

How to Design & Spec with TRUEGRID®

TRUEGRID is 100% permeable and offers detention within the 40% void space of the cross section. The figure below demonstrates how the product works under different soil conditions.



TRUEGRID offers a way to design for storm water detention without sacrificing land for a detention pond. The technology has been proven by millions of square feet installed in all climates and soils in all parts of the country. Please contact TRUEGRID for any design questions or quotes, 1-855-355-GRID (4743).

How to Design with TRUEGRID

TRUEGRID can be installed in most paving areas where asphalt or concrete are currently designed. The immediate advantage of TRUEGRID is it will not count towards your impervious cover which will decrease your on-site detention requirements and other drainage needs. The detention capacity within the TRUEGRID section is calculated by taking the TRUEGRID area multiplying by the cross-section depth and multiply by 40%. This will give the cubic feet of detention within TRUEGRID. See example calculation below.



HOW TO CALCULATE STORM WATER DETENTION CAPACITY

Detention Capacity = TRUEGRID Area (A) x Total Aggregate Depth (d) x 40% Void Space = A x d x 0.40 WHERE: d = Depth of Subbase + TRUEGRID Height

EXAMPLE: 1 Acre Lot, TRUEGRID PRO PLUS, 8in Sub Base Fill & Sub Base - 3/4" Clean/Washed Angular Stone Detention Capacity = A x d x 0.40 WHERE: A = 1 Acre = 43,560 sf d = 8 in + 1.8 in = 9.8 in = 0.8 ft Detention Capacity = 43,560 x 0.8 x 0.4 = 13,939 cf

Once the water is detained on site, it should be moved by either sloping the subgrade to allow the water to sheet flow or installing a perforated pipe in the subgrade to point flow the water. If porous sub-soils are present, the water may also exfiltrate out to the groundwater supply below.

How to Specify TRUEGRID

TRUEGRID has cross sections, cut sheets, and details available in PDF, DWG and BIM formats. These can easily be incorporated to drawings to specify TRUEGRID.

The PRO PLUS accessories such as SuperSpots[®], Reflectors, and PLATES[®] can be specified on drawings with the available details. These accessories allow for maintenance-free delineation and markings for TRUEGRID applications.

Why TRUEGRID?

TRUEGRID is designed for commercial and industrial applications and can handle any vehicle on the road. The patented design combines thick-walled cells with integrated flex joints to allow the product to handle high traffic and heavy loads over H-20/HS-20 loading. The flex joints are also designed to handle any ground movement that may occur from shrink/swell soils or freeze/thaw cycles.



The combination of robust male/female locking tabs and patented X-anchors allow for fast and easy installations. The x-anchors allow the product to be installed without the need for staking because the weight of the fill material keeps the product in place.

These patented features and history of performance make TRUEGRID the superior permeable paving solution.