

RETRACTABLE CURING ENCLOSURES

In an effort to prolong the life spans of the nation's bridges and roadway infrastructure, states, provinces and federal governments are imposing more stringent curing protection standards to guarantee the durability and quality of precast concrete implemented in new projects. Hot-weather curing is being addressed stringently in these new standards, and producers will need to adapt and adequately demonstrate their hot weather curing procedures before they can receive new contracts.

Sheltering your forms is the most direct line of defense when dealing with "hot-weather concreting." Once you take solar radiant heating, air temperature and relative humidity into consideration, avoiding plastic cracking becomes a complicated affair. Chamtech Systems, a manufacturer of retractable curing enclosures, offers a product that insulates the curing environment to decelerate unpredictable changes in temperature. The maintenance-free curing enclosures block solar radiation and retain moisture,



Photos courtesy of Chamtech Systems

meeting the ASTM C171 vapor barrier requirements. The retractable curing

system is an accordion-style enclosure that is able to retract to one-fifth of its extended length to give full overhead and side access to forms. The system is able to retain air at a high relative humidity while allowing control of the air temperature within (during hot and cold weather), and it requires two employees to operate it.

Polyethylene films are difficult to set up, especially in windy conditions, and must not be torn. The high-strength shell of the retractable enclosure resists tearing and is easy to repair. The enclosure also provides space between the forms and its walls to provide a free circulation of heat and humidity.

Retractable systems also are helpful in other areas of the plant for shading wire, rebar and aggregate. These materials affect the overall concrete temperature and need to be protected from the sun's radiation. For more information, visit www.rollcov-r.com or call (888) 695-3382.

