88-1.07C Paving Grid

Geosynthetics used for paving grid must be a geopolymer material formed into a grid of integrally connected elements with openings. Paving grid must comply with:

Geosynthetic Paving Grid

Property	Test	Specification		
		Class I	Class II	Class III
Tensile strength at ultimate, lb/in [a] minimum	ASTM D 6637	560 x 1,120	560	280
Aperture size, inch minimum	Callipered	0.5	0.5	0.5
Elongation, % maximum	ASTM D 6637	12	12	12
Mass per area, oz / sqyd minimum	ASTM D 5261	16	10	5.5
Melting point, °F minimum	ASTM D 276	325	325	325

Note:
[a] For Class I, machine direction x cross direction. For Class II and Class III, both directions.

88-1.07D Paving Geocomposite Grid

Paving geocomposite grid consists of paving grid specified under Section 88-1.07C, "Paving Grid," [NOTE: THERE IS NO Class III Paving Composite Grid] bonded or integrated with Pavement Interlayer specified under Section 88-1.07 "Pavement Interlayer" (see below)

Paving geocomposite grid must have peel strength of at least 10 pounds per foot determined under ASTM D 413.

88-1.07 PAVEMENT INTERLAYER

88-1.07A Paving Fabric

Geosynthetics used for paving fabric must be nonwoven. Paving fabric must comply with:

Geosynthetic Paving Fabric

Property	ASTM	Specification
Mass per unit area, oz/yd^2 minimum	D 5261	4.1
Grab breaking load, lb 1-inch grip, minimum, in each direction	D 4632	100
Apparent elongation, percent minimum in each direction	D 4632	50
Hydraulic bursting strength, psi minimum	D 3786	200
Melting point, °F minimum	D 276	325
Asphalt retention, gal/yd^2 minimum	D 6140	0.2

Installation Guidelines for Engineered Composite Paving Grid under Hot Mix Asphalt Concrete (HMAC)

For proper performance, it is recommended that these installation guidelines are followed.

- Power broom, sweep, or vacuum the pavement before installing paving grid. The pavement surface should be dry and free of dirt and gravel prior to installation.
- Fill cracks as necessary. Fill all cracks 1/4 inch (.63cm) or larger with an approved material.

- Repair and patch potholes and failed pavement areas prior to paving grid installation.

- A scratch or level-up course may be used if recommended by the composite paving grid manufacturer and are recommended especially when rutting is present. Composite Paving Grids can be applied directly over milled surfaces.

- Tack coat must be placed prior to installation of the composite paving reinforcing grid. Neat asphalt tack coat application rate is typically between 0.25 and 0.30 gal/yd^2. Check with manufacturer for tack coat requirements.

- Ambient temperatures for installation of paving grid should be 40°F (4°C) or higher.

- Minimum HMAC overlay thickness should be 1.5 inch (3.8cm).