

Standard C/B Ironbark versus Energy Star C/B Ironbark

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 C/B IRONBARK</b>		
Thermal emittance=	0.850		
TSR=	0.096		
Solar Absorbance=	0.904		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.927	0.910	0.896
SRI=	<b>1.27</b>	<b>3.31</b>	<b>5.12</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)=	376	354	333
Surface Temperature (C)=	<b>103</b>	<b>81</b>	<b>60</b>
Surface Temperature (F)=	217	178	141

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	<b>ENERGY STAR C/B IRONBARK</b>		
Thermal emittance=	0.900		
TSR=	0.409		
Solar Absorbance=	0.591		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.574	0.571	0.568
SRI=	<b>45.96</b>	<b>46.38</b>	<b>46.76</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)=	351	338	325
Surface Temperature (C)=	<b>78</b>	<b>65</b>	<b>52</b>
Surface Temperature (F)=	173	149	125