



Built-Up Roofing Specifications Specification 4GLG

Four Ply Gravel 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

Asphalt (Interply): Trumbull®* or other JM Approved Asphalt	Asphalt	Total Weight
Incline per foot	170°F (77°C), Type II, Flat	69 lbs. (31 kgs.)
Up to ½" (41.6 mm/m)	190°F (88°C), Type III, Steep	69 lbs. (31 kgs.)
½" to 3" (41.6 to 250 mm/m)	PermaMop	69 lbs. (31 kgs.)
Up to 3" (250 mm/m)		

Surfacing:

Flood coat of asphalt	60 lbs. (2.9 kgs./m ²)
Gravel	400 lbs. (19.5 kgs./m ²)
or Slag	300 lbs. (14.6 kgs./m ²)

Aggregate density, size and coverage will determine actual weight. Approximate installed weight: 452 - 658 lbs. (205 - 299 kgs.)

General

This specification is for use over any type of approved, lightweight, insulating concrete fill deck (without insulation) which can receive and adequately retain nails or other types of mechanical fasteners as 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.

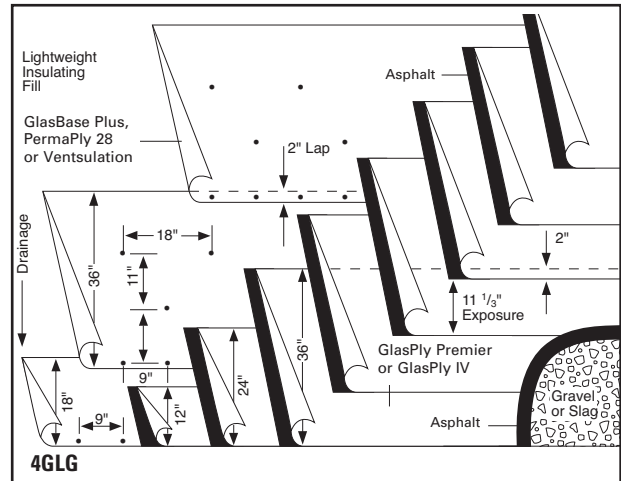
Flashings

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, PermaPly 28 or Ventsulation, start with an 18" (457 mm) width (the use of 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. Consult the current Factory Mutual Approval Guide for the appropriate base sheet, fastener type and pattern. 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 24 2/3" (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 asphalt (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.

Surfacing

Flood the surface with the appropriate asphalt at an approximate rate of 60 lbs. per square (2.9 kg/m²). Into the hot asphalt, embed an acceptable gravel at a rate of 400 lbs. per square (19.5 kg/m²) or an acceptable slag at a rate of 300 lbs. per square (14.6 kg/m²). Aggregate must be installed so that there is complete coverage across the entire surface and at least 50% of the aggregate is solidly adhered in the hot asphalt. Aggregate should meet the requirements of ASTM D 1863.

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.