

IGCC Worksheet – Site Heat Island Mitigation International Green Construction Code (IgCC)

Planning & Development Services
150 N. Capitol Blvd.
Boise, Idaho 83701
Phone: 208/384-3830
Website: <http://pds.cityofboise.org/>



Project Name: _____

Project Address: _____

Completed By: _____

Firm Name: _____

1. Site Hardscape. In accordance with Section 408.2 of the IgCC, as amended, not less than 40 percent of site hardscape shall be provided with one or any combination of options in the table below. Where trees are used to provide shade, shade coverage shall include only those hardscape areas directly beneath the trees based on a ten year growth canopy. Shade coverage can also be determined by using the arithmetic mean of the shade coverage calculated at 10 am, noon, and 3 pm on summer solstice. Shaded areas shall be shown on the construction documents demonstrating compliance with this section.

Site Hardscape Location	Site Mitigation Options (check ✓ where applicable)				Hardscape Area (sq. ft.)	% of Total Site Hardscape Area
	Paving Material with an initial Solar Reflectance Value of not less than 0.30 (see Table 1 next page)	Paved Areas shaded by Structures	Paved Areas shaded by Trees	Pervious Paving including open-grid pavers and stabilized decomposed granite		
1.						
2.						
3.						
4.						
5.						
6.						
Qualifying Site Hardscape area (1 thru 6 above)						
Non-Qualifying Site Area (Other areas not included above)						
Total Site Hardscape Area (Qualifying and Non-Qualifying)						
Total Percentage of Qualifying Site Hardscape Area (Qualifying Area ÷ Total Area)						

Table 1 – Solar Reflectance for Standard Paving Materials

Paving Material	SRI	Reflectance	Emissivity
Typical new gray concrete	35	0.35	0.9
Typical weathered* gray concrete	19	0.20	0.9
Typical new white concrete	86	0.7	0.9
Typical weathered* white concrete	45	0.4	0.9
New asphalt	0	0.05	0.9
Weathered asphalt	6	0.10	0.9
*Reflectance of surfaces can be maintained with cleaning. Typical pressure washing of cementitious materials can restore reflectance close to original value. Weather values are based on no cleaning.			

Note: Pervious and permeable concrete pavements and concrete paving without added color or stain are deemed to comply with the initial solar reflectance value with no testing required.