

Standard Blue Grass          versus          Energy Star Blue Grass

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 BLUE GRASS</b>		
Thermal emittance=	0.850		
TSR=	0.139		
Solar Absorbance=	0.861		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.881	0.866	0.852
SRI=	<b>6.89</b>	<b>8.84</b>	<b>10.57</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)=	373	352	332
Surface Temperature (C)=	<b>100</b>	<b>79</b>	<b>59</b>
Surface Temperature (F)=	211	174	139

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	<b>ENERGY STAR BLUE GRASS</b>		
Thermal emittance=	0.900		
TSR=	0.360		
Solar Absorbance=	0.640		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.624	0.621	0.618
SRI=	<b>39.49</b>	<b>39.95</b>	<b>40.36</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)=	355	340	326
Surface Temperature (C)=	<b>82</b>	<b>67</b>	<b>53</b>
Surface Temperature (F)=	179	153	127