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**PT. INTI COMPOSITE FIGLASINDO UTAMA** established in 2004, was manufactures and exports composite material and end user products for industrial sectors such as chemical processing, oil and gas, metals and mining, water and waste treatment, infrastructure, construction, pharmaceuticals, food and beverage, pulp and paper, electronics, automotive, marine, telecommunications and many more.

We are a leader in the field of composites pultrusion in Indonesia, the company delivers standard as well as customized solutions that are ideal replacements for conventional materials particularly those prone to corrosion.

With production facilities and management office which has an area of more than 25,000 m2, manufacturing at Jababeka Industrial Estate an international industrial area with our ISO-9001 certified quality management, we provide high-quality composite solutions and reliable service, complying with customer specifications as well as national and international standards.

Oriented towards continuous improvement, the company operates using principles of Total Quality Management and ISO 9001 to ensuring complete customer satisfaction.

Dedicated to single point responsibility it encompasses conceptual design, prototype, development, testing, manufacturing, logistic support, installation and comprehensive after sales service.



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high strength pultruded bar type gratings that can be designed and used like traditional metal grates but have the inherent benefits of fiberglass.

These problem solving products are ideal replacements for steel or aluminum gratings in corrosive environments or anywhere frequent grating and walkway replacement costs are unacceptable.

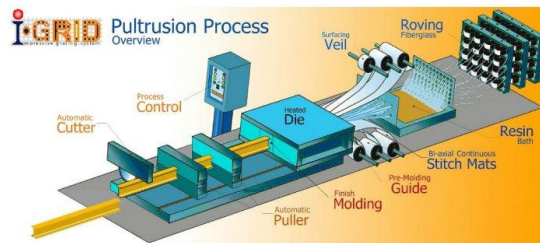
I-GRID is a standard product which available with individual bearing bars in either 25mm(1") or 38mm (1-1/2") I-shapes and 50mm(2") T-shape.

The manufacturing processes of I-GRID FRP Grating are: Composites with **Pultrusion and Contact Molding**

**COMPOSITES** is a combination of two or more materials, where the resultant material is superior to the individual component parts. I-GRID<sup>5</sup> composite products utilize these enhanced properties to the full. Designed by an experienced and talented team who know and understand composites, and manufactured from in-house produced thermosetting resins, reinforced by our captive production of reinforcements and processed by the most complete range of conversion techniques.

I-GRID composite products offer durable, long term solutions at a competitive price.

**PULTRUSION** is a process in which continuous fiberglass are pulled through a bath of resin and then through a die.



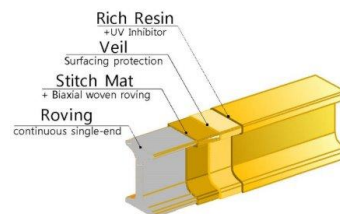
**PULTRUSION** is a process in which dry, continuous fibers are pulled through a bath of resin and then through a die.

The die serves two purposes: it forces the bundle of wet fibers to conform to the shape you want to create and since the die is heated, it will cure the resin to set the bundle of fibers into its final shape.

After the composite comes out out of the die, it is allowed to post-cure while being pulled to the automatic saw where it will be cut to designed lengths.

The bearing bars use both longitudinal (glass roving) and multidirectional (glass mat) reinforcements as well as a synthetic surfacing veil to provide unequalled strength and corrosion resistance. The densely packed core of continuous glass roving gives the bar strength and stiffness in the longitudinal direction while the continuous glass mat provides strength in the transverse direction and prevents chipping, cracking and lineal fracturing. The synthetic surfacing veil provides a 100% pure resin surface for added corrosion resistance and UV protection.

I-GRID<sup>5</sup> Materials of Construction



I-GRID is a fire retardant product utilizing a polyester or vinyl ester resin. Standard panels are available with cross-rods spacing of 100 mm, 120 mm, 150 mm or 200 mm and 300 on center.

I-GRID available to custom grid or grating systems are designed to accommodate specific applications that cannot effectively be met by a standard fiberglass grating.

I-GRID offers the customer options such as selection of open space, bar shape, cross-rod placement, custom fabrication, custom resin or color

I-GRID has been designed and thoroughly composed, accurate and measurable by our Total Quality Management team, resulting in effective, efficient, strong and superior products.

**High stiffness to weight ratio**

Also known as specific stiffness, it allows materials of different mass to be compared quickly in rigidity-sensitive applications where weight is still a factor. Carbon fiber does extremely well in this area, being about 3 times stiffer than steel and aluminum for a given weight. With all the fibers running uni-directionally, pultruded profile take optimal advantage of this characteristic.

**High strength to weight ratio**

Also known as specific strength, this is similar to the stiffness to weight ratio. This ratio allows you to compare materials of different

mass for applications where resistance against breaking has priority.

**Ability to create various profile**

The inside diameter of a pultruded profile is determined by a mandrel, which is easy to exchange for a different sized one, making it easy to produce profiles and any kind of profile with varying thickness.

I-GRID are lightweight, which saves on freight and makes installation easier. The unique cross-bar configuration of allows the grating panels to be easily cut and modified to fit almost any plant requirement. A full listing of features are shown below

- Corrosion Resistant
- Structurally Strong
- High Impact and Fatigue Strength
- Lightweight
- Easy to Fabricate and Install
- Low Maintenance
- Low Conductivity
- Fire Retardant
- Resistant to Chipping and Cracking
- Aesthetically Pleasing Appearance
- Skid Resistant
- Rigid
- Low Thermal Conductivity
- Non-Sparking

Other options feature fire retardant, UV inhibitors, various colors and specialized additives. Surface Texture Grids can be ordered with or without an anti-skid grit surface. A variety of grit material and textures can be ordered.





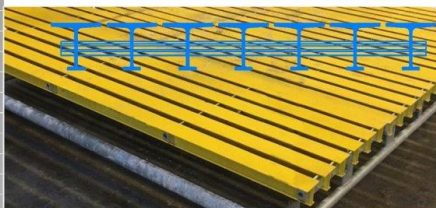
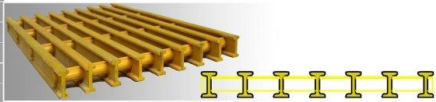
Cross rod assembly used in i-GRID grating forms a strong, unified panel that can be cut and fabricated like a solid panel. This unique system consists of two continuous, pultruded spacer bars and a center core wedge. The spacers are notched at each bearing bar so that the bars are both mechanically locked and resin bonded to the web of each bearing bar. This separates and affixes bearing bars firmly in position and distributes concentrated loads to adjacent bars. The resulting panel can be easily fabricated with standard carpenter's tools with abrasive cutting edges.

**Bar Profiles and Grating Type**

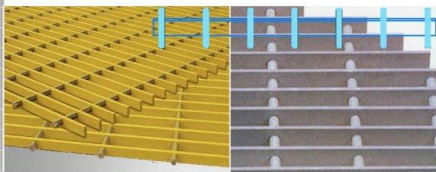
A wide variety of bearing bar shapes along with various bearing bar and cross-rod spacing are available depend on the design requirements. Refer to the load/deflection tables in this catalog for selection.



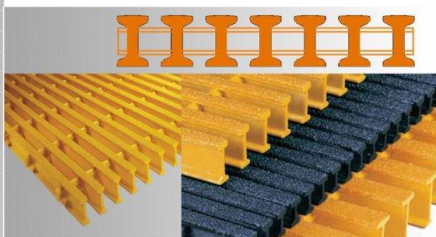
i-GRID bar using "I" shape provides maximum flexibility in design. It is available in 25mm (1"), 32mm (1-1/4"), 38mm (1-1/2") and 50mm (2") depth of grating.



i-GRID also provide T-Type which "T" bar shape for more solid walking surface, decking or platform to prevents catching high heels and other objects from the gap between the bars. T-Types are available in 25mm(1"), 40mm(1-1/2") and 50mm (2") height for the depth of grating. This T-Type is a economic series offers a lighter bearing bar.



i-GRID F-Type is grating with flat bearing bar has been designed to used for optimal opening area for air or water flow requirements with the ability to withstand loads as needed. Grating Type F is commonly used in light to medium loads with low dynamic loads



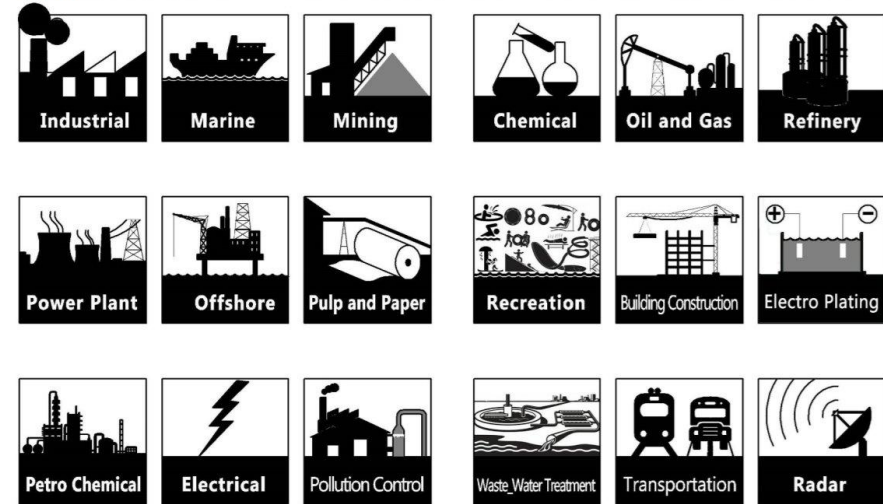
i-GRID HD-Type is heavy duty grating with bold "I" bar grating has been designed to take heavy wheel traffic such as forklifts, tow motors and truck traffic. It is available 40mm (1-1/2"), 50mm (2"), 65mm (2-1/2") and 75mm(3") height for the depth of grating.

*Because of the variety of wheel types and loading, please contact us to determine the series of heavy duty grating to use.*



i-GRID also provide i-DECK panel 305mm (12") width with fast lock system joint panel to panel, make rigid and easy to install. This deck is very lightweight, strong and comfortable. Equipped with retrofitting at the bottom, very effective for heavy loads so effective for cooling tower decks, scaffolding platforms, walkways and elevated flooring.

i-GRID grating systems are designed to accommodate a wide variety of applications, such as:



- General Industrial
- Marine
- Mining
- Power Plant
- Offshore
- Pulp and Paper Industry
- Petro Chemical
- Electrical
- Pollution Control

- Chemical
- Oil and Gas
- Refinery
- Electro Plating Plant
- Waste\_/Water Treatment
- Transportation
- Building Construction
- Recreation
- Radar

**Panel Sizes and Shape**

Panel size of i-GRID can be made to exact sizes to eliminate waste and installation costs in the work site. To manage site work , we propose maximum panel weight is 220kg and maximum panel size is 1500mm x 6000mm.

**UV Coatings**

Bearing bars can be UV coated for added protection and color stability for outdoor applications.

**Color**

Our standard colors are gray and yellow. Other colors can be provide upon request.

*\*) All grating and deck surface can be ordered with or without an anti-skid grit surface.*

**Resin Type Selection**

The standard i-GRID FRP Grating used is fire retardant comply to ASTM E-84 Class 1, which flame spread rating less than 25, and also contains a UV inhibitor. Standard resin for i-GRID is Isophthalic polyester and vinyl ester. Other options for resin type use can be provide upon request. The following pages in this catalog illustrate the corrosion resistance capability of Isophthalic Polyester and Vinyl Ester resin types. Use the table to determine the type of i-GRID material by considering corrosive environment



## CORROSIVE L ENVIRONMENTS

## CHEMICAL ENVIRONMENTS

Chemical Environment	I-GRID Performance		Chemical Environment	I-GRID Performance	
	Poly Ester	Vinyl Ester		Poly Ester	Vinyl Ester
Acetic Acid	S	S	Calcium Sulfate	S	S
Acetone	NR	NR	Caprylic Acid	S	S
Acrylic Acid	NR	S	Carbon Dioxide, gas	S	S
Aluminum Chloride	S	S	Carbon Disulfide	NR	NR
Aluminum Chlorohydroxide	S	S	Carbonic Acid	S	NA
Aluminum Citrate	S	S	Carbon Monoxide, gas	S	S
Aluminum Hydroxide	S	S	Carbon Tetrachloride	NR	NR
Aluminum Nitrate	S	S	Chloroacetic Acid	NR	S
Aluminum Potassium Sulfate	S	S	Chlorinated Paraffin	S	S
Aluminum Sulfate	S	S	Chlorine, dry gas	S	S
Ammonia, dry gas	S	S	Chlorine, wet gas	NR	S
Ammonia, liquid	NR	NR	Chlorine, liquid	NR	NR
Ammonium Acetate	NR	S	Chlorine Dioxide	NR	S
Ammonium Carbonate	NR	S	Chlorine Water	S	S
Ammonium Chloride	S	S	Chlorobenzene	NR	NR
Ammonium Citrate	S	S	Chromic Acid	NR	S
Ammonium Hydroxide	NR	S	Chromous Sulfate	S	S
Ammonium Nitrate	S	S	Citric Acid	S	S
Ammonium Phosphate	S	S	Coconut Oil	S	S
Ammonium Sulfate	S	S	Copper Acetate	S	S
Ammonium Sulfide	NR	NA	Copper Chloride	S	S
Ammonium Sulfite	NR	S	Copper Cyanide	S	S
Ammonium Thiosulfate	NR	S	Copper Nitrate	S	S
Amyl Acetate	NR	NR	Copper Sulfate	S	S
Amyl Alcohol	S	S	Cresylic Acid Fumes	NR	NR
Amyl Chloride	NR	NA	Cresol	NR	NA
Aniline Sulfate	S	S	Crude Oil (Sour)	S	S
Barium Acetate	S	S	Cyclohexane	NR	S
Barium Carbonate	S	S	Diallylphthalate	S	S
Barium Chloride	S	S	Diammonium Phosphate	NR	S
Barium Sulfate	S	S	Dibutyl Ether	NR	S
Benzene	S	NR	Dibutyl Phthalate	S	S
Benzoic Acid	S	S	Diesel Fuel	S	S
Benzyl Alcohol	NR	NR	Diethylene Glycol	S	S
Borax	S	S	Dimethyl Phthalate	NR	S
Boric Acid	S	S	Dimethyl Sulfoxide	NR	NA
Brine	S	S	Diphenyl Ether	NR	S
Bromine, dry gas	NR	S	Dipropylene Glycol	S	S
Bromine, wet gas	NR	S	Esters, Fatty Acid	S	S
Bromine, liquid	NR	NR	Ethyl Alcohol	NR	S
Butyl Acetate	NR	NR	Ethylene Chlorohydrin	NR	S
Butyl Alcohol, normal	S	S	Ethylene Glycol	S	S
Butyl Cellosolve	S	NR	Fatty Acids	S	S
Butylene Glycol	S	S	Ferric Chloride	S	S
Butyric Acid	S	S	Ferric Nitrate	S	S
Calcium Bisulfite	S	S	Ferric Sulfate	S	S
Calcium Carbonate	S	S	Ferrous Chloride	S	S
Calcium Chlorate	S	S	Ferrous Nitrate	S	S
Calcium Chloride	S	S	Ferrous Sulfate	S	S
Calcium Nitrate	S	S	Fluoboric Acid	S	S

Chemical Environment	I-GRID Performance		Chemical Environment	I-GRID Performance	
	Poly Ester	Vinyl Ester		Poly Ester	Vinyl Ester
Fluosilicic Acid	NR	S	Nitric Acid	NR	S
Formic Acid, vapor	S	S	Oleic Acid	S	S
Fuel Oil	S	S	Olive Oils	S	S
Furfural	NR	NR	Oxalic Acid	S	S
Gasoline, Aviation	S	S	Palmitic Acid	S	S
Gasoline, Ethyl	S	S	Perchloroethylene	NR	S
Gluconic Acid	S	S	Perchloric Acid	NR	S
Glucose	S	S	Phenol	NR	NR
Glycerine	S	S	Phosphoric Acid	S	S
Hexachlorocyclopentadienyl	NR	NA	Photographic Solutions	S	NA
Hydrochloric Acid	S	S	Phthalic Anhydride	S	S
Hydrofluoric Acid	NR	NA	Pickling Liquids, Acid	S	S
Hydrogen Bromide, dry gas	S	S	Pickling Liquids, Alkaline	NR	NA
Hydrogen Chloride, dry gas	S	S	Picric Acids	NR	NA
Hydrogen Chloride, wet gas	S	S	Potassium Aluminum Sulfate	S	S
Hydrogen Fluoride, vapor	NR	S	Potassium Bicarbonate	S	S
Hydrogen Peroxide	NR	S	Potassium Bromide	S	S
Hydrogen Sulfide, dry gas	S	S	Potassium Carbonate	NR	S
Hydrogen Sulfide, wet gas	S	S	Potassium Chloride	S	S
Hydroiodic Acid	NR	NA	Potassium Ferricyanide	S	S
Hypochlorous Acid	NR	S	Potassium Ferrocyanide	S	S
Isodecanol	S	S	Potassium Hydroxide	NR	S
Isopropyl Palmitate	S	S	Potassium Nitrate	S	S
Jet Fuel (JP-4)	S	S	Potassium Permanganate	NR	S
Kerosene	S	S	Potassium Persulfate	NR	S
Lactic Acid	S	S	Potassium Sulfate	S	S
Lead Acetate	S	S	Propylene Glycol	S	S
Lime Slurry	S	S	Silicic Acid	S	NA
Linseed Oil	S	S	Silver Nitrate	S	S
Lithium Bromide	S	S	Sodium Acetate	S	S
Lithium Chloride	S	S	Sodium Benzoate	S	S
Magnesium Bicarbonate	S	S	Sodium Bicarbonate	S	S
Magnesium Carbonate	S	S	Saturated	S	S
Magnesium Chloride	S	S	Sodium Bisulfate	S	S
Magnesium Nitrate	S	S	Sodium Borate	S	S
Magnesium Sulfate	S	S	Sodium Bromide	S	S
Mercuric Chloride	S	S	Sodium Carbonate	NR	S
Mercurous Chloride	S	S	Sodium Chlorate	NR	S
Mercury	S	S	Sodium Chloride	S	S
Methyl Alcohol	S	NR	Saturated Chlorine	NR	S
Methyl Ethyl Ketone	NR	NR	Sodium Chlorite	NR	S
Milk Waste	S	S	Sodium Cyanide	S	S
Mineral Oils	S	S	Sodium Dichromate	NR	S
Monochlorobenzene	NR	NR	Sodium Di-phosphate	S	S
Naphtha	S	S	Sodium Ferricyanide	S	S
Naphthalene	S	S	Sodium Ferrocyanide	S	S
Nickel Chloride	S	S	Sodium Fluoride	NR	S
Nickel Nitrate	S	S	Sodium Hydroxide	NR	S
Nickel Sulfate	S	S	Sodium Hypochlorite	NR	S
Nickel Sulfonate Plating	S	S	Sodium Hyposulfite	S	NA



## CORROSIVE L ENVIRONMENTS

Chemical Environment	i-GRID Performance		Chemical Environment	i-GRID Performance	
	Poly Ester	Vinyl Ester		Poly Ester	Vinyl Ester
Sodium Mono-phosphate	S	S	Tannic Acid	S	S
Sodium Nitrate	S	S	Tartaric Acid	S	S
Sodium Nitrite	S	S	Tetrachloroethylene	NR	S
Sodium Silicate, pH < 12	NR	S	Tetrapotassium	NR	NA
Sodium Silicate, pH > 12	NR	S	Pyrophosphate	NR	S
Sodium Sulfate	S	S	Tetrasodium Pyrophosphate	NR	S
Sodium Sulfi de	NR	S	Toulene	NR	S
Sodium Sulfi te	NR	S	Toluene Di-isocyanate fumes	NR	NA
Sodium Tetraborate	S	S	Trichloroethylene, fumes	NR	NR
Sodium Thiosulfate	S	S	Trichloroacetic Acid	NR	S
Sodium Xylene Sulfonate	NR	S	Trimethylamine Hydrochloride S	S	S
Sodium solution	S	S	Triphenyl Phosphite	NR	S
Sorbitol Solutions	S	S	Trisodium Phosphate	NR	S
Sour Crude Oil	S	S	Turpentine, Pure Gum	NR	S
Soya Oil	S	S	Urea	S	S
Stannous Chloride	S	S	Vinegar	S	S
Stearic Acid	S	S	Water, Cooling Tower	S	S
Styrene	NR	NR	Water, Demineralized	S	S
Sulfated Detergents	S	S	Water, Mine	S	S
Sulfonated Detergents	NR	S	Water, Sea	S	S
Sulfonyl Chloride, Aromatic	NR	NA	Water, Steam Condensate	S	S
Sulfur Dioxide, dry gas	S	S	Xylene	NR	S
Sulfur Dioxide, wet gas	S	S	Zinc Chloride	S	S
Sulfuric Acid, vapor	S	S	Zinc Nitrate	S	S
Sulfurous Acid	NR	S	Zinc Sulfate	S	S

In most applications i-GRID is used because of its superior corrosion resistance. The following corrosion resistance guide on this catalog offers performance recommendations for the most common environments. The general guidelines presented in this table take into consideration the normal applications where exposure to harsh chemicals is limited to fumes or vapors and occasional splashes at ambient temperatures.

This information is provided as a guide only since it is impossible to anticipate every conceivable application. For specific applications, which may fall outside the scope of these guidelines, it is recommended that the factory be consulted directly. Special applications may require a screening test of material samples in the chemical environment of interest.

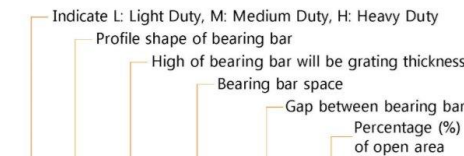


i-GRID provides various types of gratings as needed. All types of i-GRID FRP gratings are based on profile bearing bar shape. There are shape profile I, T and L.

To select i-GRID products can be started from profile shape and percentage of open area. Next, use the load data tables, deflection and safe working load on each type of grating to determine the load in application.

For workloads, i-GRID provides grating type for light, medium to heavy duty as an option for your use. Please contact our marketing engineering to determine the type of gratings that may not be described in tables in this catalog

### Grating Series and Types Designation :



**L - I - 25 x 25 - 10 - 32 ( V / Y )**

Specify on order:  
Resin Type ( V: Vinyl ester ; I: Isophthalic Polyester )  
Color ( Y: Yellow ; G: Gray )

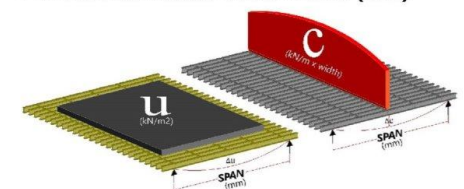
### Cross Rod Spacing

Standard of cross rod space is 150mm center to center. We can be provide 50mm, 100mm, 200mm cross rod spacing upon a special request. Please contact our marketing for your special request.

### Load and Deflection Data

Deflection and Safe Working Load (SWL) data were calculated base on actual mechanical properties tested by third party lab. All tables show the values of load, span, deflection and safe working load.

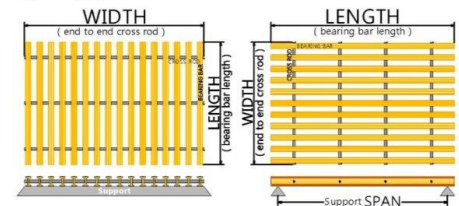
- c : Concentrated Load (kN/m x width)
- Δc : Deflection under Concentrated Load (mm)
- u : Uniform Load (kN/m<sup>2</sup>)
- Δu : Deflection under Uniform Load (mm)



### Specifying Grating Panel Size

When ordering i-GRID FRP Grating, make sure the correct length of the grating panel is based on the bearing bar's length. The bars in the panels are oriented in the right direction for the application. Bearing bars should traverse from support to support.

Cross-rods are not intended to be applied in the span direction. Please refer to the drawing below to specify the width and length of grating panels.



### HOW TO specify your ORDER

- i-GRID FRP grating shall be select on :
- Bearing Bar Profile shape,
  - Bearing Bar Spacing, or
  - Percentage of Open Area,
  - Check Load, Deflection & Safe Working Load
  - Specify Length by bearing bar length
  - Specify Width by cross bar length
  - Select Resin Type :
    - I : for Isophthalic Polyester
    - V : for Vinyl ester resin
  - Select the color
    - Y : Yellow, or G : Gray

### NOTE :

- i-GRID's FRP material was composed as :
1. Fire retardant comply to ASTM E-84 Class 1, which flame spread rating <25 and meets the self-extinguishing requirements of ASTM D-635.
  2. Color shall be gray and yellow
  3. Resin shall be UV inhibited and the composite shall include a veil on all exposed surfaces.

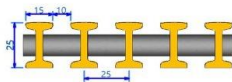
If special options are required that are not stated in the above specification, fill in your special requirement and contact us for detail clarification.



## L-I Series

### I-GRID L-I-25x25-10-37

Open Area : 37 %  
 Approx. Weight : 14.2 Kg/m<sup>2</sup>  
 Panel Volume : 0.025 m<sup>3</sup>/m<sup>2</sup> panel



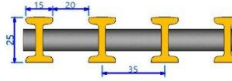
**NOTE :**

When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 4.13mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	125	150	250			
400	Δu	0.04	0.06	0.10	0.15	0.21	0.31	0.41	0.52	0.72	1.03	1.55	2.07	2.58	3.10	5.16	375	7.80
	Δc	0.17	0.25	0.42	0.58	0.83	1.24	1.66	2.07	2.89	4.13	6.20	8.26	10.32			94	
600	Δu	0.22	0.32	0.53	0.74	1.05	1.58	2.10	2.62	3.67	5.24	7.85	10.46	13.08			110	11.70
	Δc	0.58	0.86	1.41	1.97	2.81	4.20	5.59	6.99	9.77	13.95						41	
800	Δu	0.69	1.02	1.68	2.34	3.34	4.99	6.64	8.29	11.60	16.55						23	15.60
	Δc	1.38	2.04	3.37	4.69	6.67	9.97	13.27	16.57	23.18							24	
1000	Δu	1.71	2.52	4.13	5.74	8.16	12.20	16.23	20.26								15	19.50
	Δc	2.73	4.02	6.60	9.18	13.05	19.50	25.95									14	
1200	Δu	3.59	5.26	8.60	11.95	16.97	25.33										10	23.40
	Δc	4.78	7.01	11.46	15.92	22.61	33.75										7	
1500	Δu	8.90	12.99	21.15	29.32												6	29.25
	Δc	9.49	13.84	22.55	31.26												4	
1800	Δu	18.76	27.23	44.17													4	35.10
	Δc	16.67	24.19	39.23													4	

### I-GRID L-I-25x35-20-52

Open Area : 52 %  
 Approx. Weight : 10.9 Kg/m<sup>2</sup>  
 Panel Volume : 0.025 m<sup>3</sup>/m<sup>2</sup> panel



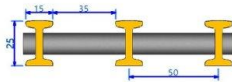
**NOTE :**

When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 5.66mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	125	150	250			
400	Δu	0.06	0.09	0.14	0.20	0.29	0.43	0.57	0.71	1.00	1.43	2.14	2.85	3.56	4.27	7.12	273	7.80
	Δc	0.23	0.35	0.57	0.80	1.14	1.71	2.28	2.85	3.99	5.70	8.54	11.39				68	
600	Δu	0.30	0.44	0.73	1.02	1.45	2.17	2.89	3.61	5.05	7.22	10.82	14.43				30	11.70
	Δc	0.79	1.17	1.94	2.71	3.86	5.78	7.71	9.63	13.47	19.24						33	
800	Δu	0.94	1.40	2.31	3.22	4.59	6.87	9.15	11.43	15.98							17	15.60
	Δc	1.89	2.80	4.62	6.44	9.17	13.73	18.28	22.84								17	
1000	Δu	2.32	3.43	5.66	7.89	11.22	16.79	22.35									11	19.50
	Δc	3.71	5.49	9.05	12.61	17.95	26.84										10	
1200	Δu	4.85	7.16	11.78	16.39	23.31	34.85										7	23.40
	Δc	6.47	9.54	15.69	21.84	31.06											5	
1500	Δu	12.00	17.63	28.90	40.17												5	29.25
	Δc	12.79	18.80	30.81													3	
1800	Δu	25.19	35.08	57.31													3	35.10
	Δc	22.37	32.75	53.50													3	

### I-GRID L-I-25x50-35-65

Open Area : 65 %  
 Approx. Weight : 8.1 Kg/m<sup>2</sup>  
 Panel Volume : 0.025 m<sup>3</sup>/m<sup>2</sup> panel



**NOTE :**

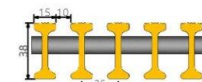
When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 8.16mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	125	150	250			
400	Δu	0.08	0.12	0.21	0.29	0.41	0.62	0.83	1.03	1.45	2.07	3.10	4.13	5.16	6.20	10.33	188	7.80
	Δc	0.33	0.50	0.83	1.16	1.66	2.48	3.31	4.13	5.78	8.26	12.39					47	
600	Δu	0.43	0.63	1.05	1.47	2.10	3.14	4.19	5.24	7.33	10.46	15.69					51	11.70
	Δc	1.13	1.69	2.81	3.92	5.59	8.38	11.16	13.95								21	
800	Δu	1.35	2.01	3.34	4.66	6.64	9.94	13.25	16.55								23	15.60
	Δc	2.70	4.03	6.67	9.31	13.27	18.59	25.48									12	
1000	Δu	3.32	4.94	8.16	11.39	16.23	24.30										7	19.50
	Δc	3.71	5.49	9.05	12.61	17.95	26.84										7	
1200	Δu	6.93	10.28	16.97	23.66												5	23.40
	Δc	9.24	13.69	22.61	31.53												3	
1500	Δu	17.07	25.24	41.57													3	29.25
	Δc	18.20	26.90	44.32													3	
1800	Δu	35.01	52.64														2	35.10
	Δc	31.71	46.76														2	

L-I Series (Light Duty Grating)  
 for industrial and general purpose which normal load application, such as walkway, stair, platform. e.t.c.

### I-GRID L-I-38x25-10-37

Open Area : 37 %  
 Approx. Weight : 20.3 Kg/m<sup>2</sup>  
 Panel Volume : 0.038 m<sup>3</sup>/m<sup>2</sup> panel



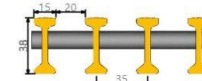
**NOTE :**

When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 1.34mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	125	150	250			
400	Δu	0.01	0.02	0.03	0.05	0.07	0.10	0.13	0.17	0.23	0.33	0.50	0.66	0.83	0.99	1.65	1179	7.80
	Δc	0.05	0.08	0.13	0.19	0.27	0.40	0.53	0.66	0.93	1.32	1.98	2.65	3.31	3.97	6.61	295	
600	Δu	0.07	0.10	0.17	0.24	0.34	0.51	0.67	0.84	1.18	1.68	2.51	3.35	4.19	5.03	8.37	349	11.70
	Δc	0.19	0.28	0.46	0.63	0.90	1.35	1.79	2.24	3.13	4.47	6.70	8.93	11.16	13.39		131	
800	Δu	0.23	0.33	0.54	0.76	1.07	1.60	2.13	2.66	3.72	5.31	7.95	10.60	13.24	15.89		147	15.60
	Δc	0.45	0.66	1.09	1.51	2.15	3.20	4.26	5.32	7.43	10.61	15.89	21.18				74	
1000	Δu	0.56	0.82	1.34	1.85	2.63	3.92	5.21	6.51	9.09	12.96	19.42	25.88				75	19.50
	Δc	0.90	1.31	2.14	2.97	4.21	6.27	8.34	10.40	14.53	20.73						47	
1200	Δu	1.19	1.72	2.79	3.87	5.47	8.15	10.83	13.51	18.87	26.90						43	23.40
	Δc	1.58	2.29	3.72	5.15	7.29	10.86	14.43	18.00	25.14							32	
1500	Δu	2.97	4.28	6.89	9.57	13.43	19.97	26.51	33.05								22	29.25
	Δc	3.16	4.56	7.35	10.13	14.32	21.29	28.26	35.23								21	
1800	Δu	6.30	9.01	14.44	19.86	28.00	41.56										13	35.10
	Δc	5.60	8.00	12.82	17.64	24.87	36.92										13	

### I-GRID L-I-38x35-20-52

Open Area : 52 %  
 Approx. Weight : 15.3 Kg/m<sup>2</sup>  
 Panel Volume : 0.038 m<sup>3</sup>/m<sup>2</sup> panel



**NOTE :**

When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 1.83mm at midspan

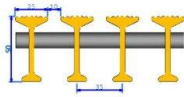
SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	125	150	250			
400	Δu	0.02	0.03	0.05	0.06	0.09	0.14	0.18	0.23	0.32	0.46	0.68	0.91	1.14	1.37	2.28	854	7.80
	Δc	0.07	0.11	0.18	0.26	0.37	0.55	0.73	0.91	1.28	1.83	2.74	3.65	4.56	5.47	9.12	213	
600	Δu	0.10	0.14	0.23	0.33	0.47	0.70	0.93	1.16	1.62	2.31	3.47	4.62	5.78	6.93	11.55	253	11.70
	Δc	0.26	0.38	0.62	0.87	1.24	1.86	2.47	3.09	4.32	6.16	9.24	12.32				95	
800	Δu	0.31	0.45	0.74	1.04	1.47	2.20	2.93	3.66	5.12	7.31	10.96	14.61	18.26			107	15.60
	Δc	0.61	0.91	1.49	2.07	2.95	4.41	5.87	7.32	10.24	14.62	21.91					53	
1000	Δu	0.76	1.12	1.83	2.54	3.61	5.39	7.17	8.96	12.52	17.86	26.77					54	19.50
	Δc	1.21	1.78	2.92	4.06	5.77	8.62	11.47	14.32	20.02							31	
1200	Δu	1.59	2.33	3.81	5.29	7.50	11.20	14.89	18.59									



## L-I Series

### I-GRID L-I-50x35-10-26

Open Area : 26 %  
 Approx. Weight : 20.1 Kg/m<sup>2</sup>  
 Panel Volume : 0.050 m<sup>3</sup>/m<sup>2</sup> panel



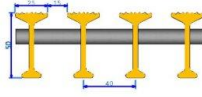
**NOTE :**

When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 0.77mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	125	150	250			
400	Δu	0.01	0.01	0.02	0.03	0.04	0.06	0.08	0.10	0.13	0.19	0.29	0.38	0.48	0.57	0.95	2045	7.80
	Δc	0.03	0.05	0.08	0.11	0.15	0.23	0.31	0.38	0.53	0.76	1.14	1.52	1.90	2.28	3.81	2145	
600	Δu	0.04	0.06	0.10	0.14	0.19	0.29	0.39	0.48	0.68	0.97	1.45	1.93	2.41	2.89	4.82	606	11.70
	Δc	0.11	0.16	0.26	0.37	0.52	0.78	1.03	1.29	1.80	2.57	3.86	5.14	6.43	7.71	12.85	228	
800	Δu	0.13	0.19	0.31	0.44	0.62	0.92	1.23	1.53	2.14	3.06	4.58	6.10	7.63	9.15	15.24	256	15.60
	Δc	0.26	0.38	0.63	0.87	1.24	1.84	2.45	3.06	4.28	6.11	9.15	12.20	15.24	18.29	31.28	128	
1000	Δu	0.32	0.47	0.77	1.07	1.51	2.26	3.00	3.75	5.23	7.46	11.18	14.90	18.62	22.34	39.0	130	19.50
	Δc	0.52	0.76	1.23	1.71	2.42	3.61	4.80	5.99	8.37	11.94	17.88	23.83	29.78	35.73	61.5	215	
1200	Δu	0.68	0.99	1.61	2.22	3.15	4.69	6.24	7.78	10.86	15.49	23.20	30.91	38.62	46.33	78.0	76	23.40
	Δc	0.91	1.32	2.14	2.96	4.20	6.25	8.31	10.36	14.47	20.64	30.91	41.18	51.45	61.72	103.0	151	
1500	Δu	1.71	2.46	3.97	5.47	7.73	11.50	15.26	19.03	26.56	37.86	53.18	68.49	83.80	100.11	166.0	38	29.25
	Δc	1.82	2.62	4.23	5.83	8.24	12.26	16.27	20.28	28.31	40.35	56.39	72.43	88.47	104.51	174.0	36	
1800	Δu	3.62	5.18	8.31	11.43	16.12	23.92	31.73	39.54	55.00	77.41	107.82	138.23	168.64	200.05	330.0	22	35.10
	Δc	3.22	4.60	7.38	10.15	14.31	21.25	28.19	35.12	48.83	67.54	94.25	120.96	147.67	174.38	290.0	24	

### I-GRID L-I-50x40-15-35

Open Area : 35 %  
 Approx. Weight : 17.6 Kg/m<sup>2</sup>  
 Panel Volume : 0.050 m<sup>3</sup>/m<sup>2</sup> panel



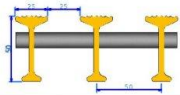
**NOTE :**

When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 0.89mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	125	150	250			
400	Δu	0.01	0.01	0.02	0.03	0.04	0.07	0.09	0.11	0.15	0.22	0.33	0.44	0.55	0.66	1.10	1708	7.80
	Δc	0.04	0.05	0.09	0.12	0.18	0.27	0.35	0.44	0.62	0.88	1.33	1.77	2.21	2.65	4.42	441	
600	Δu	0.05	0.07	0.11	0.16	0.23	0.34	0.45	0.56	0.78	1.12	1.68	2.24	2.80	3.36	5.59	523	11.70
	Δc	0.12	0.18	0.30	0.42	0.60	0.90	1.20	1.50	2.09	2.99	4.48	5.97	7.46	8.95	14.91	196	
800	Δu	0.15	0.22	0.36	0.50	0.72	1.07	1.42	1.78	2.48	3.54	5.31	7.08	8.84	10.61	17.68	220	15.60
	Δc	0.30	0.44	0.72	1.01	1.43	2.14	2.84	3.55	4.96	7.08	10.61	14.14	17.68	21.21	35.0	110	
1000	Δu	0.37	0.54	0.89	1.23	1.75	2.61	3.48	4.34	6.07	8.65	12.97	17.28	21.60	25.92	43.0	112	19.50
	Δc	0.70	0.87	1.42	1.97	2.80	4.18	5.56	6.94	9.70	13.84	20.74	27.64	34.54	41.44	68.0	70	
1200	Δu	0.78	1.14	1.85	2.57	3.64	5.43	7.22	9.01	12.59	17.96	26.90	35.84	44.78	53.72	89.0	65	23.40
	Δc	1.04	1.52	2.47	3.42	4.86	7.24	9.62	12.01	16.78	23.93	34.18	44.43	54.68	64.93	108.0	48	
1500	Δu	1.95	2.82	4.57	6.32	8.94	13.30	17.67	22.04	30.78	43.11	60.44	77.77	95.10	122.43	200.0	33	29.25
	Δc	2.08	3.01	4.87	6.73	9.53	14.18	18.84	23.49	32.81	45.14	62.47	79.80	97.13	124.46	208.0	26	
1800	Δu	4.12	5.93	9.56	13.18	18.61	27.67	36.73	45.79	63.12	85.45	117.78	150.11	182.44	224.77	370.0	19	35.10
	Δc	3.66	5.27	8.49	11.71	16.53	24.58	32.63	40.67	55.00	74.33	103.66	133.00	162.33	191.66	310.0	21	

### I-GRID L-I-50x50-25-46

Open Area : 46 %  
 Approx. Weight : 14.5 Kg/m<sup>2</sup>  
 Panel Volume : 0.050 m<sup>3</sup>/m<sup>2</sup> panel



**NOTE :**

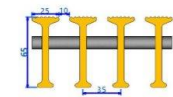
When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 1.10 mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	125	150	250			
400	Δu	0.01	0.02	0.03	0.04	0.06	0.08	0.11	0.14	0.19	0.28	0.41	0.55	0.69	0.83	1.38	1410	7.80
	Δc	0.05	0.07	0.11	0.16	0.22	0.33	0.44	0.55	0.77	1.10	1.66	2.21	2.76	3.31	5.52	353	
600	Δu	0.06	0.09	0.14	0.20	0.28	0.42	0.56	0.70	0.98	1.40	2.10	2.80	3.50	4.20	6.99	417	11.70
	Δc	0.15	0.23	0.38	0.53	0.75	1.12	1.50	1.87	2.61	3.73	5.59	7.46	9.32	11.18	18.63	156	
800	Δu	0.19	0.27	0.45	0.63	0.89	1.33	1.78	2.22	3.10	4.43	6.64	8.84	11.05	13.26	22.10	176	15.60
	Δc	0.37	0.55	0.90	1.25	1.78	2.67	3.55	4.43	6.20	8.85	13.26	17.68	22.10	26.52	44.0	88	
1000	Δu	0.46	0.67	1.10	1.54	2.18	3.26	4.34	5.42	7.58	10.81	16.20	21.60	27.00	32.40	54.0	90	19.50
	Δc	0.59	0.87	1.42	1.97	2.80	4.18	5.56	6.94	9.70	13.84	20.74	27.64	34.54	41.44	68.0	56	
1200	Δu	0.96	1.41	2.30	3.20	4.54	6.78	9.01	11.25	15.72	22.43	33.61	44.79	55.97	67.15	110.0	52	23.40
	Δc	1.28	1.88	3.07	4.26	6.05	9.03	12.01	14.99	20.95	29.89	43.83	57.77	71.71	85.65	140.0	39	
1500	Δu	2.38	3.48	5.66	7.84	11.12	16.58	22.04	27.50	38.42	52.34	70.46	88.58	106.70	124.82	200.0	27	29.25
	Δc	2.54	3.71	6.03	8.36	11.85	17.67	23.49	29.31	41.13	54.95	74.77	94.59	114.41	134.23	220.0	25	
1800	Δu	5.03	7.29	11.82	16.35	23.14	34.46	45.79	57.12	78.45	106.78	141.11	175.44	209.77	244.10	400.0	15	35.10
	Δc	4.47	6.48	10.50	14.52	20.56	30.61	40.67	50.72	70.77	90.82	120.87	150.92	180.97	211.02	350.0	17	

L-I Series (Light Duty Grating)  
 for industrial and general purpose which normal load application, such as walkway, stair, platform. e.t.c.

### I-GRID L-I-65x35-10-26

Open Area : 26 %  
 Approx. Weight : 27.7 Kg/m<sup>2</sup>  
 Panel Volume : 0.065 m<sup>3</sup>/m<sup>2</sup> panel



**NOTE :**

When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 0.46mm at midspan

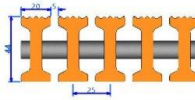
SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	125	150	250			
600	Δu	0.02	0.04	0.06	0.08	0.12	0.17	0.23	0.29	0.40	0.57	0.86	1.15	1.43	1.72	2.87	1020	11.70
	Δc	0.07	0.10	0.16	0.22	0.31	0.46	0.62	0.77	1.07	1.53	2.29	3.06	3.82	4.58	7.64	383	
800	Δu	0.08	0.12	0.19	0.26	0.37	0.55	0.73	0.91	1.27	1.82	2.72	3.63	4.53	5.44	9.06	430	15.60
	Δc	0.16	0.23	0.38	0.52	0.74	1.10	1.46	1.82	2.55	3.63	5.44	7.25	9.06	10.87	18.10	215	
1000	Δu	0.20	0.29	0.46	0.64	0.94	1.35	1.79	2.23	3.12	4.44	6.65	8.86	11.07	13.28	22.12	220	19.50
	Δc	0.32	0.46	0.74	1.02	1.45	2.16	2.86	3.57	4.98	7.10	10.63	14.17	17.70	21.23	35.0	138	
1200	Δu	0.42	0.61	0.97	1.34	1.89	2.80	3.72	4.64	6.47	9.22	13.80	18.38	22.96	27.54	45.0	127	23.40
	Δc	0.56	0.81	1.29	1.78	2.52	3.74	4.96	6.18	8.62	12.28	18.39	24.49	30.59	36.69	60.0	95	
1500	Δu	1.06	1.51	2.41	3.30	4.64	6.88	9.12	11.35	15.83	22.54	33.73	44.92	56.11	67.30	110.0	65	29.25
	Δc	1.13	1.61	2.57	3.52	4.95	7.33	9.72	12.10	16.87	24.03	35.95	47.87	59.79	71.71	115.0	60	
2000	Δu	3.54	4.96	7.78	10.61	14.85	21.92	28.99	36.06	50.21	67.30	94.37	121.44	148.51	175.58	290.0	27	39.00
	Δc	2.83	3.96	6.22	8.48	11.88	17.53	23.18	28.83	40.14	53.45	73.76	94.07	114.38	134.69	220.0	34	
2400	Δu	7.64	10.57	16.44	22.30	31.10	45.76	60.42	75.08	103.66	138.23	182.80	227.37	271.94	316.51	510.0	15	46.80
	Δc	5.09	7.04	10.95	14.86	20.72	30.48	40.25	50.02	68.79	92.56	126.33	160.10					



## M-I Series

### I-GRID M-I-45x25-5-19

Open Area : 19 %  
 Approx. Weight : 36.8 Kg/m<sup>2</sup>  
 Panel Volume : 0.045 m<sup>3</sup>/m<sup>2</sup> panel



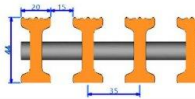
**NOTE :**

When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 0.57mm at midspan

SPAN (mm)		DEFLECTION AND SAFE WORKING LOAD															Safe Load	Δ Max. (mm)
		3	5	10	15	20	30	40	50	75	100	150	200	300	400	500		
600	Δu	0.04	0.07	0.14	0.21	0.28	0.42	0.56	0.70	1.04	1.39	2.08	2.78	4.17	5.56	6.94	843	11.70
	Δc	0.12	0.19	0.38	0.56	0.75	1.12	1.49	1.86	2.78	3.71	5.56	7.41	11.10	14.80	316		
800	Δu	0.14	0.23	0.45	0.67	0.89	1.33	1.77	2.21	3.30	4.40	6.59	8.79	13.17	17.56	355	15.60	
	Δc	0.29	0.46	0.90	1.34	1.78	2.65	3.53	4.41	6.60	8.79	13.18	17.56	178				
1000	Δu	0.36	<b>0.57</b>	1.11	1.64	2.18	3.25	4.32	5.39	8.07	10.75	16.10	21.46	181	19.50			
	Δc	0.57	0.91	1.77	2.63	3.48	5.20	6.91	8.62	12.90	17.18	25.75	113					
1200	Δu	0.76	1.20	2.31	3.42	4.53	6.75	8.97	11.20	16.75	22.30	33.41	105	23.40				
	Δc	1.01	1.60	3.08	4.56	6.04	9.00	11.96	14.92	22.32	29.71	79						
1400	Δu	1.43	2.25	4.31	6.37	8.43	12.54	16.66	20.77	31.06	66	27.30						
	Δc	1.63	2.57	4.92	7.27	9.62	14.32	19.02	23.72	35.47	58							
1800	Δu	4.06	6.31	11.93	17.56	23.18	34.42	45.67	31	35.10								
	Δc	3.61	5.61	10.60	15.60	20.59	30.58	40.56	34									
2200	Δu	9.41	14.43	26.98	39.52	52.07	16	42.90										
	Δc	6.84	10.49	19.61	28.72	37.84	56.08		22									

### I-GRID M-I-45x35-15-39

Open Area : 39 %  
 Approx. Weight : 27.3 Kg/m<sup>2</sup>  
 Panel Volume : 0.045 m<sup>3</sup>/m<sup>2</sup> panel



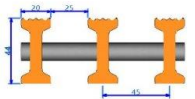
**NOTE :**

When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 0.78mm at midspan

SPAN (mm)		DEFLECTION AND SAFE WORKING LOAD															Safe Load	Δ Max. (mm)
		3	5	10	15	20	30	40	50	75	100	150	200	300	400	500		
600	Δu	0.06	0.10	0.19	0.29	0.39	0.58	0.77	0.96	1.44	1.92	2.87	3.83	5.75	7.66	9.58	610	11.70
	Δc	0.16	0.26	0.52	0.77	1.03	1.54	2.05	2.56	3.83	5.11	7.66	10.21	15.31	228			
800	Δu	0.19	0.31	0.62	0.92	1.22	1.83	2.43	3.04	4.55	6.06	9.09	12.11	18.17	257	15.60		
	Δc	0.39	0.63	1.23	1.84	2.44	3.65	4.86	6.07	9.09	12.12	18.17	128					
1000	Δu	0.48	<b>0.78</b>	1.51	2.25	2.99	4.47	5.95	7.42	11.12	14.81	22.20	132	19.50				
	Δc	0.77	1.24	2.42	3.60	4.78	7.14	9.51	11.87	17.77	23.68	82						
1200	Δu	1.01	1.62	3.15	4.69	6.22	9.28	12.34	15.41	23.07	30.72	76	23.40					
	Δc	1.35	2.16	4.20	6.24	8.28	12.37	16.45	20.53	30.73	57							
1400	Δu	1.90	3.03	5.87	8.71	11.55	17.22	22.90	28.57	47	27.30							
	Δc	2.17	3.47	6.71	9.95	13.19	19.67	26.15	32.63	42								
1800	Δu	5.34	8.45	16.20	23.95	31.71	47.22	22	35.10									
	Δc	4.75	7.50	14.39	21.28	28.17	41.94	25										
2200	Δu	12.27	19.19	36.49	53.80	12	42.90											
	Δc	8.92	13.95	26.52	39.10	51.67		16										

### I-GRID M-I-45x45-25-50

Open Area : 50 %  
 Approx. Weight : 22.0 Kg/m<sup>2</sup>  
 Panel Volume : 0.045 m<sup>3</sup>/m<sup>2</sup> panel



**NOTE :**

When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 0.97mm at midspan

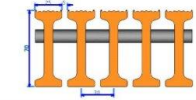
SPAN (mm)		DEFLECTION AND SAFE WORKING LOAD															Safe Load	Δ Max. (mm)
		3	5	10	15	20	30	40	50	75	100	150	200	300	400	500		
600	Δu	0.08	0.12	0.24	0.36	0.49	0.73	0.97	1.21	1.81	2.42	3.62	4.83	7.25	9.66	485	11.70	
	Δc	0.20	0.33	0.65	0.97	1.29	1.94	2.58	3.22	4.83	6.44	9.66	12.87	181				
800	Δu	0.24	0.39	0.77	1.16	1.54	2.30	3.06	3.83	5.73	7.64	11.46	15.27	22.90	204	15.60		
	Δc	0.48	0.79	1.55	2.31	3.07	4.60	6.12	7.65	11.46	15.27	22.90	102					
1000	Δu	0.60	<b>0.97</b>	1.90	2.83	3.76	5.62	7.49	9.35	14.01	18.66	27.98	104	19.50				
	Δc	0.95	1.55	3.04	4.53	6.02	8.99	11.97	14.95	22.40	65							
1200	Δu	1.25	2.02	3.95	5.88	7.82	11.68	15.54	19.40	29.06	60	23.40						
	Δc	1.35	2.16	4.20	6.24	8.28	12.37	16.45	20.53	30.73	45							
1400	Δu	2.34	3.77	7.35	10.93	14.51	21.66	28.82	38	27.30								
	Δc	2.68	4.31	8.40	12.48	16.57	24.74	32.91	33									
1800	Δu	6.56	10.47	20.25	30.02	39.80	17	35.10										
	Δc	5.82	9.30	17.98	26.67	35.35	19											
2200	Δu	14.98	23.70	45.52	9	42.90												
	Δc	10.88	17.23	33.08	48.94		13											

### M-I Series (Medium Duty Grating)

for industrial and general purpose which moderate heavy load application, such as walkway, stair, platform e.t.c.

### I-GRID M-I-70x30-5-14

Open Area : 14 %  
 Approx. Weight : 49.7 Kg/m<sup>2</sup>  
 Panel Volume : 0.070 m<sup>3</sup>/m<sup>2</sup> panel



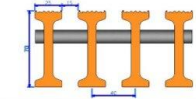
**NOTE :**

When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 0.16mm at midspan

SPAN (mm)		DEFLECTION AND SAFE WORKING LOAD															Safe Load	Δ Max. (mm)
		3	5	10	15	20	30	40	50	75	100	150	200	300	400	500		
600	Δu	0.01	0.02	0.04	0.06	0.08	0.11	0.15	0.19	0.28	0.38	0.57	0.75	1.13	1.51	1.89	3100	11.70
	Δc	0.03	0.05	0.10	0.15	0.20	0.30	0.40	0.50	0.76	1.01	1.51	2.01	3.02	4.02	5.02	1160	
800	Δu	0.04	0.06	0.12	0.18	0.24	0.36	0.48	0.60	0.90	1.20	1.79	2.39	3.58	4.77	5.96	1305	15.60
	Δc	0.08	0.13	0.25	0.37	0.49	0.72	0.96	1.20	1.79	2.39	3.58	4.77	7.15	9.53	11.91	650	
1000	Δu	0.10	<b>0.16</b>	0.30	0.45	0.60	0.89	1.18	1.47	2.19	2.92	4.38	5.83	8.74	11.65	14.55	670	19.50
	Δc	0.16	0.25	0.49	0.72	0.95	1.42	1.88	2.35	3.51	4.67	7.00	9.32	13.97	18.62	23.27	415	
1200	Δu	0.21	0.34	0.64	0.94	1.24	1.84	2.45	3.05	4.56	6.06	9.08	12.09	18.12	24.15	387	23.40	
	Δc	0.29	0.45	0.85	1.25	1.65	2.46	3.26	4.06	6.07	8.08	12.10	16.11	24.15	290			
1400	Δu	0.49	0.63	1.19	1.75	2.31	3.42	4.54	5.66	8.45	11.24	16.83	22.41	33.59	243	27.30		
	Δc	0.47	0.72	1.36	2.00	2.64	3.91	5.19	6.46	9.65	12.84	19.22	25.60	38.36	213			
1800	Δu	1.17	1.78	3.31	4.84	6.36	9.41	12.47	15.52	23.15	30.78	46.05	113	35.10				
	Δc	1.04	1.58	2.94	4.30	5.65	8.36	11.07	13.79	20.57	27.34	40.90	128					
2200	Δu	2.75	4.11	7.51	10.92	14.33	21.14	27.95	34.76	51.79	61	42.90						
	Δc	2.00	2.99	5.46	7.94	10.41	15.36	20.31	25.26	37.64	50.02		85					

### I-GRID M-I-70x40-15-35

Open Area : 35 %  
 Approx. Weight : 37.1 Kg/m<sup>2</sup>  
 Panel Volume : 0.070 m<sup>3</sup>/m<sup>2</sup> panel



**NOTE :**

When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 0.21mm at midspan

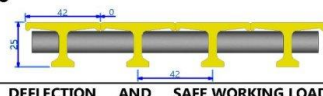
SPAN (mm)		DEFLECTION AND SAFE WORKING LOAD															Safe Load	Δ Max. (mm)
		3	5	10	15	20	30	40	50	75	100	150	200	300	400	500		
600	Δu	0.02	0.03	0.05	0.08	0.10	0.15	0.21	0.26	0.39	0.51	0.77	1.03	1.54	2.05	2.56	2250	11.70
	Δc	0.04	0.07	0.14	0.21	0.28	0.41	0.55	0.69	1.03	1.37	2.05	2.73	4.10	5.47	6.83	855	
800	Δu	0.05	0.09	0.17	0.25	0.33	0.49	0.65	0.81	1.22	1.62	2.43	3.24	4.86	6.48	8.10	962	15.60
	Δc	0.11	0.17	0.33	0.49	0.66	0.98	1.30	1.63	2.44	3.25	4.87	6.48	9.72	12.96	16.20	481	
1000	Δu	0.13	<b>0.21</b>	0.41	0.61	0.80	1.20	1.60	1.99	2.98	3.97	5.95	7.92	11.88	15.83	19.79	492	19.50
	Δc	0.21	0.34	0.65	0.97	1.29	1.92	2.55	3.18	4.76	6.34	9.51	12.67	18.99	25.31	308		
1200	Δu	0.28	0.44	0.85	1.26	1.67	2.49	3.31	4.13	6.18	8.23	12.33	16.43	24.64	284	23.40		
	Δc	0.37	0.59	1.14	1.68	2.23	3.32	4.42	5.51	8.24	10.97	16.43	21.90	32.82	213			
1400	Δu	0.53	0.83	1.59	2.35	3.11	4.63	6.15	7.67	11.47	15.27	22.86	30.46	178	27.30			
	Δc	0.60	0.95	1.82	2.69	3.55	5.29	7.02	8.76	13.10	17.43	26.11	34.79					



## L-T Series

### I-GRID L-T-25x42-0-0

Open Area : 0 %  
 Approx. Weight : 14.3 Kg/m<sup>2</sup>  
 Panel Volume : 0.025 m<sup>3</sup>/m<sup>2</sup> panel

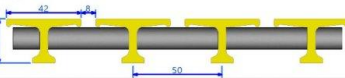


**NOTE :**  
 When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 5.77mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	125	150	250			
400	Δu	0.06	0.09	0.15	0.20	0.29	0.43	0.58	0.72	1.01	1.44	2.17	2.89	3.61	4.33	7.21	270	7.80
	Δc	0.24	0.35	0.58	0.81	1.16	1.74	2.31	2.89	4.04	5.77	8.65	11.54				60	
600	Δu	0.30	0.45	0.74	1.03	1.47	2.20	2.93	3.66	5.12	7.31	10.96					30	11.70
	Δc	0.81	1.20	1.97	2.75	3.92	5.87	7.81	9.76	13.65							87	
800	Δu	0.97	1.43	2.35	3.28	4.66	6.97	9.28	11.58	16.20							34	15.60
	Δc	1.93	2.86	4.70	6.55	9.31	13.93	18.54									17	
1000	Δu	2.39	3.52	5.77	8.02	11.41	17.04	22.67									17	19.50
	Δc	3.82	5.62	9.23	12.83	18.24	27.25										11	
1200	Δu	5.01	7.35	12.02	16.70	23.71											10	23.40
	Δc	6.68	9.79	16.02	22.25	31.59											7	
1500	Δu	12.45	18.15	29.56													5	29.25
	Δc	13.27	19.35	31.51													3	
1800	Δu	26.24	38.07														3	35.10
	Δc	23.30	33.81	54.83													3	

### I-GRID L-T-25x50-8-15

Open Area : 15 %  
 Approx. Weight : 12.3 Kg/m<sup>2</sup>  
 Panel Volume : 0.025 m<sup>3</sup>/m<sup>2</sup> panel

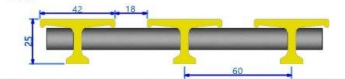


**NOTE :**  
 When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 6.90mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	125	150	250			
400	Δu	0.07	0.11	0.17	0.24	0.35	0.52	0.69	0.87	1.21	1.73	2.60	3.46	4.33	5.19	8.66	225	7.80
	Δc	0.28	0.42	0.70	0.97	1.39	2.08	2.77	3.47	4.85	6.92	10.38					56	
600	Δu	0.36	0.54	0.89	1.24	1.76	2.64	3.52	4.39	6.14	8.77	13.15					67	11.70
	Δc	0.96	1.43	2.36	3.30	4.70	7.03	9.37	11.70								25	
800	Δu	1.15	1.71	2.81	3.92	5.58	8.35	11.12	13.89	19.43							28	15.60
	Δc	2.30	3.41	5.62	7.84	11.16	16.70										14	
1000	Δu	2.84	4.19	6.90	9.60	13.66	20.42										14	19.50
	Δc	4.54	6.70	11.03	15.35	21.84											8	
1200	Δu	5.95	8.75	14.36	19.97	28.38											8	23.40
	Δc	7.92	11.66	19.13	26.61												6	
1500	Δu	14.73	21.57	35.27													4	29.25
	Δc	15.70	23.00	37.59													4	
1800	Δu	30.97	45.16														2	35.10
	Δc	27.51	40.12														2	

### I-GRID L-T-25x60-18-27

Open Area : 27 %  
 Approx. Weight : 10.7 Kg/m<sup>2</sup>  
 Panel Volume : 0.025 m<sup>3</sup>/m<sup>2</sup> panel



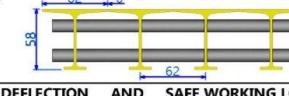
**NOTE :**  
 When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 8.09mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	125	150	250			
400	Δu	0.08	0.12	0.21	0.29	0.41	0.61	0.82	1.02	1.43	2.04	3.06	4.07	5.09	6.11	10.18	191	7.80
	Δc	0.33	0.49	0.82	1.15	1.63	2.45	3.26	4.08	5.70	8.15						48	
600	Δu	0.42	0.63	1.04	1.45	2.07	3.10	4.13	5.17	7.23	10.32	15.47					57	11.70
	Δc	1.13	1.68	2.78	3.87	5.52	8.27	11.02	13.76								21	
800	Δu	1.35	2.00	3.30	4.61	6.56	9.82	13.08	16.34								24	15.60
	Δc	2.69	4.00	6.60	9.21	13.11	19.63										12	
1000	Δu	3.32	4.91	8.09	11.27	16.05	24.00										12	19.50
	Δc	4.54	6.70	11.03	15.35	21.84											7	
1200	Δu	6.94	10.24	16.83	23.43												7	23.40
	Δc	9.24	13.64	22.43	31.22												5	
1500	Δu	17.14	25.20	41.31													4	29.25
	Δc	18.27	26.86	44.03													4	
1800	Δu	34.95	52.68														2	35.10
	Δc	31.96	46.79														2	

L-T Series Light Duty Grating for work way, flooring deck in industrial and general purpose, which series is optimum covered area with light weight panel and simple installation.

### I-GRID L-T-58x62-0-0

Open Area : 0 %  
 Approx. Weight : 14.2 Kg/m<sup>2</sup>  
 Panel Volume : 0.058 m<sup>3</sup>/m<sup>2</sup> panel

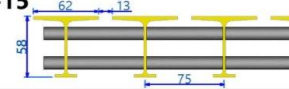


**NOTE :**  
 When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 1.01mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	2	3	5	10	20	50	75	100	200	300	400	500	600	800	1000			
400	Δu	0.01	0.02	0.03	0.05	0.10	0.25	0.38	0.50	1.01	1.51	2.01	2.52	3.02	4.03	5.03	1540	7.80
	Δc	0.04	0.06	0.10	0.20	0.40	1.01	1.51	2.01	4.03	6.04	8.05					387	
600	Δu	0.05	0.08	0.13	0.26	0.51	1.28	1.91	2.55	5.10	6.80	13.59					459	11.70
	Δc	0.14	0.21	0.34	0.68	1.36	3.40	5.10	6.80	13.59			7.65	10.19	12.74		171	
800	Δu	0.17	0.25	0.41	0.81	1.62	4.03	6.05	8.06	16.12							193	15.60
	Δc	0.34	0.50	0.82	1.63	3.23	8.06	12.09	16.11								96	
1000	Δu	0.42	0.61	1.01	1.99	3.96	9.85	14.77	19.69								99	19.50
	Δc	0.67	0.98	1.61	3.18	6.33	15.76	23.62									61	
1200	Δu	0.87	1.28	2.10	4.14	8.21	20.44	30.64									57	23.40
	Δc	1.16	1.71	2.79	5.51	10.94	27.24										43	
1500	Δu	2.17	3.17	5.16	10.13	20.09	49.95										29	29.25
	Δc	2.31	3.37	5.50	10.80	21.41	53.24										27	
1800	Δu	4.57	6.64	10.77	21.09	41.73											17	35.10
	Δc	4.06	5.90	9.56	18.73	37.07											18	

### I-GRID L-T-58x75-12-15

Open Area : 15 %  
 Approx. Weight : 12.1 Kg/m<sup>2</sup>  
 Panel Volume : 0.058 m<sup>3</sup>/m<sup>2</sup> panel



**NOTE :**  
 When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 1.22mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	2	3	5	10	20	50	75	100	200	300	400	500	600	800	1000			
400	Δu	0.01	0.02	0.03	0.06	0.12	0.31	0.46	0.61	1.22	1.83	2.45	3.06	3.67	4.89	6.11	1275	7.80
	Δc	0.05	0.07	0.12	0.25	0.49	1.22	1.83	2.44	4.89	7.33	9.77					319	
600	Δu	0.06	0.09	0.16	0.31	0.62	1.55	2.32	3.10	6.19	9.28	12.38					378	11.70
	Δc	0.17	0.25	0.42	0.83	1.65	4.13	6.19	8.25	16.50							142	
800	Δu	0.20	0.30	0.50	0.99	1.96	4.90	7.34	9.79	19.57							159	15.60
	Δc	0.41	0.60	0.99	1.97	3.92	9.79	14.67	19.56								80	
1000	Δu	0.50	0.74	1.22	2.41	4.80	11.96	17.93	23.90								81	19.50
	Δc	0.80	1.18	1.95	3.86	7.67	19.13	28.67									50	
1200	Δu	1.05	1.54	2.53	5.01	9.96	24.81										47	23.40
	Δc	1.40	2.06	3.38	6.67	13.27	33.06										35	
1500	Δu	2.60	3.81	6.22	12.27	24.35	60.62										24	29.25
	Δc	2.77	4.06	6.63	13.08	25.96	64.61										22	
1800	Δu	5.46	7.96	12.98	25.51	50.57											14	35.10
	Δc	4.85	7.07	11.53	22.66	44.92											15	

### I-GRID L-T-58x87-25-25

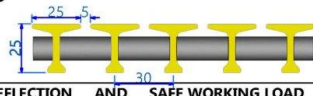


## M-T Series

M-T Series is Medium Duty Grating for work way, flooring deck in industrial and general purpose .

### I-GRID M-T-25x30-5-15

Open Area : 15 %  
 Approx. Weight : 12.8 Kg/m<sup>2</sup>  
 Panel Volume : 0.025 m<sup>3</sup>/m<sup>2</sup> panel

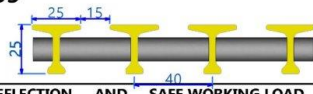


**NOTE :**  
 When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 5.66mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	125	150	250			
400	Δu	0.06	0.09	0.14	0.20	0.29	0.43	0.57	0.71	0.99	1.42	2.13	2.84	3.55	4.26	7.10	1540	7.80
	Δc	0.23	0.35	0.57	0.80	1.14	1.71	2.27	2.84	3.98	5.68	8.52					387	
600	Δu	0.30	0.44	0.73	1.02	1.45	2.17	2.88	3.60	5.04	7.20	10.79	14.38				459	11.70
	Δc	0.79	1.17	1.94	2.71	3.85	5.77	7.68	9.60	13.43							171	
800	Δu	0.95	1.40	2.31	3.22	4.58	6.85	9.12	11.40	15.94							193	15.60
	Δc	1.89	2.80	4.62	6.43	9.16	13.70	18.23									96	
1000	Δu	2.33	3.44	5.66	7.88	11.21	16.75	22.30									99	19.50
	Δc	3.73	5.51	9.05	12.60	17.92	26.79										61	
1200	Δu	4.89	7.19	11.79	16.39	23.29	34.79										43	23.40
	Δc	6.52	9.58	15.71	21.84	31.03											27	
1500	Δu	12.12	17.73	28.96	40.19												29	29.25
	Δc	12.92	18.90	30.87													27	
1800	Δu	25.49	37.14														17	35.10
	Δc	22.65	32.99	53.67													18	

### I-GRID M-T-25x40-15-35

Open Area : 35 %  
 Approx. Weight : 9.9 Kg/m<sup>2</sup>  
 Panel Volume : 0.025 m<sup>3</sup>/m<sup>2</sup> panel

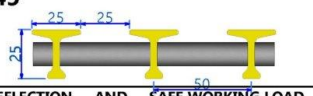


**NOTE :**  
 When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 7.66mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	125	150	250			
400	Δu	0.08	0.12	0.19	0.27	0.39	0.58	0.77	0.97	1.35	1.93	2.90	3.86	4.83	5.79	9.65	1275	7.80
	Δc	0.31	0.47	0.78	1.09	1.55	2.32	3.09	3.86	5.41	7.72	11.58					319	
600	Δu	0.40	0.60	0.99	1.38	1.96	2.94	3.92	4.90	6.85	9.78	14.67					378	11.70
	Δc	1.07	1.59	2.63	3.67	5.23	7.84	10.44	13.05								142	
800	Δu	1.27	1.89	3.13	4.36	6.22	9.31	12.39	15.48	21.66							159	15.60
	Δc	2.55	3.78	6.25	8.72	12.42	18.60										80	
1000	Δu	3.13	4.64	7.66	10.68	15.20	22.74										81	19.50
	Δc	5.01	7.42	12.25	17.07	24.30											50	
1200	Δu	6.55	9.67	15.93	22.18	31.57											47	23.40
	Δc	8.72	12.89	21.22	29.56												35	
1500	Δu	16.16	23.80	39.07													24	29.25
	Δc	17.22	25.36	41.64													22	
1800	Δu	33.88	49.71														14	35.10
	Δc	30.09	44.16														15	

### I-GRID M-T-25x50-25-45

Open Area : 45 %  
 Approx. Weight : 8.3 Kg/m<sup>2</sup>  
 Panel Volume : 0.025 m<sup>3</sup>/m<sup>2</sup> panel

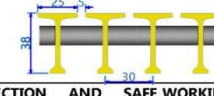


**NOTE :**  
 When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 8.38mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	125	150	250			
400	Δu	0.09	0.13	0.21	0.30	0.42	0.64	0.85	1.06	1.48	2.12	3.18	4.24	5.30	6.36	10.60	1000	7.80
	Δc	0.34	0.51	0.85	1.19	1.70	2.55	3.39	4.24	5.93	8.47						250	
600	Δu	0.44	0.65	1.08	1.51	2.15	3.23	4.30	5.37	7.52	10.74	16.10					297	11.70
	Δc	1.16	1.74	2.88	4.02	5.74	8.60	11.46	14.31								110	
800	Δu	1.39	2.07	3.42	4.78	6.81	10.20	13.60	16.99								125	15.60
	Δc	2.78	4.13	6.84	9.55	13.62	20.40										62	
1000	Δu	3.41	5.07	8.38	11.69	16.66	24.93										60	19.50
	Δc	5.01	7.42	12.25	17.07	24.30											40	
1200	Δu	7.12	10.55	17.42	24.28												37	23.40
	Δc	9.49	14.06	23.21	32.36												28	
1500	Δu	17.54	25.92	42.68													19	29.25
	Δc	18.70	27.63	45.50													18	
1800	Δu	34.97	54.07														11	35.10
	Δc	30.20	48.03														12	

### I-GRID M-T-38x30-5-15

Open Area : 15 %  
 Approx. Weight : 14.4 Kg/m<sup>2</sup>  
 Panel Volume : 0.038 m<sup>3</sup>/m<sup>2</sup> panel

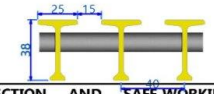


**NOTE :**  
 When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 2.82mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	200	250	300			
400	Δu	0.03	0.04	0.07	0.10	0.14	0.21	0.28	0.35	0.49	0.70	1.06	1.41	2.82	3.52	4.23	553	7.80
	Δc	0.12	0.17	0.28	0.40	0.57	0.85	1.13	1.41	1.97	2.82	4.23	5.63	7.14	14.27		138	
600	Δu	0.15	0.22	0.36	0.50	0.72	1.07	1.43	1.79	2.50	3.57	5.35	7.14	14.27			164	11.70
	Δc	0.39	0.58	0.96	1.34	1.91	2.86	3.81	4.76	6.66	9.52	14.27					61	
800	Δu	0.47	0.70	1.15	1.60	2.28	3.40	4.53	5.66	7.91	11.29	16.92					68	15.60
	Δc	0.94	1.39	2.30	3.20	4.55	6.80	9.05	11.30	15.81							34	
1000	Δu	1.17	1.72	2.82	3.92	5.57	8.32	11.07	13.82	19.32	27.58						35	19.50
	Δc	1.87	2.75	4.51	6.26	8.90	13.30	17.70	22.10								22	
1200	Δu	2.45	3.59	5.87	8.15	11.58	17.28	22.98	28.69								20	23.40
	Δc	3.26	4.78	7.82	10.86	15.42	23.02	30.62									15	
1500	Δu	6.08	8.86	14.43	20.00	28.36	42.29										10	29.25
	Δc	6.48	9.45	15.38	21.32	30.23											10	
1800	Δu	12.81	18.59	30.14	41.69												6	35.10
	Δc	11.38	16.51	26.77	37.03												7	

### I-GRID M-T-38x40-15-35

Open Area : 35 %  
 Approx. Weight : 11.1 Kg/m<sup>2</sup>  
 Panel Volume : 0.038 m<sup>3</sup>/m<sup>2</sup> panel



**NOTE :**  
 When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 3.81mm at midspan

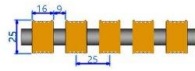
SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	2	3	5	7	10	15	20	25	35	50	75	100	200	250	300			
400	Δu	0.04	0.06	0.10	0.13	0.19	0.29	0.38	0.48	0.67	0.96	1.44	1.92	3.83	4.79	5.75	407	7.80
	Δc	0.16	0.23	0.39	0.54	0.77	1.15	1.53	1.92	2.68	3.83	5.75	7.66	15.32			100	
600	Δu	0.20	0.30	0.49	0.68	0.97	1.46	1.94	2.43	3.40	4.85	7.28	9.70	19.40			120	11.70
	Δc	0.53	0.79	1.31	1.82	2.60	3.89	5.18	6.47	9.06	12.94						45	
800	Δu	0.63	0.94	1.55	2.17	3.09	4.62	6.15	7.68	10.75	15.35	23.01					50	15.60
	Δc	1.27	1.88	3.11	4.33	6.17	9.23	12.30	15.36	21.48							25	
1000	Δu	1.56	2.31	3.81	5.30	7.55	11.29	15.03	18.77	26.26							25	19.50
	Δc	2.50	3.70	6.09	8.48	12.07	18.05	24.04									16	
1200	Δu	3.27	4.82	7.92	11.03	15.68	23.37	31.20									15	23.40
	Δc	4.36	6.42	10.56	14.69	20.90	31.23										11	
1500	Δu	8.08	11.87	19.45	27.02	38.39											7	29.25
	Δc	8.62	12.65	20.73	28.81	40.92											7	
1800	Δu	16.97	24.82	40.53													4	35.10
	Δc	15.07	22.05	36.01													4	



## H-I Series

### I-GRID H-I-25x25-9-33

Open Area : 33 %  
 Approx. Weight : 28.0 Kg/m<sup>2</sup>  
 Panel Volume : 0.025 m<sup>3</sup>/m<sup>2</sup> panel

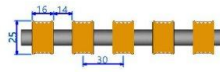


**NOTE :**  
 When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 3.06mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD													Safe Load	Δ Max. (mm)			
	1	3	5	7	10	15	25	50	75	100	125	150	200			250	300	
400	Δu	0.02	0.05	0.08	0.11	0.15	0.23	0.37	0.75	1.12	1.49	1.87	2.24	2.99	3.73	4.48	523	7.80
	Δc	0.07	0.19	0.30	0.42	0.60	0.90	1.50	2.99	4.48	5.97	7.46	8.95					
600	Δu	0.09	0.24	0.39	0.54	0.77	1.14	1.90	3.79	5.68	7.56	9.45	11.34	15.12			155	11.70
	Δc	0.23	0.63	1.04	1.44	2.04	3.05	5.06	10.10	15.13								
800	Δu	0.29	0.76	1.24	1.72	2.44	3.63	6.02	11.98	17.95							65	15.60
	Δc	0.57	1.53	2.48	3.44	4.87	7.25	12.03	23.95									
1000	Δu	0.73	1.90	3.06	4.23	5.98	8.89	14.72	29.29								33	19.50
	Δc	1.17	3.03	4.90	6.76	9.56	14.22	23.53										
1200	Δu	1.58	4.00	6.41	8.83	12.46	18.50	30.58									19	23.40
	Δc	2.10	5.32	8.54	11.76	16.60	24.65											
1400	Δu	3.04	7.52	11.99	16.47	23.19	34.38										12	27.30
	Δc	3.47	8.58	13.70	18.81	26.48	39.27											
1600	Δu	5.38	13.02	20.66	28.30	39.75											8	31.20
	Δc	5.37	13.01	20.64	28.28	39.73												
1800	Δu	8.93	21.16	33.40													5	35.10
	Δc	7.93	18.80	29.67	40.54													

### I-GRID H-I-25x30-14-42

Open Area : 42 %  
 Approx. Weight : 24.1 Kg/m<sup>2</sup>  
 Panel Volume : 0.025 m<sup>3</sup>/m<sup>2</sup> panel

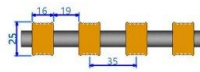


**NOTE :**  
 When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 3.51mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD													Safe Load	Δ Max. (mm)			
	1	3	5	7	10	15	25	50	75	100	125	150	200			250	300	
400	Δu	0.02	0.05	0.09	0.12	0.17	0.26	0.43	0.86	1.29	1.72	2.15	2.58	3.44	4.30	5.16	453	7.80
	Δc	0.07	0.21	0.35	0.49	0.69	1.04	1.72	3.44	5.16	6.88	8.60						
600	Δu	0.10	0.27	0.45	0.62	0.88	1.32	2.19	4.37	6.54	8.72	10.90	13.07				134	11.70
	Δc	0.26	0.73	1.19	1.65	2.35	3.51	5.83	11.63	17.44								
800	Δu	0.32	0.87	1.42	1.97	2.80	4.18	6.93	13.81	20.69							56	15.60
	Δc	0.65	1.75	2.85	3.95	5.60	8.35	13.85	27.60									
1000	Δu	0.82	2.16	3.51	4.85	6.87	10.22	16.94	33.74								29	19.50
	Δc	1.31	3.46	5.60	7.75	10.98	16.35	27.09										
1200	Δu	1.76	4.54	7.33	10.12	14.30	21.26	35.20									16	23.40
	Δc	2.34	6.05	9.77	13.48	19.05	28.33											
1400	Δu	3.36	8.53	13.69	18.85	26.60	39.50										10	27.30
	Δc	3.84	9.74	15.64	21.53	30.38												
1600	Δu	5.93	14.74	23.55	32.35												7	31.20
	Δc	5.93	14.73	23.53	32.33													
1800	Δu	9.81	23.91	38.02													4	35.10
	Δc	8.71	21.24	33.77														

### I-GRID H-I-25x35-19-50

Open Area : 50 %  
 Approx. Weight : 20.9 Kg/m<sup>2</sup>  
 Panel Volume : 0.025 m<sup>3</sup>/m<sup>2</sup> panel



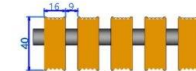
**NOTE :**  
 When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 4.00mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD													Safe Load	Δ Max. (mm)			
	1	3	5	7	10	15	25	50	75	100	125	150	200			250	300	
400	Δu	0.02	0.06	0.10	0.14	0.20	0.30	0.50	0.99	1.48	1.98	2.47	2.97	3.95	4.94	5.93	394	7.80
	Δc	0.08	0.24	0.40	0.56	0.80	1.19	1.98	3.96	5.93	7.91							
600	Δu	0.11	0.31	0.51	0.71	1.01	1.51	2.51	5.01	7.52	10.02	12.52					116	11.70
	Δc	0.30	0.83	1.36	1.90	2.70	4.03	6.70	13.36									
800	Δu	0.36	1.00	1.63	2.26	3.21	4.79	7.95	15.86								49	15.60
	Δc	0.73	1.99	3.25	4.52	6.41	9.57	15.89										
1000	Δu	0.91	2.46	4.00	5.55	7.86	11.72	19.44	38.75								25	19.50
	Δc	1.31	3.46	5.60	7.75	10.98	16.35	27.09										
1200	Δu	1.96	5.16	8.36	11.56	16.36	24.37										14	23.40
	Δc	2.61	6.87	11.14	15.41	21.80	32.47											
1400	Δu	3.73	9.67	15.60	21.53	30.43											8	27.30
	Δc	4.26	11.04	17.81	24.59	34.75												
1600	Δu	6.56	16.68	26.80	36.91												6	31.20
	Δc	6.55	16.66	26.78	36.89													
1800	Δu	10.80	27.01	43.22													3	35.10
	Δc	9.60	23.99	38.39														

## H-I Series is Heavy Duty Grating with simple profile "I" bearing bar, for heavy duty and high work load application

### I-GRID H-I-40x25-9-33

Open Area : 33 %  
 Approx. Weight : 44.4 Kg/m<sup>2</sup>  
 Panel Volume : 0.040 m<sup>3</sup>/m<sup>2</sup> panel

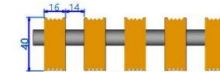


**NOTE :**  
 When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 0.78mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD													Safe Load	Δ Max. (mm)			
	1	3	5	7	10	15	25	50	75	100	125	150	200			250	300	
400	Δu	0.00	0.01	0.02	0.03	0.04	0.06	0.09	0.19	0.28	0.37	0.46	0.56	0.74	0.93	1.11	2100	7.80
	Δc	0.02	0.05	0.08	0.11	0.15	0.22	0.37	0.74	1.11	1.48	1.86	2.23	2.97	3.71	4.45		
600	Δu	0.02	0.06	0.10	0.14	0.19	0.29	0.47	0.94	1.41	1.88	2.35	2.82	3.76	4.70	5.64	620	11.70
	Δc	0.06	0.16	0.26	0.36	0.51	0.76	1.26	2.51	3.76	5.02	6.27	7.52	10.02	11.69	15.02		
800	Δu	0.08	0.20	0.32	0.44	0.61	0.91	1.50	2.99	4.47	5.95	7.44	8.92	11.89	14.85	17.82	230	15.60
	Δc	0.16	0.40	0.63	0.87	1.23	1.82	3.00	5.97	8.93	11.90	14.86	17.83					
1000	Δu	0.21	0.49	0.78	1.07	1.51	2.23	3.68	7.30	10.92	14.55	18.17	21.79				134	19.50
	Δc	0.33	0.79	1.25	1.72	2.41	3.57	5.89	11.68	17.47	23.26							
1200	Δu	0.45	1.05	1.65	2.25	3.15	4.65	7.66	15.17	22.68	30.19						77	23.40
	Δc	0.60	1.40	2.20	3.00	4.20	6.20	10.21	20.21	30.22								
1400	Δu	0.88	1.99	3.11	4.22	5.89	8.67	14.24	28.15								48	27.30
	Δc	1.01	2.28	3.55	4.82	6.73	9.90	16.26	32.15									
1600	Δu	1.58	3.48	5.38	7.28	10.12	14.87	24.36	48.10								32	31.20
	Δc	1.58	3.48	5.37	7.27	10.12	14.86	24.35	48.07									
1800	Δu	2.66	5.70	8.74	11.78	16.34	23.95	39.15									22	35.10
	Δc	2.36	5.06	7.76	10.47	14.52	21.27	34.78										

### I-GRID H-I-40x30-14-42

Open Area : 42 %  
 Approx. Weight : 38.1 Kg/m<sup>2</sup>  
 Panel Volume : 0.040 m<sup>3</sup>/m<sup>2</sup> panel



**NOTE :**  
 When 5 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 0.89mm at midspan

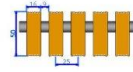
SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD													Safe Load	Δ Max. (mm)			
	1	3	5	7	10	15	25	50	75	100	125	150	200			250	300	
400	Δu	0.00	0.01	0.02	0.03	0.04	0.06	0.11	0.21	0.32	0.43	0.54	0.64	0.86	1.07	1.28	1824	7.80
	Δc	0.02	0.05	0.09	0.12	0.17	0.26	0.43	0.86	1.28	1.71	2.14	2.57	3.42	4.27	5.13		
600	Δu	0.03	0.07	0.11	0.16	0.22	0.33	0.55	1.09	1.63	2.17	2.71	3.25	4.33	5.42	6.50	540	11.70
	Δc	0.07	0.19	0.30	0.42	0.59	0.88	1.45	2.90	4.34	5.78	7.22						



## H-I Series

### I-GRID H-I-50x25-9-33

Open Area : 33 %  
 Approx. Weight : 55.3 Kg/m<sup>2</sup>  
 Panel Volume : 0.050 m<sup>3</sup>/m<sup>2</sup> panel

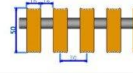


**NOTE :**  
 When 10 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 0.87mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD													Safe Load	Δ Max. (mm)			
	5	7	10	15	25	50	75	100	125	150	200	250	300			400	500	
400	Δu	0.01	0.02	0.02	0.03	0.05	0.11	0.16	0.21	0.27	0.32	0.42	0.53	0.64	0.85	1.06	3676	7.80
	Δc	0.04	0.06	0.09	0.13	0.21	0.43	0.64	0.85	1.06	1.27	1.70	2.12	2.54	3.39	4.24	920	
600	Δu	0.06	0.08	0.11	0.16	0.27	0.54	0.81	1.08	1.35	1.61	2.15	2.69	3.22	4.30	5.37	1089	11.70
	Δc	0.15	0.21	0.30	0.44	0.72	1.44	2.15	2.87	3.58	4.30	5.73	7.16	8.59	10.69	14.31	408	
800	Δu	0.18	0.25	0.35	0.52	0.86	1.71	2.56	3.41	4.26	5.10	6.80	8.50	10.19	13.58	16.98	459	15.60
	Δc	0.37	0.50	0.71	1.05	1.72	3.42	5.11	6.81	8.50	10.20	13.59	16.98				229	
1000	Δu	0.46	0.62	0.87	1.29	2.11	4.18	6.26	8.33	10.40	12.47	16.61	20.75				234	19.50
	Δc	0.73	1.00	1.39	2.06	3.38	6.69	10.00	13.31	16.62	19.93						146	
1200	Δu	0.97	1.31	1.83	2.68	4.40	8.70	12.99	17.28	21.58	25.87						135	23.40
	Δc	1.29	1.75	2.43	3.58	5.86	11.59	17.31	23.03	28.75							101	
1400	Δu	1.82	2.46	3.41	5.01	8.19	16.14	24.10	32.05								85	27.30
	Δc	2.08	2.81	3.90	5.72	9.35	18.44	27.52									74	
1600	Δu	3.17	4.25	5.88	8.60	14.02	27.60	41.17									56	31.20
	Δc	3.17	4.25	5.88	8.59	14.02	27.58	41.14									56	
1800	Δu	5.17	6.91	9.51	13.86	22.56	44.29										34	35.10
	Δc	4.59	6.13	8.45	12.31	20.04	39.35										39	
2000	Δu	8.01	10.66	14.64	21.27	34.52	67.65										22	39.00
	Δc	6.41	8.52	11.70	17.00	27.60	54.08										28	

### I-GRID H-I-50x30-14-42

Open Area : 42 %  
 Approx. Weight : 47.3 Kg/m<sup>2</sup>  
 Panel Volume : 0.050 m<sup>3</sup>/m<sup>2</sup> panel

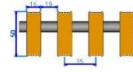


**NOTE :**  
 When 10 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 1.00mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD													Safe Load	Δ Max. (mm)			
	5	7	10	15	25	50	75	100	125	150	200	250	300			400	500	
400	Δu	0.01	0.02	0.02	0.04	0.06	0.12	0.18	0.24	0.31	0.37	0.49	0.61	0.73	0.98	1.22	3190	7.80
	Δc	0.05	0.07	0.10	0.15	0.25	0.49	0.73	0.98	1.22	1.47	1.96	2.44	2.93	3.91	4.89	797	
600	Δu	0.07	0.09	0.13	0.19	0.31	0.62	0.93	1.24	1.55	1.86	2.48	3.10	3.72	4.95	6.19	945	11.70
	Δc	0.17	0.24	0.34	0.50	0.83	1.66	2.48	3.31	4.13	4.96	6.61	8.25	9.90	13.20		354	
800	Δu	0.21	0.29	0.41	0.60	0.99	1.97	2.95	3.93	4.90	5.88	7.84	9.79	11.75	15.66		398	15.60
	Δc	0.42	0.58	0.81	1.20	1.98	3.94	5.89	7.85	9.80	11.75	15.66					199	
1000	Δu	0.52	0.71	1.00	1.47	2.43	4.82	7.20	9.59	11.98	14.37	19.14	23.92				203	19.50
	Δc	0.83	1.14	1.59	2.36	3.89	7.70	11.52	15.34	19.15	22.97						127	
1200	Δu	1.10	1.49	2.09	3.08	5.06	10.01	14.96	19.91	24.86							117	23.40
	Δc	1.46	1.99	2.78	4.10	6.74	13.33	19.93	26.53								88	
1400	Δu	2.06	2.80	3.90	5.73	9.40	18.57	27.74									73	27.30
	Δc	2.36	3.19	4.45	6.55	10.74	21.21	31.68									64	
1600	Δu	3.57	4.83	6.70	9.83	16.09	31.74										49	31.20
	Δc	3.57	4.82	6.70	9.83	16.08	31.72										49	
1800	Δu	5.81	7.82	10.83	15.84	25.86	50.93										30	35.10
	Δc	5.17	6.95	9.62	14.07	22.97	45.24										34	
2000	Δu	9.00	12.05	16.64	24.28	39.56											19	39.00
	Δc	7.19	9.64	13.30	19.41	31.62											24	

### I-GRID H-I-50x35-19-50

Open Area : 50 %  
 Approx. Weight : 40.7 Kg/m<sup>2</sup>  
 Panel Volume : 0.050 m<sup>3</sup>/m<sup>2</sup> panel



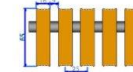
**NOTE :**  
 When 10 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 1.14mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD													Safe Load	Δ Max. (mm)			
	5	7	10	15	25	50	75	100	125	150	200	250	300			400	500	
400	Δu	0.01	0.02	0.03	0.04	0.07	0.14	0.21	0.28	0.35	0.42	0.56	0.70	0.84	1.12	1.40	2768	7.80
	Δc	0.06	0.08	0.11	0.17	0.28	0.56	0.84	1.12	1.41	1.69	2.25	2.81	3.37	4.49	5.62	692	
600	Δu	0.07	0.10	0.15	0.22	0.36	0.71	1.07	1.43	1.78	2.14	2.85	3.56	4.27	5.69	7.11	820	11.70
	Δc	0.20	0.27	0.39	0.58	0.96	1.90	2.85	3.80	4.75	5.69	7.59	9.48	11.38	15.17		308	
800	Δu	0.24	0.33	0.46	0.69	1.14	2.26	3.38	4.51	5.63	6.75	9.00	11.25	13.50	17.99		346	15.60
	Δc	0.48	0.66	0.93	1.37	2.27	4.52	6.76	9.01	11.26	13.36	17.99					173	
1000	Δu	0.59	0.81	1.14	1.69	2.78	5.53	8.27	11.01	13.76	16.50	21.99					177	19.50
	Δc	0.83	1.14	1.59	2.36	3.89	7.70	11.52	15.34	19.15	22.97						110	
1200	Δu	1.24	1.70	2.38	3.52	5.79	11.48	17.17	22.86	28.54							102	23.40
	Δc	1.65	2.26	3.17	4.69	7.72	15.30	22.87	30.45								76	
1400	Δu	2.33	3.17	4.44	6.55	10.76	21.30	31.84									64	27.30
	Δc	2.66	3.63	5.07	7.48	12.29	24.33	36.36									56	
1600	Δu	4.03	5.47	7.63	11.22	18.41	36.39										42	31.20
	Δc	4.03	5.47	7.62	11.21	18.40	36.37										42	
1800	Δu	6.55	8.85	12.30	18.06	29.58	58.38										26	35.10
	Δc	5.81	7.86	10.93	16.05	26.28	51.86										29	
2000	Δu	10.11	13.62	18.89	27.66	45.22											17	39.00
	Δc	8.08	10.89	15.10	22.12	36.15											21	

H-I Series is Heavy Duty Grating with simple profile "I" bearing bar, for heavy duty and high work load application

### I-GRID H-I-65x25-9-33

Open Area : 33 %  
 Approx. Weight : 71.7 Kg/m<sup>2</sup>  
 Panel Volume : 0.065 m<sup>3</sup>/m<sup>2</sup> panel



**NOTE :**  
 When 10 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 0.43mm at midspan

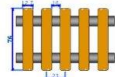
SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD													Safe Load	Δ Max. (mm)			
	5	7	10	15	25	50	75	100	125	150	200	250	300			400	500	
400	Δu	0.01	0.01	0.01	0.02	0.03	0.05	0.08	0.10	0.13	0.16	0.21	0.26	0.31	0.42	0.52	523	7.80
	Δc	0.02	0.03	0.04	0.06	0.11	0.21	0.31	0.42	0.52	0.63	0.83	1.04	1.25	1.67	2.08	130	
600	Δu	0.03	0.04	0.05	0.08	0.13	0.27	0.40	0.53	0.66	0.79	1.06	1.32	1.58	2.11	2.64	155	11.70
	Δc	0.08	0.10	0.15	0.22	0.36	0.71	1.06	1.41	1.76	2.11	2.82	3.52	4.22	5.63	7.03	58	
800	Δu	0.09	0.13	0.18	0.26	0.43	0.84	1.26	1.68	2.09	2.51	3.34	4.18	5.01	6.68	8.34	65	15.60
	Δc	0.18	0.25	0.35	0.52	0.85	1.68	2.52	3.35	4.18	5.02	6.68	8.35	10.01	13.35	16.68	32	
1000	Δu	0.23	0.31	0.43	0.64	1.05	2.06	3.08	4.10	5.12	6.13	8.17	10.20	12.24	16.31	20.38	33	19.50
	Δc	0.37	0.50	0.70	1.02	1.67	3.30	4.93	6.55	8.18	9.81	13.06	16.31	19.57			21	
1200	Δu	0.49	0.66	0.91	1.34	2.18	4.29	6.40	8.51	10.62	12.73	16.95	21.17	25.39			19	23.40
	Δc	0.65	0.88	1.22	1.78	2.90	5.72	8.53	11.34	14.15	16.96	22.58	28.17				14	
1400	Δu	0.93	1.24	1.71	2.50	4.06	7.97	11.88	15.79	19.69	23.60	31.42					12	27.30
	Δc	1.06	1.42	1.96	2.85	4.64	9.10	13.56	18.03	22.49	26.96	35.89					10	
1600	Δu	1.63	2.16															



## H-I Series - Heavy Duty Grating with simple profile "I" bearing bar, for heavy duty and high work load application

### I-GRID H-I-75x25-9-33

Open Area : 46 %  
 Approx. Weight : 68.3 Kg/m<sup>2</sup>  
 Panel Volume : 0.076 m<sup>3</sup>/m<sup>2</sup> panel

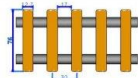


**NOTE :**  
 When 30 kN/m<sup>2</sup> uniform load placed upon a 1250mm simple span, it will produce a deflection of 2.46mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	10	20	30	50	75	100	125	150	200	250	300	400	500	750	1000			
600	Δu	0.04	0.09	0.13	0.21	0.32	0.43	0.53	0.64	0.85	1.06	1.27	1.70	2.12	3.18	4.24	2760	11.70
	Δc	0.12	0.23	0.34	0.57	0.85	1.13	1.41	1.70	2.26	2.82	3.39	4.52	5.65	8.47	11.29	1035	
800	Δu	0.14	0.27	0.41	0.68	1.01	1.34	1.68	2.01	2.68	3.35	4.02	5.36	6.70	10.04	13.39	1165	15.60
	Δc	0.28	0.55	0.82	1.35	2.02	2.69	3.36	4.03	5.36	6.70	8.04	10.71	13.39	20.07		582	
1000	Δu	0.35	0.67	1.00	1.65	2.47	3.29	4.10	4.92	6.55	8.19	9.82	13.09	16.35	24.52		596	19.50
	Δc	0.56	1.08	1.60	2.65	3.95	5.26	6.56	7.87	10.48	13.09	15.70	20.93				371	
1250	Δu	0.86	1.66	2.46	4.05	6.05	8.04	10.03	12.03	16.02	20.00	23.99	31.97				304	24.38
	Δc	1.10	2.12	3.14	5.18	7.73	10.28	12.83	15.39	20.49	25.59						238	
1500	Δu	1.81	3.47	5.12	8.43	12.56	16.70	20.83	24.97	33.24							175	29.25
	Δc	1.93	3.70	5.46	8.99	13.39	17.80	22.21	26.61	35.43							164	
1800	Δu	3.83	7.26	10.69	17.55	26.12	34.69	43.27									101	35.10
	Δc	3.40	6.45	9.49	15.59	23.20	30.82	38.43									114	
2000	Δu	5.91	11.13	16.36	26.81	39.88											73	39.00
	Δc	4.72	8.90	13.08	21.44	31.88	42.33										92	
2200	Δu	8.75	16.40	24.05	39.36	58.49											54	42.90
	Δc	6.36	11.92	17.48	28.60	42.51	56.41										75	
2400	Δu	12.53	23.37	34.20	55.88												41	46.80
	Δc	8.35	15.57	22.79	37.23	55.28											63	

### I-GRID H-I-75x30-14-42

Open Area : 53 %  
 Approx. Weight : 58.3 Kg/m<sup>2</sup>  
 Panel Volume : 0.076 m<sup>3</sup>/m<sup>2</sup> panel

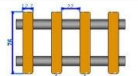


**NOTE :**  
 When 30 kN/m<sup>2</sup> uniform load placed upon a 1250mm simple span, it will produce a deflection of 2.81mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	10	20	30	50	75	100	125	150	200	250	300	400	500	750	1000			
600	Δu	0.05	0.10	0.15	0.24	0.37	0.49	0.61	0.73	0.98	1.22	1.46	1.95	2.44	3.65	4.87	2401	11.70
	Δc	0.13	0.26	0.39	0.65	0.98	1.30	1.63	1.95	2.60	3.25	3.90	5.19	6.49	9.73	12.98	900	
800	Δu	0.16	0.31	0.47	0.78	1.16	1.55	1.93	2.31	3.08	3.85	4.62	6.16	7.70	11.54	15.39	1013	15.60
	Δc	0.32	0.63	0.94	1.55	2.32	3.09	3.86	4.63	6.16	7.70	9.24	12.31	15.39	23.07		506	
1000	Δu	0.40	0.77	1.15	1.90	2.84	3.78	4.72	5.65	7.53	9.41	11.29	15.04	18.80	28.19		518	19.50
	Δc	0.63	1.23	1.83	3.04	4.54	6.04	7.54	9.04	12.04	15.05	18.05	24.05				323	
1250	Δu	0.98	1.90	2.81	4.65	6.94	9.23	11.53	13.82	18.40	22.99	27.57					264	24.38
	Δc	1.25	2.43	3.60	5.95	8.88	11.81	14.74	17.67	23.54	29.40						207	
1500	Δu	2.06	3.96	5.86	9.66	14.42	19.17	23.92	28.68	38.19							152	29.25
	Δc	2.19	4.22	6.25	10.30	15.37	20.44	25.50	30.57								143	
1800	Δu	4.33	8.28	12.22	20.11	29.96	39.82										87	35.10
	Δc	3.85	7.35	10.85	17.86	26.62	35.37										99	
2000	Δu	6.67	12.68	18.69	30.71	45.73											63	39.00
	Δc	5.33	10.74	14.94	24.55	36.56	48.57										80	
2200	Δu	9.87	18.67	27.46	45.06												46	42.90
	Δc	7.17	13.57	19.96	32.75	48.73											65	
2400	Δu	14.11	26.57	39.03	63.96												35	46.80
	Δc	9.40	17.70	26.01	42.61	63.36											54	

### I-GRID H-I-75x35-19-50

Open Area : 58 %  
 Approx. Weight : 50.0 Kg/m<sup>2</sup>  
 Panel Volume : 0.076 m<sup>3</sup>/m<sup>2</sup> panel



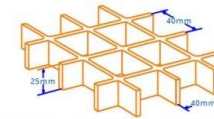
**NOTE :**  
 When 30 kN/m<sup>2</sup> uniform load placed upon a 1250mm simple span, it will produce a deflection of 3.22mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	10	20	30	50	75	100	125	150	200	250	300	400	500	750	1000			
600	Δu	0.06	0.11	0.17	0.28	0.42	0.56	0.70	0.84	1.12	1.40	1.68	2.23	2.79	4.19	5.58	2088	11.70
	Δc	0.15	0.30	0.45	0.75	1.12	1.49	1.86	2.23	2.98	3.72	4.47	5.95	7.44	11.16	14.87	783	
800	Δu	0.18	0.36	0.54	0.89	1.33	1.77	2.21	2.65	3.53	4.42	5.30	7.06	8.82	13.23	17.64	881	15.60
	Δc	0.37	0.72	1.07	1.78	2.66	3.54	4.42	5.30	7.06	8.83	10.59	14.11	17.64			440	
1000	Δu	0.45	0.88	1.31	2.17	3.25	4.33	5.40	6.48	8.63	10.78	12.94	17.24	21.55			450	19.50
	Δc	0.72	1.41	2.10	3.47	5.20	6.92	8.64	10.36	13.80	17.24	20.69					280	
1250	Δu	1.11	2.16	3.22	5.32	7.95	10.57	13.20	15.83	21.09	26.34						229	24.38
	Δc	1.25	2.43	3.60	5.95	8.88	11.81	14.74	17.67	23.54	29.40						180	
1500	Δu	2.33	4.51	6.69	11.05	16.50	21.95	27.40	32.85								132	29.25
	Δc	2.49	4.81	7.13	11.78	17.59	23.40	29.21	35.02								123	
1800	Δu	4.90	9.42	13.94	22.98	34.28	45.58										75	35.10
	Δc	4.36	8.37	12.38	20.41	30.45	40.49										86	
2000	Δu	7.54	14.43	21.32	35.09	52.32											54	39.00
	Δc	6.03	11.53	17.04	28.06	41.82											69	
2200	Δu	11.13	21.22	31.30	51.48												40	42.90
	Δc	8.09	15.42	22.75	37.41	55.74											56	
2400	Δu	15.90	30.38	44.47	73.04												30	46.80
	Δc	10.59	20.11	29.63	48.66												46	

## MG-C Series is molded grating which fabricated of profile "I" bar contact molded lamination for light duty application

### I-GRID MG-25-40x40-70

Open Area : 70 %  
 Approx. Weight : 13.4 Kg/m<sup>2</sup>  
 Panel Volume : 0.025 m<sup>3</sup>/m<sup>2</sup> panel

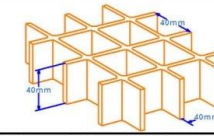


**NOTE :**  
 When 2.0 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 10.28mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	1	1.5	2	3	4	5	6	8	10	12	15	20						
400	Δu	0.13	0.19	0.26	0.39	0.51	0.64	0.77	1.02	1.28	1.53	1.91	2.55	3.30			33.0	4.21
	Δc	0.52	0.78	1.03	1.54	2.05	2.56	3.07	4.09	5.10							8.0	
600	Δu	0.67	0.99	1.31	1.96	2.60	3.25	3.89	5.18	6.47							9.6	6.32
	Δc	1.79	2.65	3.50	5.22	6.94											3.6	
800	Δu	2.14	3.16	4.18	6.22	8.26	10.30										4.0	8.42
	Δc	4.29	6.32	8.36	12.43												2.0	
1000	Δu	5.30	7.79	10.28	15.25												2.0	10.53
	Δc	8.48	12.45														1.3	
1200	Δu	11.13	16.29														1.1	12.63
	Δc	14.83															0.8	

### I-GRID MG-40-40x40-70

Open Area : 70 %  
 Approx. Weight : 21.4 Kg/m<sup>2</sup>  
 Panel Volume : 0.040 m<sup>3</sup>/m<sup>2</sup> panel



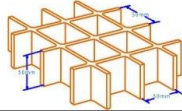
**NOTE :**  
 When 2.0 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 2.56mm at midspan

SPAN (mm)	DEFLECTION AND SAFE WORKING LOAD															Safe Load (mm)	Δ Max. (mm)	
	1	1.5	2	3	4	5	6	8	10	12	15	20						
400	Δu	0.03	0.05	0.06	0.09	0.13	0.16	0.19	0.25	0.31	0.37	0.47	0.62	135.0				4.21
	Δc	0.13	0.19	0.25	0.38	0.50	0.63	0.75	1.00	1.25	1.50	1.87	2.49	33.0				
600	Δu	0.17	0.25	0.32	0.48	0.64	0.80	0.95	1.27									



## I-GRID MG-50-50x50-75

Open Area : 75 %  
 Approx. Weight: 21.4 Kg/m<sup>2</sup>  
 Panel Volume : 0.050 m<sup>3</sup>/m<sup>2</sup> panel



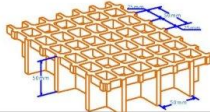
**NOTE :**

When 2.0 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 1.75mm at midspan

SPAN (mm)		DEFLECTION AND SAFE WORKING LOAD												Safe Load	Δ Max. (mm)
		1	1.5	2	3	4	5	6	8	10	12	15	20		
400	Δu	0.02	0.03	0.04	0.06	0.09	0.11	0.13	0.17	0.21	0.26	0.32	0.43	197.0	4.21
	Δc	0.09	0.13	0.17	0.26	0.34	0.43	0.52	0.69	0.86	1.03	1.28	1.71		
600	Δu	0.11	0.17	0.22	0.33	0.44	0.55	0.65	0.87	1.09	1.30	1.63	2.17	58.0	6.32
	Δc	0.31	0.45	0.59	0.88	1.17	1.46	1.74	2.32	2.90	3.47	4.34	5.77		
800	Δu	0.37	0.54	0.71	1.05	1.39	1.74	2.08	2.76	3.44	4.12	5.15	6.86	21.0	8.42
	Δc	0.74	1.08	1.42	2.10	2.79	3.47	4.15	5.52	6.88	8.24	10.29			
1000	Δu	0.92	1.34	1.75	2.59	3.42	4.25	5.09	6.75	8.42	10.09	12.59	12.5	10.53	
	Δc	1.47	2.14	2.80	4.14	5.47	6.80	8.13	10.80						
1200	Δu	1.95	2.81	3.67	5.40	7.13	8.86	10.59	14.04	7.1	12.63				
	Δc	2.59	3.74	4.90	7.20	9.50	11.80	14.11							
1400	Δu	3.67	5.27	6.87	10.08	13.28	16.48	4.4	14.74						
	Δc	4.19	6.02	7.85	11.51	15.16									
1600	Δu	6.38	9.11	11.84	17.30	2.9	16.84								
	Δc	6.38	9.10	11.83	17.29										

## I-GRID MG-50-50x50-55

Open Area : 55 %  
 Approx. Weight: 21.4 Kg/m<sup>2</sup>  
 Panel Volume : 0.050 m<sup>3</sup>/m<sup>2</sup> panel



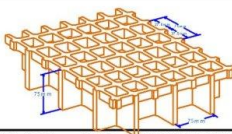
**NOTE :**

When 2.0 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 1.74mm at midspan

SPAN (mm)		DEFLECTION AND SAFE WORKING LOAD												Safe Load	Δ Max. (mm)
		1	1.5	2	3	4	5	6	8	10	12	15	20		
400	Δu	0.02	0.03	0.04	0.06	0.09	0.11	0.13	0.17	0.21	0.25	0.32	0.42	197.0	4.21
	Δc	0.09	0.13	0.17	0.26	0.34	0.43	0.51	0.68	0.85	1.02	1.27	1.70		
600	Δu	0.11	0.17	0.22	0.33	0.44	0.54	0.65	0.86	1.08	1.29	1.61	2.15	58.0	6.32
	Δc	0.30	0.45	0.59	0.87	1.16	1.45	1.73	2.30	2.87	3.44	4.30	5.73		
800	Δu	0.37	0.54	0.71	1.04	1.38	1.72	2.06	2.74	3.41	4.09	5.11	6.80	24.0	8.42
	Δc	0.73	1.07	1.41	2.09	2.76	3.44	4.12	5.47	6.82	8.18	10.21			
1000	Δu	0.91	1.33	1.74	2.57	3.39	4.22	5.05	6.70	8.35	10.01	12.49	12.5	10.53	
	Δc	1.46	2.12	2.78	4.10	5.43	6.75	8.07	10.71						
1200	Δu	1.93	2.79	3.64	5.36	7.07	8.79	10.50	13.93	7.1	12.63				
	Δc	2.57	3.71	4.86	7.14	9.42	11.71	13.99							
1400	Δu	3.64	5.23	6.82	10.00	13.17	16.35	4.4	14.74						
	Δc	4.16	5.97	7.79	11.42	15.04									
1600	Δu	6.33	9.04	11.75	17.17	2.9	16.84								
	Δc	6.33	9.03	11.74	17.15										

## I-GRID MG-75-75x75-60

Open Area : 60 %  
 Approx. Weight: 30.5 Kg/m<sup>2</sup>  
 Panel Volume : 0.075 m<sup>3</sup>/m<sup>2</sup> panel



**NOTE :**

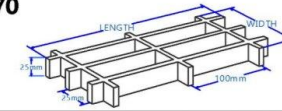
When 2.0 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 0.75mm at midspan

SPAN (mm)		DEFLECTION AND SAFE WORKING LOAD												Safe Load	Δ Max. (mm)
		1	1.5	2	3	4	5	6	8	10	12	15	20		
400	Δu	0.01	0.01	0.02	0.03	0.04	0.05	0.05	0.07	0.09	0.11	0.13	0.18	471.0	4.21
	Δc	0.04	0.06	0.07	0.11	0.14	0.18	0.22	0.29	0.36	0.43	0.54	0.72		
600	Δu	0.05	0.07	0.09	0.14	0.18	0.23	0.28	0.37	0.46	0.55	0.68	0.91	139.0	6.32
	Δc	0.13	0.19	0.25	0.37	0.49	0.61	0.73	0.97	1.22	1.46	1.82	2.42		
800	Δu	0.16	0.23	0.30	0.45	0.59	0.73	0.87	1.16	1.45	1.73	2.16	2.88	52.0	8.42
	Δc	0.32	0.46	0.61	0.89	1.18	1.46	1.75	2.32	2.89	3.46	4.32	5.75		
1000	Δu	0.40	0.58	0.75	1.10	1.45	1.80	2.15	2.84	3.54	4.24	5.29	7.03	30.0	10.53
	Δc	0.64	0.92	1.20	1.76	2.32	2.87	3.43	4.55	5.66	6.78	8.45	11.24		
1200	Δu	0.85	1.22	1.58	2.30	3.02	3.75	4.47	5.92	7.37	8.81	10.98	14.60	17.0	12.63
	Δc	1.14	1.62	2.10	3.07	4.03	4.99	5.96	7.89	9.81	11.74	14.63			
1400	Δu	1.62	2.29	2.96	4.30	5.64	6.98	8.32	11.00	13.68	16.37	10.7	14.74		
	Δc	1.85	2.62	3.38	4.91	6.44	7.97	9.51	12.57						
1600	Δu	2.83	3.98	5.12	7.41	9.69	11.98	14.27	18.84	7.1	16.84				
	Δc	2.83	3.97	5.12	7.40	9.69	11.97	14.26	18.83						

**NOTE**  
 Maximum panel size of this MG Series is 2400mm Length x 1200mm Width

## I-GRID MG-25-25x100-70

Open Area : 70 %  
 Approx. Weight: 13.4 Kg/m<sup>2</sup>  
 Panel Volume : 0.025 m<sup>3</sup>/m<sup>2</sup> panel



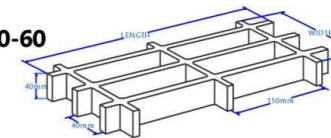
**NOTE :**

When 2.0 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 7.02mm at midspan

SPAN (mm)		DEFLECTION AND SAFE WORKING LOAD												Safe Load	Δ Max. (mm)
		1	1.5	2	3	4	5	6	8	10	12	15	20		
400	Δu	0.09	0.13	0.17	0.26	0.34	0.43	0.52	0.69	0.86	1.03	1.28	1.71	49.3	4.21
	Δc	0.36	0.53	0.70	1.04	1.38	1.72	2.06	2.74	3.43	4.11	5.13			
600	Δu	0.46	0.68	0.89	1.32	1.76	2.19	2.62	3.48	4.35	5.21	6.51	14.5	6.32	
	Δc	1.22	1.80	2.38	3.53	4.68	5.83	6.98							
800	Δu	1.48	2.16	2.85	4.21	5.58	6.94	8.31	11.04	6.0	8.42				
	Δc	2.96	4.32	5.69	8.42	11.14									
1000	Δu	3.68	5.35	7.02	10.35	13.68	3.0	10.53							
	Δc	5.89	8.55	11.22											
1200	Δu	7.78	11.24	14.70	1.7	12.63									
	Δc	10.37	14.98												
1400	Δu	14.69	21.09	1.0	14.74										
	Δc	16.78													

## I-GRID MG-40-25x150-60

Open Area : 60 %  
 Approx. Weight: 13.7 Kg/m<sup>2</sup>  
 Panel Volume : 0.04 m<sup>3</sup>/m<sup>2</sup> panel



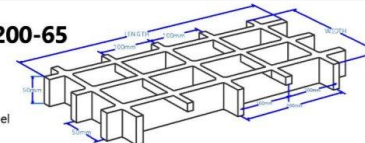
**NOTE :**

When 2.0 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 2.70mm at midspan

SPAN (mm)		DEFLECTION AND SAFE WORKING LOAD												Safe Load	Δ Max. (mm)
		1	1.5	2	3	4	5	6	8	10	12	15	20		
400	Δu	0.03	0.05	0.07	0.10	0.13	0.17	0.20	0.26	0.33	0.40	0.49	0.66	128.0	4.21
	Δc	0.14	0.20	0.27	0.40	0.53	0.66	0.79	1.06	1.32	1.58	1.97	2.63		
600	Δu	0.18	0.26	0.34	0.51	0.68	0.84	1.01	1.34	1.67	2.00	2.50	3.33	37.8	6.32
	Δc	0.47	0.69	0.91	1.36	1.80	2.24	2.68	3.57	4.46	5.34	6.67			
800	Δu	0.57	0.83	1.09	1.62	2.14	2.67	3.19	4.25	5.30	6.35	7.92	10.55	15.9	8.42
	Δc	1.14	1.66	2.19	3.24	4.29	5.34	6.39	8.48						
1000	Δu	1.42	2.06	2.70	3.98	5.26	6.55	7.83	10.39	12.96	8.0	10.53			
	Δc	2.27	3.29	4.32	6.37	8.42	10.46	12.51							
1200	Δu	2.99	4.32	5.65	8.31	10.97	13.63	4.6	12.63						
	Δc	3.99	5.76	7.53	11.07	14.62									
1400	Δu	5.65	8.11	10.58	15.50	2.8	14.74								
	Δc	6.45	9.27	12.08	17.70										
1600	Δu	9.82	14.02	18.22	1.8	16.84									
	Δc	9.81	14.01	18.21											

## I-GRID MG-50-50x200-65

Open Area : 65 %  
 Approx. Weight: 19.4 Kg/m<sup>2</sup>  
 Panel Volume : 0.05 m<sup>3</sup>/m<sup>2</sup> panel



**NOTE :**

When 2.0 kN/m<sup>2</sup> uniform load placed upon a 1000mm simple span, it will produce a deflection of 1.76mm at midspan

SPAN (mm)		DEFLECTION AND SAFE WORKING LOAD												Safe Load	Δ Max. (mm)
		1	1.5	2	3	4	5	6	8	10	12	15	20		
400	Δu	0.02	0.03	0.04	0.06	0.08	0.11	0.13	0.17	0.21	0.25	0.31	0.42	201.0	4.21
	Δc	0.09	0.13	0.17	0.26	0.34	0.42	0.51	0.67	0.84	1.01	1.26	1.68		
600	Δu	0.12	0.17	0.22	0.33	0.43	0.54	0.64	0.86	1.07	1.28	1.60	2.13	59.5	6.32
	Δc	0.31	0.45	0.59	0.87	1.15	1.44	1.72	2.28	2.85	3.41	4.26	5.67		
800	Δu	0.38	0.54	0.71	1.04	1.38	1.71	2.05	2.72	3.38	4.05	5.06	6.73	25.0	8.42
	Δc	0.75	1.08	1.42	2.09	2.75	3.42	4.09	5.43	6.77	8.10	10.11			
1000	Δu	0.94	1.35	1.76	2.57	3.39	4.21	5.02	6.66	8.29	9.92	12.37	12.7	10.53	
	Δc	1.50	2.16	2.81	4.11	5.42	6.73	8.03	10.64						
1200	Δu	2.00	2.85	3.69	5.39	7.08	8.77	10.47	13.85						



