



turf block
accepts
precipitation
that falls
on it
and can
withstand
traffic

TURF BLOCK

(grass grid, open-cell unit paver, geoblock)

Turf block consists of interlocking concrete or plastic cells filled with soil and planted with turf grass or a low-maintenance groundcover. Water passes through the turf block into a reservoir base of crushed aggregate, then infiltrates into the subgrade. Turf block accepts precipitation only, not stormwater runoff. It is available in a variety of colors, shapes, sizes, and textures. Turf block is best suited for areas of low traffic and infrequent parking, such as patios, walkways, and terraces, residential driveways, overflow parking areas, emergency access roads, and street shoulders.



Benefits

Turf block reduces stormwater runoff flow rate, volume, and temperature, filters pollutants, helps recharge groundwater and maintain stream base flows, and controls erosion. In some cases, turf block may reduce or eliminate the need for an underground storm drain system or a curb and gutter system. It has a green appearance and structural strength.

Vegetation

Turf block systems can be planted with a variety of grasses and low growing groundcovers that can withstand foot and vehicular traffic and occasional heavy loads. Self-sustaining native species are recommended.

Maintenance

Maintenance is similar to a regular lawn, requiring mowing, irrigation, raking, and occasional reseeding. Native grass species suitable for the specific area can minimize maintenance needs. It is important to control site erosion, sedimentation, and soil compaction to prevent clogging and maintain permeability.

Cost

Installation costs \$4 to \$6 per square foot, higher than for conventional concrete or asphalt paving. This cost may be offset if it is not necessary to install an underground drainage system or curb and gutter drainage system.

Safety and Siting Requirements

- Follow manufacturer's installation and siting instructions.
- Use only in gravelly sand, loamy sand or other pervious native soils.
- Like other pervious pavement, turf blocks are not allowed for areas where hazardous material is stored or transported.
- Use in low to moderate traffic areas without high weight-bearing loads.
- Refer to Portland's Stormwater Management Manual for details on sizing, placement, and design.

Permits

- Using turf blocks in public parking areas, walkways or rights-of-way requires a building permit from the City's Bureau of Development Services, with review from the Portland Office of Transportation.
- Stormwater systems on non-residential sites need commercial building permits.

Examples

Dosha Building, 2281 NW Glisan

SE Water Avenue - across from OMSI

Washington School for the Blind

2310 E 13th street

Vancouver, Washington



ENVIRONMENTAL SERVICES
CITY OF PORTLAND
working for clean rivers



www.cleanriverspdx.org or 503-823-7740

For Clean River Rewards information www.CleanRiverRewards.com or 503-823-1371

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