



CROSSVILLE PORCELAIN TILE TECHNICAL CAUTION: Heavy Load moving equipment over freshly installed porcelain tile floors.

Motorized self-leveling work platforms and fork trucks have become very popular over the last several years for all manner and form of activities related to on-going construction work as well regular high level decorating and planned maintenance procedures. However, with their increased usage some problems have developed when used over tile floor surfaces. Porcelain tile can be a very strong rigid veneer when the installation has proper and complete coverage and when the installation is mature or has experienced the complete cure of the supporting mortar.

Please Note:

- If the installation is less than 30- to 45 days old, it is likely the rolling loads from these mobile trucks/work platforms will damage or break tiles in their path.
- In addition, when the extended boom apparatus is employed, often the rolling load is transferred to an increased point load, again stressing a recently installed tile system or possibly breaking tile that may have incomplete supportive mortar coverage whether newly installed or not.
- These platforms(common weight between 9,000 and 14,000 lbs. plus very heavy payloads) are noted to have non-marking solid rubber tires, these tires are integral with solid steel rims, this combination can be a very unforgiving footprint particularly when the unit pivots or is turned sharply.
- Finally given the firmness in the tire/wheel assembly and their narrow width, point load is greatly increased often to the detriment of the underlying tile assembly.
- It should also be noted, while young (less than 30 to 45 days) installations are particularly vulnerable to the rolling loads this equipment can impose on a tile assembly, they can also be damaging to older more mature installations where point load strength in the tile assembly is lower due to the use of soft cleavage/crack isolation membranes.
- If the equipment is more heavily loaded and combines movement with pivoting activity, tile along the travel path or at the pivot points are likely to be damaged, newly installed or not.
- Awareness of the vulnerability of tile floors newly installed or not needs to prevail, if the equipment's tires can be modified to a tube or air-filled tire rather than the prevailing solid rubber tires a softer footprint or trac can be achieved.
- If such modifications are not practical or impair the unit's performance, the usage of sheets of plywood/particle board or Masonite in front of the equipment can help lessen or dissipate the point load weight on the tile assembly.

CROSSVILLE TECHNICAL SERVICES TEAM-2015

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