

PLANK TYPE FLOORING

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PLANK TYPE GRATING

for industrial floors, footbridges and intermediate decks



Plank Type Grating

Plank type grating is used for all sorts of industrial floors, intermediate decks, footbridges etc. The planks cope with span widths up to 2 m, which means that supporting structures can be arranged at larger distances and that erection is facilitated. Thanks to its low weight (300 mm width = 7.4 kg/m and 500 mm width 10.8 kg/m) it can be mounted by hand without requiring a lifting device. Plank type grating thus represents a very economical alternative.

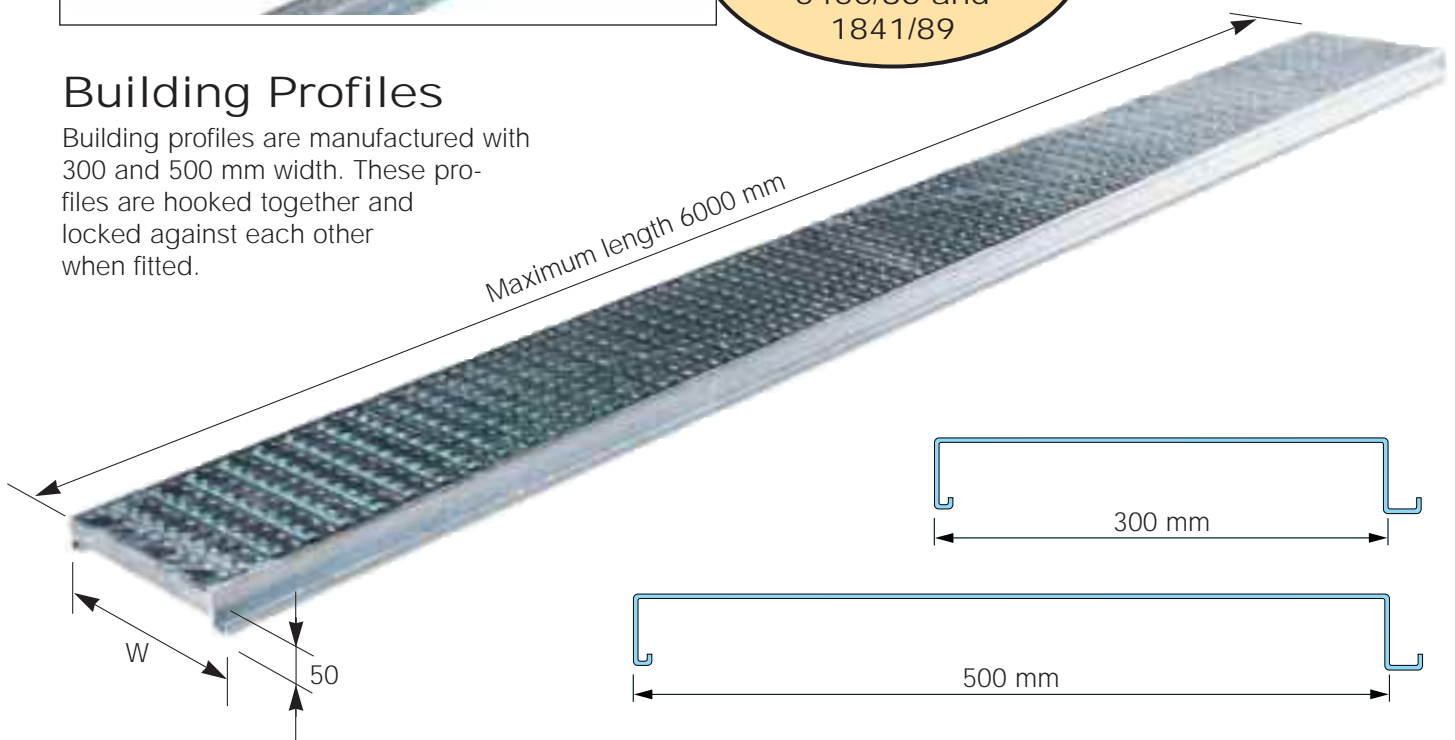
Plank type grating is supplied in two designs — tight or punched. The tight design is used in instances where a tight floor is required. The punched design is used to allow light, dirt and liquids to get through.

Plank type grating is as standard hot dip galvanized.

Type approved by the supervisory building authority
Certificates no. 5455/86 and 1841/89

Building Profiles

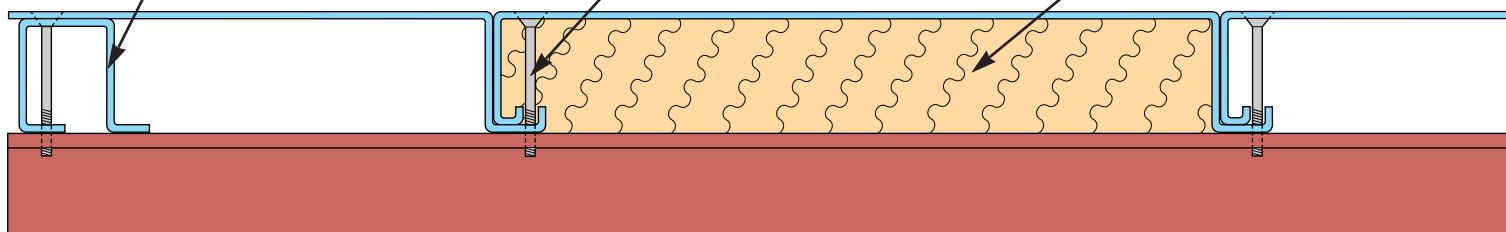
Building profiles are manufactured with 300 and 500 mm width. These profiles are hooked together and locked against each other when fitted.



Profile LU43
Loose profile, is used as reinforcement or as border profile

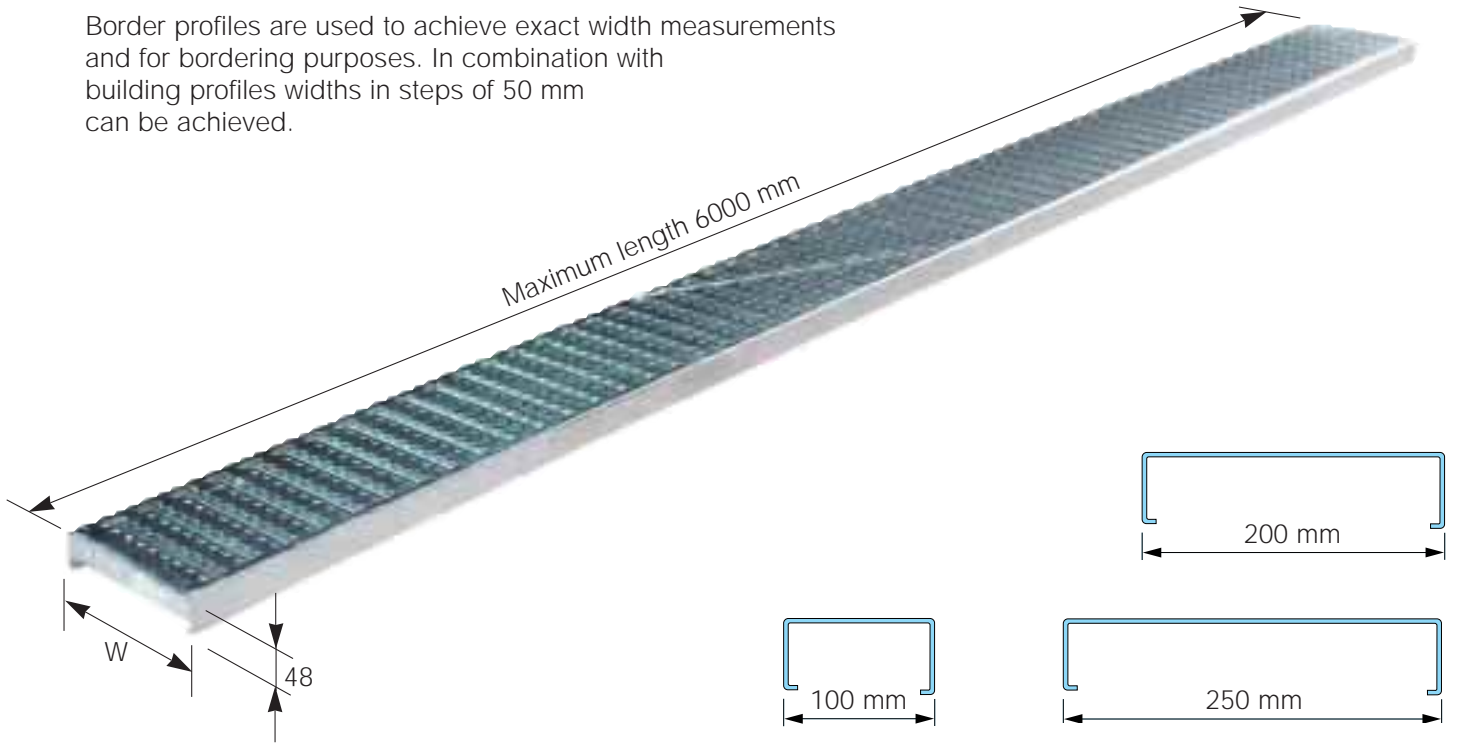
Fixing The plank is fixed to the supporting beam by means of self-cutting screws

Sound Insulating
Insulating board is placed underneath the plank and fixed with clips



Border Profiles

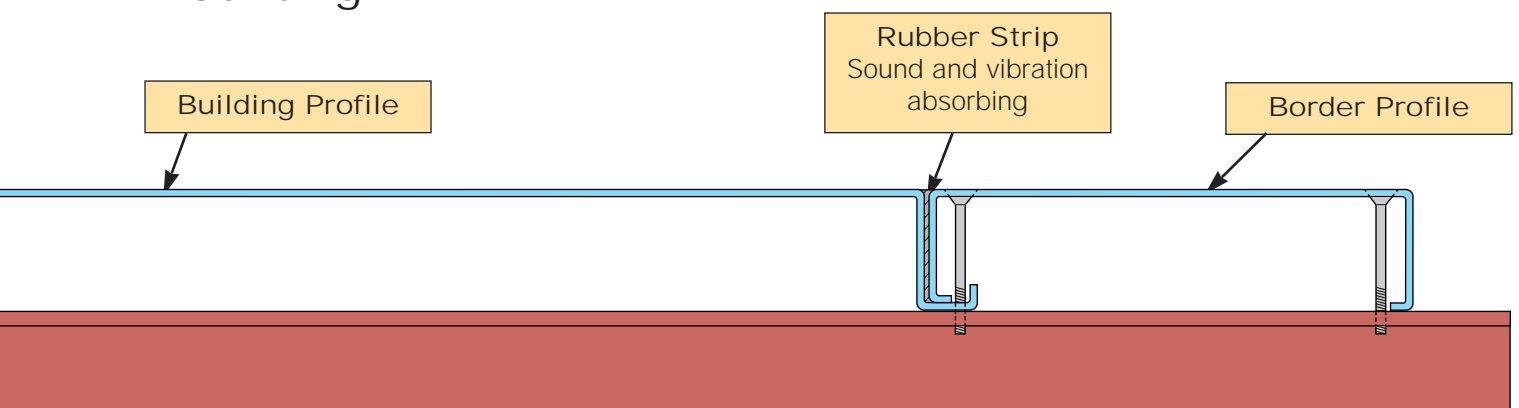
Border profiles are used to achieve exact width measurements and for bordering purposes. In combination with building profiles widths in steps of 50 mm can be achieved.



Plank type grating can be used for a variety of applications

Scaffold planks are just one application. Tight or punched design. Low weight, good load carrying capacity, durable, easily mounted.

Mounting



Easy to work with

Plank type grating represents a low weight and strong construction that allows for span widths up to 2000 mm. Considerable savings of material compared to other types of industrial flooring by using simpler and on larger distance from each other arranged supporting structures.



Footbridges

Plank type grating is excellent for footbridges. The supporting structure can consist of low weight beams, and in combination with the low weight of the grating planks a very economical alternative is achieved.

Weland can supply complete footbridge systems with supporting structure, railings and staircases.



Load regulations

The Swedish building standard (SBN 80) prescribes load values for different types of rooms. The table below shows some examples from table 22:311.

In rooms for industrial activities the load value has to be judged with regard to the type of activity. The total exceptional load must, however, always be minimum 5 kN/m².

Floors must also be adapted to stand up against concentrated loads — 1 kN, 1,5 kN or 4 kN depending upon the type of room.

For dimensioning see separate planning instruction.

Distributed Loads (tight grating)

Type of room	Latent load Normal load kN/m ²	Free load Normal kN/m ² k	Excep- tional load N/m ²
Rooms incl. basements in residential buildings, hotels etc.	0,50	0,50	1,50
Offices, class rooms in schools etc.	1,00	0,75	1,50
Shops, assembly halls except dance halls, stands	1,00	1,50	3,00
Balconies, roof terraces	0	1,00	2,00
Sports terraces, dance halls, gymnasiums etc.	0	2,00	4,00
Yard roof decks without vehicular traffic	0	2,00	4,00
corridors in schools, arcades and staircases	0	1,75	4,00

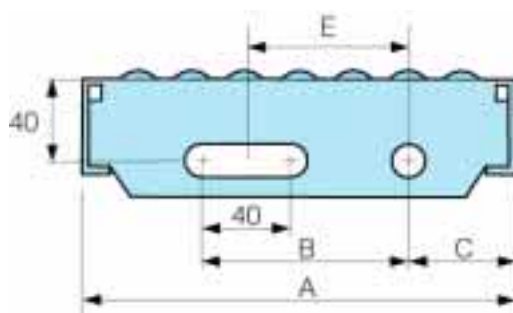
Typical distributed load in kN/m ² following SBN-2A (corresponds to exceptional load following SBN 80)							
Element	Number of partitions	Span Width					
		1,0	1,2	1,4	1,6	1,8	2,0
300	1	28,1	19,5	14,3	11,0	8,7	7,0
	2	27,9	19,9	14,8	11,5	9,2	7,5
	3	34,4	24,5	18,4	14,3	11,4	9,3
500	1	15,2	12,6	9,3	7,1	5,6	4,6
	2	15,2	12,6	9,5	7,4	5,9	4,8
	3	15,2	15,2	11,7	9,1	7,3	6,0
500+300	1	15,2	15,2	11,2	8,6	6,8	5,5
	2	15,2	15,2	11,5	8,9	7,1	5,8
	3	15,2	15,2	14,2	11,0	8,8	7,2

STAIR-TREADS

Stairtreads of plank type grating in both tight and punched design are kept in stock. Stairtreads can be supplied with different goings and lengths as shown in the tables below



Going	Stairtread Length									
200	500	600	700	800	900	1000	1100	1200		
250	500	600	700	800	900	1000	1100	1200	1300	



Stairtreads End plate measurement (normal arrangement of fixing holes E)				
Going	A	B	C	E
200	200	95	50	92
250	250	125	50	92

