

## GRASSCRETE MOLDED PULP LOADING TABLE

This guide is to provide some basic information about the capacity of the Bomanite 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  $5 \frac{1}{2}$ " thick, has a void structure of 37% and utilizes concrete with  $\frac{1}{2}$ " 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.

Grasscrete Molded Pulp	24 hours	7 days	14 days	28 days
#2 bar 16" on center 4000 psi concrete	Foot	18,200	34,125	45,500
#2 bar 8" on center 4000 psi concrete	Foot	25,600	48,000	64,000
#2 bar 16" on center 5000 psi concrete	Foot	21,600	40,500	54,000
#2 bar 8" on center 5000 psi concrete	Foot	30,400	57,000	76,000
#3 bar 16" on center 4000 psi concrete	Foot	22,800	42,750	57,000
#3 bar 8" on center 4000 psi concrete	Foot	32,000	60,000	80,000
#3 bar 16" on center 5000 psi concrete	Foot	27,200	51,000	68,000
#3 bar 8" on center 5000 psi concrete	Foot	38,400	72,000	96,000
#4 bar 16" on center 4000 psi concrete	Foot	27,200	51,000	68,000
#4 bar 8" on center 4000 psi concrete	Foot	38,400	72,000	96,000
#4 bar 16" on center 5000 psi concrete	Foot	32,800	61,500	82,000
#4 bar 8" on center 5000 psi concrete	Foot	46,000	86,250	115,000

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