

Standard Nimbus versus Energy Star Nimbus

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	NIMBUS		
Thermal emittance=	0.850		
TSR=	0.107		
Solar Absorbance=	0.893		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.915	0.899	0.884
SRI=	2.70	4.72	6.51
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)=	375	354	333
Surface Temperature (C)=	102	81	60
Surface Temperature (F)=	215	177	140

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	NIMBUS		
Thermal emittance=	0.900		
TSR=	0.354		
Solar Absorbance=	0.646		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.630	0.627	0.624
SRI=	38.71	39.16	39.58
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)=	355	341	326
Surface Temperature (C)=	82	68	53
Surface Temperature (F)=	180	154	128