



Making Concrete Test Samples

When making concrete test samples OSC field personnel must follow the requirements for California Test 540 "Method of Making, Handling, and Storing Concrete Compressive Test Specimens in the Field." This test method can be accessed from the OSC website at the following page: <http://onramp.dot.ca.gov/hq/oscnet/> (Look under: Links/Other Caltrans Links/California Test Methods).

Caltrans METS Concrete Testing Section has reported the following recurring deficiencies:

- The top of samples are: not leveled, overfilled, under filled, excessively sloped or have significant surface voids.
- The TL-0502 forms contain insufficient or conflicting, confusing information.
- The concrete samples are not clearly marked on the mold.

Suggestions:

- Prepare concrete test samples on a level surface. Pat sides of mold after each layer to release any entrapped air and use a wooden float to strike off the concrete even with the top edge of mold. Wipe off excess concrete around the sides, preferably with a moist sponge, to obtain a good seal with the cap.
- Caution should be used when moving the sample to the curing location to avoid excessive vibration. If necessary, first move the sample to the curing location and then complete the process from strike off of the cylinder.
- Make sure Project No., Date Cast, Sample No., Mix Design No. and project information is on the TL-0502 form. Keep the size of the form to 4 ½" x 7".
- Use a waterproof permanent marker (flow pen) to mark both the cap and each side of the mold with Contract No., Sample No. and Date Cast.

Example

Contract No. 04-012024
Sample No. 1-28-1/2
Date Cast 06/28/05

If you need additional help after reviewing CT 540, contact Caltrans METS concrete testing section at (916) 227-7283.