Standard Off White versus Energy Star Off 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	**STANDARD**
Colour	**OFF WHITE**
Thermal emittance=	0.850
TSR=	0.587
Solar Absorbance=	0.413

	Wind Condition		
	Low	Medium	High
Convective coefficient=	5	12	30
X=	0.409	0.402	0.396
SRI=	**67.74**	**68.71**	**69.57**

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)=	340	329	320
Surface Temperature (C)=	**67**	**56**	**47**
Surface Temperature (F)=	152	134	116

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing

Product	**ENERGY STAR**
Colour	**OFF WHITE**
Thermal emittance=	0.900
TSR=	0.747
Solar Absorbance=	0.253

	Wind Condition		
	Low	Medium	High
Convective coefficient=	5	12	30
X=	0.231	0.229	0.228
SRI=	**91.87**	**92.05**	**92.21**

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)=	326	321	315
Surface Temperature (C)=	**53**	**48**	**42**
Surface Temperature (F)=	128	118	108

ASTEC PAINTS

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