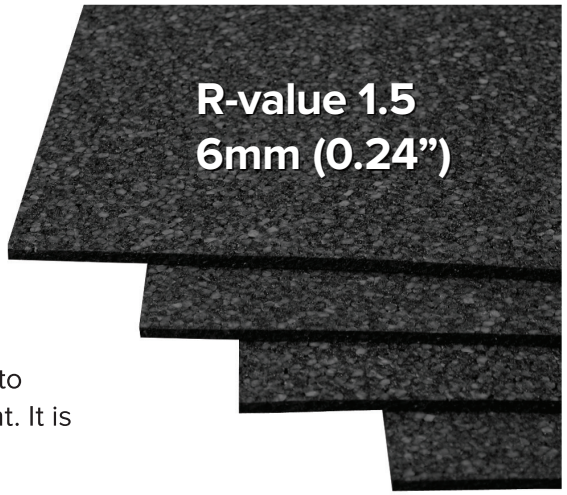
WarmlyYours
Be Connected.
Be Warm. Be Radiant.

ThermalSheet
Energy Efficiency Report

ThermalSheet

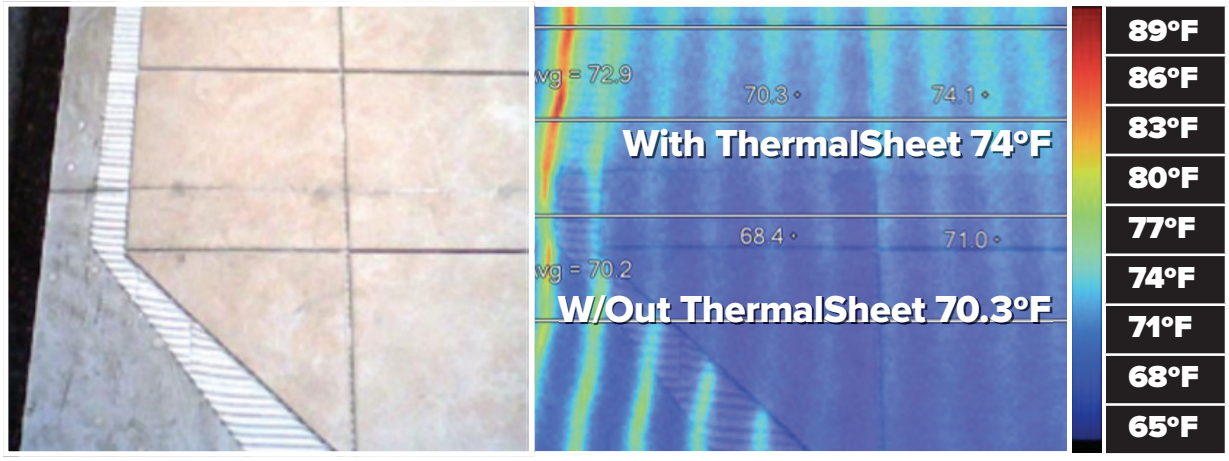
ThermalSheet is a 6mm thick underlayment that has been specifically designed as a moisture resistant underlayment for use underneath tile and stone flooring types. ThermalSheet offers excellent insulation properties along with the ability to be used in place of regular tile backer board. ThermalSheet has a 1.5 R-value, and it offers crack isolation of up to ¼".



ThermalSheet synthetic cork underlayment is recommended when installing a TempZone™ floor heating system over a concrete slab to prevent heat loss. By creating a thermal break to prevent the heat from sinking into the concrete, it allows more heat to radiate into the floor covering and room. ThermalSheet is lightweight. It is available in 2' x 3' sheets, providing 6 square feet of coverge.

Test 1:
ThermalSheet Under Tile Study

This study shows how ThermalSheet lowers the temperature beneath the heating mat by 3 degrees Fahrenheit while increasing the temperature above the heating mat by 4-6 degrees Fahrenheit, thereby reducing your electric bill and improving the overall efficiency of the heating system. This test is done on a plywood platform. ThermalSheet has been installed under half of the tiles, as indicated by where the cord enters, and 3/8" of thinset has been applied over the ThermalSheet and under the tiles. The other half of the platform shown contains thinset over plywood with approximately 3/8" of thinset between the plywood board and the tile. All of the tiles used in this test are consistent in model-type and thickness. The average temperature in the insulated section is 74 degrees Fahrenheit. The average temperature in the uninsulated section is 70.3 degrees Fahrenheit.



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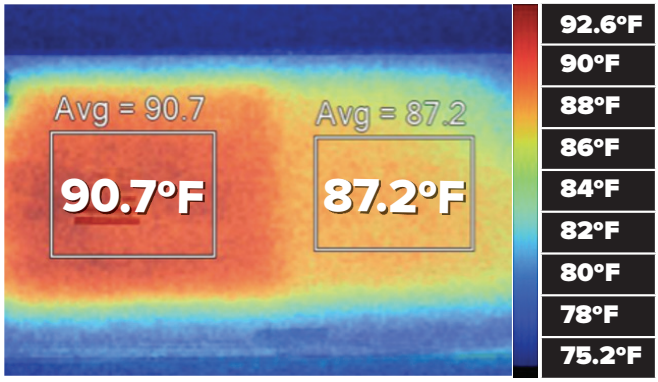
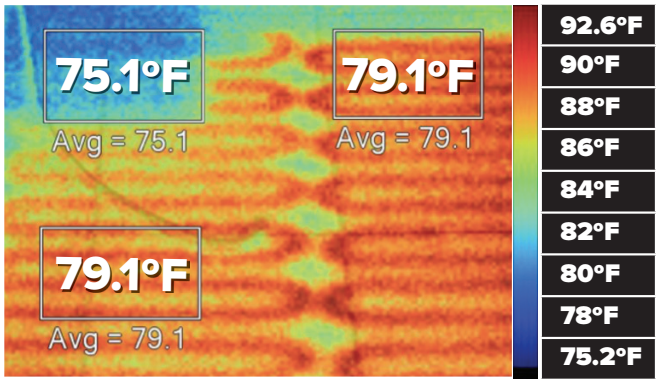
Test 2:
Downward Heat Loss in a Test Fixture

Here is a picture of the bottom of the fixture illustrating how much heat is lost downward. The left side of the fixture is the uninsulated side. The left side is 3.5 degrees Fahrenheit warmer than the side using 6mm ThermalSheet underlayment. The heat level present at the bottom of the fixture represents potential heat loss. The less heat present at the bottom, the better.



Test 3:
Uninsulated Section Temperature Comparison

This image shows a thermal-rendering of a sunroom with radiant floor heating. This project featured insulating underlayment throughout most of the project, except in the upper left-hand corner. The upper left-hand corner shows results with thinset over slab without the presence of an insulating underlayment. The thinset area over just the slab is 75.1 degrees Fahrenheit, whereas the insulated area is averaging 79.1 degrees Fahrenheit.



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