PLANK GRATINGS AND PERFORATED SHEETS

PROJECT > PRODUCTION > ASSEMBLY

TLC GROUP IN BRIEF

Swedish-Polish manufacturer with companies operating in Poland, Germany, Sweden and the UK

More than 15 years of experience in manufacturing stairs and steel platforms as well as construction safety systems

In-house engineering and technological offices as well as a research and development department

Modern and fully automated machinery park

Highly qualified engineering, technical and production staff

Comprehensive Customer service: design, manufacturing, sales, rental, transportation, assembly and repair services delivered all across Europe

The manufacturer holds TÜV SÜD Poland certificate No. 2527 according to EN 1090-1, EN 1090-3.

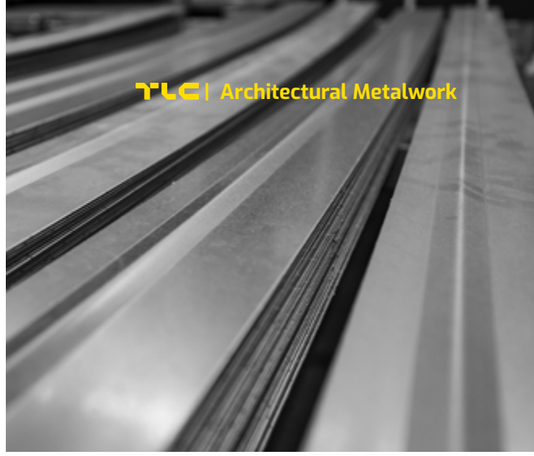
TLC GRATINGS

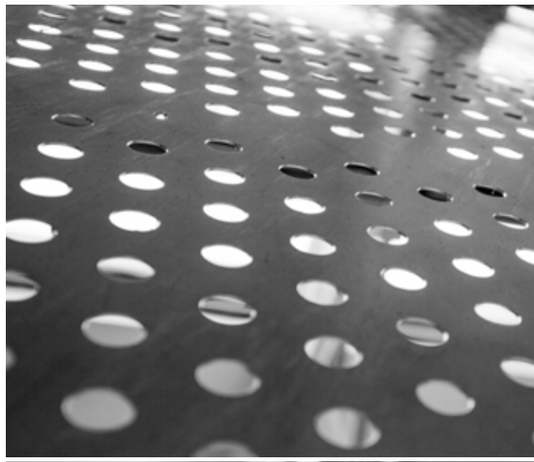
GENERAL INFORMATION

Plank gratings and perforated sheets produced by the TLC are dedicated to the construction and industrial sectors as well as public. Thanks to modern and technologically advanced machines, our offer includes not only standard finishes, but also individual designs.
A wide range of perforations and steel thicknesses allow for matching the right solution depending on the client's needs.

OUR POSSIBILITIES:

- Plain steel with a punched sheet thickness of 0.5 - 2mm
- Aluminum with a punched sheet thickness of 0.5 - 2mm
- The maximum dimension of the sheet: 3000x1500mm
- One-sided steel processing margin: 50mm
- Diameters of holes in mm:
  - round: 9, 11, 13, 15, 20, 25, 35
  - square: 10, 20, 25



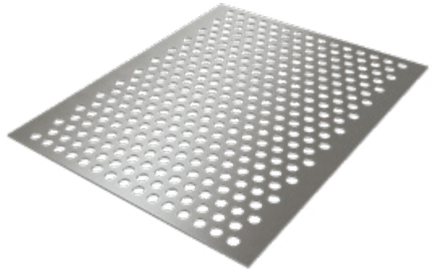


The information in this advertising material is for reference only. The product specification should be subject to verification with technical data provided by the manufacturer.

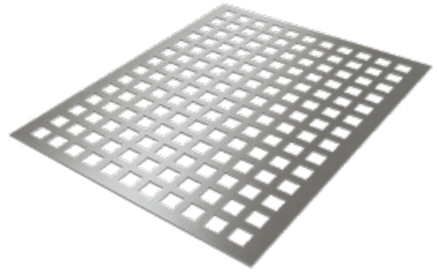
TLC implements projects using standard materials available on the market. This allows for substantial shortening the term of implementation and cost optimization. On customer's request, projects can be implemented with the use of non-standard materials and solutions.

PERFORATED SHEETS

- Sheet thickness: 0.5 - 2.0 mm
- Material: S235, S355, DC01, corten, aluminum, Z275 galvanized sheet
- Corrosion protection: Hot-dip galvanization, electro galvanization, powder painting (RAL)

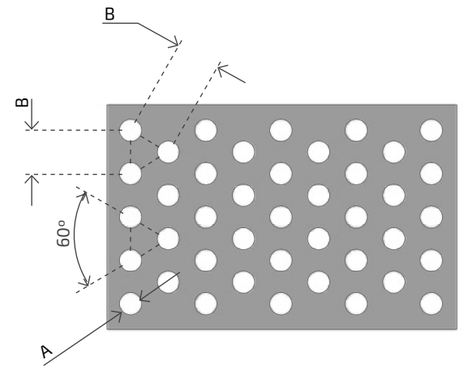


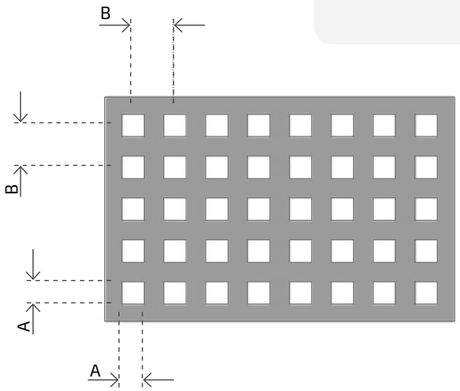
Patterns of round perforations			
PERFORATION	A	B	TRANSPARENCY
Fi 9x15	9	15	32,6 %
Fi 11x21,4	11	21,4	24 %
Fi 13x18,8	13	18,8	43,4 %
Fi 13x21,4	13	21,4	33,5 %
Fi 15x21,4	15	21,4	44,6 %
Fi 15x25	15	25	32,6 %
Fi 20x28	20	38	46,3 %
Fi 20x30	20	30	40,3 %
Fi 20x37,5	20	37,5	25,8 %
Fi 25x33,8	25	33,8	49,6 %
Fi 25x41,7	25	41,7	32,6 %
Fi 25x62,5	25	62,5	14,5%
Fi 35x43,5	35	43,5	58,7 %
Fi 35x50	35	50	30,9 %
Fi 35x60	35	60	24,1 %
Fi 35x100	35	100	11,1 %
Fi 35x125	35	125	7,1 %



Patterns of square perforations			
PERFORATION	A	B	TRANSPARENCY
Kw 10x18,75	10	18,75	28,4 %
Kw 10x25	10	25	16 %
Kw 15x25	15	25	36%
Kw 15x30	15	30	25 %
Kw 20x30	20	30	44,4 %
Kw 20x37,5	20	37,5	28,4 %
Kw 20x65	20	65	9,5 %
Kw 25x35	25	35	51 %
Kw 25x60	25	60	17,4 %
Kw 25x80	25	80	9,8 %
Kw 25x90	25	90	7,7 %

Perforated sheets are used in the construction sector as a decorative finishing of façades, balustrades or in other places where steel finishing is used. They are also very popular in the industry as elements of covers, partitions or fences. By using of a modern CNC machine we are able to make a perforation with holes in any alternative shape.





PLANK GRATINGS

- Profile width: 200, 260, 320mm and non-standard for a special order
- Profile length: 100 - 3000mm
- Profile height: 40, 50, 60mm
- Sheet thickness: 1.5, 2.0mm
- Material: S235, S355, aluminum, Z275 galvanized sheet
- Corrosion protection: Hot-dip galvanization, electro galvanization

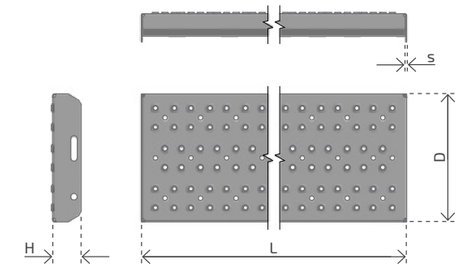
Plank gratings maximum distributed load

Values in kN/m², maximum deflection L/200

S	H	D	L					
			700	800	900	1000	1100	1200
1,5	40	200	7,52	7,08	6,84	6,72	6,60	6,48
		260	6,27	5,90	5,70	5,60	5,50	5,40
		320	4,39	4,13	3,99	3,92	3,85	3,78
2	40	200	13,70	13,20	12,79	12,60	12,12	11,88
		260	11,42	11,00	10,66	10,50	10,10	9,90
		320	7,99	7,70	7,46	7,35	7,07	6,93
2,5	40	200	20,56	19,80	19,54	19,26	18,96	18,78
		260	17,13	16,50	16,28	16,05	15,80	15,65
		320	11,99	11,55	11,40	11,24	11,06	10,96
1,5	50	200	9,24	9,00	8,90	8,40	8,21	8,04
		260	7,70	7,50	7,42	7,00	6,84	6,70
		320	5,39	5,25	5,19	4,90	4,79	4,69
2	50	200	17,12	16,50	15,71	15,36	14,81	14,39
		260	14,27	13,75	13,09	12,80	12,34	11,99
		320	9,99	9,63	9,16	8,96	8,64	8,39
2,5	50	200	24,20	23,54	22,75	22,00	21,56	21,26
		260	22,00	21,40	20,68	20,00	19,60	19,33
		320	17,60	17,12	16,54	16,00	15,68	15,46
1,5	60	200	10,04	9,90	9,27	9,02	8,78	8,42
		260	9,13	9,00	8,43	8,20	7,98	7,65
		320	7,30	7,20	6,74	6,56	6,38	6,12
2	60	200	19,15	18,15	16,36	16,06	15,57	14,65
		260	17,41	16,50	14,87	14,60	14,15	13,32
		320	15,67	14,85	13,38	13,14	12,74	11,99
2,5	60	200	31,41	28,60	27,83	27,28	25,55	24,17
		260	28,55	26,00	25,30	24,80	23,23	21,97
		320	25,70	23,40	22,77	22,32	20,91	19,77

Plank gratings maximum point load on area of 200x200mm, values in kN

S	H	D	L					
			700	800	900	1000	1100	1200
1,5	40	200	1,31	1,08	1,00	0,92	0,89	0,69
		260	1,19	0,98	0,91	0,84	0,81	0,63
		320	1,07	0,88	0,82	0,76	0,72	0,57
2	40	200	1,69	1,46	1,31	1,16	1,04	0,92
		260	1,54	1,33	1,19	1,05	0,95	0,84
		320	1,39	1,20	1,07	0,95	0,85	0,76
2,5	40	200	2,08	1,77	1,54	1,39	1,23	1,16
		260	1,89	1,61	1,40	1,26	1,12	1,05
		320	1,70	1,45	1,26	1,13	1,01	0,95
1,5	50	200	1,93	1,69	1,46	1,23	1,16	1,00
		260	1,75	1,54	1,33	1,12	1,05	0,91
		320	1,58	1,39	1,20	1,01	0,95	0,82
2	50	200	2,46	2,23	1,93	1,62	1,46	1,31
		260	2,24	2,03	1,75	1,47	1,33	1,19
		320	2,02	1,83	1,58	1,32	1,20	1,07
2,5	50	200	3,00	2,31	2,23	2,00	1,77	1,62
		260	2,73	2,10	2,03	1,82	1,61	1,47
		320	2,46	1,89	1,83	1,64	1,45	1,32
1,5	60	200	2,31	2,03	1,76	1,48	1,39	1,20
		260	2,10	1,85	1,60	1,34	1,26	1,09
		320	1,89	1,66	1,44	1,21	1,13	0,98
2	60	200	2,96	2,68	2,31	1,94	1,76	1,57
		260	2,69	2,44	2,10	1,76	1,60	1,43
		320	2,42	2,19	1,89	1,59	1,44	1,29
2,5	60	200	3,60	2,77	2,68	2,40	2,13	1,94
		260	3,28	2,52	2,44	2,18	1,93	1,76
		320	2,95	2,27	2,19	1,97	1,74	1,59



Plank gratings are mostly used for production of stair steps, platform fills, platforms or passageways primarily in the industrial sector. They are also used in public construction when industrial and extraordinary design is expected. The right choice of perforation and density allows to achieve a high level of security and durability, keeping the low weight at the same time. Gratings with dense and fine mesh are used most often for public, allowing a comfort usage, for example by ladies wearing high heels.

SERRATED PLANKS (TYPE USA)

- Profile width: 200, 260, 320mm and non-standard for a special order
- Profile length: 100 - 3000mm
- Profile height: 40, 50, 60mm
- Sheet thickness: 1.5, 2.0, 2.5mm
- Material: S235, S355, aluminum, Z275 galvanized sheet
- Corrosion protection: Hot-dip galvanization, electro galvanization

Serrated planks maximum distributed load

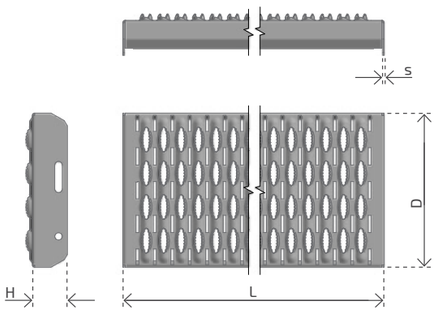
Values in kN/m², maximum deflection L/200

S	H	D	L					
			700	800	900	1000	1100	1200
1,5	40	200	14,4	13,65	12,75	10,65	9,3	8,25
		260						
		320						
2	40	200	21,18	18,15	16,05	13,56	12,015	10,65
		260						
		320						
2,5	40	200	26,55	23,7	21,15	18,015	15,3	12,75
		260						
		320						
1,5	50	200	19,5	19,05	18,75	16,35	13,65	13,2
		260						
		320						
2	50	200	27,3	25,95	24,3	21,75	18,6	17,25
		260						
		320						
2,5	50	200	37,2	33,75	32,4	28,65	24,3	21,3
		260						
		320						
1,5	60	200	27,15	25,65	24,9	22,65	19,5	19,05
		260						
		320						
2	60	200	36	34,65	33,3	31,5	28,65	25,65
		260						
		320						
2,5	60	200	48,15	46,5	44,25	40,2	34,65	31,65
		260						
		320						

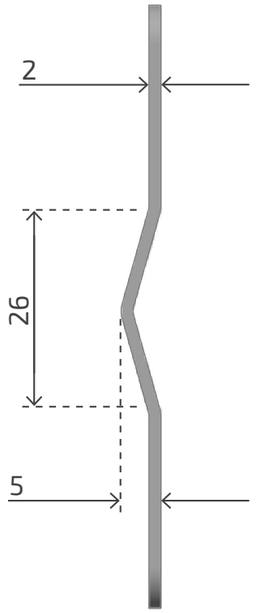
Serrated planks maximum point load on area of 200x200mm, values in kN

S	H	D	L					
			700	800	900	1000	1100	1200
1,5	40	200	1,7	1,4	1,3	1,2	1,15	0,9
		260						
		320						
2	40	200	2,2	1,9	1,7	1,5	1,35	1,2
		260						
		320						
2,5	40	200	2,7	2,3	2	1,8	1,6	1,5
		260						
		320						
1,5	50	200	2,5	2,2	1,9	1,6	1,5	1,3
		260						
		320						
2	50	200	3,2	2,9	2,5	2,1	1,9	1,7
		260						
		320						
2,5	50	200	3,9	3	2,9	2,6	2,3	2,1
		260						
		320						
1,5	60	200	3	2,64	2,28	1,92	1,8	1,56
		260						
		320						
2	60	200	3,84	3,48	3	2,52	2,28	2,04
		260						
		320						
2,5	60	200	4,68	3,6	3,48	3,12	2,76	2,52
		260						
		320						

SERRATED PLANKS TYPE USA



Serrated gratings are characterised by large, oval openings with aggressive non-slip finish. A Special design was created for the highest dirt resistance which works perfectly on the building site. A deep perforation provides a large load resistance. Widely used in the heavy industry areas, oil platforms, agricultural or offshore industry.

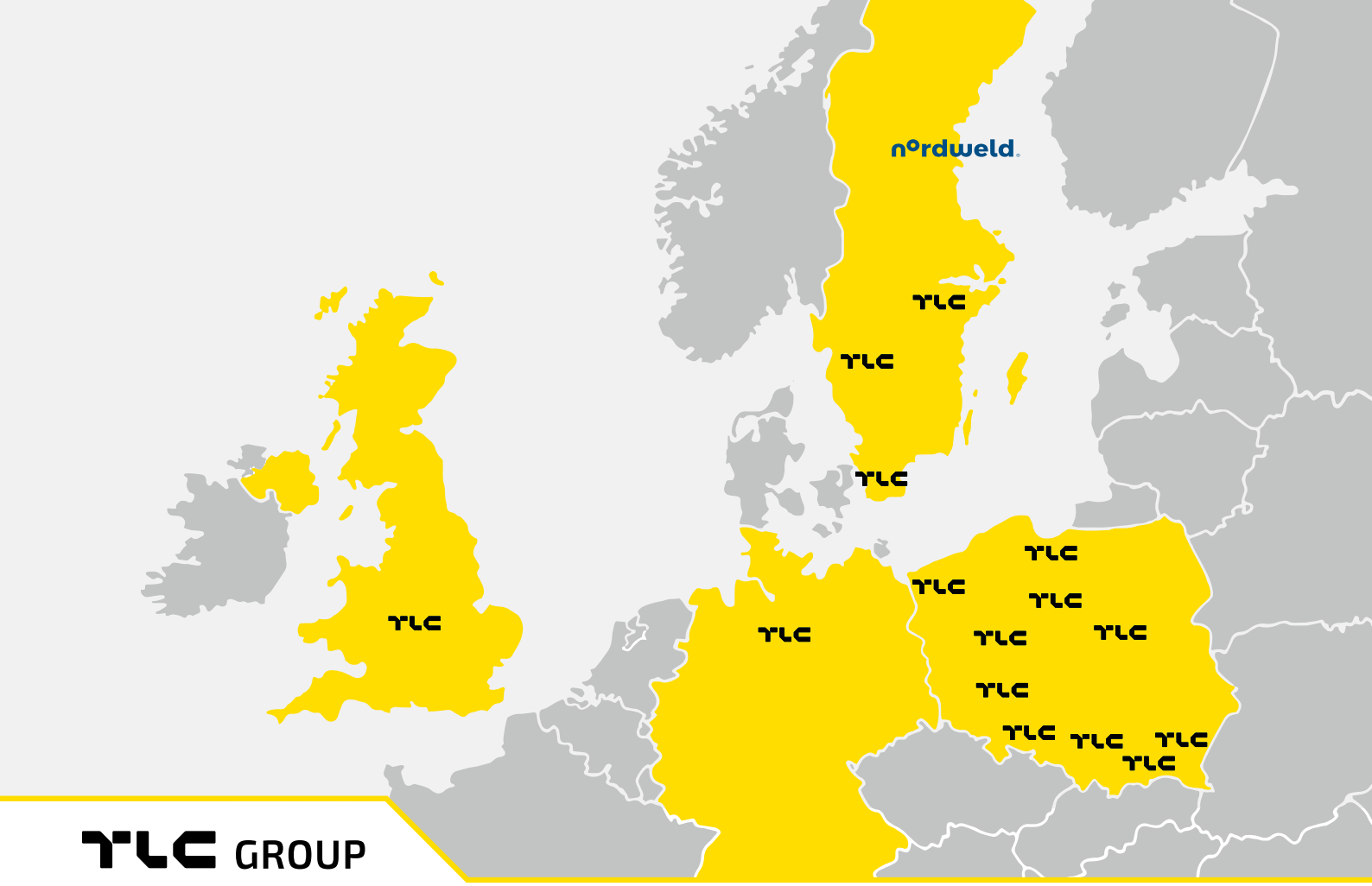


Longitudinal ribbing – in the industry mostly desired to strengthen the steel plates used as a bouncer at the landings outer edges protecting against small items falling. In the public sector they can be used as a decorative element, e.g. elevation.

LONGITUDINAL RIBBING

- **Maximum length: 2900mm**
- **Sheet thickness: 0.5 - 2.0mm**
- **Material: S235, S355, DC01, corten, aluminum, Z275 galvanized sheet**
- **Corrosion protection: Hot-dip galvanization, electro galvanization, powder painting (RAL)**

Examples of using longitudinal overlays



TLC GROUP

POLAND

TLC Sp z o. o.

+48 18 35 00 800
info@tlc.eu
tlc.eu

TLC Rental

+48 22 720 17 17
info@tlcrental.pl
tlcrental.pl

SWEDEN

Inter TLC AB

+46 70 525 99 18
info@intertlc.se
intertlc.se

nordweld TBS

+46 73 818 34 44
info@nordweld.eu
nordweld.eu

UNITED KINGDOM

Inter TLC Ltd

+44 2033 690 080
info@intertlc.co.uk
intertlc.co.uk

GERMANY

Inter TLC GmbH

+49 5147 709 00 72
info@intertlc.de
intertlc.de

TLC - MANUFACTURER OF STAIRS AND STEEL PLATFORMS FOR BUILDING INDUSTRY

TLC RENTAL - MOBILE PROTECTION SYSTEMS FOR CONSTRUCTION SITES

NORDWELD TBS - INNOVATIVE TANK BUILDING SYSTEM