

## ***Using Welded Wire Reinforcement (WWR) for Worker Safety***

The ASCC Technical Committee met in Dallas on Tuesday prior to the ASCC Annual Conference. Although, we usually leave safety topics to the Safety Council, there was a great discussion on the use of welded wire reinforcement (WWR) for worker safety. The concern was for workers placing concrete when the top reinforcement is spaced greater than 6 inches apart in one or both directions. A worker's foot could slip through this size opening or trip on it, causing injury to an ankle or knee. To deal with this issue, several committee members indicated that they had been installing sheets of WWR over the top layer of reinforcement to use as fall protection for workers placing concrete.

The committee members indicated their criteria for using WWR for worker safety:

- Spacing of reinforcement exceeding 6 in. in one or both directions
- Depth of fall through the reinforcement exceeding 12 in.
- Member width exceeding 24 in.
- Typical use of WWR included:
  - ✓ Covering entire mat foundations
  - ✓ In strips over wide and deep transfer beams



Welded wire reinforcement placed over top bars in a mat foundation so workers can safely perform their tasks. (Photos courtesy of Tim Manherz-- TAS Commercial Concrete Construction, Houston, TX)

The use of WWR was limited to sheets due to the safety concern of using rolled WWR. The sheets were tied (wire ties) together only at the laps to eliminate a tripping hazard. However, this will depend on the spacing of the reinforcing as wider spacing would require heavier WWR sheets tied to the reinforcement. When the fall hazard is on a mat foundation, the WWR is placed over the entire area. For wide transfer members, only a strip of WWR is placed over the beam for workers to safely place concrete while standing on the top.

Committee members using WWR for worker safety said that Owners and Construction Managers were enthusiastic about this approach and were willing to pay the concrete contractor for the material and labor to install the WWR. One individual said that the cost of an injured worker could exceed \$250,000. Thus installing WWR becomes cheap insurance.

This issue is not currently covered in the ASCC Safety Manual, and the committee members discussed using *The VOICE* as an opportunity to present this issue to all members. If you have comments on the use of WWR for worker safety please email Ward or me so we can collect the information and forward it to the ASCC Safety Council for consideration in the next edition of the Safety Manual.