



▶ New device allows exact, consistent elevations of reinforcement.

Primary reinforcement for a concrete slab should support the concrete, not the subgrade beneath it. However, once placed, reinforcement is constantly in jeopardy of being displaced either by workers who must move in and around it or by the pour process itself.

Current building codes require rebar and reinforcing wire in concrete foundations to be set at a specified height above grade. Until now, contractors have used wire chairs and standard concrete bricks to support the reinforcing steel. However, wire chairs often bend or sink into the soil, and standard concrete brick is costly and doesn't provide the most common elevation of 3 inches, not to mention various other elevations.

To solve this problem, the support mechanism for the reinforcement really needs to be secured in place. That's not always easy, depending on what the contractor uses to support the reinforcement. Now, inventor and engineer Namon A. Nassef of Pensacola, Fla., has devised a support that's easy to secure to the reinforcement and won't get dislodged.

Patented July 18, 2000, the "Method of Forming a Reinforcement Mat Assembly" invention is a brick with a series of holes through the center and strategically placed slots on the sides. It is also sized such that when used as a whole or in parts, it will allow exact, consistent elevations of the reinforcement.

Commercially sold under the trade name "Tie Brick," the invention stands up to the weight of steel reinforcement and workers walking across it, resists sinking into soils,

# Tie Brick

## is Reinforcement for Reinforcement

and costs about the same as standard brick and wire chairs. It provides support heights of 2, 3, 4, 5, 6, 7, and 8 inches from one unit. Contractors can easily break units along the side slots to achieve the various heights.

In installation, reinforcement fastens to the Tie Brick with either a wire or string, which passes through the hole in the center of the brick.

Nassef has considered just about every possible scenario in this inven-

tion. In addition to the standard rectangular configuration, the Tie Brick can also be designed with angular or diagonal slots so it may be broken off into triangular or other trapezoidal shapes, or spherical or cylindrical shapes to fit the needs of various supporting applications.

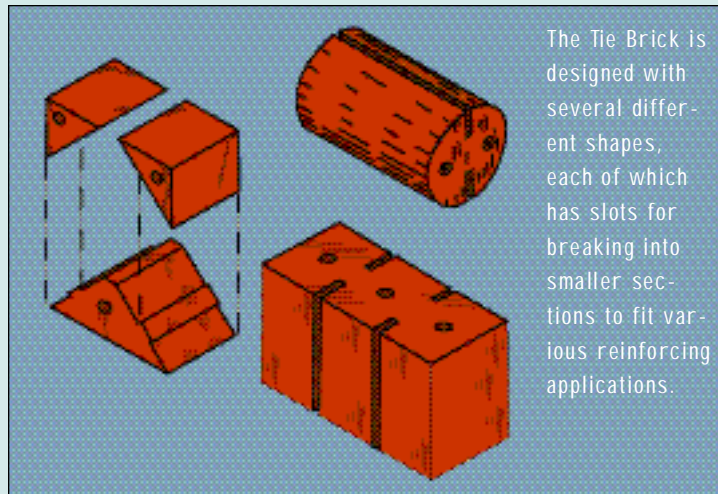
Contractors can break the Tie Brick into standard lengths without scoring or masonry sawing, unlike its standard brick counterpart. They can simply strike it on a hard object along the slot where they want it to break. This is possible by actually striking one Tie Brick against another.

— PAUL D. Q. CAMPBELL

Paul D.Q. Campbell is a Titusville, Fla.-based science and technology writer. He can be reached via e-mail at [techpubs@ix.netcom.com](mailto:techpubs@ix.netcom.com) or on the Web at <http://techpubs.home.netcom.com>.

### Tie Brick Raises Support

Traditional primary concrete reinforcement often gets displaced on the jobsite. The patented Tie Brick is designed for rebar insertion to keep reinforcement in place and at a uniform height.



The Tie Brick is designed with several different shapes, each of which has slots for breaking into smaller sections to fit various reinforcing applications.