

**Characteristics**

Graepel-Glide 18 has a flat surface and only downward facing holes (diameter of 18 mm) that are arranged in staggered rows. The consistent hole diameter forms a uniform hole pattern. The open area for standard grating widths is approximately 19 %. Therefore, this perforation offers drainage, but no slip resistance. The maximum embossed field is 460 mm.

**Application**

Graepel-Glide 18 is suitable as an indoor walking and sliding surface or as shelves or trays. The perforation can also be used for housings and facade cladding. It is translucent and permeable to air, and at the same time very break-proof and resistant.

**Options**

- This perforation is program controllable. Thus, individual embossments can be created.
- The standard edge perforation may be omitted.

Dimensions		Graepel-Glide 18
Material thickness	DD 11 raw	2.0   2.5   3.0 mm
	DD 11 hot-dip galvanized   DX 51 D pre-galvanized	2.0   2.5 mm
Material thickness	Stainless steel	2.0   2.5 mm
	EN AW-5754	2.0   2.5   3.0 mm
Dimensions	Lengths (L) up to	6,000 mm
	Length divider	45 mm
Dimensions	Standard grating widths <sup>1</sup> (B)	182   240   298   330   356 mm
	Width divider	22.5 mm
Dimensions	Heights (H)	30   50   75 mm

<sup>1</sup> Other dimensions on request.

Weight per meter for Graepel-Glide 18 for material thickness S [in kg/m]																		
Grating width [mm]	2.0						2.5						3.0					
	EN AW-5754 DD 11**/Stainless steel Height [mm]			EN AW-5754 Height [mm]			EN AW-5754 DD 11**/Stainless steel Height [mm]			EN AW-5754 Height [mm]			EN AW-5754 DD 11**/Stainless steel Height [mm]			EN AW-5754 Height [mm]		
	30	50	75	30	50	75	30	50	75	30	50	75	30	50	75	30	50	75
182	4.0	4.6	5.4	1.4	1.6	1.9	5.0	5.8	6.8	1.7	2.0	2.3	6.0	6.9	8.1	2.1	2.4	2.8
240	4.8	5.4	6.2	1.7	1.9	2.1	6.0	6.8	7.8	2.1	2.3	2.7	7.2	8.1	9.3	2.5	2.8	3.2
298	5.7	6.3	7.1	1.9	2.2	2.4	7.1	7.9	8.9	2.4	2.7	3.1	8.6	9.5	10.7	2.9	3.3	3.7
330	6.0	6.7	7.5	2.1	2.3	2.6	7.6	8.4	9.4	2.6	2.9	3.2	9.0	10.1	11.3	3.1	3.5	3.9
356	6.5	7.1	7.9	2.2	2.4	2.7	8.1	8.9	9.9	2.8	3.1	3.4	9.8	10.7	11.9	3.3	3.7	4.1

**Conversion of the replacement load F<sub>q</sub> from the table into a distributed load Q**

with:

$$Q = \frac{10^6 \times F_q}{B \times L}$$

Q = Distributed load for a grating [kN/m<sup>2</sup>]  
 F<sub>q</sub> = Replacement load from table with reference to the support width [kN]  
 B = Grating width [mm]  
 L = Support length [mm]



Further details on the perforation on our website

H [mm]	D [mm]	Uniformly distributed load												Replacement load F <sub>q</sub> [in kN] for uniformly distributed load. (numer. values apply for single grating)								Concentrated load				Load F <sub>q</sub> [in kN] for concentrated load (numer. values apply for single grating)										
		Support length L [mm]				Support length L [mm]				Support length L [mm]				Support length L [mm]				Support length L [mm]				Support length L [mm]														
		500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000		
DD 11, DX 51 D	30	2.0	5.676	3.784	2.838	2.009	1.395	1.025	0.785	0.620	0.502	0.415	0.349	3.548	2.183	1.577	1.234	0.879	0.645	0.493	0.389	0.315	0.260	0.218	4.208	2.589	1.870	1.464	1.043	0.765	0.584	0.461	0.373	0.308	0.259	
	30	2.5	6.732	4.488	3.366	2.382	1.654	1.215	0.931	0.735	0.596	0.492	0.414	4.789	2.947	2.128	1.666	1.187	0.870	0.665	0.525	0.425	0.351	0.295	5.489	3.289	2.382	1.849	1.362	1.009	0.765	0.604	0.492	0.408	0.344	
	30	3.0	7.662	5.108	3.831	2.711	1.883	1.383	1.059	0.837	0.678	0.560	0.471	6.119	3.820	2.789	2.037	1.484	1.084	0.820	0.655	0.525	0.425	0.351	0.295	7.129	4.387	3.169	2.480	1.817	1.342	1.009	0.784	0.634	0.525	0.441
	50	2.0	11.407	7.605	5.703	4.563	3.802	3.259	2.614	2.065	1.673	1.382	1.162	8.595	5.289	3.820	2.989	2.456	2.084	1.809	1.562	1.264	1.044	0.878	10.414	6.414	4.614	3.544	2.644	2.044	1.544	1.144	0.944	0.778	0.678	
EN AW-5754	30	2.0	4.005	1.780	1.001	0.641	0.445	0.327	0.250	0.198	0.160	0.132	0.111	2.697	1.151	0.638	0.406	0.281	0.206	0.157	0.124	0.100	0.083	0.070	3.199	1.365	0.757	0.481	0.333	0.244	0.186	0.147	0.119	0.098	0.080	
	30	2.5	4.751	2.111	1.188	0.760	0.528	0.388	0.297	0.235	0.190	0.157	0.132	3.489	1.489	0.825	0.525	0.363	0.266	0.203	0.161	0.130	0.107	0.093	4.144	1.719	0.989	0.634	0.441	0.321	0.241	0.191	0.151	0.121	0.101	
	30	3.0	5.181	2.303	1.295	0.829	0.576	0.423	0.324	0.256	0.207	0.171	0.144	4.640	1.819	1.023	0.634	0.441	0.321	0.241	0.191	0.151	0.121	0.101	5.441	2.119	1.199	0.764	0.534	0.394	0.294	0.224	0.174	0.144	0.124	
	50	2.0	8.963	5.930	3.336	2.135	1.482	1.089	0.834	0.659	0.534	0.441	0.371	5.602	3.447	2.125	1.351	0.935	0.685	0.524	0.413	0.335	0.276	0.232	6.753	4.156	2.562	1.629	1.127	0.826	0.631	0.498	0.403	0.333	0.280	
Stainless steel	30	2.0	6.217	4.144	3.108	2.009	1.395	1.025	0.785	0.620	0.502	0.415	0.349	3.885	2.391	1.727	1.271	0.879	0.645	0.493	0.389	0.315	0.260	0.218	4.608	2.836	2.048	1.507	1.043	0.765	0.584	0.461	0.373	0.308	0.259	
	30	2.5	7.374	4.916	3.687	2.382	1.654	1.215	0.931	0.735	0.596	0.492	0.414	4.805	3.470	2.716	2.231	1.893	1.642	1.296	1.049	0.866	0.728	5.793	4.184	3.274	2.689	2.282	1.979	1.562	1.264	1.044	0.877			
	30	3.0	8.329	5.530	4.164	2.614	1.811	1.311	1.005	0.794	0.643	0.532	0.447	5.544	3.793	2.822	2.282	1.819	1.259	0.923	0.705	0.557	0.451	0.372	0.313	6.614	4.640	3.441	2.822	2.282	1.819	1.259	0.923	0.705	0.557	0.451
	50	2.0	12.493	8.329	6.247	4.997	4.164	3.414	2.614	2.065	1.673	1.382	1.162	7.808	4.805	3.470	2.716	2.231	1.893	1.642	1.296	1.049	0.866	0.728	9.403	5.793	4.184	3.274	2.689	2.282	1.979	1.562	1.264	1.044	0.877	

H [mm]	D [mm]	Uniformly distributed load												Replacement load F <sub>q</sub> [in kN] for uniformly distributed load. (numer. values apply for single grating)								Concentrated load				Load F <sub>q</sub> [in kN] for concentrated load (numer. values apply for single grating)										
		Support length L [mm]				Support length L [mm]				Support length L [mm]				Support length L [mm]				Support length L [mm]				Support length L [mm]														
		500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000		
EN AW-5754	30	2.0	4.005	1.780	1.001	0.641	0.445	0.327	0.250	0.198	0.160	0.132	0.111	2.697	1.151	0.638	0.406	0.281	0.206	0.157	0.124	0.100	0.083	0.070	3.199	1.365	0.757	0.481	0.333	0.244	0.186	0.147	0.119	0.098	0.080	
	30	2.5	4.751	2.111	1.188	0.760	0.528	0.388	0.297	0.235	0.190	0.157	0.132	3.489	1.489	0.825	0.525	0.363	0.266	0.203	0.161	0.130	0.107	0.093	4.144	1.719	0.989	0.634	0.441	0.321	0.241	0.191	0.151	0.121	0.101	
	30	3.0	5.181	2.303	1.295	0.829	0.576	0.423	0.324	0.256	0.207	0.171	0.144	4.640	1.819	1.023	0.634	0.441	0.321	0.241	0.191	0.151	0.121	0.101	5.441	2.119	1.199	0.764	0.534	0.394	0.294	0.224	0.174	0.144	0.124	
	50	2.0	8.963	5.930	3.336	2.135	1.482	1.089	0.834	0.659	0.534	0.441	0.371	5.602	3.447	2.125	1.351	0.935	0.685	0.524	0.413	0.335	0.276	0.232	6.753	4.156	2.562	1.629	1.127	0.826	0.631	0.498	0.403	0.333	0.280	
Stainless steel	30	2.0	6.217	4.144	3.108	2.009	1.395	1.025	0.785	0.620	0.502	0.415	0.349	3.885	2.391	1.727	1.271	0.879	0.645	0.493	0.389	0.315	0.260	0.218	4.608	2.836	2.048	1.507	1.043	0.765	0.584	0.461	0.373	0.308	0.259	
	30	2.5	7.374	4.916	3.687	2.382	1.654	1.215	0.931	0.735	0.596	0.492	0.414	4.805	3.470	2.716	2.231	1.893	1.642	1.296	1.049	0.866	0.728	5.793	4.184	3.274	2.689	2.282	1.979	1.562	1.264	1.044	0.877			
	30	3.0	8.329	5.530	4.164	2.614	1.811	1.311	1.005	0.794	0.643	0.532	0.447	5.544	3.793	2.822	2.282	1.819	1.259	0.923	0.705	0.557	0.451	0.372	0.313	6.614	4.640	3.441	2.822	2.282	1.819	1.259	0.923	0.705	0.557	0.451
	50	2.0	12.493	8.329	6.247	4.997	4.164	3.414	2.614	2.065	1.673	1.382	1.162	7.808	4.805	3.470	2.716	2.231	1.893	1.642	1.296	1.049	0.866	0.728	9.403	5.793	4.184	3.274	2.689	2.282	1.979	1.562	1.264	1.044	0.877	

Grating width B [mm]	Maximum possible lump load F [in kN] (numerical values apply for DD 11)		
	Load area 200 x 200 mm		
	Material thickness [mm]		
	2.0	2.5	3.0
182***	1.89	2.49	3.18
240	1.25	1.25	2.10
298	0.97	1.28	1.63
330	0.88	1.16	1.48
356	0.82	1.09	1.38

**Note concerning lump load**

The values are calculated for gratings which are supported over their whole length. For a given span width, the values stated in this lump load table must not exceed those given in the concentrated load table.

For stainless steel, the values in the table must be multiplied by a factor of 1.04 or for EN AW 5754 by a factor of 0.75.

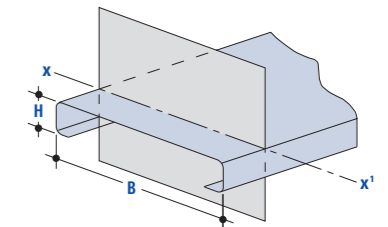
**Order information**

Graepel-Glide 18 (except for DD 11 hot-dip galvanized) is available up to a length of 12,000 mm. Please note that grating lengths over 6,000 mm are difficult to handle and cost intensive due to their high weight.

Upon request, the gratings are cut to length. Please specify the required length when ordering. Please take account of the length divider of 45 mm.

Hot-dip galvanized gratings are hot-dip galvanized after sawing to ensure optimum corrosion protection.

**Moments of inertia and section modulus**  
Grating cross-sections (axis X-X')



Note: Only the unperforated area of the two sides is taken into account for the static cross section values for the longitudinal direction of the grating (shaded area).