SUSTAINABLE PAVING SYSTEMS, LLC

GRASSCRETE SYSTEMS

Frequently Asked Questions

GRASSCRETE GENERAL APPLICATION QUESTIONS:

1) What is Grasscrete?

Grasscrete is a pervious reinforced concrete structure for all types of trafficked areas that is either covered with grass, has grass growing in the voids of the structure or has stone in the voids of the structure.

2) How is Grasscrete made?

Grasscrete is made by pouring concrete over “Formers”, a tool or mold that leaves voids in the concrete, that once opened can be filled with a variety of porous materials such as grass or gravel.

3) What are the Formers made of?

Grasscrete Formers come in two types. A re-usable plastic tool that is used only for fully grassed or concealed installations and the more common single-use Molded Pulp Former used for all Grasscrete types.

4) What is Molded Pulp?

The Molded Pulp is made from 100% recycled paper pulled from both post industrial and post consumer waste streams. It is suspended in a water slurry, vacuum formed to a mold and then air dried to a solid product. It is based on the same biodegradable material commonly found at landscape supply stores or nurseries that plant pots are made from.

5) What is the difference between Grasscrete Systems and the competitors?

Grasscrete is the only product on the market that is made from continuously reinforced cast-in-place concrete. It is by far the most robust pervious grassed structure as it is not made from cheap plastic rings or supplied in segments. It has the load bearing capacity and durability comparable to concrete freeways or parking lots.

6) What are the products dimensions?

The individual Grasscrete Formers are 24” x 48” in outside dimension and are 5 ½” deep. The final installed product size is determined by the size of the project – every square foot of properly installed Grasscrete is connected with steel reinforcement.

7) What is Grasscrete installed over?

Grasscrete is installed over a sub-base of gravel at a depth determined by the load bearing capacity required for the project. In many situations the Grasscrete is installed over the native soils saving money on excavation and gravel. In some cases it is installed over a deep bed of crushed stone or even storm water chambers so as to provide capacity for water which can be highly desired when controlling storm water runoff.

8) How well does grass grow over Grasscrete?

Grasscrete has been installed extensively throughout the world in all climate types. In some environments such as the Pacific Northwest it will grow the same as any lawn requiring no irrigation. In environments that are dry and hot, it is recommended that the Grasscrete be irrigated much like any other grassed area. Hardy, drought tolerant grass or groundcover can be selected for applications such as retaining pond bottoms or slope protection.

9) How long do we have to wait before driving on Grasscrete?

Unlike other competitive systems that may require the grass to grow prior to use, Grasscrete can be driven on immediately after the concrete hardens in the extent of an emergency situation. Typically it is recommended that you wait two to four weeks before you drive on it for best results.

10) What types of grass should I use in the product?

Use a species that is both deep rooting and robust. Generally a Blue/Rye/Fescue mix in northern climates and Zoysia, Fescue, or Bermuda types in southern climates.

11) What material is Grasscrete filled with for grassed installations?

Grasscrete functions best in fully concealed installations when a sandy soil is used to fill the voids and to cover the concrete. This will allow the grass to grow well and will support occasional non-emergency vehicle access. The same mixture is used for void grassed only installations which will allow for any type of vehicle access as often as required.

12) Can I seed or sod over the product?

Seed or sod can both be used dependant upon the application.

13) Is soil amending recommended?

Yes, a water retaining soil additive such as PAM or equal is recommended for grassed applications. It will retain moisture between watering or rainfall and will help aerate the root zone as it expands and contracts.

14) How are parking spaces delineated on a Grasscrete parking lot?

The use of traditional line paints is the most effective way to delineate stalls on a Grasscrete parking lot. Other methods, such as pouring the concrete in multiple pours, leaving a wider band of concrete between the stalls and planting brushes or shrubs in a predetermined pattern are all ways to distinguish between stalls and to control traffic patterns.

GRASSCRETE PERFORMANCE QUESTIONS:

1) How heavy of a load can Grasscrete support?

Grasscrete can be designed and installed to support any vehicle. The standard minimum installation supports vehicles weighing 75,000 pounds with more customized installations capable of supporting vehicles exceeding 150,000 pounds – including tracked vehicles.

2) How much traffic can the product withstand?

Fully grassed installations can handle periodic traffic such as maintenance access or overflow parking. This is dictated by the robustness of the grass itself. Void grassed only installations can be driven on continuously with no issues associated with plowing, high speed travel or tires turning at particular places in the installation.

3) Can Grasscrete be used for emergency access such as fire lanes?

Yes, this is one of the more common uses for Grasscrete. As an example, the City of Los Angeles Fire Department has been using Grasscrete exclusively since 1982.

4) What is the installed cost for Grasscrete vs. Concrete?

Grasscrete is generally 30% higher than traditional concrete pavement. Using Grasscrete can eliminate or minimize the need for storm water collection systems which may be a substantial savings.

5) What is the installed cost for Grasscrete vs. other pervious grass systems?

Grasscrete is generally slightly more than other pervious grassed systems such as plastic rings, plastic unit pavers and pre-cast unit pavers. However, using Grasscrete means you are using the most robust system with the lowest lifecycle costs of any pervious system with comparable capacity, durability and performance.

6) Can we plow Grasscrete?

Applications requiring plowing are typically applications requiring continuous vehicle use and therefore are void grassed only installations. Grasscrete installed in this manner can be plowed with conventional equipment requiring no specialized attachments or care compared to other less robust systems.

7) Can we use Grasscrete in lieu of a pervious concrete parking lot?

Grasscrete is commonly used as a pervious concrete parking lot where as the voids are simply filled with stone rather than grass. Unlike no-fines pervious concrete Grasscrete is easily reinforced, the reinforcing steel is not subject to corrosion due to the no fines mix of traditional pervious concrete, the mix designs are established freeze-thaw resistant, the final surface is exceedingly more abrasion resistant that pervious concrete mixes, and there is no issue with rock pop outs.

Additionally Grasscrete is not subject to clogging issues and in the event that too much silt has entered the voids, they can be mechanically cleaned in an efficient manner unlike traditional pervious concrete.

GRASSCRETE BENEFITS QUESTIONS:

1) Does Grasscrete lessen heat island effect?

Yes. Concrete is much lighter in color than blacktop so even for void grassed only installations there is improved reflectance.

2) Can Grasscrete have a recycled content?

Yes. Both due to the 100% recycled Mold Pulp Formers and to the fact that Grasscrete does not require the same set times and finishing as traditional concrete. This means that a high fly ash or blast slag content is possible along with reclaimed aggregates such as crushed concrete.

3) Does Grasscrete help control storm water runoff?

Yes. Concealed and Partially Concealed Grasscrete drains comparatively to local grassed areas with similar soils. Stone Filled installations have virtually zero runoff even in a exceptional rain event provided that there is adequate capacity to contain the water beneath the Grasscrete.

4) Can Grasscrete channel storm water runoff?

Yes. Some of the most common installations for Grasscrete is river training, slope protection and channels. As it supports grass or other plants in its voids the Grasscrete system can perform as an armored layer resisting washout yet remain predominantly concealed unlike traditional concrete channels.

5) Can Grasscrete be used for retaining pond bottoms?

Yes. Grasscrete is ideal for use as a retaining pond bottom as it is pervious which helps avoid liability issues associated with using non-pervious concrete for retaining pond bottoms. It can also be mechanically scraped which allows for sediment to be excavated periodically using large pieces of equipment while maintaining the root structure of the grass which repopulates to conceal the system to provide a food source and cover for local animal species.

6) Does Grasscrete contribute to LEED?

Yes. For all the reasons listed above.