

Standard Regal Brown versus Energy Star Regal Brown

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	<b>STANDARD REGAL BROWN</b>		
Thermal emittance=	0.850		
TSR=	0.097		
Solar Absorbance=	0.903		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.926	0.909	0.895
SRI=	<b>1.40</b>	<b>3.44</b>	<b>5.24</b>
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)=	375	354	333
Surface Temperature (C)=	<b>102</b>	<b>81</b>	<b>60</b>
Surface Temperature (F)=	216	178	141

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	<b>ENERGY STAR REGAL BROWN</b>		
Thermal emittance=	0.900		
TSR=	0.386		
Solar Absorbance=	0.614		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.598	0.594	0.591
SRI=	<b>42.92</b>	<b>43.36</b>	<b>43.75</b>
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)=	353	339	325
Surface Temperature (C)=	<b>80</b>	<b>66</b>	<b>52</b>
Surface Temperature (F)=	176	151	126