



# **Zappmat**



#### **Important Notes:**

All installation work must be thoroughly planned before work commences on site to identify hazards and assess risk.

These instructions form guidance for the operation and installation of Zappmat. Non-standard applications should be approved by a suitably qualified engineer.

Ensure all personnel engaged in installation operations are properly briefed and adequately supervised by a <u>competent person</u>.

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## IF IN ANY DOUBT SEEK FURTHER ADVICE: ON FREEPHONE - 0370 240 2381



Rev	Date	Comments	Initial
1.4	19/07/24	Update	DSW

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## **SAFETY**

## **Common Symbols and Meanings**

PERSONAL PROTECTIVE EQUIPMENT (PPE)			
	Use eye protection		
	Use hearing protection		
	Wear protective gloves		
	Wear head protection		
	Wear protective footwear		

WARNING SYMBOLS		
	General warning	
	Crushing of hands	





#### Introduction

Zappmat is a plastic mat pedestrian walkway and light duty temporary roadway manufactured from high density polyethylene (HDPE) which is 100% recyclable. The panel strength and high impact resistance is due to the virgin HDPE material composition which is UV stabilised.

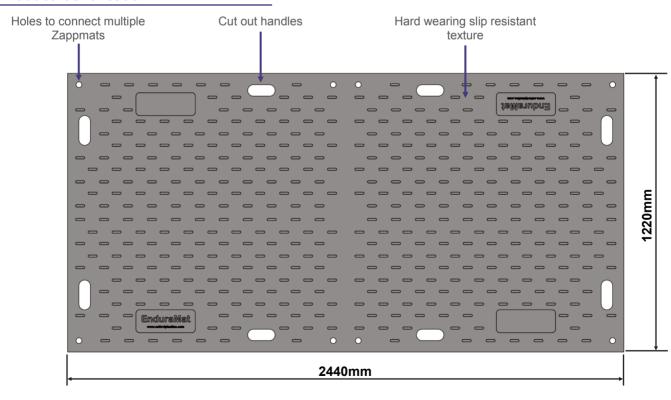
The tread pattern surface provides excellent grip and dispels mud whilst vehicles traverse: the reverse side has a finer tread pattern more suited to pedestrian use. At 32kg per mat and featuring hand grips for easy movement, no specialist equipment is required and manual positioning can be executed rapidly and precisely.

The Zappmat system is Ironstone Charcoal in colour and is typically used for temporary access solutions at festivals, outdoor exhibitions, and in compounds and car parks.

#### **Benefits**

- Enable access for heavy vehicles
- · Creates semi-permanent roadways on soft ground using heavy duty couplers
- Light enough to be lifted and moved by 2 persons
- · Can easily integrate into temporary access and ground protection installations
- · Protects grounds and buried services from damage
- Stable in temperatures from +50°C to -30°C
- Provides secure access for lightweight plant, machinery and vehicles over almost any terrain
- Minimal environmental impact
- If maintained correctly, will not degrade in UV light, water or salts
- · Easy to stack, transport and offload

#### **Product Identification**





## **Product Specification**

Zappmat Mat and Couplers					
Height (mm) Width (mm) Length (mm)					
Zappmat	12	1220	2440		
Light Duty Coupler	3	132	95		
Heavy Duty Coupler	8	178	178		

## Slip Resistance

Slip Resistance testing has been carried out by an independent test house in line with the requirements of UK <u>HSE 2012 document 'Testing the slip resistance of flooring'</u>. Testing was carried out in 3 directions in wet and dry conditions, using a calibrated Munro slip tester using Slider 55 and Slider 96.

#### **Classifications:**

High Slip Potential: 0 - 24 Medium Slip Potential: 25 - 35

Low Slip Potential: 36+

Slider 96 Test Results - Dry			
Median Result Classification			
Parallel to traffic	60	Low Slip Potential	
45 degrees to traffic	64 Low Slip Potentia		
Perpendicular to traffic	68	Low Slip Potential	

Slider 96 Test Results - Wet			
Median Result Classification			
Parallel to traffic	34	Moderate Slip Potential	
45 degrees to traffic	40	Low Slip Potential	
Perpendicular to traffic	34	Moderate Slip Potential	

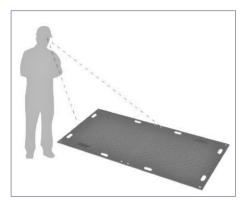
Slider 55 Test Results - Dry			
Median Result Classification			
Parallel to traffic	87	Low Slip Potential	
45 degrees to traffic	91 Low Slip Potential		
Perpendicular to traffic	114	Low Slip Potential	

Slider 55 Test Results - Wet			
Median Result Classification			
Parallel to traffic	30	Moderate Slip Potential	
45 degrees to traffic	37	Low Slip Potential	
Perpendicular to traffic	39	Low Slip Potential	



# **User Guide**

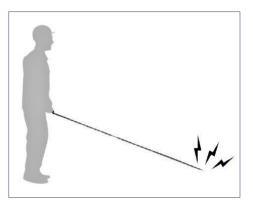
## Inspection and Maintenance



Inspect each mat for signs of damage between each installation.



Clean mats between each installation to remove debris and maintain slip resistance.



Do not drop the mats.

Do not lift or move with machinery.

## Installation



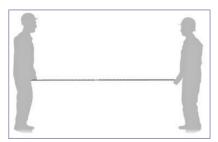
## Safety Notes:

Care and adequate precautions must be taken to prevent trapping fingers during installation.

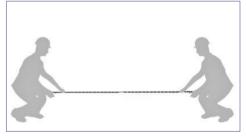




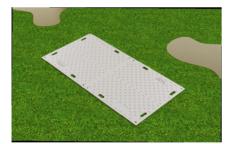
Assess conditions of the ground and traffic passing over the Zappmats



Use a two person lift



Bend at the knees in line with best practise.



Position the mat on the area requiring ground protection.



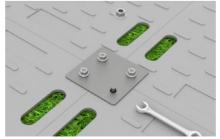
Depending on traffic and Conditions, connect multiple Zappmats with either a light or heavy duty coupler.



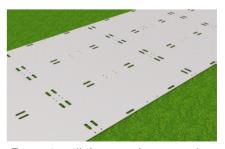
When using the light duty coupler, place one end of the coupler into the first mat and then the next into the Second mat.



When using the Heavy Duty coupler, place the back plate behind the Zappmat, feeding the bolts through the holes.



Do this for up to four Zappmats. Place the front plate on top and secure with nuts.



Repeat until the area is covered.



GROUND & VEHICLE TYPE QUICK REFERENCE				
	Ground Type	Suitable to protect ground for:		
HARD	Compact sand clay that cannot be indented with moderate thumb pressure  Gravel  Rock  Shale  Cemented material	26T 18T		
MEDIUM	Soft clay that can be indented 5mm with moderate thumb pressure.  Loose and fine dry sand	7.5T 0 0 0		
SOFT	Very soft clay penetrated by moderate thumb pressure up to a few centimetres.	3.5T 0		



### How to use this table

- **1.** Assess ground conditions and select the appropriate row.
- **2.** Select the column for the vehicle axle number.
- **3.** Find the maximum weight that can be supported for the selection.
- **4.** If the gross vehicle weight is less than the maximum weight, the mat can be used to protect the ground. (See 'Notes on the use of data')

#### Notes on the use of data

- Occasional vehicle use, not continuous traffic
- Only one wheel on the mat at one time
- · Mats connected or pinned in place
- Load of vehicle spread over all wheels
- Ground type flat and consistent (no variations or mix of materials)
- Harder materials within softer ground types may damage the mat
- Users to carry out their own risk assessments

GROUND & VEHICLE TYPE DATA TABLE				
Ground Type	2 axle vehicle Mat T recommended with Zappmat	3 axle vehicle Mat T recommended with Zappmat	4 axle vehicle Mat T recommended with Zappmat	5 axle vehicle Mat T recommended with Zappmat
Hard Rock: Granite	463	694	925	1156
Sandstone, Limestone	231	347	463	578
Broken Bedrock, Shale, Cemented Material	126	188	251	314
Soft Shale, Hard Dry Clay	63	94	126	157
Compact Gravel & Sand	63	94	126	157
Soft Rocks	63	94	126	157
Medium Clay that cannot be indented with moderate thumb pressure	35	52	70	87
Loose Gravel or Sandy Gravel mix, dry	35	52	70	87
Moist Clay cannot be indented with moderate thumb pressure	21	32	43	54
Fine Sand & Silt	21	32	43	54
Soft Clay indented with thumb (5mm or less)	14	21	29	36
Loose & Fine Dry Sand	14	21	29	36
Very Soft Clay penetrated by thumb up to a few centimetres	7	14	14	18