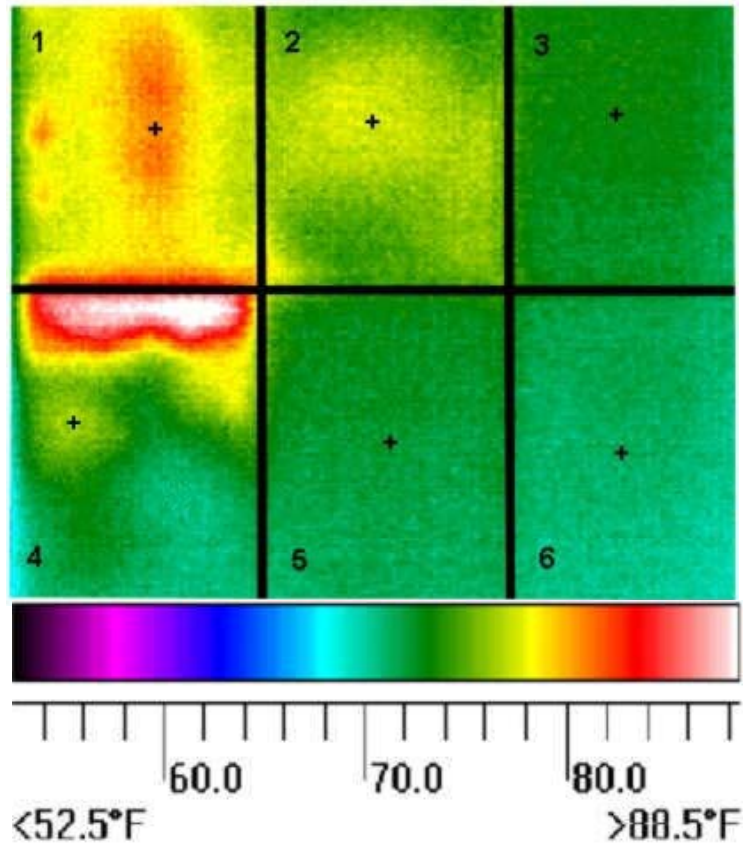


"HOT BOX" DEMONSTRATION OF RELATIVE EFFICIENCIES OF INSULATION SYSTEMS

This thermal image indicates the surface temperature of the sheet rock facing of six panels insulated with different materials or thicknesses. The crosses (+) mark points where spot surface temperature measurements were taken. The air temperature behind the panels was controlled at 110 °F in a "hot box" which contained a fan to keep the temperature in the box uniform and to simulate the effect of wind.

The insulation systems, their nominal R-values, and the surface temperatures are listed in the table below.



Insulation System	R-Value	Surface Temperature at Points Indicated
1. Radiant Barrier: 5/16" reflective radiant barrier consisting of two layers of "bubblepack" laminated between two layers of aluminum foil.	R-9.8 (including the effects of 3/4" interior and exterior plywood, 2x6 studs on 16" centers, and all air spaces within the assembly)	80.5 °F
2. Fiber Glass" 3 1/2" fiber glass batt.	R-13	76.3 °F
3. NCFI InsulStar® Spray Polyurethane Foam: 2" closed-cell spray foam	R-13	72.5 °F
4. Cellulose: 3 1/2" installed at appx. 2 lb/ft ³	R-12	75.5 °F
5. NCFI Sealite™ Spray Polyurethane Foam: 3 1/2" open-cell spray foam.	R-12	72.2 °F
6. NCFI InsulStar® Spray Polyurethane Foam: 3" closed-cell spray foam.	R-20	70.4 °F



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