

Required Granular Fill Thickness* for Tensar[®] TX160 Geogrid Crawler Cranes Walking without Load

*Thicknesses greater than 30 inches may require an embankment stability analysis and possibly additional geogrid reinforcement and/or other measures.



1. PLEASE CONTACT KECO when subgrade soil is SOFT (CBR < 0.8).

2. For use with Tensar TriAx (TX) Geogrid shown and for estimating/preliminary analysis purposes only.

3. In areas where cranes are turning, consideration should be given to increasing the minimum granular fill thicknesses indicated on the chart.

4. For working surfaces reinforced with multiple layers of geogrid, it is recommended that the uppermost layer be located at least 1 ft below the surface.

5. Manitowoc crawler cranes may be configured many ways. These plots are based on the following specific configurations which may be less conservative than yours: maximum car body counterweights, Manitowoc Series 3 Heavy Lift (HL) booms, boom lengths: 222 @ 140 ft; 777 @ 200 ft; 2250 @ 260 ft, no jibs. The plots reflect static conditions only, i.e., they do not reflect dynamic effects of swinging, hoisting & lowering, wind, and other adverse operating conditions.

6. Global stability, edge stability and settlement are not considered in this chart and should be analyzed by others.





Required Granular Fill Thickness* for Tensar[®] TX160 Geogrid Crawler Cranes under extreme loading conditions



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Required Granular Fill Thickness* for Tensar[®] TX160 Geogrid Haulage Truck Trafficking

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2. For use with Tensar TriAx (TX) Geogrid shown and for estimating/preliminary analysis purposes only.

3. For reinforced fill thicknesses in excess of 24" (600 mm), an additional layer of geogrid should be placed at the mid-point of the granular fill.





Required Granular Fill Thickness* for Tensar[®] TX160 Geogrid Wheeled Front Loader Trafficking

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2. For use with Tensar TriAx (TX) Geogrid shown and for estimating/preliminary analysis purposes only.

3. For reinforced fill thicknesses in excess of 24" (600 mm), an additional layer of geogrid should be placed at the mid-point of the granular fill.