



1 Personal Protective Equipment

- Use hardhat at all times
- Use steel-toed boots with slip-resistant soles
- Use high-visibility vest on active sites
- Use gloves

2 Lifting & Rigging

- Use certified rigging equipment rated for mat weight
- Tie mats only in proper locations and properly secure rigging equipment before any lift
- Never stand under suspended loads
- Maintain clear communication with other personnel or equipment involved
- Inspect slings and chains following the manufacturer recommendations/standards

3 Placement Procedures

- Rule of thumb: mats distribute load, but they do not fix a failing subgrade
- Ensure ground is level and free of any large debris
- Place mats so load travels perpendicular to timber grain whenever possible
- If mats allow, interlock them properly to prevent shifting
- Place mats tight together, no gaps, ensure full ground contact, no rocking

4 Load Limits

• Never exceed the designed ground bearing pressure

- Timber mats do not increase crane capacity—they only spread the load.
- Always verify that the combined system (equipment + mat + subgrade) can support the load.

Mat capacity is governed by subgrade strength.

• Center all loads on the mat

- Loads (outriggers, tracks, wheels) must be placed near the center of the mat.
- Edge loading dramatically reduces capacity.
- Keep load points at least 300 mm (12 in) from mat edges.

• Ensure full contact with the ground

- A mat must sit flat with full ground contact.
- Voids or rocking create point loads.
- Shim only with compacted soil or gravel, never wood blocks.
- A partially supported mat can fail even below its rated load.

• Use multiple mats for high or dynamic loads

- For heavy lifts, soft soils, or dynamic loading:
- Use double-layer, cross-laid mats, or more layers, when needed, and recommended by your engineer.
- Distribute load across multiple mats.
- Never rely on a single mat under high outrigger loads.

5 Inspection

- Inspect mats weekly for:
- Structural cracks

- Bolt loosening
- Crushing
- Excessive deflection
- Remove any damaged mat immediately