

### THERMOMASS System Installation

The following guide details the general concepts involved in installing the THERMOMASS Building Insulation System for tilt-up or precast construction.

Please contact Composite Global Solutions for answers to any questions or for full installation instructions for your project.

If you are approaching your first THERMOMASS pour, we can have a technical representative visit your site to oversee and make sure everything runs smoothly.

#### Step 1: Exterior layer of concrete is poured

The bottom layer of concrete is placed in the forms. This begins once the forms have been secured and the surfaces cleaned and treated with a bond release agent. Reinforcing has also been placed.

The reinforcing for this exterior (and usually thinner) face is typically SL52 or SL62 (or steel fibres) to control shrinkage during curing, with 8mm rebar for robustness.

**Note:** The next three steps (steps 2, 3, and 4) are critical.

#### Step 2: STYROFOAM insulation is installed

The pre-drilled foam sheet insulation is then placed directly over the concrete that has just been poured.

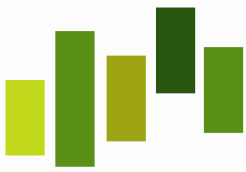
This should be done immediately after the bottom layer has been consolidated and levelled to thickness, but in any event, within 15-20 minutes after placement of the concrete to ensure the mix is still plastic.

#### Step 3: Fibre composite connectors are installed



The fibre composite connectors should immediately be inserted through the pre-drilled holes in the installed foam sheet insulation.





#### Step 4: Concrete is consolidated around the connectors



The concrete around the connectors should then be consolidated. Walking on the insulation near each row of connectors and applying foot pressure on each side of the connector can do this effectively. This will cause the still fluid concrete to flow into the notch in the bottom side of the connector.

Additional consolidation can be achieved by vibration of the bed in precast/pre-stressed plants.

**Note:** Step 5 can proceed immediately. If step 5 can't be executed immediately, the process should wait until after the lower layer of concrete has set.

#### Step 5: Interior layer of concrete is poured



The top layer of concrete is then poured after necessary reinforcement has been placed. This will become the inner (structural) layer of concrete for the finished panel.

Should you have any questions about the THERMOMASS Building Insulation System, please call us at +61 3 9824 8211 or contact us by email: [info@compositglobal.com](mailto:info@compositglobal.com)