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## 21 C° Infinite R Energy Sheet

M70 16" x 4ft Sheets

101.21R07016048

| COMPONENT | DESCRIPTION  | VALUES (ENGLISH)  | VALUES (METRIC)  |
|-----------|--|---|--|
| Film      | multilayer white polyfilm                                | 4.4 mil   | .1118 mm   |
| Pocket    | formed white polyfilm pocket                             | ~35 ct 1.5"x 2.0" x .25"<br>PCM filled pods per Ft <sup>2</sup> | 376 ct 38mm x 51mm x 6mm<br>PCM filled pods per M <sup>2</sup> |
| PCM       | Proprietary Blend of Inorganic<br>Phase Change Materials | ~1.0 lbs phase change materials<br>per Ft <sup>2</sup>          | ~4.89 kilograms<br>per sq. meter                               |

| PHYSICAL PROPERTIES  | TEST METHOD | VALUES (ENGLISH)                           | VALUES (METRIC)                         |
|----------------------|-------------|--|---|
| M-Value              | ASTM        | 70 BTU per sq. ft.                         | 221 W per sq. meter                     |
| Melt Point           | DSC         | 71.0° Fahrenheit                           | 21° Celsius                             |
| Specific Heat        | DSC         | 1.35 BTU/lb                                | ~3.14 kj/kg                             |
| Latent Heat          | DSC         | ~86 btu/lb                                 | ~200 j/g                                |
| Thermal Conductivity | DSC         | ~0.16 W/ft/K Liquid<br>~0.33 W/ft/K Solid  | ~0.54 W/m/K Liquid<br>~1.09 W/m/K Solid |
| Dimensions           | Ruler       | 16.5" x 48"                                | 420mm X 1219mm                          |
| Total Unit Thickness | Micrometer  | .25"                                       | 6mm                                     |
| Weight               | Scale       | 0.70 lbs per sq. ft.                       | 3.42 kg per sq. meter                   |
| Permeability         | ASTM E96    | 0.08<br>(grains/hr*ft <sup>2</sup> *in Hg) | 4.60 ng / N's                           |

| FIRE TESTING      | ASTM E84 | UL 723 | ASTM E800 -0 |
|-------------------|----------|--------|--------------|
| Flame Spread      | 5        | 5      | passed       |
| Smoke Development | 10       | 10     |              |

| POLYFILM PACKAGING       |                     |                                  |                                  |
|--------------------------|---------------------|----------------------------------|----------------------------------|
| PHYSICAL PROPERTIES      | TEST STANDARD       | VALUES (ENGLISH)                 | VALUES (METRIC)                  |
| Caliper                  | ASTM D 21203        | 4.4 MIL                          | 11 mm                            |
| Yield                    | Calculated          | 65050 IN <sup>2</sup> / Lb.      | 92.36 M/Kg                       |
| Puncture Resistance      | MIL STD 3010        | 20 Lbs                           | 9.09 Kg                          |
| Tensile Strength         | ASTM D 882          | 28 lbs/IN                        | 1.973 Kg/CM <sup>2</sup>         |
| Breaking Strength        | MIL STD 3010        | 75Lbs/IN (GRAB)                  | 5.285 Kg/CM <sup>2</sup>         |
| Water Vapor Transmission | ASTM F 1249         | 0.0005 G/100 IN <sup>2</sup> Day | 0.0005 G/645 CM <sup>2</sup> Day |
| Seal Strength            | ASTM F 88           | 18 Lbs/IN                        | 1.268 Kg/CM <sup>2</sup>         |
| Sealing Temp             | Manufacturer's Spec | 400° F @ 40PSI 1.5 Sec           |                                  |

Manufacturer Rep



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