

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

Standard Blue Grass versus Energy Star Blue Grass

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 BLUE GRASS		
Thermal emittance=	0.850		
TSR=	0.139		
Solar Absorbance=	0.861		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.881	0.866	0.852
SRI=	6.89	8.84	10.57
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)=	373	352	332
Surface Temperature (C)=	100	79	59
Surface Temperature (F)=	211	174	139

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR BLUE GRASS		
Thermal emittance=	0.900		
TSR=	0.360		
Solar Absorbance=	0.640		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.624	0.621	0.618
SRI=	39.49	39.95	40.36
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	326
Surface Temperature (C)=	82	67	53
Surface Temperature (F)=	179	153	127

Standard Botanic versus Energy Star Botanic

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 BOTANIC		
Thermal emittance=	0.850		
TSR=	0.084		
Solar Absorbance=	0.916		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.939	0.923	0.908
SRI=	-0.29	1.77	3.60
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)=	376	355	334
Surface Temperature (C)=	103	82	61
Surface Temperature (F)=	218	179	141

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR BOTANIC		
Thermal emittance=	0.900		
TSR=	0.279		
Solar Absorbance=	0.721		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.707	0.703	0.699
SRI=	28.91	29.42	29.88
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)=	361	344	328
Surface Temperature (C)=	88	71	55
Surface Temperature (F)=	190	160	131

Standard Broken White versus Energy Star Broken White

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 BROKEN WHITE		
Thermal emittance=	0.850		
TSR=	0.711		
Solar Absorbance=	0.289		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.279	0.274	0.269
SRI=	85.34	86.02	86.61
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	316
Surface Temperature (C)=	57	50	43
Surface Temperature (F)=	135	122	110

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR BROKEN WHITE		
Thermal emittance=	0.900		
TSR=	0.813		
Solar Absorbance=	0.187		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.164	0.163	0.162
SRI=	101.10	101.23	101.34
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)=	321	317	313
Surface Temperature (C)=	48	44	40
Surface Temperature (F)=	119	112	105

Standard C/B Beige versus Energy Star C/B Beige

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 BEIGE		
Thermal emittance=	0.850		
TSR=	0.304		
Solar Absorbance=	0.696		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.707	0.695	0.684
SRI=	28.80	30.41	31.83
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)=	361	344	328
Surface Temperature (C)=	88	71	55
Surface Temperature (F)=	190	160	131

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR C/B BEIGE		
Thermal emittance=	0.900		
TSR=	0.543		
Solar Absorbance=	0.457		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.438	0.436	0.433
SRI=	63.89	64.22	64.51
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)=	342	331	321
Surface Temperature (C)=	69	58	48
Surface Temperature (F)=	156	137	118

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	STANDARD		
Colour	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	ENERGY STAR		
Colour	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

Standard C/B Heritage Red versus Energy Star C/B Heritage Red

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	C/B HERITAGE RED		
Thermal emittance=	0.850		
TSR=	0.142		
Solar Absorbance=	0.858		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.878	0.863	0.849
SRI=	7.28	9.23	10.95
Standard solar conditions			
Solar Flux=1000 W/m ²			
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)=	372	352	332
Surface Temperature (C)=	99	79	59
Surface Temperature (F)=	211	174	138

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	C/B HERITAGE RED		
Thermal emittance=	0.900		
TSR=	0.375		
Solar Absorbance=	0.625		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.609	0.606	0.602
SRI=	41.47	41.91	42.32
Standard solar conditions			
Solar Flux=1000 W/m ²			
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	340	326
Surface Temperature (C)=	81	67	53
Surface Temperature (F)=	178	152	127

Standard C/B Ironbark versus Energy Star C/B Ironbark

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	C/B IRONBARK		
Thermal emittance=	0.850		
TSR=	0.096		
Solar Absorbance=	0.904		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.927	0.910	0.896
SRI=	1.27	3.31	5.12
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)=	376	354	333
Surface Temperature (C)=	103	81	60
Surface Temperature (F)=	217	178	141

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	C/B IRONBARK		
Thermal emittance=	0.900		
TSR=	0.409		
Solar Absorbance=	0.591		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.574	0.571	0.568
SRI=	45.96	46.38	46.76
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)=	351	338	325
Surface Temperature (C)=	78	65	52
Surface Temperature (F)=	173	149	125

Standard C/B Mountain Blue versus Energy C/B Mountain Blue

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	C/B MOUNTAIN BLUE		
Thermal emittance=	0.850		
TSR=	0.078		
Solar Absorbance=	0.922		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.946	0.929	0.914
SRI=	-1.07	1.01	2.84
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)=	377	355	334
Surface Temperature (C)=	104	82	61
Surface Temperature (F)=	219	180	142

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	C/B MOUNTAIN BLUE		
Thermal emittance=	0.900		
TSR=	0.255		
Solar Absorbance=	0.745		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.731	0.727	0.723
SRI=	25.80	26.32	26.80
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)=	362	345	329
Surface Temperature (C)=	89	72	56
Surface Temperature (F)=	193	162	132

Standard C/B Rivergum versus Energy Star C/B Rivergum

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	C/B RIVERGUM		
Thermal emittance=	0.850		
TSR=	0.153		
Solar Absorbance=	0.847		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.867	0.851	0.838
SRI=	8.72	10.65	12.35
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)=	372	351	332
Surface Temperature (C)=	99	78	59
Surface Temperature (F)=	209	173	138

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	C/B RIVERGUM		
Thermal emittance=	0.900		
TSR=	0.445		
Solar Absorbance=	0.555		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.538	0.535	0.532
SRI=	50.74	51.14	51.50
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	324
Surface Temperature (C)=	76	63	51
Surface Temperature (F)=	168	145	123

Standard C/B Saltbush versus Energy Star C/B Saltbush

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	C/B SALT BUSH		
Thermal emittance=	0.850		
TSR=	0.287		
Solar Absorbance=	0.713		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.725	0.712	0.701
SRI=	26.51	28.16	29.62
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)=	362	345	328
Surface Temperature (C)=	89	72	55
Surface Temperature (F)=	192	161	131

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	C/B SALT BUSH		
Thermal emittance=	0.900		
TSR=	0.558		
Solar Absorbance=	0.442		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.423	0.421	0.418
SRI=	65.92	66.24	66.52
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)=	341	330	321
Surface Temperature (C)=	68	57	48
Surface Temperature (F)=	154	135	118

Standard C/B Slate Grey versus Energy Star C/B Slate 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	STANDARD		
Colour	C/B SLATE GREY		
Thermal emittance=	0.850		
TSR=	0.166		
Solar Absorbance=	0.834		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.853	0.838	0.824
SRI=	10.43	12.33	14.01
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)=	371	351	331
Surface Temperature (C)=	98	78	58
Surface Temperature (F)=	208	172	137

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	C/B SLATE GREY		
Thermal emittance=	0.900		
TSR=	0.403		
Solar Absorbance=	0.597		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.581	0.577	0.574
SRI=	45.17	45.59	45.98
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)=	352	338	325
Surface Temperature (C)=	79	65	52
Surface Temperature (F)=	174	149	125

Standard C/B Smooth Cream versus Energy C/B Smooth Cream

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	C/B SMOOTH CREAM		
Thermal emittance=	0.850		
TSR=	0.668		
Solar Absorbance=	0.332		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.324	0.318	0.313
SRI=	79.20	79.98	80.67
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)=	333	325	318
Surface Temperature (C)=	60	52	45
Surface Temperature (F)=	141	126	112

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	C/B SMOOTH CREAM		
Thermal emittance=	0.900		
TSR=	0.785		
Solar Absorbance=	0.215		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.192	0.191	0.190
SRI=	97.18	97.32	97.46
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)=	323	319	314
Surface Temperature (C)=	50	46	41
Surface Temperature (F)=	123	114	106

Standard C/B Weathered Copper versus Energy Star C/B Weathered Copper

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	WEATHERED COPPER		
Thermal emittance=	0.850		
TSR=	0.086		
Solar Absorbance=	0.914		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.937	0.921	0.906
SRI=	-0.03	2.03	3.85
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)=	376	355	334
Surface Temperature (C)=	103	82	61
Surface Temperature (F)=	218	179	141

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	WEATHERED COPPER		
Thermal emittance=	0.900		
TSR=	0.391		
Solar Absorbance=	0.609		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.593	0.589	0.586
SRI=	43.58	44.01	44.41
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)=	353	339	325
Surface Temperature (C)=	80	66	52
Surface Temperature (F)=	175	150	126

Standard Carriage Green versus Energy Star Carriage Green

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 CARRIAGE GREEN		
Thermal emittance=	0.850		
TSR=	0.063		
Solar Absorbance=	0.937		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.961	0.944	0.929
SRI=	-3.01	-0.91	0.96
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)=	378	356	334
Surface Temperature (C)=	105	83	61
Surface Temperature (F)=	221	181	142

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR CARRIAGE GREEN		
Thermal emittance=	0.900		
TSR=	0.246		
Solar Absorbance=	0.754		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.740	0.736	0.732
SRI=	24.63	25.17	25.65
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)=	363	346	329
Surface Temperature (C)=	90	73	56
Surface Temperature (F)=	194	163	133

Standard Charcoal versus Energy Star Charcoal

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 CHARCOAL		
Thermal emittance=	0.850		
TSR=	0.056		
Solar Absorbance=	0.944		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.969	0.952	0.936
SRI=	-3.92	-1.80	0.08
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)=	378	356	334
Surface Temperature (C)=	105	83	61
Surface Temperature (F)=	221	182	143

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR CHARCOAL		
Thermal emittance=	0.900		
TSR=	0.328		
Solar Absorbance=	0.672		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.657	0.653	0.650
SRI=	35.30	35.77	36.20
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)=	357	342	327
Surface Temperature (C)=	84	69	54
Surface Temperature (F)=	184	156	129

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		STANDARD		
Colour		CHINO		
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=		39.77	41.20	42.47
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)=		82	67	52
Surface Temperature (F)=		179	152	126

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing				
Product	ENERGY STAR			
Colour	CHINO			
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=	72.44	72.72	72.98	
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	

Standard Clay Tone versus Energy Star Clay Tone

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 CLAY TONE		
Thermal emittance=	0.850		
TSR=	0.279		
Solar Absorbance=	0.721		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.734	0.721	0.709
SRI=	25.44	27.10	28.57
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)=	363	345	328
Surface Temperature (C)=	90	72	55
Surface Temperature (F)=	193	162	132

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR CLAY TONE		
Thermal emittance=	0.900		
TSR=	0.467		
Solar Absorbance=	0.533		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.515	0.513	0.510
SRI=	53.68	54.06	54.40
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)=	347	335	323
Surface Temperature (C)=	74	62	50
Surface Temperature (F)=	166	143	122

Standard Cobalt versus Energy Star Cobalt

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	COBALT		
Thermal emittance=	0.850		
TSR=	0.142		
Solar Absorbance=	0.858		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.878	0.863	0.849
SRI=	7.28	9.23	10.95
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)=	372	352	332
Surface Temperature (C)=	99	79	59
Surface Temperature (F)=	211	174	138

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	COBALT		
Thermal emittance=	0.900		
TSR=	0.338		
Solar Absorbance=	0.662		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.647	0.643	0.640
SRI=	36.61	37.08	37.50
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)=	356	341	327
Surface Temperature (C)=	83	68	54
Surface Temperature (F)=	182	155	128

Standard French Green versus Energy Star French Green

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	FRENCH GREEN		
Thermal emittance=	0.850		
TSR=	0.367		
Solar Absorbance=	0.633		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.641	0.630	0.620
SRI=	37.32	38.79	40.09
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)=	356	341	326
Surface Temperature (C)=	83	68	53
Surface Temperature (F)=	182	154	127

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	FRENCH GREEN		
Thermal emittance=	0.900		
TSR=	0.539		
Solar Absorbance=	0.461		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.442	0.440	0.437
SRI=	63.35	63.68	63.98
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)=	342	331	321
Surface Temperature (C)=	69	58	48
Surface Temperature (F)=	156	137	118

Standard Gull Grey versus Energy Star Gull 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	STANDARD		
Colour	GULL GREY		
Thermal emittance=	0.850		
TSR=	0.478		
Solar Absorbance=	0.522		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.524	0.515	0.507
SRI=	52.54	53.76	54.85
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)=	348	335	323
Surface Temperature (C)=	75	62	50
Surface Temperature (F)=	167	144	122

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	GULL GREY		
Thermal emittance=	0.900		
TSR=	0.683		
Solar Absorbance=	0.317		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.296	0.294	0.293
SRI=	83.00	83.23	83.43
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)=	331	324	317
Surface Temperature (C)=	58	51	44
Surface Temperature (F)=	137	124	111

Standard Light Cream versus Energy Star Light Cream

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	LIGHT CREAM		
Thermal emittance=	0.850		
TSR=	0.696		
Solar Absorbance=	0.304		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.294	0.289	0.285
SRI=	83.20	83.91	84.53
Standard solar conditions			
Solar Flux=1000 W/m ²			
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)=	331	324	317
Surface Temperature (C)=	58	51	44
Surface Temperature (F)=	137	123	111

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	LIGHT CREAM		
Thermal emittance=	0.900		
TSR=	0.787		
Solar Absorbance=	0.213		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.190	0.189	0.188
SRI=	97.46	97.60	97.74
Standard solar conditions			
Solar Flux=1000 W/m ²			
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)=	323	319	314
Surface Temperature (C)=	50	46	41
Surface Temperature (F)=	122	114	106

Standard Light Latte versus Energy Star Light Latte

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 LIGHT LATTE		
Thermal emittance=	0.850		
TSR=	0.550		
Solar Absorbance=	0.450		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.448	0.440	0.433
SRI=	62.55	63.61	64.55
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)=	342	331	321
Surface Temperature (C)=	69	58	48
Surface Temperature (F)=	157	137	118

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR LIGHT LATTE		
Thermal emittance=	0.900		
TSR=	0.709		
Solar Absorbance=	0.291		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.269	0.268	0.266
SRI=	86.60	86.80	86.99
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)=	329	323	316
Surface Temperature (C)=	56	50	43
Surface Temperature (F)=	133	121	110

Standard Merino versus Energy Star Merino

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	MERINO		
Thermal emittance=	0.850		
TSR=	0.525		
Solar Absorbance=	0.475		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.475	0.466	0.459
SRI=	59.06	60.18	61.17
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)=	344	333	322
Surface Temperature (C)=	71	60	49
Surface Temperature (F)=	160	139	120

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	MERINO		
Thermal emittance=	0.900		
TSR=	0.683		
Solar Absorbance=	0.317		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.296	0.294	0.293
SRI=	83.00	83.23	83.43
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)=	331	324	317
Surface Temperature (C)=	58	51	44
Surface Temperature (F)=	137	124	111

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	STANDARD		
Colour	MID BUSCUIT		
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=	60.45	61.55	62.52
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)=	71	59	48
Surface Temperature (F)=	159	138	119

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	MID BISCUIT		
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=	84.66	84.88	85.07
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)=	57	50	44
Surface Temperature (F)=	135	123	111

Standard Mid Brunswick Green versus Energy Star Mid Brunswick Green

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 MID		
Colour	BRUNSWICK GREEN		
Thermal emittance=	0.850		
TSR=	0.069		
Solar Absorbance=	0.931		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.955	0.938	0.923
SRI=	-2.23	-0.14	1.71
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)=	377	356	334
Surface Temperature (C)=	104	83	61
Surface Temperature (F)=	220	181	142

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR MID		
Colour	BRUNSWICK GREEN		
Thermal emittance=	0.900		
TSR=	0.259		
Solar Absorbance=	0.741		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.727	0.723	0.719
SRI=	26.32	26.84	27.31
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)=	362	345	329
Surface Temperature (C)=	89	72	56
Surface Temperature (F)=	192	162	132

Standard Mist Green versus Energy Star Mist Green

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 MIST GREEN		
Thermal emittance=	0.850		
TSR=	0.245		
Solar Absorbance=	0.755		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X= 0.770 0.756 0.744			
SRI=	20.90	22.63	24.17
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)=	365	347	329
Surface Temperature (C)=	92	74	56
Surface Temperature (F)=	198	165	133

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR MIST GREEN		
Thermal emittance=	0.900		
TSR=	0.440		
Solar Absorbance=	0.560		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X= 0.543 0.540 0.537			
SRI=	50.08	50.48	50.84
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	324
Surface Temperature (C)=	76	63	51
Surface Temperature (F)=	169	146	123

Standard Mocca versus Energy Star Mocca

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	MOCCA		
Thermal emittance=	0.850		
TSR=	0.345		
Solar Absorbance=	0.655		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.664	0.652	0.642
SRI=	34.33	35.85	37.20
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)=	358	342	327
Surface Temperature (C)=	85	69	54
Surface Temperature (F)=	185	156	128

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	MOCCA		
Thermal emittance=	0.900		
TSR=	0.576		
Solar Absorbance=	0.424		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.405	0.402	0.400
SRI=	68.36	68.66	68.94
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)=	339	329	320
Surface Temperature (C)=	66	56	47
Surface Temperature (F)=	151	134	117

Standard Neutral White versus Energy Star Neutral White

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	NEUTRAL WHITE		
Thermal emittance=	0.850		
TSR=	0.668		
Solar Absorbance=	0.332		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.324	0.318	0.313
SRI=	79.20	79.98	80.67
Standard solar conditions			
Solar Flux=1000 W/m ²			
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)=	333	325	318
Surface Temperature (C)=	60	52	45
Surface Temperature (F)=	141	126	112

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	NEUTRAL WHITE		
Thermal emittance=	0.900		
TSR=	0.785		
Solar Absorbance=	0.215		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.192	0.191	0.190
SRI=	97.18	97.32	97.46
Standard solar conditions			
Solar Flux=1000 W/m ²			
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)=	323	319	314
Surface Temperature (C)=	50	46	41
Surface Temperature (F)=	123	114	106

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

Standard Off White versus Energy Star Off White

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 OFF WHITE		
Thermal emittance=	0.850		
TSR=	0.587		
Solar Absorbance=	0.413		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.409	0.402	0.396
SRI=	67.74	68.71	69.57
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)=	340	329	320
Surface Temperature (C)=	67	56	47
Surface Temperature (F)=	152	134	116

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR OFF WHITE		
Thermal emittance=	0.900		
TSR=	0.747		
Solar Absorbance=	0.253		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.231	0.229	0.228
SRI=	91.87	92.05	92.21
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)=	326	321	315
Surface Temperature (C)=	53	48	42
Surface Temperature (F)=	128	118	108

Standard Olive Green versus Energy Star Olive Green

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 OLIVE GREEN		
Thermal emittance=	0.850		
TSR=	0.086		
Solar Absorbance=	0.914		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.937	0.921	0.906
SRI=	-0.03	2.03	3.85
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)=	376	355	334
Surface Temperature (C)=	103	82	61
Surface Temperature (F)=	218	179	141

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR OLIVE GREEN		
Thermal emittance=	0.900		
TSR=	0.394		
Solar Absorbance=	0.606		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.590	0.586	0.583
SRI=	43.98	44.41	44.80
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)=	352	339	325
Surface Temperature (C)=	79	66	52
Surface Temperature (F)=	175	150	126

Standard Pale Biscuit versus Energy Star Pale 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	STANDARD		
Colour	PALE BISCUIT		
Thermal emittance=	0.850		
TSR=	0.644		
Solar Absorbance=	0.356		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.349	0.343	0.337
SRI=	75.79	76.63	77.37
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)=	335	326	318
Surface Temperature (C)=	62	53	45
Surface Temperature (F)=	144	128	114

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	PALE BISCUIT		
Thermal emittance=	0.900		
TSR=	0.754		
Solar Absorbance=	0.246		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.224	0.222	0.221
SRI=	92.85	93.02	93.18
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)=	326	320	315
Surface Temperature (C)=	53	47	42
Surface Temperature (F)=	127	117	108

Standard Pewter versus Energy Star Pewter

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	PEWTER		
Thermal emittance=	0.850		
TSR=	0.373		
Solar Absorbance=	0.627		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.635	0.623	0.613
SRI=	38.13	39.59	40.88
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)=	356	340	326
Surface Temperature (C)=	83	67	53
Surface Temperature (F)=	181	153	127

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	PEWTER		
Thermal emittance=	0.900		
TSR=	0.607		
Solar Absorbance=	0.393		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.373	0.371	0.369
SRI=	72.58	72.86	73.12
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

Standard Pioneer versus Energy Star Pioneer

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	PIONEER		
Thermal emittance=	0.850		
TSR=	0.065		
Solar Absorbance=	0.935		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.959	0.942	0.927
SRI=	-2.75	-0.65	1.21
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)=	378	356	334
Surface Temperature (C)=	105	83	61
Surface Temperature (F)=	220	181	142

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	PIONEER		
Thermal emittance=	0.900		
TSR=	0.285		
Solar Absorbance=	0.715		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.701	0.697	0.693
SRI=	29.69	30.19	30.65
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)=	360	344	328
Surface Temperature (C)=	87	71	55
Surface Temperature (F)=	189	160	131

Standard Quarry versus Energy Star Quarry

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 QUARRY		
Thermal emittance=	0.850		
TSR=	0.402		
Solar Absorbance=	0.598		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.604	0.593	0.584
SRI=	42.09	43.48	44.72
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)=	177	151	126

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR QUARRY		
Thermal emittance=	0.900		
TSR=	0.598		
Solar Absorbance=	0.402		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.382	0.380	0.378
SRI=	71.35	71.64	71.90
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)=	338	328	319
Surface Temperature (C)=	65	55	46
Surface Temperature (F)=	148	132	116

Standard Red Oxide versus Energy Star Red Oxide

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 RED OXIDE		
Thermal emittance=	0.850		
TSR=	0.145		
Solar Absorbance=	0.855		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.875	0.859	0.846
SRI=	7.67	9.61	11.33
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)=	372	352	332
Surface Temperature (C)=	99	79	59
Surface Temperature (F)=	210	174	138

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR RED OXIDE		
Thermal emittance=	0.900		
TSR=	0.390		
Solar Absorbance=	0.610		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.594	0.590	0.587
SRI=	43.45	43.88	44.28
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)=	353	339	325
Surface Temperature (C)=	80	66	52
Surface Temperature (F)=	176	150	126

Standard Regal Brown versus Energy Star Regal Brown

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 REGAL BROWN		
Thermal emittance=	0.850		
TSR=	0.097		
Solar Absorbance=	0.903		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.926	0.909	0.895
SRI=	1.40	3.44	5.24
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)=	216	178	141

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR REGAL BROWN		
Thermal emittance=	0.900		
TSR=	0.386		
Solar Absorbance=	0.614		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.598	0.594	0.591
SRI=	42.92	43.36	43.75
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)=	353	339	325
Surface Temperature (C)=	80	66	52
Surface Temperature (F)=	176	151	126

Standard Sandalwood versus Energy Star Sandalwood

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	SANDALWOOD		
Thermal emittance=	0.850		
TSR=	0.661		
Solar Absorbance=	0.339		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.331	0.325	0.320
SRI=	78.20	79.00	79.70
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)=	334	326	318
Surface Temperature (C)=	61	53	45
Surface Temperature (F)=	142	127	113

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	SANDALWOOD		
Thermal emittance=	0.900		
TSR=	0.767		
Solar Absorbance=	0.233		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.210	0.209	0.208
SRI=	94.66	94.82	94.97
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)=	325	320	315
Surface Temperature (C)=	52	47	42
Surface Temperature (F)=	125	116	107

Standard Stone versus Energy Star Stone

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 STONE		
Thermal emittance=	0.850		
TSR=	0.531		
Solar Absorbance=	0.469		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.468	0.460	0.453
SRI=	59.90	61.00	61.98
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)=	71	59	48
Surface Temperature (F)=	160	139	119

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR STONE		
Thermal emittance=	0.900		
TSR=	0.688		
Solar Absorbance=	0.312		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.291	0.289	0.288
SRI=	83.69	83.92	84.12
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)=	331	324	317
Surface Temperature (C)=	58	51	44
Surface Temperature (F)=	136	123	111

Standard Terracotta versus Energy Star Terracotta

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 TERRACOTTA		
Thermal emittance=	0.850		
TSR=	0.158		
Solar Absorbance=	0.842		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.861	0.846	0.832
SRI=	9.38	11.29	12.99
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)=	371	351	332
Surface Temperature (C)=	98	78	59
Surface Temperature (F)=	209	173	138

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR TERRACOTTA		
Thermal emittance=	0.900		
TSR=	0.424		
Solar Absorbance=	0.576		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.559	0.556	0.553
SRI=	47.95	48.36	48.73
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)=	350	337	324
Surface Temperature (C)=	77	64	51
Surface Temperature (F)=	171	147	124

Standard Tuscany versus Energy Star Tuscany

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 TUSCANY		
Thermal emittance=	0.850		
TSR=	0.542		
Solar Absorbance=	0.458		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.457	0.449	0.441
SRI=	61.43	62.51	63.46
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)=	343	332	321
Surface Temperature (C)=	70	59	48
Surface Temperature (F)=	158	138	119

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product Colour	ENERGY STAR TUSCANY		
Thermal emittance=	0.900		
TSR=	0.660		
Solar Absorbance=	0.340		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.319	0.317	0.316
SRI=	79.84	80.08	80.30
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)=	333	325	318
Surface Temperature (C)=	60	52	45
Surface Temperature (F)=	140	126	113

Standard Warm Clay versus Energy Star Warm Clay

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	WARM CLAY		
Thermal emittance=	0.850		
TSR=	0.469		
Solar Absorbance=	0.531		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.534	0.524	0.516
SRI=	51.29	52.54	53.64
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)=	168	145	122

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	WARM CLAY		
Thermal emittance=	0.900		
TSR=	0.595		
Solar Absorbance=	0.405		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.385	0.383	0.381
SRI=	70.94	71.23	71.50
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)=	338	328	320
Surface Temperature (C)=	65	55	47
Surface Temperature (F)=	149	132	116

Standard Yallara Brown versus Energy Star Yallara Brown

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	YALLARA BROWN		
Thermal emittance=	0.850		
TSR=	0.086		
Solar Absorbance=	0.914		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.937	0.921	0.906
SRI=	-0.03	2.03	3.85
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)=	376	355	334
Surface Temperature (C)=	103	82	61
Surface Temperature (F)=	218	179	141

ASTM E1980-01 Solar Reflectance Index Calculator for Low-Slope Roofing			
Product	ENERGY STAR		
Colour	YALLARA BROWN		
Thermal emittance=	0.900		
TSR=	0.371		
Solar Absorbance=	0.629		
Convective coefficient=	Wind Condition		
	Low	Medium	High
	5	12	30
X=	0.613	0.610	0.606
SRI=	40.94	41.39	41.79
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	340	326
Surface Temperature (C)=	81	67	53
Surface Temperature (F)=	178	152	127