

Standard Chino versus Energy Star Chino

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	<b>STANDARD CHINO</b>		
Thermal emittance=	0.850		
TSR=	0.385		
Solar Absorbance=	0.615		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.622	0.611	0.601
SRI=	<b>39.77</b>	<b>41.20</b>	<b>42.47</b>
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	340	325
Surface Temperature (C)=	<b>82</b>	<b>67</b>	<b>52</b>
Surface Temperature (F)=	179	152	126

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	<b>ENERGY STAR CHINO</b>		
Thermal emittance=	0.900		
TSR=	0.606		
Solar Absorbance=	0.394		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.374	0.372	0.370
SRI=	<b>72.44</b>	<b>72.72</b>	<b>72.98</b>
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)=	<b>64</b>	<b>55</b>	<b>46</b>
Surface Temperature (F)=	147	131	115