

## Built-Up Roofing Specifications Specification 4GNG

**Four Ply Gravel Surfaced Fiber Glass Built-Up Roof. For use over wood or other nailable decks on inclines of up to 3" per foot (250 mm/m).**

**Materials per 100 sq. ft. (9.3 m<sup>2</sup>) of Roof Area**

**Sheathing Paper** (Wood board decks only) 1 layer

**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

Incline per foot	Asphalt	Total Weight
Up to 1/2" (41.6 mm/m)	170°F (77°C), Type II, Flat	69 lbs. (31 kgs.)
1/2" to 3" (41.6 to 250 mm/m)	190°F (88°C), Type III, Steep	69 lbs. (31 kgs.)
Up to 3" (250 mm/m)	PermaMop	69 lbs. (31 kgs.)

**Surfacing:**

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

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 structural 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 wood and plywood. This specification is not for use directly over lightweight, insulating concrete decks.

**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**

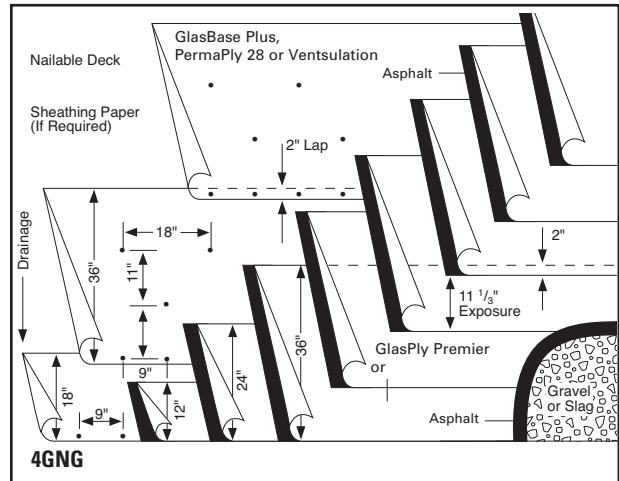
Flashing details can be found in the "Bituminous Flashings" section of the JM Commercial/Industrial Roofing Systems Manual.

**Application**

Over wood board decks, one ply of sheathing paper must be used under the base felt and on top of the wood board deck.

**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. 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 2 1/2" (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/m<sup>2</sup>) over the entire surface.

**Surfacing**

Flood the surface with the appropriate asphalt at an approximate rate of 60 lbs. per square (2.9 kg/m<sup>2</sup>). Into the hot asphalt, embed an acceptable gravel at a rate of 400 lbs. per square (19.5 kg/m<sup>2</sup>) or an acceptable slag at a rate of 300 lbs. per square (14.6 kg/m<sup>2</sup>). 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.