

Plycem CemDeck Installation Recommendations: BEST PRACTICE GUIDELINES

U.S. Architectural Products and The Plycem Company, manufacturer of Plycem CemDeck, recommend the following best practices to ensure efficient and proper installation.

i. General Installation Recommendations

As with all construction material, it is imperative that a certain level of care be taken with the Plycem CemDeck sheets on the jobsite to protect against impact from jobsite handling.

1. Plycem recommends ALL installers read and understand all published installation instructions and product guides, before installing Plycem CemDeck. Those documents are available online at www.architecturalproducts.com. Please contact your local US Architectural Products sales representative for copies in Spanish.
2. Plycem recommends the use of proper dunnage during handling and storage. Stack full pallets no more than 4 units high on a stable, level, solid substrate. The sheets must be stored and installed completely flat. If damage occurs, do not install damaged sheets.

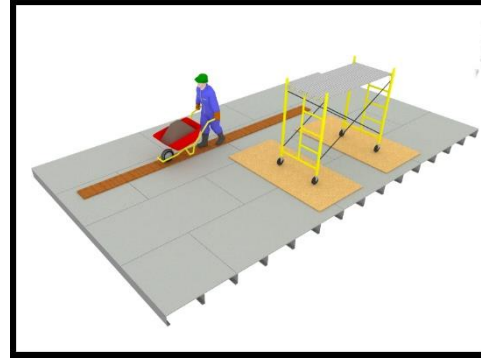


3. Impact situations such as dropped block, brick or framing members may result in fractures, pock-marks or punctures. Precautions must be taken to avoid these types of impacts from occurring on the Plycem CemDeck sheets. Replace any damaged sheets (see section II).

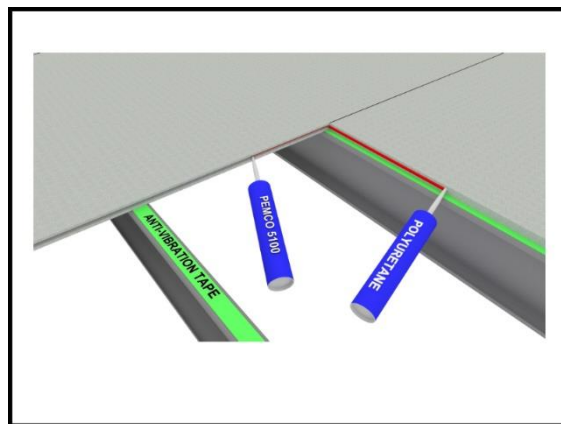
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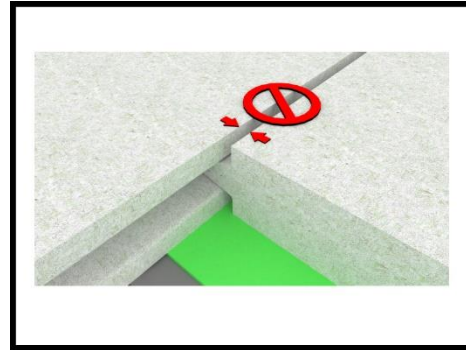
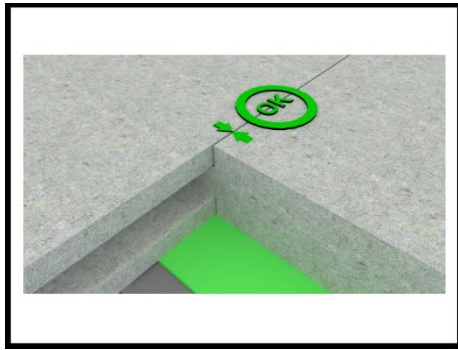
4. Plycem recommends the use of a protective material, such as plywood or OSB, over installed Plycem CemDeck sheets to prevent damage from ladders, scaffolding, hoists, equipment, job boxes, sheetrock A-frame carts, etc. Specifically, plan ahead where to install sacrificial wear surfacing in areas of high traffic and abuse to prevent damage to the Plycem CemDeck during and after installation.



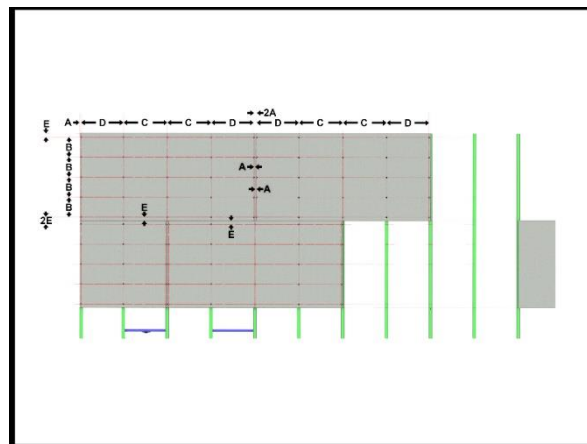
5. Be aware of overloading the assembly's design capabilities during staging and construction. Pay particular attention to distributing such loads over multiple structural members. Roofing materials should be evenly distributed on the roofing structure, not loaded on the floor decking, to avoid high concentrated loads during construction and installation.
6. In addition to fasteners, the optional use of an adhesive is allowed in all board-to-board joints on floor deck applications, including both tongue and groove as well as square edges. All board joints may receive Pemco 5100 noncombustible polyurethane based adhesive or equal.



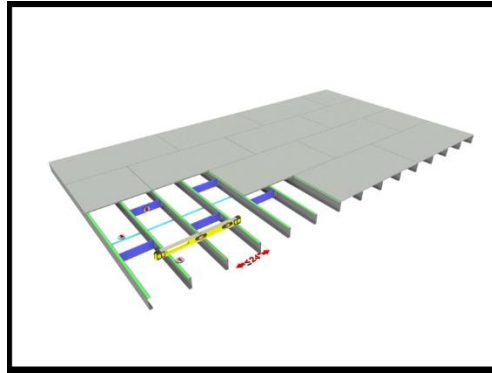
7. Be sure all tongue and groove edges are tightly interlocked and that the long dimensions of the board lie perpendicular to the framing members. All square-edge board edges should fall on a structural member and also be tightly abutted to the adjacent sheet. Adequate flange supports will facilitate this requirement and proper fastening.



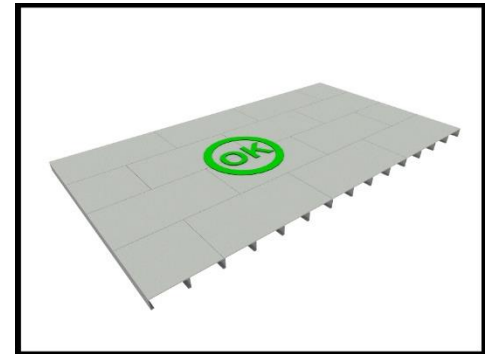
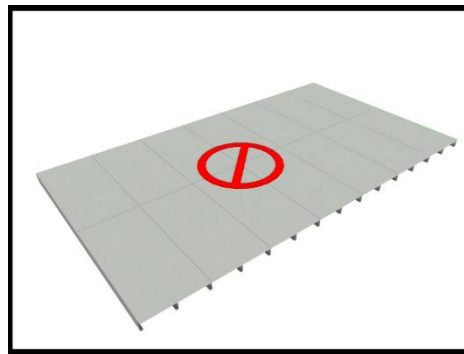
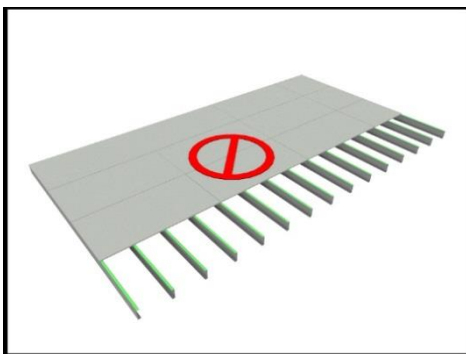
8. Fasteners and fastener locations must be within product specification. Please review fastener and fastener pattern information published on the US Architectural Products website - www.architecturalproducts.com. Proper fasteners and fastener locations for sheet attachment are critical to successful deck installations and optimum performance of the assembly.



9. The steel structure to which the Plycem CemDeck sheeting is to be applied should be flat, even, and equally supportive (coplanar). Fasteners should not be protruding above the sheeting. Variations in co-planarity of the steel joist system can lead to voids in support of the decking and cause stress cracks. The use of anti-vibration tape is allowed but care must be taken during assembly to prevent rolling, pinching, or doubling of the tape which can cause an uneven floor surface.

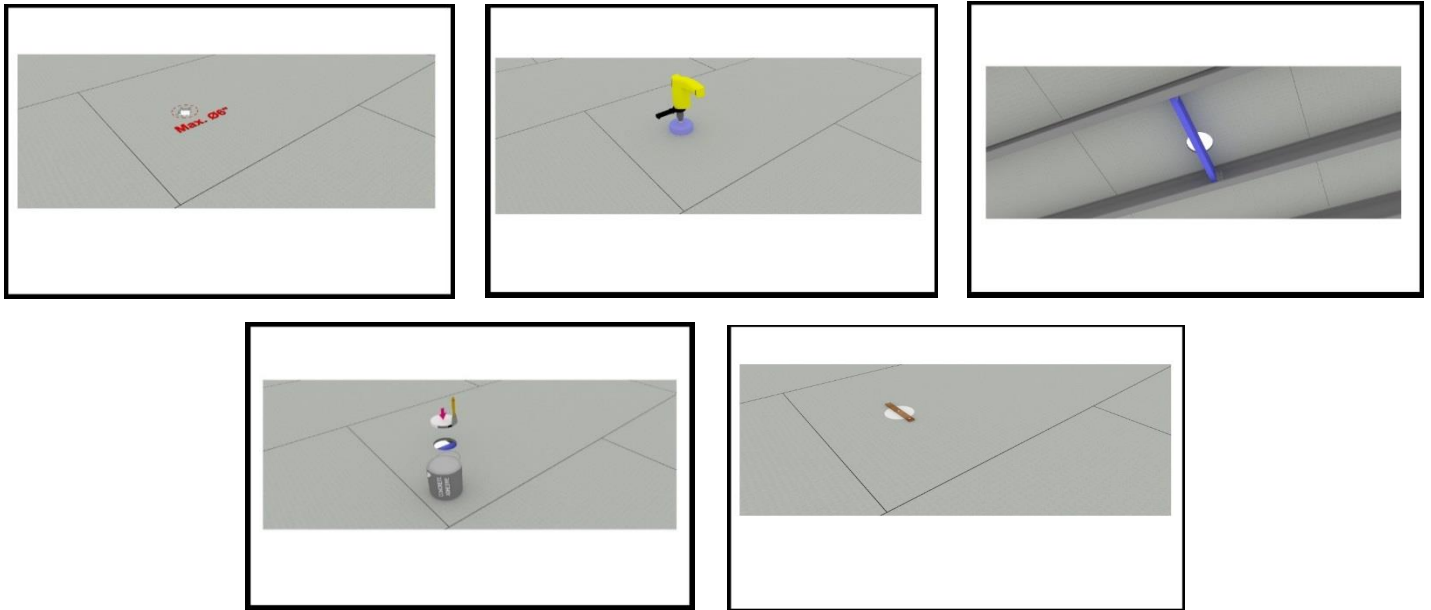


10. Plycem CemDeck is not designed to be used as a shear plate. While it has considerable shear properties, care should be taken when/if racking tensioners are released. Whenever possible, strapping or bracing should be used to secure the trued assembly. Without adequate strapping or bracing, fastener shifting may occur and damage the Plycem CemDeck sheeting.
11. Panels used in floor applications should be installed with the 8' or T&G edge perpendicular to the structural supports, continuous over two or more spans. Single span conditions should be avoided as a rule. End joints must be over the supports and should be staggered at least one support. The long edges of subfloor panels should be tongue-and-groove or supported with blocking



ii. Repair Recommendations

Every panel with fractures, pock-marks or punctures must be repaired or replaced. All repairs should utilize materials compatible with Portland cement. Due to the movement of most structures, a flexible or elastomeric repair system should be considered for best results. If the fracture does not span multiple structural members, a repair may be considered that will reinforce the fracture from the backside using another piece of Plycem CemDeck supported from below by bridging between the structural members. All fractures, pock-marks or puncture repairs must receive structural bridging underneath to adequately support the panel.



iii. Designed Penetrations

Penetrations in excess of 2" in diameter used for passage of ductwork, plumbing or electrical, etc. should have adequate bridging or strapping installed between the adjacent structural members for support. Care must be taken around larger penetrations in moisture prone areas (toilets, etc.) to assure adequate support between joists. Use perimeter joists to rim all stairwells and elevator shaft penetrations to prevent damage during construction.

