

Instructions for the Universal Ground Protection Mat (UGPM)

1.0 Specifications of the UGPM

Overall Length (mm)	Overall Width (mm)	Overall Thickness inc tread (mm)	Approx. Panel Weight (kg)	No of holes per mat	Diameter of hole (mm)	Tread on mat	No of hand holds per mat	Load* (kg)
2410	1120	13	33	8	22	Single (UGPM1) or Double (UGPM2)	8	60,000

Due to thermal expansion properties of the material, dimensions may vary. Weight recorded was 30.2kg at 10°C
*Depending on ground conditions. We are only recommending the use of vehicle up to 25 - 30 tonnes

2.0 Safety Instructions of the UGPM

- The mat is designed for tyred or rubber tracked vehicles only. It has not been designed for general pedestrian use.
- The mat is not suitable for bridging purposes. The mat must not be used for lying across trenches or open gullies.
- The mat must not be used as outrigger pads.
- The contractor should ensure that the mat is used for the purpose that it has been designed, tested, and intended to do and no deviation to this occurs.
- A site-specific risk assessment must also be carried out before any installation.
- Correct manual handling techniques must be used at all times.
- PPE (safety gloves and boots) must be worn before the start of laying the mats.
- Before any usage, a land and weather condition survey must be carried out in that region. The land survey must include research consisting of any underground utilities such as gas pipes, water pipes, and electrical cables. The utilities must be more than 1 metre below ground level to prevent any damage when securing the mats.
- If a lawn or grassed area has been recently fertilised, heat can build up under any coloured mats from a chemical reaction. There must be a mat rotation to prevent heat damage or chemical reaction taking place on the grassed area.
- Marwood Group Ltd recommends the use of a Geo-Fabric under the mats in severe mud conditions to keep the mats from sinking into the mud.
- The UGP mats will stiffen in cold weather, but will not become brittle. If they start to shrink or contract, just lay them on a flat surface in the sun and they will flatten out.
- High winds can produce extreme wind blurts that can lift a flat panel, or panels connected. The user/owner must take appropriate action to remove or secure the mat to the ground to avoid potential high wind issues. Also note, weather conditions can be unpredictable especially during the night with little or no warning. Always check the weather forecast.
- The mats will float on water. In potential flood areas where high and fast-moving water is possible, consider anchoring the mats or weigh them down.
- Spinning wheels will result in damage to the mat. Careful driving and movement are required on the mats at all times.

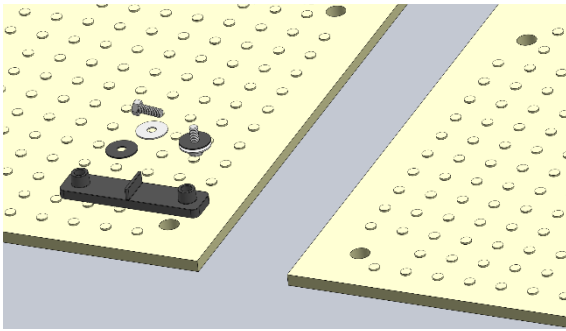
3.0 Handling of the UGPM

- The mats should be lifted on an 8x4 pallet (where possible) and hand loaded to the desired location while following all site safety procedures.
- If the site has no forklift, subject to a site-specific manual handling assessment, the mats can be lifted by one or more persons.

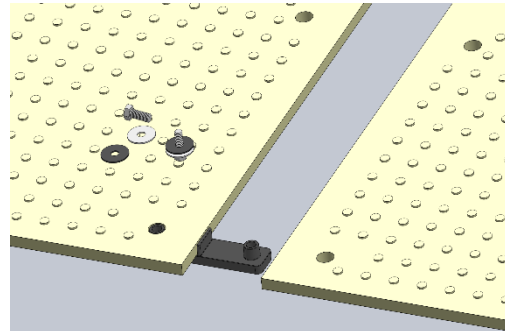
Note: The UGP mats have hand cut-outs for lifting. Gloves must be worn when manually handling the UGP mats. (Take extra precaution, heavy usage can throw up sharp edges anywhere on the mat.)

4.0 UGPM Installation steps

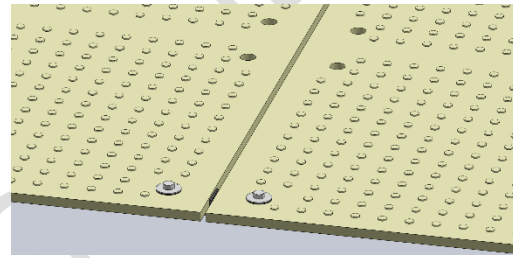
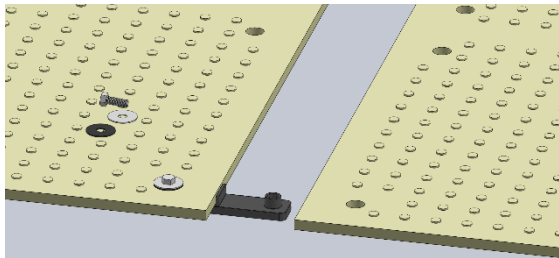
Using the 2 way HDU connector



Step 1: Each connector set includes: -
2 nut single connector plate
2 steel, 2 rubber washers and 2 bolts



Step 2: Slide connector plate with imbedded nut up through connector hole in mat.



To avoid damage to the mat and its components, it is recommended that the bolts are hand tighten or **apply the minimum torque setting when using a tool.**

The UGP mats can be secured with cable ties when used on delicate surfaces.
The UGP mats can be secured with "U" steel pins on steep hills.

Note: The bolt is 3/8 UNC Hexagon head.

5.0 Maintenance of the UGPM

- All mats must be checked for cracks, wear, distortion or discoloration, or any chemical reaction found underneath or on top of the mats. Any of the mentioned issues or security concerns must be removed and Marwood Group Ltd must be informed.
- The surface of the mat must be kept clean and clear of any debris that could damage it. Jet washed if any muck or mud found on mats.

6.0 Storage of the UGPM

- Make sure mats are clean before storage.
- Using 8x4 pallets, mats should be stored in bundles of 25 maximum.
- Suggested maximum height 4 bundles.

The Universal Ground Protection Mat including its accessories must not be modified