

# RUTGUARD™ RECOMMENDATIONS

## INFILL MATERIAL

FOR BEST RESULTS, IT IS CRUCIAL TO CHOOSE A TYPE OF INFILL MATERIAL THAT BEST SUITS PROJECT'S SITE CONDITIONS AS WELL AS THE APPLICATION OF THE PROJECT.

### PREPARATION TIPS

It is recommended to install a layer of geotextile fabric on top of the prepared subgrade in order to create a separation layer between the geocell and subgrade. The prepared sub-base area should be free of existing ruts, excavated out, and graded as needed and per specific site conditions.

### GRAVEL INFILL

It is highly recommended to fill the cells with a crushed, angular rock (3/8" - 1") with a mix of fines in order to compact and create a solid base. Unwashed stones such as a decomposed granite, contain a mix of fines for the gravel to lock into place. The material needs to be fully compacted in order to best provide a solid foundation.

If a particular cleaned/washed rock is desired, depending on site conditions, it can be an option to fill the top 1" with a cleaned or washed stone. Something to consider is that if the cleaned rock on the top layer is heavier/stronger/more compacted than the material within the cell below, there is a risk of the top infill pushing down into the bottom infill. This is why it is crucial to ensure that the material being placed inside the geocell is able to compact to form a solid base or foundation for the rolling course.

### GRASS INFILL

For vegetative fill, it is recommended to mix a gravel/crushed aggregate in with the topsoil **before** filling the cells in order to create stability within the cells, especially until vegetation is established. The recommended ratio would be 75% aggregate to 25% topsoil. Clays, silts, and organic materials are typically not recommended for this application.

### PEA GRAVEL

Rounded, smooth, stone (such as pea gravel) typically does not allow the material to "lock" into place. For applications that involve more than foot traffic, consider a crushed, angular rock with a mix of fines for a more solid foundation.

### SAND

Sand is best used within the sub-base as a foundation, rather than the rolling course. For example, paver stone foundations, flagstone foundations, shed and building foundations typically work well with sand, but driving and parking applications typically work best with an unwashed gravel.

### INSTALLATION TIPS

If after filling and compacting the cells, running your foot across the top surface layer moves the material, this is a strong indicator that the material is not interlocking or compacting as it should.

The size of the rock used for infill should typically not exceed 1/3 of the cell's height. For example, if using a 3" tall panel, one would not want to exceed 1" (1/3 of 3 inches) sized rock for use in the cell.

