



 GRATINGS

A TEAM OF EXPERIENCED
PROFESSIONALS FROM PROJECT
PLANNING TO COMPLETION

GEI is a guarantee of quality and service, from the design to the realization of your projects. Our products are manufactured on high-performance production lines with cutting-edge technology. Our sales department, in collaboration with our design department, studies your needs, advises you and recommends the best solution. After manufacture, all our products undergo a double quality and quantity control to ensure optimum quality. Because being a specialist in gratings means preparing for the future, we innovate and support the development of your projects. This support is also provided by our logistics department, which does everything in its power to ensure that your orders are delivered as quickly as possible. GEI also guarantees after-sales service to answer your questions and ensure your complete satisfaction.

GEI, a team of professionals at your service.

- ✓

Attentiveness
- ✓

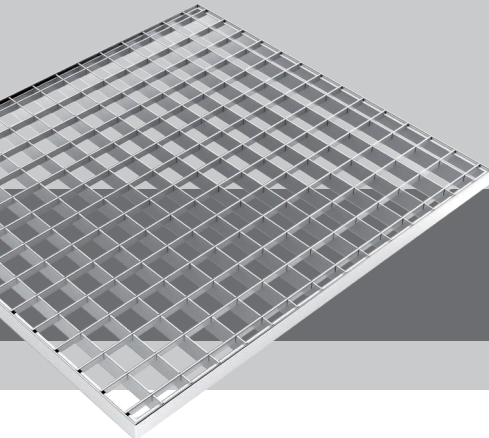
Know-how
- ✓

Flexibility
- ✓

Responsiveness
- ✓

Engineering
- ✓

Thoroughness



Contact:

+352 26 29 66 51

gei@geisa.lu



OUR COMPANY	2
FIELDS OF APPLICATION	6
OUR PRODUCTS	
Press-locked grating	14
Press-welded grating	24
Fence and railing gratings	28
Gratings for shelving	30
FRP gratings	34
FRP railings and profiles	38
Safety grids	40
Safety grid stair treads	44
Stair treads	46
Straight and spiral staircases	48
Additional products	52
PRM solutions	54
Fastenings and accessories	58
TECHNICAL SPECIFICATIONS	
Installation principles	60
Surface treatments	61
Glossary	62
Load tables	64
Standards	71
Tolerances	72
Stock programme	74

A SALES TEAM CLOSE TO YOU

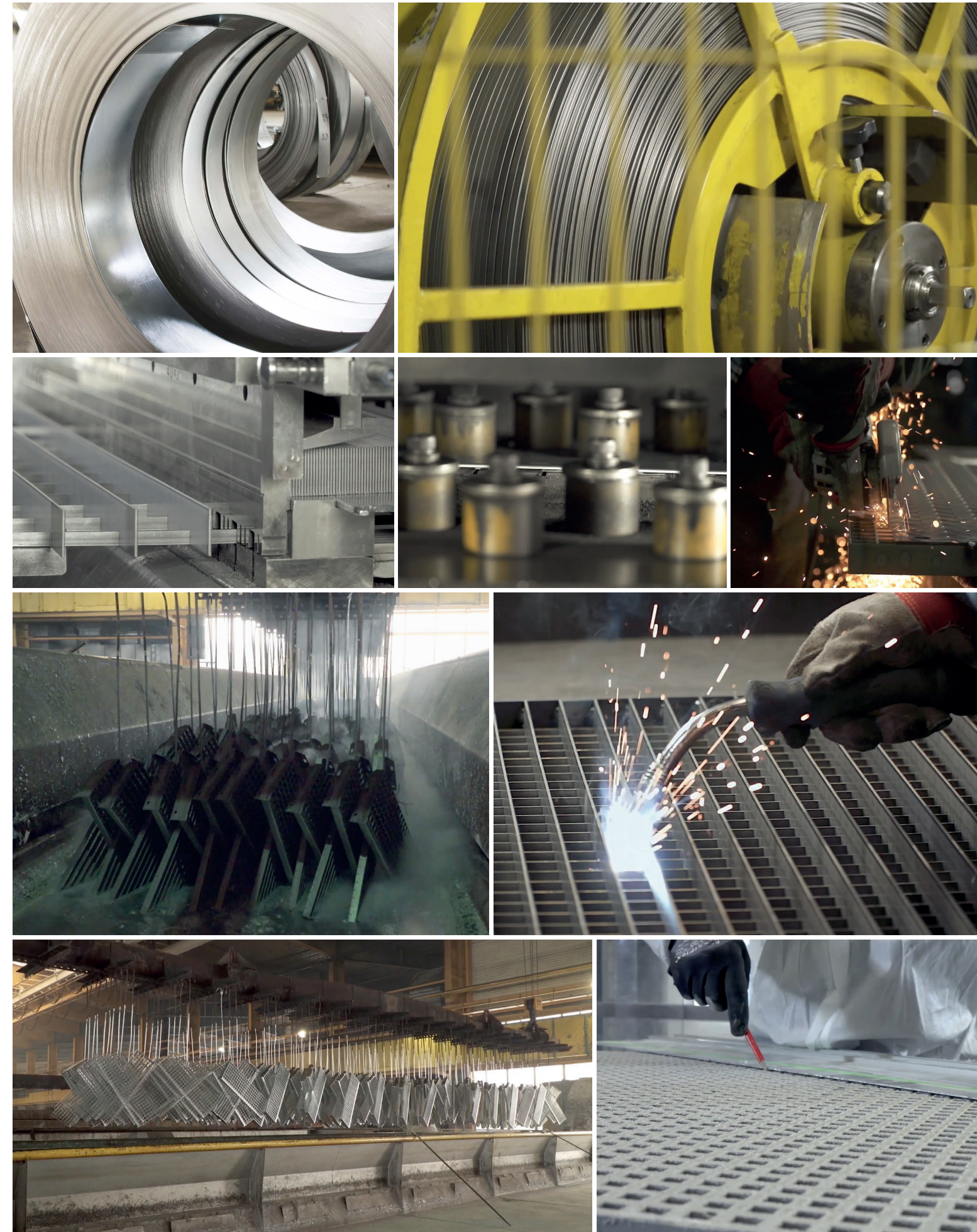
GEI has sedentary and itinerant salespeople, who will be by your side to take note of your needs and requirements, advise you and offer you the best solution at the best price. Our dynamic, professional sales team is based in your area, so that we can be even closer to you and respond quickly to your needs. In collaboration with our design department, our teams of grating professionals will be your privileged contacts to support you in your projects, from initial contact through to completion.

AN IN-HOUSE DESIGN DEPARTMENT

Our design department technicians, fully integrated within the company, are on hand to deal with your technical requests and layout drawings, and can advise you in collaboration with our sales department. Specially trained in computer-aided design software, our industrial designers can draw up calculation reports and model your projects, finding the best solution to your most specific requirements and needs, in industry and construction alike.

STANDARD AND CUSTOM-MADE PRODUCTION

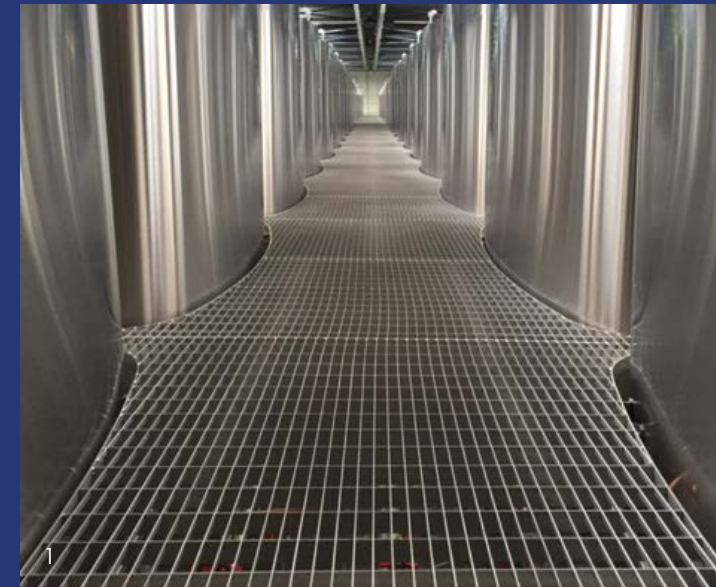
Made-to-measure is one of GEI's strengths. Our high-performance production lines use cutting-edge technology to guarantee top-quality products. To meet your needs as quickly as possible, we have a permanent stock of 200,000 m² of standard gratings and other derived products, spread over a 30,000 m² storage area. This stock of over 700 references makes our company one of the best equipped in Europe!



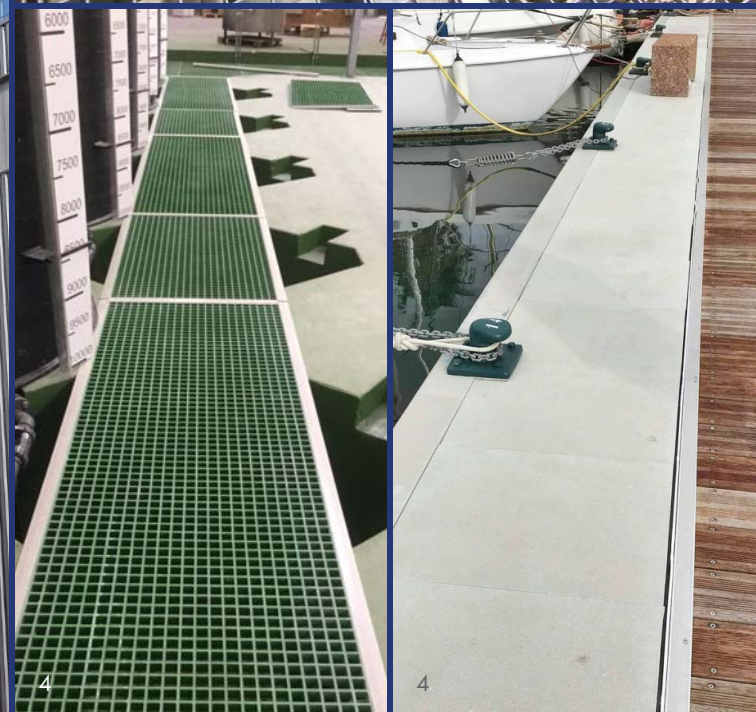
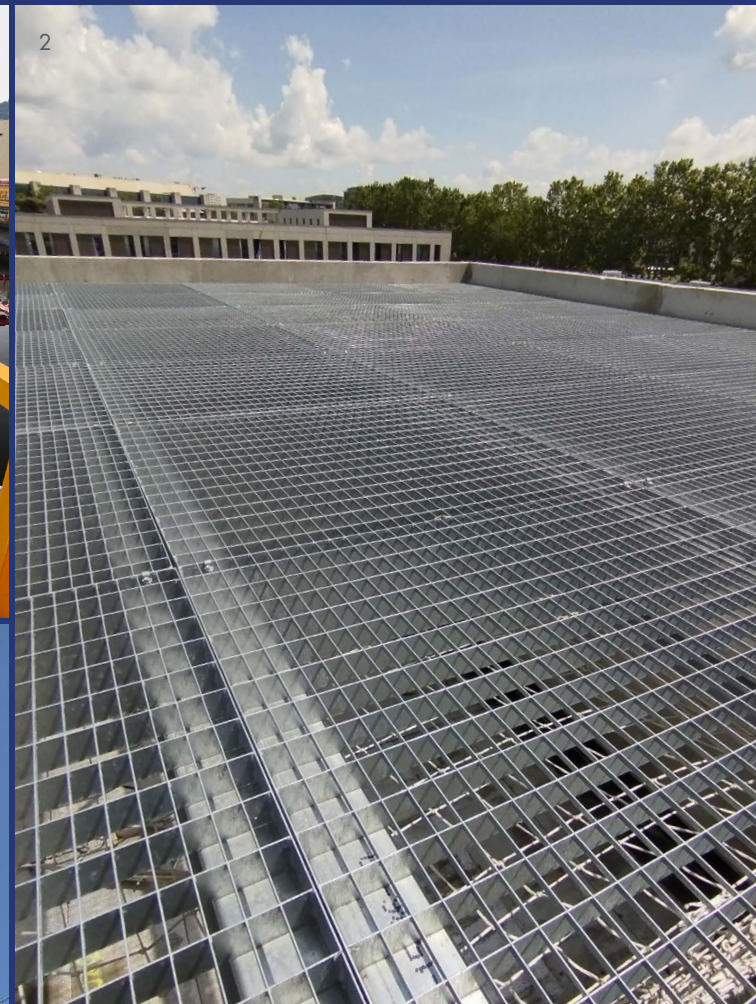
FIELDS OF APPLICATION

IN CONSTRUCTION, PUBLIC WORKS AND INDUSTRY

Technical flooring, industrial walkways, metal working and fabrication, railways, transport, fire escapes... gratings have become indispensable in construction, public works and industry (chemical, petrochemical, energy, food processing, water treatment).



1. Stainless steel gratings, ideal for the food industry
2. Helipad made of press-welded grating
3. Spiral staircase with press-welded grating treads
4. Highway grating
5. Press-welded grating on marine vessels
6. Metal gratings for decking

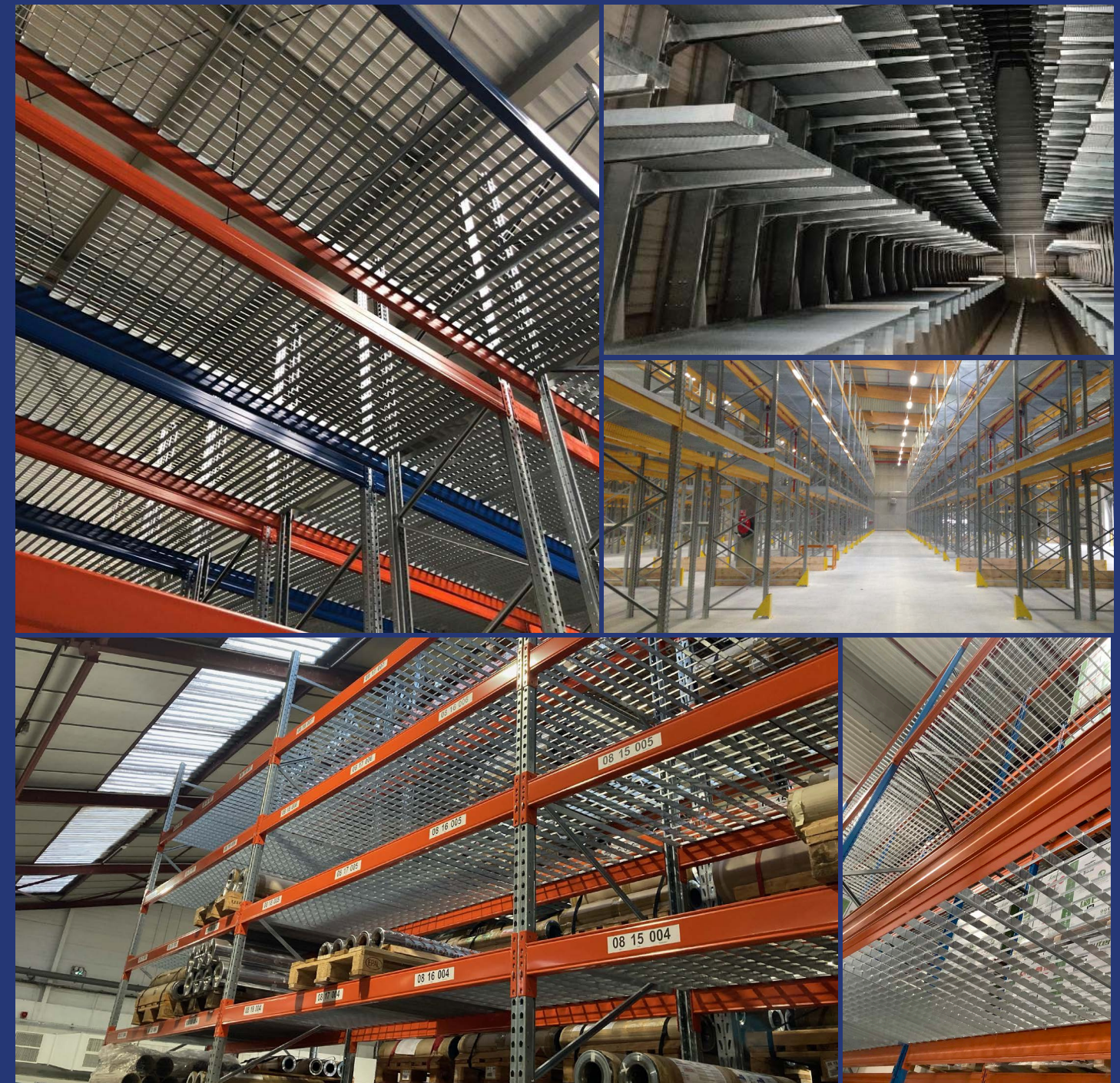


1. Pedestrian walkway out of FRP grating for fish farm
2. Rooftop grating to protect heating and air-conditioning systems
3. Spiral staircase for access to silo roofs
4. FRP grating before tanks in a winery or in a full version to create a deck

FIELDS OF APPLICATION

IN LOGISTICS AND WAREHOUSING

Metal grating provides excellent rigidity and improved visibility of stored items. Because it can let through sprinkled water in the event of a fire, it is increasingly used for storage and warehousing.



FIELDS OF APPLICATION

IN ARCHITECTURE

Key elements in contemporary architecture, gratings offer innovative solutions for aesthetic creativity in new build and refurbishment projects.



GEI gratings are versatile enough to combine modernity and practicality: they can be used as privacy screens, sunscreens, facade cladding, etc.



1. Grating can be used as a false ceiling, to conceal electrical cables, heating pipes, air conditioning, etc.
2. As fencing or railing infill, gratings secure any pathway
3. Pedestrian walkways with grating floor
4. Translucent FRP gratings for contemporary facade cladding
5. Grating used for street furniture: here, a tree grate with red powder coating

FIELDS OF APPLICATION

IN DAY-TO-DAY LIFE

Grating comes in a variety of forms and is now part of our daily life.

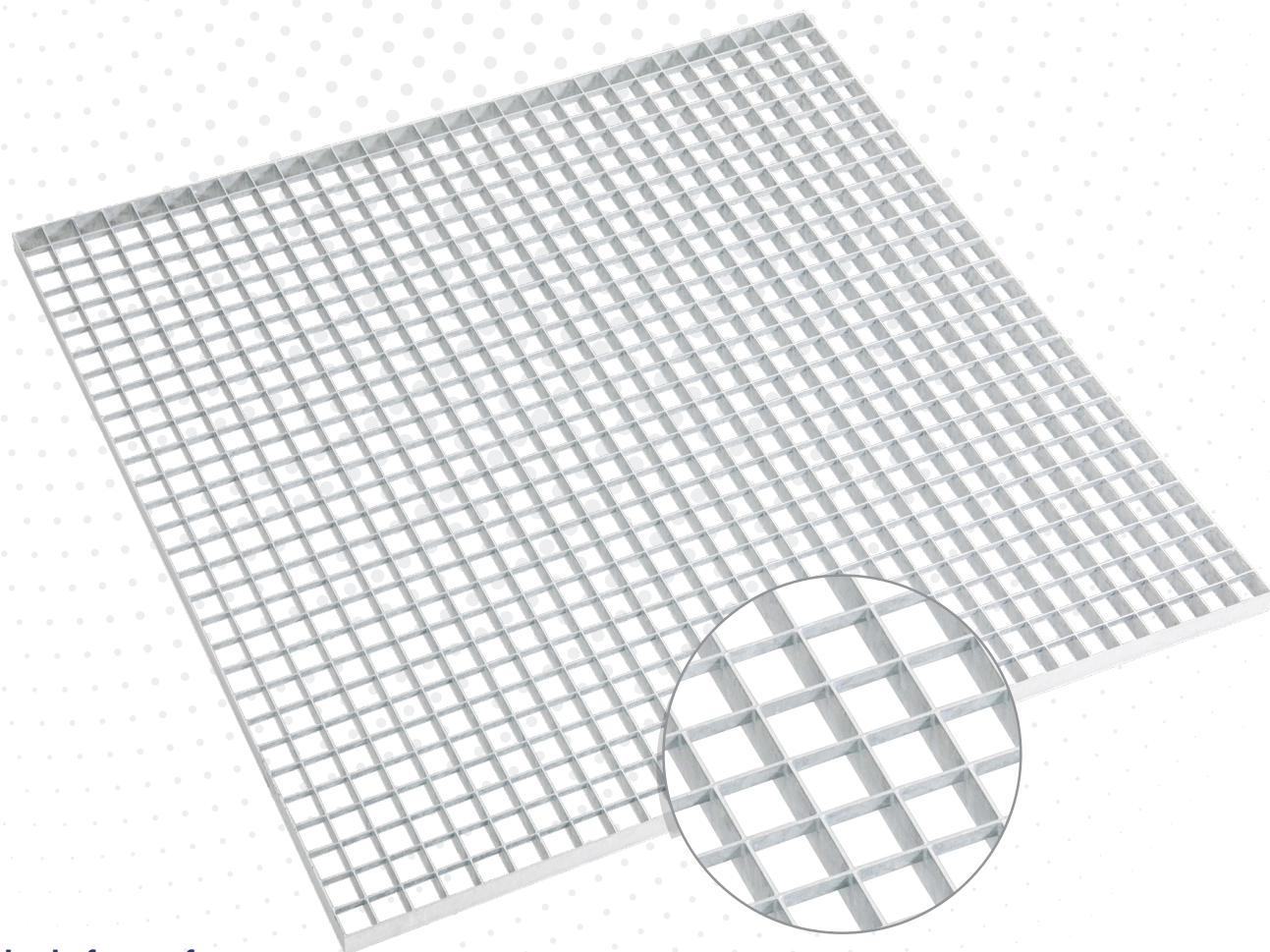


Grating is easy to walk on and offers a durable solution for walkways and paths, in parks, gardens, woods, etc.



- 1. Gratings for stadiums or playgrounds used as flooring or wall covering
- 2. When used to enclose car parks, grating keeps vehicles secure while letting through air and light
- 3. For gutters, door thresholds, railing infills and staircases, grating can be put to many domestic uses

PRESS-LOCKED GRATING

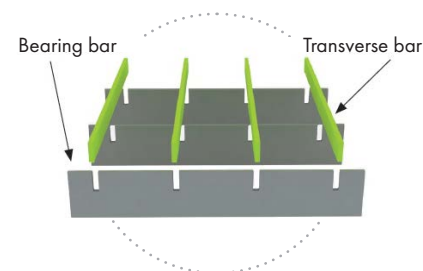


Method of manufacture

GEI press-locked grating is characterized by transverse, cross bars inserted under high pressure into pre-existing notches in the bearing bars. This grating is produced in flat or T-shaped sections, welded into place and then optionally undergoes hot-dip galvanizing in accordance with the applicable EN ISO 1461 standards. For situations with an increased risk of slipping, anti-slip grating can be produced, where the upper

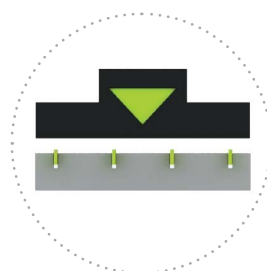
surface of the bearing bars and/or the transverse bars can be given anti-slip serrations.

GEI press-locked grating is typically manufactured from S235JR steel in accordance with the EN 10025 standards, ensuring consistent production quality. RAL-GZ 638 manufacturing tolerances applied.



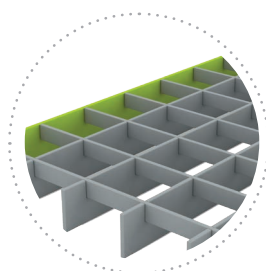
STEP 1

BBs and TBs fixed in place



STEP 2

Press-locking

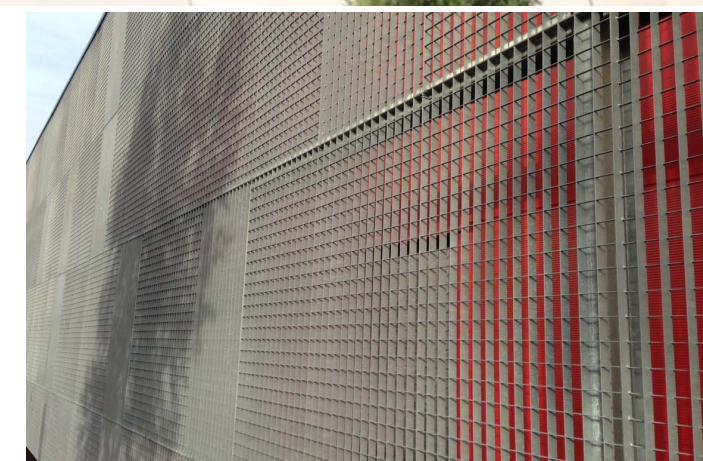


STEP 3

Application of banding bars

Thanks to their wide range of models and applications, press-locked gratings offer great versatility in terms of size, mesh configuration, height and thickness of bearing bars.

The materials used are equally diverse, enabling us to meet every need, whether industrial or architectural. Press-locked gratings are the most widely used type of custom-built grating, as their many possible shapes give each project an aesthetic appearance.



General technical characteristics

GEI press-locked gratings are designed according to precise technical specifications. The dimensions of the bearing bars (BB) and transverse bars (TB) are important, as they determine the load-bearing capacity.

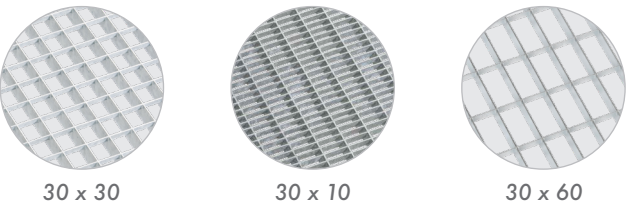
MESH SPACING

Mesh spacing is the distance between the centre lines of the bearing bars and transverse bars (e.g. 34.3 x 38.1). It is decided based on standards and load capacity and is used by our design department to produce calculation reports. For convenience, the term “mesh designation” is more frequently used (for example: 30 x 30).

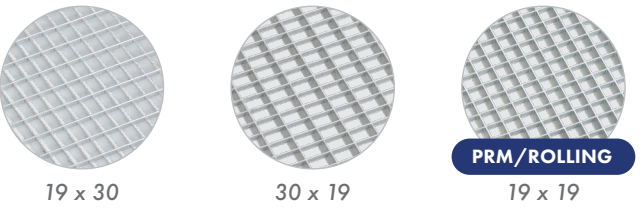
For a BB thickness of 2 to 3 mm, the mesh spacing of the BB and TB is usually a multiple of 11... .
For a BB thickness of 4 and 5 mm, the mesh spacing of the BB and TB is also a multiple of 11... .

GEI OFFERS YOU PRESS-LOCKED GRATINGS WITH DIFFERENT TYPES OF MESHES:

STANDARD MESHES



SAFETY MESHES



Other options on request.

For the sake of aesthetics, for vertical decorative panels with large mesh (ex: 60 x 60 mm – 40 x 100 mm – etc.), it is possible to manufacture panels with a mesh alignment as well as full mesh.

For all your projects, our design department will provide calculation reports to you.

Find our **technical booklet** on page 60 with loading tables, the current standards, the surface treatments that are possible and the explanatory diagrams.

BEARING BARS

Standard height: from 20 to 150 mm.
Standard thickness: from 2 to 8 mm.
Other options are available on request.

TRANSVERSE BARS

Standard height: 10 mm.
Standard thickness: 2 mm.
Other options are available on request.

DIMENSIONS

Max length of BB: 4,000 mm.
Max length of TB: 2,000 mm.

MATERIALS

S235JR steel as per EN 10025 standards.
304 (1.4301), 316L (1.4404) or 316Ti (1.4571) stainless steel.
AlMg3 aluminium.
Corten.

SURFACE FINISHES

Galvanization as per EN ISO 1461 standards.
Powder-coating as per RAL standard.
Pickling. Passivation.
Other options are available on request.

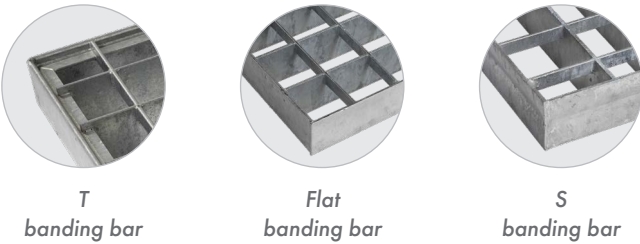
FINISHED PRODUCTS

Raw or galvanized mats, half-mats, panels and stair treads are kept in stock and can easily be assembled on site.
Custom manufacture possible based on the dimensions and/or plans supplied by the customer.
Max dimensions: for optimal grating quality, we advise you not to exceed a height/length ratio of 2 m² in 30 gauge mesh and 1.5 m² in 19 gauge mesh (for custom-made products).

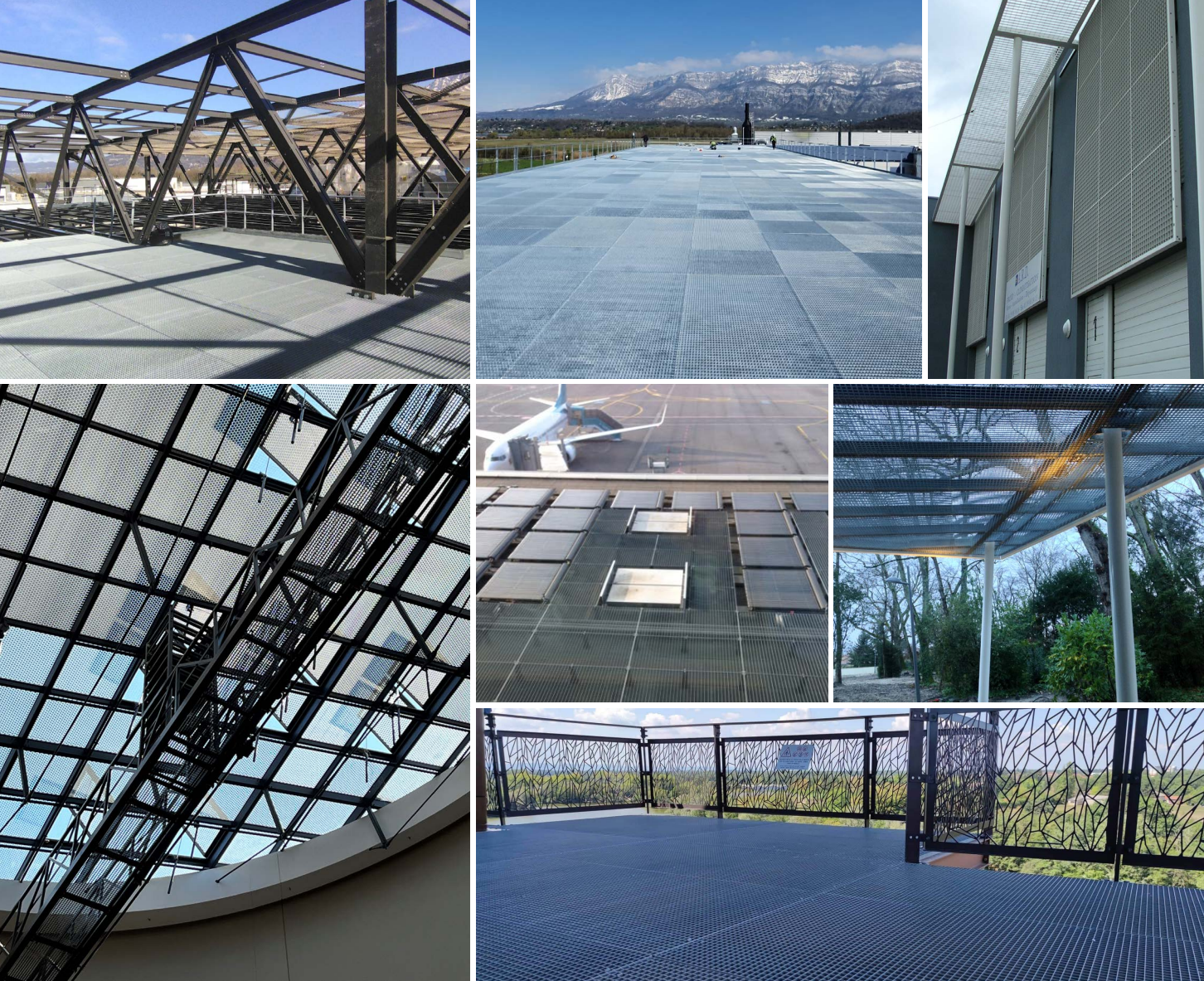
FINISHES

T or flat banding bars.
Single or double anti-slip serration on request.
Half-moon or saw-toothed anti-slip serration options.

BANDING BARS



SERRATIONS

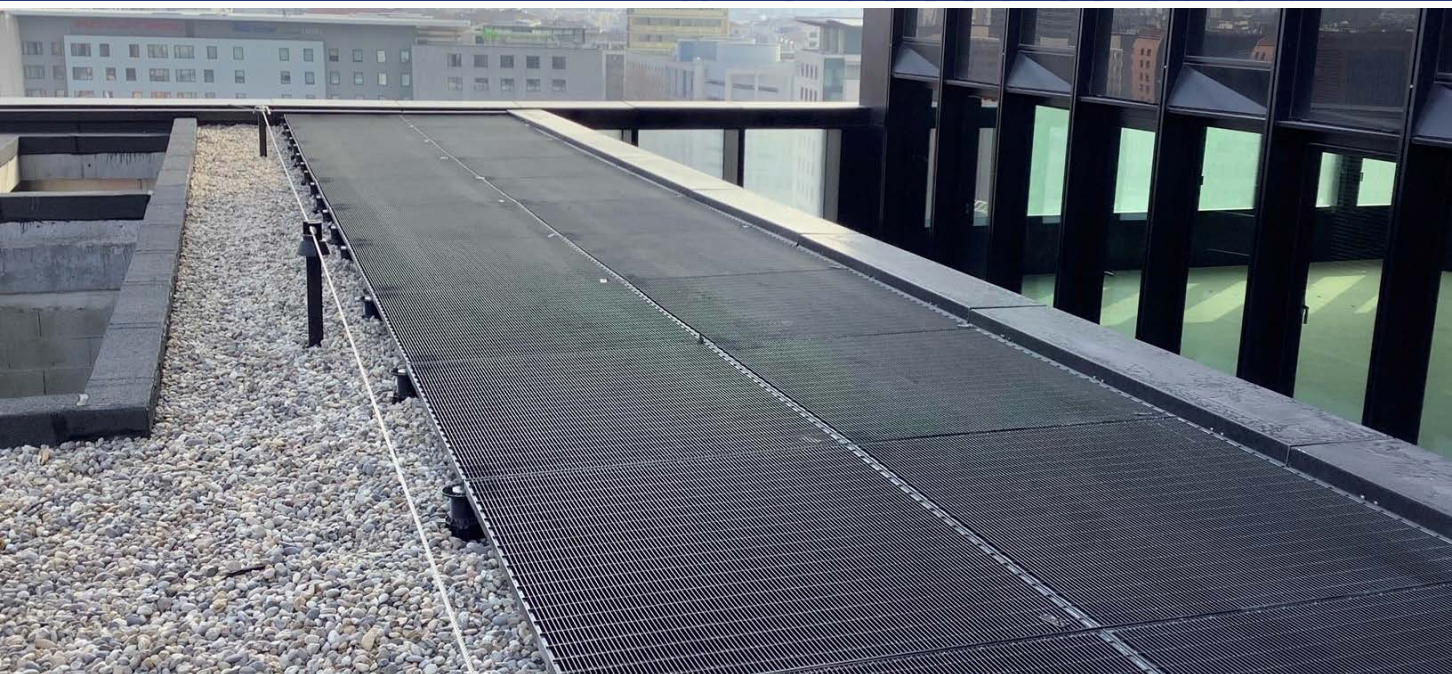


INDUSTRY

- Thermal, hydro-electric, nuclear and solar power plant
- Chemical and oil industries
- Automotive and steel industry
- Shipbuilding
- Cement works
- Metal working and fabrication
- Railings and fencing
- Emergency stairs
- Railway and transportation
- Drains and ventilation systems
- T3A highway grating
- Heavy loads

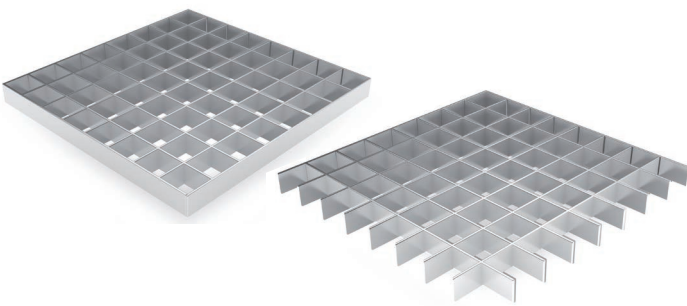
ARCHITECTURE

- Decoration
- Sun shading
- Decorative cladding
- False ceiling
- Fencing
- Railings
- Urban furniture
- Walkways
- Multisport grounds



PRESS-LOCKED
PRESS-WELDED
FENCING AND RAILING
SHELTING
FRP
SAFETY GRIDS
STAIR TREADS
SPIRAL STAIRCASES
ADDITIONAL PRODUCTS
PRM SOLUTIONS
FASTENINGS AND ACCESSORIES
TECHNICAL SPECIFICATIONS
STOCK PROGRAMME

GEI ALSO OFFERS DIFFERENT VERSIONS OF PRESS-LOCKED GRATINGS TO MEET MORE SPECIFIC NEEDS:



FULL GRATINGS

Full gratings are characterised by the fact that the bearing bars (BB) and transverse bars (TB) are of equal height. They are designed for both intensive industrial use, thanks to their high load-bearing capacity, and architectural use, since their appearance provides a high level of visual protection for the creation of aesthetically pleasing structures. GEI full gratings are used for industrial flooring, and are also prized by architects for filling railings, as sunshades and as privacy screens.

PROTRUDING BLADE

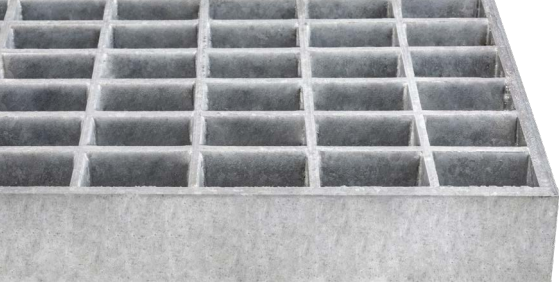
The protruding blade is easily recognized by its protruding spacer, the standard protrusion of which is 10 mm. This feature gives it a comb-like appearance. Depending on your needs, you can adjust the spacing and number of bearing bars. The minimum height of the bearing bars is 25 mm.

This type of press-locked grating is mainly used for its architectural appeal. It can be found on the exterior of a building as decking or facade cladding, but also indoors. In this case, it can be used to conceal air-conditioning or heating installations, while adding a contemporary touch to your decor.



T3A HIGHWAY GRATING

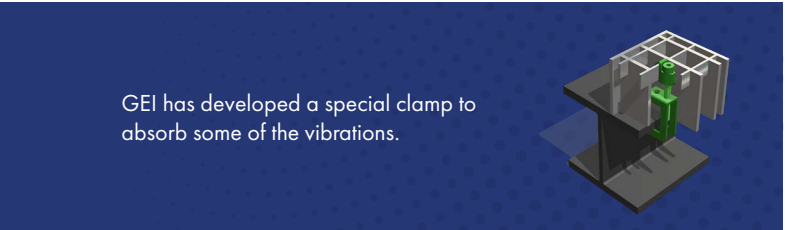
The T3A grating is a press-locked grating (mesh size: 30 x 130, bearing bar: 40 / 3) specially designed for freeways. It can be fitted with a spacing and connecting device on request.



HEAVY LOAD GRATING

The heavy load grating is a press-locked grating with particularly thick bearing bars.

Designed to support heavy loads, it is mainly used as an industrial floor for heavy vehicles (trucks, helicopters, tanks, etc.).



Passage for light to heavy vehicles up to 40 tons



Heavy-load gratings can also be made from press-welded gratings.

LOUVRED GRATINGS

A variant of the press-locked grating, louvred grating is mainly used in the architectural sector. Prized by architects for its ease of use and design, the louvred grating has carved out a major place for itself in facade elements.



Method of manufacture

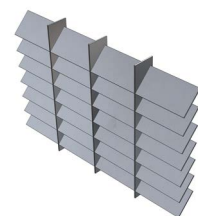
GEI louvred grating is characterized by transverse bars inserted at 45° into the bearing bars (please check with us for any other angle). It can then be produced in flat sections, welded at right angles to the bearing bars.



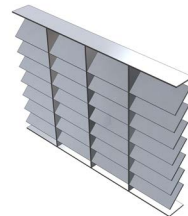
FINISHED PRODUCTS

Custom manufacture possible based on the dimensions and/or plans supplied by the customer.

FINISHES



Finishes without banding bars



Finishes with banding bars

MAIN ADVANTAGES

- Excellent sun-shading effect.
- Allows air to pass through for thermal comfort.
- Prevents a feeling of emptiness.
- Reduces voyeuristic effect.
- Adds aesthetic appeal to new or old buildings.
- Ideal as a privacy screen, as it resists weather and time.



MESH SPACING

It is decided based on standards and load capacity. For louvred grating, the mesh spacing of the BB and TB is usually a multiple of 11... .

GEI has a range of louvred gratings with different mesh available:

■ 100 x 30 - 60 x 30 - 30 x 30.

Other options are available on request.

BEARING BARS

Standard thickness: from 2 to 3 mm.

Height of BBs and TBs (in mm):

Bearing bars	25	30	35	40	50	60
Transverse bars louvred at 45°	35	40	50	55	70	85

Other options are available on request.

APPLICATION EXAMPLE

- Technical floor or gateway
- Railing or fence
- Facade installation
- Sun shading or privacy screen
- Roof
- ...



General technical specifications

Louvred GEI grating is manufactured according to a precise load table. The dimensions of the bearing bars (BB) are important because they determine the load bearing capacity of the grating.

DIMENSIONS

Maximum dimensions: 2,500 x 2,000 mm.

For optimal grating quality, we advise you not to exceed a height/length ratio of 1.5 m².

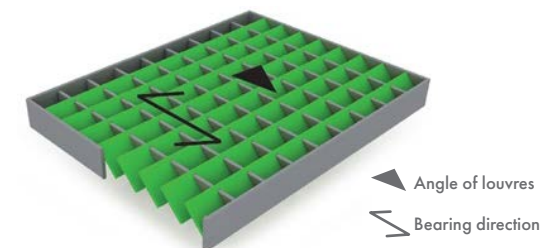
MATERIALS

S235JR steel as per EN 10025 standards.

304 (1.4301), 316L (1.4404) or 316Ti (1.4571) stainless steel.

AlMg3 aluminium.

DIRECTION AND ANGLE

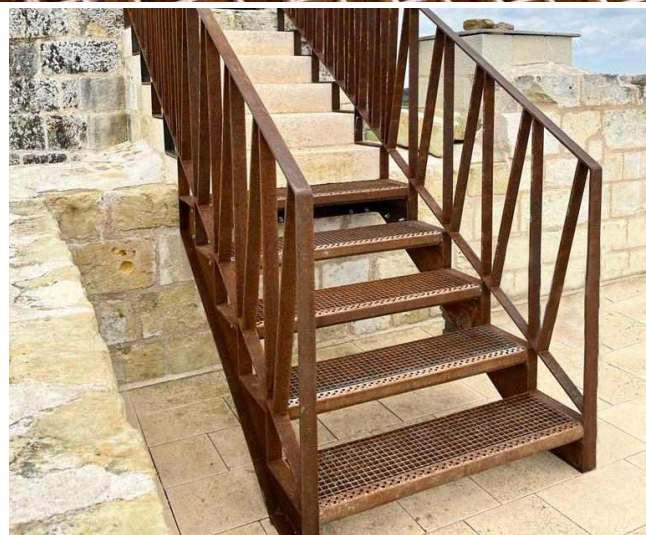
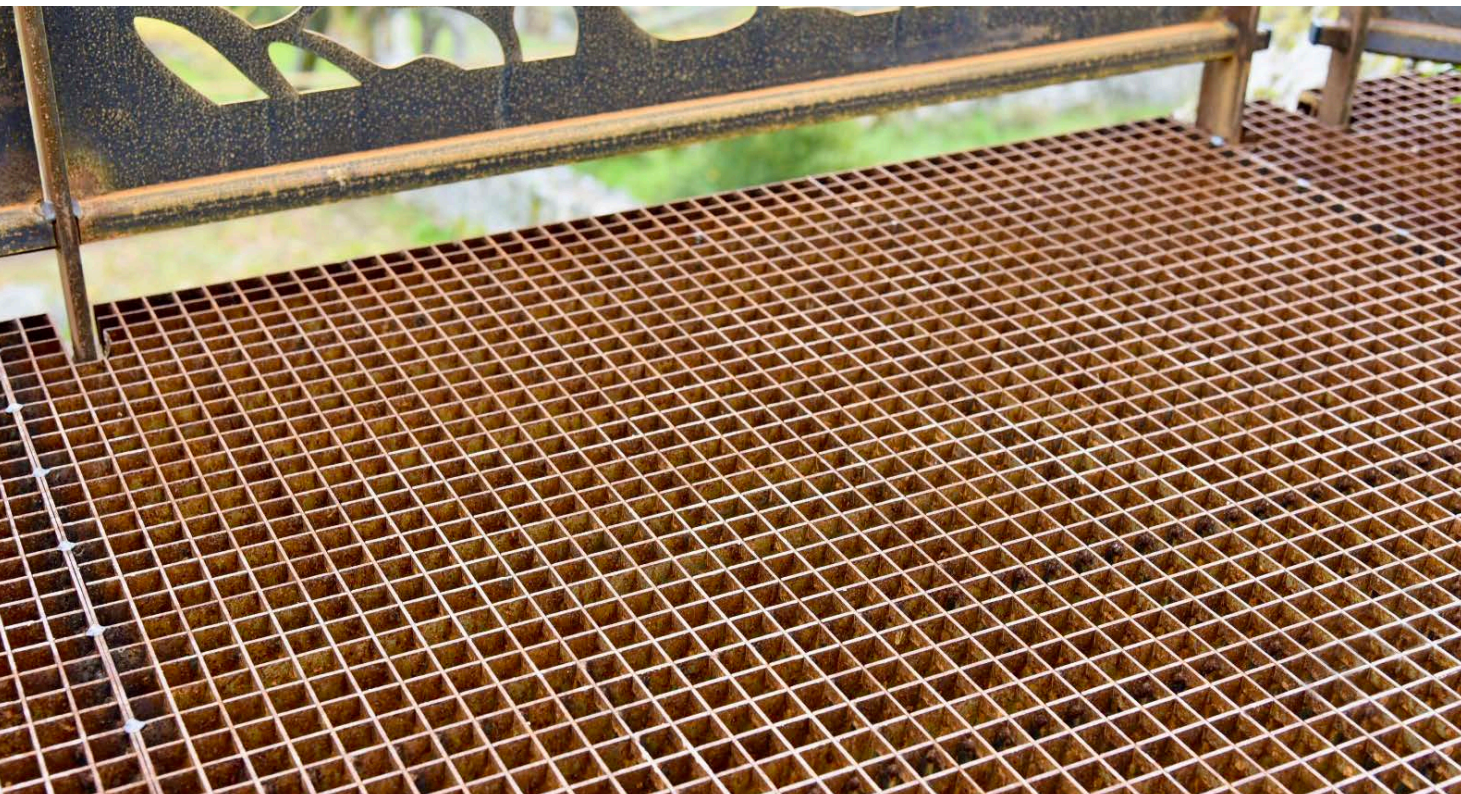


FASTENING SYSTEMS

Fastening systems are manufactured from galvanized steel for steel gratings and from stainless steel for stainless steel and aluminium gratings. In certain cases, gratings may be fixed to structures with welded brackets.



RAW OR GALVANIZED STEEL, POWDER COATED OR CORTEN STEEL, PRESS-LOCKED GRATING IS AVAILABLE IN DIFFERENT MATERIALS:



CORTEN STEEL GRATING

Corten steel is favoured by architects and decorators for its rusty appearance. In this case, oxidation acts as a protective layer. It enhances the steel's strength and resistance to atmospheric corrosion. This self-oxidizing steel is the result of a combination of several alloys, including phosphorus, copper, chrome and nickel.

Corten's orange-brown color develops naturally under the influence of atmospheric conditions (wind, sun and rain). The oxidation of the metal matures over a period of one to three years. The patina of each grating is unique!

Corten steel can be used both indoors and outdoors: for street furniture, artwork, signs, building elements and more. It is advisable to wait until the material has weathered and stabilized before installing it in a building.



ALUMINIUM GRATING

Aluminum gratings are particularly prized by architects for their matte appearance and uniform finish.

MAIN ADVANTAGES

- Easy to handle.
- Lightweight: aluminum gratings are about 3 times lighter than steel gratings.
- Contemporary aesthetic effect.

TREATMENTS

Stainless steel: Raw / Pickled / Passivated / Electropolished.
Aluminum: Raw / Anodised / Powder-coated.

DIMENSIONS

Maximum length of BB: 3000 mm.

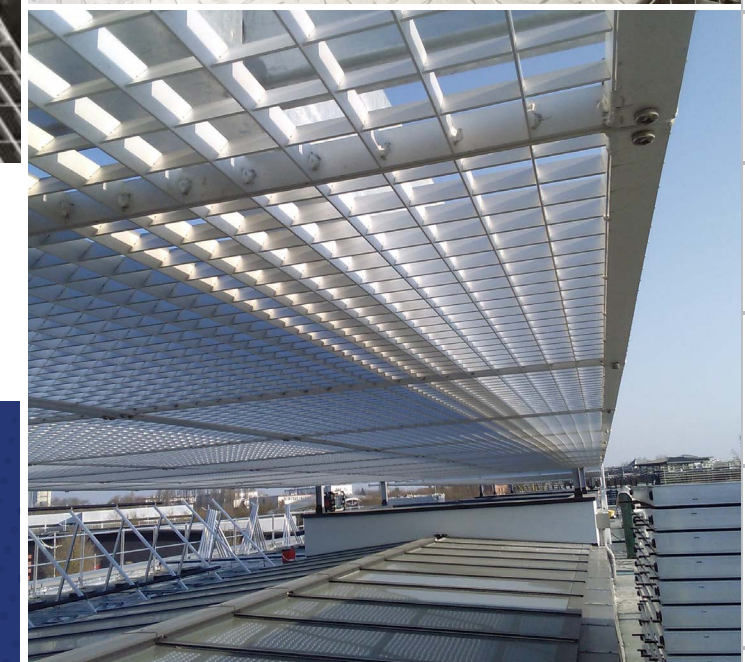
Maximum TB length: 1500 mm.

For optimum grating quality, we recommend that you not exceed a length x width ratio of 2 m².

STAINLESS STEEL GRATING

Stainless steel gratings can be adapted to all industries in the food and petrochemical sectors.

304 (1.4301) stainless steel is used in food processing environments, while 316L (1.4404) or 316Ti (1.4571) stainless steel is used in environments particularly exposed to corrosive products (marine environments, etc.).



BEARING BARS

Standard height: 20 to 80 mm.

Standard thickness: 2 to 5 mm.

Other options on request.

TRANSVERSE BARS

Standard height: 10 mm.

Standard thickness: 2 mm.

Other options on request.

Find out **more about the different surface treatments** on page 61.

PRESS-LOCKED

PRESS-WELDED

FENCING AND RAILING

SHELVING

FRP

SAFETY GRIDS

STAIR TREADS

SPIRAL STAIRCASES

ADDITIONAL PRODUCTS

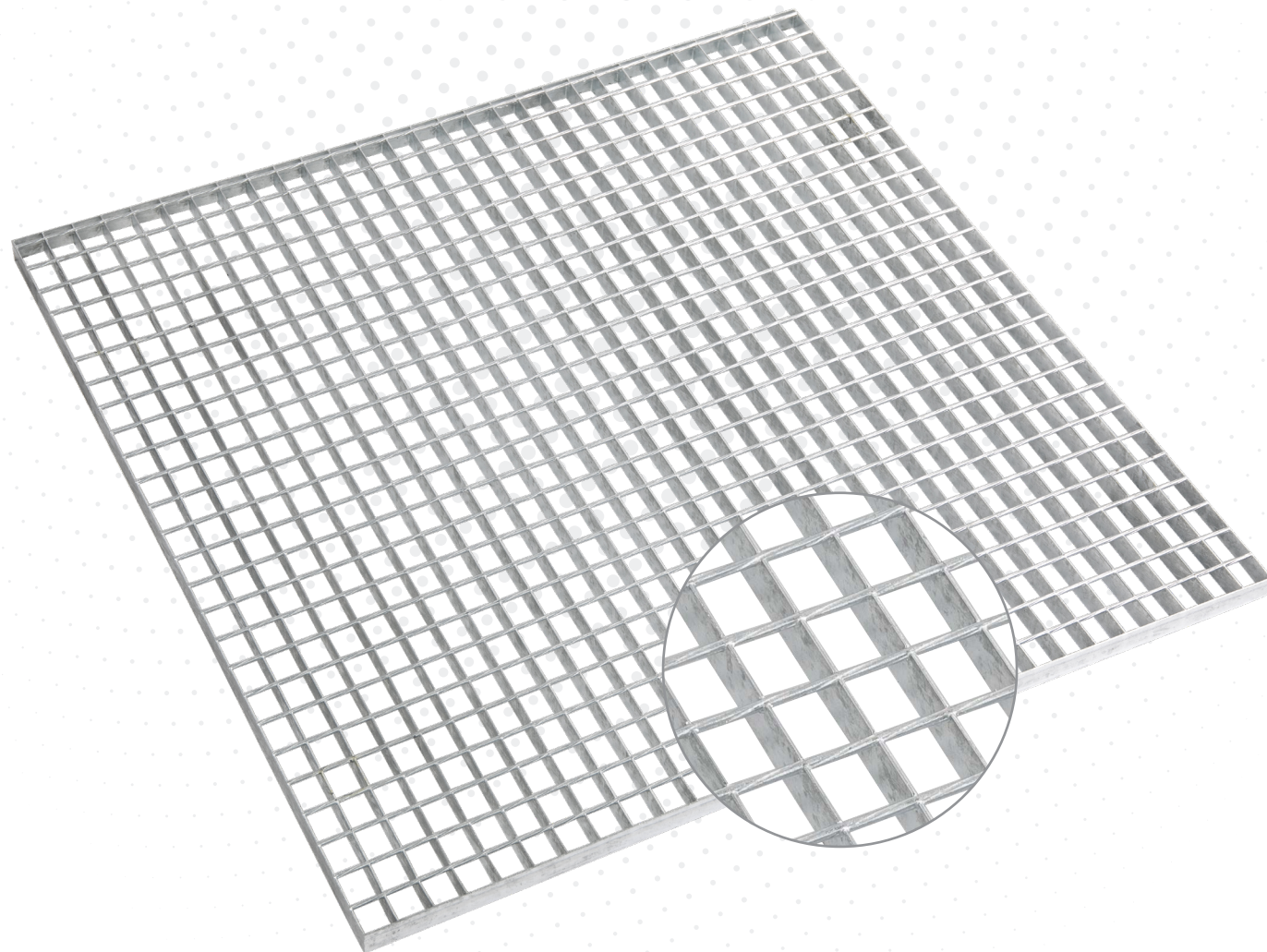
PRM SOLUTIONS

FASTENINGS AND ACCESSORIES

TECHNICAL SPECIFICATIONS

STOCK PROGRAMME

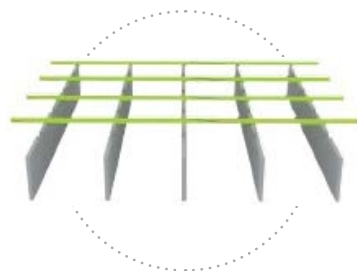
PRESS-WELDED GRATING



Method of manufacture

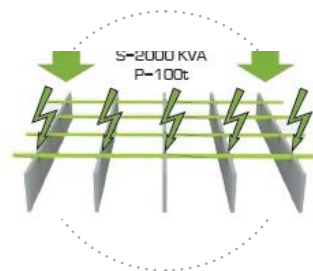
Press-welded grating is obtained by electrical welded transverse bars, which are usually square and twisted (but can be round and straight) into the bearing bars. The grating is produced with flat banding, and then optionally undergoes hot-dip galvanizing in accordance with the applicable EN ISO 1461 standards.

For an optimised anti-slip surface, it is possible to produce serrated press-welded grating, with serration on the bearing bars only. It is typically manufactured from S235JR steel in accordance with the EN 10025 standards, ensuring consistent production quality. RAL-GZ 638 manufacturing tolerances applied.



STEP 1

Put in place the transverse bars and the bearing bars for electrowelding



STEP 2

Electrowelding

Press-welded grating consists of square, twisted transverse bars that have been electrowelded to the bearing bars.

Welding at the joint of each BB and TB ensures maximum firmness and robustness.

It is particularly suited to places where structural changes are frequent or where more cutting is needed. Press-welded grating is used a lot in numerous industrial sectors.

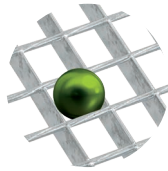


General technical characteristics

Press-welded GEI grating is manufactured according to a precise load table. The dimensions of the bearing bars (BB) are important because they determine the load bearing capacity of the grating.

MESH SPACING

Mesh spacing is the distance between the centre lines of the bearing bars and transverse bars (e.g. 34.3 x 38.1). It is decided based on standards and load capacity and is used by our design department to produce calculation reports. For convenience, the term “mesh designation” is more frequently used (for example: 30 x 30).

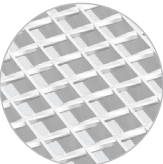


20 mm ball tight safety mesh

GEI HAS A RANGE OF PRESS-WELDED GRATINGS WITH DIFFERENT MESH TYPES ON OFFER:

- Standard meshes: 30 x 30 - 30 x 44 - etc.
- Safety meshes: 19 x 40 - 30 x 19 - 19 x 19 - etc.
- Reduced mobility mesh: 19 x 19.
- Offshore mesh: 30 x 100.

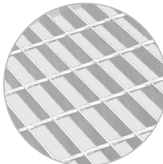
STANDARD MESHES



30 x 30

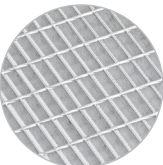


30 x 40

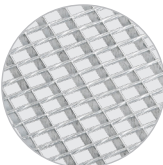


30 x 100

SAFETY MESHES



19 x 40



30 x 19



PRM/ROLLING

19 x 19

Other options on request.

BEARING BARS

Standard height: from 25 to 60 mm.
Standard thickness: from 2 to 5 mm.
Other options are available on request.

TRANSVERSE BARS

Twisted and square: from 4 to 6 mm.
Round and straight option on request.

For all your projects, our design department will provide calculation reports to you.

DIMENSIONS

Max length of BB: 6,100 mm.
Max length of square twisted bars: 1,000 mm.
Other options are available on request.

MATERIALS

S235JR steel as per EN 10025 standards.

SURFACE FINISHES

Galvanization as per EN ISO 1461 standards.
Powder-coating as per RAL standard.
Other options are available on request.

FINISHES

Flat banding bar.
Anti-slip serration treatment on request.



Single anti-slip serration



Flat banding bar

FINISHED PRODUCTS

Raw or galvanized mats, half-mats, panels and stair treads in stock.
Custom manufacture possible based on the dimensions and/or plans supplied by the customer.

PRESS-WELDED GRATING VARIANT:



T3B HIGHWAY GRATING

The T3B grating is a press-welded grating (mesh size: 30 x 100, bearing bar: 40 / 3) specially designed for freeways.

Find our **technical booklet** on page 60 with loading tables, the current standards, the surface treatments that are possible and the explanatory diagrams.



FIELDS OF APPLICATION

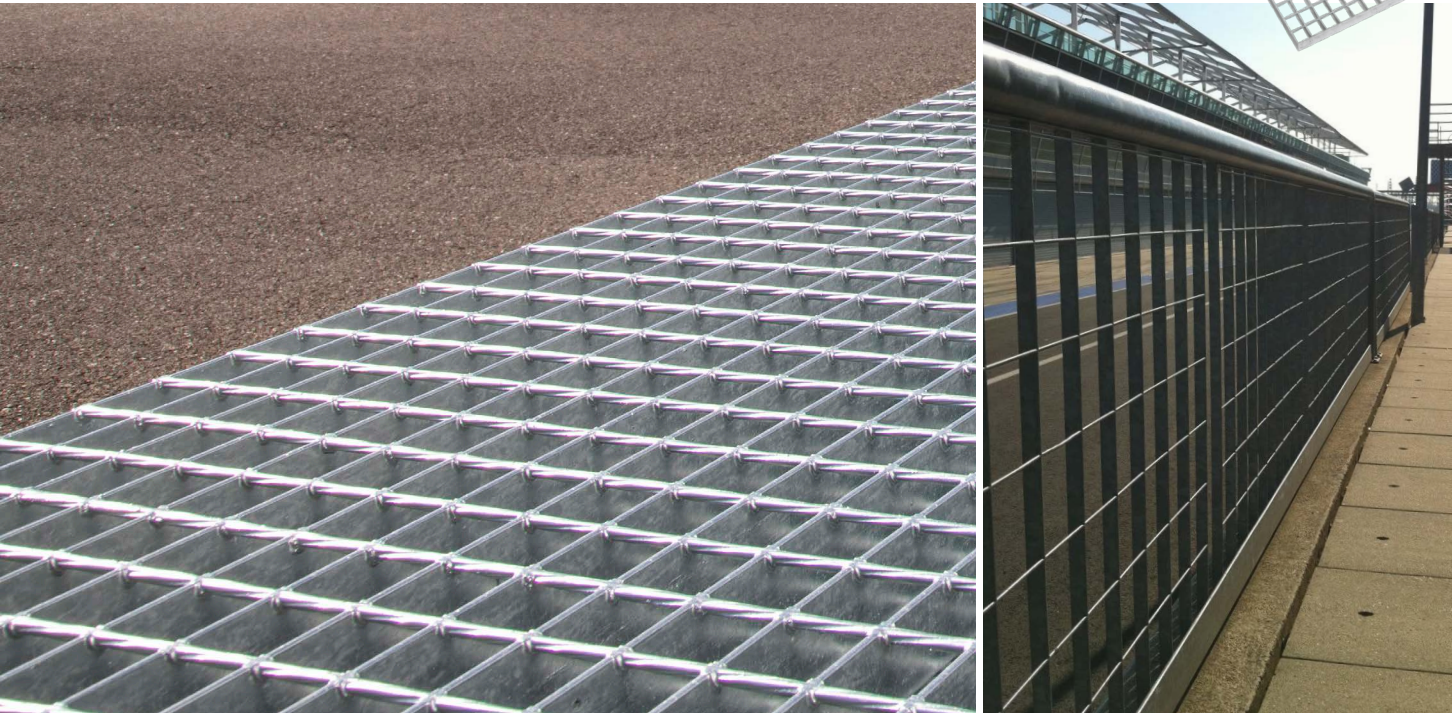
INDUSTRY

- Thermal, hydro-electric, nuclear and solar power plant
- Chemical and oil industries
- Automotive and steel industry
- Shipbuilding
- Cement works
- Metal working and fabrication
- Railings and fencing
- Emergency stairs

- Railway and transportation
- Drains and ventilation systems
- T3B highway grating

ARCHITECTURE

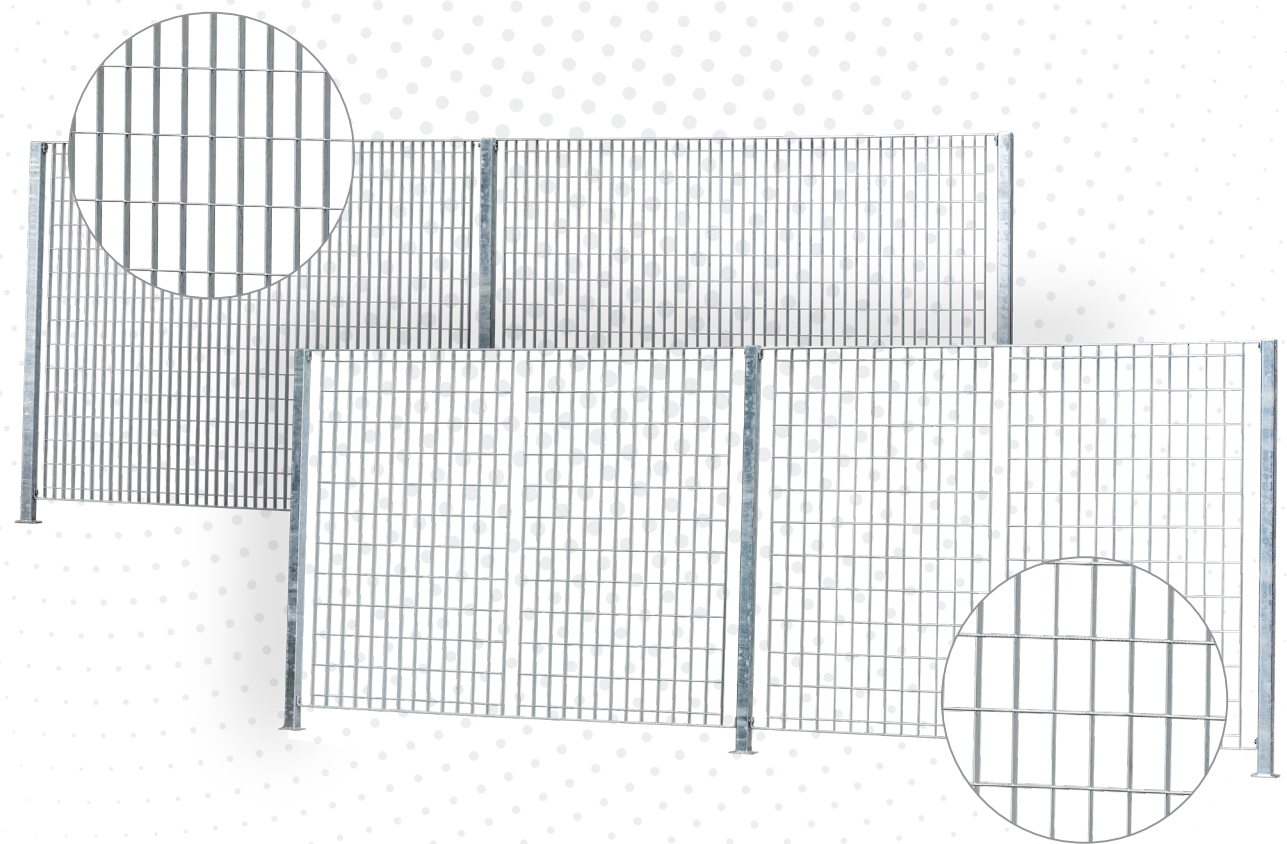
- Decoration
- Sun shading
- Fencing
- Cladding
- Urban furniture
- Walkways
- Multisport grounds



PRESS-LOCKED
PRESS-WELDED
FENCING AND RAILING
SHELVING
FRP
SAFETY GRIDS
STAIR TREADS
SPIRAL STAIRCASES
ADDITIONAL PRODUCTS
PRM SOLUTIONS
FASTENINGS AND ACCESSORIES
TECHNICAL SPECIFICATIONS
STOCK PROGRAMME

CUSTOM-MADE

GRATINGS FOR FENCING AND RAILING



The grating for fencing or railing infill is made of galvanized steel, with the option of a powder-coated finish. It is quick to assemble and highly resistant. Whether used in stadiums, factories, airports, multisports grounds or by private individuals, gratings for fencing and guardrails can be found in a wide variety of fields.

It can be supplied in press-locked or press-welded grating, or with louvred blades for a privacy screen effect.

Panels can be connected by square or flat tubular posts, either directly anchored or with drilled plates (on request only).

MESH SPACING

Most common spacing (press-locked grating):

■ BB spacing: 33.33 mm - 44.44 mm - 55.55 mm - 66.66 mm in 25/2.

■ TB spacing: 33.33 mm - 44.44 mm - 55.55 mm - 66.66 mm - 99.99 mm in 25/2.

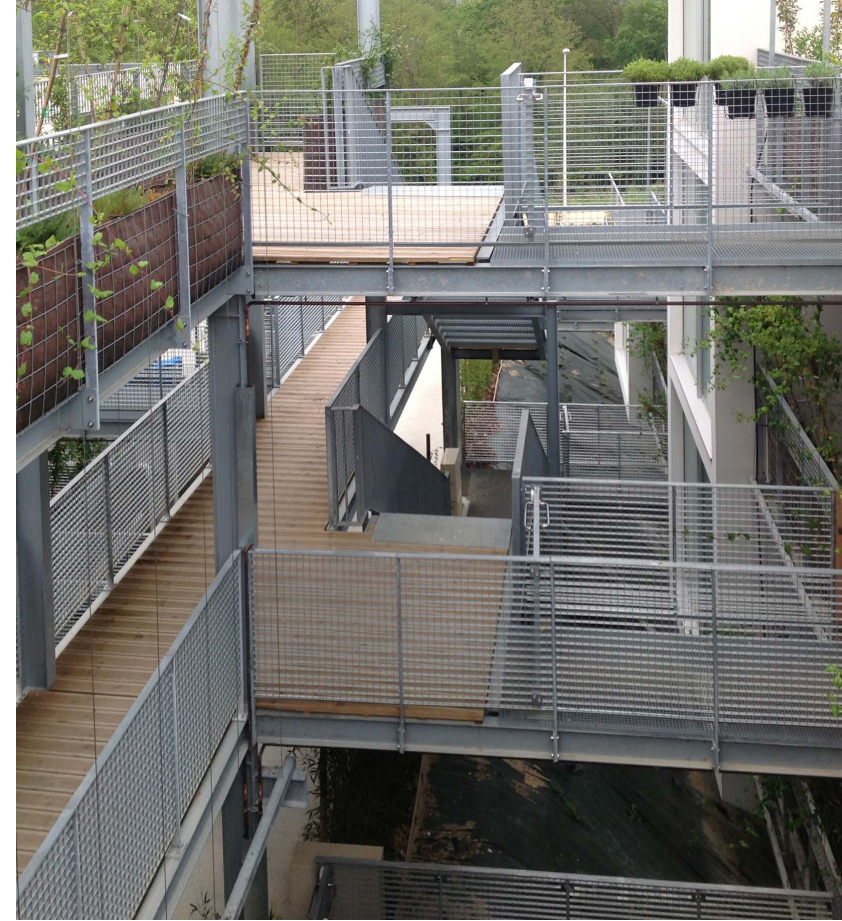
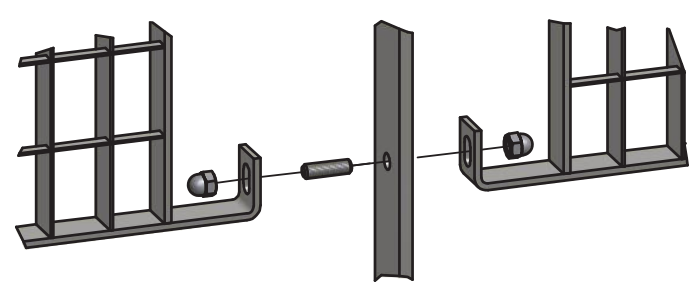
Most common spacing (press-welded grating):

■ BB spacing: 68.6 mm in 25/2.

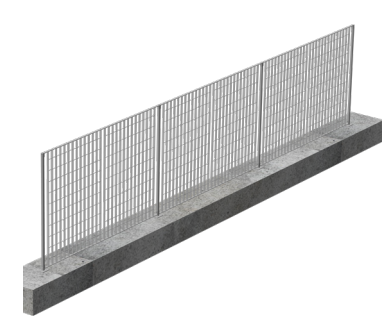
■ TB spacing: 127 mm in 5 mm diameter round.

Please enquire for any specific request.

FASTENING PRINCIPLE



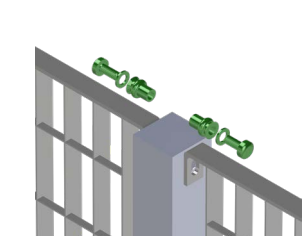
Whether in press-locked or press-welded grating, GEI offers you a tailor-made design for your gratings for fencing and railing.



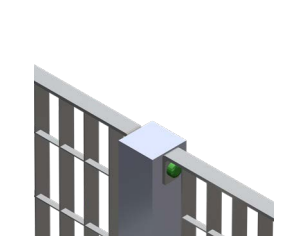
FENCE



RAILLING AND FILLING PANEL

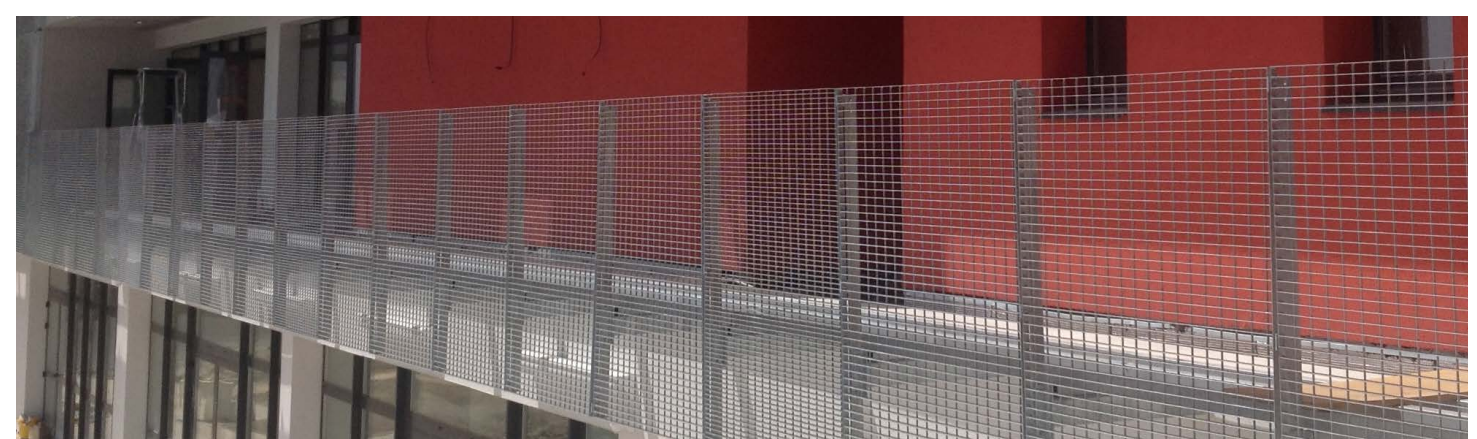


Open view

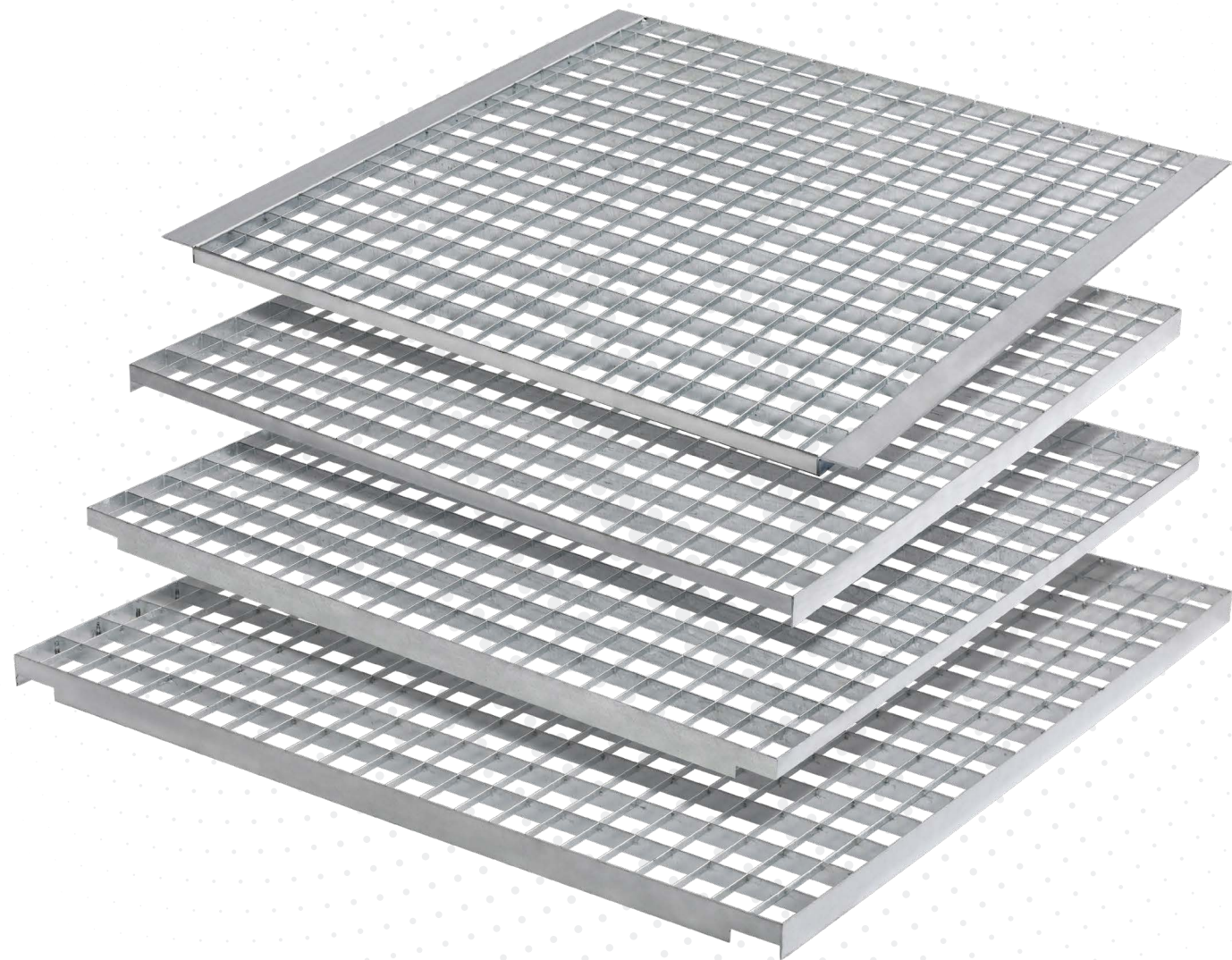


Assembled view

BOLT-ON MOUNTING



PRESS-LOCKED
PRESS-WELDED
FENCING AND RAILING
SHELVING
FRP
SAFETY GRIDS
STAIR TREADS
SPIRAL STAIRCASES
ADDITIONAL PRODUCTS
PRM SOLUTIONS
FASTENINGS AND ACCESSORIES
TECHNICAL SPECIFICATIONS
STOCK PROGRAMME

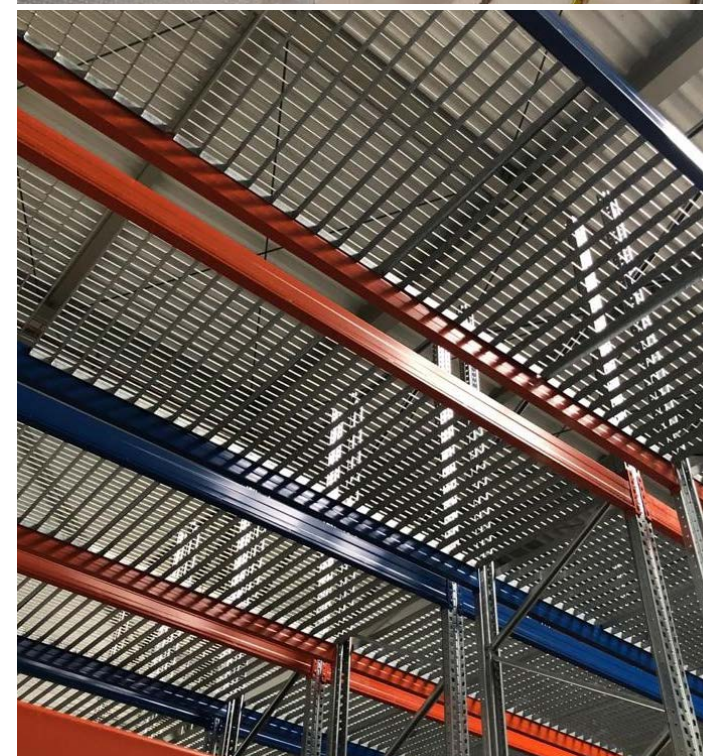
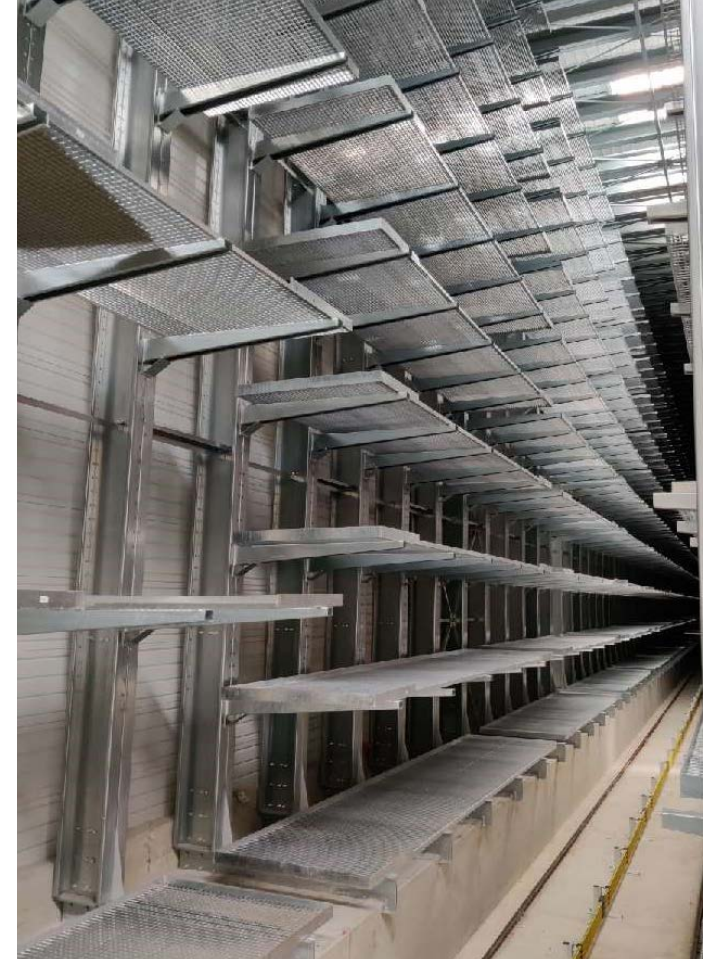


PANELS | CUSTOM MADE

GRATINGS FOR SHELVING

GEI grating for shelving provides excellent rigidity and improved visibility of stored items. It can be used to equip pallet racks and cantilevers with grating, enabling them to store loads of varying weights without the need for the load to be taken up by the rails. Metal gratings are an increasingly popular alternative in this sector, thanks to their ability to let through water that is sprinkled in the event of fire.

Made with S235JR steel, gratings for shelving are available in press-locked and press-welded.



Gratings for shelving must be adapted to the desired load. Several load options are available:

- uniformly distributed load
- pallet load
- punching load

Different mesh sizes and bearing bars to suit different loads.



Etc.

In warehousing and logistics, robustness and modularity are key to ensuring the efficiency and safety of your operations. GEI offers the ideal range of gratings to meet these requirements.

MAIN ADVANTAGES

- Anti-fall: the grating fits perfectly into the rack.
- Press-locked grating does not damage stored products during handling.
- Guaranteed safety when picking up loads.
- Low installation height for gratings with angle bars.
- Fire safety: the open surface of gratings makes them particularly suitable for sprinkler systems.
- Easy to clean and maintain.

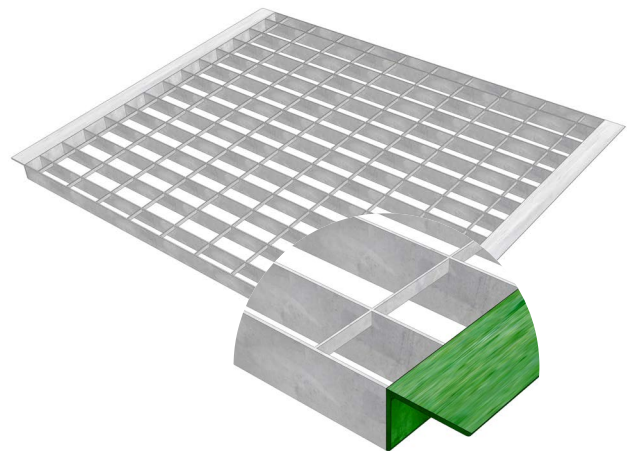
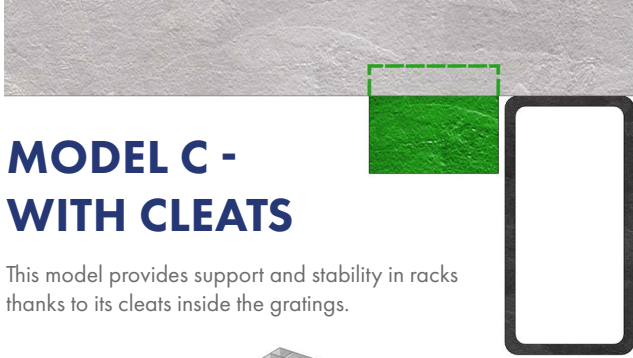


DIFFERENT MODELS ARE AVAILABLE DEPENDING ON YOUR CONSTRAINTS AND THE ENVIRONMENT:



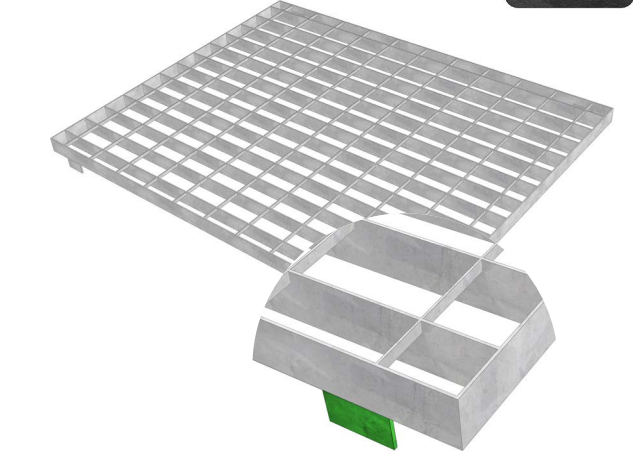
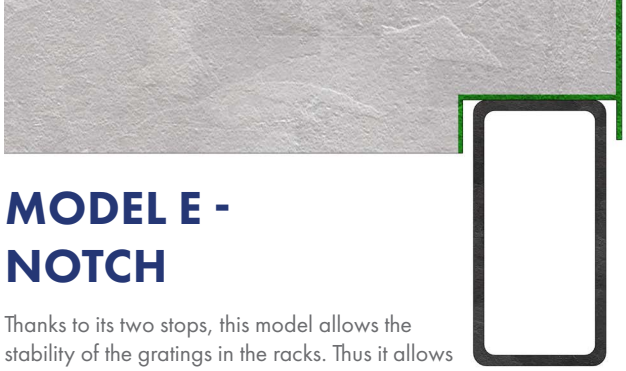
**MODEL A -
CORNER FLAP**

This model is especially suitable for shelving where the height is restricted, for uniformly distributed load.

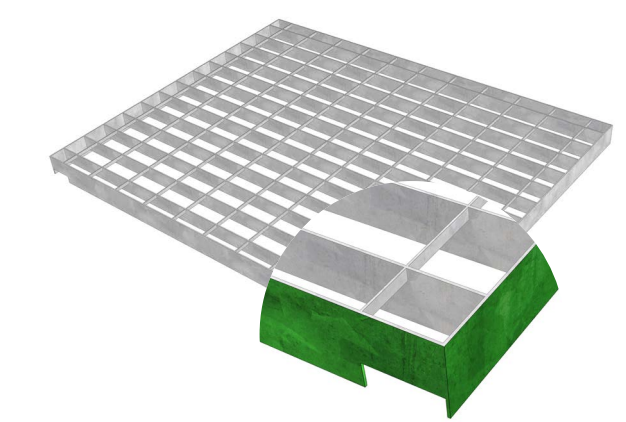
**MODEL C -
WITH CLEATS**

This model provides support and stability in racks thanks to its cleats inside the gratings.

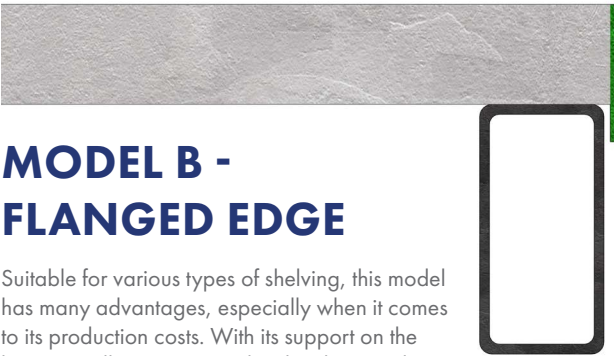
**MODEL E -
NOTCH**

Thanks to its two stops, this model allows the stability of the gratings in the racks. Thus it allows maximum security.



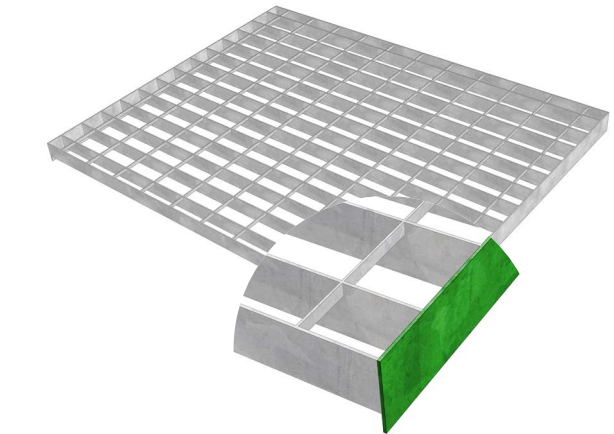
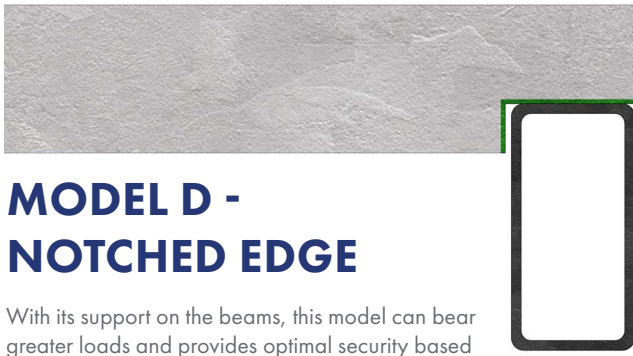

MODEL Z

This model is especially suitable for shelving where the height is reduced and for a point load.

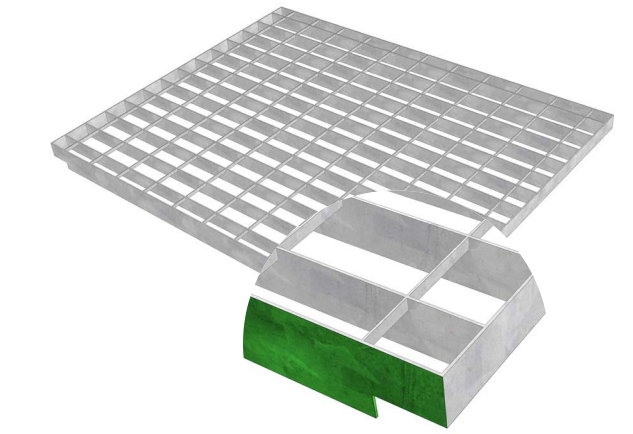
**MODEL B -
FLANGED EDGE**

Suitable for various types of shelving, this model has many advantages, especially when it comes to its production costs. With its support on the beams, it allows a greater load pick-up and safety with its flanged edges which immobilises the grating on the racks.

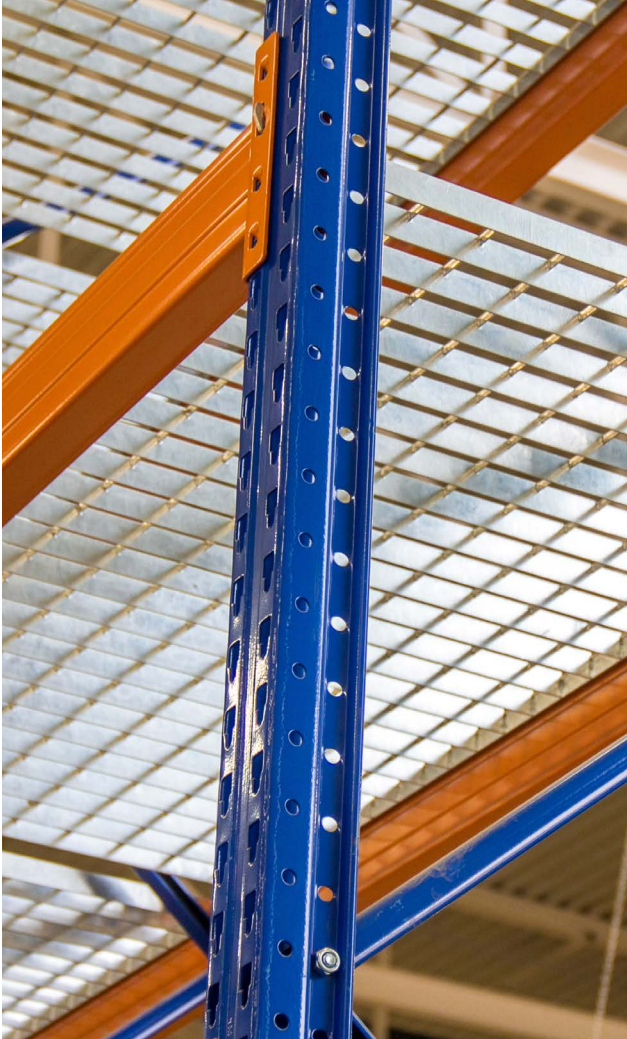
**MODEL D -
NOTCHED EDGE**

With its support on the beams, this model can bear greater loads and provides optimal security based on the way it is indented.

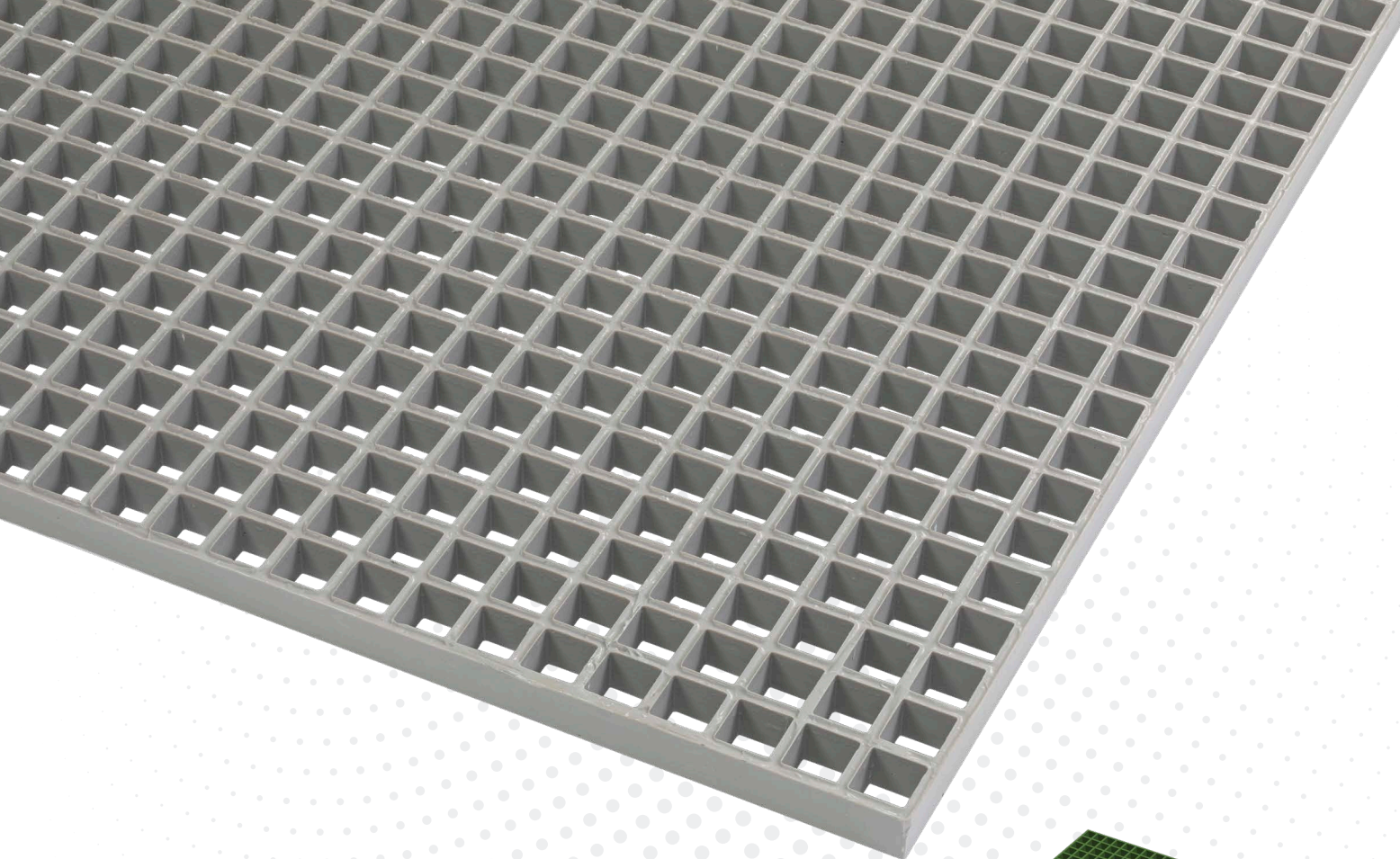



**MODEL G - FOLDED
SHEET METAL**

This model is especially suitable for shelving where the height is reduced and for a point load.

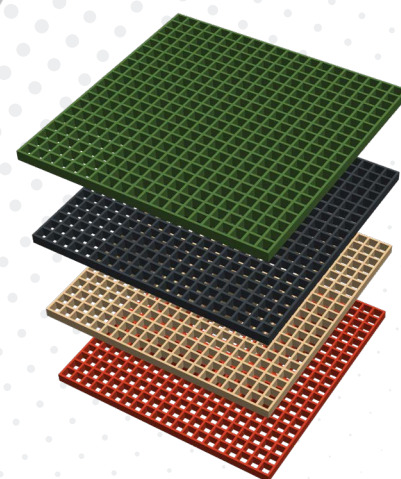


PRESS-LOCKED
PRESS-WELDED
FENCING AND RAILING
SHELVING
FRP
SAFETY GRIDS
STAIR TREADS
SPIRAL STAIRCASES
ADDITIONAL PRODUCTS
PRM SOLUTIONS
FASTENINGS AND ACCESSORIES
TECHNICAL SPECIFICATIONS
STOCK PROGRAMME
33



MATS | STAIR TREADS | CUSTOM MADE

FRP / POLYESTER GRATINGS

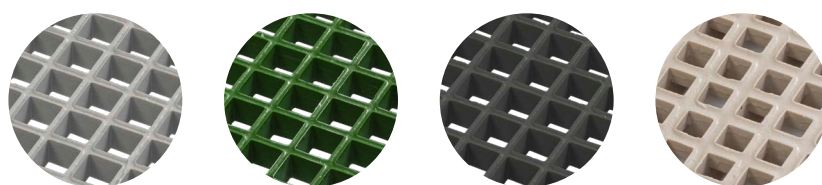


Method of manufacture

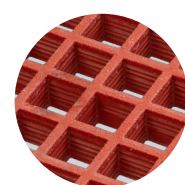
Moulded FRP grating is manufactured from fibreglass-reinforced resin. It is composed of 65% resin for its chemical and UV resistance and is composed of 35% fibreglass for increased

mechanical strength. GEI has 3 types of resin on offer with different degrees of resistance to chemical corrosion.

IN STOCK



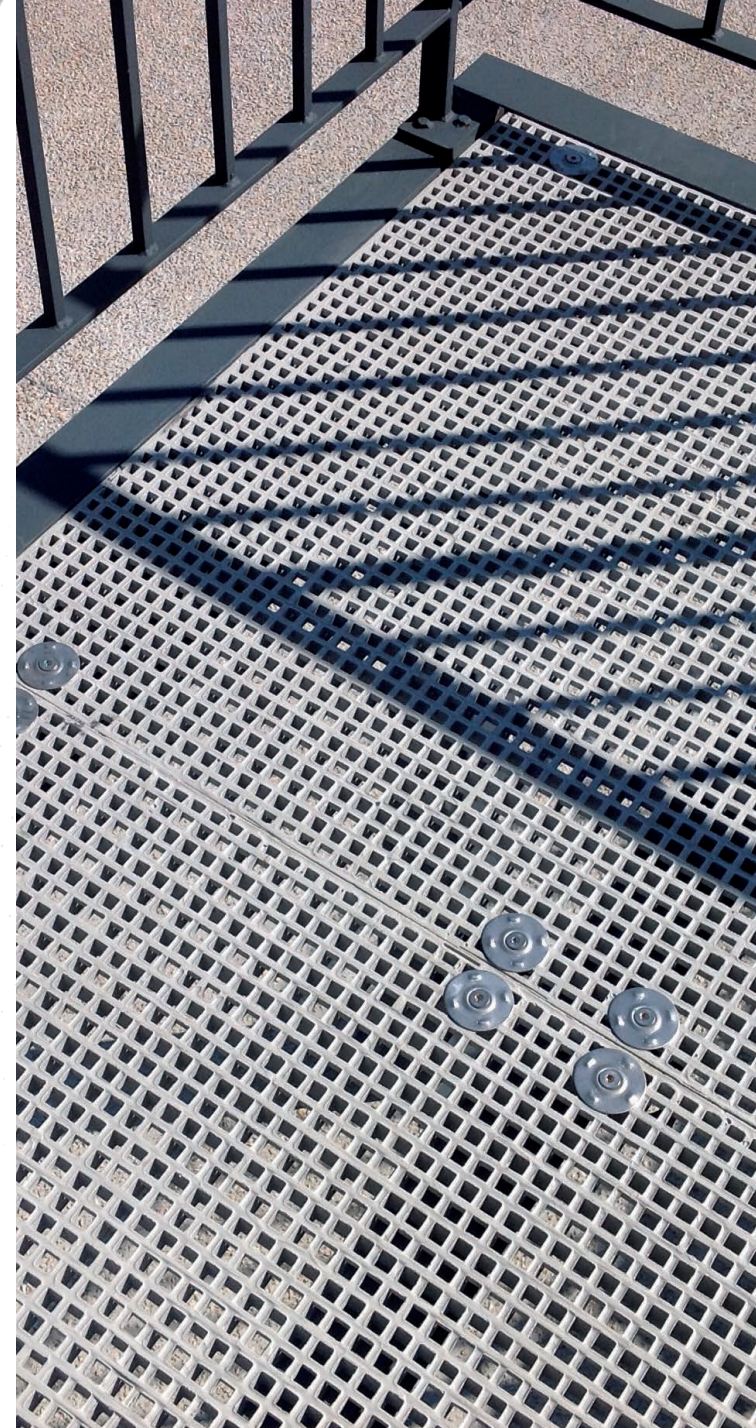
Isophthalic resin in RAL 7035 gray, RAL 6010 green, RAL 7012 anthracite or RAL 1001 beige resistant to fire, corrosion and chemicals.



RAL 2002 orange vinyl ester resin, resistant to the most severe chemical aggression (high concentrations).

MADE TO ORDER

Orthophthalic resin resistant to a wide range of chemicals.



With a toughness that is proving popular within the industrial and public sectors, GEI-FIB FRP grating has many advantages.

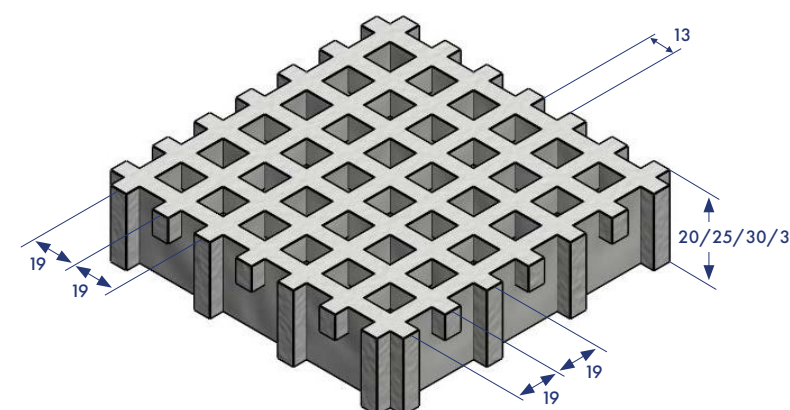
MAIN ADVANTAGES

- Fire resistant.
- Easy to cut.
- Load-bearing in both directions.
- Resistant to corrosion, weathering and UV light.
- Very good chemical resistance.
- No electrical conductivity.
- Low thermal conductivity.
- Concave or gritted R13 in accordance with BGR 181 and DIN 51130 standards.
- Easy assembly with specially designed clamps available in stock.
- Fast delivery of custom-made products as well as those already in stock.

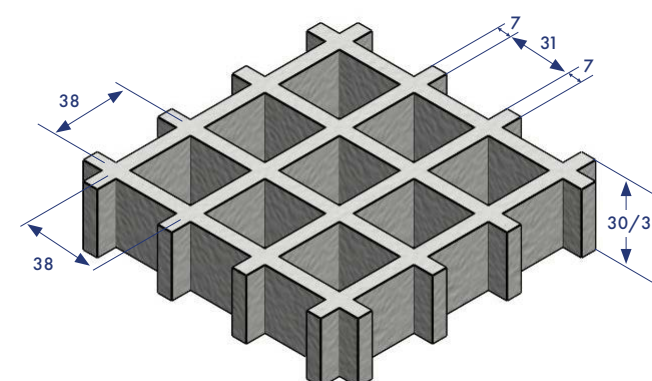
ALL OUR FRP GRATINGS COMPLY WITH THE **REACH STANDARD** ADOPTED TO PROTECT HUMAN HEALTH AND THE ENVIRONMENT AGAINST THE RISKS RELATED TO CHEMICAL SUBSTANCES.



SAFETY MESH 19 X 19



STANDARD MESH 38 X 38



PRESS-LOCKED
PRESS-WELDED
FENCING AND RAILING
SHELVING
FRP
SAFETY GRIDS
STAIR TREADS
SPIRAL STAIRCASES
ADDITIONAL PRODUCTS
PRM SOLUTIONS
FASTENINGS AND ACCESSORIES
TECHNICAL SPECIFICATIONS
STOCK PROGRAMME

General technical specifications

MESH SPACING

GEI has a range of FRP gratings with different mesh types on offer:

- Standard meshes: 38 x 38 - 26 x 26 - 50 x 50.
- Safety mesh: 19 x 19.
- Other meshes on demand.

BEARING BARS

Standard dimensions: 20/7 ; 25/7 ; 30/7 ; 38/7 ; 50/7 mm.
Other BB on demand.

STANDARD PANEL

DIMENSIONS

1000 x 2026 mm.
1000 x 3055 mm.
1220 x 3055 mm.

STANDARD DIMENSIONS

STAIR TREADS WITH

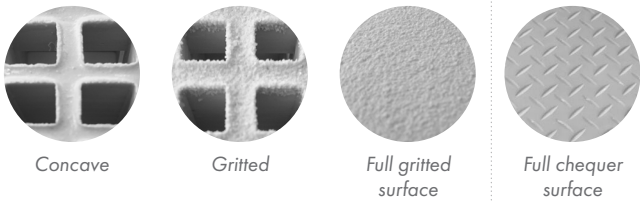
GRITTED FRONT EDGE

800 x 275 mm.
1000 x 275 mm.
1000 x 350 mm.

Discover our complete range of FRP gratings and construction elements in **our special FRP brochure**.



FINISHES



Other finishes on demand.

FINISHED PRODUCTS

We stock mats, stair treads and stair rails which are easy to assemble on site.
Custom manufacture possible based on the dimensions and/or plans supplied by the customer.



Cutting bench



Made to measure

COLORS



Other RAL colours available for special manufacture.

Fastenings:



316 STAINLESS STEEL CLAMP
with 19 x 19 mesh washer.
In stock.



316 STAINLESS STEEL CLAMP
with 38 x 38 mesh pin.
In stock.



316 STAINLESS STEEL STAIR SUPPORT
for 38 x 38 and 19 x 19 mesh.
A left and a right one.
In stock.

Accessories:

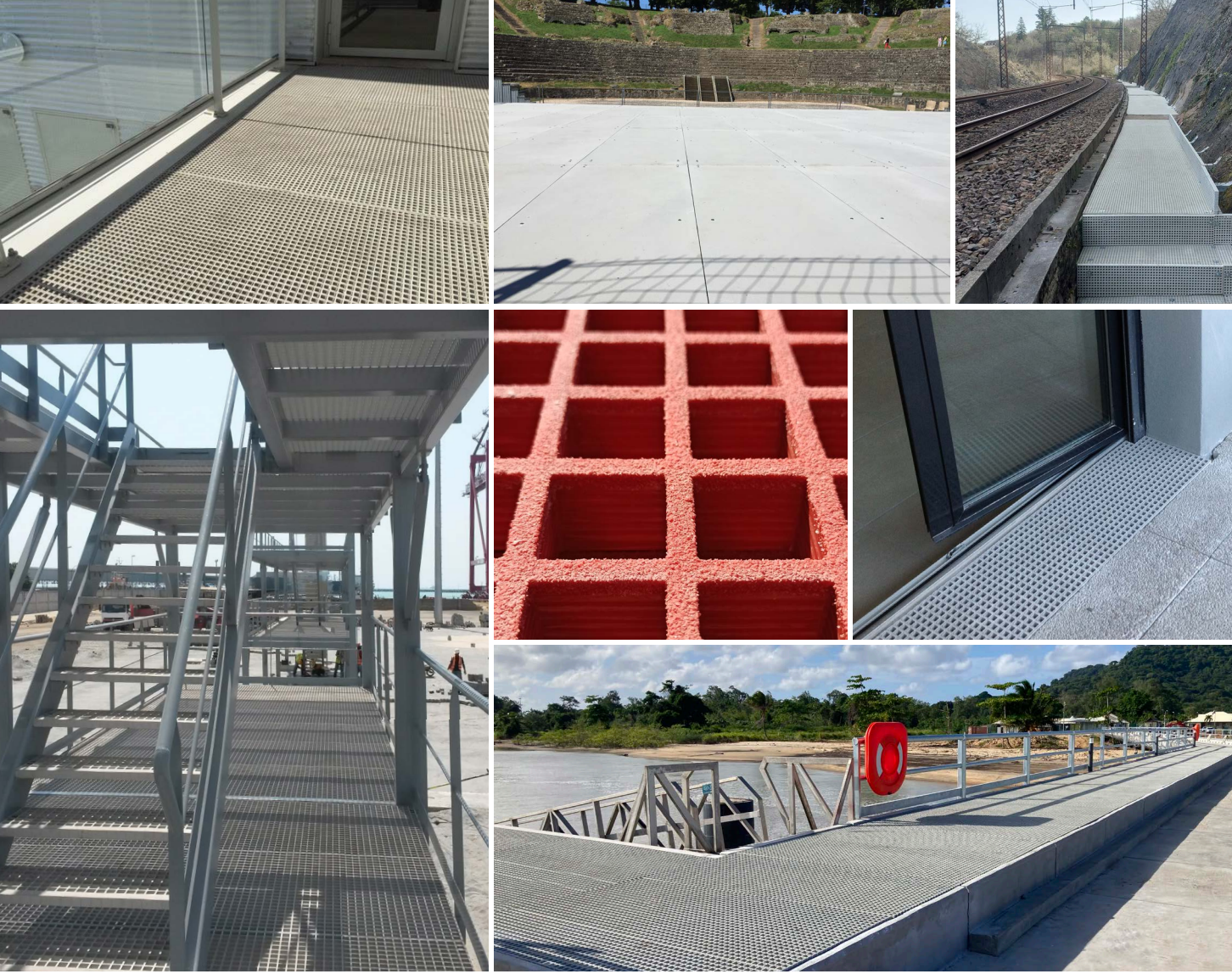


ADJUSTABLE FOOT
Dimensions of insert: 35 x 35 mm.
Thickness of insert: 20 mm.
Height of foot: 40 or 70 mm.
In stock.

Assembly:



ADJUSTABLE PADS
Depending on the environment, the floor can also be raised using GEI adjustable pads.



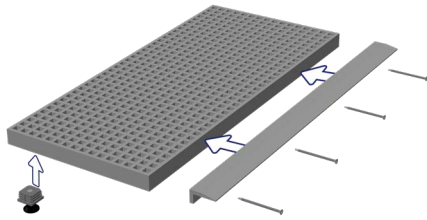
FIELDS OF APPLICATION

- Food industry
- Paper and cellulose industry
- Pharmaceutical industry
- Plastics industry
- Fiber and textile industry
- Automobile and aircraft construction
- Offshore installation
- Sewage treatment plants
- Navy and shipbuilding
- Transportation
- Pickling and galvanizing plant
- Petrochemical industry
- Platforms, floors and gangways
- Steps
- Ramp
- Production line
- Sewer, pit and shaft lining
- Duct lining
- Danger zone indication
- Washing station
- Raw chemical storage
- Waterproofing
- Etc.



Thanks to the GEI concept, easily ensure accessibility for people with reduced mobility (PRM).

Also available in a ready-to-assemble kit



Find out more about this product on page 56.

FRP / POLYESTER RAILING

GEI resin railings protect users, while offering high resistance to chemicals and high temperature.

In order to keep users safe, GEI offers railing profiles made in resin. Such railings are mainly used to protect industrial walkways and are fitted with a hand rail, one or more intermediate rails and vertical posts. Installation by the customer; see the stock programme.



*Conditions according to our recommendations; please enquire. More information on request.

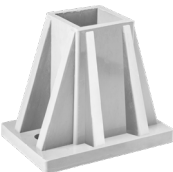
 Colour of assembly: Grey RAL 7035

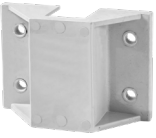
HAND RAIL
L 6000 x W 58 x H 62 mm

UNDER RAIL
L 6000 mm
Inner Ø 22 mm
Outer Ø 32 mm

BASE PANEL
L 6000 x W 100 mm

POST
Length: 6000 mm
Dimensions (W x H x thickness):
50 x 50 x 7.5 mm


FLOOR BASE
Fastened to the floor
L 153 x W 126 x H 133 mm


WALL MOUNT
Fastened to the wall
L 170 x W 60 x H 120 mm


90° BEND FITTING FOR HAND RAIL
L 150 x 150 mm
W 49 x H 40 mm


90° BEND FITTING FOR UNDER RAIL
L 105 x 105 mm
Inner Ø 21.7 - Outer Ø 30 mm


ARTICULATED FITTING FOR HAND RAIL
L 50 x W 50 x H 143 mm


FITTING FOR BASE PANEL
L 100 x W 50 x H 50 -
thickness 6 mm


PLUG FOR HAND RAIL
L 6 x W 60 x H 63 mm


PLUG FOR UNDER RAIL
L 14 mm
Inner Ø 22 - Outer Ø 35 mm



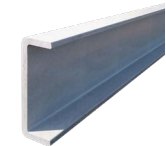
FRP PROFILES



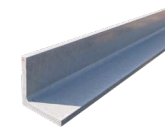
	Dimensions in mm*	Length in mm
H shapes	100 x 100 x 6	6000
	200 x 200 x 12	6000



	Dimensions in mm*	Length in mm
I shapes	100 x 50 x 8	6000
	150 x 75 x 9,5	6000
	150 x 100 x 8	3000
	200 x 100 x 9,5	6000



	Dimensions in mm*	Length in mm
U shapes	100 x 50 x 6,5	6000
	150 x 50 x 6,5	6000
	200 x 60 x 10	6000



	Dimensions in mm*	Length in mm
Standard angles	30 x 30 x 5	3000
	50 x 50 x 6	3000
	75 x 75 x 9	6000
	100 x 100 x 9,5	6000



	Dimensions in mm*	Length in mm
Bevelled angle	25 x 50 x 5	3000



	Dimensions in mm*	Length in mm
Gritted angle	30 x 30 x 3	3000

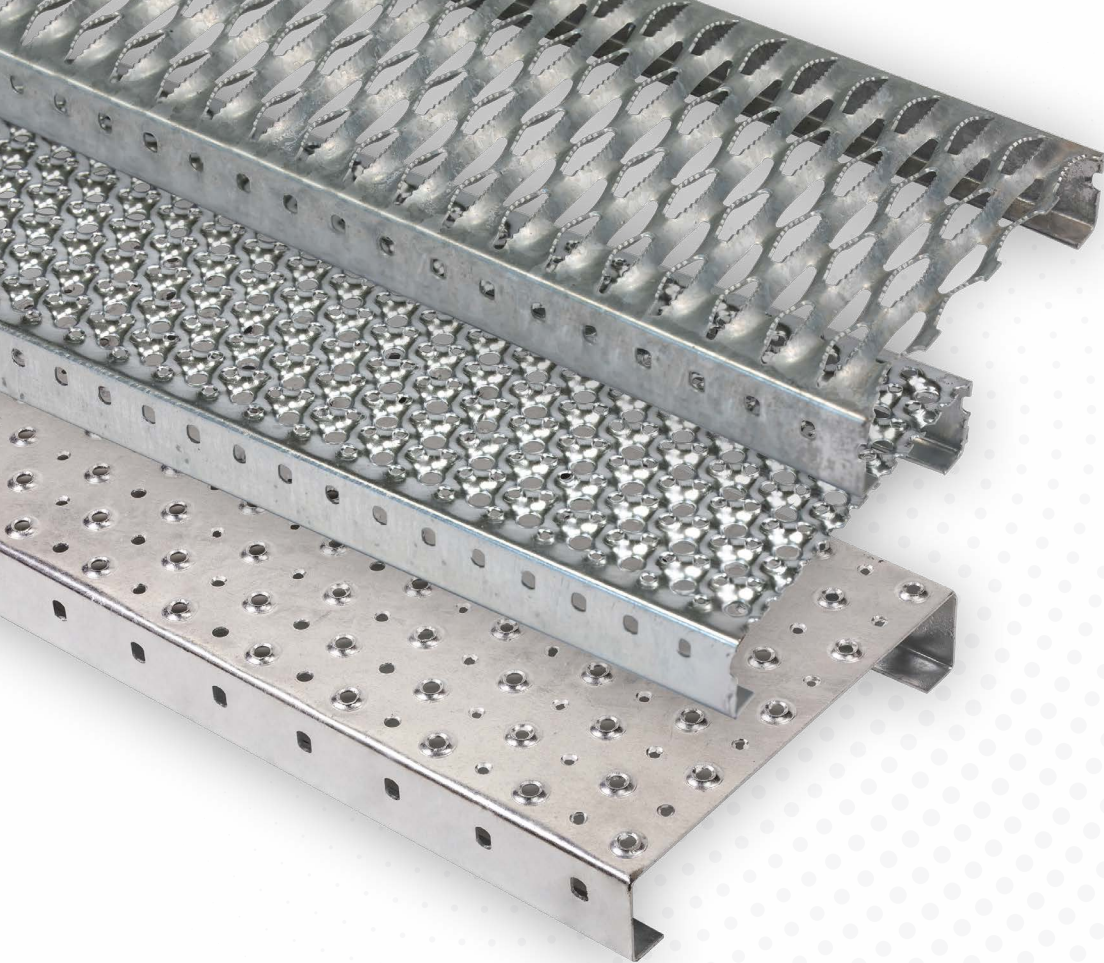


	Dimensions in mm*	Length in mm
Square tubes	50 x 50 x 5	6000
	100 x 100 x 6,5	6000

* Please enquire for exact dimensions.

Find out more about our FRP railing range and accessories in the **specific FRP RAILING booklet**.



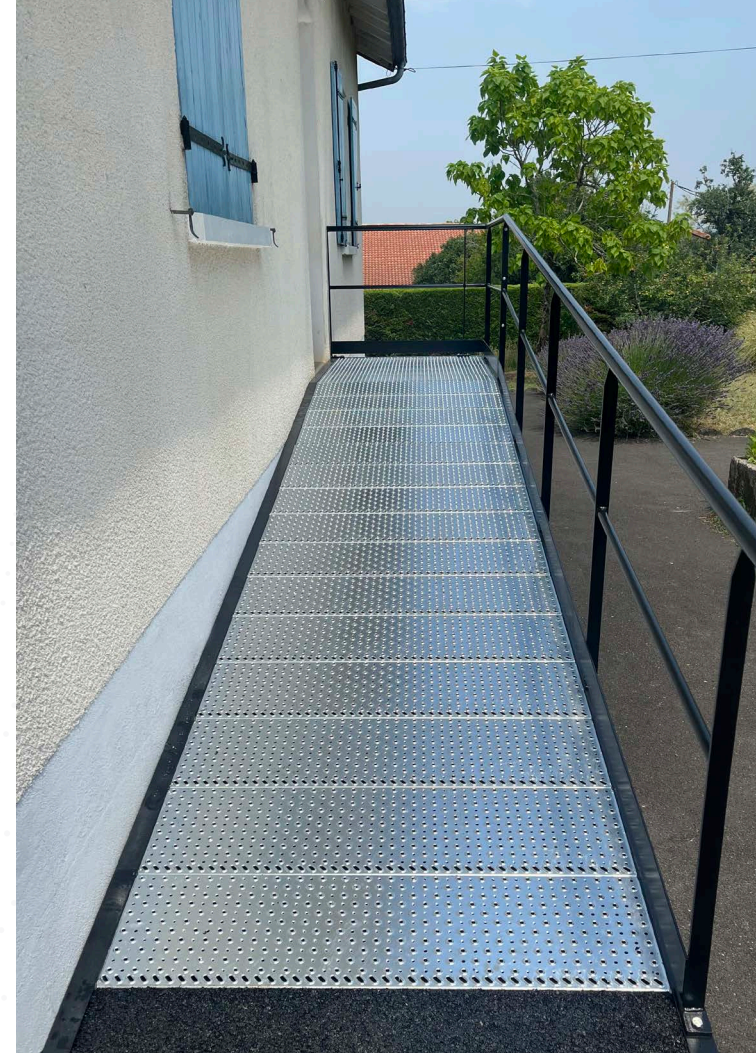
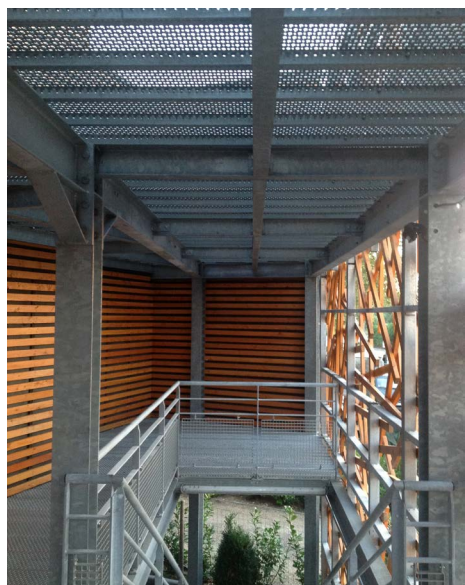


STEEL | STAINLESS STEEL | ALUMINIUM

SAFETY GRIDS

Method of manufacture

Manufactured using techniques that ensure consistent production quality, GEI safety grids meet current safety standards. GEI safety grids are manufactured with tolerances in accordance with RAL-GZ 639 standard.



Whether for functional or decorative use, safety grids are suitable for any environment. Due to the wide range of varieties on offer, they guarantee a solution in terms of their great stability, grip, durability and drainage qualities as well as their use as a means of foot traffic.

MAIN ADVANTAGES

- Safety in public areas.
- Avoids feelings of emptiness.
- Reduces voyeurism.
- Easy to clean and maintain.

MATERIALS

S235JR steel as per EN 10025 standards.
304 (1.4301) stainless steel.
AlMg3 aluminium.

SURFACE FINISHES

Raw or galvanized steel.
Raw or pickled stainless steel.
Raw, pickled or anodised aluminium.

THICKNESSES

Steel: 2 mm / 2.5 mm / 3 mm.
Stainless steel: 2 mm / 2.5 mm / 3 mm.
Aluminium: 2 mm / 2.5 mm / 3 mm.

HEIGHTS

6 options depending on model: 20 / 30 / 40 / 50 / 75 / 100 mm.
Other options on request.

LENGTHS

Up to 6000 mm depending on model.

NEW

CUT TO SIZE OF OUR STEEL SAFETY GRIDS, EXPRESS DELIVERY

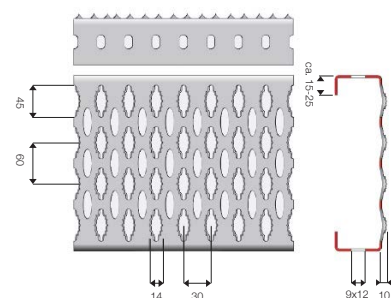


A RANGE OF 7 MODELS AVAILABLE:



PS-CRANT

PS-CRANT safety grid stands out for its anti-slip qualities thanks to its serrated surface. It is very well suited for the automotive and industrial construction sectors.



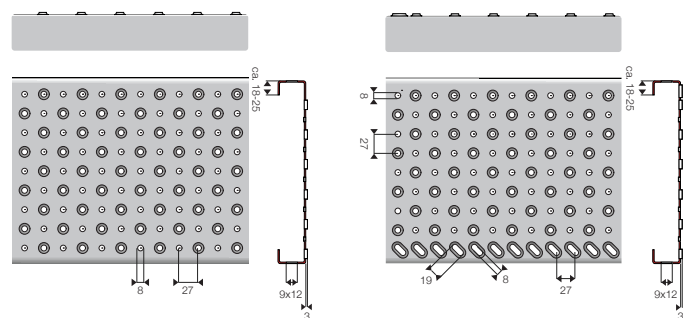
Standard widths:

120 mm / 180 mm / 240 mm / 300 mm / 360 mm / 420 mm / 480 mm.



PS-PMR

With its 8 mm diameter perforations, the PS-PMR safety grid is specially designed for access by people with reduced mobility (PRM). In addition to the dimensions, numerous options are available depending on the configuration of the installation site.



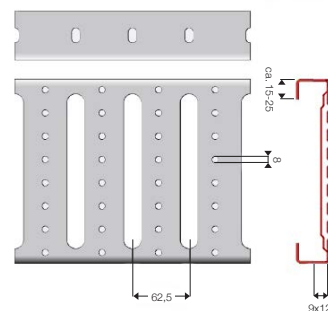
Standard widths:

150 mm / 200 mm / 250 mm / 300 mm / 330 mm



PS-OVA

PS-OVA safety grid guarantees high load-bearing capacity. It is often used to cover gutters and as facade cladding.



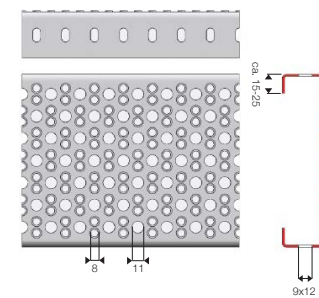
Standard widths:

150 mm / 200 mm / 250 mm / 300 mm.



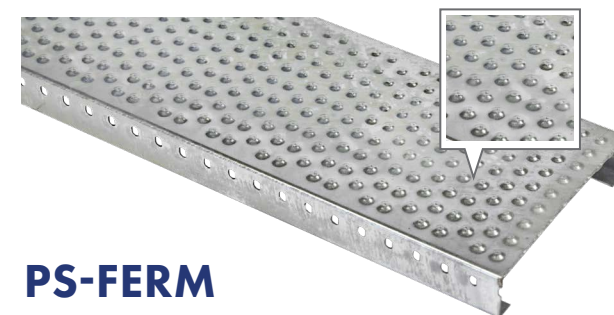
PS-PERF

The PS-PERF safety grid has large, downward-pressed perforations and allows liquid to drain through small perforations.



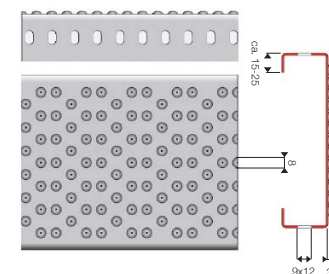
Standard widths:

150 mm / 200 mm / 250 mm / 300 mm.



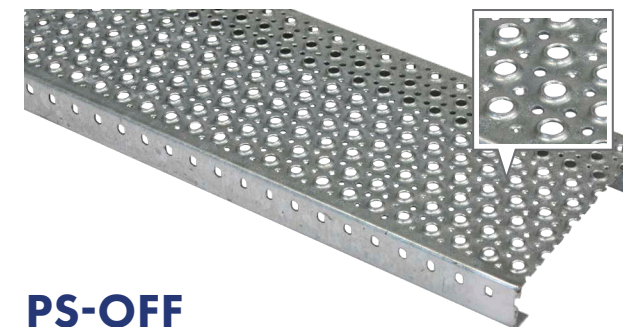
PS-FERM

The PS-FERM safety grid is used in areas where a closed surface is required and where traffic safety must be guaranteed (non-perforated product).



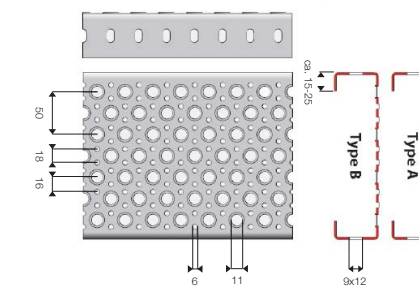
Standard widths:

150 mm / 200 mm / 300 mm.



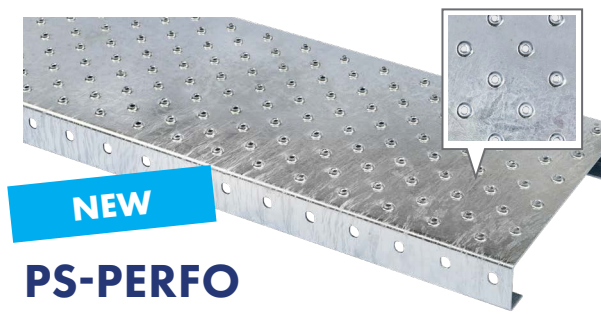
PS-OFF

The PS-OFF safety grid has the same advantages as the PS-PERF safety grid. It offers excellent grip thanks to its large, upward-pressed perforations and allows liquids to drain through small perforations.



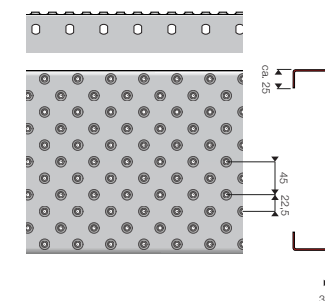
Standard widths:

150 mm / 200 mm / 250 mm / 300 mm.



PS-PERFO

The PS-PERFO safety grid is characterised by its practically closed surface, which prevents small objects from falling and guarantees good grip for indoor use.

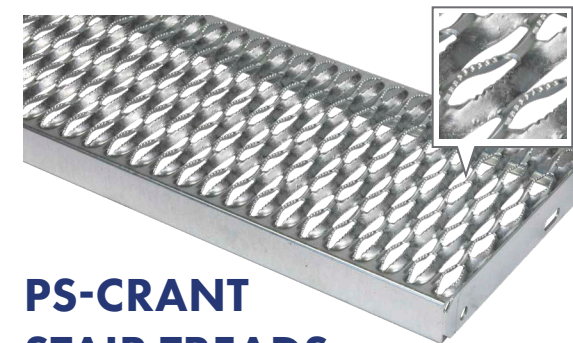
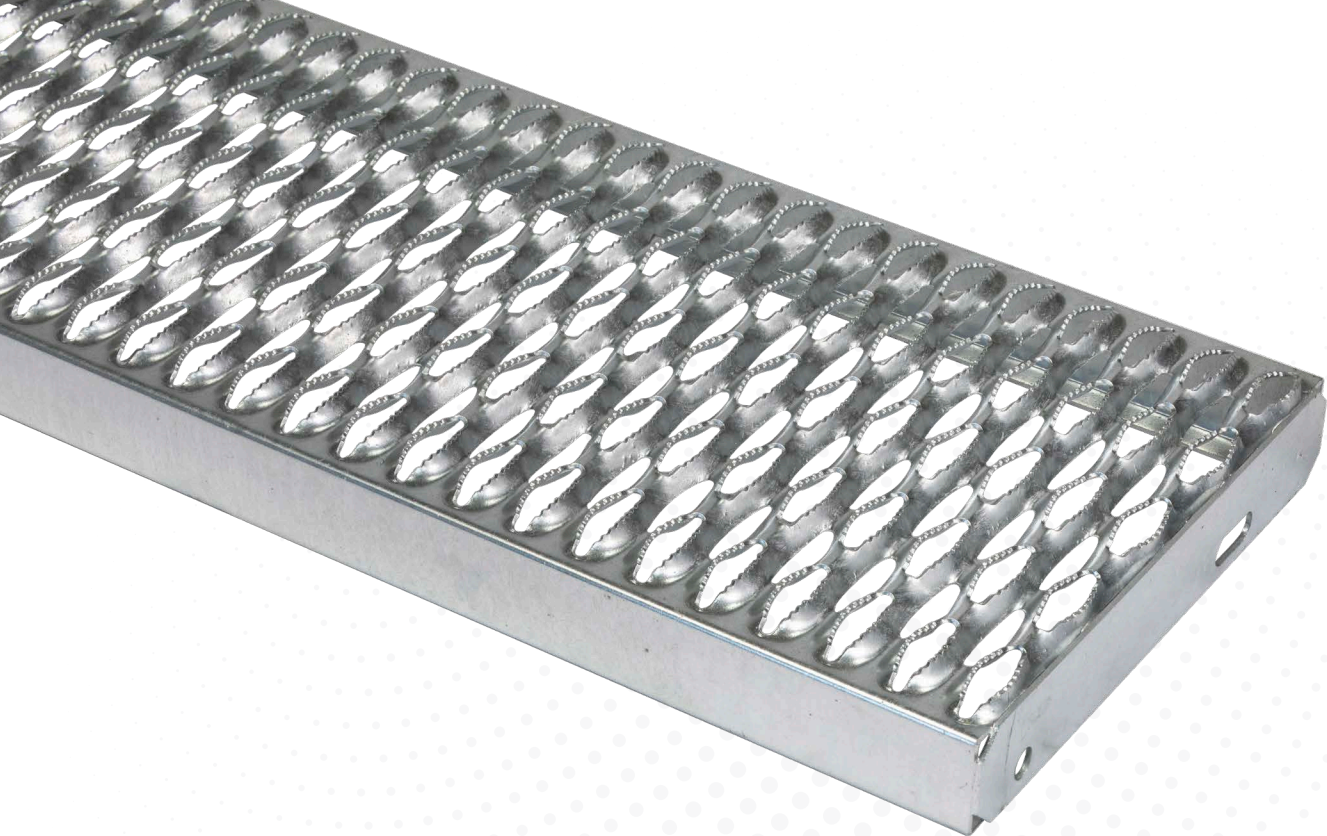


Standard widths:

150 mm / 200 mm / 250 mm / 300 mm.



STOCK PROGRAMME
TECHNICAL SPECIFICATIONS
FASTENINGS AND ACCESSORIES
PRM SOLUTIONS
ADDITIONAL PRODUCTS
SPIRAL STAIRCASES
STAIR TREADS
SAFETY GRIDS
FRP
SHELVING
FENCING AND RAILING
PRESS-WELDED
PRESS-LOCKED



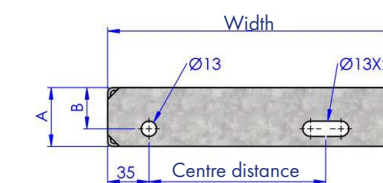
PS-CRANT STAIR TREADS



PS-PERF STAIR TREADS

Models and sizes in stock: PS-CRANT and PS-PERF in 800 x 300 mm, 1000 x 300 mm and 1200 x 300 mm. Height: 50 mm. Thickness: 2 mm.
For other models and sizes, please contact us.

Tread width (in mm)	150 to 159	160 to 169	170 to 179	180 to 189	190 to 199	200 to 249	250 to 279	280 to 309	310 to 330
Centre distance (in mm)	70	80	90	100	110	120	150	180	210



For HT 40 steps: A = 40 | B = 25 • For HT 50 steps: A = 50 | B = 35

For HT 75 steps: A = 75 | B = 60

Other tread side drilling dimensions on request.

PS-PMR STAIR TREADS

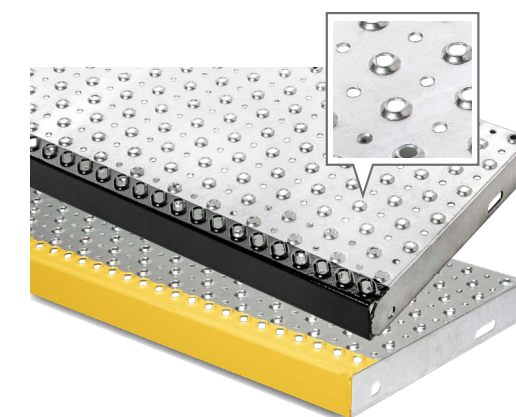
In galvanized steel. Dimensions in stock:
800 x 330 mm, 900 x 330 mm, 1000 x 300 mm, 1000 x 330 mm,
1200 x 330 mm, 1400 x 330 mm and 1800 x 330 mm.

Heights: 50, 75 and 100 mm.

Thicknesses: 2 and 2.5 mm.

Optional: visual contrast (paint) available.

Different RAL colours are available on special manufacture.
Please contact us for further information.

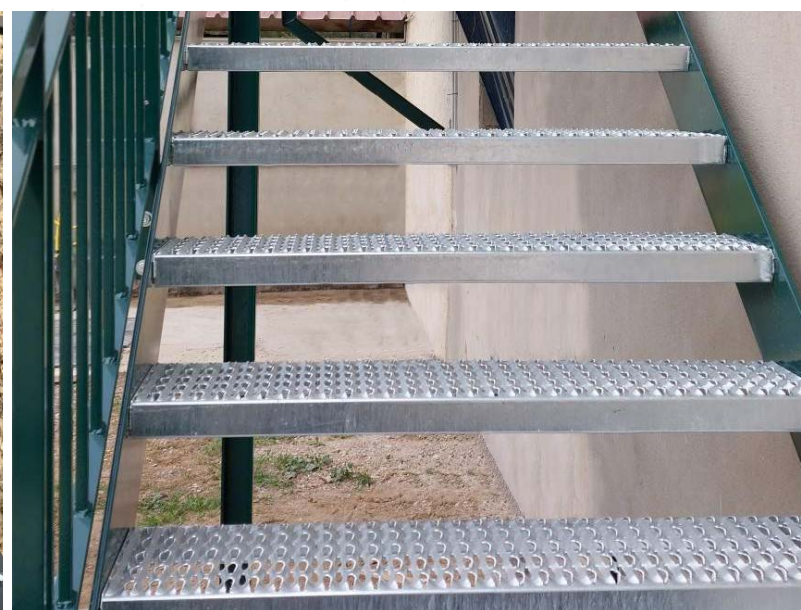
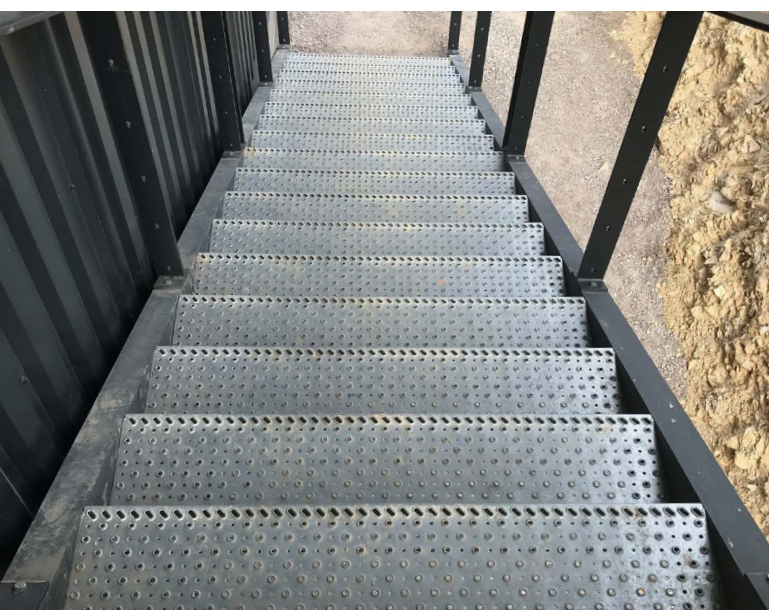


STEEL | STAINLESS STEEL | ALUMINIUM

SAFETY GRID STAIR TREADS

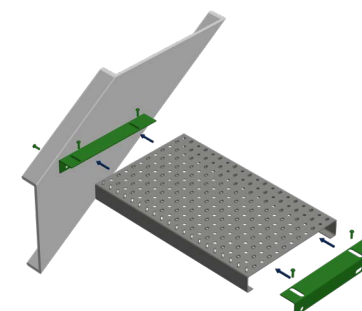
Method of manufacture

Manufactured using techniques that ensure consistent quality, GEI safety grid stair treads comply with current safety standards and are manufactured with tolerances in accordance with RAL-GZ 639 standard.



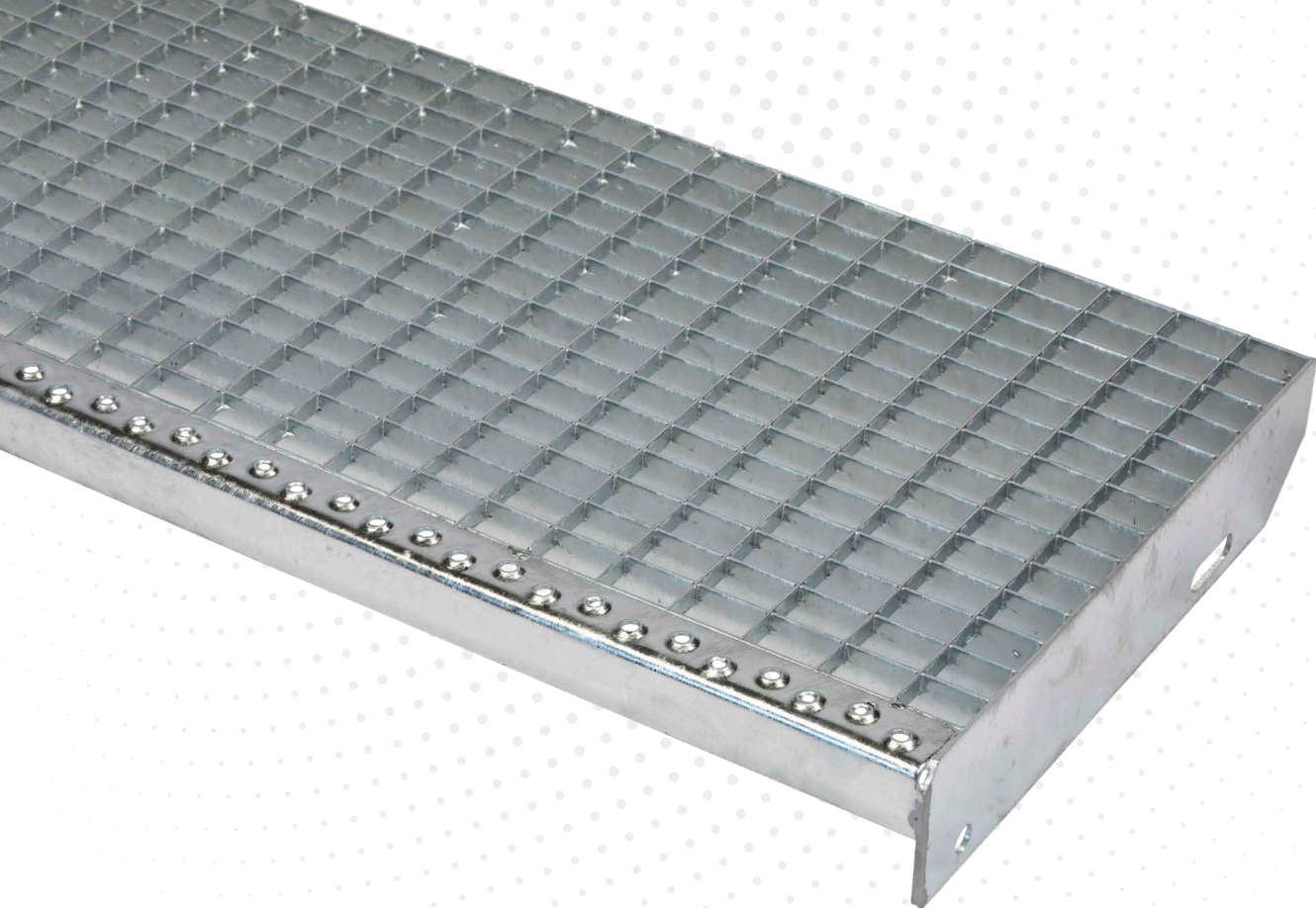
NEW

MANUFACTURE OF STAIRS FOR PEOPLE
WITH REDUCED MOBILITY USING OUR
PS-PMR SAFETY GRIDS IN STOCK AND
OUR PS-PMR SUPPORTS



POSSIBILITY OF EXPRESS DELIVERY:
Contact our sales department
(+352) 26 29 66 51 or gei@geisa.lu





PRESS-LOCKED | PRESS-WELDED | FRP

STAIR TREADS

Method of manufacture

GEI stair treads are made from press-locked, press-welded or FRP gratings, with anti-slip nose and side or support panels with standard or made-to-measure holes, depending on your requirements. The anti-slip nose is welded to the side panel and to the first bearing bar, making the step rigid. The mesh size and height of the support bars are defined according to the

effective width of the step and the load to be supported (number of passages). Where surfaces may be slippery, the BB and TB of pressed stair treads and the BB of press-locked stair treads can be serrated for maximum anti-slip safety. The manufacturing process for press-locked and press-welded steps is identical to that for gratings.

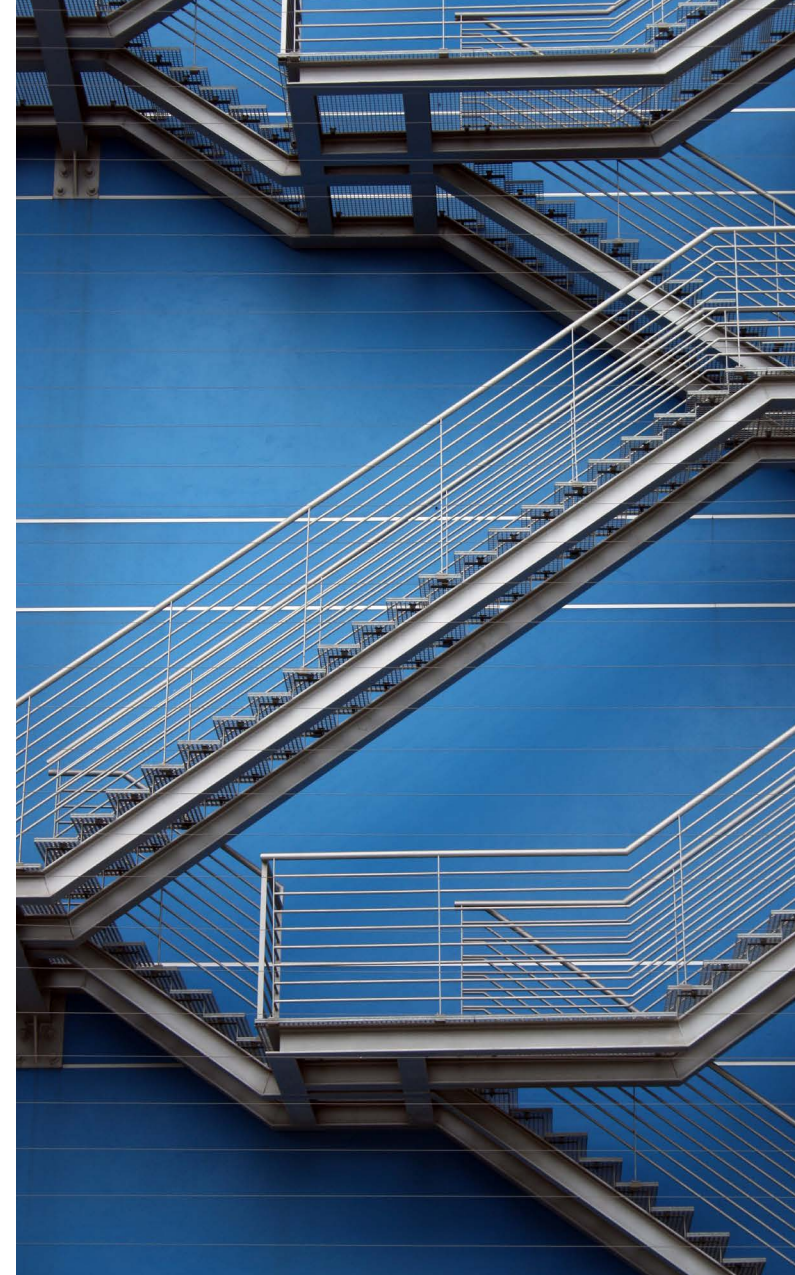
TREAD TYPES



Treads for straight stair



Treads for curved stair

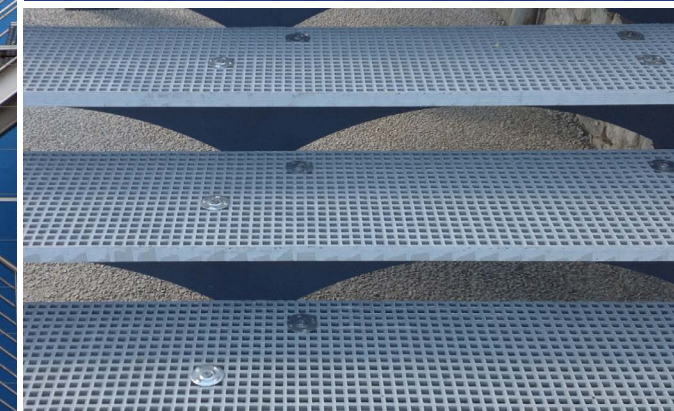
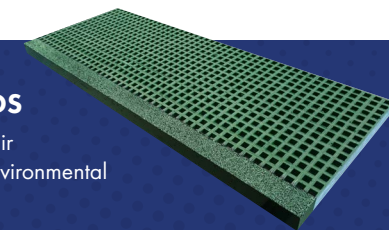


Whether in an industrial environment, with its safety mesh and serrations, or in a public environment, with its aesthetics and finishes, stair treads can be adapted to suit all your projects.

GEI is aware that stair treads must be as safe as possible, and offers you a complete range of standard and made-to-measure stair treads that comply with the various safety standards in force.

FRP STAIR TREADS

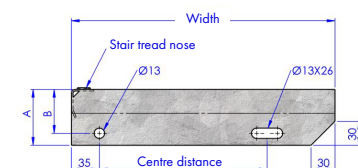
GEI also offers FRP stair treads to meet your environmental safety requirements.



DRILL HOLE CENTRE DISTANCE (PRESS-LOCKED AND PRESS-WELDED STEPS)

Depending on your specifications, we offer a wide range of drilling centre distances (itches) which suit any setup.

Stair tread width (in mm)	150 to 159	160 to 169	170 to 179	180 to 189	190 to 199	200 to 249	250 to 279	280 to 309	310 to 339	340 to 369
Centre distance (in mm)	70	80	90	100	110	120	150	180	210	240



For steps in BB 25, 30, 35, 40: A = 70 | B = 55 • For steps in BB 50: A = 80 | B = 65

For BB 60 steps: A = 90 | B = 75

Other tread side drilling dimensions on request.

MATERIALS

S235JR steel to EN 10025 standards.

Stainless steel 304 (1.4301), 316L (1.4404) or 316Ti (1.4571).

Aluminium AlMg3.

FRP.

FINISHES

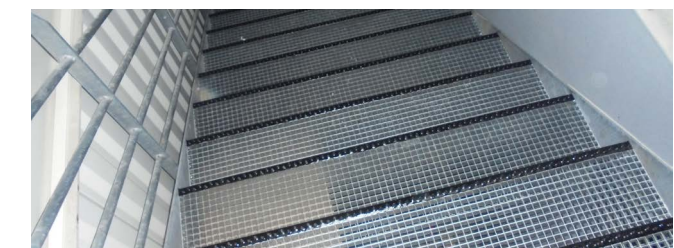
Possibility of single or double serrations on bearing bars and/or transverse bars for optimum anti-slip safety.

Possibility of adding a contrasting nosing for PRM.

FINISHED PRODUCTS

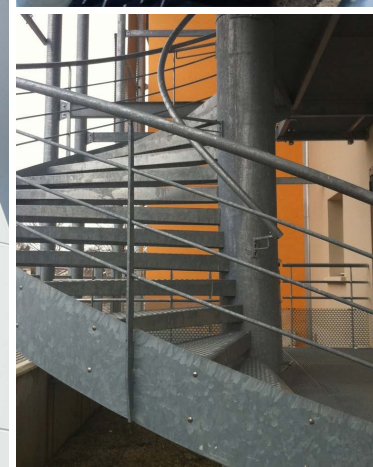
Galvanized stair treads, FRP stair treads and supports for FRP stair treads in stainless steel available from stock. Stair nosing can also be supplied alone.

Made-to-measure products can be manufactured according to the dimensions and/or drawings supplied by the customer.



CUSTOM-MADE

STRAIGHT AND SPIRAL STAIRCASES

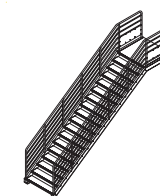


MAIN ADVANTAGES

Our many years of experience have allowed us to develop stairs with certain advantages:

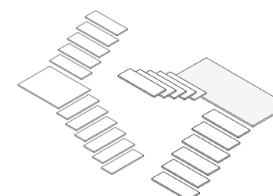
- Reduction of time needed for assembly.
- Custom-made according to your needs.

Straight staircases:



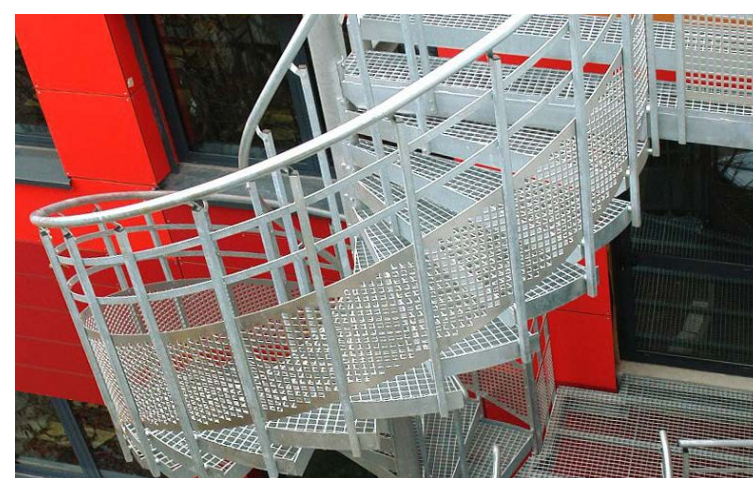
STRAIGHT

One flight, choice of railings.



MULTI-FLIGHTS

1/4 turn or 2/4 turn with landing.
Any project to your specifications.



Recommended for modern homes, spiral and straight staircases also provide a solution for optimising space.

GEI offers a range of spiral and straight staircases specially designed for use in industrial, public and tertiary sectors. Prefabricated and ready to install, they adapt to all structures and all types of environment.

Spiral staircases:



GEI INDUS

Fitted with handrail, bottom rail and plinth.



GEI LINÉA

With one handrail and five under rails.



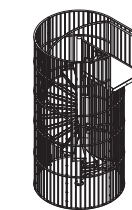
GEI BARO

With vertical bars.



GEI STAIR S

With vertical bars.



GEI PROTECT

Perforated cage or cage with bars.



GEI GRAFIC

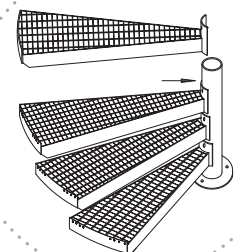
Fitted with one handrail and one perforated aluminium cap.

Method of manufacture

The treads are made from press-welded grating or plain solid, perforated or treaded sheet metal. Two types of assembly are available for your spiral staircase.



Standard load

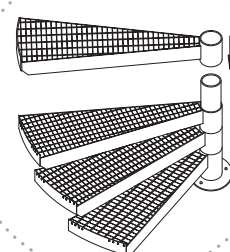


BY SCREWING

The steps are screwed onto the shaft.
The structure supports a standard load.



Heavy load



BY STACKING

The steps are made up of a sleeve, stacked one on top of the other around a mast. The structure supports heavy loads.

PRESS-LOCKED
PRESS-WELDED
FENCING AND RAILING
SHELVING
FRP
SAFETY GRIDS
STAIR TREADS
SPIRAL STAIRCASES
ADDITIONAL PRODUCTS
PRM SOLUTIONS
FASTENINGS AND ACCESSORIES
TECHNICAL SPECIFICATIONS
STOCK PROGRAMME

General technical characteristics

TYPE OF TREAD

GEI offers several types of tread to meet technical or aesthetic objectives in the building or industrial sectors.



PRESS-WELDED GRATING
Possibility in press-locked
30 x 30 mm - 30 x 19 mm - 19 x 19 mm



TREADED SHEET METAL



PERFORATED SHEET METAL

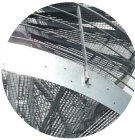


PLAIN SOLID SHEET METAL

MATERIALS

- Raw steel
- Galvanized steel
- Galvanized steel + RAL powder coating
- Stainless steel

AVAILABLE OPTIONS



External sill on spiral



Non-slip stair nosing



Lower handrail on spiral shaft



Special worksite adaptation

FOCUS ON STAIRCASES FOR PEOPLE WITH REDUCED MOBILITY (PRM)

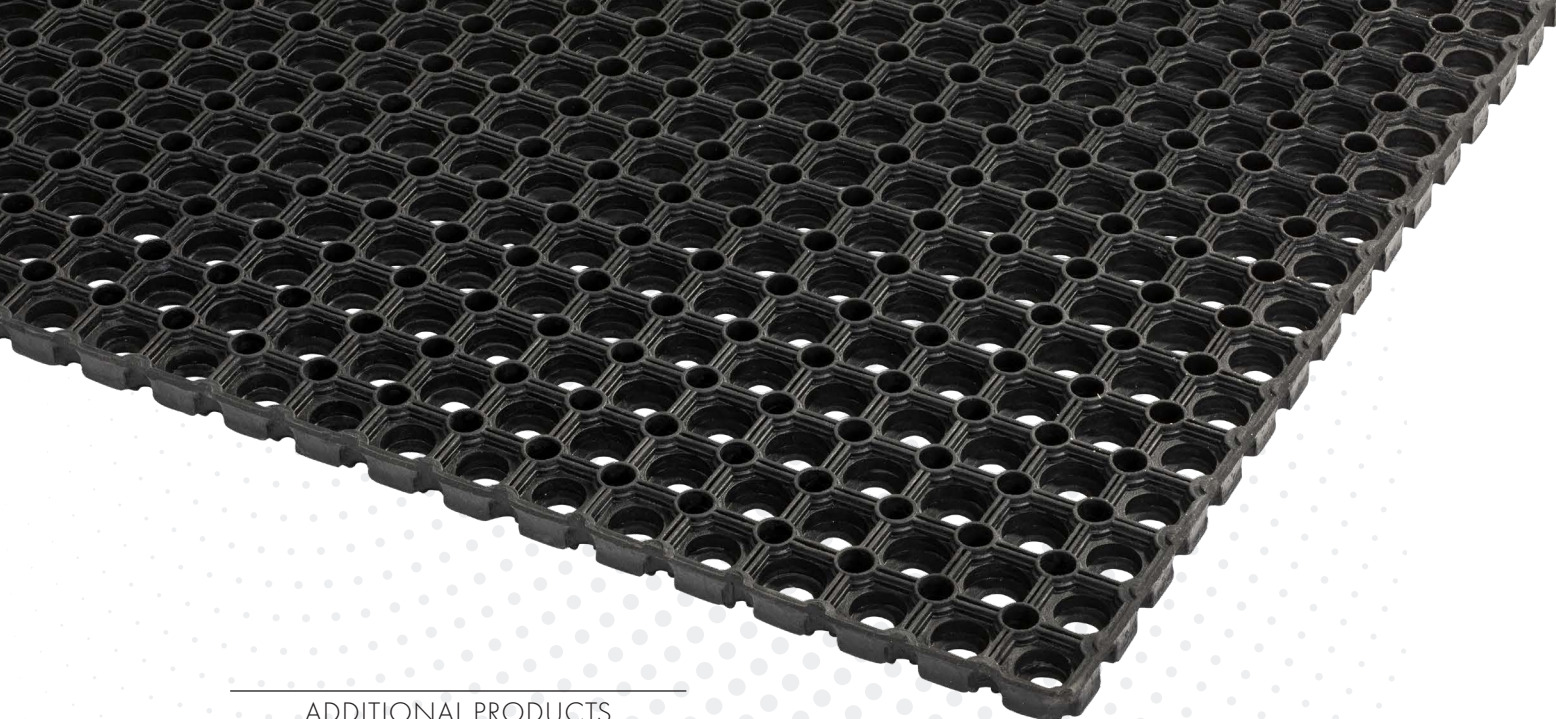
- 1200 mm minimum clearance between handrails.
- Staircase Ø 3700 mm minimum.
- Maximum step height: 160 mm.
- Minimum tread of 280 mm at 600 mm from the inside handrail.
- 19 x 19 mesh.
- Minimum step overlap of 50 mm.
- First and last tread contrasted.
- Contrasted stair nosings.
- Podotactile tile on landing.

POSSIBLE USES

Indoors or outdoors.

		 Private			 Company		 Industry	 Public building	 Emergency	 PRM
		Living	Renting	Public reception	Common	Evacuation	Machinery & technical area	Public reception	Public reception	Public reception
Spiral staircase	GEI Indus	✗	✗	✗	✗	✗	✓	✗	✗	✗
	GEI Linéa	✓	✓	✓	✓	✓	✓	✓	✓	✓
	GEI Baro	✓	✓	✓	✓	✓	✓	✓	✓	✓
	GEI Stair S	✓	✓	✓	✓	✓	✓	✓	✓	✓
	GEI Protect	✓	✓	✓	✓	✓	✓	✓	✓	✓
	GEI Grafic	✓	✓	✓	✓	✓	✓	✓	✓	✓
Straight staircase	GEI Linéa	✓	✓	✓	✓	✓	✓	✓	✓	✓
	GEI Indus	✗	✗	✗	✗	✗	✓	✗	✗	✗
	GEI Baro	✓	✓	✓	✓	✓	✓	✓	✓	✓
	GEI Stair S	✓	✓	✓	✓	✓	✓	✓	✓	✓
Type of tread	Press-welded grating 30x30	✓	✓	✓	✓	✓	✓	✓	✓	✗
	Press-welded grating 30x19	✓	✓	✓	✓	✓	✓	✓	✓	✗
	Press-welded grating 19x19	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Treaded sheet metal	✓	✓	✓	✓	✓	✓	✓	✓	✗
	Perforated sheet metal	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Plain solid sheet metal	✓	✓	✗	✗	✗	✗	✗	✗	✗





ADDITIONAL PRODUCTS

RUBBER GRATINGS

General technical characteristics

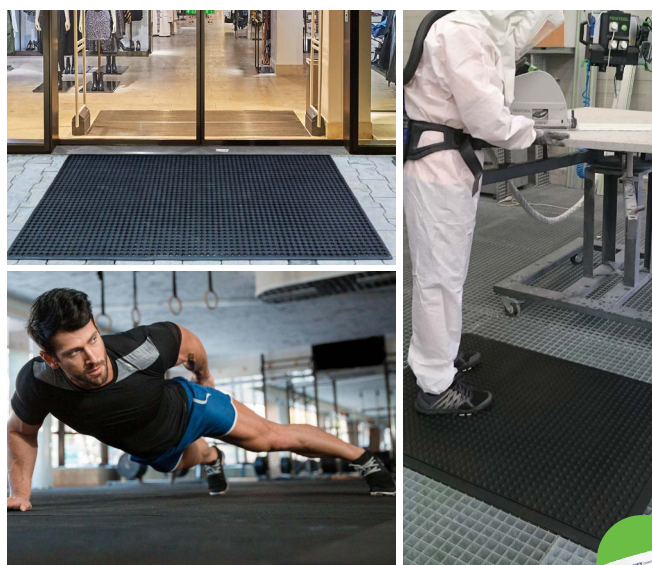
GEI rubber gratings are designed to precise specifications.

STANDARD PANEL DIMENSIONS

According to model.

FINISHES

Bevelled edges.
Straight finish.



Discover our full range of rubber gratings, mats and tiles in our **specific RUBBER brochure**.



GEI RUBBER

COLOURS

Black.
Red available on request.

FINISHED PRODUCTS

Mats and floor coverings available from stock.
Possibility of customised manufacture according to dimensions and/or supplied by the customer.

ADVANTAGES



Recyclable



Environmentally friendly



Non-slip



Comfortable



Oil-resistant



Water resistant



U.V. resistant

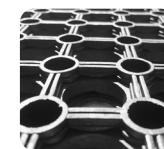


PRM-compliant

ALL OUR RUBBER GRATINGS ARE RECYCLABLE AND ENVIRONMENTALLY FRIENDLY, AND COMPLY WITH REACH REGULATIONS DESIGNED TO PROTECT HUMAN HEALTH AND THE ENVIRONMENT FROM THE RISKS ASSOCIATED WITH CHEMICAL SUBSTANCES.

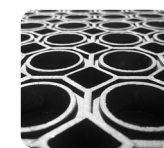


GEI offers a complete range of rubber gratings, mats and tiles to suit all your needs:



TOP

This rubber grating is the most commonly used in many applications.



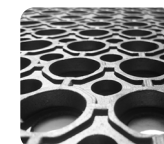
OCTA

It is heavier and is generally used in ski resorts and in the industrial sector.



ACCESS

With perforations less than 2 cm in diameter, it complies with the PMR standard.



HONEY COMFORT

As well as providing a cushioning effect, it has an anti-slip surface.



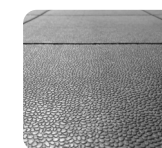
SLIC COMFORT

Mainly used in wet working conditions (work areas, service stations, etc.).



BUB COMFORT

It has a unique design thanks to its domed top surface, which makes it very comfortable to use.



SPORTS

Perfect for gyms, sports halls or playgrounds as it prevents falls and provides ideal comfort.



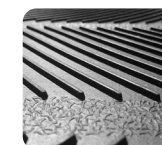
BARN

Mainly intended for stables and cowsheds to improve the comfort and living conditions of animals.



LOB

Designed to be laid in front of building entrances, this rubber mat prevents any danger of slipping.



CLEAN

Protects floors from dirt, grime and rubbish.

FIELDS OF APPLICATION

Often used for walking over difficult terrain, for prolonged standing on production lines or for warehousing, our rubber gratings are compatible with a high frequency of use and are UV-treated for use both indoors and outdoors.

- Industrial sector
- PRM zones
- Ski resorts
- Building entrances
- Walkways
- Access path
- Production line
- Workshop
- Stairs
- Livestock sheds
- Stables
- Gymnasium
- Sports hall
- Play area
- ...

ADDITIONAL PRODUCTS

LADDER RUNGS

Ladder rungs are used in slippery environments requiring optimum safety.

GEI has developed two products for this type of use.

Materials: raw or galvanized steel, stainless steel and aluminium.

Perforations: 12 mm diameter towards the top.

Can be made to measure.

Rung with 1 row of perforations

Standard length: 2000 mm.
Width: 25 mm.
Height: 39 mm.
Thickness: 2 mm.

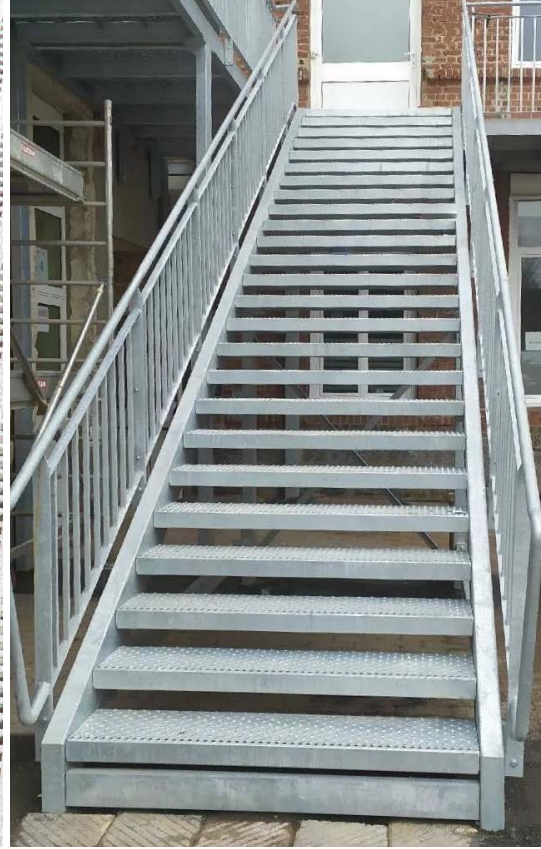
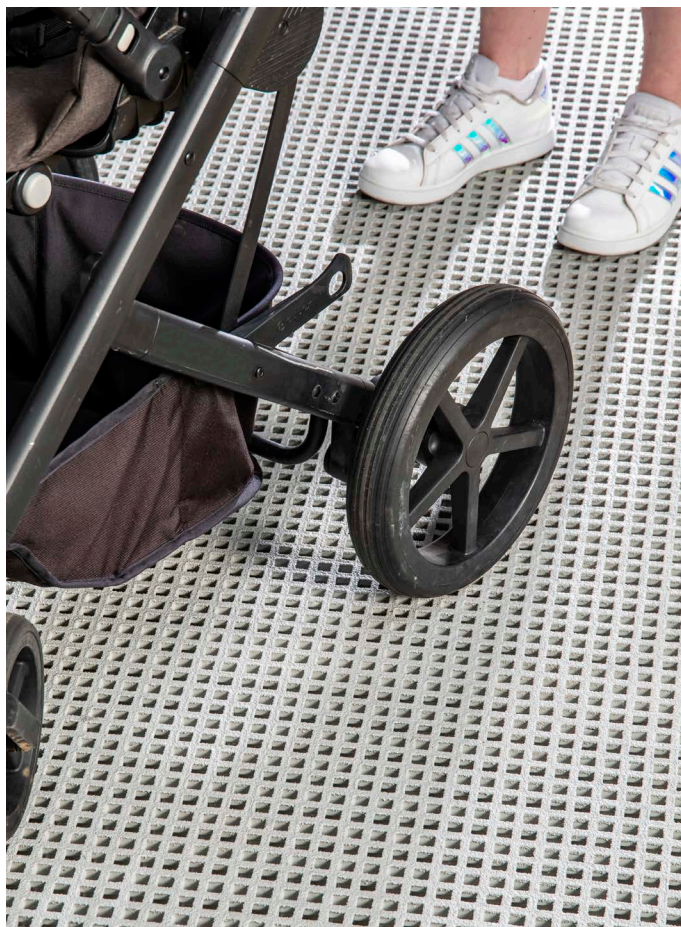
Rung with 2 rows of perforations

Standard length: 2000 mm.
Width: 50 mm.
Height: 39 mm.
Thickness: 2 mm.



PRM SOLUTIONS

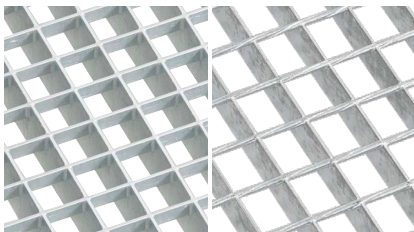
Making buildings accessible to people with reduced mobility (PRM) is a real social challenge.



PRM SOLUTIONS

GRATINGS WITH 19 x 19 SECURITY MESH

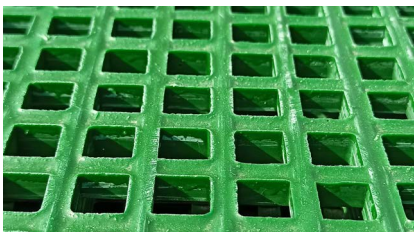
We offer a range of materials that are impervious to the 20 mm ball and comply with the PRM standard, thanks to our steel, stainless steel, aluminium, rubber and polyester gratings in 19 x 19 mesh.



PRM press-locked and press-welded gratings

Available in steel, stainless steel and aluminium for press-locked gratings and in steel for press-welded gratings.

Tolerances in accordance with the RAL-GZ 638 standard.



PRM FRP grating

Made from fiberglass-reinforced resin, it offers high mechanical and chemical resistance.

R13 concave or gritted surface, it is available in a range of different colours: green, beige, grey, orange or anthracite.



PRM rubber gratings

GEI ACCESS rubber gratings, specially developed for the PRM standard, are non-slip, recyclable, environmentally friendly and water-resistant. With perforations less than 2 cm in diameter, a thin surface and bevelled edges, it provides easy access for people with reduced mobility.

SOLUTIONS FROM GEI



Thanks to our standard and customised solutions, you can easily solve accessibility issues for people with reduced mobility:

- Grating with 19 x 19 safety mesh
- PRM rubber mats
- PRM door sill
- PRM press-locked and press-welded gratings
- PRM safety grids
- PRM FRP gratings
- PRM staircases and treads



PRM SOLUTIONS

PRM DOOR SILL GRATING

Patented by GEI, this door sill is ready to install. It is easy to cut to length on site. The surface of the grating is partly full to prevent the passage of light when the shutter is closed. To make installation easier, a bevelled angle is integrated into the 19 x 19 grating along one of the lengths.

Find out more about this product in the **special PRM DOOR SILL leaflet**.

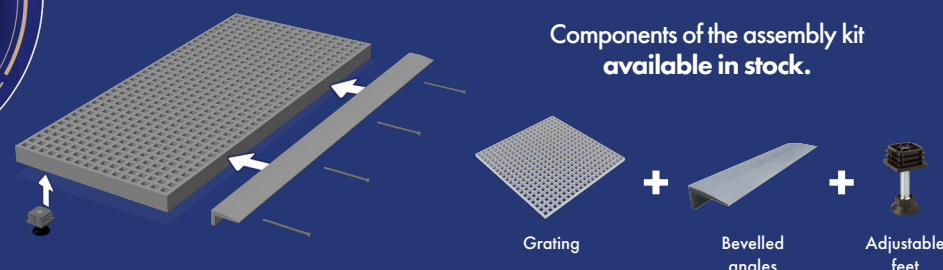


MAIN ADVANTAGES

- Fire resistant
- Lightweight
- UV resistant
- Easy cutting on the site
- Integrated angle
- Solid surface that does not let through light
- Different dimensions available in stock

Also available in ready-to-assemble kit

Components of the assembly kit available in stock.



PRM specific surface pattern

Possible options:

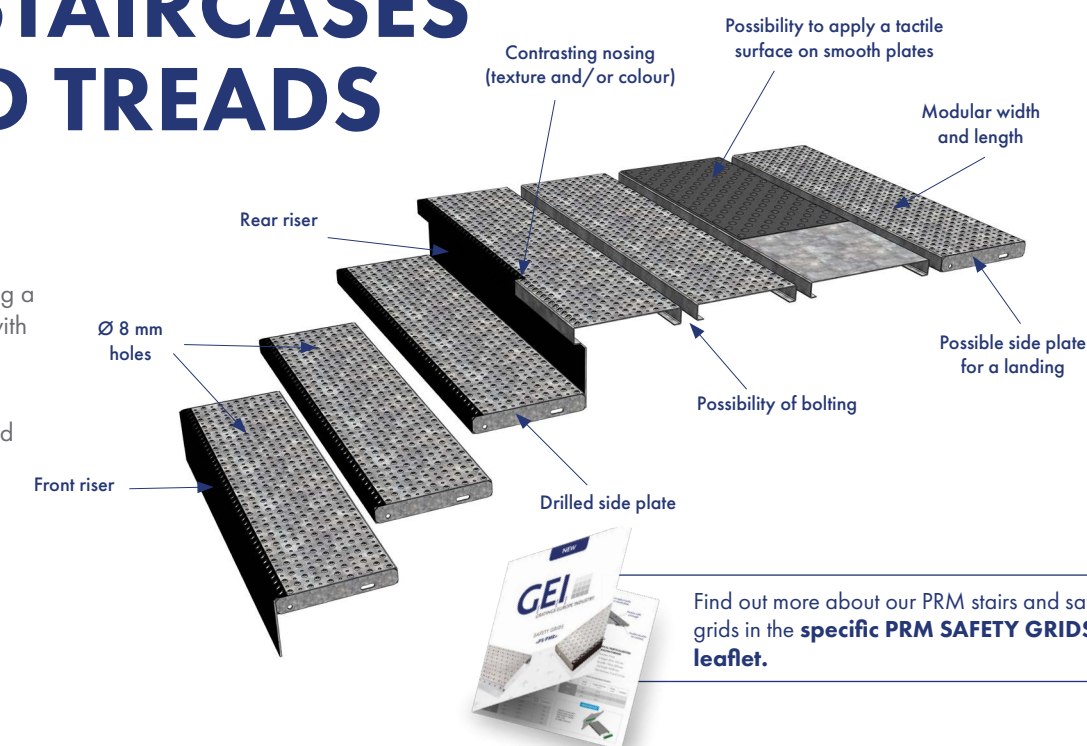
- Raw or galvanized grating.
- Grid with contrasting stair nosing: stair nosing can be painted black, red or yellow. Other RAL colours are available on special order. Please contact us for further information.
- Contrasting riser (painted).
- Side panel drilling...

PRM SOLUTIONS

PRM STAIRCASES AND TREADS

Made-to-measure stair treads, with the option of installing a tactile tile, or creating a contrasting nosing with texture or colour...

Available in press-locked, press-welded and safety grids.



Find out more about our PRM stairs and safety grids in the **specific PRM SAFETY GRIDS leaflet**.

PRM SOLUTIONS

PRM SAFETY GRIDS

With its 8 mm diameter perforations, the PS-PMR safety grid is specially designed for access by people with reduced mobility (PRM).

Made-to-measure production possible, in addition to the dimensions, numerous options are available depending on the configuration of the installation site.



PRESS-LOCKED

PRESS-WELDED

FENCING AND RAILING

SHELVING

FRP

SAFETY GRIDS

STAIR TREADS

SPIRAL STAIRCASES

ADDITIONAL PRODUCTS

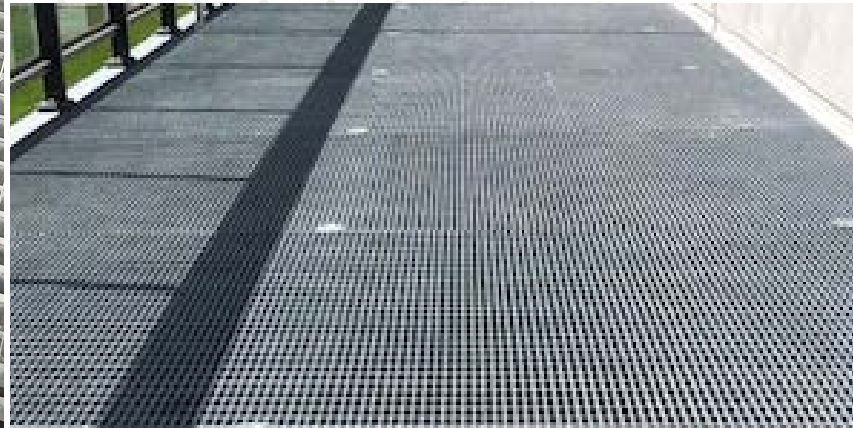
PRM SOLUTIONS

FASTENINGS AND ACCESSORIES

TECHNICAL SPECIFICATIONS

STOCK PROGRAMME

FASTENINGS AND ACCESSORIES



ADJUSTABLE FEET

In order to adjust the height of steel (19 x 19 or 30 x 30 mesh) and polyester (19 x 19 or 38 x 38 mesh) gratings on small surfaces requiring a low load-bearing capacity (gutters, door thresholds), GEI offers adjustable feet.

ADJUSTABLE FOOT FOR STEEL GRATINGS

The GEI adjustable foot for steel gratings consists of 2 parts:

- 1 sleeve
- 1 actuator

Technical specifications:
(19 x 19 mesh)

- Insert dimensions: 25 x 25 mm
- Thickness of insert: 20 mm.
- Height of foot: 40 or 70 mm.



Technical specifications:
(30 x 30 mesh)

- Dimensions of insert: 35 x 35 mm
- Thickness of insert: 20 mm.
- Height of foot: 40 or 70 mm.

ADJUSTABLE FOOT FOR FRP GRATINGS

The GEI adjustable foot for FRP gratings consists of 2 components:

- 1 sleeve
- 1 actuator

Technical specifications:
(Mesh 19 x 19 AND 38 x 38)

- Dimension of insert: 35 x 35 mm
- Thickness of insert: 20 mm.
- Height of foot: 40 or 70 mm.



ADJUSTABLE PADS

Used for raised access floors in the chemical, mechanical, offshore, metallurgy and sewage industries, these blocks provide safety and stability.

Standard components:

- Mount head
- Connecting sleeve (extension)
- Pad base



Advantages of pads:

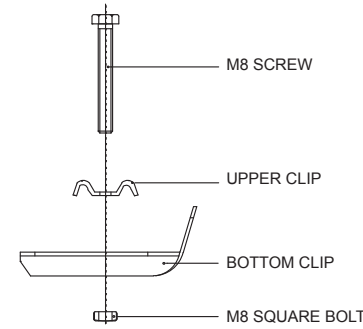
- Adjustable up to 955 mm
- UV-resistant
- Excellent resistance to water
- Resistant to loads of up to 1000 kg/pad
- Slope corrector available on request.



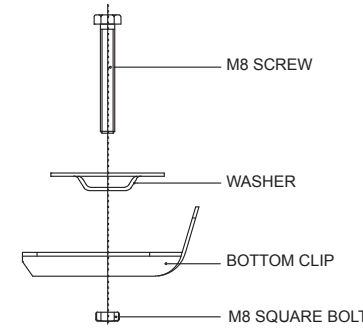
FASTENING CLIPS

GEI fasteners enable gratings to be quickly fixed to the metal structure. The choice of fastener depends on a number of criteria: the type of grating, the mesh, the height and thickness of the bearing bars. GEI offers a wide range of fasteners to meet your every need.

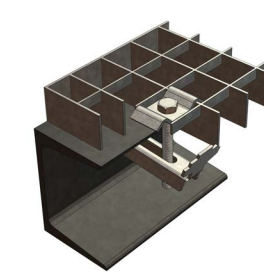
FASTENING WITH UPPER CLIP



FASTENING WITH WASHER



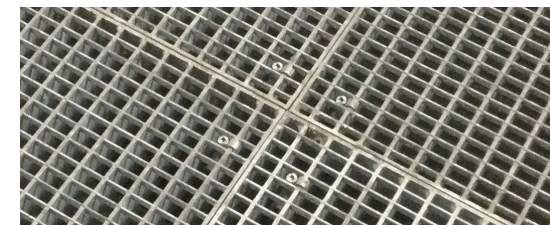
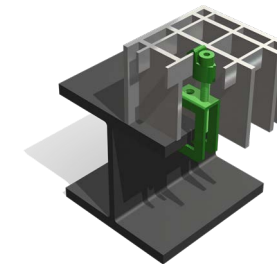
INSTALLATION PRINCIPLE



HEAVY LOAD FASTENING SYSTEM

The heavy-load fastener is specially used for securing heavy gratings designed to support heavy loads. This fastener absorbs some of the vibrations. It is composed of 3 parts:

- 1 universal clip
- 1 screw
- 1 specific bottom clip



STANDARD FASTENING SYSTEM

Standard (or single) fastening system is composed of 4 parts:

- 1 washer or upper clip
- 1 screw
- 1 bottom clip (or shoe)
- 1 square bolt

Finishes available:

- Galvanized single fastening system used to secure raw steel or galvanized gratings.
- Stainless steel single fastening system used to secure stainless steel and aluminium gratings.

UPPER CLIP AND SELF-POSTING SCREW (available individually)



DOUBLE FASTENING SYSTEM

GEI double fastening system allows two gratings to be fixed together and is composed of 4 different parts:

- 2 washers or upper clips
- 2 screws
- 2 square bolts
- 1 bottom clip (or shoe)

Finishes available:

- Galvanized double fastening system used to secure raw steel or galvanized gratings.
- Stainless steel double fastening system used to secure stainless steel and aluminium gratings.



UNIVERSAL FASTENING SYSTEM

Universal fastening system fixes to a single bearing bar, which means it can be used for gratings with large mesh gauges. They are also very discrete due to their shape.

Each fastening system is composed of 4 parts:

- 1 upper clip
- 1 screw
- 1 bottom clip (or shoe)
- 1 square bolt



STAINLESS STEEL FASTENING SYSTEM FOR FRP GRATING

Stainless steel standard retaining fastening system is used to secure FRP stair treads and gratings. Each fastening system is composed of 4 parts:

- 1 washer or upper clip
- 1 screw
- 1 bottom clip (or shoe)
- 1 square bolt

S-TYPE FASTENING SYSTEM FOR SAFETY GRIDS

S-type fastening system is a special fastening system used to fix safety grids to their supports.

For PS-CRANT grids, it is composed of 3 parts:

- 1 S-shaped lower grip
- 1 screw
- 1 olive

For PS-PERF, PS-OFF and PS-OVA grids, S-type fastening system is composed of 2 parts:

- 1 S-shaped lower grip
- 1 screw



INSTALLATION PRINCIPLES

STANDARD FASTENING SYSTEM



FASTENERS WITH SELF-POSTING SCREWS

3 installation options with washer / universal upper clip / standard upper clip.



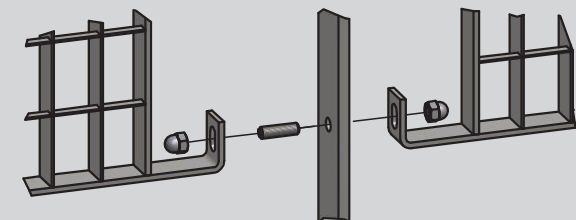
PRE-DRILLED PLATE

Welded at the bottom of the mesh for a more aesthetic installation.

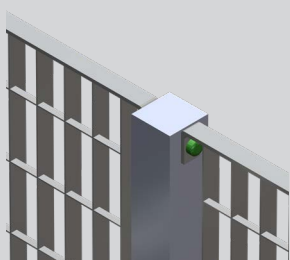
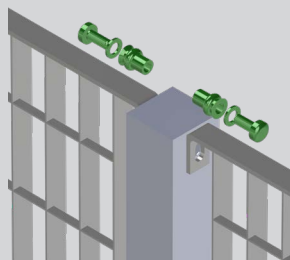


FLATS FOLDED AT 90° FOR ASSEMBLY

Several options are available.



Recommended for fences and railings. Find these products on page 28.



SURFACE TREATMENTS

Materials and treatments for metal gratings

- Steel: raw, galvanized or powder-coated
- Stainless steel: raw, pickled, passivated or electropolished
- Aluminium: raw, anodised or powder-coated

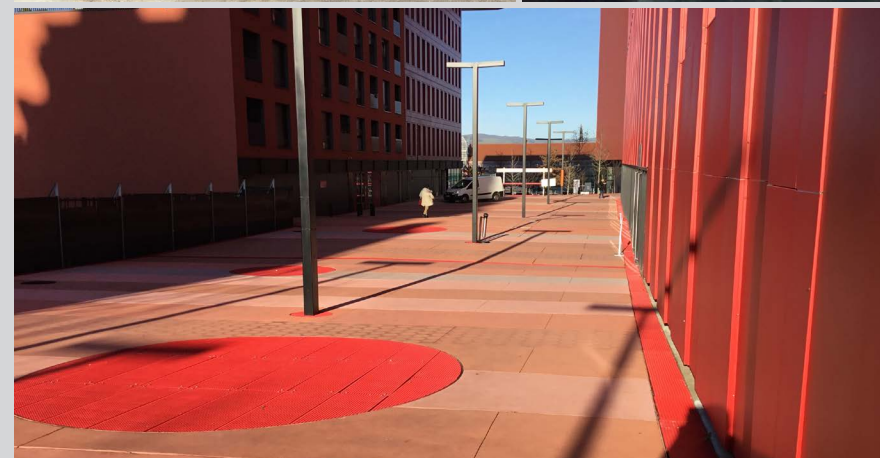
Anodising (or sometimes eloxing): surface treatment (conversion type) used to protect or decorate aluminium gratings by anodic oxidation (electrically insulating layer of 5 to 50 micrometers). This process makes it more resistant to wear, corrosion and heat.

Cataphoresis (or cationic electroplating): a finish consisting of immersing the grating in a bath of water-soluble paint, with the part as the cathode. The paint particles suspended in the bath migrate towards the metal surface by means of an electric current. The paint is then deposited uniformly over the entire surface of the immersed part. Finally, the paint is drained and polymerised in an oven at around 180°C.

Pickling: blasting technique (sandblasting or shot blasting) used to remove oxidation or free the surface of scale.

Galvanizing: patented by French engineer Stanislas Sorel in 1837, hot-dip galvanizing is used to protect steel gratings against corrosion. The gratings are dipped in a bath of molten zinc at around 450°C, making them more waterproof and mechanically stronger.

Powder coating: a finish consisting of applying powder paint by electrostatic spraying. It is then polymerised in an oven at 200°C to form a film. This technique is easy to apply and environmentally friendly, giving metal gratings a uniform, long-lasting finish. Combined with an aesthetic and design dimension, powder coating is popular in the architectural world.



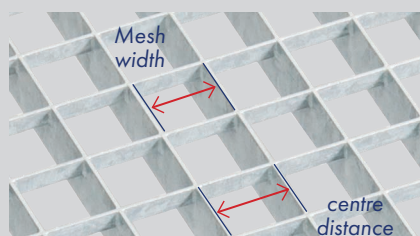
GLOSSARY

Are you new to the world of gratings, or would you like to learn more about certain technical concepts? Here's a comprehensive glossary of the terms most frequently used in the composition, assembly and manufacture of gratings.

Structures

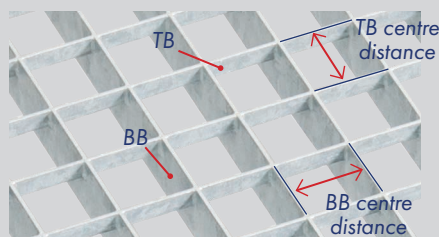
Mesh: spacing between the bearing bars (BB) and the transverse bars (TB). The mesh thus created has two characteristics: the mesh width and the mesh centre-to-centre distance (mesh spacing).

- **Mesh width:** free opening between the BBs and TBs
- **Mesh spacing:** distance between 2 consecutive BB and 2 TB.

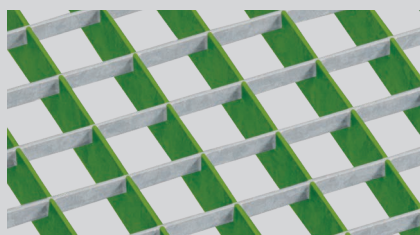


Mesh configuration / Designation: the mesh configuration is made up of two values (in mm), the first corresponding to the distance between the axes of the bearing bars, the second between those of the insert bars (e.g. 33.33 x 33.33; 33.33 x 11.11; 55.55 x 55.55; etc.).

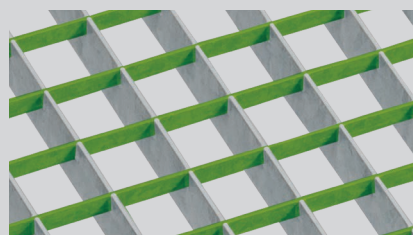
For the sake of convenience, the term "mesh designation" is more commonly used (e.g. 30 x 30; 30 x 10; 50 x 50; etc.).



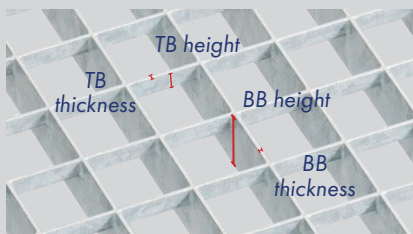
Bearing bars (BB): straight rods bearing the weight and arranged in rows at right angles to the transverse bars and supports.



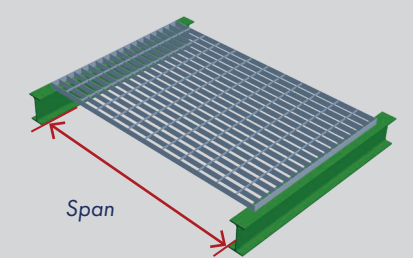
Transverse bars (TB) (or cross bars / spacers): inserted perpendicularly into the bearing bars (by pressing for press-locked grating in the form of flat iron or by electro-welding for press-welded grating with a twisted square cross-section), they hold the bearing bars in place.



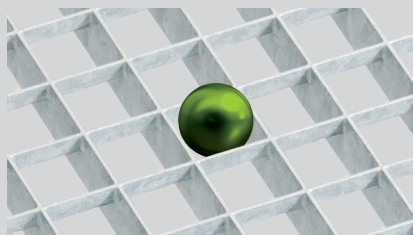
BB and TB gauge: this is defined by two values (in mm), where the first corresponds to their height and the second to their thickness. Gauge examples: 30 / 2; 30 / 3; 40 / 3; etc.



Span: gap between the supports on which the ends of the bearing bars rest.

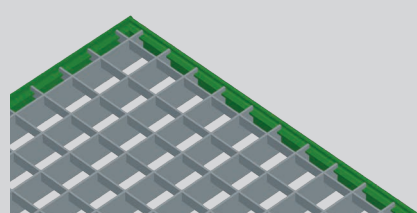


Impermeability - Security bars: safety mesh uses the following mesh gauge: 30 x 19; 19 x 30; 19 x 19; etc. It is recommended for industrial environments (14122 standard) and allows nothing exceeding a 20 mm diameter ball to pass through it.

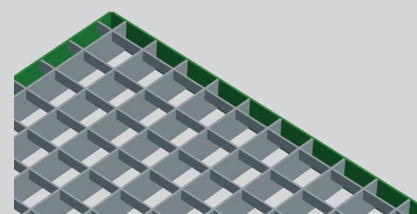


Finishes

Border: profile that forms the outer frame of the panels. It provides an aesthetic finish to the grating and increases its structural rigidity. Several types of edging are available, the most common being:



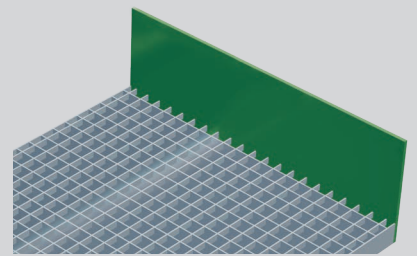
T banding bar (press-locking only)



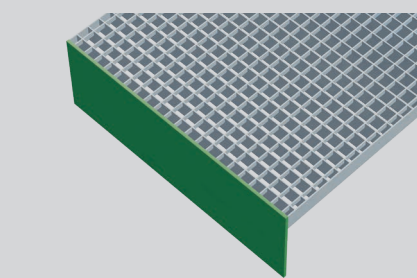
Flat banding bar

Other borders possible on request.

Toe plate - Raised border: straight metal welded onto the end of the grating. This may also be called a toe plate or raised border.

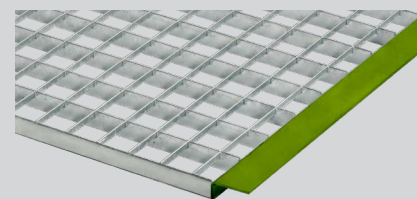


Toe plate - Mainly used to secure the passage of people when the configuration of the site requires it.

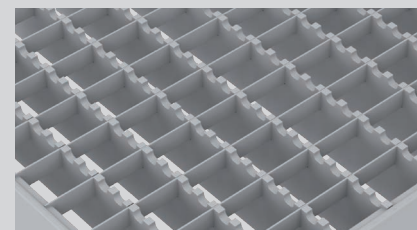


Raised border - Used in particular to improve flow in environments subject to hydrodynamic constraints.

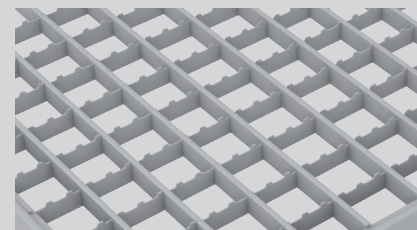
Support bracket: bracket welded to the ends of the grating rendering it suitable for certain uses (for example: shelving, guttering).



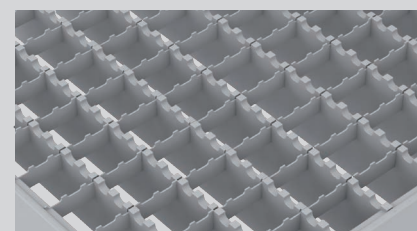
Serration: configuration of bearing bars and/or transverse bars with serrations facing the load-bearing surface. The purpose is to give the grating anti-slip properties when required for safety reasons. The grating can be notched in one or both directions (bearing and/or transverse bars). Note that double serrations can only be used on press-locked gratings. Press-welded gratings can only be notched on the bearing bars.



Single anti-slip serration on BB



Single anti-slip serration on TB



Double anti-slip serration on BBs and TBs

Bottom clip: curved metal fastener for clamping gratings without drilling or welding. It avoids weakening the support.

Electro-welding: welding technique using electrical processes in the heat generation phase. Used in the assembly of press-welded gratings, it fuses the twisted square spacers to the bearing bars. The joints are seamless and strengthen the connection point.

Side plate: a flat, pre-drilled metal support at either end of a staircase, used to attach it to the stringers (the side structures of a staircase).

Mat: slab of grating (BB greater than 3 m), generally rectangular with no edging (pressed-locked grating) or edging only lengthways (press-welded grating). This configuration can be re-cut before installation. FRP grating mats are fully edged.

Stair nosing: both a finishing and protective element, it is located in place of a border between 2 side plates (in the case of a step) and on all or part of a border (in the case of a grating (landing)). It improves the lifespan of steps by protecting the most heavily used part. Non-slip and generally rounded, it prevents the foot from slipping when descending and ensures a firm footing when ascending.

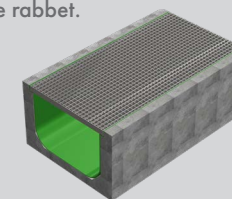
Panel: fully framed press locked or press-welded grating (edged on all 4 sides).

Layout drawing: drawing on a plan or elevation of the layout of the gratings to make up an assembly or cover a surface. It precisely determines the elements (type, quantities) and their layout (in particular to take account of angles or junctions). It is also essential for assessing the materials and products needed to complete a job: costing, preparing orders and optimising cut-outs.

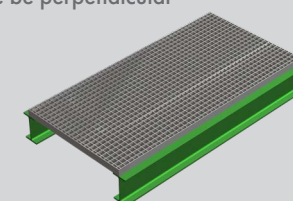
Bracket: welded between 2 BB at the bottom of a mesh (generally 4 per panel), this small pre-drilled metal plate is invisibly fixed to its support. These welded brackets are widely used in the construction of facade gratings and can also be used for grounding (electrical insulation).

Gritted coating: a granular, non-slip surface treatment designed to meet personal safety requirements (PRM, public buildings, industry, etc.). This finish is reserved for products made from resins (polyester gratings in particular).

Guttering and joisting: **Installation principle for drainage channels:** the drainage channel grating is placed on the rabbet.

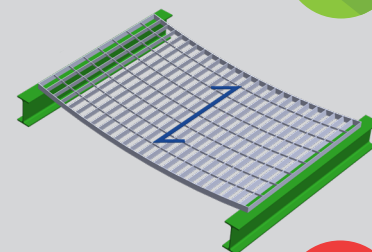
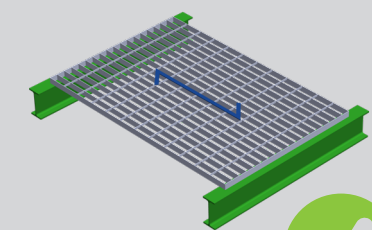


Principle of installation on a metal structure or joist: the grating resting on the joists will carry the load. The load-bearing direction of the grating must be considered between the structures: it will therefore be perpendicular to them.



- Joist: a structural member placed horizontally on walls or beams to support a floor.
- Joisting: all the joists in a building.
- Gutter rabbet: part of the gutter in which the grating is placed.

Installation principle: load-bearing direction



Load-bearing direction

[illegible][illegible]

Mesin					
BB	19 x 19	19 x 30	30 x 10	30 x 19	30 x 30
20 / 2	23,30	20,85	25,45	18,25	15,85
25 / 2	27,25	24,85	28,20	21,00	18,60
30 / 2	31,30	28,90	30,95	23,75	21,35
35 / 2	35,30	32,85	33,70	26,50	24,10
40 / 2	39,25	36,90	36,45	29,25	26,85
25 / 3	35,90	33,50	33,90	26,70	24,30
30 / 3	41,60	39,20	37,80	30,55	28,15
40 / 3	53,00	50,60	45,55	38,30	35,90

Mesh						
BB	19 x 19	19 x 30	19 x 40	30 x 19	30 x 30	30 x 40
25 / 2	29,30	26,20	24,80	21,80	18,70	17,30
30 / 2	33,45	30,40	28,95	24,45	21,35	20,00
40 / 2	41,75	38,70	37,25	29,75	26,70	25,25
25 / 3	38,35	35,25	33,80	27,30	24,20	22,75
30 / 3	44,25	41,20	39,75	31,05	27,95	26,50
40 / 3	56,15	53,10	51,65	38,60	35,45	34,05

[illegible][illegible]

LOAD TYPES

	 Foot traffic (technical)	 Foot traffic (public)	 Light vehicle	 Coach	 3.5 T Utility	 11 T Heavy goods vehicle	 38 T Trailer	 Forklift	 Transpallet
Dimension of impact (in mm)	200 x 200	200 x 200	150 x 150	250 x 250	150 x 150	300 x 150	500 x 250	100 x 100 300 x 200	70 x 70
Load per impact (in kg)	100	150	550	3625	1170	3650	7800	2680 4300	500
Uniform distribution of load (in kg)	250	400							

Reference values. Please ask us if you have any specific requests.

- ## TABLE OF COEFFICIENTS FOR CALCULATING LOADS

Mesh spacing (in mm)	11,..	22,..	26,..	33,..	34,..	44,..	52,..	66,..	69,..
Coefficients	2,84	1,42	1,29	1,00	0,95	0,74	0,67	0,50	0,50

BB	Span	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
25 / 2	DL	6460	3730	2957	2060	1519	1166	925	751	623	525	449							
	D			0,16	0,23	0,31	0,41	0,51	0,63	0,77	0,91	1,07							
30 / 2	DL	9980	5500	4258	2967	2187	1680	1331	1082	897	756	666	559	488					
	D			0,13	0,19	0,26	0,34	0,43	0,53	0,64	0,76	0,89	1,04	1,19					
35 / 2	DL	13800	7920	5715	4083	2976	2286	1812	1472	1221	1029	880	761	665	586	521	466		
	D			0,10	0,15	0,20	0,26	0,40	0,41	0,50	0,60	0,71	0,82	0,94					
40 / 2	DL	17910	10480	7578	5274	3887	2986	2367	1923	1595	1344	1149	994	868	766	680	609	548	496
	D			0,10	0,14	0,19	0,25	0,32	0,40	0,48	0,57	0,67	0,78	0,89	1,02	1,15	1,29	1,43	1,59
25 / 3	DL	11200	6280	4430	3090	2278	1750	1387	1127	934	788	673	582						
	D			0,16	0,23	0,31	0,41	0,51	0,63	0,77	0,91	1,07	1,24						
30 / 3	DL	15120	9160	6387	4450	3280	2519	1997	1623	1345	1134	969	839	733	646	574			
	D			0,13	0,19	0,26	0,34	0,43	0,53	0,64	0,76	0,89	1,04	1,19	1,35	1,53			
35 / 3	DL	21080	12460	8695	6057	4464	3429	2718	2209	1831	1544	1319	1141	997	879	781	699	629	
	D			0,11	0,16	0,22	0,29	0,37	0,45	0,55	0,65	0,77	0,89	1,02	1,16	1,31	1,47	1,64	
40 / 3	DL	25940	14820	11355	7910	5830	4479	3550	2885	2392	2016	1723	1491	1303	1149	1021	913	822	744
	D			0,10	0,14	0,19	0,25	0,32	0,40	0,48	0,57	0,67	0,78	0,89	1,02	1,15	1,29	1,43	1,59
50 / 3	DL	48500	27500	17740	12360	9910	6995	5545	4508	3737	3150	2693	2329	2035	1795	1565	1427	1285	1163
	D			0,08	0,11	0,16	0,21	0,26	0,32	0,38	0,46	0,54	0,62	0,71	0,82	0,92	1,03	1,15	1,27
40 / 4	DL	38000	21500	13899	9685	7142	5487	4351	3536	2933	2473	2114	1829	1599	1410	1253	1122	1010	915
	D			0,10	0,14	0,19	0,25	0,32	0,40	0,48	0,57	0,67	0,78	0,89	1,02	1,15	1,28	1,43	1,58
40 / 5	DL	43100	25800	17380	12100	8900	6850	5430	4425	3650	3080	2640	2280	1995	1760	1545	1400	1260	1140
	D			0,10	0,14	0,19	0,25	0,32	0,40	0,48	0,57	0,67	0,78	0,89	1,02	1,15	1,28	1,43	1,58
50 / 5	DL	75000	42000	26700	18750	13950	10700	8490	6900	5700	4810	4110	3570	3120	2750	2445	2180	1970	1780
	D			0,08	0,11	0,16	0,21	0,26	0,32	0,38	0,46	0,54	0,62	0,71	0,82	0,92	1,03	1,15	1,27
60 / 5	DL	107800	61000</																



BB	Span	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
25 / 2	CL	460	372	279	223	186	160	140	124	112	102	93							
	D			0,13	0,18	0,25	0,32	0,41	0,50	0,61	0,73	0,85							
30 / 2	CL	620	460	399	319	266	228	199	177	160	145	133	123	114					
	D			0,11	0,15	0,21	0,27	0,34	0,42	0,51	0,61	0,71	0,82	0,94					
35 / 2	CL	910	720	537	430	358	307	269	239	215	195	179	165	154	143	134	123		
	D			0,10	0,13	0,18	0,23	0,29	0,36	0,44	0,52	0,61	0,71	0,81	0,92	1,04	1,17		
40 / 2	CL	1260	935	696	557	464	398	348	309	278	253	232	214	199	186	174	167	155	164
	D			0,08	0,11	0,16	0,20	0,26	0,32	0,38	0,45	0,53	0,62	0,71	0,81	0,91	1,02	1,14	1,26
25 / 3	CL	650	550	419	335	279	239	209	186	168	152	140	129						
	D			0,13	0,18	0,25	0,32	0,41	0,51	0,61	0,73	0,85	0,99						
30 / 3	CL	1200	800	598	479	399	342	299	266	239	218	199	184	171	160	150			
	D			0,11	0,15	0,21	0,27	0,34	0,42	0,51	0,61	0,71	0,82	0,94	1,10	1,21			
35 / 3	CL	1610	1080	806	645	537	461	403	358	322	293	269	248	230	215	202	190	179	
	D			0,09	0,13	0,18	0,23	0,29	0,36	0,44	0,52	0,61	0,71	0,81	0,92	1,04	1,17	1,30	
40 / 3	CL	1950	1400	1044	835	696	596	522	464	418	380	348	321	298	278	261	246	232	220
	D			0,08	0,11	0,16	0,20	0,26	0,32	0,38	0,45	0,53	0,62	0,71	0,81	0,91	1,02	1,14	1,26
50 / 3	CL	3300	2180	1730	1360	1123	955	831	736	660	598	547	504	467	435	408	383	362	342
	D			0,07	0,09	0,13	0,16	0,21	0,25	0,31	0,36	0,43	0,49	0,57	0,64	0,73	0,82	0,91	1,01
40 / 4	CL	2560	1700	1276	1021	850	729	638	567	510	464	425	393	364	340	319	300	283	269
	D			0,08	0,11	0,16	0,21	0,26	0,32	0,38	0,46	0,54	0,62	0,71	0,81	0,91	1,02	1,14	1,26
40 / 5	CL	3230	2140	1610	1280	1070	920	801	710	644	585	535	495	460	425	400	375	355	335
	D			0,08	0,11	0,15	0,20	0,25	0,31	0,38	0,45	0,53	0,62	0,71	0,80	0,91	1,02	1,13	1,25
50 / 5	CL			2440	1970	1640	1410	1230	1090	985	895	820	755	705	655	610	580	545	515
	D			0,06	0,09	0,12	0,16	0,20	0,25	0,30	0,36	0,42	0,49	0,57	0,64	0,72	0,82	0,90	1,00
60 / 5	CL			3490	2780	2320	1990	1740	1550	1380	1260	1160	1050	985	905	850	800	750	700
	D																		

66

LOAD TABLES
FRP GRATINGS



19 X 19 MESH
HEIGHT 20

Span in mm	Uniformly distributed rigid load kg/m²
	Deflection of 1% of span
600	720
700	480
800	400
900	280
1000	220
1100	140
1200	120



19 X 19 MESH
HEIGHT 25

Span in mm	Uniformly distributed rigid load kg/m²
	Deflection of 1% of span
300	7347
400	3214
500	1693
600	1002
700	644
800	438
900	313
1000	231
1100	176
1200	137
1300	109
1400	88
1500	72



38 X 38 OR 19 X 19 MESH
HEIGHT 30

Span in mm	Uniformly distributed rigid load kg/m²
	Deflection of 1% of span
300	14844
400	6664
500	3581
600	2155
700	1403
800	968
900	697
1000	520
1100	399
1200	313
1300	250
1400	204



38 X 38 OR 19 X 19 MESH
HEIGHT 38

Span in mm	Uniformly distributed rigid load kg/m²
	Deflection of 1% of span
300	26809
400	10599
500	5163
600	2867
700	1744
800	1135
900	776
1000	552
1100	406
1200	305
1300	217
1400	182
1500	146



50 X 50 MESH
HEIGHT 50

Span in mm	Uniformly distributed rigid load kg/m²
	Deflection of 1% of span
300	46840
400	18922
500	9371
600	5278
700	3247
800	2132
900	1472
1000	1056
1100	782
1200	590
1300	423
1400	357
1500	287

Contact us for other loads

WEIGHT OF FRP GRATINGS
AND STAIRS TREADS

FRP GRATINGS

Height in mm	Mesh	Finishes	Weight (kg/ m²)
30	38 x 38	Gritted	17,67
		Concave	17,24
38	19 x 19	Gritted	22,38
20		Gritted	14,00
25		Gritted	16,65
30		Gritted	20,68
38		Concave	19,10
30		Gritted	26,20
30	26 x 26	Gritted	17,85
50	50 x 50	Concave	21,87
30 + 3	38 x 38	Full gritted surface	20,54

FRP STAIRS TREADS

Height in mm	Mesh	Finishes	Weight (kg/ m²)
38	38 x 38	Concave	20,72
	19 x 19		24,36



THEORETICAL TABLE OF LEVELLED DIMENSIONS

DIMENSIONS OF POLYESTER GRATINGS TO AVOID A COMB EFFECT AND PROVIDE FULL MESHES

Height: 25, 30 and 38 mm | Tolerance: 0/-5 mm

	19 x 19 mm	38 x 38 mm		19 x 19 mm	38 x 38 mm		19 x 19 mm	38 x 38 mm		19 x 19 mm	38 x 38 mm
25	*		789	*		1551	*		2313	*	
45	*	*	807	*	*	1569	*	*	2331	*	*
65	*		827	*		1589	*		2351	*	
83	*	*	845	*	*	1607	*	*	2369	*	*
103	*		865	*		1627	*		2389	*	
121	*	*	883	*	*	1645	*	*	2407	*	*
141	*		903	*		1665	*		2427	*	
159	*	*	921	*	*	1683	*	*	2445	*	*
179	*		941	*		1703	*		2465	*	
198	*	*	960	*	*	1722	*	*	2484	*	*
218	*		980	*		1742	*		2504	*	
236	*	*	998	*	*	1760	*	*	2522	*	*
256	*		1018	*		1780	*		2542	*	
274	*	*	1036	*	*	1798	*	*	2560	*	*
294	*		1056	*		1818	*		2580	*	
312	*	*	1074	*	*	1836	*	*	2598	*	*
332	*		1094	*		1856	*		2618	*	
350	*	*	1112	*	*	1874	*	*	2636	*	*
370	*		1132	*		1894	*		2656	*	
388	*	*	1150	*	*	1912	*	*	2674	*	*
408	*		1170	*		1932	*		2694	*	
426	*	*	1188	*	*	1950	*	*	2712	*	*
446	*		1208	*		1970	*		2732	*	
464	*	*	1226	*	*	1988	*	*	2750	*	*
484	*		1246	*		2008	*		2770	*	
502	*	*	1264	*	*	2026	*	*	2788	*	*
522	*		1284	*		2046	*		2808	*	
540	*	*	1302	*	*	2064	*	*	2826	*	*
560	*		1322	*		2084	*		2846	*	
579	*	*	1341	*	*	2103	*	*	2865	*	*
599	*		1361	*		2123	*		2885	*	
617	*	*	1379	*	*	2141	*	*	2903	*	*
637	*		1399	*		2161	*		2923	*	
655	*	*	1417	*	*	2179	*	*	2941	*	*
675	*		1437	*		2199	*		2961	*	
693	*	*	1455	*	*	2217	*	*	2979	*	*
713	*		1475	*		2237	*		2999	*	
731	*	*	1493	*	*	2255	*	*	3017	*	*
751	*		1513	*		2275	*		3037	*	
769	*	*	1531	*	*	2293	*	*	3055	*	*

Indicative table. Dimensions may change slightly in real life.



LOAD TABLE SAFETY GRIDS

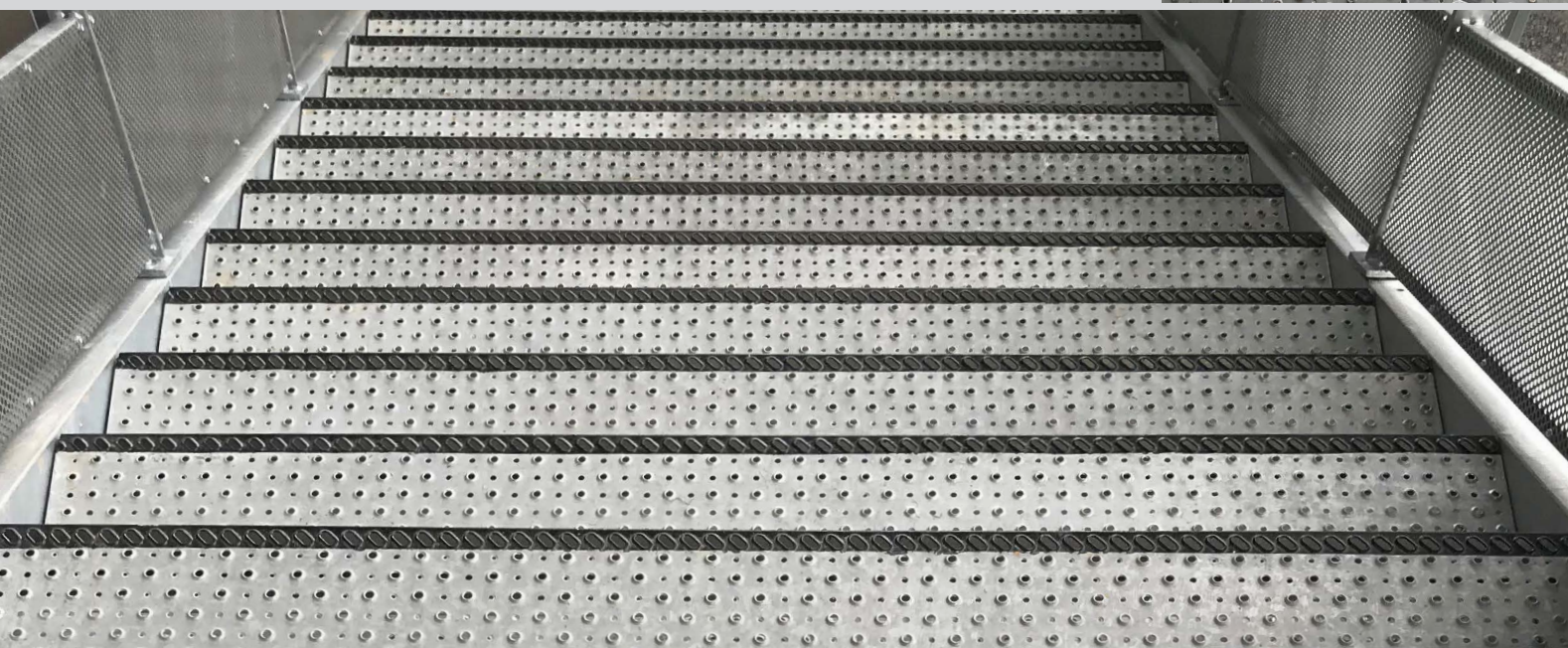
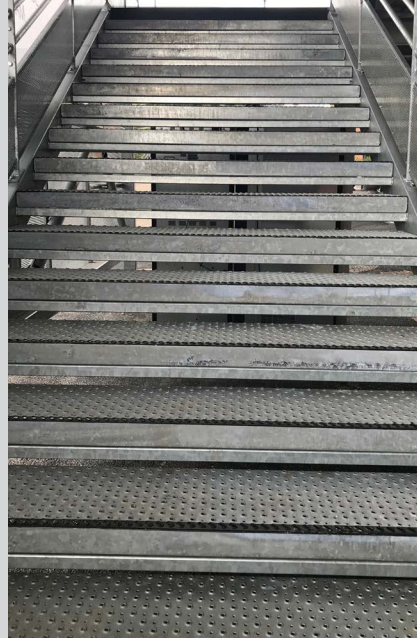
For our entire range of safety grids

Height x thickness	Industrial load (250 daN/m² - 100 daN on impact 200X200)	Public load (400 daN/m² - 150 daN on impact 200X200)
	Maximum span... (in mm)	
30 x 2	950	800
40 x 2	1220	1070
50 x 2	1460	1280
75 x 2	2040	1780
30 x 2,5	1010	880
40 x 2,5	1300	1130
50 x 2,5	1560	1360
75 x 2,5	2170	1900



LOAD TABLE SAFETY GRID STAIR TREADS

L x w (Length x width)	PS-PERF / PS-OFF	PS-PMR	PS-CRANT
600 x 330	40 x 2	40 x 2	40 x 2
700 x 330			
800 x 330			50 x 2
900 x 330			
1000 x 330			
1100 x 330			
1200 x 330	50 x 2,5	50 x 2,5	50 x 2,5
1300 x 330			
1400 x 330	75 x 2	75 x 2	75 x 2
1500 x 330			
1600 x 330			75 x 2,5
1700 x 330			
1800 x 330		100 x 2	



STANDARDS

SUMMARY OF LOAD CLASSES AND CATEGORIES

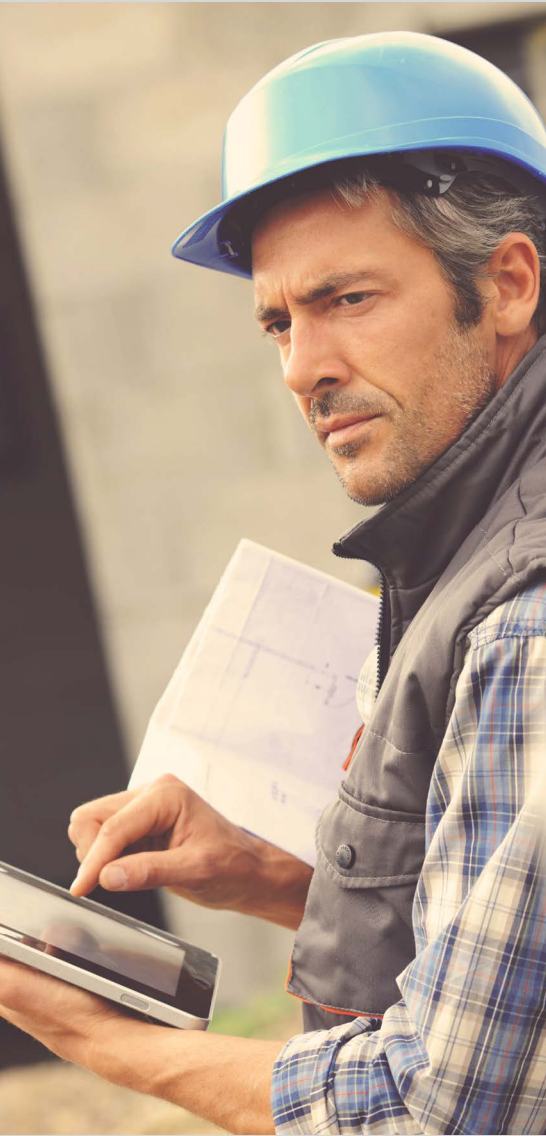
Load table Eurocode reference EN 1991-1-1

Category	Specific usage	Distributed (daN/m²)	Concentrated (daN)	Impact length (in mm)	Impact width (in mm)
A	Residential housing	150	200	50	50
B	Offices	250	400	50	50
C1	Areas with tables	250	300	50	50
C2	Areas with fixed seats	400	400	50	50
C3	Areas where there are no obstacles to the passage of people	400	400	50	50
C4	Areas that allow physical activity	500	700	50	50
C5	Areas likely to welcome large crowds	500	450	50	50
D1	Regular retail outlets	500	500	50	50
D2	Department stores	500	700	50	50
E1	Areas likely to receive an accumulation of goods, including access areas	750	700	50	50
E2	Industrial usage	750	700	50	50
FL1	Forklift 1T		1300	200	200
FL2	Forklift 1.5T		2000	200	200
FL3	Forklift 2.5T		3150	200	200
FL4	Forklift 4T		4500	200	200
FL5	Forklift 6T		7000	200	200
FL6	Forklift 8T		8500	200	200
F	Gross Vehicle Weight Rating (GSWR) < 3T with number of seats ≤ 8	230	750	100	100
G	3T vehicle < GSWR ≤ 160T	500	4500	200	200

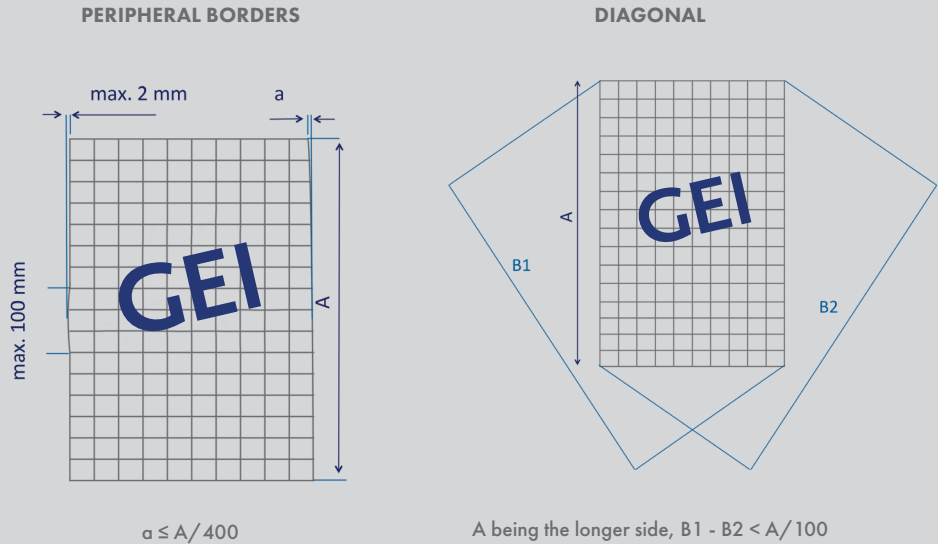
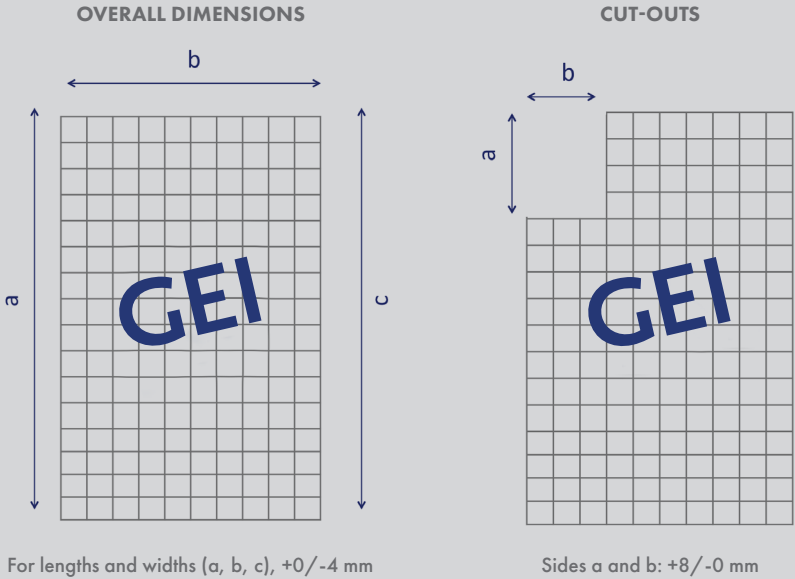
The dimensions actually manufactured always differ slightly from the dimensions ordered.

We base ourselves on the recommendations of the RAL-GZ 638 standard, which defines precise tolerance intervals for metal gratings.

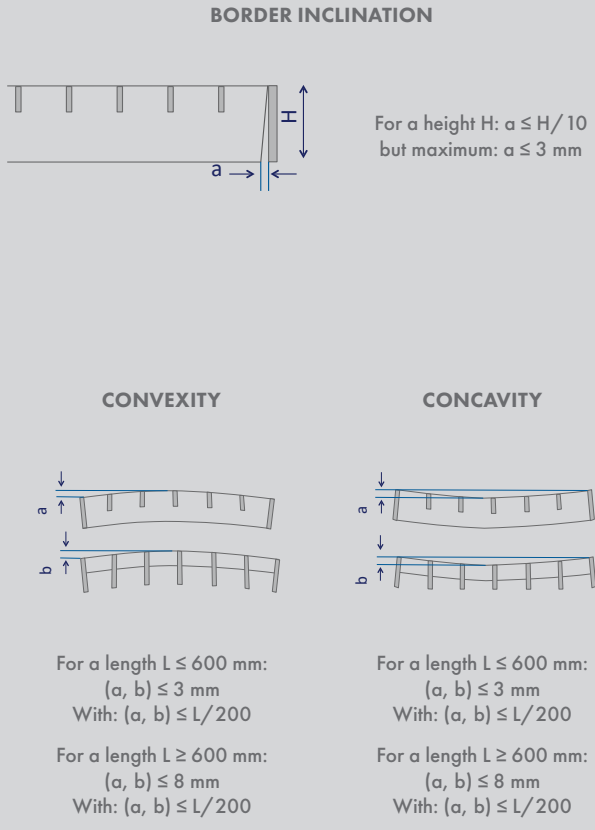
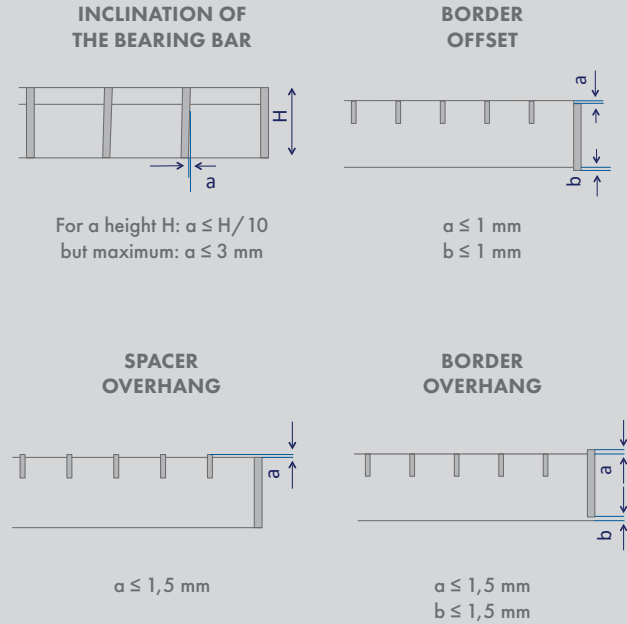
Dimensions are given in millimetres.



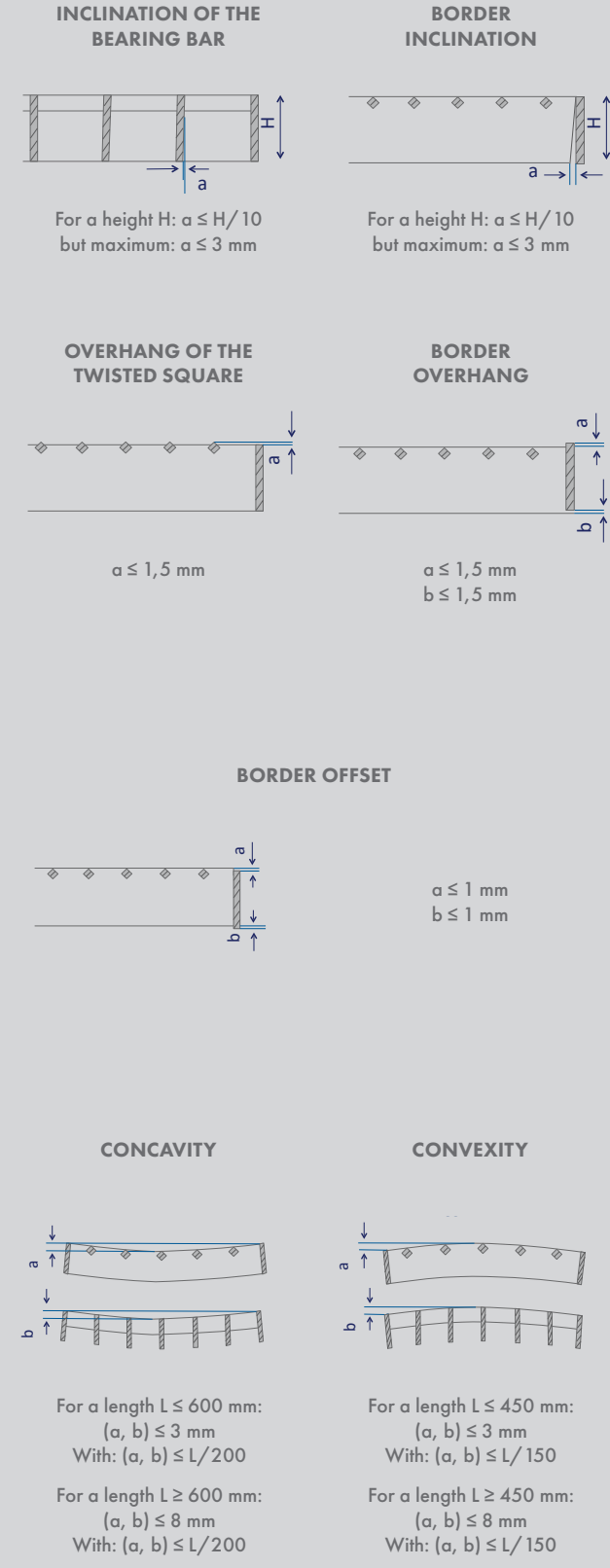
1. GENERAL MANUFACTURING TOLERANCES



2. PERMITTED TOLERANCES FOR PRESS-LOCKED GRATINGS



3. PERMITTED TOLERANCES FOR PRESS-WELDED GRATINGS



PRESS-LOCKED
PRESS-WELDED
FENCING AND RAILING
SHELVING
FRP
SAFETY GRIDS
STAIR TREADS
SPIRAL STAIRCASES
ADDITIONAL PRODUCTS
PRM SOLUTIONS
FASTENINGS AND ACCESSORIES
TECHNICAL SPECIFICATIONS
STOCK PROGRAMME

GALVANIZED PRESS-LOCKED PANELS

PANELS WITH BANDING BARS 30 X 30 MESH			
BB	Dimensions in mm ¹	Foot traffic	Light vehicle
30 / 2	200 x 1000	✓	✓
	250 x 1000	✓	✓
	300 x 500	✓	✓
	300 x 1000	✓	✓
	400 x 500	✓	
	400 x 1000	✓	
	500 x 500	✓	
	500 x 1000	✓	
	600 x 500	✓	
	600 x 1000	✓	
	700 x 1000	✓	
	800 x 500	✓	
	800 x 1000	✓	
	900 x 1000	✓	
	1000 x 500	✓	
	1000 x 600	✓	
	1000 x 700	●	✓
	1000 x 800	✓	
	1000 x 900	●	✓
	1000 x 1000	✓	
30 / 3	1000 x 1250	✓	
	1000 x 2000	✓	
	1100 x 1000	✓	
	1200 x 500	✓	
	1200 x 600	✓	
	1200 x 1000	✓	
	1250 x 1000	✓	
	1300 x 1000	✓	
	2000 x 1000	*	
	1000 x 1000	✓	
30 / 3	1000 x 1500	●	✓
	1200 x 1000	●	✓
	1400 x 1000	✓	
	1500 x 500	✓	
	1500 x 1000	✓	

* requires an intermediate support to take the pedestrian load.

PANELS WITH BANDING BARS
30 X 30 MESH SINGLE HALF-MOON SERRATION

30 / 2	600 x 1000	✓	
	800 x 1000	✓	
	1000 x 1000	✓	

PANELS WITH BANDING BARS
30 X 10 MESH

BB	Dimensions in mm ¹	Foot traffic	Light vehicle
30 / 2	600 x 1000	✓	
	700 x 1000	✓	
	800 x 1000	✓	
	900 x 1000	✓	
	1000 x 600	✓	
	1000 x 700	✓	
	1000 x 800	✓	
	1000 x 900	✓	
30 / 3	1000 x 1000	✓	
	1200 x 1000	✓	
	1500 x 1000	✓	

PANELS WITH BANDING BARS
30 X 19 MESH

30 / 2	800 X 1000	✓	
	1000 x 1000	✓	
	1200 x 1000	✓	
30 / 3	1500 x 1000	✓	

PANELS WITH BANDING BARS
19 X 19 MESH

30 / 2	500 x 1000	✓	
	800 x 1000	✓	
	1000 x 1000	✓	
	1200 x 1000	✓	
30 / 3	1500 x 1000	✓	

PANELS WITH BANDING BARS
19 X 30 MESH DOUBLE SAW-TOOTHED SERRATION

30 / 3	1000 x 1000	✓	
	1500 x 1000	✓	

PANELS WITH BANDING BARS
30 X 30 MESH DOUBLE HALF-MOON SERRATION

30 / 2	500 x 1000	●	✓	
	600 x 1000	●	✓	
	700 x 1000	●	✓	
	800 x 1000		✓	
	900 x 1000	●	✓	
	1000 x 1000		✓	
	1200 x 1000		✓	
30 / 3	1000 x 1000		✓	
	1200 x 1000	●	✓	
	1500 x 1000	●	✓	

PANELS WITH BANDING BARS
50 X 100 MESH

90 / 8	950 x 1000	HEAVY LOAD	
--------	------------	------------	--

¹ The first value represents the bearing direction.

● Available in 10 to 15 days.

RAW AND
GALVANIZED PRESS-LOCKED MATS

MATS WITHOUT BANDING BARS
RAW

Mesh	BB	Dimensions in mm ¹
30 x 30	30 / 2	3000 x 994
	30 / 3	3000 x 994
30 x 19	30 / 2	3000 x 994
30 x 10	30 / 2	3000 x 994
19 x 19	30 / 2	3000 x 994
	40 / 2	3000 x 994

MATS WITHOUT BANDING BARS
GALVANIZED

30 x 30	30 / 2	3000 x 994
	30 / 3	3000 x 994
30 x 10	30 / 3	3000 x 994
19 x 19	30 / 2	3000 x 994

MATS WITHOUT BANDING BARS
RAW SIMPLE HALF-MOON SERRATION

30 x 10	30 / 2	3000 x 994
	30 / 3	3000 x 994

MATS WITHOUT BANDING BARS
RAW DOUBLE HALF-MOON SERRATION

30 x 30	30 / 2	3000 x 994
	30 / 3	3000 x 994
19 x 30	30 / 2	3000 x 994

● Available in 10 to 15 days.



Length in mm	Light load	Medium-heavy load	Medium-heavy + load	Heavy load
Dimension ¹	995 x 890	995 x 890	995 x 890	995 x 890
Mesh	100 x 60	100 x 60	90 x 60	60 x 100
BB	25 x 2	35 x 2	40 x 2	40 x 2
Load capacity	265 daN/m ² correspond to 236 daN/panel	525 daN/m ² correspond to 467 daN/panel	840 daN/m ² correspond to 747 daN/panel	1070 daN/m ² correspond to 952 daN/panel

¹ The first value represents the bearing direction.

ALUMINIUM PRESS-LOCKED PANELS

PANELS WITH BANDING BARS
30 X 30 MESH

BB	Dimensions in mm ¹	Foot traffic	Light vehicle
40 / 2	1000 x 1000	✓	

PANELS WITH BANDING BARS
30 X 19 MESH

40 / 2	1000 x 1000	✓	
--------	-------------	---	--

PANELS WITH BANDING BARS
19 X 19 MESH

40 / 2	1000 x 1000	✓	
--------	-------------	---	--



FASTENING AND
ACCESSORIES

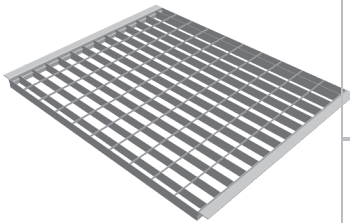
p. 79



NEW

PRESS-LOCKED
SHELVING GRATINGS

4 dimensions¹ of galvanized pressed gratings in stock according to the load with a safety coefficient of 1.5.



PRESS-LOCKED TREADS
30 X 19 MESH

BB	Dimensions in mm ¹	Drilling centre distance
30 / 2	800 x 270	150
	800 x 330	210
	900 x 330	210
	1000 x 330	210
40 / 2	900 x 330	210
	1200 x 330	210
40 / 3	1400 x 330	210

30 / 2	600 x 330	210
	700 x 330	210
	800 x 330	210
	900 x 330	210
	1000 x 330	210
	1000 x 350	240
35 / 2	1200 x 330	210
40 / 2	1000 x 330	210
	1200 x 350	240
50 / 2	1400 x 330	210

25 / 2	600 x 240 ●	120
	600 x 270 ●	150
30 / 2	600 x 270	150
	700 x 240 ●	120
	700 x 270	150
	800 x 240 ●	120
	800 x 270	150
30 / 3	1000 x 305	180
35 / 2	900 x 240 ●	120
	900 x 270	150
	1000 x 240	120
	1000 x 270	150
	1000 x 305	180
40 / 2	1200 x 240 ●	120
	1200 x 270 ●	150
40 / 3	1200 x 270	150
	1200 x 305	180

- Available in 10 to 15 days.



BB	Dimensions in mm ¹	Drilling centre distance
25 / 2	500 x 200 ●	120
	500 x 240 ●	120
	600 x 200 ●	120
30 / 2	600 x 230	120
	600 x 240	120
	600 x 260	150
	600 x 270	150
	600 x 305	180
	600 x 330	210
	700 x 200 ●	120
	700 x 230	120
	700 x 240	120
	700 x 260	150
	700 x 270	150
	700 x 305	180
	800 x 200 ●	120
	800 x 230	120
	800 x 240	120
	800 x 260	150
	800 x 270	150
	800 x 305	180
	800 x 330	210
	900 x 230	120
	900 x 240	120
	900 x 260	150
	900 x 270	150
	900 x 305	180
	900 x 330	210
	1000 x 230	120
	1000 x 240	120
	1000 x 260	150
	1000 x 270	150
	1000 x 305	180
30 / 3	800 x 270 ●	150
	1000 x 270	150
	1000 x 305	180
	1200 x 270	150
	1200 x 305	180
35 / 2	900 x 200 ●	120
	900 x 270	150
	1000 x 200 ●	120
	1000 x 240 ●	120
	1000 x 270	150
	1000 x 305	180
40 / 2	1000 x 330	210
	1200 x 200 ●	120
	1200 x 240 ●	120
	1200 x 330	210
	1400 x 330	210
40 / 3	1200 x 270	150
	1200 x 305	180

BB	Dimensions in mm ¹	Drilling centre distance
30 / 2	800 x 240	120
30 / 3	1000 x 270	150
	1000 x 305	180
35 / 2	1000 x 270	150
40 / 3	1200 x 305	180
	1250 x 305	180

35 / 3	1000 x 305	180
40 / 3	1200 x 305	180

30 / 2	600 x 240 ●	120
	600 x 270 ●	150
	800 x 270	150
30 / 3	1000 x 270	150
35 / 2	700 x 240 ●	120
	700 x 270 ●	150
	800 x 240 ●	120
40 / 2	900 x 240 ●	120
	900 x 270 ●	150
	1000 x 240 ●	120
	1000 x 270 ●	150
	1200 x 240 ●	120
	1200 x 270 ●	150
40 / 3	1200 x 305	180

30 / 3	800 x 300	180
--------	-----------	-----

30 / 2	800 x 270	150
35 / 2	900 x 270	150
	1000 x 305	180
40 / 3	1200 x 305	180

Finish	Dimensions in mm
Raw	3 000
	6 000

Stair tread width (in mm)	from 150 to 159	from 160 to 169	from 170 to 179	from 180 to 189	from 190 to 199	from 200 to 249	from 250 to 279	from 280 to 309	from 310 to 339	from 340 to 369
Drilling centre distance (in mm)	70	80	90	100	110	120	150	180	210	240

For steps in BB 25, 30, 35, 40: A = 70 | B = 55 • For steps in BB 50: A = 80 | B = 65 • For steps in BB 60: A = 90 | B = 75

BB	Dimensions in mm ¹	Foot traffic	Light vehicle
30 / 2	500 x 1000	✓	
	800 x 1000	✓	
	1000 x 1000	✓	

30 / 2	1000 x 1000	✓	
--------	-------------	---	--

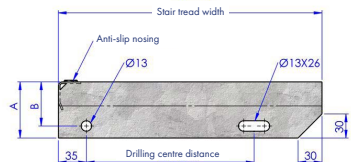
30 / 2	1000 x 1000	✓	
--------	-------------	---	--

Mesh	BB	Dimensions in mm ¹
30 x 30	30 / 2	3000 x 994
30 x 19	30 / 2	3000 x 994

BB	Dimensions in mm¹	Drilling centre distance
30 / 2	800 x 300	180
	1000 x 300	180



- Available in 10 to 15 days.



PRESS-WELDED PANELS AND STAIR TREADS

PRESS-WELDED PANELS WITH BANDING BARS 30 X 30 MESH		 Foot traffic
BB	Dimensions in mm ¹	
30 / 2	500 x 1000	✓
	600 x 1000	✓
	700 x 1000	✓
	800 x 1000	✓
	900 x 1000	✓
	1000 x 1000	✓
	1200 x 1000	✓
	2000 x 1000	✓
30 / 3	1500 x 1000	✓

PRESS-WELDED PANELS WITH BANDING BARS 30 X 19 MESH		
30 / 2	2000 x 1000	✓



PRESS-WELDED STAIR TREADS 30 X 30 MESH

BB	Dimensions in mm ¹	Drilling centre distance
30 / 2	600 x 230	120
	600 x 240	120
	700 x 230	120
	700 x 240	120
	800 x 230	120
	800 x 240	120
	800 x 260	150
	800 x 330	210
	900 x 230	120
	900 x 240	120
	900 x 305	180
	900 x 330	210
	1000 x 230	120
	1000 x 240	120
30 / 3	1000 x 260	150
	1000 x 270	150
	1000 x 305	180
40 / 3	1200 x 270	150
	1200 x 305	180

PRESS-WELDED STAIR TREADS 30 X 19 MESH

30 / 2	600 x 260	150
	700 x 230	120
	800 x 230	120
	800 x 240	120
	800 x 260	150
	800 x 270	150
	900 x 230	120
	900 x 330	210
	1000 x 230	120
	1000 x 240	120
	1000 x 260	150

¹ The first value represents the bearing direction.

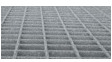


GRATINGS EUROPE INDUSTRY

CUSTOMER SERVICE
Phone: (+352) 26 29 66 51
Fax: (+352) 26 29 61 05
E-mail: gei@geisa.lu

Find all our latest innovations on:
WWW.GEISA.LU

PRESS-WELDED MATS AND HALF-MATS

30 X 30 MESH			
BB	Dimensions in mm ¹	Galvanized	Raw
25 / 2	3050 x 1000		•
	6100 x 1000	•	•
30 / 2	3050 x 1000	•	•
	6100 x 1000	•	•
30 / 3	3050 x 1000	•	
	6100 x 1000	•	•
40 / 2	6100 x 1000	•	
40 / 3	6100 x 1000	•	•

19 X 40 MESH			
25 / 2	3050 x 1000		•
30 / 2	6100 x 1000	•	•
30 / 3	3050 x 1000	•	
	6100 x 1000	•	•

19 X 19 MESH			
30 / 2	3050 x 1000	•	•
	6100 x 1000	•	•

30 X 40 MESH			
30 / 3	3050 x 1000	•	
	6100 x 1000	•	

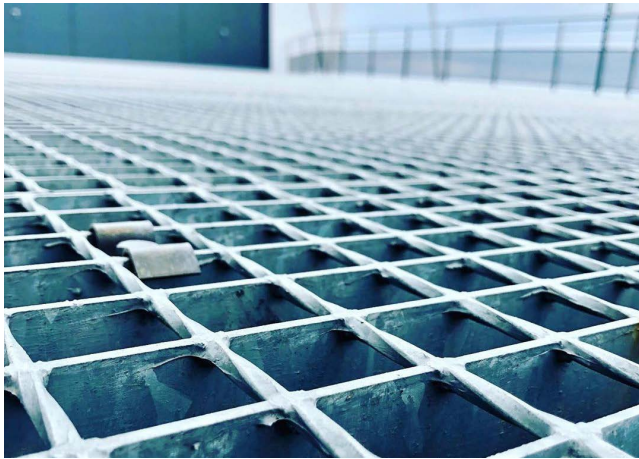
30 X 19 MESH			
30 / 2	3050 x 1000	•	•
	6100 x 1000	•	•
30 / 3	6100 x 1000	•	•

GALVANIZED PRESS-WELDED MATS HALF-MOON SERRATION

Mesh	BB	Dimensions in mm ¹
30 x 100	25 / 5	6100 x 1000
30 x 100	30 / 5	6100 x 1000

¹ The first value represents the bearing direction.

- Available on stock.



FASTENING SYSTEMS AND ACCESSORIES



STEEL FASTENING

FASTENING SYSTEM FOR STEEL GRATINGS	Mesh
Galvanized standard retaining fastening system with clip	19 x 19
	30 x 10
	30 x 19
	30 x 30
Galvanized standard retaining fastening system with washer	40 x 19
	30 x 30
Galvanized universal fastening system	30 x 30 minimum
Galvanized double retaining fastening system with clip	19 x 19
	30 x 30
Galvanized upper clip	19 x 19
	30 x 10
	30 x 19
	30 x 30
	40 x 19
	40 x 40
Galvanized universal hook	30 x 30 minimum
Stainless steel standard retaining fastening system with clip	19 x 19
	30 x 30
Stainless steel upper clip	19 x 19
	30 x 30

SAFETY GRID FASTENING SYSTEM

S-type fastening system without olive for PS-OFF - PS-PERF grid
S-type fastening system without olive for PS-PMR grid
FRP Olive for PS-CRANT grid

ACCESSORIES

ADJUSTABLE FEET	Dimensions of insert in mm	Thickness of insert in mm	Height of foot in mm
For FRP gratings (38 x 38 and 19 x 19 mesh) and steel gratings (30 x 30 mesh)	35 x 35	20	40 or 70
For steel gratings (19 x 19 mesh)	25 x 25	20	40 or 70

ADJUSTABLE PAD	Height adjustment in mm	
For gratings	12 to 955	●

SCREW	Ø mm	Lenght in mm
Self-posting screw galvanized TH	6,3	50
	6,3	60
	6,3	70
Self-posting screw stainless steel 304 TH	6,3	50
	6,3	60

- Available in 10 to 15 days.



FRP GRATING

FRP MATS

Height in mm	Mesh	Dimensions in mm	Gritted	Concave	Gritted	Concave	Gritted	Gritted	Gritted
20	19 x 19	1000 x 2026			•		•	•	
	19 x 19	1000 x 3055			•		•	•	
	19 x 19	1220 x 3055			•				
25	19 x 19	198 x 2026			•				
	19 x 19	198 x 3055			•				
	19 x 19	312 x 2026			•				
	19 x 19	312 x 3055			•				
	19 x 19	1000 x 2026			•		•	•	
	19 x 19	1000 x 3055			•		•	•	
	19 x 19	1220 x 3055			•		•	•	
30	19 x 19	1000 x 2026	•	•	•	•		•	•
	19 x 19	1000 x 3055	•	•	•	•		•	
	19 x 19	1220 x 2026			•				
	19 x 19	1220 x 3055	•	•	•	•			
38	19 x 19	1000 x 2026			•				
	19 x 19	1000 x 3055	•						
	19 x 19	1220 x 3055			•				
30	38 x 38	1000 x 2026	•	•	•	•			•
	38 x 38	1000 x 3055	•	•	•	•			
	38 x 38	1220 x 3055	•	•	•	•			
38	38 x 38	1000 x 2026	•	•	•				
	38 x 38	1000 x 3055	•		•				
	38 x 38	1220 x 3055	•						
30	26 x 26	1000 x 2035			•				
	26 x 26	1000 x 3075	•		•				
50	50 x 50	1220 x 3055				•			

FRP GRATING WITH FULL GRITTED SURFACE

30 + 3	38 x 38	1000 x 2026			•	
	38 x 38	1000 x 3055	•		•	

FRP STAIR TREADS WITH GRITTED NOSING

38	38 x 38	800 x 275		•		•
	38 x 38	1000 x 275		•		•
	38 x 38	1000 x 350		•		•
	19 x 19	800 x 275		•		•
	19 x 19	1000 x 275		•		•
	19 x 19	1000 x 350		•		•



FRP FASTENING

FASTENING SYSTEM FOR FRP GRATINGS	Mesh
Complete galvanized fastening system with clip	38 x 38
	19 x 19
Complete stainless steel fastening system with clip	38 x 38
Complete stainless steel fastening system with washer	19 x 19
Stainless steel clip	38 x 38

STEP SUPPORT

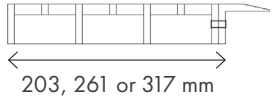
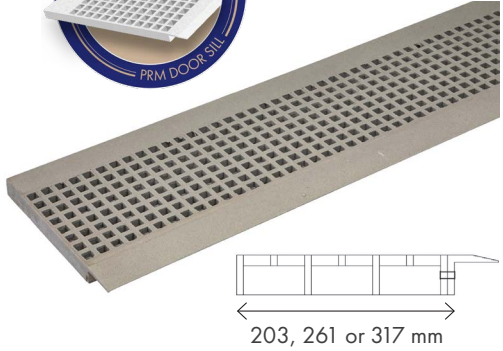
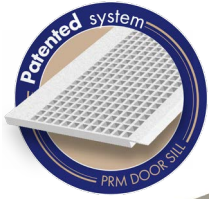
	Mesh
For FRP gratings	38 x 38
	19 x 19
Stair treads support	
Stainless steel hexagonal nut for support	

ACCESSORY

Resin kit: 1 dose of resin + 1 dose of hardener

FRP GRATING WITH INTEGRATED ANGLE

Height in mm	Mesh	Dimensions in mm	RAL 7035 Grey	
			Gritted	Concave
25	19 x 19	203 x 2026	•	
	19 x 19	203 x 3055	•	
	19 x 19	261 x 2026	•	
	19 x 19	261 x 3055	•	
	19 x 19	317 x 2026	•	
	19 x 19	317 x 3055	•	



ELEMENTS FOR RAILING
RAL 7035 GREY

	Dimensions in mm	Length in mm
Hand rail	W 58 x H 62	6000
Under rail	inner Ø 22 - outer Ø 32	6000
Base panel	W 100	6000
Square post	W 50 x H 50 - thickness 7.5	6000
Floor base	L 153 x W 126 x H 133	
Wall mount	L 170 x W 60 x H 120	
90° bend fitting for hand rail	L 150 x 150 x W 49 x H 40	
90° bend fitting for under rail	L 105 x 105 x inner Ø 21.7 - outer Ø 30	
Articulated fitting for hand rail	L 50 x W 50 x H 143	
Fitting for base panel	L 100 x W 50 x H 50 x thickness 6	
Plug for hand rail	L 6 x W 60 x H 63	
Plug for under rail	L 14 x inner Ø 22 - outer Ø 35	



FRP PROFILES

	Dimensions in mm*	Length in mm	RAL 7035 Grey	RAL 7012 Anthracite	RAL 1001 Beige	RAL 1003 Yellow	RAL 6010 Green
H shapes	100 x 100 x 6	6000	•				
	200 x 200 x 12	6000	•				
I shapes	100 x 50 x 8	6000	•				
	150 x 75 x 9,5	6000	•				
	150 x 100 x 8	3000	•				
	200 x 100 x 9,5	6000	•				
U shapes	100 x 50 x 6,5	6000	•				
	150 x 50 x 6,5	6000	•				
	200 x 60 x 10	6000	•				
Standard angles	30 x 30 x 5	3000	•		•		
	50 x 50 x 6	3000	•				
	75 x 75 x 9	6000	•				
	100 x 100 x 9,5	6000	•				
Bevelled angles	25 x 50 x 5	3000	•	•	•		
Gritted angles	30 x 30 x 3	3000	•			•	•
Square tubes	50 x 50 x 5	6000	•				
	100 x 100 x 6,5	6000	•				

* Please enquire for exact dimensions.

• Available on stock.

SAFETY GRIDS

PS-CRANT SAFETY GRID

Length in mm	Width in mm	Height/thickness in mm	NEW			
			Galvanized	Raw	Stainless steel	Aluminium
4020	120	50 / 2	•			
	180	50 / 2	•			
	240	50 / 2	•	•	•	
	240	50 / 2,5				•
	300	50 / 2	•	•	•	
	300	50 / 2,5				•
	360	50 / 2	•			
	420	50 / 2	•			
	480	50 / 2	•			

PS-PERF SAFETY GRID

Length in mm	Width in mm	Height/thickness in mm	NEW			
			Galvanized	Raw	Stainless steel	Aluminium
4020	200	50 / 2	•	•		
	250	50 / 2	•	•	•	
	250	50 / 2,5				•
	300	50 / 2	•	•	•	
	300	50 / 2,5				•

PS-OFF SAFETY GRID

4020	300	50 / 2	•			
------	-----	--------	---	--	--	--

PS-OVA SAFETY GRID

4020	200	50 / 2	•			
	250	50 / 2	•			
	300	50 / 2	•			

PS-FERM SAFETY GRID

4020	250	50 / 2	•			
	300	50 / 2	•			

PS-PMR SAFETY GRID

3996	200	50 / 2	•	•		
	250	50 / 2	•	•		
	300	50 / 2	•	•		
	300	75 / 2	•			

PS-PMR SAFETY GRID WITH GALVANIZED NOSING

3996	330	50 / 2	•			
4200	330	75 / 2	•			

STAIR TREADS IN SAFETY GRIDS

PS-CRANT GALVANIZED STAIR TREADS

800	300	50 / 2
1000	300	50 / 2
1200	300	50 / 2

PS-PERF GALVANIZED STAIR TREADS

800	300	50 / 2
1000	300	50 / 2
1200	300	50 / 2

PS-PMR STAIR TREADS WITH GALVANIZED NOSING

800	330	50 / 2
900	330	50 / 2
1000	300	50 / 2
	330	50 / 2
1200	330	50 / 2,5
1400	330	75 / 2
1800	330	100 / 2

NEW

PS-PERFO GALVANIZED SAFETY GRID

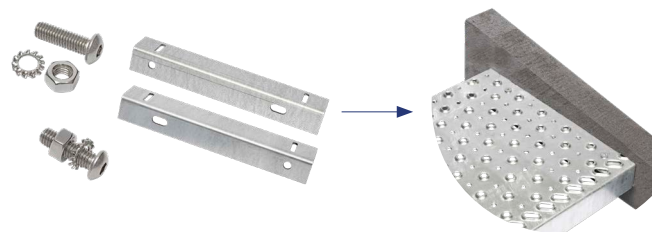
4020	300	50 / 2
------	-----	--------

See our range of safety grids on page 40.

ACCESSORY

PS-PMR STEP KIT

We (or you) can make stair treads using our PS-PMR safety grids in stock and our ready-to-use supports.



MAIN ADVANTAGES

- Grids in stock immediately available.
- Easy cutting of our grids to the dimensions you require.
- Time saving.
- Step kit that adapts to all types of stair stringers.
- 2 heights available (50 and 75 mm).

- Available on stock.

RUBBER

GRATINGS | MATS | TILES



GEI RUBBER TOP

Dimensions	Height	Weight
500 x 1000 mm	22 mm	3,5 kg
800 x 1200 mm	22 mm	9,0 kg
1000 x 1500 mm	22 mm	14,0 kg



GEI RUBBER OCTA

Dimensions	Height	Weight
1000 x 1500 mm	22 mm	15,5 kg



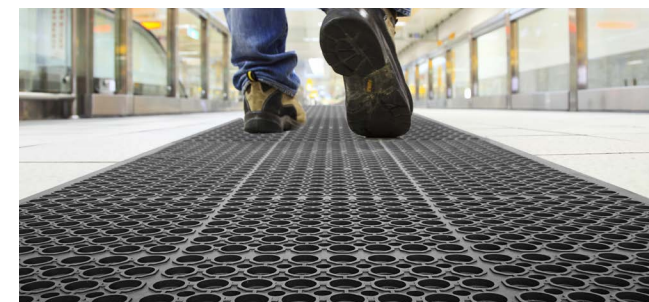
GEI RUBBER ACCESS

Dimensions	Height	Weight
1200 x 1830 mm	10 mm	17,5 kg
1000 x 1484 mm	22 mm	26,5 kg
Roll 1000 x 10000 mm	10 mm	80 kg



GEI RUBBER HONEY COMFORT

	Dimensions	Height	Weight
Standard	910 x 1510 mm	14 mm	8,7 kg
Nitrile	910 x 1510 mm	14 mm	8,7 kg



See our rubber range on page 52.

LADDER RUNGS

LADDER RUNGS - WITH 1 ROW OF HOLES

Length in mm	Width in mm	Raw	Stainless steel
2000	25	•	•

LADDER RUNGS - WITH 2 ROWS OF HOLES

2000	50	•	
------	----	---	--



GEI RUBBER SLIC COMFORT

Dimensions	Height	Weight
910 x 910 mm	14 mm	5,7 kg



GEI RUBBER BUB COMFORT

Dimensions	Height	Weight
900 x 1200 mm	14 mm	7,0 kg
915 x 1525 mm	14 mm	12,3 kg



GEI RUBBER SPORTS

Dimensions	Height	Weight
910 x 910 mm	16 mm	8,7 kg
910 x 910 mm	28 mm	15,5 kg



GEI RUBBER BARN

	Dimensions	Height	Weight
Version 1	1220 x 1830 mm	17 mm	34,0 kg
Version 2	1140 x 1830 mm	25 mm	39,0 kg



GEI RUBBER CLEAN

	Dimensions	Height	Weight
Version 1	400 x 800 mm	28 mm	
Version 2	400 x 800 mm	at the edge	1,8 kg

ACCESSORY



Connections

For any other model or size, please contact our sales team.

(+352) 26 29 66 51

gei@geisa.lu



11A Avenue de la Liberté
L-1931 Luxembourg

Phone: 00352 26 29 66 51
Fax: 00352 26 29 61 05
Email: gei@geisa.lu

WWW.GEISA.LU
