

Kent Double Wedge Heel Mesh Grating



The Kent Double Wedge Heelmesh Grating is commonly manufactured for use as a ventilation grille. Unlike most other options available our double wedge range can be manufactured to take loadings of up to FACTA B for 44 ton trucks slow moving and is heel safe

Kent Double Wedge grating is frequently supplied with angle frame and support beams (more detail can be found on P3 &4).

As standard the double wedge grating is manufactured to be heelsafe. The 5mm bar and 5mm gap prevents high heels getting trapped or entering the free area. Increased free area / air flow can be created by moving from 5mm bar / 5mm gap to 8mm, 10mm or 12mm gaps with the same 5mm bar.

The same grille structure can be made in planks to be used as channel/trench drain gratings and is dealt with in a separate brochure.

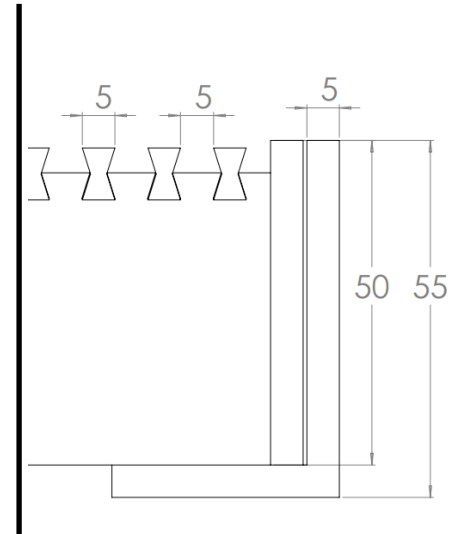
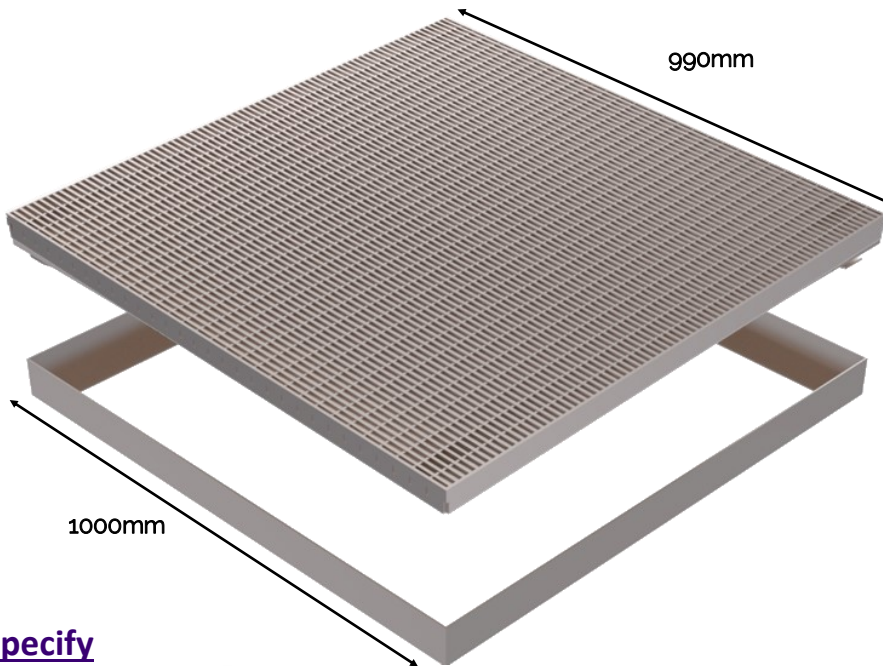
Features:

- Heel safe (ADA and EN1433)
- Up to FACTA B Loading
 - (44 ton truck slow moving)
- 5mm bar and 5mm gap as standard
- Wider gaps available to create larger free area
- Grade 316 Stainless steel as Standard
- Bead Blasted or Satin Finish 320 Grit Polish



Pall Mall, London—5mm Bar / 5mm Gap. 200mm x 1700mm, FACTA B Loading

KENT DOUBLE WEDGE HEELMESH GRATING KDWHMG1000



Specify

Customise your size, or go with our standard 1000mm x 1000mm x 50mm

(Loading chosen will may dictate a deeper grating)

Decide between

5mm bar and 5mm up to 12mm gap -or state free area desired

Specify:

Kent Double Wedge Heelmesh Grating KDWHMG1000; Outside Frame 1000mm length, 1000mm width, 50mm Depth in 55mm Frame; Hidden Lock Points; Grade 316 Stainless Steel; Satin polished finish; 5mm bar, 5mm slot, and FACTA B Loading

Choose your steel:

Grade 304 Stainless steel

Grade 316 Stainless steel

Choose your Finish:

Satin Polish

Shot Peened

Choose your loading

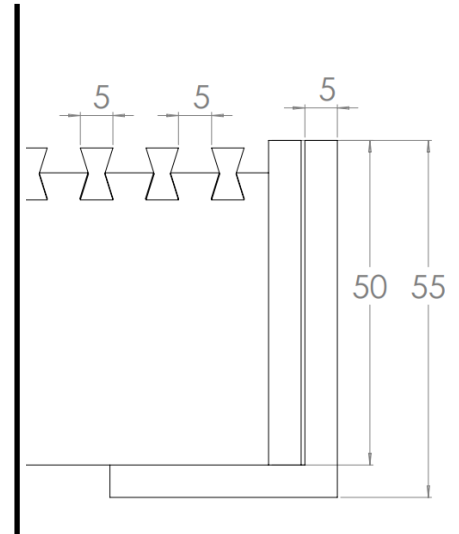
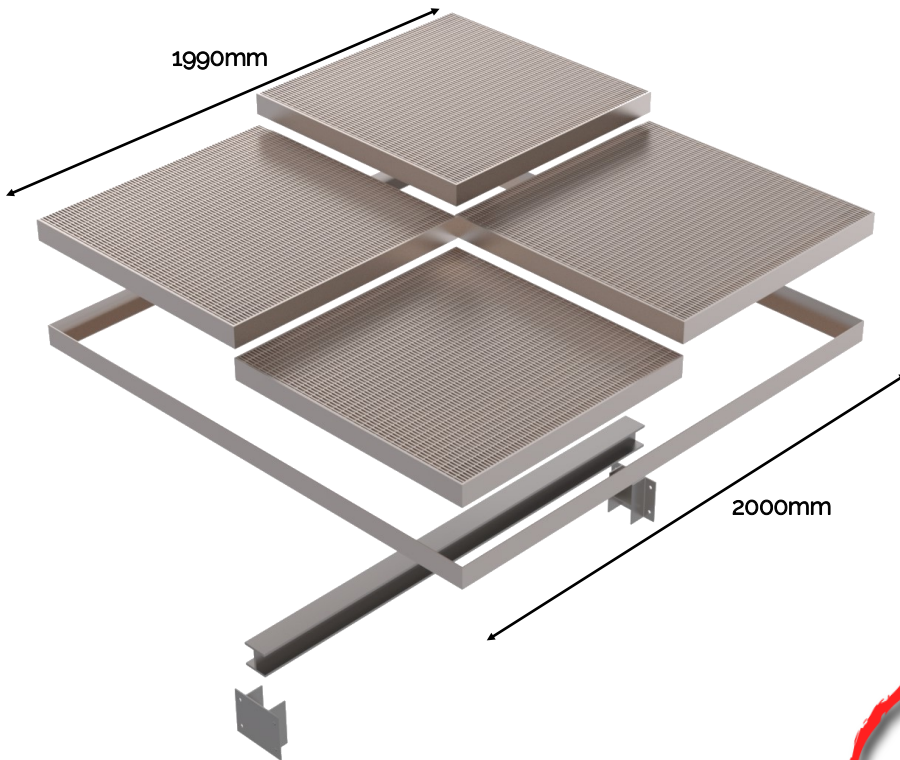
FACTA A, FACTA AA, FACTA AAA

FACTA B,

Product code	Bar	Gap	Depth	Frame Depth	Max Free Area
KDWHMG1000 (5/5)	5	5	50	55	43%
KDWHMG1000 (5/8)	5	8	50	55	54%
KDWHMG1000 (5/10)	5	10	50	55	59%
KDWHMG1000 (5/12)	5	12	50	55	63%

Bespoke:

Modify the dims in the model number eg KDWHMG1000/750 - or KDWHMG606/306 to suit paving & grout pattern



*Decide between
5mm bar and 5mm up
to 12mm gap -or state
free area desired*

*Customise your size, or go with our
standard 2000mm x 2000mm x 50mm
(Loading chosen will may dictate a
deeper grating)*

Specify:

Kent Double Wedge Heelmesh Grating KDWHMG2000; Outside Frame 2000mm length, 2000mm width, 50mm Depth in 55mm Frame; Hidden Lock Points; Grade 316 Stainless Steel; Satin polished finish; 5mm bar, 5mm slot, and FACTA B Loading

*Choose your steel:
Grade 304 Stainless steel
Grade 316 Stainless steel*

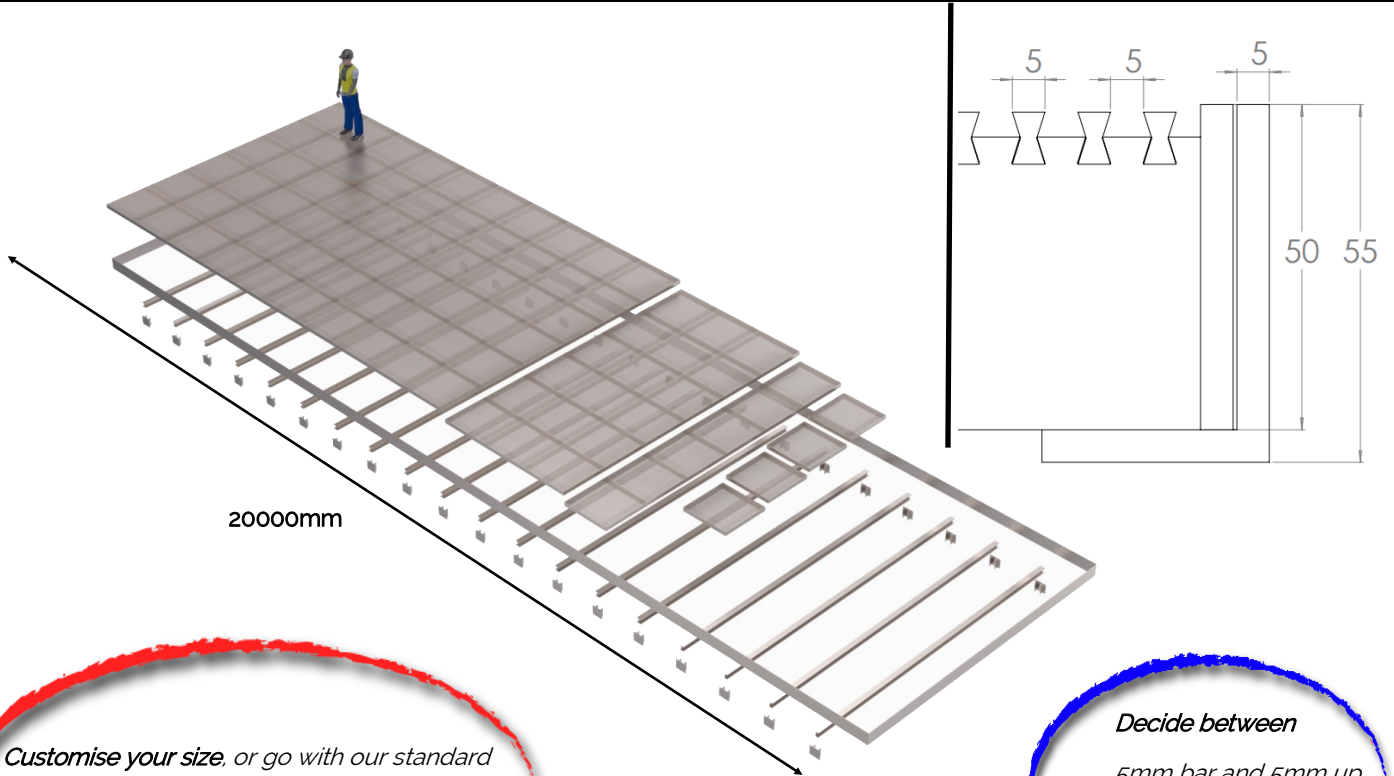
*Choose your Finish:
Satin Polish
Shot Peened*

*Choose your loading
FACTA A, FACTA AA,
FACTA AAA*

Product code	Bar	Gap	Depth	Frame Depth	Max Free Area
KDWHMG2000 (5/5)	5	5	50	55	43%
KDWHMG2000 (5/8)	5	8	50	55	54%
KDWHMG2000 (5/10)	5	10	50	55	59%
KDWHMG2000 (5/12)	5	12	50	55	63%

Bespoke:

Modify the dims in the model number eg KDWHMG2000/1750 - or KDWHMG1930/1115 to suit paving & grout pattern



Customise your size, or go with our standard 20000mm x 6000mm x 50mm
(Loading chosen will may dictate a deeper grating)

Decide between
5mm bar and 5mm up to 12mm gap -or state free area desired

Specify:
Kent Double Wedge Heelmesh Grating KDWHMG20000/6000; Outside Frame 20000mm length, 6000mm width, 50mm Depth in 50mm Frame; Hidden Lock Points; Grade 316 Stainless Steel; Satin polished finish; 5mm bar, 5mm slot, and FACTA B Loading

Choose your steel:
Grade 304 Stainless steel
Grade 316 Stainless steel

Choose your Finish:
Satin Polish
Shot Peened

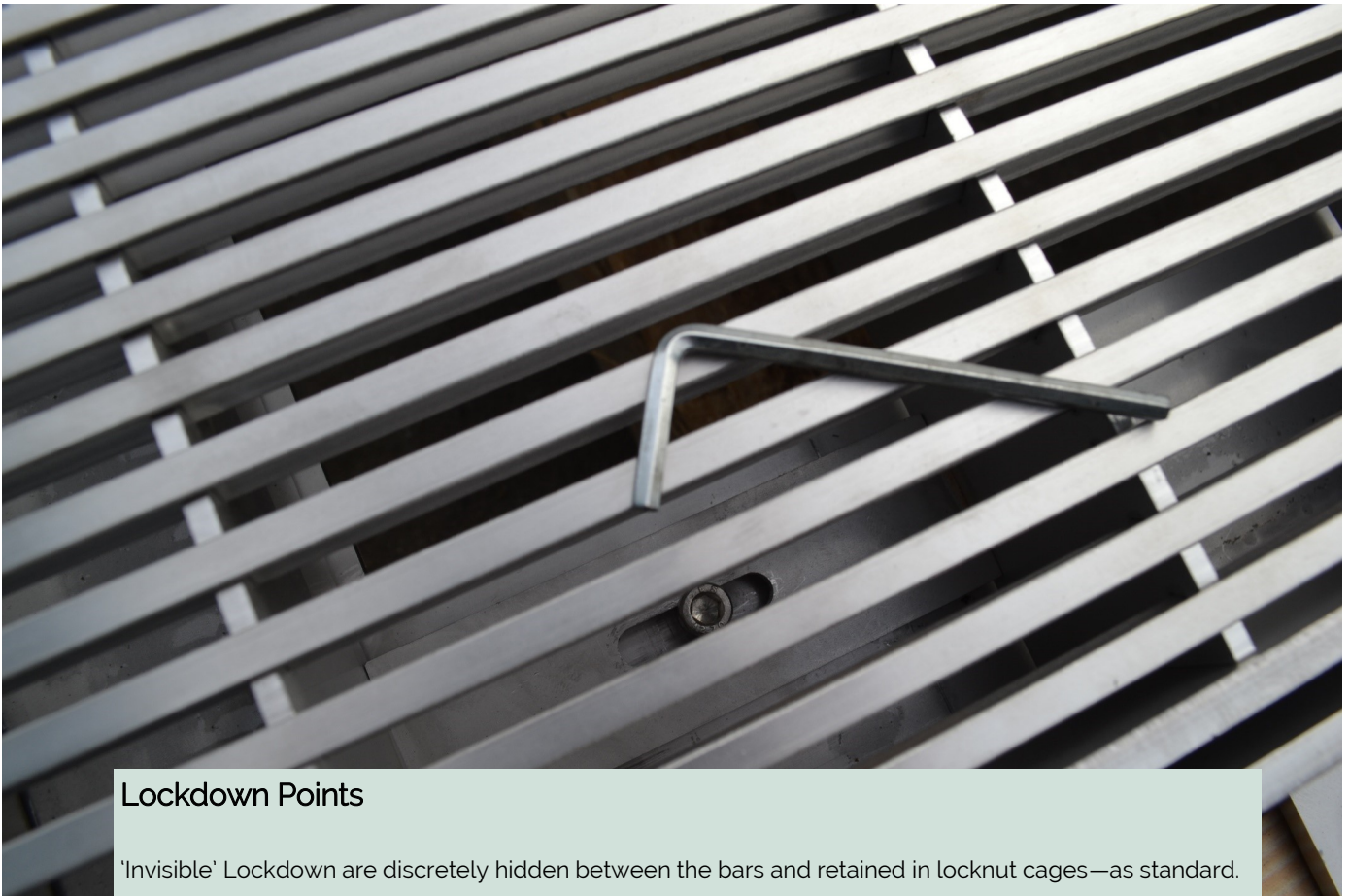
Choose your loading
FACTA A, FACTA AA, FACTA AAA

Product code	Bar	Gap	Depth	Frame Depth	Max Free Area
KDWHMG20000/6000 (5/5)	5	5	50	55	43%
KDWHMG20000/6000 (5/8)	5	8	50	55	54%
KDWHMG20000/6000 (5/10)	5	10	50	55	59%
KDWHMG20000/6000 (5/12)	5	12	50	55	63%

Bespoke:

Modify the dims in the model number eg KDWHMG15000/5000 - or KDWHMG11725/4325 to suit paving & grout pattern

Lockdown Point



Lockdown Points

'Invisible' Lockdown are discretely hidden between the bars and retained in locknut cages—as standard.

Allen key hex heads can be replaced with secure head fixings for high security installations



Heelproof

5mm openings standard—but increase regularly to 8mm, 10mm or occasionally 12mm to increase free area to help increase air flow rate.

ADA compliant is 1/2" or 12mm, Heelproof is 1/4" or 6mm



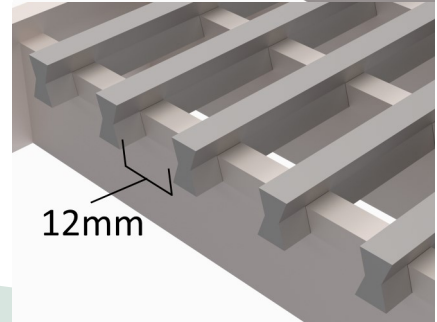
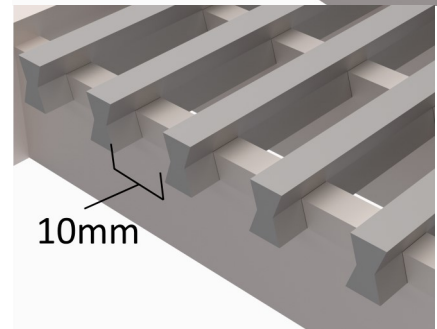
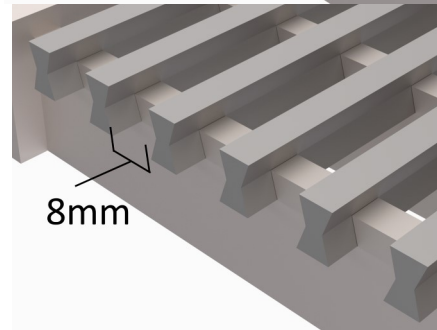
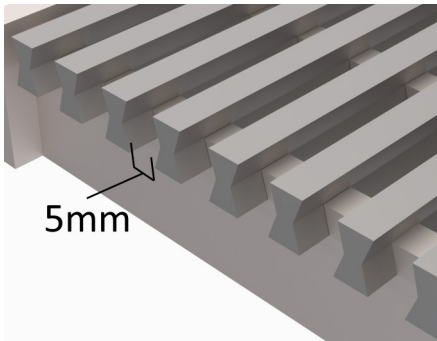
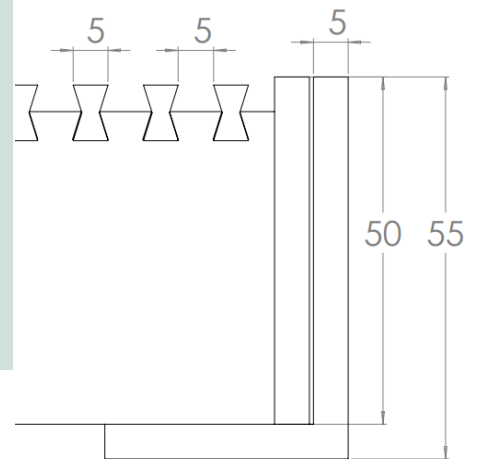
44 Ton Truck Loading

FACTA B Loading as standard or EN124 B125 Loading on request—each to take a slow moving pneumatic tyre of a HGV—44 Ton vehicle with 11 Ton Axle Load and 5.25 ton wheel load.

Pedestrian Loadings on request

Free Area

Free Area is determined 1st by the thickness of the bars and the gaps between the bars. A 5mm Bar with a 5mm gap will give 50% free area—minus the space taken by the load bearing bars below. These load bearing bars vary in terms of thickness and depth and the number of them. Thickness and the number of them decrease the free area—depth does not. So designers should choose their desired loading and their designed free area and make direct contact with Kent Stainless R&D dept to finalise the exact final design per project.

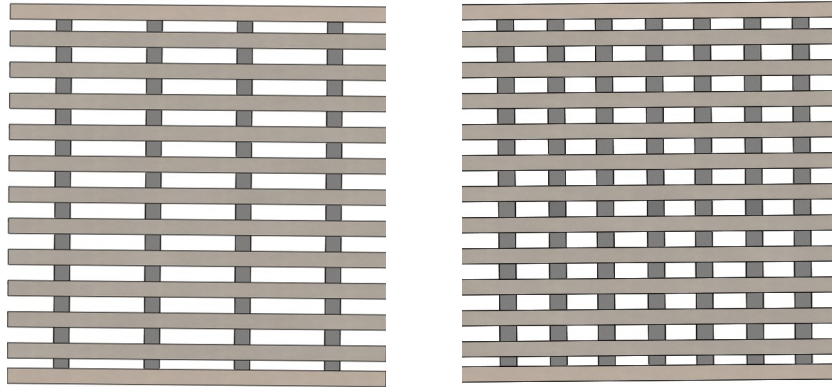


Pedestrian areas

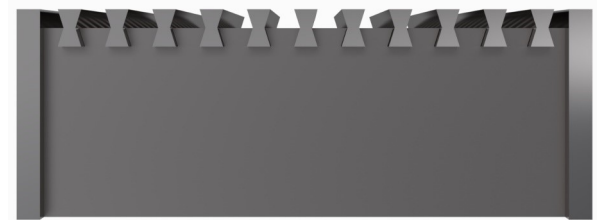
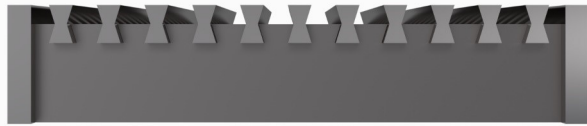
Heavy traffic



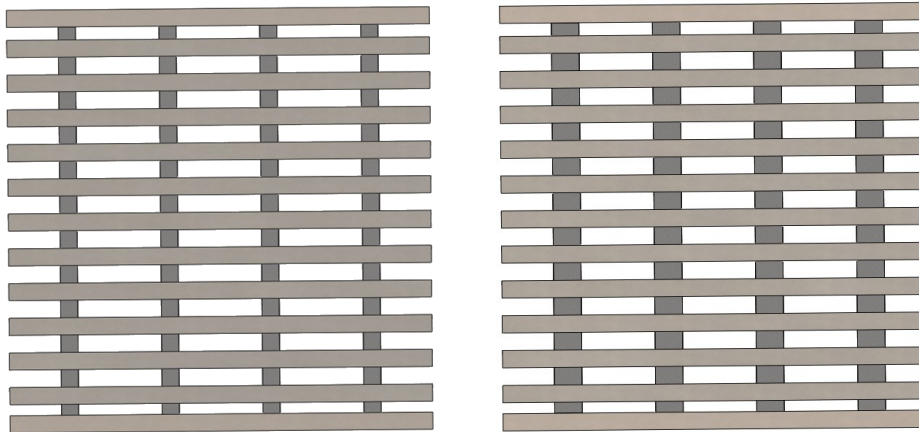
Free Area & Loading



The **number** of load bearing bars (vertical here) can be increased and their **centres reduced** to give a higher loading. This in turn reduces free area



Instead of increasing the number of load bearing bars, their **height** can be increased—from 25mm up to 100mm and more. By doing this we can increase the loading strength **without reducing the free area**



A 3rd way in increasing strength is by increasing the **thickness** of the load bearing bars (vertical here). These bars can go from 3mm to 10mm thick.

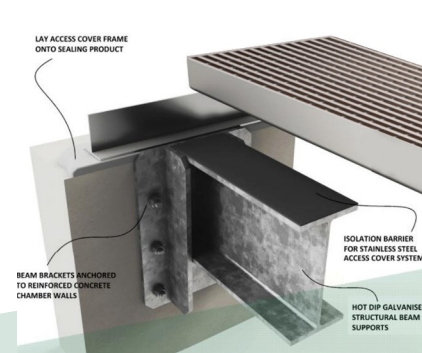
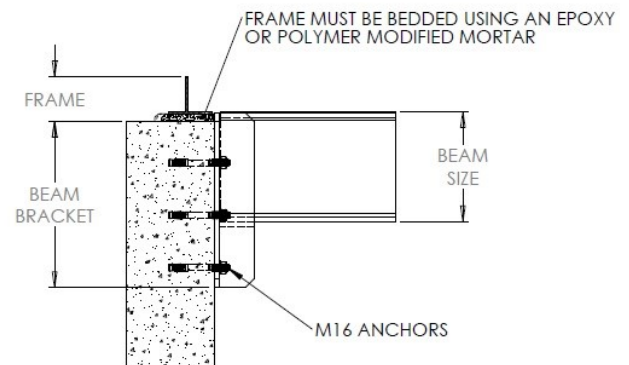
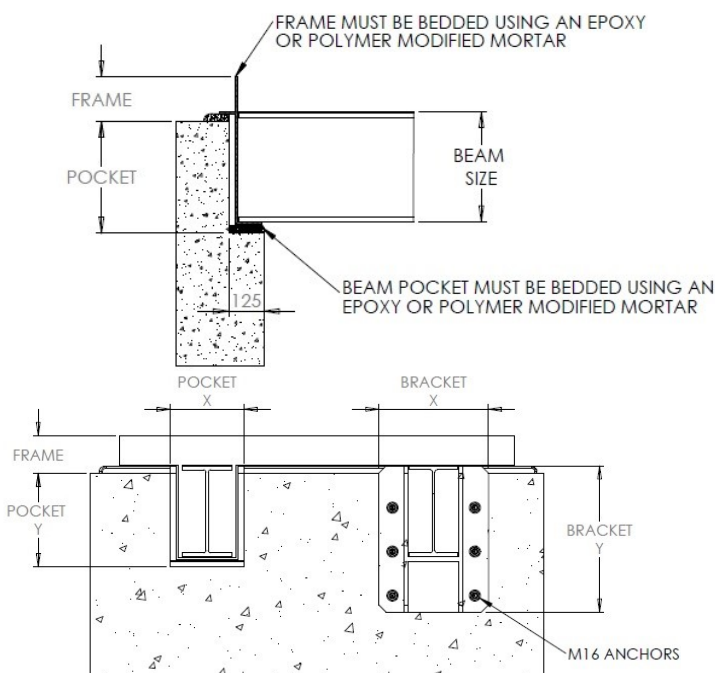
A combination of **quantity**, **height** and **thickness** of the load bearing bars are used for **strength** and the project's **free area** requirements, or **depth restrictions** determine which combination suits best. This combination is customised project by project and is determined directly by contact between the consulting engineer and Kent Stainless R&D Dept.

Load Class B125 and FACTA C

Removable Support Beam Size	Max Pit Clear Opening Length (L)	Beam Bracket		Beam Pocket	
		Y	X	Y	X
152 x152 x 37 kg/m UC	2000	400	375	170	250
203 x152 x 52kg/m RSJ	2750	400	375	220	250
305 x 165 x 54 kg/m UB	3900	500	375	320	250

Load Class FACTA D

Removable Support Beam Size	Max Pit Clear Opening Length (L)	Beam Bracket		Beam Pocket	
		Y	X	Y	X
152 x152 x 37kg/m UC	1300	400	375	170	250
203 x152 x 52kg/m RSJ	1750	400	375	220	250
305 x 165 x 54kg/m UB	2300	500	375	320	250
356 x 171 x 67kg/m UB	2850	500	375	370	250
457 x 152 x 82kg/m UB	3450	675	375	470	250
533 x 210 x 122kg/m UB	3900	675	425	550	300



I Beam and Bracket Support Systems

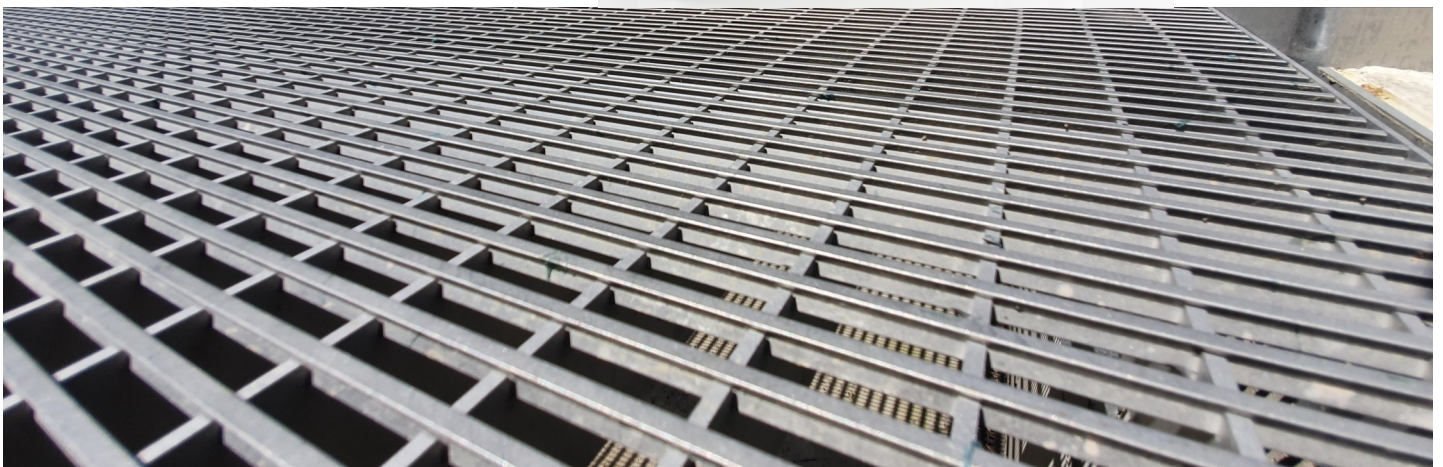
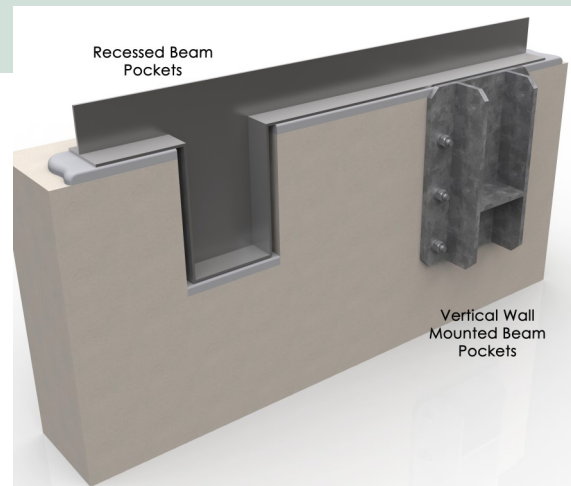
Large Ventilation Grilles are generally manufactured in several panels. Due to this it is necessary to have a beam system in place below the surface to support individual trays. There are two ways in which we supply these support systems. Our Technical Support team are happy to assist in providing advice in order to make sure the most suitable option is chosen.

Type 1: Vertical Wall Mounted Beam Pockets

These are wall mounted pockets which we supply to the customer which are to be bolted to the retaining wall, underneath the frame. The removable I-Beam then sits into these pockets and supports the loading on the tray or grille above. These pockets are to be bolted into place by the contractor on site.

Type 2: Recessed Beam Pockets

With this option, Recessed pockets are formed in the frame to allow space for the I-Beam to be dropped into place. In this case, both the frame and the I-Beam are supported by the cast concrete of the retaining wall.



Greenwich P5K, London—5mm Bar / 12mm Gap. 38m long x 1200mm wide—FACTA AAA loading

Stainless Steel Maintenance

Clean the stainless steel components using warm water with a mild detergent with a non abrasive cloth or sponge. Heavier stains may require the use of a nylon scouring pad or a stainless steel cleaner. To remove paint or graffiti (or light concrete splashes) use a cloth and alkaline or solvent paint strippers according to type of paint. For Satin Finish Stainless try to follow the direction of the grain when cleaning vigorously or polishing. For Bead Blasted Finish use a circular motion. Rust spots or 'tea stains' can occur on the surface of the material, these are normally caused by contamination from ordinary mild steel, particularly in areas where construction work has been undertaken. Where contamination of the stainless has occurred from ordinary mild steel coming into contact with the stainless, use Rust Remover 410. In cases where the surface is severely stained as a result of severe environmental conditions or scratched due to misuse, it may still be possible to restore the original finish using chemicals such as Oxalic Acid solution.



Regent's Place, London—5mm Bar / 8mm Gap. 6m long x 2250mm wide. FACTA B Loading



Sea Power Station, London—5mm Bar / 8mm Gap. 12m long x 2.2m wide. FACTA B Loading (also showing Stainless Cycle Stands)

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