

Standard Neutral White versus Energy Star Neutral White

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 NEUTRAL WHITE</b>		
Thermal emittance=	0.850		
TSR=	0.668		
Solar Absorbance=	0.332		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.324	0.318	0.313
SRI=	<b>79.20</b>	<b>79.98</b>	<b>80.67</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)=	333	325	318
Surface Temperature (C)=	<b>60</b>	<b>52</b>	<b>45</b>
Surface Temperature (F)=	141	126	112

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	<b>ENERGY STAR NEUTRAL WHITE</b>		
Thermal emittance=	0.900		
TSR=	0.785		
Solar Absorbance=	0.215		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.192	0.191	0.190
SRI=	<b>97.18</b>	<b>97.32</b>	<b>97.46</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)=	323	319	314
Surface Temperature (C)=	<b>50</b>	<b>46</b>	<b>41</b>
Surface Temperature (F)=	123	114	106