

Standard Autumn versus Energy Star Autumn

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 AUTUMN		
Thermal emittance=	0.850		
TSR=	0.458		
Solar Absorbance=	0.542		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.545	0.535	0.527
SRI=	49.78	51.05	52.17
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)=	349	336	323
Surface Temperature (C)=	76	63	50
Surface Temperature (F)=	170	146	123

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR AUTUMN		
Thermal emittance=	0.900		
TSR=	0.609		
Solar Absorbance=	0.391		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.371	0.369	0.367
SRI=	72.85	73.13	73.39
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