

Standard Mid Biscuit          versus          Energy Star Mid Biscuit

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 MID BUSCUIT</b>		
Thermal emittance=	0.850		
TSR=	0.535		
Solar Absorbance=	0.465		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.464	0.456	0.448
SRI=	<b>60.45</b>	<b>61.55</b>	<b>62.52</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)=	344	332	321
Surface Temperature (C)=	<b>71</b>	<b>59</b>	<b>48</b>
Surface Temperature (F)=	159	138	119

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	<b>ENERGY STAR MID BUSCUIT</b>		
Thermal emittance=	0.900		
TSR=	0.695		
Solar Absorbance=	0.305		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.284	0.282	0.281
SRI=	<b>84.66</b>	<b>84.88</b>	<b>85.07</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)=	330	323	317
Surface Temperature (C)=	<b>57</b>	<b>50</b>	<b>44</b>
Surface Temperature (F)=	135	123	111