



INDIVIDUAL STORAGE AND LOGISTICS
SOLUTIONS WITH GRATINGS AND
PERFORATED METAL PLANKS

INDIVIDUAL GRATINGS + PERFORATED METAL PLANKS FOR SHELVING AND FLOORINGS FOR YOUR APPLICATION

+ Pallet rackings

+ Cantilever rackings

+ Car shelves

+ Distribution Centres

+ Walkways and mezzanine platforms

+ Storage automation

+ Mobile shelving systems

+ Archive shelves

GRATINGS AND PERFORATED METAL PLANKS FOR LOGISTICS

OUR KNOWLEDGE OF STEEL IS BASED ON DECADES OF EXPERIENCES, ESPECIALLY IN THE PRODUCTION OF GRATINGS AND PERFORATED METAL PLANKS. OUR MANY YEARS OF EXPERIENCE IN THE USE OF INDUSTRIAL FLOOR COVERINGS HAVE SHOWN THAT THERE ARE ALWAYS NEW APPLICATIONS THROUGH THE DEVELOPMENT OF INDIVIDUAL SOLUTIONS. AND THE ADVANTAGES OF GRATINGS AND PERFORATED METAL PLANKS IN THE STORAGE AND LOGISTIC AREA ARE CLEAR:

**EFFICIENT, QUICKLY MOUNTED, SAFE, INDIVIDUAL
HIGH FREE CROSS SECTION = LIGHT AND WATER PERMEABILITY = INCREASED FIRE PROTECTION**

SHELVING SYSTEMS

Gratings and perforated metal planks are highly suitable for shelves in nearly every racking system. According to your requirements we offer numerous possibilities regarding the grating type as well as different surface structures for perforated metal planks. Therefore, we will have the optimal solution for every installation situation. Optimum utilisation of the height in pallet rackings with flush fitting gratings, bridging of large spans in cantilever rackings, sprinkler suitability and higher fire safety are only a few advantages of our products.

FLOORINGS

In order to ensure the consistency of the high quality of our products, all relevant national and international standards are to be strictly adhered to. Our qualified team will assist you to find the optimal grating type for your application and it is available for you from the on-site measurement to After-Sales Services.



RACKING SOLUTIONS WITH GRATINGS

Whether gratings with angled Z-profile, back stop or locking mechanism, within the wide range of different grating types, we can offer the right product for every installation situation.

	material	surface	bearing bar thickness	bearing bar height	bearing bar spacing	cross bar spacing
TYPES*	steel	self-coloured	1,5-3 mm	25-50 mm	33,33 mm	33,33 mm
	S235	galvanised			44,44 mm	44,44 mm
	S275	galvanised and coated			66,66 mm	66,66 mm
	S355	pickled				
	stainless steel					
	aluminium					

* Other types and versions are possible on request.

+ higher fire safety

+ direct locking of the gratings

+ sprinkler suitability

+ right solution for each situation

+ generally no additional fixing material necessary

+ optimum utilization of the height

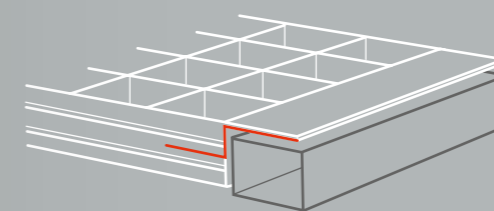
+ high flexibility in product planning

+ light and water permeability

+ different types of gratings

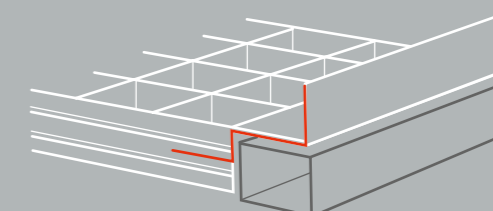
MODELS

FLUSH FITTING SOLUTIONS



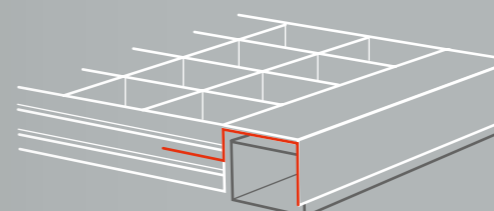
1. ANGLED Z-PROFILE

- binding in direction of cross bar standardized with Z-Profile 50/21/12/2 mm as angled bracket
- + optimum utilization of the height



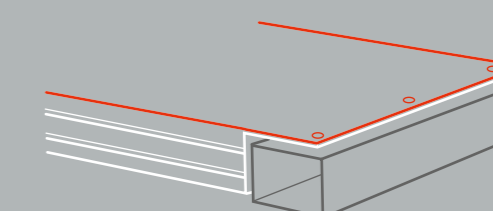
2. BACK STOP

- binding in direction of cross bar standardized with Z-Profile 50/21/12/2 mm and additional upstand as back stop
- + sliding goods are prevented



3. ZU-PROFILE

- binding in direction of cross bar with ZU-Profile 20/70/20/12/2 mm (alternative with 40 mm edging)
- + additional safety by locking at the supports

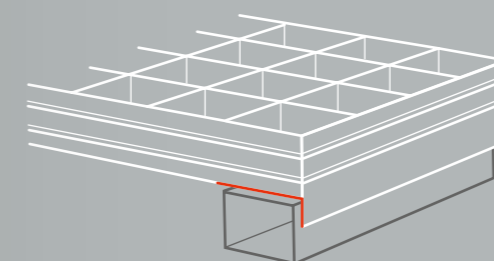


4. WITH FIRE BAFFLES

- binding in direction of cross bar standardized with Z-Profile and fire baffles
- + higher fire safety (prevents chimney effect)

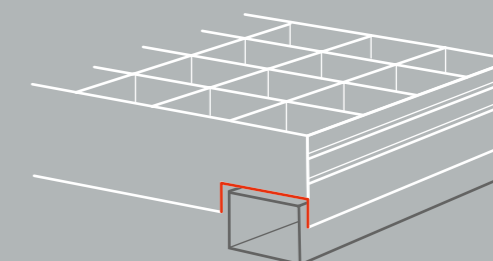
+ different dimensions of profiles, notches and prefabrications are possible on request

OVERLAY SOLUTIONS



1. LOCKING MECHANISM

- binding in direction of cross bar with a deep binding bar + 15 mm above bearing bar height as a locking mechanism
- + direct locking mechanism in the rack



2. DOUBLE LOCKING MECHANISM

- binding in direction of bearing bar with deep binding bar + 15 mm above bearing bar
- binding in direction of cross bar with deep binding bar generally + 10 mm or 15 mm above bearing bar including 2 cut outs with 56 mm x 15 mm as additional locking mechanism
- + double locking mechanism



RACKING SOLUTIONS WITH PERFORATED METAL PLANKS

Perforated metal planks as shelves are considered the first choice specially in interaction with cantilever rackings. Through the combination of the width of the profile, thickness and height, we can enlarge the free span depending on the shelf load.

	material	surface	grid dimension	width	height
TYPES*	steel	self-coloured	125 mm	150 mm	30 mm
	S235 (1,5 and 2,5 mm)	galvanised		200 mm	50 mm
	S250 (1,5 and 2 mm)	galvanised and coated		250 mm	75 mm
	stainless steel	pre-galvanised		300 mm	100 mm
	aluminium	pickled		400 mm	125 mm
					150 mm

* Other types and versions are possible on request.

+ bridging of large spans =
reduction of racking construction

+ free cross section over 70 %

+ production lengths of up to 10 m

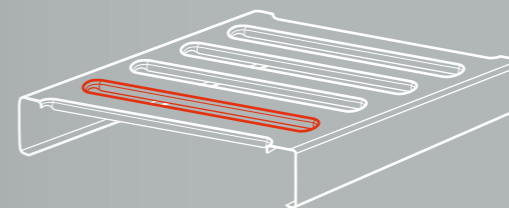
+ sprinkler suitability

+ extremely fast assembly

+ different models of
surface structures

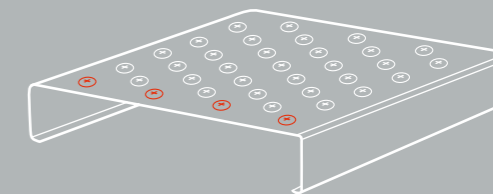
+ light and water
permeability

MODELS



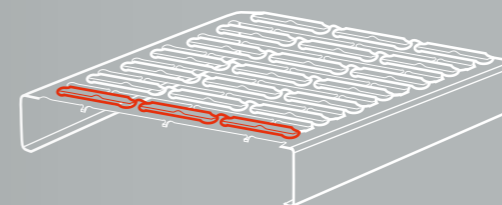
1. PERFORATED METAL PLANK TYPE BP-ON

- perforated metal plank type BP-ON is characterised by their smooth line profiling and high loading capacity
- + bridging of large spans
- + high lateral stiffness



2. PERFORATED METAL PLANK TYPE BN-G

- at the perforated metal plank type BN-G the upwardly punched holes are closed
- + because of the closed surface nothing can fall down on other goods



3. PERFORATED METAL PLANK TYPE BZ-GV

- the perforated metal plank type BZ-GV has the highest open area
- + sprinkler suitability

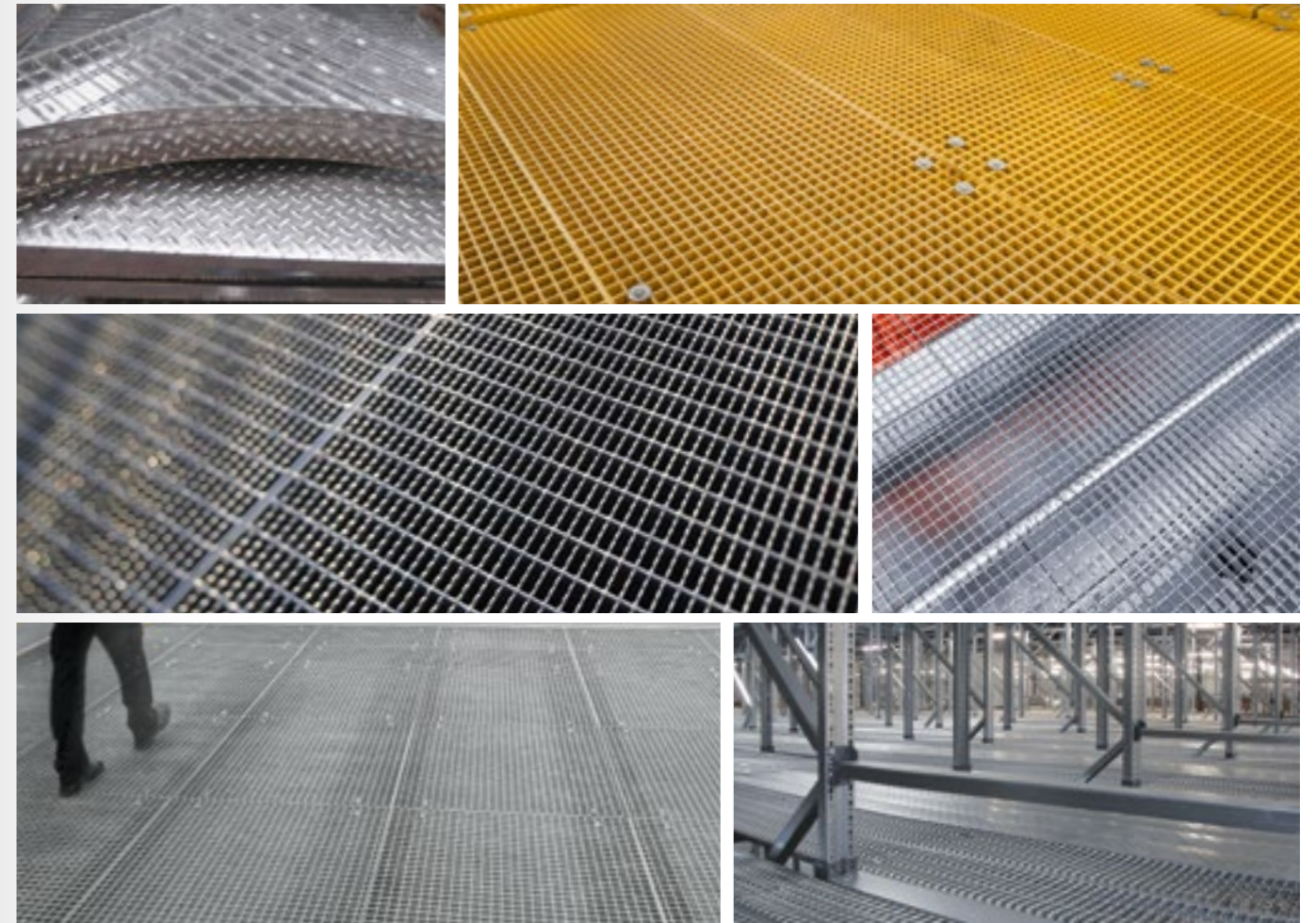
+ further surface structures are possible on request

LOAD EXAMPLE

perforated metal plank, width: 250 mm, shelving depths to customer needs

distributed load (kgs/sqm)	free span (mm)	grating height (mm)	weight per unit (kgs/sqm)
500	1500	40	22,61
	1750	45	23,24
	2000	55	24,49
	2250	60	25,12
	2500	70	26,38
	2750	80	27,63
	3000	85	28,26
800	1500	45	23,24
	1750	55	24,49
	2000	65	25,75
	2250	75	27,00
	2500	90	28,89
	2750	100	30,14
	3000	110	31,40

distributed load (kgs/sqm)	free span (mm)	grating height (mm)	weight per unit (kgs/sqm)
1000	1500	50	23,86
	1750	65	25,75
	2000	75	27,00
	2250	90	28,89
	2500	100	30,14
	2750	115	32,03
	3000	125	33,28
1200	1500	60	25,12
	1750	70	26,37
	2000	85	28,26
	2250	100	30,14
	2500	115	32,03
	2750	130	33,91
	3000	140	35,17



LICHTGITTER-FLOORINGS

SUSTAINABLE, EFFICIENT, INDIVIDUAL, LIGHT AND WATER PERMEABILITY, SPRINKLER SUITABILITY AND EASY TO INSTALL – THIS IS ONLY A PART OF THE ADVANTAGES FOR OUR PRODUCTS.

As one of the leading manufacturer of industrial floor coverings, our target

is to preserve the high quality and safety standards of our products.

Our products are kept always on our promises!

GRATINGS AND PERFORATED METAL PLANKS

Due to many options in the choice of bearing bars, the selection of mesh spacing and the material as well as the surface treatment, almost infinite variations of forge welded gratings and pressure locked gratings are possible. The same applies also to perforated metal planks - here we offer a wide range of different surface profiles. So requirements according DIN EN ISO 14122-2 (floorings with

underlying workspace = 20 mm ball proof) or other national and international standards can be unproblematically solved.

- + savings in the area of the substructure through the bridging of large spans
- + 20 mm ball proof is ensured
- + sprinkler suitability due to a large open cross-section = savings in

costs by eliminating sprinkler systems at every level

- + higher fire safety
- + DIN-compliant (DIN EN ISO 14122-2) establishment of permanent jobs possible
- + light and water permeability
- + high slip resistance through the use of various surface finishes
- + different surface profiles and treatments possible

COMBI-DECK

Gratings with welded on chequer plates ideally combine the advantages of both products.
gratings = supporting element
chequer plate = closed surface

- + bridging of large spans
- + reduction of substructure
- + closed, serrated (rating group: R11) and robust surface
- + lower installation costs

- + no risk of the waste (slice)
- + individual definition and production of grating height possible – no tripping edges

In the meantime – true to the motto »Lichtgitter – Everything from one source« the portfolio has been expanded in addition to the production of gratings and perforated metal planks by a versatile range of

GRP-products, chequer plates and stair treads. Your advantages lay on our complete range of industrial floor coverings and the resulting lack of interface problems, as well as in our product-related services such

as planning support, generation of installation plans, visualization, complete technical documentation and After-Sales-Services.

REFERENCES

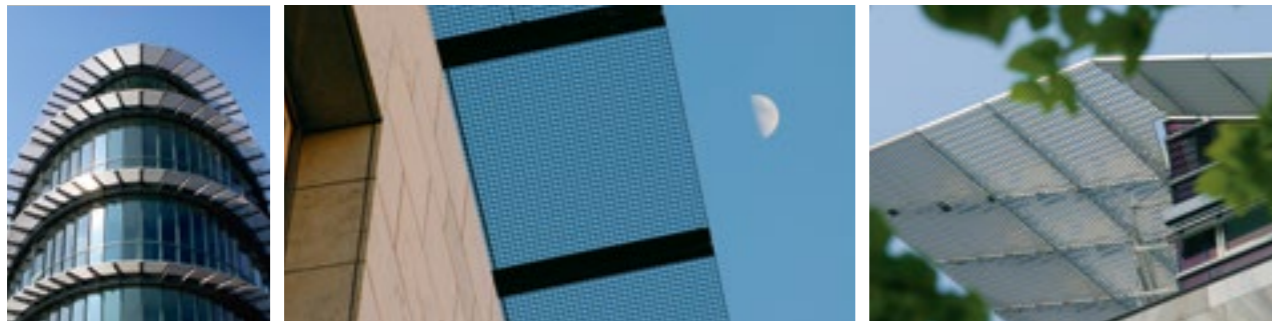
FACADES



CEILING COVERINGS



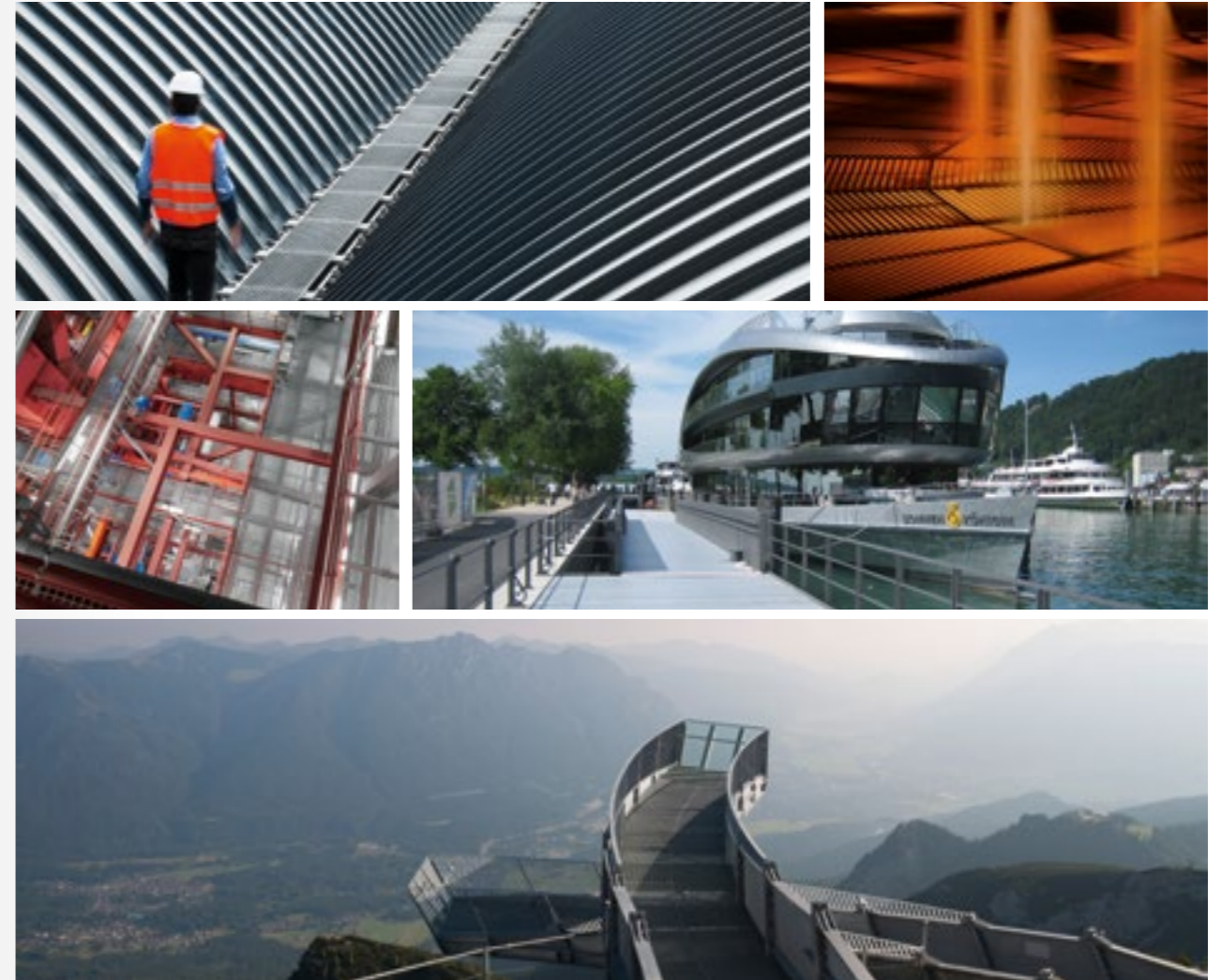
SUN PROTECTION



STAIRS AND RAILINGS



FLOOR COVERINGS/WALKWAYS



LICHTGITTER – ABOUT US

A BRIGHT OUTLOOK SINCE 1929

Lichtgitter was established in 1929 in order to carry out the specialized manufacturing of gratings. By the continuous monitoring of our performance, and quality systems, together with innovation in manufacturing techniques, we have ensured Lichtgitter's place in the forefront of manufacturers of industrial floor coverings with subsidiaries all over the world. Besides the production of pressure-locked

gratings, forge-welded gratings and perforated metal planks, a various offer of GRP products are part of the production range. Our current product range also includes profiled chequer plates, spiral staircases, stairtreads and ladder rungs. Together with our steel slitting service centre and hot dip galvanizing plants we provide a complete fabrication facility to our customers.

EVERYTHING FROM ONE SOURCE:

forge-welded gratings, pressure-locked gratings,
perforated metal planks, GRP-gratings, combi-deck,
chequer plates, spiral staircases, stairtreads,
ladder rungs, hot-dip galvanisation, steel service

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