



PATENT PENDING

gridmeshanchor.com

What is the Gridmesh Anchor?

The Gridmesh Anchor (GMA) is a break-through product in personal fall protection. The patent-pending design allows a user to set a fall protection anchor point above a grid mesh clad structure across two supporting beams that distribute the load of any fall that occurs. The product can be set up quickly, without the risk of a fall, enabling a worker to access locations below safely without the need for scaffolding, rope technicians or elevated working platforms.

The GMA is ideal for use in a multitude of industrial applications and industries, including oil & gas, petrochemical plants onshore and offshore drilling rigs, power stations to name just a few.

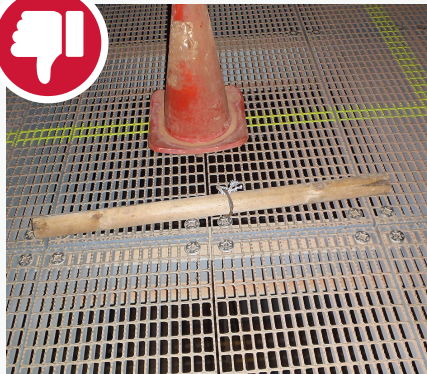
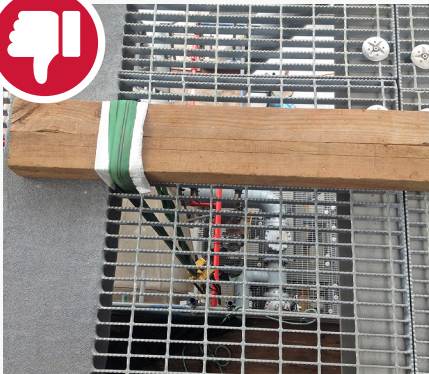
It can also be used as a lifting device for hauling loads up to 1.2 tonne.



Testing and rating

Within industry there are a large volume of improvised / temporary anchors set every day that will not pass the minimum requirements as a fall arrest anchor. Think about it this way - A standard passenger vehicle weighs about 1.5 tonnes. This is approximately equal to a static load of 15kN - the minimum load requirement for a personal fall arrest anchor.

So ask yourself - if I set up a temporary fall arrest anchor - will it support the weight of my family car? Look at these examples of temporary anchors and judge for yourself...



These set ups are not rated, tested or proven to be able to take a fall arrest load.

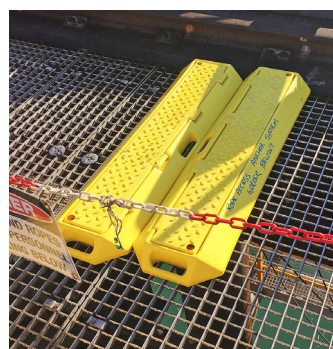
Applications - the Gridmesh Anchor in use



Product
Applications
and
Industries

The Gridmesh Anchor is designed for use in:

- | LNG Plants
- | Petrochemical / Chemical Plants
- | Mine Platforms
- | Drilling Rigs
- | Power Stations
- | Mine Sites
- | Processing Plants
- | Oil & Gas Platforms
- | Storage & Offloading Vessels
- | Domestic Gas Plants
- | Anywhere you have grid mesh



Prototype devices being tested on a jetty in Queensland

How to set up the Gridmesh Anchor

INSTALLATION:

The Gridmesh Anchor can be installed in a matter of minutes by a single person, but more quickly by two people to set an anchor.

TO INSTALL
PLEASE FOLLOW
THESE **11 STEPS**
AS SHOWN HERE ON
PAGES 4 AND 5:



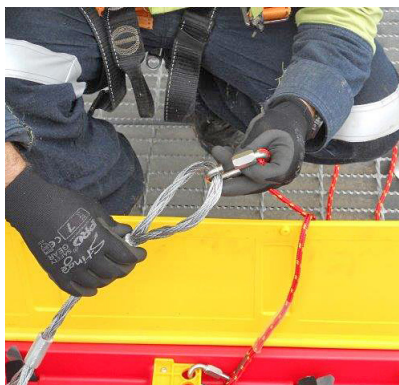
1. Using the storage bag, carry the gridmesh anchor to the desired location. Ideally there will be a user at the top of the structure to set the anchorage on the mesh and a user below the mesh to arrange connection to the equipment from below.



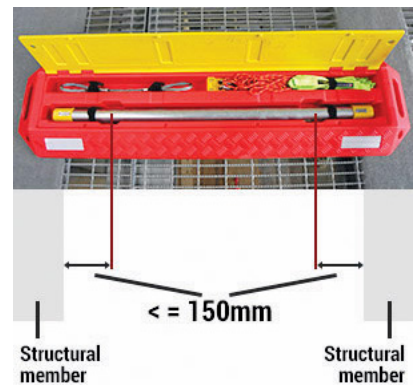
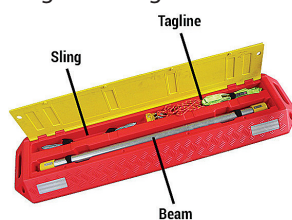
2. Open the storage bag and lay the GMA base onto the gridmesh walkway area. Be sure to align the load points of the GMA onto a location immediately above the structural members supporting the walkway. This may require placing the base diagonally to the direction of the mesh slots.



3. On structures where there is high wind, ocean swell or moving equipment, it may be appropriate to secure the GMA to the structure with rope, tool lanyards or other appropriate fastening to prevent it from moving.



4. Open the GMA lid and remove the tag-line rope, sling and support beam. Connect the end of the sling to the tag line.



5. Align the GMA such that the location slot for the GMA sits no more than 150mm from the supporting structure below the gridmesh.

INSTRUCTIONS CONTINUED
ON NEXT PAGE >



6. Lower the rope tag line 'sling first' through the GMA base and the slot in the gridmesh. It may be necessary to squeeze the eye of the sling so that it fits through the mesh.



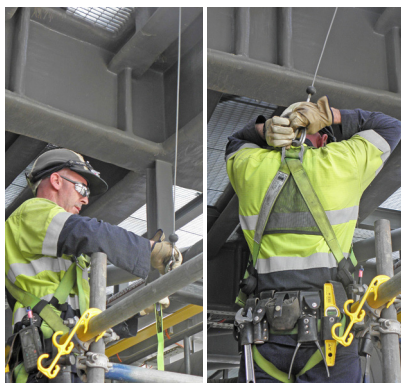
7. Once lowered, the worker below should connect a self retracting lifeline, rope or other device to be used for fall protection. They should also ensure a tag line is connected to the SRL to ensure the device is accessible once set in place.



8. Raise the sling with SRL attached by hauling the connected tag line in reverse through the gridmesh, such that the end of the sling protrudes through the gridmesh and the base of the GMA.



9. Slide the GMA beam end through the sling and slide into position, such that the beam can rest into its operating position within the GMA base. The SRL is now set for use.



10. Once the installation is completed, the worker below the GMA will pull the tag line attached to the SRL and attach the connector to the harness. The worker is now ready to commence work.

11. Disassemble by following the steps listed above in reverse.

NOTE: TWO USERS

The Gridmesh Anchor can be used by up to two people as a fall arrest anchor device. Third-party testing confirms the product provides the strength rating of 22.2kN (5000lbs) in accordance with the testing requirements for AS/NZS 5532. The device has been tested to EN795 as a single person anchor for fall protection and meets AS/NZS1891.1 requirements for single or two-person fall arrest anchors. Access to testing information can be accessed from the website.

RATED ANCHOR FOR LIFTING

The Gridmesh Anchor can also be used for materials handling/lifting loads up to 1.2 tonne. See the user manual for more info.

Safe Load Calculator (Platform structure dimensions for steel beams)

The following tables can be used to ensure the steel dimensions of the supporting structure are adequate for the GMA to be used.

Minimum required beam size for simply cantilevered structure

Length [m]	1	1.5	2	2.5	3	3.5	4	4.5
Universal Columns	100 UC 14	100 UC 14	150 UC 23	150 UC 23	150 UC 23	200 UC 46	200 UC 46	200 UC 46
Universal beams	150 UB 14	150 UB 14	150 UB 14	200 UB 18	200 UB 18	250 UB 25	250 UB 25	310 UB 32
Parallel Flange Channel	100 PFC	150 PFC	150 PFC	150 PFC	200 PFC	250 PFC	250 PFC	250 PFC
Un-equal angle	125x75 UA 6	150x90 UA 12	~	~	~	~	~	~
Rectangular hollow section	100 x 50 x 5	150 x 50 x 5	200 x 100 x 5	200 x 100 x 5	200 x 100 x 5	250 x 150 x 9	250 x 150 x 9	~
Square hollow section	100 X 5	100 X 5	150 x 5	150 x 5	200 x 5	200 x 5	250 x 6	250 x 6

Length [m]	5	5.5	6	6.5	7	7.5	8	8.5
Universal Columns	200 UC 46	250 UC 72.9	250 UC 72.9	250 UC 72.9	250 UC 72.9	310 UC 118	310 UC 118	310 UC 118
Universal beams	310 UB 32	360 UB 44	360 UB 44	360 UB 44	410 UB 53	410 UB 53	460 UB 67	460 UB 67
Parallel Flange Channel	380 PFC	380 PFC	380 PFC	~	~	~	~	~
Un-equal angle	~	~	~	~	~	~	~	~
Rectangular hollow section	~	~	~	~	~	~	~	~
Square hollow section	250 x 6	~	~	~	~	~	~	~

Length [m]	9	9.5	10	10.5	11	11.5	12
Universal Columns	310 UC 118	310 UC 118	310 UC 118	~	~	~	~
Universal beams	610 UB 101	610 UB 101	~	~	~	~	~
Parallel Flange Channel	~	~	~	~	~	~	~
Un-equal angle	~	~	~	~	~	~	~
Rectangular hollow section	~	~	~	~	~	~	~
Square hollow section	~	~	~	~	~	~	~

Minimum required beam size for simply supported structure

Length [m]	1	1.5	2	2.5	3	3.5	4	4.5
Universal Columns	100 UC 14	100 UC 14	100 UC 14	100 UC 14	100 UC 14	100 UC 14	150 UC 23	150 UC 23
Universal beams	150 UB 14	150 UB 14	150 UB 14	150 UB 14	150 UB 14	150 UB 14	150 UB 14	150 UB 14
Parallel Flange Channel	100 PFC	100 PFC	100 PFC	100 PFC	150 PFC	150 PFC	150 PFC	150 PFC
Un-equal angle	125x75 UA 6	125x75 UA 6	125x75 UA 6	125x75 UA 6	125x75 UA 6	125x75 UA 8	125x75 UA 12	~
Rectangular hollow section	100 x 50 x 6	100 x 50 x 6	100 x 50 x 6	100 x 50 x 6	150 x 100 x 6	150 x 100 x 6	150 x 100 x 6	150 x 100 x 6
Square hollow section	100 X 6	100 X 6	100 X 6	100 X 6	100 X 6	100 X 6	150 x 5	150 x 5

Length [m]	5	5.5	6	6.5	7	7.5	8	8.5
Universal Columns	150 UC 23	150 UC 23	150 UC 23	150 UC 30	150 UC 30	150 UC 30	150 UC 37.2	200 UC 46.2
Universal beams	200 UB 22	200 UB 22	200 UB 22	200 UB 22	200 UB 22	250 UB 25.7	250 UB 25.7	310 UB 32
Parallel Flange Channel	150 PFC	200 PFC	200 PFC	200 PFC	250 PFC	250 PFC	250 PFC	250 PFC
Un-equal angle	~	~	~	~	~	~	~	~
Rectangular hollow section	150 x 100 x 6	250 x 150 x 6	250 x 150 x 6	250 x 150 x 6	250 x 150 x 6	250 x 150 x 6	250 x 150 x 6	250 x 150 x 6
Square hollow section	150 x 5	150 x 5	200 x 5	200 x 5	200 x 5	200 x 5	250 X 6	250 X 6

Length [m]	9	9.5	10	10.5	11	11.5	12
Universal Columns	200 UC 46.2	200 UC 46.2	200 UC 46.2	200 UC 46.2	200 UC 59.5	200 UC 59.5	200 UC 59.5
Universal beams	310 UB 32	310 UB 32	310 UB 32	310 UB 46	310 UB 46	310 UB 46	310 UB 46
Parallel Flange Channel	300PFC	300PFC	300PFC	300PFC	380PFC	380PFC	380PFC
Un-equal angle	~	~	~	~	~	~	~
Rectangular hollow section	250 x 150 x 6	250 x 150 x 6	250 x 150 x 6	250 x 150 x 6	250 x 150 x 6	250 x 150 x 6	250 x 150 x 6
Square hollow section	250 X 6	250 X 6	250 X 6	~	~	~	~

Assumptions

1. Maximum floor width = 1200 mm
2. The GMA sits, and is positioned so as to transfer load through 2 beams.
3. All materials are Grade 300 Mpa or better (AS3678 & AS1163)
4. Floor is fully loaded at 2.5 Kpa (typical design load) - Is equivalent to 255 kg per m²
5. Floor mesh and handrails considered to be approx 50 kg per square metre.
6. A 1.25x factor has been applied to the loads, for error in estimations of operators.
7. It's assumed the beams are full restrained, buckling has not been considered.
8. 15kN fall arrest anchorage load has been used to one side. This means 2 anchorages can be used on the same device on either side.

Frequently asked questions

WARRANTY

The Gridmesh Anchor has a limited lifetime warranty.

Please visit our website for the full detailed warranty at:

www.gridmeshanchor.com/technical/

Q: Can I use the Gridmesh Anchor (GMA) for rope access applications?

A: Yes it is possible to use the GMA for rope access applications, though the code of practice for rope access (e.g. ICOP for IRATA) will likely require you to use two devices as separate anchorage points for one person. As the strength of the GMA is high enough for limited-free-fall or suspension type work, it has adequate strength.

Q: Can I use the Gridmesh Anchor (GMA) for hauling loads?

A: Yes. The GMA can be used as a personal fall protection device or as a mobile crane for hauling loads up to 1.2 tonne. As a general rule, we do not recommend the use of the same Gridmesh Anchor as a personal fall arrest anchor to be used as a materials hauling system. We recommend the device be marked on the label for its specific purpose.

Q: Does the Gridmesh Anchor come in different sizes?

A: At the present time there is only one size available. This device enables an anchor to be set over grid mesh with the floor sub-structure set at a maximum of 1200mm centres. The device can also be used where the steel floor joists are less distance apart (say 900mm). This can be achieved by orienting the device in a diagonal position that still allows the feet of the GMA to remain positioned directly over the supporting sub-structure. Future models may be provided in alternative sizes if sufficient demand exists.

Q: Can I access extra accessories than the ones already provided in the kit?

A: Additional components such as taglines, wire slings, bags can all be purchased separately as required. In the event one component is unsuitable for future use (e.g, fails inspection) or additional accessories are required for your application, the replacement parts can simply be purchased through your preferred distributor.

Q: Where can I order the Gridmesh Anchor?

A: The Gridmesh anchor company has chosen to sell its products through a distribution network to enable the products to be correctly supported in the field and assist to rectify issues in the unlikely event there are any problems with the product on the ground. It also enables the product to be pre-inspected prior to being entered into service. Contact the company to determine if your preferred distributor is an existing stockist, or we can arrange for the establishment of your chosen safety provider to access the product on your behalf

Q: How often do I need to inspect the Gridmesh Anchor?

A: Like any fall protection product, the GMA needs periodic inspection. The following schedule is recommended for inspection:

- Before first use - inspection by a competent person (also record date of first use in the log book);
- Before each use - by the user;
- 6 monthly by a competent person, with details also recorded in a logbook.

The GMA wire sling and beam carry separate serial numbers - we recommend you use the beam serial number as the kit serial number if this is required to be recorded. Detailed inspection requirements are located in the user instruction manual which can be downloaded from the website in the event it becomes lost/separated from the kit that has initially been supplied.

Q: Does the Gridmesh Anchor have a lifespan?

A: The Gridmesh Anchor carries a limited lifetime warranty (see the technical section on the website or the user instruction manual for further details). Generally, the product should last a minimum of 10 years, though items such as slings and taglines can be replaced if they wear down with use. The Gridmesh anchor can continued to be used indefinitely until such time as it fails an inspection. If any component of the GMA is found to be damaged, it should be tagged out of service immediately and not used.



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