

Standard Pewter versus Energy Star Pewter

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	STANDARD PEWTER		
Thermal emittance=	0.850		
TSR=	0.373		
Solar Absorbance=	0.627		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.635	0.623	0.613
SRI=	38.13	39.59	40.88
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)=	356	340	326
Surface Temperature (C)=	83	67	53
Surface Temperature (F)=	181	153	127

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR PEWTER		
Thermal emittance=	0.900		
TSR=	0.607		
Solar Absorbance=	0.393		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.373	0.371	0.369
SRI=	72.58	72.86	73.12
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)=	337	328	319
Surface Temperature (C)=	64	55	46
Surface Temperature (F)=	147	131	115