16
 

<b>HA323</b> maximum span for 2.08 kPa load	= 1350 mm
<b>HC653</b> maximum span for 2.08 kPa load	= 2400 mm
<b>HA653</b> maximum span for 2.08 kPa load	= 3000 mm

### Example of Calculation for Trafficable Screen

1. Select loading in kPa for your project screen situation ie: pedestrian traffic maintenance load = 2.5 kPa
2. From Span Tables on page 16
 

<b>HA403</b> maximum span for 2.5 kPa load	= 1800 mm
<b>HA653</b> maximum span for 2.5 kPa load	= 2800 mm
<b>SC323/60</b> maximum span for 2.5 kPa load	= 2000 mm

**When selecting a trafficable screen ensure that live load selected is not subordinated by the wind load.**

- Wind Loads = Wind Velocity (refer to page 18) x Reduction Factor.
- Pedestrian traffic maintenance loads = 2.5 kPa
- Public assembly type loads = 5.0 kPa

### Notes:

- The reduction factors for the grating and louvre profiles are for use on wind loads only and are based on a combination of the porosity of the profile and the orientation of the product on the building.
- Loads are calculated for simple spans with a maximum deflection = Span ÷ 200 mm for grating and trafficable louvre sections type.
- Loads are calculated for simple spans with a maximum deflection = Span ÷ 150 mm for non-trafficable louvre sections.
- For trafficable situations cross bars are to be installed in the upper plane.
- For HC grating sections multiply span x 0.8.
- For serrated flat bar sections allow extra 5mm on selected load bar depth.
- **HA205** not available serrated.

