

Engineering firm develops free tilt-up panel reinforcing estimating tool

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Photo: www.tmtiltup.com

Dayton, Ohio-based structural engineer Steinbicker & Associates has developed a [free online tool](#) to help owners, developers, and contractors estimate panel thickness and the required amount of steel reinforcing for a typical tilt-up panel on a specific project.

"Not only does this tool help contractors and subcontractors who are actively involved in the tilt-up industry, but it also is a great help to those just getting started with tilt-up," said Mark Remmetter, PE, managing principal of the firm's Dayton office. "They can use this tool to get an approximation on how to best bid a tilt-up job and get a better handle on some of the costs associated with a project."

To get an approximation for panel reinforcing, users simply enter the panel width, opening width, panel height, panel structural thickness (a minimum recommended thickness is suggested by the tool), wind speed, and wind exposure category. The tool then provides a reinforcing estimate measured in pounds per square foot based on the gross panel area.

Jon Schuchmann, PE, managing principal of Steinbicker & Associates' Orlando office, explains that the tool also can assist contractors and subcontractors in bidding tilt-up projects. "The estimate can be used as a pricing tool, allowing users to check various panel thicknesses and corresponding reinforcing amounts to predict an efficient combination of thickness and reinforcing. This number can greatly fluctuate depending on several factors, so this estimating tool assists users in quantifying the number."

The firm notes that the tool is to be used for estimating purposes only and is not intended to be used to determine rebar layout or quantities for final design loads. Final tilt-up panel reinforcing design requires the services of a professional structural engineer experienced in the design of tilt-up concrete panels.

The estimating tool can be accessed at: http://www.sai-engineers.com/inner/tiltup_tool_login.php (short registration required)