



**May 20, 2020**

## **RE: Hydrogrow Material in the Manufacturer Specifications for Grasspave2 and It's Relative Ineffectiveness**

Hydrogrow is a two-part material used with Grasspave2 intended to amend the road base to promote grass growth. In reality it is actually doing very little to help amend the road base for grass root growth in road base.

While it is true that most grass roots will grow quite well in road base with the proper porous paver installation along with irrigation and maintenance, the Hydrogrow material has very little to do with any of this occurring.

### **Breaking Down Hydrogrow**

Supplied by the manufacturer at a rate of roughly 1lb per 100 square feet of area, the amount of material is miniscule. Approximately half of that amount is fertilizer and half of that amount is a crushed volcanic material added for water retention so there is only about .5lb of each per 100sf of area.

1. First, typical fertilizers are applied at rates of 1 to 2 lbs per 100sf so at .5lb per 100sf for Hydrogrow, there is 25-50% less material than even a standard topical fertilizer. As applied as a conditioner for road base that may be 6-12" deep, it is probably giving very little nutrient to the grass roots after any moisture brings the Hydrogrow below the surface in a diluted quantity.
2. Secondly, the crushed volcanic material would have to be applied at rates likely 5-10 times the .5lb per 100sf found in the Hydrogrow to have any water retention value whatsoever. The sand and fines in the road base will give much more water retention than the material found in the Hydrogrow. If extra water retention is required a 10-20% topsoil mix with the sand layer in the pavers will give exponentially more water holding than the Hydrogrow material with an added nutrient component also.

### **What is the best practice solution for getting nutrients and water retention into any grass porous paving system?**

1. Adding 10-20% topsoil to the sand fill in the pavers will give both nutrients and water retention to the critical 1" below the sod or seed during germination and grass root growth into the road base. Sod with root mass of any depth would likely eliminate the need for additional top soil. The topsoil in the root mass will nourish the roots as it breaks down and combines with the sand fill in the pavers and the the roots grow down to the road base that will also be conditioned by the root mass topsoil material.
2. Fertilizing normally will give most of the nutrients necessary for most applications, with or without the topsoil above in #1. Fertilizer is applied better from the surface than being on the road base which quickly dissipates and will never really benefit the root growth development.