



INSULCEL-E

Commercial Product Data Sheet



**USES:
SLIC**

Standards	ASTM E119 ASTM C869 ASTM C796 ASTM C595 Type IL ASTM C11574 Type GU ASTM C150 Type I, II, III CAS 30015 Type GU
Unit Weight	5 gal (18.9 L) 55 gal (208 L)
Wet Density	38 - 48 pcf (609 - 769 kg/m ³)
Set/Cure Time	48 - 72 hours
Temperature Limitations	Do not install below 32°F (0°C) during 24 hours following application of product.
Acoustic Ratings*	 

Energy Efficiency & Sustainability

As part of a designed Insulcel system, this product can contribute towards LEED "Optimize Energy Performance". Visit siplast.com for more details.

*Actual ratings depend upon the type of assembly. Not all ratings are available for all assemblies.

PRODUCT INFORMATION

Application

Refer to the applicable Siplast Technical Guide for detailed application information.

Storage and Handling

All Siplast roofing products should be stored on a clean, flat surface. All roofing products should be stored in a dry place out of direct exposure to the elements and double stacking is permissible. Material should be handled so that it remains dry prior to and during installation.

See product packaging and the Safety Data Sheet for specific information on the safe handling of this product.

Packaging

Pallet: 44 in x 45 in (1.12 m x 1.14 m)
Units Per Pallet: 32 pails or 4 drums
Pallets Per Truckload (Typical): 24
Weight Per Pallet: 600 lb or 2220 lb (272.1 kg or 1006.9 kg)

Listings, Approvals, & Certifications



FM Approved - Refer to RoofNav.com for specific assemblies.

Current copies of all Siplast Commercial Product Data Sheets are posted on our website at www.siplast.com
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MIXING DESIGN CHART

Thermal Resistance (R-value)		Physical Properties					
		Compressive Strength		Wet Density		Dry Density	
hr-ft ² -F/Btu	m ² K/W	lb/in ²	kPa	lb/ft ³	kg/m ³	lb/ft ³	kg/m ³
1.33	0.23	200	1379	37	593	30	481
1.15	0.20	330	2275	40	641	34	545
1.02	0.18	450	3102	45	721	38	609
0.94	0.17	640	4412	50	801	43	689
0.83	0.15	790	5447	55	881	47	753

Thermal Resistance (R-value)		Materials Required (yd ³)						
		Cement		Foam			Water	
hr-ft ² -F/Btu	m ² K/W	lb	kg	ft ³	US gal	L	L	US gal
1.33	0.23	630	286	18.9	141	535	38	144
1.15	0.20	695	315	17.9	134	507	42	159
1.02	0.18	787	357	16.7	125	473	47	178
0.94	0.17	878	398	15.5	116	439	53	201
0.83	0.15	970	440	14.3	107	405	58	220

- Notes:
1. Thermal resistance values of Insulcel-E are based on 40°F (4 °C) mean temperature. Insulcel-E properties are based on the material at minimum dry density. Actual dry density of placed Insulcel-E is dependent upon application, design, and climatic conditions that will affect calculated R-values.
 2. Typical mix designs illustrated above are based on a water / cement ratio of 0.50.
 3. The R factors seen above are based on thermal conductivity data derived from laboratory testing of dry materials in accordance with ASTM specification C 177. The values shown are affected by actual environment and installed and designed nuances, and will be lower than calculated values. Actual placement conditions affect all types of insulation, and the R-values shown above should be used for the purposes of comparison with other systems' values.

UL FIRE-RATING

Unprotected Steel Deck	Protected Steel Deck		Pre-cast Concrete Deck		Other Commonly Used Assemblies
P902, P903, P907, P908, P919, P920, P921, P922, P923, P925, P926, P927, P928, P929, P930, P936, P937	Armstrong Ceilings:	P215, P216, P231, P251	Exposed:	P905, P910, P913, P916	D708, D750, D755, D759, D768, D775, D832, D902, D916, D919, D922, D923, D925, D927, D929
	Other Tile Ceilings:	P214, P241, P246, P255, P261, P264	Sprayed Fireproofing:	P708, P737, P810, P812	
	Plaster Ceiling:	P405, P406, P407, P410, P411			
	Gypsum Board Ceiling:	P501, P503, P509, P511, P513, P514, P520			