



dejo

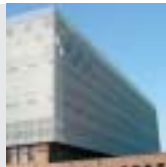
grating technology

stairtreads

hot-dip galvanizing

electrostatic powder coating

> PROJECTS



bureau Flierbosdreef
Amsterdam



Wijdeven
Tilburg



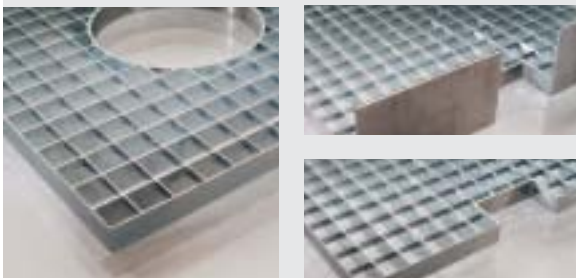
Gepla
Beek



Czaar Peterstraat
Amsterdam

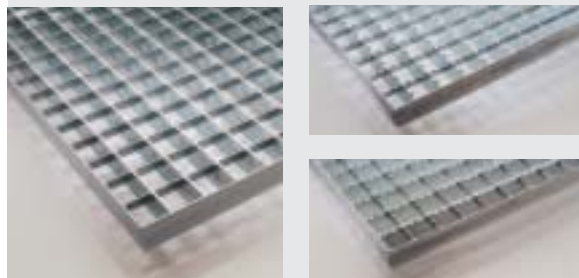
> PRODUCTS / GRATING TECHNOLOGY

> SPECIALS



technical information	from page	19
fixation methods and tolerances	page	32

> FLOOR GRATINGS



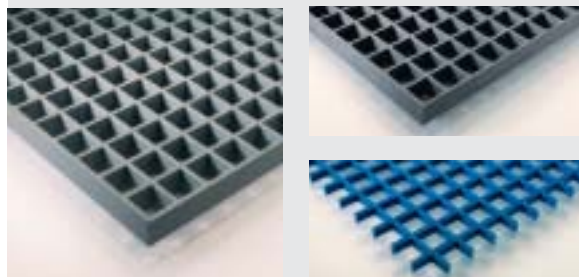
DPG technical information	from page	19
fixation methods and tolerances	page	32

> SP GRATINGS



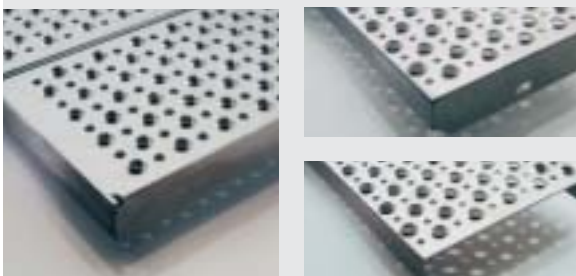
DSP technical information	page	28
fixation methods and tolerances	page	32

> SYNTHETIC GRATINGS



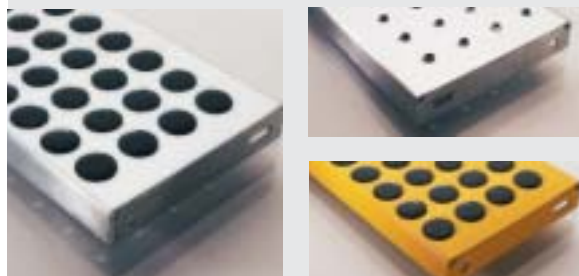
DGK technical information	page	29
---------------------------	------	----

> DEJOGRIP



DG technical information	from page	33
fixation methods and tolerances	page	36

> DEJO STUDDED STEPS

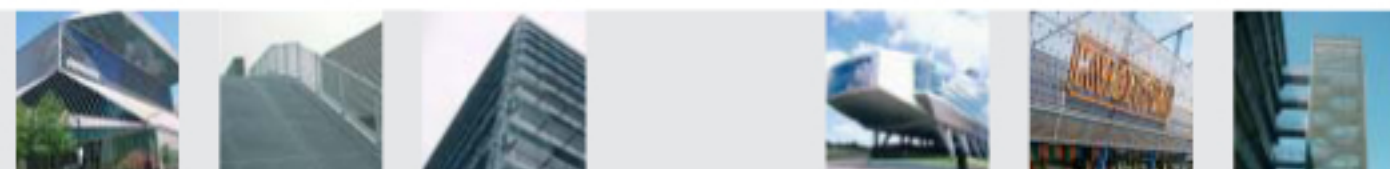


DT technical information	from page	33
fixation methods and tolerances	page	36

> PRODUCTS / HOT-DIP GALVANISING



hot-dip galvanising at dejo	page	10	logistics	page	14
TVP Duplex	page	10			
renovation	page	10			



Seattle Public Library
Seattle (USA)

multi-storey car park
Rijswijk

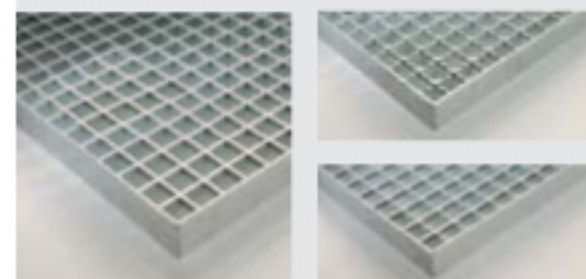
SVB building
Rotterdam

ING head office
Amsterdam

Alexandrium
Rotterdam

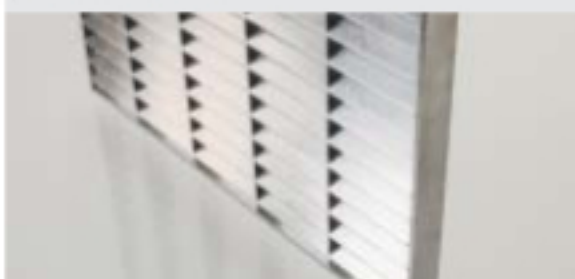
Salvatorflat
Roermond

> HEAVY-DUTY GRATINGS



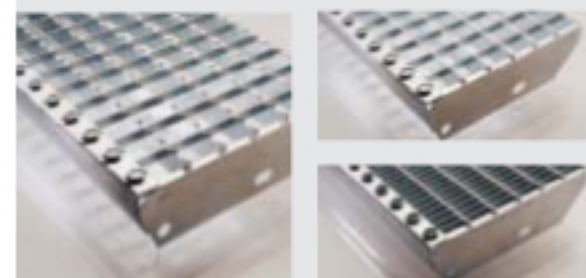
DPH	technical information	from page	25
	fixation methods and tolerances	page	32

> LOUVRE GRATINGS



DPL	technical information	page	38
	fixation methods and tolerances	page	32

> PRESSED GRATING STEPS



DPS	technical information	from page	30
	fixation methods and tolerances	page	32

> FULL GRATINGS



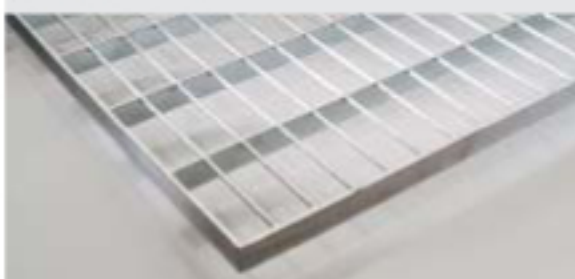
DPG	technical information	from page	39
	fixation methods and tolerances	page	32

> FASTENERS



	technical information	page	32
--	-----------------------	------	----

> FENCE GRATINGS



DFG	technical information	from page	40
	fixation methods and tolerances	page	32

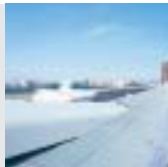
> PRODUCTS / ELECTROSTATIC POWDER COATING



electrostatic powder coating at dejo	page	12
TVP Duplex	page	10
renovation	page	12

logistics	page	14
RAL colours	page	41

welcome at **dejo**



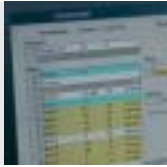
The logo for Dejo, featuring the word "dejo" in white lowercase letters on a red square background.

grating technology
stairtreads
hot-dip galvanizing
electrostatic powder coating

Jan Schaeferbrug, Amsterdam

no standard bridge
no standard gratings
no problem

that's Dejo



> THIS IS DEJO

dejo. Market leader in production of gratings and steps in the Netherlands. Leading in grating technology. On request, **dejo** delivers custom-made gratings for special projects, designs total solutions and initiates new market developments. A highly modern hot-dip-galvanizing plant and two high-tech powder coating installations make **dejo** a complete supplier

dejo is a one-stop-shop. The company is leading in grating technology; clients can turn to **dejo** for a comprehensive package. The options are unlimited and they guarantee a comprehensive range of gratings and steps. From standard shape to cut-to-measure product, **dejo** takes care of it. Applications are available with antislip, in steel, stainless steel or aluminium.

When steel needs durable protection, hot-dip galvanising offers the best result. Powder coating makes it possible to finish steel in almost any desired colour. The combination of galvanising and powder coating at one site, with the aid of the system known as TVP Duplex, makes **dejo** unique in the branch. Over the years **dejo** realised many leading quality projects for renowned clients.

> PIONEER'S ROLE

Innovation is of paramount importance to **dejo**. The specialist behind the supply of gratings and steps in all types and dimensions is continually engaged in product development, as well as in the use of existing products in new applications. In addition to product innovation, **dejo** focuses on process innovation. The emphasis is on increasing the efficiency, monitoring the quality standard, making small series and single products cost effective and creating external durability.

> INNOVATION

dejo means innovation. That is why **dejo** has its own knowledge centre - the product of intense cooperation with clients to create total solutions - and why **dejo** initiates new market developments. Specialist knowledge is always available in the field of new products, choice of material, applications, strength calculations and surface treatment. Cooperation frameworks with universities, architects and industry have resulted in **dejo's** leading role in the metal branch.

The widely differing cooperation frameworks with market parties have resulted among other things in the development of bearing structures and wall cladding, composed of gratings in combination with synthetic granular material, timber, glass and checker plate. In addition **dejo** works with applications of ss 304 or 316, glass-fibre reinforced synthetics, aluminium and hot-dip-galvanized steel.

> MORE INFORMATION

grating technology

6

hot-dip galvanising

10

electrostatic powder coating

12

> GRATING TECHNOLOGY

dejo's original core activity is the production of pressed gratings for landings and steps. During the well over 60 years of **dejo's** existence, countless applications have been added. Full gratings, louvre gratings and fence gratings, at **dejo** everyone can find exactly what he is looking for.

> REPUTATION

dejo offers total solutions and is closely involved in the design stage of the construction process. That is why **dejo** is often prescribed in building specifications. **dejo** consults with architects, contractors and steel constructors, so the products are seamlessly geared for the client's wishes.

dejo has gained an excellent reputation through very close involvement in countless high-quality projects. This brochure contains three examples of projects of the highest stature: Jan Schaefer bridge by architect Ton Verhoeven, Seattle Public Library by Rem Koolhaas of OMA Architects and ING head office by architect Roberto Meijer of Meijer & Van Schooten.

> CUSTOM-MADE

dejo means custom-made products. The company is renowned for its custom-made gratings. The design department is at your service with expert advice for clients with special wishes. Short lines of communication between **dejo** and the client are vital. Products are supplied made-to-measure, geared to the client's requirements and wishes. Gratings loaded, gratings unloaded, heavy-duty gratings, gratings with openings, kick edges, in specific shapes, gratings finished with a single or double layer coating in any desired colour: **dejo** ensures that all requirements and wishes are complied with.

In addition to products geared to specific wishes, **dejo** also stocks a wide range of gratings and steps. **dejo** guarantees a very short delivery period for such orders. the current range can always be found on www.dejo.nl.

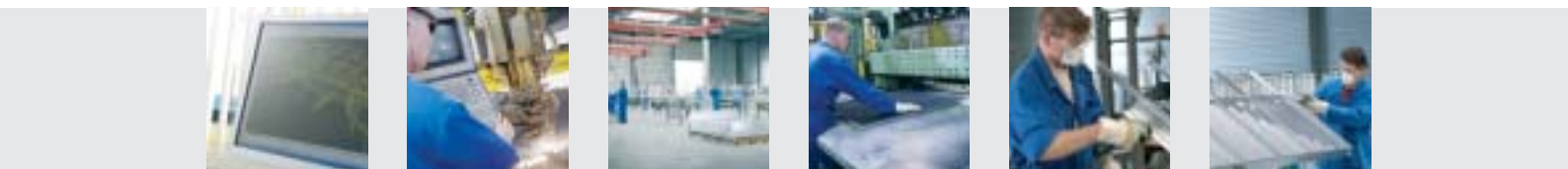
> PRODUCTION PROCESS

dejo has highly advanced equipment. The production process starts with punching the half-products. Then these half-products go to the processing machines, that assemble the half-product into mats. Subsequently, the product is cut to the right shape. Finally the gratings are provided with an edge. Quality inspection is of vital importance throughout the production process. The gratings are inspected after every treatment. That way **dejo** guarantees a perfect finished product.

> INTERNATIONAL

dejo's market is expanding. For now the Netherlands still is the largest market. But also internationally **dejo** is a company to reckon with, considering the increasing number of renowned purchasers throughout Europe and even in the United States where **dejo** has been responsible for the gratings of the Seattle Public Library.

> TECHNICAL INFORMATION





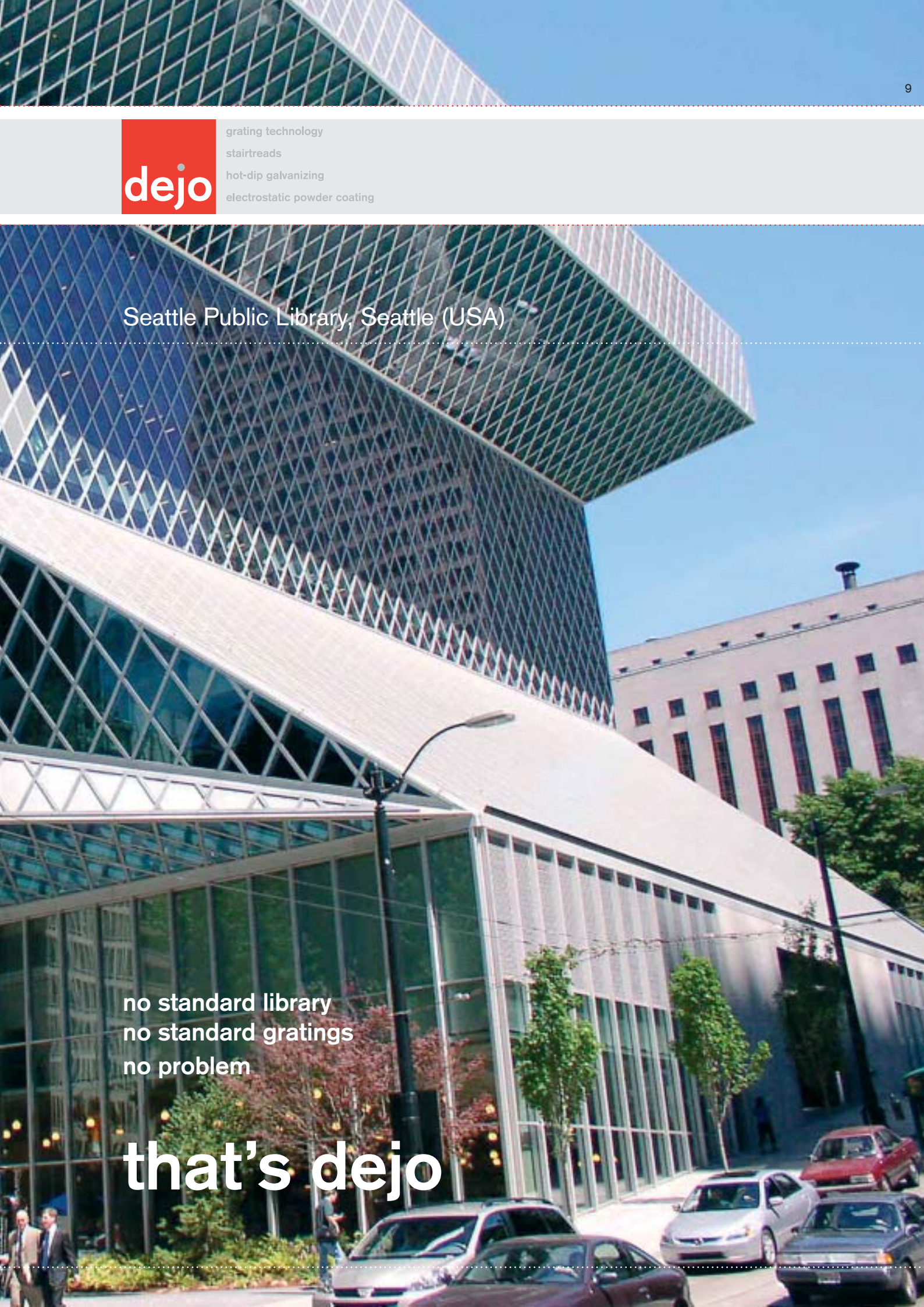


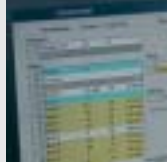
grating technology
stairtreads
hot-dip galvanizing
electrostatic powder coating

Seattle Public Library, Seattle (USA)

no standard library
no standard gratings
no problem

that's dejo





> HOT-DIP GALVANISING

Hot-dip galvanising is the perfect solution when steel needs protection against environmental influences. Providing the product with a zinc layer, allows **dejo** to guarantee a long service life of the product. Galvanising takes place fully in-house in our own, advanced galvanising plant.

> QUALITY GUARANTEE

The steel is treated before it is galvanised. In the incoming inspection the metal is checked for any imperfections as regards galvanising technique. It is also inspected whether the positions of inflow and outflow holes are correct.

After approval, the material is placed on traverses and a completely automated treatment process starts. The materials are submerged in special baths where they are degreased, pickled and rinsed. The chemical pretreatment ends with a special flux bath in which the material gets a primer coat that prevents the formation of fly rust during internal transport.

Subsequently, the material is routed through a drying kiln, followed by a dip in a liquid zinc bath. At very high temperature (450 degrees Celsius) steel and zinc form protective zinc alloy layers, sealed by a pure zinc oxide layer. This layer protects the material for dozens of years, even under the most extreme conditions. Hot-dip galvanising also takes place under continuous quality inspection. The material that leaves the galvanising plant is delivered in compliance with NEN-EN-ISO 1461.

> DEZINCING

dejo can not only galvanise steel, but also dezinc galvanised metal. This is necessary when products need a new coat of zinc. The original zinc layer is removed in a completely ecologically sound processed before the new zinc layer is applied.

> TVP DUPLEX SYSTEM

The combination of hot-dip galvanising and powder coating, referred to as TVP Duplex system, guarantees the ultimate protection of steel against aggressive environmental influences. On top of that, powder coating gives the material a beautiful appearance, in any desired colour. The TVP duplex system guarantees an exceptionally long service life of the metal, longer than when the material is separately galvanised or powder coated.

> ELECTROSTATIC POWDER COATING

Galvanising gives steel an excellent protective layer. But that is not sufficient for every application. In such cases powder coating is the solution.

> POWDER COATING

This technology gives the material additional protection and a beautiful appearance at the same time. **dejo** possesses a high-tech coating department where the material gets any desired colour, on request with a special effect lacquer. With the aid of so-called hammer-finish paint and special structure powders, special effects can be achieved in the material. This equipment ensures an ecologically sound treatment process.

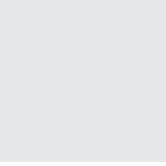
dejo sets great store by quality. That also appears from the recent purchase of two high-tech coating lines. The latest gadgets guarantee an extensive coating process of the highest quality. These lines can handle almost anything. Track one is nine metres long and intended for material up to a thousand kilos. This track has a chemical pretreatment installation that gives the material a protective primer layer. Track two is 14.5 metres long and can handle items weighing up to three thousand kilos.

> RECYCLING

dejo stimulates material recycling. That offers ecological and economic advantages. **dejo** is professional partner in the field of surface treatment, has a reputation as 'preserver' and offers various recycling options.

For instance, **dejo** can chemically remove the paint from objects with a length of nine metres, a width of one metre and a weight of a thousand kilos, if required while preserving the existing zinc layer. Then the structure receives a new single or double coating layer in any desired RAL colour. If the zinc layer has deteriorated to such an extent that a new coat does not sufficiently guarantee durability **dejo** can dezinc the product and give it a new zinc layer. It goes without saying, that **dejo** can remove the paint from basic ss and aluminium material and provide it with a new coating layer.





> ONE-STOP SHOP

dejo is a complete supplier and one-stop shop. On the client's request the company handles the entire project coordination. **dejo** delivers a comprehensive package. The client asks, **dejo** designs, produces and delivers. That means custom-made products by **dejo** and time savings for the client. Picking up, treating, packaging and delivering in time? **dejo** takes care of it.

> TRANSPORT

Ever more purchasers use **dejo**'s transport service. **dejo** takes care of the entire logistic process and guarantees prompt delivery in the Netherlands and abroad, at competitive rates. **dejo** works with regular, specialised transport partners with the right equipment and excellent motivation. Their trained drivers are experienced in handling the **dejo** products.

The flexible transport service is geared for the widely varying dimensions of the products to be transported. Unloading or loading with a lorry loading crane, a sliding tarpaulin semitrailer or a combination of those? **dejo** takes care of it throughout whole Europe.

> MORE INFORMATION

more information on one-stop shopping >

[t] +31 (0)561 691 691

[e] verkoop@dejo.nl



The logo for 'dejo' is a red square with the word 'dejo' in white lowercase letters.

grating technology
stairtreads
hot-dip galvanizing
electrostatic powder coating

ING head office, Amsterdam

no standard office
no standard gratings
no problem

that's dejo

> TECHNICAL SPECIFICATIONS

The chapter technical specifications indicates the preconditions for the products you want to have treated. You can ask **dejo** a specific question or issue a well-defined order. Our people will be happy to assist you. You can also go to our website www.dejo.nl for more information or for placing online orders.

> MANUAL

In order to serve you optimally, the chapters have been composed on the basis of market demand. You are the one who knows best where you are going to use **dejo** products. Below it is explained where you can quickly find the right information.

> GRATING TECHNOLOGY > LOADED GRATINGS	page	19 - 36
---	------	----------------

Loaded gratings are gratings for which every grating is expected to have bearing capacity. They must be able to carry a certain load, suitable for pedestrians, bicycles or other traffic. That may be for instance be bridges, staircases, balconies or landings.

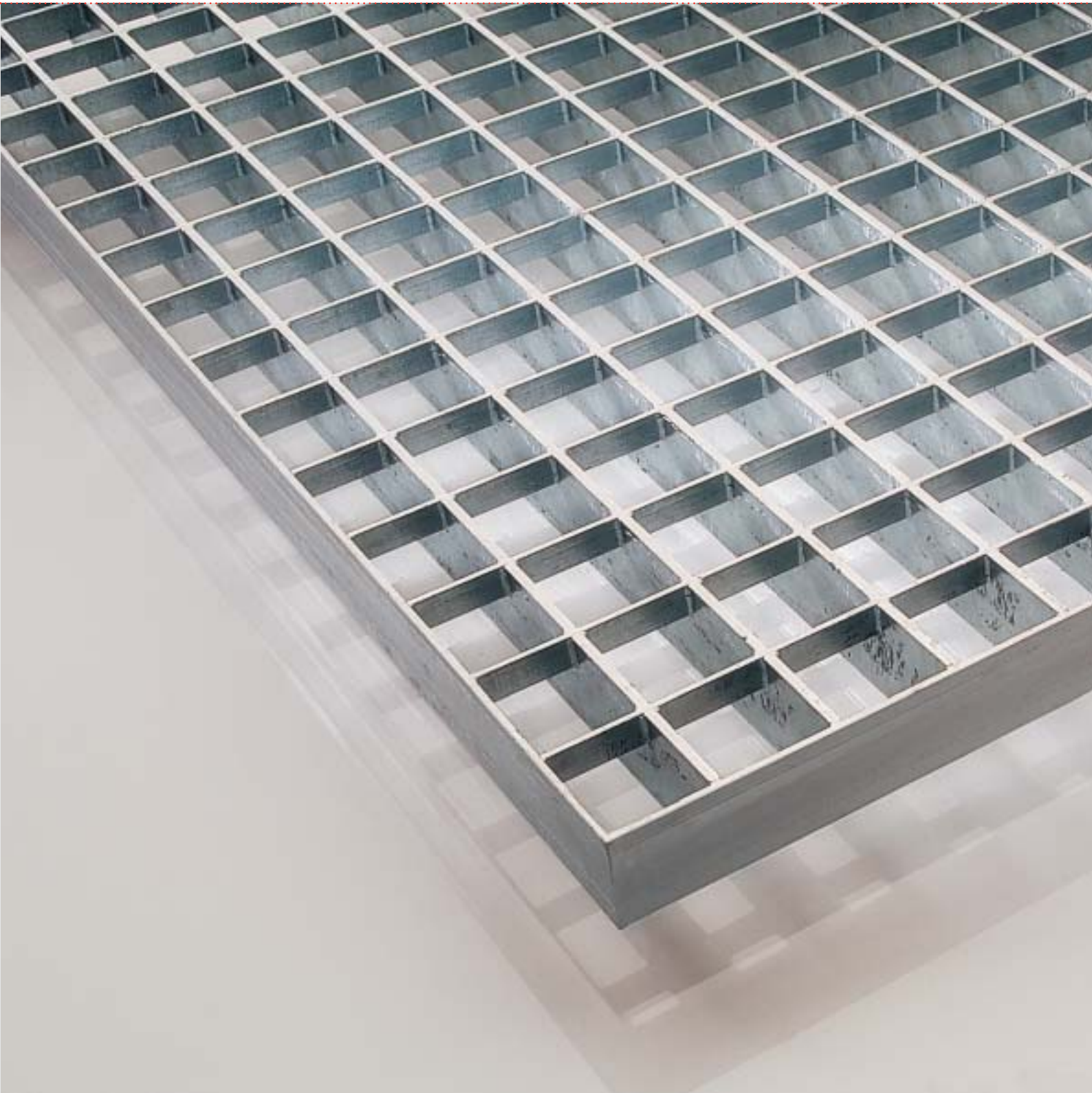
> GRATING TECHNOLOGY > UNLOADED GRATINGS	page	37 - 40
---	------	----------------

Unloaded gratings are gratings for which hardly any bearing capacity is expected. The gratings are commonly used for aesthetic purposes. For instance for wall cladding and fences.

> COMPREHENSIVE TABLE OF CONTENTS

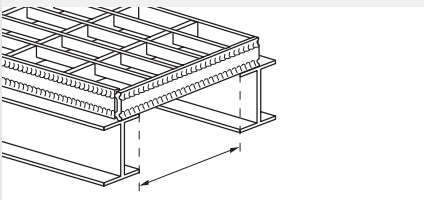
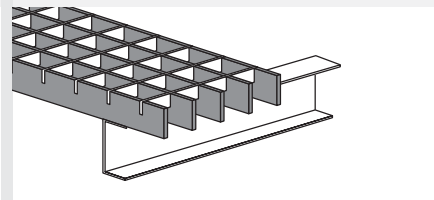
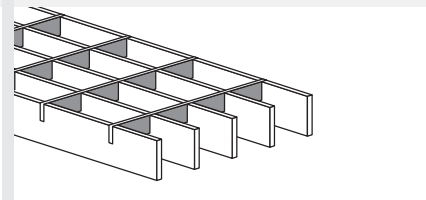
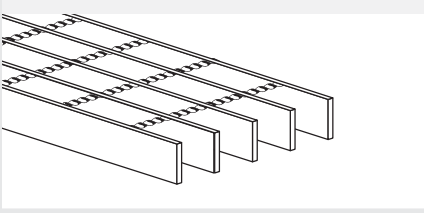
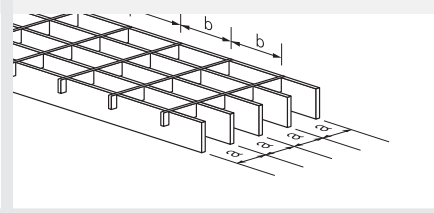
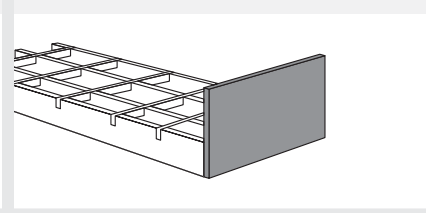
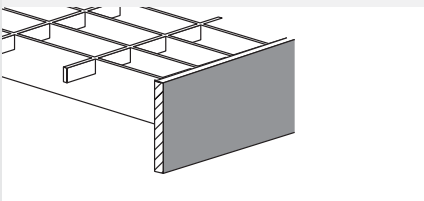
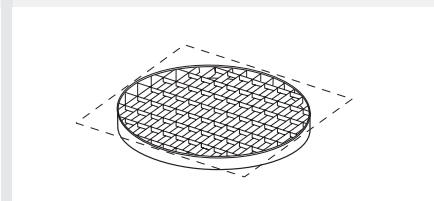
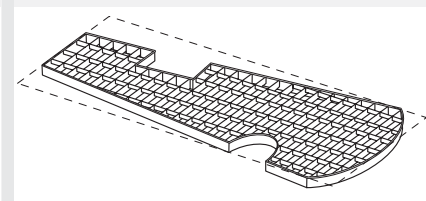
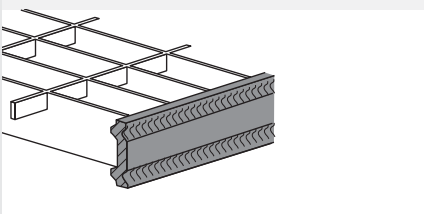
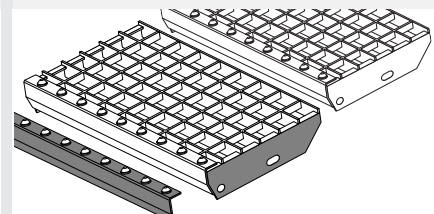
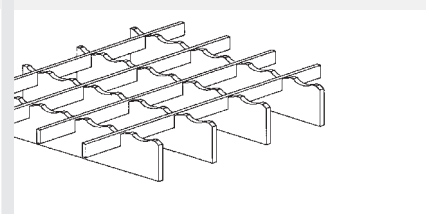
> TECHNICAL SPECIFICATIONS	> TECHNICAL TERMS FOR GRATINGS AND STEPS	page	20
> LOADED GRATINGS	> FLOOR GRATINGS	page	21 - 24
	> HEAVY-DUTY GRATINGS	page	25 - 27
	> SP GRATINGS	page	28
	> SYNTHETIC GRATINGS	page	29
	> PRESSED GRATING STEPS	page	30 - 31
	> FIXATION METHODS AND TOLERANCES FOR GRATINGS AND STEPS	page	32
	> DEJO GRIP AND DEJO STUDDED STEPS	page	33 - 36
	> TECHNICAL TERMS DEJO GRIP AND DEJO STUDDED STEPS	page	33
	> FIXATION METHODS AND TOLERANCES FOR DEJOGRIP AND DEJO STUDDED STEPS	page	36
	> UNLOADED GRATINGS	> LOUVRE GRATINGS	page
> FULL GRATINGS		page	39
> FENCE GRATINGS		page	40

> SPECIFICATIONS FOR LOADED GRATINGS



> SPECIFICATIONS FOR GRATINGS AND STEPS

> TECHNICAL TERMS GRATINGS AND STEPS

<p>FREE SPAN</p> <p>The spacing between two supporting bearing beams. Important for calculating the load-bearing capacity of gratings.</p> 	<p>BEARER BAR</p> <p>Bearer bars must carry the load and must be supported at both ends. The bearer bar length is mentioned first and underlined.</p> 	<p>CROSS BAR OR BEARER BAR</p> <p>Cross bars form the connections between the bearer bars.</p> 
<p>CROSS BAR OR BEARER BAR SP GRATING</p> <p>Twisted cross bars form the connection between the bearer bars.</p> 	<p>MESH SIZE / MESH CLASSIFICATION</p> <p>The spacing (between centres) of the bearer bars (a), followed by the spacing (between centres) of the cross bars (b). The bearer bar spacing is stated first and underlined.</p> 	<p>KICK EDGE</p> <p>Welded-on strip protruding under the grating.</p> 
<p>LOWERED EDGE</p> <p>Welded-on strip protruding under the grating.</p> 	<p>GROSS GRATING AREA</p> <p>Total grating area before cutting to size and fitting with any required cut-outs.</p> 	<p>CUT-OUTS</p> <p>All cutting work in the grating.</p> 
<p>EDGES</p> <p>At the ends of the bearer and cross bars (so all around) a grating edge is placed.</p> <p>PROFILE EDGE</p> <p>With a few exceptions, dejo-press-gratings are finished with a profile edge.</p> 	<p>NON SLIP NOSING + MOUNTING PLATES</p> <p>At the front of the dejo steps a special antislip run profile is placed. This run profile increases the bearing capacity, while simultaneously creating a clear visual distinction between the steps. dejo steps come with welded-on plates for mounting between the stair stringers. These mounting plates have already been provided with the necessary holes.</p> 	<p>ANTISLIP</p> <p>The antislip effect can be increased by providing the bearer bars with a serrated edge. Moreover, dejo presses the cross bars recessed, so the higher notches form the upper surface. That results in a strong antislip effect in all directions. Another option is to serrate both bearer and cross bars, while keeping the top surfaces of both at the same level (double antislip).</p> 

> FLOOR GRATINGS DEJO PRESS GRATINGS > CODE: **DPG**

> PRODUCTION OPTIONS

CUSTOM-MADE

As a grating manufacturer, **dejo** is highly versatile. No matter what type of grating, **dejo** stocks it or makes it to measure. The custom-made gratings are what **dejo** really is renowned for: heavy-duty gratings, gratings with special openings, kick edges or specific shapes? Provided with antislip in steel, ss or aluminium and finished with a single or double coating layer in any desired colour? For **dejo** it is no problem.



MESH SIZES TABLE

applies for steel, ss and aluminium

BEARER BAR SPACING	CROSS BAR SPACING BETWEEN CENTRES.							
BETWEEN CENTRES	11, ¹¹	16, ⁶⁶	22, ²²	33, ³³	44, ⁴⁴	49, ⁹⁹	66, ⁶⁶	99, ⁹⁹
11 ¹¹ (on request)	–	•	•	•	•	•	•	•
16 ⁶⁶	–	•	•	•	•	•	•	•
22 ²²	–	•	•	•	•	•	•	•
33 ³³	•	•	•	•	•	•	•	•
44 ⁴⁴	•	•	•	•	•	•	•	•
49 ⁹⁹	•	•	•	•	•	•	•	•
66 ⁶⁶	•	•	•	•	•	•	•	•
99 ⁹⁹	–	•	•	•	•	•	•	•
Standard mesh size 33, ³³ x 33, ³³ mm								

STEEL

DIMENSIONS

For hot-dip galvanised gratings the following guideline applies for minimum and maximum dimensions:

- Bearer bar length : 140 - 3000 mm
- Bearer bar height : 20 - 60 mm
- Bearer bar thickness : 2 - 5 mm
- Cross bar length : 100- 2800 mm
- Cross bar height : 10 - 50 mm
- Cross bar thickness : 2 - 5 mm
- Grating size : 0.20 - 2 m²
- – Length-width ratio of the gratings: 1 : 3 or 3 : 1

POSTTREATMENT

Usually: dip galvanised in-house under NEN-EN-ISO 1461, if desired with powder coating using the TVP Duplex process. In most common situations antislip version possible .

BEARER BARS	20 x 2	25 x 3
	25 x 2	30 x 3
	30 x 2	35 x 3
	35 x 2	40 x 3
	40 x 2	50 x 3
	50 x 2	
CROSS BARS	10 x 2 *	
	10 x 3	
	18 x 2	

* Usual for bearer bars up to 3 mm thick

SS 316 OR 304

DIMENSIONS

For ss gratings the following guideline applies for minimum and maximum dimensions:

- Bearer bar length : 140 - 2000 mm
- Bearer bar height : 20 - 50 mm
- Bearer bar thickness : 2 - 5 mm
- Cross bar length : 140 - 2000 mm
- Cross bar height : 10 - 50 mm
- Cross bar thickness : 2 - 5 mm
- Grating size : 0.20 - 2 m²
- – Length-width ratio of the gratings: 1 : 3 or 3 : 1

POSTTREATMENT

Pickled and passivated. In most common situations antislip version possible .

BEARER BARS	20 x 2	30 x 3
	25 x 2	
	30 x 2	
CROSS BARS	10 x 2	10 x 3
	18 x 2	

ALUMINIUM

DIMENSIONS

For aluminium gratings the following guideline applies for minimum and maximum dimensions:

- Bearer bar length : 140 - 2000 mm
- Bearer bar height : 20 - 60 mm
- Bearer bar thickness : 2 - 5 mm
- Cross bar length : 140 - 2000 mm
- Cross bar height : 10 - 50 mm
- Cross bar thickness : 2 - 5 mm
- Grating size : 0.20 - 2 m²
- – Length-width ratio of the gratings: 1 : 3 or 3 : 1

POSTTREATMENT

Anodised (natural or in colour according to VOM), with powder coating using the TVP Duplex process.

BEARER BARS	20 x 2	30 x 3
	25 x 2	
	30 x 2	
CROSS BARS	10 x 2	
	18 x 2	

> FLOOR GRATINGS DEJO PRESS GRATINGS > CODE: **DPG**> LOAD TABLE: UNIFORM LOAD IN KG/M²

SPAN	BEARER BARS										
	20 x 2	25 x 2	25 x 3	30 x 2	30 x 3	35 x 2	35 x 3	40 x 2	40 x 3	40 x 4	50 x 3
200	13227										
300	5879	9185	13778	13227	19840	18003					
400	3307	5167	7750	7440	11160	10127	15190	13227	19840		
500	2116	3307	4960	4762	7142	6481	9722	8465	12689	16930	19840
600	1470	2296	3444	3307	4960	4501	6751	5879	8818	11757	13778
700	972	1687	2531	2429	3644	3307	4960	4319	6478	8638	10122
800	651	1271	1907	1860	2790	2532	3798	3307	4960	6613	7750
900	457	893	1340	1470	2204	2000	3000	2613	3919	5255	6123
1000	333	651	977	1125	1687	1620	2430	2116	3174	4233	4960
1100	250	489	734	845	1268	1339	2009	1749	2623	3498	4099
1200	193	377	565	651	977	1034	1551	1470	2204	2939	3444
1300	152	296	444	512	768	813	1220	1214	1821	2427	2935
1400	121	237	356	410	615	651	977	972	1458	1944	2531
1500	99	193	289	333	500	529	794	790	1185	1580	2204
1600	81	159	238	275	412	436	654	651	977	1302	1907
1700	68	133	199	229	343	364	545	543	814	1085	1590
1800	57	112	167	193	289	306	459	457	686	914	1340
1900	49	95	142	164	246	260	391	389	583	778	1139
2000	42	81	122	141	211	223	335	333	500	667	977
2100	36	70	105	121	182	193	289	288	432	576	844
2200	31	61	92	106	158	168	252	250	376	501	734
2300	27	54	80	92	139	147	220	219	329	438	642
2400	24	47	71	81	122	129	194	193	289	386	565
2500	21	42	62	72	108	114	171	171	256	341	500
± WEIGHT KG/M ²	15.6	18.4	24.6	21.1	28.6	23.5	32.7	26.6	36.7	52.1	44.7

GRATING SPECIFICATIONS

Bearer bar spacing 33,³³ mm between centres, above the line max. stress 1600 kg/cm², under the line max. deflection 1/200 x the span.

MATERIALS

Steel hot-dip galvanised, ss

SAFETY FACTOR

Up to the yield limit 1.5, up to breaking limit 2.1.

DEVIATING MESH SIZES

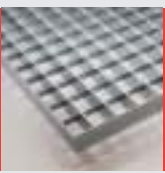
Conversion other mesh sizes compared to 33,³³ mm.

The load for other possible bearer bar spacings can be calculated with the aid of the table on the right.

The data in the table on the right are valid for all stated load tables.

Go for strength calculations to our calculation module at www.dejo.nl

BETWEEN CENTRES BEARER BARS	MULTIPLICATION FACTOR
16, ⁶⁶ mm	1.9 x
22, ²² mm	1.45 x
27, ⁷⁷ mm	1.18 x
33, ³³ mm	1 x
44, ⁴⁴ mm	0.78 x
50, ⁰⁰ mm	0.70 x
66, ⁶⁶ mm	0.55 x



> FLOOR GRATINGS DEJO PRESS GRATINGS > CODE: **DPG**

> LOAD TABLE: CONCENTRATED LOAD IN KG IN AN AREA OF 200 x 200 MM

SPAN	BEARER BARS										
	20 x 2	25 x 2	25 x 3	30 x 2	30 x 3	35 x 2	35 x 3	40 x 2	40 x 3	40 x 4	50 x 3
200	853	1333	2000	1920	2880	1613	3920	3413	5120	6827	8000
300	427	667	1000	960	1440	1307	1960	1707	2560	3413	4000
400	284	444	667	640	960	871	1307	1138	1707	2276	2667
500	213	333	500	480	720	653	980	853	1280	1707	2000
600	171	267	400	384	576	523	784	683	1024	1365	1600
700	128	222	333	320	480	436	653	569	853	1138	1333
800	96	186	281	274	411	373	560	488	731	975	1143
900	75	146	219	240	360	327	490	427	640	853	1000
1000	60	117	175	202	302	290	436	379	569	759	889
1100	49	95	143	165	247	261	392	341	512	683	800
1200	41	81	119	137	205	218	327	310	465	621	727
1300	34	67	101	116	174	185	277	276	414	551	667
1400	30	56	87	100	150	158	237	236	354	473	615
1500	26	50	75	85	130	137	206	205	307	410	571
1600	22	44	66	76	113	120	180	179	269	358	525
1700	20	39	58	67	100	106	159	158	237	316	463
1800	18	34	51	59	89	94	141	141	211	281	412
1900	16	31	46	53	80	84	126	126	189	252	368
2000	14	28	41	46	72	76	114	113	170	226	332
2100	13	25	38	43	65	69	103	102	154	205	300
2200	12	23	34	39	59	62	94	93	140	186	273
2300	11	21	31	36	54	57	85	85	127	170	249
2400	10	19	29	33	49	52	78	78	117	156	228
2500	9	18	26	30	45	48	72	72	108	143	210
± WEIGHT KG/M ²	15.6	18.4	24.6	21.1	28.6	23.5	32.7	26.6	36.7	52.1	44.7

GRATING SPECIFICATIONS

Bearer bar spacing 33,33 mm between centres, above the line max. stress 1600 kg/cm², under the line max. deflection 1/200 x the span.

MATERIALS

Steel hot-dip galvanised, ss.

SAFETY FACTOR

Up to the yield limit 1.5, up to breaking limit 2.1.

DEVIATING MESH SIZES

Conversion other mesh sizes compared to 33,33 mm.

The load for other possible bearer bar spacings can be calculated with the aid of the table on the right.

The data in the table on the right are valid for all stated load tables.

Go for strength calculations to our calculation module at www.dejo.nl

BETWEEN CENTRES BEARER BARS	MULTIPLICATION FACTOR
16, ⁶⁶ mm	1.9 x
22, ²² mm	1.45 x
27, ⁷⁷ mm	1.18 x
33, ³³ mm	1 x
44, ⁴⁴ mm	0.78 x
50, ⁰⁰ mm	0.70 x
66, ⁶⁶ mm	0.55 x

> FLOOR GRATINGS DEJO PRESS GRATINGS > CODE: **DPG**

> STOCK GRATINGS STEEL HOT-DIP GALVANISED

DIMENSIONS	BEARER BARS			DIMENSIONS	BEARER BARS		
	25 x 2	30 x 2	30 x 3		25 x 2	30 x 2	30 x 3
300 x 500 mm	•			800 x 1200 mm	•		
300 x 600 mm	•			900 x 500 mm	•		
300 x 1000 mm			•	900 x 600 mm	•		•
400 x 500 mm	•			900 x 700 mm	•		
400 x 600 mm	•			900 x 800 mm			•
400 x 1000 mm			•	900 x 1000 mm	•		•
500 x 800 mm	•			900 x 1200 mm			•
500 x 1000 mm	•		•	900 x 1500 mm			•
600 x 600 mm	•			1000 x 500 mm	•	•	•
600 x 700 mm	•			1000 x 600 mm	•		•
600 x 800 mm	•			1000 x 700 mm	•		•
600 x 900 mm	•			1000 x 800 mm	•	•	•
600 x 1000 mm	•			1000 x 900 mm	•		•
600 x 1200 mm	•			1000 x 1000 mm	•	•	•
600 x 1500 mm	•			1000 x 1200 mm	•		•
700 x 500 mm	•			1000 x 1500 mm	•	•	•
700 x 600 mm	•			1200 x 500 mm			•
700 x 1000 mm	•			1200 x 600 mm			•
800 x 500 mm	•			1200 x 700 mm			•
800 x 600 mm	•			1200 x 800 mm			•
800 x 700 mm	•			1200 x 900 mm			•
800 x 900 mm	•			1200 x 1000 mm			•
800 x 1000 mm	•	•	•	1200 x 1500 mm			•
± WEIGHT KG/M²	± 18.4	± 21.1	± 28.6		± 18.4	± 21.1	± 28.6

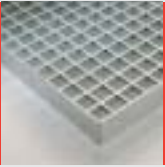
GRATING SPECIFICATIONS

Bearer bars see table, cross bars 10 x 2 mm, mesh size 33,³³ mm between centres, the length and width tolerance for grating dimensions is + 0 to - 4 mm.

The first value is the length of the bearer bars (span) that must be supported at the ends. State this size when ordering or, if you make a copy of this page to fax, underline it on the copy.

ORDERING ONLINE

For our current offer go to our website www.dejo.nl. You can order online here.



> HEAVY-DUTY GRATINGS DEJO PRESS HEAVY DUTY > CODE: DPH

> PRODUCTION OPTIONS

CUSTOM-MADE

As a grating manufacturer, **dejo** is highly versatile. No matter what type of heavy-duty grating; **dejo** makes it to measure. The custom-made gratings are what **dejo** really is renowned for. Gratings with special openings, kick edges or specific shapes? Provided with antislip in steel, ss or aluminium and finished with a single or double coating layer in any desired colour? For **dejo** it is no problem.



MESH SIZES TABLE		applies for steel and ss						
BEARER BAR SPACING BETWEEN CENTRES	CROSS BAR SPACING BETWEEN CENTRES.	16, ⁶⁶	22, ²²	33, ³³	44, ⁴⁴	49, ⁹⁹	66, ⁶⁶	99, ⁹⁹
16 ⁶⁶		•	•	•	•	•	•	•
22 ²²		•	•	•	•	•	•	•
33 ³³		•	•	•	•	•	•	•
44 ⁴⁴		•	•	•	•	•	•	•
49 ⁹⁹		•	•	•	•	•	•	•
66 ⁶⁶		•	•	•	•	•	•	•
99 ⁹⁹		•	•	•	•	•	•	•
		Standard mesh size 33, ³³ x 33, ³³ mm						

MATERIAL: STEEL

DIMENSIONS

For hot-dip galvanised gratings the following guideline applies for minimum and maximum dimensions:

- Bearer bar length : 200 - 3000 mm
- Bearer bar height : 25 - 150 mm
- Bearer bar thickness : 4 - 5 mm
- Length-width ratio: 1 : 3 or 3 : 1
- Cross bar length : 200- 2300 mm
- Cross bar height : 10 - 60 mm
- Cross bar thickness : 2 - 5 mm
- Grating size : 0.50 - 2.5 m²
- Max. grating weight: 500 kg

POSTTREATMENT

Dip galvanised in-house under NEN-EN-ISO 1461, if desired with powder coating using the TVP Duplex process. In most cases an antislip version is possible.

BEARER BARS	25 x 4	25 x 5	70 x 5
	30 x 4	30 x 5	80 x 5
	35 x 4	40 x 5	90 x 5
	40 x 4	50 x 5	100 x 5
	50 x 4	60 x 5	120 x 5
	60 x 4		150 x 5
CROSS BARS	10 x 2	10 x 3	
		10 x 5	
		15 x 5	
		20 x 5	
		25 x 5	
		30 x 5	

> HEAVY-DUTY GRATINGS DEJO PRESS HEAVY DUTY > CODE: DPH

> LOAD TABLE: CONCENTRATED LOAD IN KG IN AN AREA OF 200 x 200 MM

> BEARER BAR ORIENTATION IS DRIVING DIRECTION

SPAN	BEARER BAR										
	25x5	30x5	40x5	50x5	60x5	70x5	80x5	90x5	100x5	120x5	150x5
200	3000	4320	7680	12000	17280						
300	1500	2160	3840	6000	8640	11760	15360	19440			
400	1000	1440	2560	4000	5760	7840	10240	12960	16000		
500	750	1080	1920	3000	4320	5880	7680	9720	12000	17280	
600	600	864	1536	2400	3456	4704	6144	7776	9600	13824	
700	500	720	1280	2000	2880	3920	5120	6480	8000	11520	18000
800	422	617	1097	1714	2469	3360	4369	5554	6857	9874	15429
900	328	540	960	1500	2160	2940	3840	4860	6000	8640	13500
1000	263	454	853	1333	1920	2613	3413	4320	5333	7680	12000
1100	215	371	768	1200	1728	2352	3072	3888	4800	6912	10800
1200	179	309	698	1091	1571	2138	2793	3535	4364	6284	9816
1300	151	262	620	1000	1440	1960	2560	3240	4000	5760	9000
1400	130	224	532	923	1329	1809	2363	2991	3692	5317	8308
1500	113	194	461	857	1234	1680	2194	2777	3429	4937	7714
1600	98	170	403	788	1152	1568	2048	2592	3200	4608	7200
1700	87	150	356	695	1080	1470	1920	2430	3000	4320	6750
1800	77	133	316	618	1016	1384	1807	2287	2824	4066	6353
1900	69	119	283	563	955	1307	1707	2160	2667	3840	6000
2000	62	107	255	497	859	1238	1617	2046	2526	3638	5684
2100	56	97	230	450	778	1176	1536	1944	2400	3456	5400
2200	51	88	209	409	707	1220	1463	1851	2286	3291	5143
2300	47	81	191	374	645	1025	1396	1767	2182	3142	4909
2400	43	74	175	342	592	940	1336	1690	2087	3005	4696
2500	39	68	161	315	544	864	1280	1620	2000	2880	4500
± WEIGHT KG/M ²	44	51	64	78	92	106	119	132	145	170	209

GRATING SPECIFICATIONS

Bearer bar spacing 33,³³ mm between centres. / above the line max. stress 1600 kg/cm². / under the line max. deflection 1/200 x the span.

MATERIALS

steel and ss

SAFETY FACTOR

Up to the yield limit 1.5, up to breaking limit

IMPACT FACTOR

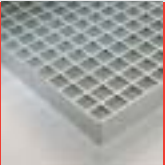
For alternating load multiply the wheel pressure by 1.3.

BRIDGE CLASSES

Permissible loads for heavy traffic are indicated with bridge classes.

The converted concentrated load can be used for the load table.

BRIDGE CLASS	WHEEL PRESSURE	LOAD AREA	MULTIPL. FACTOR	CONCENTRATED LOAD CONVERTED TO AN AREA OF 200 x 200 MM	
				STATIC	+ IMPACT FACTOR 1.3
60	10000 kg	200 mm	2.15 x	4651 kg	6046 kg
45	7500	200 x 500	1.85	4054	5270
30	5000	200 x 400	1.50	3333	4333
24	4000	200 x 300	1.25	3200	4160
16	5000	200 x 400	1.50	3333	4333
12	4000	200 x 300	1.25	3200	4160
9	3000	200 x 260	1.13	2655	3452
6	2000	200 x 200	1.00	2000	2600
3	1000	200 x 200	1.00	1000	1300



> HEAVY-DUTY GRATINGS DEJO PRESS HEAVY DUTY > CODE: DPH

> LOAD TABLE: CONCENTRATED LOAD IN KG IN AN AREA OF 100 X 100 MM
 > FOR FORKLIFT TRUCKS

SPAN	BEARER BAR															
	25x5	30x3	30x5	40x3	40x4	40x5	50x3	50x5	60x5	70x5	80x5	90x5	100x5	120x5	140x5	150x5
200	1333	1152	1920	2048	2731	3413	3200	5333	7680	10453	13653					
300	800	691	1152	1229	1638	2048	1920	3200	4608	6272	8192	10368	12800			
400	571	494	823	878	1170	1463	1371	2286	3291	4480	7406	9143	13166			
500	444	384	640	683	910	1138	1067	1778	2560	3483	4551	5760	7111	10240	13938	
600	364	314	524	559	745	931	873	1455	2095	2851	3724	4713	5818	8378	11404	13091
700	308	266	443	473	630	788	738	1231	1772	2412	3151	3988	4923	7089	9649	11077
800	263	230	384	410	546	683	640	1067	1536	2091	2733	3456	4267	6144	8363	9600
900	206	203	339	361	482	602	565	941	1355	1845	2409	3049	3765	5421	7379	8471
1000	166	172	286	323	431	539	505	842	1213	1651	2156	2728	3368	4851	6602	7579
1100	136	141	236	293	390	488	457	762	1097	1493	1950	2469	3048	4389	5973	6857
1200	114	118	197	267	356	445	417	696	1002	1363	1781	2254	2783	4007	5454	6261
1300	97	100	167	238	318	397	384	640	922	1254	1638	2074	2560	3686	5018	5760
1400	83	86	144	205	273	341	356	593	853	1161	1517	1920	2370	3413	4646	5333
1500	72	75	125	178	237	297	331	552	794	1081	1412	1788	2207	3178	4326	4966
1600	64	66	110	156	208	260	305	508	743	1012	1321	1672	2065	2973	4046	4645
1700	56	58	97	138	184	230	270	449	698	950	1241	1571	1939	2793	3801	4364
1800	50	52	86	123	164	205	240	400	658	896	1170	1481	1829	2633	3584	4114
1900			77	110	147	184	215	358	619	848	1107	1401	1730	2491	3390	3892
2000			70	99	132	165	194	323	558	804	1050	1329	1641	2363	3216	3692
2100			63	90	120	150	176	293	506	765	999	1264	1561	2248	3060	3512
2200			58	82	109	136	160	266	460	729	953	1206	1488	2143	2917	3349
2300			53	75	100	125	146	243	421	668	910	1152	1422	2048	2788	3200
2400				69	92	114	134	223	386	613	871	1103	1362	1961	2669	3064
2500				63	84	105	123	206	355	564	836	1058	1306	1881	2560	2939

GRATING SPECIFICATIONS

Bearer bar spacing 33,³³ mm between centres. / above the line max. stress 1600 kg/cm². / under the line max. deflection 1/200 x the span.

MATERIALS

steel and ss

SAFETY FACTOR

Up to the yield limit 1.5, up to breaking limit 2.1.

IMPACT FACTOR

For alternating load multiply the wheel pressure by 1.3.

DEVIATING MESH SIZES

Conversion other mesh sizes compared to 33,³³ mm

The load for other possible bearer bar spacings can be calculated with the aid of the table on the right.

THIS TABLE 'DEVIATING MESH SIZES' ALSO APPLIES FOR THE LOAD TABLE FOR HEAVY-DUTY GRATINGS ON THE PREVIOUS PAGE

BETWEEN CENTRES BEARER BARS	MULTIPLICATION FACTOR
16, ⁶⁶ mm	1.9 x
22, ²² mm	1.45 x
27, ⁷⁷ mm	1.18 x
33, ³³ mm	1 x
44, ⁴⁴ mm	0.78 x
50, ⁹⁰ mm	0.70 x
66, ⁶⁶ mm	0.55 x

> SP GRATINGS DEJO SCHWEISS PRESS > CODE: DSP

> PRODUCTION OPTIONS

CUSTOM-MADE

As a grating manufacturer, **dejo** is highly versatile. No matter what type of grating, **dejo** stocks it or makes it to measure. The custom-made gratings are what **dejo** really is renowned for. SP gratings, gratings with cut-outs, kick edges or specific shapes? Provided with antislip in steel, for offshore and/or finished with a single or double coating layer in any desired colour? For **dejo** it is no problem. SP gratings can be ordered in ss after consultation.

MESH SIZES TABLE

BEARER BAR SPACING BETWEEN CENTRES	CROSS BAR SPACING BETWEEN CENTRES.										only applies for steel
	19	24	25	34	38	50	65	76	100	132	
15	-	-	-	-	-	-	-	•	•	-	<ul style="list-style-type: none"> • also as offshore gratings mesh size 8 x 8 for 34 x 38 •• also as offshore gratings mesh size 13 x 96 for 34 x 100 ••• also as offshore gratings mesh size 11 x 96 for 43 x 100 r : in ss 1.4301 (V2A), 1.4571 (V4A)
22	-	•	-	-	• r	• r	-	•	• r	-	
25	-	-	•	-	•	•	-	•	•	-	
30	-	-	-	-	•	• r	-	•	•	-	
33	-	-	-	•	•	•	-	•	•	-	
34	•	•	-	-	• r	• r	-	•	•• r	-	
38	-	-	-	-	•	• r	-	•	• r	-	
41	-	-	-	-	•	• r	-	•	• r	-	
43	-	•	-	-	•	•	-	•	•••	-	
50	-	-	-	-	•	•	-	•	•	-	
62	-	-	-	-	-	•	•	-	•	•	
66	-	-	-	-	•	•	-	•	•	-	

STEEL

DIMENSIONS

For SP gratings in hot-dip galvanised version the following applies for minimum and maximum dimensions:

- Bearer bar length : 140 - 6100 mm
- Bearer bar height : 20 - 60 mm
- Bearer bar thickness : 2 - 5 mm
- Cross bar length : 100 - 1000 mm
- Cross bar square twisted
- Grating size : 0.20 - 2 m²
- Length-width ratio of the gratings : 1 : 3 or 3 : 1

POSTTREATMENT

Usually: dip galvanised in-house under NEN-EN-ISO 1461, if desired with powder coating using the TVP Duplex process. In most cases an antislip version is possible.

BEARER BARS

HEIGHT	THICKNESS			
	2	3	4	5
20	•	•	-	-
25	• r	• r	• r	•
30	• r	• r	• r	•
35	•	•	•	•
40	• r	• r	• r	•
50	-	• r	•	•
60	-	-	• r	•

CROSS BARS

	4	4,5	5	6	8
square twisted	-	•	•	•	•
round	•	-	•	•	-

LOAD TABLE

Check for the load table at floor gratings (DPG) and/or heavy-duty gratings (DPH).

> STOCK

BEARER BARS DIMENSIONS	30 x 2		30 x 3		STEPS + DIN mounting plates and run profile DIMENSIONS	30 x 2		30 x 3	
400 x 1000 mm	•		•		600 x 240 (270 mm)	•		•	
500 x 1000 mm	•		•		800 x 240 (270 mm)	•		•	
600 x 1000 mm	•		•		1000 x 240 (270 mm)	•		•	
700 x 1000 mm	•		•		1200 x 240 (270 mm)	•		•	
800 x 1000 mm	•		•						
900 x 1000 mm	•		•						
1000 x 1000 mm	•		•						
1200 x 1000 mm	•		•						
1500 x 1000 mm	•		•						

> SYNTHETIC GRATINGS DEJO GLASSFIBRE SYNTHETIC > CODE: **DGK**

> PRODUCTION OPTIONS

CUSTOM-MADE

Synthetic gratings with openings or specific shapes? With antislip? In special colours? For **dejo** it is no problem.

MESH SIZES TABLE

BEARER BAR SPACING BETWEEN CENTRES	CROSS BAR SPACING BETWEEN CENTRES.			
	13	38	40	50
13	•	-	-	-
38	-	•	-	-
40	-	-	•	-
50	-	-	-	•

SYNTHETIC

DIMENSIONS

Guideline for version and minimum and maximum dimensions:

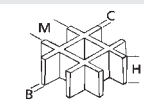
- Bearer bar and cross bar length :1007 - 4047 mm (see table)
- Bearer bar and cross bar height :12 - 63 mm (see table)

COLOURS

Synthetic gratings are available in grey, yellow, green and red. For sufficient order sizes all other RAL colours are available.

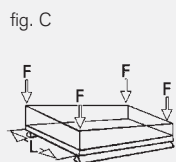
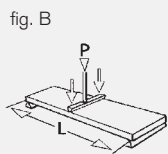
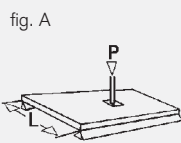
STOCK

HEIGHT	PANEL DIMENSIONS	MESH SIZE	WEIGHT PER M ²
12	3660 x 1220	38 x 38	5.6 kg
25	2007 x 1007	40 x 40	12.6 kg
25	3007 x 1007	40 x 40	12.6 kg
25	4047 x 1007	40 x 40	12.6 kg
30	2440 x 1220	38 x 38	15.2 kg
38	3050 x 1525	38 x 38	19 kg
38	3660 x 1220	38 x 38	19 kg
50	3660 x 1220	50 x 50	12 kg
63	3660 x 1220	38 x 38	50 kg
30	3007 x 1007	13 x 13	17.7 kg
28	2007 x 1007	40 x 40	18.6 kg
28	3007 x 1007	40 x 40	18.6 kg
33	2440 x 1220	38 x 38	21.2 kg
41	3660 x 1220	38 x 38	25 kg
COVER PLATE			
3	2000 x 1000		5.4 kg



LOAD TABLE

span L mm	CONCENTRATED LOAD maximum load kN deflection (Fig. A)		LINEAR LOAD maximum load kN deflection (Fig. B)		UNIFORM LOAD maximum load kN/M ² deflection (Fig. C)		
	L/100	L/200	L/100	L/200	L/100	L/200	
DGK 25							
H	300	13.6	5.8	4.6	2.1	94.5	44.5
C	500	5.1	2.6	1.8	0.9	19.6	9.6
B	800	2.3	1.1	0.7	0.4	4.7	2.3
M = 38/38 mm	1000	1.7	0.8	0.4	0.2	2.3	1.2
	1200	1.3	0.6	0.3	0.2	1.4	0.7
DGK 30							
H = 30,0 mm	300	25.9	9.8	9.1	4.3	214.9	73.3
C = 6,7 mm	500	9,3	4,4	6,2	3,1	39,7	19,3
B = 5,0 mm	800	4,1	2,1	1,4	0,7	11,1	5,3
M = 38/38 mm	1000	2,9	1,4	0,9	0,5	5,0	2,6
	1200	2,3	1,2	0,7	0,3	3,3	1,6
	1400	-	-	0,5	0,3	1,8	0,9
	1500	-	-	0,4	0,2	1,7	0,8
DGK 38							
H = 30.0 mm	500	17.3	7.7	6.5	3.2	70.0	32.7
C = 6.7 mm	800	8.4	4.0	2.7	1.4	21.7	9.4
B	1000	6.1	3.0	1.9	1.0	9.0	4.5
M = 38/38 mm	1200	4.8	2.4	1.4	0.7	5.9	2.8
	1400	-	-	0.9	0.4	3.4	1.7
	1500	-	-	0.8	0.4	2.7	1.4
DGK 50							
H = 50.0 mm	500	36.9	15.7	12.7	6.2	148.0	67.9
C = 8.0 mm	700	22.0	10.1	6.8	3.4	58.6	38.8
B = 5.0 mm	800	17.0	8.1	4.8	2.4	37.5	19.4
M = 50/50 mm	1000	12.5	6.2	3.6	1.8	16.6	8.4
	1200	9.8	5.0	2.1	1.4	12.2	5.8
	1400	-	-	2.0	1.0	6.6	3.2
	1500	-	-	1.8	0.9	5.3	2.7



> PRESSED GRATING STEPS DEJO PRESSED STAIR STEPS > CODE: DPS

> PRODUCTION OPTIONS

CUSTOM-MADE

As a grating manufacturer, **dejo** is highly versatile. No matter what type of grating or step, **dejo** stocks it or makes it to measure. The custom-made stairtreads are what **dejo** really is renowned for. Provided with antislip in steel, ss or aluminium and finished with a single or double coating layer in any desired colour? For **dejo** it is no problem.

MESH SIZES TABLE

BEARER BAR SPACING BETWEEN CENTRES	CROSS BAR SPACING BETWEEN CENTRES.						
	11, ¹¹	22	33	44	49	66	99
16 ⁶⁶	•	•	•	•	•	•	•
35 ⁵⁵	•	•	•	•	•	•	•
44 ⁴⁴	•	•	•	•	•	•	•
66 ⁶⁶	•	•	•	•	•	•	•
	Standard mesh size 35, ⁵⁵ x 33, ³³ mm						

applies for steel, ss

STEEL

DIMENSIONS

For steps in hot-dip galvanised version the following applies for minimum and maximum dimensions:

- Bearer bar length : 140 - 2000 mm
- Bearer bar height : 20 - 150 mm
- Bearer bar thickness : 2 - 5 mm
- Cross bar length : 100 - 500 mm
- Cross bar height : 10 - 50 mm
- Cross bar thickness : 2 - 5 mm

POSTTREATMENT

Usually: dip galvanised in-house under NEN-EN ISO 1461, if required with coating using TVP Duplex process. In most situations antislip version is possible.

BEARER BARS

20 x 2	25 x 3	25 x 4	25 x 5	70 x 5
25 x 2	30 x 3	30 x 4	30 x 5	80 x 5
30 x 2	35 x 3	35 x 4	40 x 5	90 x 5
35 x 2	40 x 3	40 x 4	50 x 5	100 x 5
40 x 2	50 x 3	50 x 4	60 x 5	120 x 5
50 x 2		60 x 4		150 x 5

CROSS BARS

10 x 2 *	18 x 2			
10 x 3	20 x 5			
10 x 5	25 x 5			
15 x 5	30 x 5			

* Usual for bearer bars up to 3 mm thick

SS 316 OR 304

DIMENSIONS

For steps in ss version the following guideline applies for minimum and maximum dimensions:

- Bearer bar length : 140 - 1200 mm
- Bearer bar height : 20 - 50 mm
- Bearer bar thickness : 2 - 5 mm
- Cross bar length : 140 - 500 mm
- Cross bar height : 10 - 50 mm
- Cross bar thickness : 2 - 5 mm

POSTTREATMENT

Pickled and passivated. In most common situations antislip version possible.

BEARER BARS

20 x 2	30 x 3
25 x 2	
30 x 2	

CROSS BARS

10 x 2	10 x 3
18 x 2	

> CONSTRUCTION GUIDELINES STAIRS

GRATING SPECIFICATIONS

The following guidelines apply when designing stairs. Our people will be happy to help you in further detailing.

- Standard step lengths are 500, 600, 700, 800, 900 and 1000 mm.
- A stair with more than 4 steps must be fitted with railings.
- For more than 18 steps, a landing must be included as well.
- The landing length must be at least 1 metre.

- For stair widths of more than 1 metre, the landing length is equal to the step width.
- For a stair that is pleasant to walk on, Dejo uses as rule of thumb: run + (2 x rise) = 630 mm.
- The overlap must be at least 10 mm.
- The stair pitch can be determined on the basis of the ratio between height and base length: L : H = D.
- The desired stair pitch is between 30° and 45°. Choose the nearest ratio from the table below.

Stair pitch	60°	57°	55°	52°	50°	47°	45°	42°	40°	37°	35°	32°	30°
Suitable rise	240	235	230	225	220	215	210	205	200	190	185	175	170
Suitable run	150	160	170	180	190	200	210	220	230	250	260	280	290
Suitable step width	160	170	200	200	200	230	230	230	260	260	300	300	300
Ratio base length/height	0.58	0.65	0.70	0.78	0.84	0.93	1.00	1.11	1.19	1.33	1.43	1.60	1.73



> **PRESSED GRATING STEPS** DEJO PRESSED STAIR STEPS > CODE: **DPS**

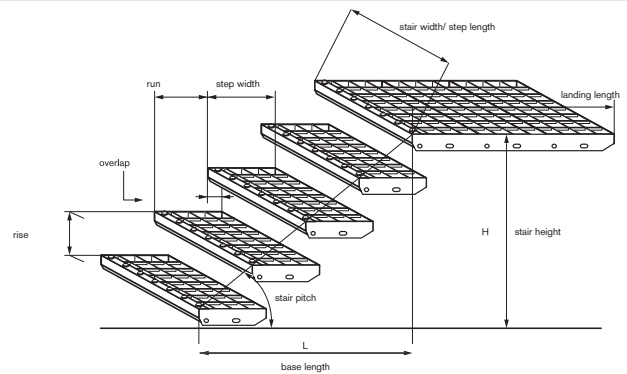
> CONSTRUCTION GUIDELINES STAIRS

SPECIFICATIONS

If the stair pitch is not known, but you do know the height (H) and the base length (L), then divide the base length (L) by the height (H).

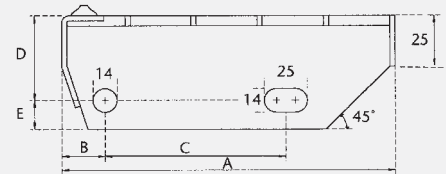
EXAMPLE

Stair pitch (D) : ?
 Base length (L) : 3.0 m
 Height (H) : 2.5 m
 $L : H = 3.0 : 2.5 = 1.2$
 The stair pitch is 40°



> STOCK

MESH SIZE 35 ⁵ x 33 ³³ MM BETWEEN CENTRES, MOUNTING PLATES ACCORDING TO DEJO				DIMENSIONS MOUNTING PLATES	
Bearer bars:	Length:	A = 200 mm:	A = 233 mm:	A = 200	A = 233
25 x 2 mm:	500 mm	•		B = 25	B = 25
	600 mm	•		C = 105	C = 105
	700 mm	•		D = 50	D = 50
	800 mm	•		E = 17	E = 17
30 x 2 mm:	600 mm		•		
	700 mm		•		
	800 mm		•		
	900 mm	•	•		
	1000 mm		•		
30 x 3 mm:	600 mm		•		
	700 mm		•		
	750 mm		•		
	800 mm		•		
	900 mm		•		
	1000 mm		•		



MESH SIZE 35 ⁵ x 33 ³³ MM BETWEEN CENTRES, MOUNTING PLATES ACCORDING TO DIN				DIMENSIONS MOUNTING PLATES		
Bearer bars:	Length:	A = 240 mm:	A = 270 mm:	A = 305 mm:		
30 x 2 mm:	600 mm	•	•		A = 240	A = 270
	700 mm	•			B = 35	B = 35
	800 mm	•	•		C = 120	C = 150
	900 mm	•	•		D = 55	D = 55
	1000 mm	•	•	•	E = 12	E = 12
30 x 3 mm:	1000 mm	•	•			
	1200 mm			•		
40 x 3 mm:	1200 mm	•	•	•		

MESH SIZE 35 ⁵ x 11 ¹¹ MM BETWEEN CENTRES, MOUNTING PLATES ACCORDING TO DIN				DIMENSIONS MOUNTING PLATES		
Bearer bars:	Length:	A = 240 mm:	A = 270 mm:	A = 305 mm:		
30 x 2 mm:	800 mm		•		A = 240	A = 270
	1000 mm	•		•	B = 35	B = 35
30 x 3 mm:	800 mm		•		C = 120	C = 150
	1000 mm		•		D = 55	D = 55
	1200 mm			•	E = 12	E = 12

ORDERING ONLINE

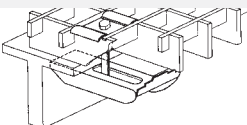
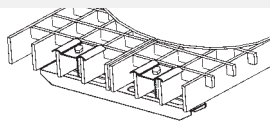
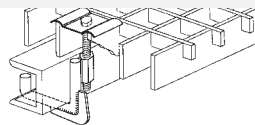
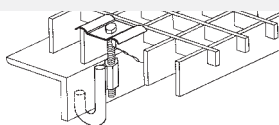
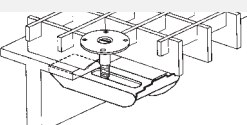
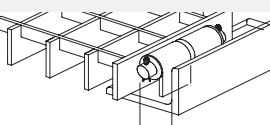

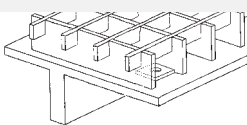
For our current offer go to our website www.dejo.nl. You can order online here.

> FIXATION METHODS AND TOLERANCES

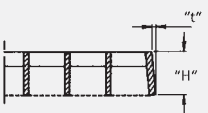
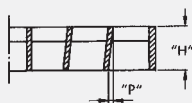
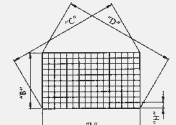
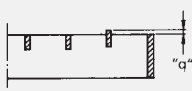
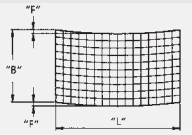
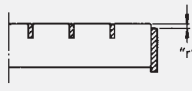
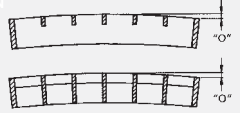
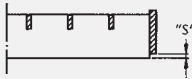
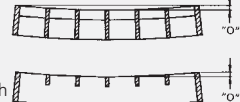
> FIXATION METHODS FOR GRATINGS

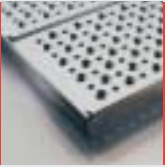
FIXATION METHODS PRESSED GRATINGS

For **dejo** gratings special fixation systems have been developed. These can be placed effortlessly (from the top). Then only the bolt has to be tightened. Of course it is possible to provide the gratings with welded-on plates and other welded-on material as per drawing. This page shows you some examples of **dejo** fixation systems: simple, effective and safe. For problem-specific fixation methods we can inform you on other options.

FASTENING CLAMP KIT <ul style="list-style-type: none"> • upper clamp (saddle) • tap bolt + nut M8 • U profile (cleat) 	COUPLING KIT <ul style="list-style-type: none"> • 2 x upper clamp (saddle) • 2 x tap bolt + nut M8 • 1 x continuous U-profile (coupling strip) 	U-HOOK KIT <ul style="list-style-type: none"> • upper clamp (saddle) • U-hook, various sizes • tap bolt M8 	J-HOOK KIT <ul style="list-style-type: none"> • J-hook kit, upper clamp (saddle) • J-hook, various sizes tap bolt M8 
COVER PLATE <ul style="list-style-type: none"> • disc • tap bolt + nut M8 • U profile (cleat) 	HINGE <ul style="list-style-type: none"> • 2 parts with strip steel 20 x 3 • 1 ss pin with copper ring 	<ul style="list-style-type: none"> • 2 copper washers • 2 ss split pins 	WELDED-IN PLATE <ul style="list-style-type: none"> • welded-in material as per drawing 

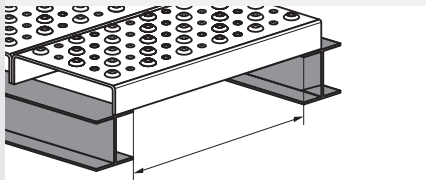
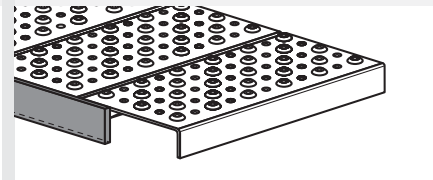
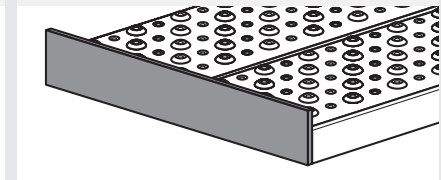
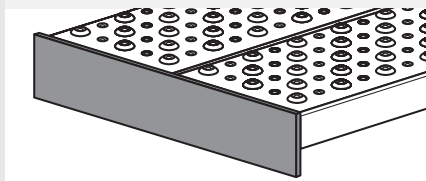
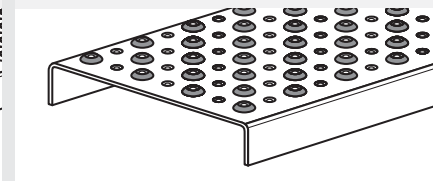
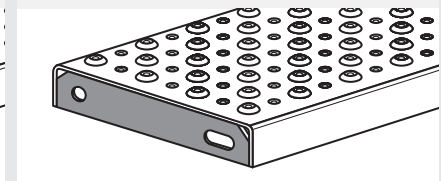
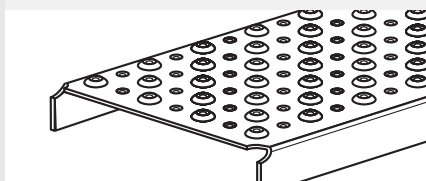
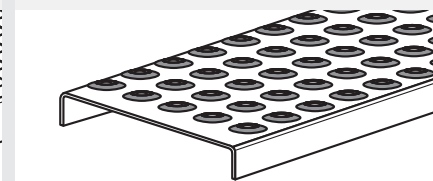
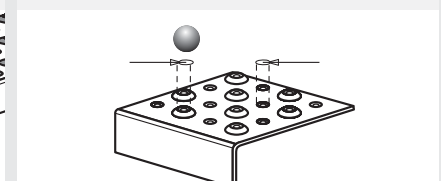
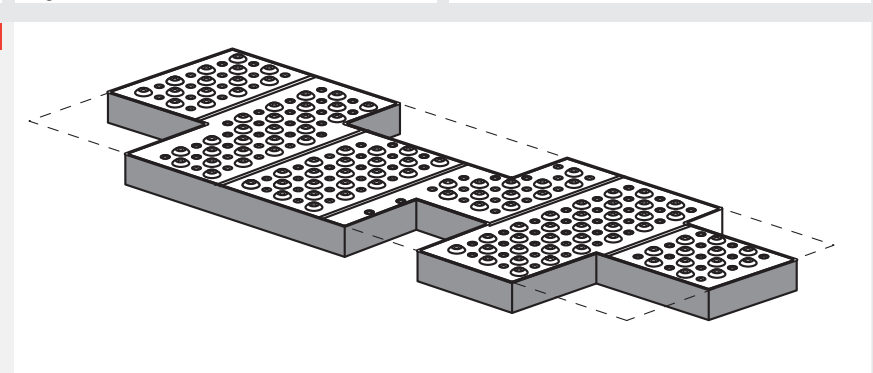
> TOLERANCES FOR GRATINGS

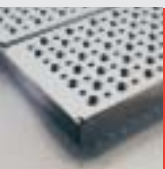
DIMENSIONAL TOLERANCES <p>Applicable for mesh size 33,33 x 33,33 between centres • Max. grating size 2 m² • Max. bearer and/or cross bar length 2000 mm • Ratio bearer to cross bars < 1:3 or 3:1 • Grating sizes "B", "L" = + 0 / - 4 mm. • End mesh deviation "H" = + 2 / - 2 mm.</p>	INCLINATION EDGE PROFILE <p>"y." max. = 0.1 x "</p> 
INCLINATION BEARER BAR <p>"P" max. = 0.1 x "H"</p> 	DIAGONAL DEVIATION <ul style="list-style-type: none"> - does not exceed 6 mm for gratings ≤ 1 m² - is 6 mm per m² for gratings > 1 m² 
HIGHER LEVEL CROSS BAR <p>"q" max. = 1 mm</p> 	DEFLECTION GRATING <p>"F" is 0.0033 x "L" maximum</p> 
LOWER WELDED-ON EDGE <p>"r" max. = 1 mm</p> 	CONVEX IN BEARER BAR/CROSS BAR DIRECTION <ul style="list-style-type: none"> • "O" is 3 mm maximum when "B"/"L" ≤ 600 mm • "O" is 0.005 x "B"/"L" mm maximum when "L"/"B" > 600 mm 
HIGHER WELDED-ON EDGE <p>"S" max. = 1 mm</p> 	CONCAVE IN BEARER BAR/CROSS BAR DIRECTION <ul style="list-style-type: none"> • "O" is 2 mm maximum when "B"/"L" ≤ 1500 mm • "O" is 4 mm maximum when "B"/"L" ≤ 1500 mm • "B" = bearer bar length • "L" = cross bar length 



> DEJOGRIP EN DEJO STUDDED STEPS

> TECHNICAL TERMS DEJOGRIP AND DEJO STUDDED STEPS

<p>FREE SPAN</p> <p>The spacing between two supporting bearing beams. Important for calculating the load-bearing capacity of dejogrip landings.</p>  <p>Edges at the ends of dejogrip</p>	<p>THIS WOULD FLAT EDGE</p> <p>Any trade profile can be used</p> 	<p>KICK EDGE</p> <p>Welded-on strip, protruding above the dejogrip landing.</p> 
<p>LOWERED EDGE</p> <p>Welded-on strip, protruding under the dejogrip landing.</p> 	<p>ANTISLIP</p> <p>dejogrip antislip effect is achieved by raised punched holes in the top surface. That results in a strong antislip effect in all directions.</p> 	<p>MOUNTING PLATES</p> <p>dejogrip steps come with welded-on plates for mounting between the stair stringers. These mounting plates have already been provided with the necessary holes.</p> 
<p>ZINC DRAIN HOLES</p> <p>For dejogrip panels to be welded in stair or landing structures and then hot-dip galvanised, it is recommended to make zinc drain holes.</p> 	<p>SYNTHETIC PLUGS</p> <p>For special applications dejogrip panels can be provided with synthetic plugs. The holes pattern will be modified. The plugs are supplied separately.</p>  <p>Plugs are available in various colours.</p>	<p>PASSAGE</p> <p>Certain safety standards prescribe that openings the size of a 15 mm ball are not allowed in gratings. dejogrip sheet gratings and steps comply with that.</p> 
<p>GROSS LANDING AREA</p> <p>Total landing area before cutting to size and fitting with any required openings.</p> <p>OPENINGS: all cutting work in the grating.</p>		



> DEJOGRIP

DEJO GRIP

> CODE: **DG**

> DEJO STUDDED STEPS

DEJO STUDDED STEPS > CODE: **DT**

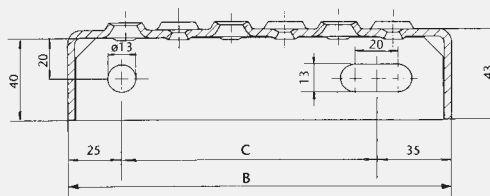
> PRODUCTION OPTIONS

QUICK DELIVERY

Sheet material with a thickness of 3 mm is used as standard. The standard height is always 43 mm. Steps in these dimensions can be delivered quickly. At your request untreated, hot-dip galvanised and/or treated in the TVP Duplex process. With or without mounting plates, in steel, ss and aluminium.

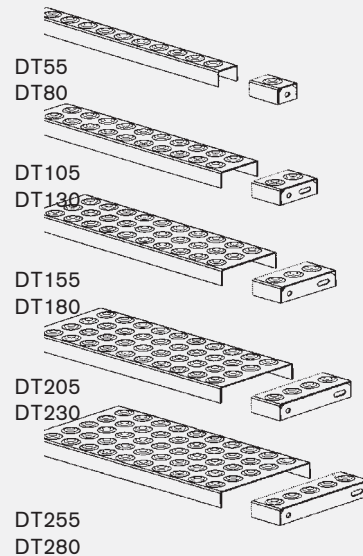
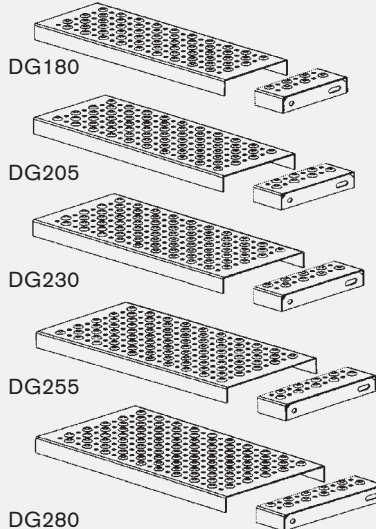
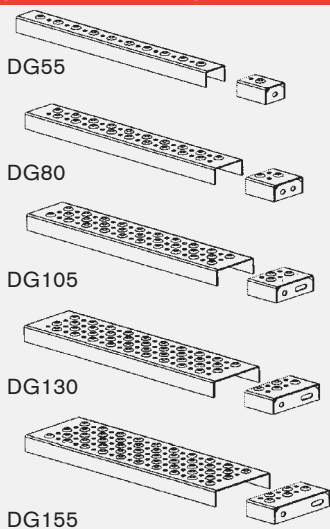
STANDARD DIMENSIONS

The dimensions listed in the table under B are our standard width dimensions. Table C shows the standard spacing of the fixing holes.

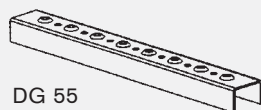
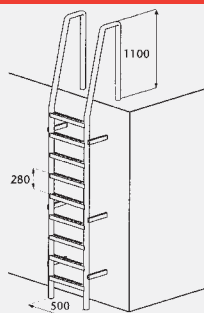


B	C
55 mm	-
80 mm	-
105 mm	45 mm
130 mm	70 mm
155 mm	95 mm
180 mm	120 mm
205 mm	145 mm
230 mm	170 mm
255 mm	195 mm
280 mm	220 mm

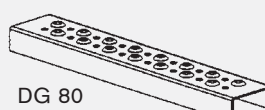
STANDARD PANEL WIDTHS



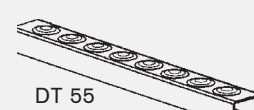
STANDARD LADDER STEP WIDTHS



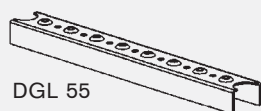
DG 55



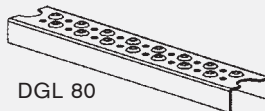
DG 80



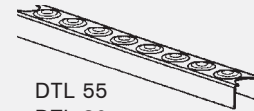
DT 55
DT 80



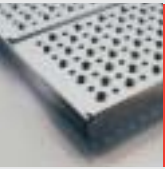
DGL 55



DGL 80



DTL 55
DTL 80



> DEJOGRIP

DEJO GRIP

> CODE: **DG**

> DEJO STUDDED STEPS

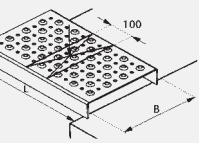
DEJO STUDDED STEPS

> CODE: **DT**

> LOAD TABLES

CONDITION

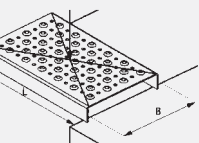
These load tables are based on **dejo**grip steel steps and panels with a material thickness of 3 mm.



LOAD TABLE DEJO GRIP STEPS > MAXIMUM CONCENTRATED LOAD PER STEP IN KG

STEP HEIGHT 43 MM	B - WIDTH	L SPAN IN MM										
		500	600	700	800	900	1.000	1.200	1.400	1.600	1.800	2.000
55	P	357	292	247	214	189	169	140	116	89	71	57
80	P	379	310	262	227	201	179	148	126	101	80	65
105	P	393	322	272	236	208	186	154	131	111	87	71
130	P	403	330	279	242	214	191	158	134	117	92	75
155	P	411	336	284	247	218	195	161	137	119	96	79
180	P	417	341	289	250	221	197	163	139	121	100	81
205	P	422	345	292	253	223	200	165	141	122	103	83
230	P	425	348	295	255	225	202	166	142	124	105	85
255	P	429	351	297	257	227	203	168	143	124	107	87
280	P	431	353	299	259	228	204	169	144	125	109	88

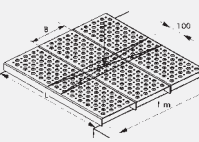
Data at maximum deflection: $F=1/300 \times L$, to the left of the line max. stress 1,400 kg/cm², to the right of the line max. deflection



LOAD TABLE DEJO GRIP STEPS > MAXIMUM UNIFORM LOAD PER STEP IN KG

STEP HEIGHT 43 MM	B - WIDTH	L SPAN IN MM										
		500	600	700	800	900	1.000	1.200	1.400	1.600	1.800	2.000
55	P	643	536	459	402	357	321	268	230	179	141	114
80	P	682	568	487	426	379	341	284	244	203	160	129
105	P	708	590	506	442	393	354	295	253	220	174	141
130	P	726	605	519	454	403	363	303	259	227	185	149
155	P	740	616	528	462	411	370	308	264	231	193	157
180	P	750	625	536	469	417	375	313	268	234	200	162
205	P	759	632	542	474	422	379	316	271	237	205	167
230	P	766	638	547	479	425	383	319	274	239	211	171
255	P	772	643	551	482	429	386	322	276	241	214	174
280	P	777	647	555	485	431	388	324	277	243	216	177

Data at maximum deflection: $F=1/300 \times L$, to the left of the line max. stress 1,400 kg/cm², to the right of the line max. deflection



LOAD TABLE DEJO GRIP STEPS > MAXIMUM KNIFE-EDGE LOAD PER RUNNING METRE IN KG

STEP HEIGHT 43 MM	B - WIDTH	L SPAN IN MM										
		500	600	700	800	900	1.000	1.200	1.400	1.600	1.800	2.000
55	P	6783	5548	4693	4066	3591	3211	2660	2204	1691	1349	1083
80	P	4927	4030	3406	2951	2613	2327	1924	1638	1313	1040	845
105	P	3930	3220	2720	2360	2080	1860	1540	1310	1110	870	710
130	P	3224	2640	2232	1936	1712	1528	1264	1072	936	736	600
155	P	2877	2352	1988	1729	1526	1365	1127	959	833	672	553
180	P	2502	2046	1734	1500	1326	1182	978	834	726	600	483
205	P	2110	1725	1460	1265	1115	1000	825	705	610	515	415
230	P	2125	1740	1475	1275	1125	1010	830	710	620	525	425
255	P	1716	1404	1188	1028	908	812	1072	672	496	428	348
280	P	1724	1412	1196	1036	912	846	1076	676	500	436	352

Data at maximum deflection: $F=1/300 \times L$, to the left of the line max. stress 1,400 kg/cm², to the right of the line max. deflection



> DEJOGRIP

DEJO GRIP

> CODE: **DG**

> DEJO STUDDED STEPS

DEJO STUDDED STEPS > CODE: **DT**

> FIXATION METHODS FOR DEJOGRIP AND DEJO STUDDED STEPS

FASTENING CLAMP KIT STANDARD	U-HOOK KIT	J-HOOK KIT
countersunk screw + nut M8 U profile (cleat)	countersunk screw M8 U-hook, various sizes	countersunk screw M8 J-hook, various sizes

> TOLERANCES FOR DEJOGRIP AND DEJO STUDDED STEPS

<p>DIMENSIONAL TOLERANCES</p> <p>B H D = ± 0.2 L = + 0 / - 2</p>		<p>DIAGONAL DEVIATION</p> <p>diagonal deviation of C and D = ± 2 mm</p>	
<p>TWIST LENGTH</p> <p>F max. = 0.002 x L L max. 2000 mm Warp (twist) max. = 0 x L</p>		<p>WARP WIDTH</p> <p>U = max. 0.065 x H and < 2.5 mm</p>	
<p>WIDTH DEVIATION</p> <p>section A - A</p>		<p>HEIGHT DEVIATION</p> <p>Difference H1 - H2 = max. 2 mm</p>	
<p>LENGTHWISE CONCAVE</p> <p>h = max. 0.003 x L</p>		<p>LENGTHWISE CONVEX</p> <p>b = max. 0.005 x L</p>	
<p>CROSSWISE CONCAVE</p> <p>O = max. 0.012 x B</p>		<p>CROSSWISE CONVEX</p> <p>O = max. 0.012 x B</p>	

> UNLOADED GRATINGS

Unloaded gratings are gratings for which no bearing capacity worth mentioning is expected. The gratings are commonly used for aesthetic purposes.. For instance for wall cladding and fences for stairwells.

> IMPORTANT

This chapter describes louvre gratings, full gratings and fence gratings. These have been developed by **dejo** and **dejo** produces them. **dejo** also has other technology available to use these gratings for applications where loads do occur. The reverse also applies: gratings described above that can carry a load can also be used for aesthetic purposes. You choose, we deliver.

We do recommend to discuss deviating wishes with **dejo** employees. They will be happy to help you.



> LOUVRE GRATINGS DEJO PRESS LOUVRE > CODE: DPL

> PRODUCT INFORMATION > LOUVRE GRATINGS

PRODUCT DESCRIPTION

Louvre gratings are gratings in which the cross bar is attached to the bearer bar at a certain angle.

MATERIALS

- steel : according to the specifications below
- ss : on request
- aluminium : on request

DESIGN

- bearer bar: standard band width from 20 to 60 mm. Other sizes on request.
- cross bar (louvre): standard band width from 20 to 60 mm. Other sizes on request.
- bearer bar and cross bar thickness: 2 - 3 mm
- edge bar thickness 4 or 5 mm or, on request, with fillet profile
- cross bar angle: 45° or 50°. Other sizes on request.

POSTTREATMENT

- steel: dip galvanised under NEN-EN-ISO 146, aluminium: anodised, ss: pickled and passivated
- powder coating using the TVP Duplex process

MOUNTING

- holes in the edge
- welded-on plates with hole
- welded-in plates with hole, with partial cross (louvre) bar trimmer:
- so-called bed hook construction

TOLERANCES

The tolerance table for louvre gratings will be sent to you on request.

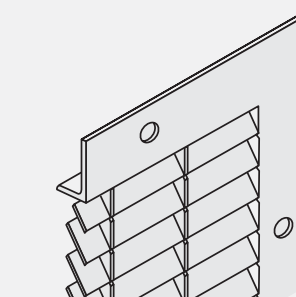
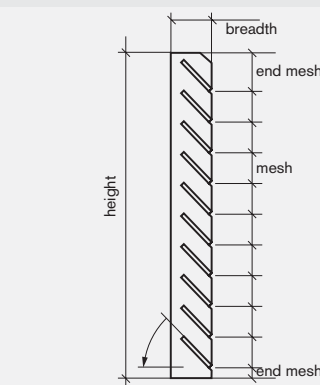
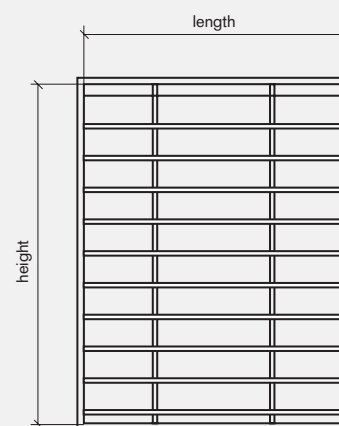
CUSTOM-MADE

dejo possess the technology to produce these gratings to measure for you. We will do that in consultation.

DIMENSIONS

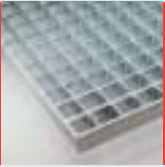
Dependent on the composition of bearer bars and cross bars (louvre) in combination with the mesh size.

- area not exceeding 2 m²
- length cross bar (louvre) 1900 mm
- deviating sizes on request



MESH SIZES TABLE

BEARER BAR SPACING BETWEEN CENTRES	CROSS BAR SPACING BETWEEN CENTRES.					
	22, ²²	33, ³³	44, ⁴⁴	49, ⁹⁹	66, ⁶⁶	99, ⁹⁹
33 ³³	•	•	•	•	•	•
44 ⁴⁴	•	•	•	•	•	•
49 ⁹⁹	•	•	•	•	•	•
66 ⁶⁶	•	•	•	•	•	•
99 ⁹⁹	•	•	•	•	•	•



> FULL GRATINGS DEJO PRESS FULL GRATING > CODE: **DPF**

> PRODUCT INFORMATION FULL GRATINGS

PRODUCT DESCRIPTION

Full gratings are gratings in which the bearer bar and the cross bar have the same height.

MATERIALS

- steel : according to the specifications below
- ss : on request
- aluminium : on request

DESIGN

- bearer bar and cross bar: standard band widths from 20 to 60 mm. Other sizes on request.
- bearer bar and cross bar thickness : 2 - 3 mm. Other sizes on request.
- edge bar thickness : 4 or 5 mm, dependent on application.

POSTTREATMENT

- steel: dip galvanised under NEN-EN-ISO 146, aluminium: anodised, ss: pickled and passivated
- powder coating using the TVP Duplex process

MOUNTING

- holes in the edge
- welded-on or welded-in plates with hole
- so-called bed hook construction

TOLERANCES

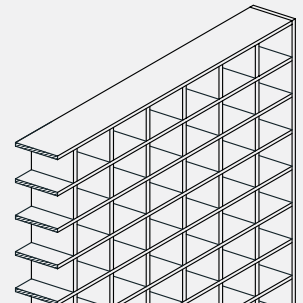
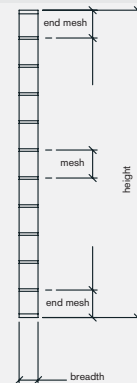
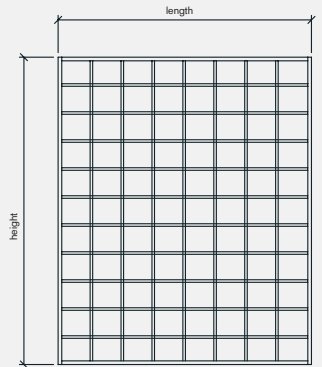
The tolerance table for full gratings will be sent to you on request.

CUSTOM-MADE

Almost anything is possible. Your specification can be assessed by **dejo** very quickly.

DIMENSIONS

Dependent on the thickness and height of the bearer bars and cross bars in combination with the mesh size.



MESH SIZES TABLE

BEARER BAR SPACING BETWEEN CENTRES	CROSS BAR SPACING BETWEEN CENTRES.					
	22, ²²	33, ³³	44, ⁴⁴	49, ⁹⁹	66, ⁶⁶	99, ⁹⁹
33 ³³	•	•	•	•	•	•
44 ⁴⁴	•	•	•	•	•	•
49 ⁹⁹	•	•	•	•	•	•
66 ⁶⁶	•	•	•	•	•	•
99 ⁹⁹	•	•	•	•	•	•

> FENCE GRATINGS DEJO FENCE GRATING > CODE: **DFG**

> PRODUCT INFORMATION FENCE GRATINGS

PRODUCT DESCRIPTION

Fence gratings are gratings in which a round bar is pressed into a rectangular bearer bar.

MATERIALS

- steel : according to the specifications below
- ss : on request

DESIGN

- bearer bar : standard band widths from 20 to 60 to mm.
- crass bar: diam 5 mm
- bearer bar thickness : 3 to 5 mm
- edge rod thickness: 5 mm

POSTTREATMENT

- dip galvanised under NEN-EN-ISO 1461
- powder coating using the TVP Duplex process

MOUNTING

- holes in the edge
- welded-on or welded-in plates with hole
- with so-called bed hook construction

TOLERANCES

The tolerance table for fence gratings will be sent to you on request.

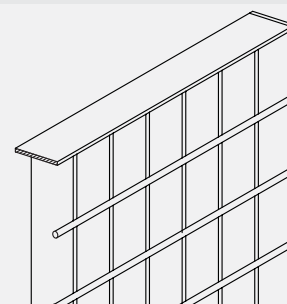
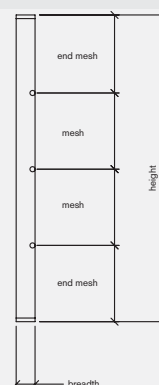
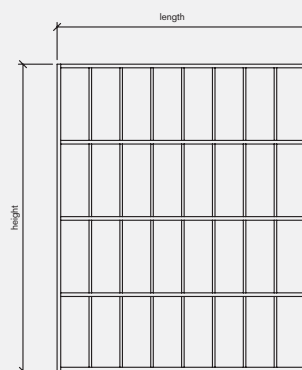
CUSTOM-MADE

Fence gratings are never the same. Your specification is our concern.

DIMENSIONS

Dependent on the combination of bearer bar type and mesh size.

- total area not exceeding 2 m²
- cross bar length (diameter 5 mm) not exceeding 1200 mm
- deviating sizes on request

**MESH SIZES TABLE**

BEARER BAR SPACING BETWEEN CENTRES	CROSS BAR SPACING BETWEEN CENTRES.					
	22, ²²	33, ³³	44, ⁴⁴	49, ⁹⁹	66, ⁶⁶	99, ⁹⁹
33 ³³	•	•	•	•	•	•
44 ⁴⁴	•	•	•	•	•	•
49 ⁹⁹	•	•	•	•	•	•
66 ⁶⁶	•	•	•	•	•	•
99 ⁹⁹	•	•	•	•	•	•

> RAL COLOURS OVERVIEW

> OUTDOOR RESISTANT POWDERS, GLOSS DEGREE APPROX. 70%/60° ISO 2813

RAL COLOUR	CATEGORY	RAL COLOUR	CATEGORY	RAL COLOUR	CATEGORY	RAL COLOUR	CATEGORY
YELLOW HUES		3015 light pink	I	6007 bottle green	I	7034 yellow grey	I
1000 green beige	I	3016 coral red	III	6008 brown green	I	7035 light grey	I
1001 beige	I	3017 rose	III	6009 fir green	I	7036 platinum grey	I
1002 sand yellow	I	3018 strawberry red	IV	6010 grass green	II	7037 dusty grey	I
1003 signal yellow	V	3020 traffic red	IV	6011 resada green	I	7038 agate grey	I
1004 golden yellow	III	3022 salmon pink	I	6012 black green	I	7039 quartz grey	I
1005 honey yellow	III	3027 raspberry red	III	6013 reed green	I	7040 window grey	I
1006 maize yellow	IV	3031 orient red	III	6014 yellow olive	I	7042 traffic grey A	I
1007 daffodil yellow	III	VIOLET HUES		6015 black olive	I	7043 traffic grey B	I
1011 brown beige	I	4001 red lilac	III	6016 turquoise green	II	7044 silk grey	I
1012 lemon yellow	III	4002 red violet	II	6017 may green	I	7045 tele grey 1	I
1013 oyster white	I	4003 heather violet	III	6018 yellow green	III	7046 tele grey 2	I
1014 ivory	I	4004 claret violet	IV	6019 pastel green	I	7047 tele grey 4	I
1015 light ivory	I	4005 blue lilac	III	6020 chrome green	I	BROWN HUES	
1016 sulphur yellow	III	4006 traffic purple	IV	6021 pale green	I	8000 green brown	I
1017 saffron yellow	II	4007 purple violet	IV	6022 olive drab	I	8001 ochre brown	I
1018 zinc yellow	III	4008 signal violet	IV	6024 traffic green	II	8002 signal brown	I
1019 grey beige	I	4009 pastel violet	I	6025 fern green	I	8003 clay brown	I
1020 olive yellow	II	4010 telemagenta approx.	III	6026 opal green	I	8004 copper brown	I
1021 rape yellow approx.	IV	BLUE HUES		6027 light green	I	8007 fawn brown	I
1023 traffic yellow	IV	5000 violet blue	I	6028 pine green	I	8008 olive brown	I
1024 ochre yellow	I	5001 green blue	I	6029 mint green	II	8011 nut brown	I
1027 curry	II	5002 ultramarine blue approx.	II	6031 bronze green approx.	I	8012 red brown	I
1028 melon yellow	II	5003 sapphire blue	I	6032 signal green	II	8014 sepia brown	I
1032 broom yellow	II	5004 black blue	I	6033 mint turquoise	I	8015 chestnut brown	I
1033 dahlia yellow	IV	5005 signal blue	II	6034 pastel turquoise	I	8016 mahogany brown	I
1034 pastel yellow	III	5007 brilliant blue	I	GREY HUES		8017 chocolate brown	I
ORANGE HUES		5008 grey blue	I	7000 squirrel grey	I	8019 grey brown	I
2000 yellow orange	IV	5009 azure blue	I	7001 silver grey	I	8022 black brown	I
2001 red orange	III	5010 gentian blue	II	7002 olive grey	I	8023 orange brown	I
2002 vermillion	IV	5011 steel blue	I	7003 moss grey	I	8024 beige brown	I
2003 pastel orange	III	5012 light blue	I	7004 signal grey	I	8025 pale brown	I
2004 pure orange approx.	III	5013 cobalt blue	II	7005 mouse grey	I	8027 leather brown	I
2008 red orange on request		5014 pigeon blue	I	7006 beige grey	I	8028 terra brown	I
2009 traffic orange on request		5015 sky blue	I	7008 khaki grey	I	WHITE / BLACK HUES	
2010 signal orange	IV	5017 traffic blue	I	7009 green grey	I	9001 cream	I
2011 deep orange approx.	V	5018 turquoise blue	I	7010 tarpaulin grey	I	9002 grey white	I
2012 salmon orange	II	5019 capri blue	I	7011 iron grey	I	9003 signal white	I
RED HUES		5020 ocean blue	I	7012 basalt grey	I	9004 signal black	I
3000 flame red	III	5021 water blue	I	7013 brown grey	I	9005 jet black	I
3001 signal red	IV	5022 night blue	II	7015 slate grey	I	9006 silver approx.	IV
3002 carmine red	III	5023 distant blue	I	7016 anthracite grey	I	9007 silver aluminium approx.	IV
3003 ruby red	III	5024 pastel blue	II	7021 black grey	I	9010 pure white	I
3004 purple red	IV	GREEN HUES		7022 umbra grey	I	9011 graphite black	I
3005 wine red	III	6000 patina green	I	7023 concrete grey	I	9016 traffic white	I
3007 black red	I	6001 emerald green	II	7024 graphite grey	I	9017 traffic black	I
3009 oxide red	I	6002 leaf green	II	7026 granite grey	I	9018 papyrus white	I
3011 brown red	II	6003 olive green	I	7030 stone grey	I	9021 pitch black approx.	I
3012 beige red	I	6004 blue green	I	7031 blue grey	I	SPECIALS	
3013 tomato red	III	6005 moss green	I	7032 pebble grey	I	e.g. bronze colour /micas	IV
3014 antique pink	I	6006 grey olive	I	7033 cement grey	I	many options / only indoor	

CATEGORIES

I Standard RAL colour in stock at supplier

II RAL colour pigment-enhanced in stock at supplier

III RAL colour extra pigment-enhanced surcharge

IV/V RAL special surcharge