Standard C/B Weathered Copper versus Energy Star C/B Weathered Copper

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	**WEATHERED COPER**
Thermal emittance=	0.850
TSR=	0.086
Solar Absorbance=	0.914

	Wind Condition		
	Low	Medium	High
Convective coefficient=	5	12	30
X=	0.937	0.921	0.906
SRI=	**-0.03**	**2.03**	**3.85**

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	355	334
Surface Temperature (C)=	**103**	**82**	**61**
Surface Temperature (F)=	218	179	141

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

Product	**ENERGY STAR**
Colour	**WEATHERED COPPER**
Thermal emittance=	0.900
TSR=	0.391
Solar Absorbance=	0.609

	Wind Condition		
	Low	Medium	High
Convective coefficient=	5	12	30
X=	0.593	0.589	0.586
SRI=	**43.58**	**44.01**	**44.41**

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)=	353	339	325
Surface Temperature (C)=	**80**	**66**	**52**
Surface Temperature (F)=	175	150	126

ASTEC PAINTS

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