

Standard Pale Biscuit versus Energy Star Pale Biscuit

The reported information below is done in accordance with ASTM E 1980-01. The comparative data is based upon an ambient air temperature of 37° C. The highlighted numbers represent the Solar Reflectance Index and product surface temperatures.

| ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing | | | |
|--|----------------------------------|--------------|--------------|
| Product Colour | STANDARD PALE BISCUIT | | |
| Thermal emittance= | 0.850 | | |
| TSR= | 0.644 | | |
| Solar Absorbance= | 0.356 | | |
| Convective coefficient= | Wind Condition | | |
| | Low | Medium | High |
| | 5 | 12 | 30 |
| X= | 0.349 | 0.343 | 0.337 |
| SRI= | 75.79 | 76.63 | 77.37 |
| Standard solar conditions Solar Flux=1000 W/m2 Ambient Air Temp=310K (37C) Ambient Sky Temp=300K (27C) No conductive heat transfer | | | |
| Low Slope Roofing Temperatures for above standard solar conditions | | | |
| Surface Temperature (K)= | 335 | 326 | 318 |
| Surface Temperature (C)= | 62 | 53 | 45 |
| Surface Temperature (F)= | 144 | 128 | 114 |

| ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing | | | |
|--|-------------------------------------|--------------|--------------|
| Product Colour | ENERGY STAR PALE BISCUIT | | |
| Thermal emittance= | 0.900 | | |
| TSR= | 0.754 | | |
| Solar Absorbance= | 0.246 | | |
| Convective coefficient= | Wind Condition | | |
| | Low | Medium | High |
| | 5 | 12 | 30 |
| X= | 0.224 | 0.222 | 0.221 |
| SRI= | 92.85 | 93.02 | 93.18 |
| Standard solar conditions Solar Flux=1000 W/m2 Ambient Air Temp=310K (37C) Ambient Sky Temp=300K (27C) No conductive heat transfer | | | |
| Low Slope Roofing Temperatures for above standard solar conditions | | | |
| Surface Temperature (K)= | 326 | 320 | 315 |
| Surface Temperature (C)= | 53 | 47 | 42 |
| Surface Temperature (F)= | 127 | 117 | 108 |