



GREAVES

MESH-BUG™ Connector for Pool Mesh

FAQ What connector can I use for the wire-mesh in a concrete pool deck or under paving stones?

The 2008 NEC Article 680.26(B)(1)(b) requires an equipotential bonding grid under pool perimeter surfaces such as concrete or paving stones. Typically, wire mesh is embedded in concrete rather than rebar. This wire mesh must be connected into the required equipotential bonding grid, which includes rebar and exposed metal objects within 5 feet of the pool. Direct burial connectors are needed because the connection is embedded in earth or concrete.

Steel wire mesh in concrete

Steel mesh re-enforcement wire grid (which looks like large hardware cloth) is typically used (rather than rebar) in on-grade concrete pool decks and walkways. Steel wire mesh is typically #10 (rolled) or #6 (flat sheet) steel wire, and is supplied by the concrete contractor.

Connectors with direct burial capability are needed because the connection is embedded in concrete. For these connections, Greaves recommends and supplies direct burial MESH-BUG™ split bolt connectors. The MESH-BUG is made of copper-alloy bronze and is UL listed and marked for direct burial in earth or concrete. While not listed specifically for use on steel wire, several sizes are listed for use on rebar, which is the same material combination (copper wire to steel) as with the steel wire mesh. The MESH-BUG is generally accepted for this application by AHJs.

For #10 mesh, select the MESH-BUG #A2-DB or larger, and for #6 mesh use the #A5-DB or larger.

Copper wire mesh under pavers

Copper mesh wire grid is often used under paving stones to fulfill the NEC requirement. Made of #8AWG solid copper wire with exothermically welded joints, copper mesh also must be connected to the equipotential bonding grid. Direct burial connectors (split bolts and rebar clamps) must be used, and are typically included with copper mesh kits.

CBM Copper Bonding Mesh is available from Greaves Corp. The kit includes suitable connectors. Other connectors are also available from Greaves for pool and similar jobs, such as Jones Rebar Clamps (for rebar connections) and the #BTL4-DB or #BTL414-DB direct burial lay-in lugs and their plated “-P” versions for bonding to other equipment.

FAQMeshBug
02/27/02
Rev 8/26/10