# **GRASSPAVE2 THATCH BUILDUP**





Grasspave2 reinforces grass for traffic areas and prevents compaction. The porous base course below and grass surface allow rain to enter and pass through the crosssection quickly over long periods of time. However, several species of grass (dense turf types) are subject to building a thick layer of thatch (dead and dense organic material) on the surface. This layer can inhibit water penetration and also elevate the plant crown (active growing stalk) well above the protection provided by the Grasspave2 ring structure – allowing potential damage to the plant from traffic.

Warm season grasses (like St. Augustine and Bermuda) are very efficient at surface growth and starting new shoots off older stems, thus growing vertical rapidly, but leaving older stems to compact and capture clippings. Cool season grasses are generally slower in growth, but still subject to capture of mown clippings and allowing them to compact at the surface – generating thatch. Geographic areas with low moisture and/or low microbial activity to biodegrade the clippings will build thatch layers more quickly.

How can thatch layers be minimized or eliminated? Our suggestions are as follows:

## **1. COLLECT MOWN CLIPPINGS**

When the biological activity is sufficiently high to rapidly break down the clippings, nutrients are effectively reintroduced to the root zone as the clippings decompose. In cases where this isn't the scenario, it is advisable to collect the clippings using bags, a vacuum, or by raking after each mowing. Nutrients can then be provided to the turf through fertilization to reduce thatch buildup.

### **2. INCREASE BIOLOGICAL ACTIVITY**

Increasing biodegradation rates and reducing surface layering can be achieved by introducing active beneficial bacteria to the grass's root zone. Incorporating active Humate materials or similar products can introduce extra bacteria, supported by micronutrients and regular moisture. This approach is recommended as part of a proactive turf maintenance program.

## **3. BREAKUP THE THATCH LAYER**

DO NOT AERATE THE GRASSPAVE2 SURFACE. While deep blade or hollow tube aeration equipment is commonly used to aerate dense thatch layers for better air and water penetration into the soil, using this equipment can cause significant damage to the plastic structure. It is recommended to use spring tine equipment (horizontal or vertical rotation) to remove large amounts of thatch, which can then be raked and cleared. Any physical damage to grass blades will typically recover in appearance after the next 2 or 3 mowings.

## 4. REMOVE THATCH "SOD"

If the thatch layer has built up to a depth of .75" to 1/25" (maximum) affecting water penetration but still allows dense leaf growth, treating it like sod and using sod cutting equipment could be an option. Adjust the horizontal cutting depth slightly above the top of the rings, cut the sod, roll it up, and remove it. In some cases, this sod can be harvested, potentially having some value, and relocated elsewhere, possibly only needing sand topdressing. Removing the actively growing plant crowns from the Grasspave2 area means reseeding or re-sprigging will be necessary for new turf coverage, similar to the process during a new installation.

## **5. BURN THE THATCH LAYER**

While this action will frequently not be allowed by many municipal codes, or in areas subject to drought and high fire danger potential, burning lawns (usually in the spring) can be an effective thatch management tool. Burning pastures (usually at multiple year intervals) can quickly restore health to soils, reducing weeds, and allowing grass plants to re-establish. It is also possible to introduce another grass species by seed or sod with different growing characteristics, without use of chemical agents.

Managing thatch is a key aspect of turf maintenance, whether you have Grasspave2 installed or not. Local conditions can differ significantly, but local university extension service agents can provide valuable guidance on addressing specific issues. Effectively controlling thatch over Grasspave2 will help maintain the performance of porous pavement for many years. If you have insights into other techniques not covered here, feel free to reach out to us, and we will share the information accordingly.

InvisibleStructures.com



303-233-8383