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EPOXY TERRAZZO OVER PLYWOOD AND CEMENT BOARD

While concrete is the most common substrate, this Association suggests favorable experience with an epoxy terrazzo system being applicable for interior use over a double layer of exterior grade plywood or plywood/cement board.

EXECUTION

It is assumed that whenever this system is considered, wood joists or trusses are involved with occupied space below. Thus, consideration may be given to sandwiching a damping board or sheet membrane between the exterior plywood sheets to reduce the noise created by activities over this floor.

It is recommended that the wood joists are a minimum of 2x1Os, spaced 12 to 16 inches on center—the 12 inches is preferred to lessen deflection with heavy loads. The exterior plywood layers should be at least 3/4-inch in thickness. The second sheet should be staggered – no joints aligned with that below – or lap-joined from the joints in the initial sheet and adequately screwed. The use of an adhesive along with the mechanical fasteners assures positive bond between the plywood and better flexural strength of the system. The sound damping layer is placed between these two plywood sheets.

The upper layer of plywood is best positioned with 1/8-inch gaps around all edges versus a tight joint.

This is to be followed by filling all open joints with epoxy mortar and then covering with approximately a 4-inch width of liquid epoxy membrane with fiberglass mesh embedded, all according to manufacturer's directions. The results of this procedure will make the joints at least as strong as the plywood itself.

Cement board has been used as the top layer in this system. Extremely stringent fire ratings or moisture resistance may be a consideration.

Place dual "L" angle-type divider strips "bookended", back-to-back with a 1/8-inch space between around the perimeter and at column lines. This void is filled with a selected colored flexible sealant after the placement/finishing of the terrazzo.

All divider strips are anchored in the desired design to the plywood with an epoxy adhesive compatible with the epoxy matrix. It should be understood, all divider strips employed play no role in the control of the epoxy terrazzo system unless they are used in the control joint position. They are strictly for aesthetics, separating various colors or forming a design.

The epoxy terrazzo matrix is applied to the clean and dry plywood or cement board surface per standard trade practices and selected manufacturer's directions.

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