

Built-Up Roofing Specifications

Specification 5GLC CR

Five Ply White-Coated Mineral Surfaced Fiber Glass Built-Up Roof. For use over approved, lightweight, insulating fill decks on inclines of up to 3" per foot (250 mm/m).

Materials per 100 sq. ft. (9.3 m²) of Roof Area

Felts:


GlasBase Plus, PermaPly 28 or Ventsulation Felt	1 ply
GlasPly Premier or GlasPly IV	3 plies
GlasKap CR	1 ply

Asphalt (Interply): Trumbull®* or other JM Approved Asphalt

Incline per foot	Asphalt	Total Weight
Up to 1" (83 mm/m)	170°F (77°C), Type II, Flat	92 lbs. (42 kgs.)
1" to 3" (83 to 250 mm/m)	190°F (88°C), Type III, Steep	92 lbs. (42 kgs.)
Up to 3" (250 mm/m)	PermaMop	92 lbs. (42 kgs.)

Approximate installed weight: 200 - 296 lbs. (91 - 180 kgs.).

Energy and the Environment

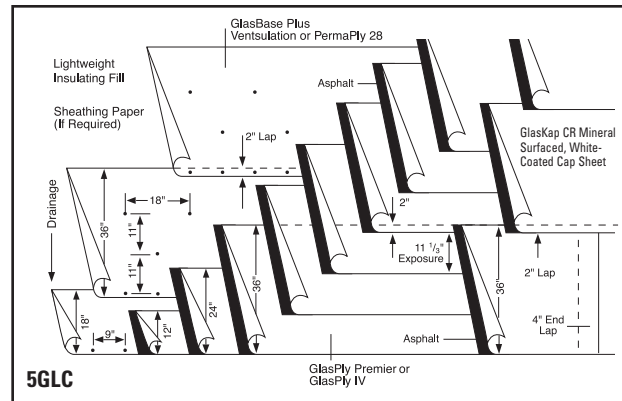
 <p>CRRC COOL ROOF RATING COUNCIL</p>	Solar Reflectance	Initial 0.76	Weathered Pending
	Thermal Emittance	0.85	Pending
	Rated Product ID	0662-0007	
	Licensed Manufacturer ID	0662	
	Classification	Production Line	
<p><small>Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building construction may vary.</small></p> <p><small>Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating normal procedures.</small></p>			

General

This specification is for use over any type of approved light-weight, insulating concrete fill deck (without insulation) which can receive and adequately retain nails or other types of mechanical fasteners that may be recommended by the deck manufacturer. Examples of such decks are Zonolite, Celcore® and Elastizell. JM Ventsulation Felt is recommended over any wet fill deck and may be required as a condition of Guarantee.

Design and installation of the deck and/or substrate must result in the roof draining freely and to outlets numerous enough and so located as to remove water promptly and completely. Areas where water ponds for more than 24 hours are unacceptable and are not eligible to receive a JM Roofing Systems Guarantee.

Note: All general instructions contained in the current JM Commercial/Industrial Roofing Systems Manual should be considered part of this specification.



Flashings

Flashing details can be found in the "Bituminous Flashings" section of the JM Commercial/Industrial Roofing Systems Manual.

Application

Note: On roof decks with slopes up to 1" per foot (83.3 mm/m), the roofing felts may be installed either perpendicular or parallel to the roof incline. On slopes over 1" per foot (83.3 mm/m), refer to **Paragraph 6.11** of this section for special requirements.

Using GlasBase Plus, Ventsulation or PermaPly 28 start with an 18" (457 mm) width (a specific base sheet may be a condition of Guarantee). The following base sheet courses are to be applied full width, lapping the preceding felt 2" (51 mm) on the side laps and 4" (102 mm) on the end laps. Nail the side laps 9" (229 mm) o.c. Down the longitudinal center of each felt, place two rows of nails spaced approximately 11" (279 mm) apart, with the nails staggered on approximately 18" (457 mm) centers. Use nails or fasteners appropriate to the type of deck with 1" (25 mm) minimum diameter caps. For additional fastener information, refer to the Fastener Data in the "Roof Deck" section of the current JM Commercial/Industrial Roofing Systems Manual.

Using GlasPly Premier or GlasPly IV, apply a piece 12" (305 mm) wide, then over that, one 24" (610 mm) wide, then over both, a full width piece. The following felts are to be applied full width overlapping the preceding felts by 24²/₃" (627 mm) so that at least 3 plies of felt cover the base felt/substrate at all locations. Install each felt so that it is firmly and uniformly set, without voids, into the hot bitumen (within ±25°F [±14°C] of the EVT) applied just before the felt at a nominal rate of 23 lbs. per square (1.1 kg/m²) over the entire surface. Installation over porous substrates such as roof insulation may require up to 33 lbs. per square (1.6 kg/m²) of hot bitumen.

Refer to the Material Safety Data Sheet and Product Label prior to using this product.



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Surfacing

Prior to application of GlasKap CR, cut the cap sheet into handleable lengths (12' - 18' [3.66 m - 5.50 m]). Lay the material out on the roof and allow it to relax and flatten. To accommodate a full width sheet, apply a mopping of hot asphalt, approximately 20°F (11°C) above the EVT, at a nominal rate of 23 lbs. per square (1.1 kg/m²). (The higher temperature of asphalt maximizes the bonding of the cap sheet to the ply felts.) Then flop the cap sheet into the hot asphalt. On subsequent courses, a slop sheet can be positioned upside down, directly over the sheet in the preceding course such that only the side lap area of the preceding sheet is exposed. Care should be taken to maintain 2" (51 mm) side laps and 4" (102 mm) end laps. Asphalt is applied in the same manner as before, making sure to also cover the 2" (51 mm) exposed side lap. Asphalt may also be applied to the exposed "upside down" cap sheet, prior to "flopping" it into the hot asphalt. The cap sheet must be firmly and uniformly set, without voids, into the hot asphalt with all edges and laps well sealed.

Finishing

It is important to be careful with asphalt when applying the GlasKap CR sheets on the roof. However, if a small amount of asphalt bleeds out at the side or end laps, the roof will still meet Title 24 requirements. Bleed out of less than 1" (25 mm) is acceptable, but 3/8" (10 mm) is recommended.

Some applicators or building owners may want to dress up the roof by coating the asphalt to give the roof surface a uniform white appearance. This is an optional step. JM recommends using a heavy knap roller, in a 4" (102 mm) width, to coat the exposed asphalt with a JM recommended white acrylic coating.

Asphalt

Asphalt should meet the requirements of ASTM D 312.

JM Guarantees require the use of Trumbull®* asphalt or another JM Approved Asphalt.

Check with a JM Technical Service Specialist for special asphalt requirements in hot climates.

Refer to the Material Safety Data Sheet and Product Label prior to using this product.

* Trumbull is a registered trademark of Owens Corning.