

Load Description	Depth of Base		Depth of Base	
	AGGREGATE		ENGINEERED AGGREGATE/TOPSOIL ²	
	CBR ¹ 2-4	CBR ¹ >4	CBR ¹ 2-4	CBR ¹ >4
Heavy Fire Truck Access & H-20 loading. Typical 758 kPa (110 psi) maximum tire pressure. Single axle loadings of 145 kN (32 kip), tandem axle loadings of 220 kN (48 kip). Gross vehicle loads of 36.3 tonne (80,000 lb).	150 mm (6 in)	150 mm (6 in)	Not Recommended	Not Recommended
Light Fire Truck Access & H-15 loading. Typical 586 kPa (85 psi) maximum tire pressure. Single axle loadings of 110 kN (24 kip). Gross vehicle loads of 27.2 tonne (60,000 lb).	150 mm (6 in)	100 mm (4 in)	Not Recommended	Not Recommended
Utility & Delivery Truck Access & H-10 loading. Typical 414 kPa (60 psi) maximum tire pressure. Single axle loadings of 75 kN (16 kip). Gross vehicle loads of 18.1 tonne (40,000 lb).	100 mm (4 in)	50 mm (2 in)	100 mm (4 in)	50 mm (2 in)
Cars & Pick-up Truck Access. Typical 310 kPa (45 psi) maximum tire pressure. Single axle loadings of 18 kN (4 kip). Gross vehicle loads of 3.6 tonne (8,000 lb).	50 mm (2 in)	None*	50 mm (2 in)	None*
Trail Use. Loading for pedestrian, wheelchair, equestrian, bicycle, motorcycle and ATV traffic.	None*	None*	None*	None*

A minimum of 50 mm (2 in) of aggregate base should be placed below the GeoPave units as a drainage layer and an infiltration storage area. Greater depth may be required depending upon design rainfall needs and subbase permeability.

¹ CBR is the abbreviation for California Bearing Ratio. Methods for determining CBR vary from more sophisticated laboratory methods to simple field identification methods that use hand manipulation of the soil. Presto does not recommend one method over the other, however, the user must have a high degree of confidence in the results produced by the chosen method. If other-than-CBR soil strength values exist, use available correlation charts to relate the value to CBR.

² With the aggregate/topsoil mix and a vegetative surface, infrequent/occasional passes are recommended. Infrequent/occasional passes are defined as the number of passes over any period of time that causes no lasting damage to the vegetation. This number will be a function of vegetation type and age, climatic conditions, and maintenance practices. This number is not a function of the GeoPave material.

BASE MATERIAL:
IF NECESSARY FOR LOADING REQUIREMENTS, THE RECOMMENDED BASE SHALL BE AGGREGATE OR AN ENGINEERED AGGREGATE/TOPSOIL MIXTURE, AND SHOULD BE CONSISTENT WITH THE CHOSEN INFILL TYPE.

A MINIMUM OF 50 MM (2 IN) OF BASE MATERIAL IS GENERALLY RECOMMENDED FOR DRAINAGE, EVEN IF NOT REQUIRED BY DESIGN FOR LOAD SUPPORT. ADDITIONAL BASE DEPTH MAY BE ADDED IF REQUIRED OVER A LOW-PERMEABLE BASE OR TO FUNCTION AS A STORM WATER DETENTION/RETENTION LAYER.

RECOMMENDED AGGREGATE INFILL:
THE AGGREGATE INFILL SHALL BE A WELL-GRADED 10 MM TO 13 MM (0.375 TO 0.5 IN) CRUSHED ANGULAR STONE WITH A FINE CONTENT LESS THAN 5%.

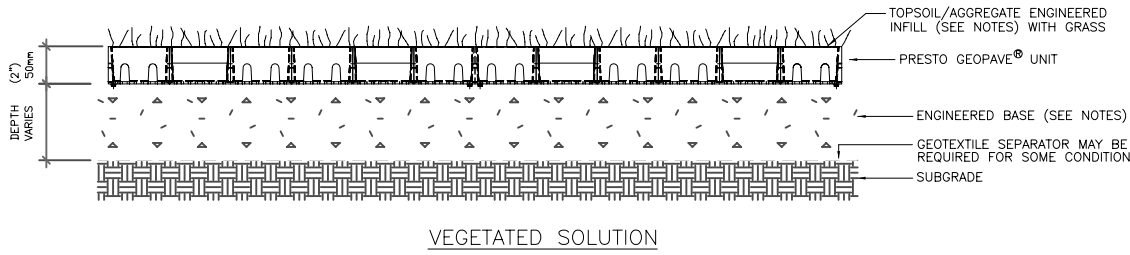
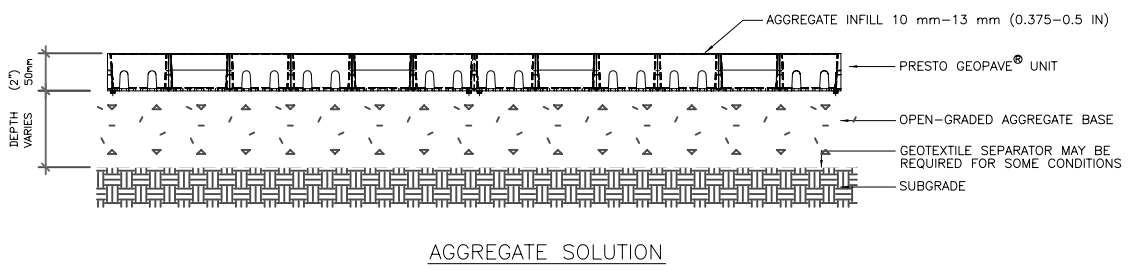
RECOMMENDED ENGINEERED BASE FOR VEGETATED SOLUTIONS:
SUPPORT SOIL SHALL CONSIST OF A HOMOGENOUS MIXTURE CONSISTING OF 1) A CLEAR-STONE/CRUSHED ROCK HAVING AN AASHTO #5 OR SIMILAR DESIGNATION BLENDED WITH 2) PULVERIZED TOPSOIL AND 3) A VOID COMPONENT GENERALLY CONTAINING AIR AND/OR WATER. THIS HOMOGENOUS MIXTURE WILL PROMOTE VEGETATIVE GROWTH AND PROVIDE REQUIRED STRUCTURAL SUPPORT. THE AGGREGATE PORTION SHALL HAVE A PARTICLE RANGE FROM 10 MM TO 25 MM (0.375 TO 1.0 IN) WITH A D₅₀ OF 13 MM (0.5 IN). THE PERCENTAGE VOID-SPACE OF THE AGGREGATE PORTION WHEN COMPACTED SHALL BE AT LEAST 30%. THE PULVERIZED TOPSOIL SHALL EQUAL 25% OF THE TOTAL VOLUME AND BE ADDED AND BLENDED TO PRODUCE A HOMOGENOUS MIXTURE PRIOR TO PLACEMENT. ONCE PLACED, THE MIXTURE SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.

RECOMMENDED ENGINEERED INFILL FOR VEGETATED SOLUTIONS:
SAME AS ENGINEERED BASE BUT WITH A PARTICLE RANGE FROM 10 MM TO 13 MM (0.375 TO 0.5 IN)

GEOPAVE[®] SYSTEM USAGE GUIDELINES

Item	Specifications & Details
Material	Up to 97% Recycled Polyethylene*
Color	Ranges from dark shades of gray to black
Chemical Resistance	Superior
Carbon Black for Ultraviolet Light Stabilization	1.5% - 2.0%
Empty Unit Minimum Crush Strength @ 21°C (70°F)	1,202 kPa (175 psi)
Aggregate or Aggregate/Topsoil Filled Unit Minimum Crush Strength @ 21°C (70°F)	6,869 kPa (1000 psi)
Nominal Dimensions (width x length)	0.50 m x 1.00 m (20 in x 40 in)
Nominal Unit Depth	50 mm (2 in)
Nominal Coverage Area	0.50 m ² (5.38 ft ²)
Cells per Unit	50
Cell Size (small cell)	83 mm x 83 mm (3.25 in x 3.25 in)
Cell Size (large cell)	83 mm x 165 mm (3.25 in x 6.5 in)
Top Open Area per unit	90.5%
Bottom Open Area per unit	32.6%
Bottom Mesh Openings	6.35 mm x 6.35 mm (.25 in x .25 in)
Nominal Weight per Unit	3.6 kg (8.0 lb)
Runoff Coefficient @ 63.5 mm/hr (2.5 in) Rainfall	(0 - 0.15)
Units per Pallet	46

**GEOPAVE[®]
MATERIAL
SPECIFICATIONS**



PRESTO GEOSYSTEMS[®]

**THE GEOPAVE[®]
POROUS PAVEMENT SYSTEM**

GEOSYSTEMS[®] AND GEOPAVE[®] ARE REGISTERED TRADEMARKS OF PRESTO PRODUCTS COMPANY.

DATE	DECEMBER, 2008	FILE NAME	GEOPAVE-B1.DWG
SCALE	NTS	SHEET	2