

Standard C/B Birch Grey versus Energy C/B Birch Grey

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 C/B BIRCH GREY		
Thermal emittance=	0.850		
TSR=	0.397		
Solar Absorbance=	0.603		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.609	0.599	0.589
SRI=	41.41	42.81	44.06
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)=	354	339	325
Surface Temperature (C)=	81	66	52
Surface Temperature (F)=	178	151	126

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR C/B BIRCH GREY		
Thermal emittance=	0.900		
TSR=	0.622		
Solar Absorbance=	0.378		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.358	0.356	0.354
SRI=	74.63	74.90	75.14
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)=	336	327	319
Surface Temperature (C)=	63	54	46
Surface Temperature (F)=	145	129	114