

Standard Clay Tone versus Energy Star Clay Tone

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 CLAY TONE		
Thermal emittance=	0.850		
TSR=	0.279		
Solar Absorbance=	0.721		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.734	0.721	0.709
SRI=	25.44	27.10	28.57
Standard solar conditions Solar Flux=1000 W/m ² 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)=	363	345	328
Surface Temperature (C)=	90	72	55
Surface Temperature (F)=	193	162	132

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR CLAY TONE		
Thermal emittance=	0.900		
TSR=	0.467		
Solar Absorbance=	0.533		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.515	0.513	0.510
SRI=	53.68	54.06	54.40
Standard solar conditions Solar Flux=1000 W/m ² 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)=	347	335	323
Surface Temperature (C)=	74	62	50
Surface Temperature (F)=	166	143	122