SUSTAINABLE PAVING SYSTEMS, LLC

GRASSCRETE MOLDED PULP LOADING TABLE

This guide is to provide some basic information about the capacity of the Grasscrete system using Molded Pulp Formers in its application. It is meant to assist in the selection of an appropriate combination of concrete strength with reinforcement size and layout. The weights reference gross vehicle weight in pounds based off a 10 wheeled vehicle with 36 square inches of tire contact per tire. The calculations assume a minimum allowable load bearing capacity of the sub-base of 4.2 kN per square foot.

These tables are guides based off certain calculations of load bearing capacity and are intended as reference points for an engineer to select any given system. The product when installed is 5 ½" thick, has a void structure of 37% and utilizes concrete with ½" minus aggregates poured at a water reduced slump of 6-8 inches. Additional improvements to the concrete such as increased compressive strength and fiber reinforcement may improve both the load bearing capacity and the abrasion resistance of the concrete itself.

The minimum wall thickness of the concrete at the level of rebar placement is 2". It is recommended that #4 be the largest sized reinforcement so as to allow for adequate cover. If incorporating larger sized bar or a heat melt system it is recommend to decrease the top sized aggregate and to incorporate fibers in the concrete mix design.

It is the end user's responsibility to fully evaluate any Grasscrete System. Local conditions and regulations may play a role in the system design. Consult Sustainable Paving Systems, LLC for more information on your specific Grasscrete application.

MOLDED PULP FORMER LOADING TABLE

Rebar Size / Layout Concrete Strength	lbs of Load Application Can Support				Fibers Needed	Typical Applications		
	After 24 hrs	After 7 days	After 14 days	**After 28 days**	lbs/yard	Residential Drives	Parking Lots	Emergency Access
#2 bar 16" on center 4000 psi concrete	Foot	18,200	34,125	**45,500**	5	•		
#2 bar 16" on center 5000 psi concrete	Foot	21,600	40,500	**54,000**	5		•	
#3 bar 16" on center 4000 psi concrete	Foot	22,800	42,750	**57,000**	5		•	
#2 bar 8" on center 4000 psi concrete	Foot	25,600	48,000	**64,000**	1.5		•	
#3 bar 16" on center 5000 psi concrete	Foot	27,200	51,000	**68,000**	5		•	
#4 bar 16" on center 4000 psi concrete	Foot	27,200	51,000	**68,000**	5		•	
#2 bar 8" on center 5000 psi concrete	Foot	30,400	57,000	**76,000**	1.5			•
#3 bar 8" on center 4000 psi concrete	Foot	32,000	60,000	**80,000**	1.5			•
#4 bar 16" on center 5000 psi concrete	Foot	32,800	61,500	**82,000**	5			•
#4 bar 8" on center 4000 psi concrete	Foot	38,400	72,000	**96,000**	1.5			•
#3 bar 8" on center 5000 psi concrete	Foot	38,400	72,000	**96,000**	1.5			•
#4 bar 8" on center 5000 psi concrete	Foot	46,000	86,250	**115,000**	1.5			•

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