

Gentaş Exterior Compact laminates for façade cladding

Table 4: Required hole diameters

Screw type	Hole diameter
Self centering RVS Torx—of mounting screw	8 mm
Pan head screw Ø 4 mm or Ø 5 mm, length at least 35 mm, head diameter 11 mm maximal	1,5x diameter screw

Mounting distances

Mounting distances shall be determined on basis of maximum deflection of the panels en the minimum pull out resistance of the screw as used. The pull out resistance of a screw in a aluminium member is better. Additionally the strength of a rivet is higher.

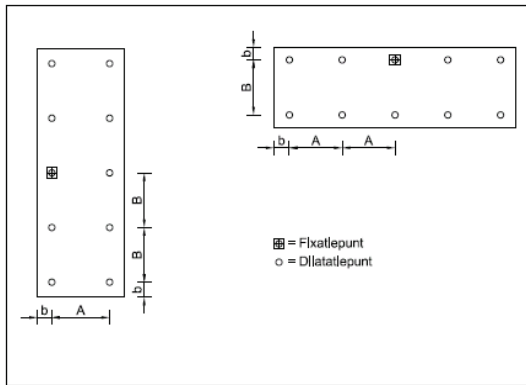


Figure 3: 2-point fixation

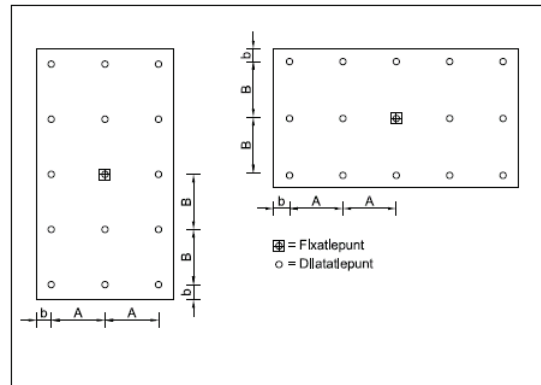


Figure 4: 3 or more point fixation

For a 6 mm panel, in tables 5 and 6 the maximum mounting distances, the maximum distances of fixation A and B in relation to the application area are given (building height per wind fastness area and terrain category). These are based on a timber supporting frame in accordance with paragraph 3.2. On special demand, distances shall be determined by GENTAŞ A.Ş. or a constructor, considering the wind areas and terrain roughness's as described in EN 1991-1-4/NB.

Table 5: Maximum mounting distances 2-point fixation (A, B in mm) in relation to areas of application (building height in m)

2-point fixation according figure 3									
Mounting distance ¹⁾		Wind area I			Wind area II			Wind area III	
A [mm]	B [mm]	coast [m]	unbuild [m]	build [m]	coast [m]	unbuild [m]	build [m]	unbuild [m]	build [m]
480	360	2	10	20	3	20	20	20	20
420	360	3	20						
360	360	6							
300	360	15							

Table 6: Maximum mounting distances 3 or more point fixation (A, B in mm) in relation to areas of application (building height in m)

3 or more point fixation according figure 4									
Mounting distance ¹⁾		Wind area I			Wind area II			Wind area III	
A [mm]	B [mm]	coast [m]	unbuild [m]	A [mm]	B [mm]	coast [m]	unbuild [m]	A [mm]	B [mm]
420	360	2	10	20	5	10	20	10	20
360	360	4	20		10	20		20	
360	300	10							
300	300								

1) The mounting distances mentioned above are based on a timber substructure with a minimum density of the timber of 400 kg/m³.

Remarks

- As material factor Y_m of the screw 1,5 is held.
- For buildings higher than 20 m¹ an anchoring by means of screws shall be calculated. It is however advised not to use a timber substructure at buildings higher than 20 m¹.
- Besides strength also mounting distances depend on requirements on flatness. For this reason the following Om deze reden kunnen de volgende omrekenfactoren worden toegepast:
 - 8 mm panel thickness: increase mounting distances A and B with a maximum of 1/3;
 - 10 mm panel thickness: increase mounting distances A and B with a maximum of 2/3;
- For grouping in wind areas and the determination of the areas a reference is made to Figure 5.