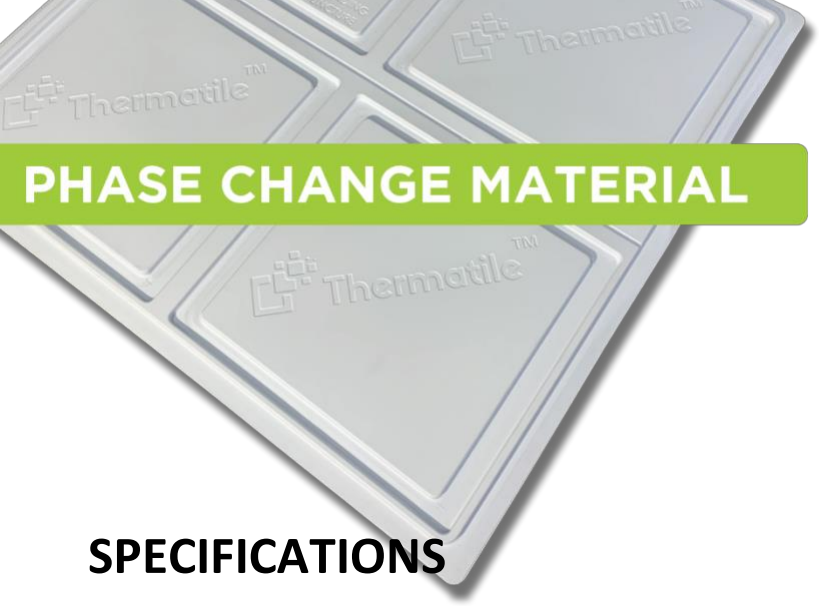


Thermatile™ by Insolcorp, LLC is a revolutionary rigid panel with specifically engineered cells containing the highest capacity phase change material [PCM] in the world. The thermoformed design features a triple seal solution to ensure longevity and reliability.

TYPICAL USAGE:

- **Exposed on Walls or Roof Deck/Ceilings**
- **Laid Over Ceiling Tiles**
- **Ceiling Tile Alternative**

Insolcorp's phase change material is built around a fundamental property of Nature: The natural tendency of materials to absorb heat when they melt (phase change from solid to liquid/gel) and to release heat when they solidify (phase change from liquid/gel to solid). When these phase change materials are placed together behind our finished panel system, they will naturally absorb heat or air condition the building during the day and release heat at night. Working to provide year-round comfort with heating and cooling savings.

SPECIFICATIONS

PANEL MATERIAL : PVC - .25 gauge

PANEL SIZE : 23.75" x 23.75" (603 mm x 603 mm)

GENERAL PANEL THICKNESS : 0.25" (6.3 mm)

MAX CENTERRIDGE THICKNESS : 0.16" (mm)

THERMAL CAPACITY : +100 btu/sf

PHASECHANGE MATERIAL : Mineral Based / Inorganic

TEMPERATURES : 65°F (18°C), 71°F (21°C), 75°F (24°C), 78°F (25°C), 84°F (29°C)

LATENT HEAT : 86 btu/lb ; [2.32 j/g]

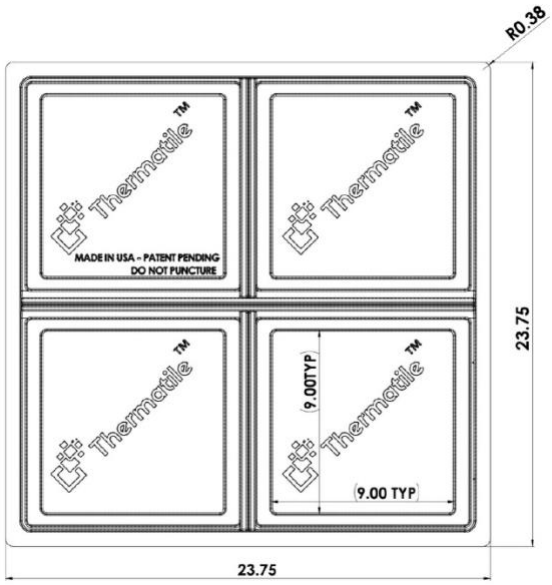
SPECIFIC HEAT : 1.35 btu/lb ; [3.14 j/g]

THERMAL CONDUCTIVITY : ~0.16W/ft/KLiquid , ~0.33 W/ft/KSolid

WEIGHT : 1.3 lbs/sf [5.7kg/m2]

FLAMESPREAD : ASTME84|UL723 - CLASSA - Flame5, Smoke10

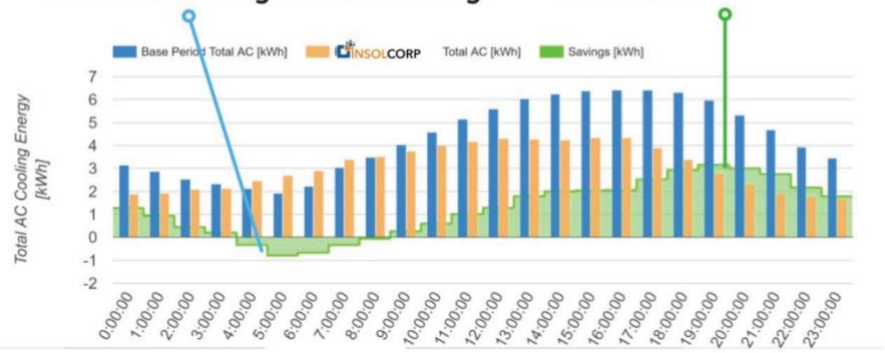
MANUFACTURED : USA - International Patents Pending



THERMAL ENERGY STORAGE

STORE Energy Using FREE Ventilation or Efficient Cooling in the morning

SAVE when it's most expensive in the afternoon



Thermatile™

PHASE CHANGE MATERIAL

Thermatile™ PCM Panels are a revolutionary change to the way we consider design for energy performance. In the 21st century, we have all but removed thermal mass (concrete, brick, block, earth) from our building designs. Thermal mass is both expensive and, in most cases, has a significant carbon footprint. Overall, the climate and our energy usage has suffered as a result of this change to light weight construction. Why?

Today's Buildings have lots of glazing, metal, wood and NO ability to absorb temperature changes. Insulation (Foams and Fiberglass) have largely replaced the Concrete and Stone of our great historic architecture.

What is Thermatile™ PCM?
Thermatile™ puts desperately needed thermal mass back into buildings, but without the weight and carbon footprint OR cost of other forms of mass. By using Insolcorp's world leading "Phase Change Material", the product is designed to respond to the natural temperature changes within a building to help absorb/release thermal energy, which leads to improved comfort, reduced energy and significantly less carbon footprint. Thermatile™ blends together the comfort, resilience and energy performance of our PCM's, with the needs and observations we have gathered over the years of working with our customers, solving a range of problems. In short, it is the answer to the call of our most important innovators.

Our Thermatile™ panel measures 2' x 2' in size, and is made of thermoformed PVC material for peak durability, water, moisture and flame resistance. Each panel contains a formed PVC tray with cells containing our high performance PCM, heat sealed between a second flat sheet of PVC.

What are Phase Change Materials?
Insolcorp's Phase Change Material products are built around a fundamental property of Nature: The natural tendency of materials to absorb heat when they melt (phase change from solid to liquid (gel) and to release heat when they solidify (phase change from liquid (gel) to solid). When these phase change materials are placed in quantity into the structure of a building, they will absorb heat (air condition) the building during the day and release heat (heat) the building at night or as temperatures try to drop. The result is both energy savings, and improved building resilience.

Where is Thermatile™ Installed?
Thermatile has been specifically designed to be neatly placed over top of suspended ceiling tiles where it can provide maximum comfort and energy savings. It is also designed to be surface mounted to hard lid ceilings and metal decks, exposed on walls and installed within wall framing.

What are ideal applications for Thermatile™?
Thermatile™ can benefit any building in any climate in the world. There are however applications which are particularly suitable:

- High Rise Office or Residential Housing with Glazed Solar Loads
- Buildings with Suspended Ceilings, particularly when plenum return HVAC exists
- Providing cooling benefits when no A/C exists, or in applications where investment in A/C cooling could be avoided. Where PCM & ventilation design can displace much of the cooling demand.
- Any application with high internal heat loads from glass, people, equipment, machinery.