

Standard C/B Slate Grey versus Energy Star C/B Slate Grey

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</b> <b>C/B SLATE GREY</b>		
Thermal emittance=	0.850		
TSR=	0.166		
Solar Absorbance=	0.834		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.853	0.838	0.824
SRI=	<b>10.43</b>	<b>12.33</b>	<b>14.01</b>
Standard solar conditions Solar Flux=1000 W/m <sup>2</sup> 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)=	371	351	331
Surface Temperature (C)=	<b>98</b>	<b>78</b>	<b>58</b>
Surface Temperature (F)=	208	172	137

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	<b>ENERGY STAR</b> <b>C/B SLATE GREY</b>		
Thermal emittance=	0.900		
TSR=	0.403		
Solar Absorbance=	0.597		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.581	0.577	0.574
SRI=	<b>45.17</b>	<b>45.59</b>	<b>45.98</b>
Standard solar conditions Solar Flux=1000 W/m <sup>2</sup> 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)=	352	338	325
Surface Temperature (C)=	<b>79</b>	<b>65</b>	<b>52</b>
Surface Temperature (F)=	174	149	125