

INSTALLATION DETAILS FOR CORE Grass 50-35

COREgrass - Honeycomb Grass Stabilizer Panels:

Panels shall be $\pm 45.3'' \times \pm 30.7'' \times 1.4''$ (1.15 m x .78 m x 35mm) (MEDIUM) (JUMBO panels also available = 3X medium panel size) heavy duty green injection-molded (virgin/recycled) polypropylene panel as manufactured by CORE Landscape Products, 2750 Cumberland Road, Courtenay, BC, Canada V9N 9P1 and shall be capable of supporting wheelchairs and occasional light truck traffic. Compressive strength is tested under ASTM D 1621-04a and shall be 1016 kg/0.0175 m². Loading capacity shall be > 250 tons/m², > 350 psi, when filled with Structural Soil (as per specs provided by CORE Landscape Products) over the specified base.

CORE GRASS HONEYCOMB CELL, BASE AND INFILL MATERIALS

Specifier Notes (further details in Execution section):

- A. Stabilize ground with a minimum road crush base on 2" (50 mm) (site dependant). Compact this layer. If road crush is already present, remove compacted top layer (min. 1") and regrade and redress as necessary.
- B. Add 2-2.75" (50-65mm) of sand/soil blend (60/40 or 70/30) to compacted road crush layer. Compact this layer.
- C. Lay the grids. For a permeable system, fill cells with Structural Soil as per recipe offered by CORE Landscape Products. Structural Soil can be created from locally sourced materials.
- D. Infill sizes with Structural Soil and compact with lawn roller and apply water. Reapply Structural Soil to 10 mm over top of grid and compact. You should not be able to see the grid.
- E. Apply grass seed or hydroseed to previously leveled and compacted soil in grids. If laying sod over top of grid, ensure that roots are fully established (and protected) in grids cells prior to use (see Note E).
- F. Allow 4-6 weeks for grass seed and sod to fully establish prior to vehicular or pedestrian use.
- G. Vehicular passes per day not limited when using grass seed. If using sod, vehicle passes limited to 5 per day.

EXECUTION

EXAMINATION

- A. Evaluate site conditions. Notify the Engineer and refrain from excavation until site conditions have been corrected.
- B. Evaluate that the layout of the project is as indicated on the drawings. Notify the Engineer and do not proceed until the layout of the project matches the drawings.

A. Subgrade Preparation:

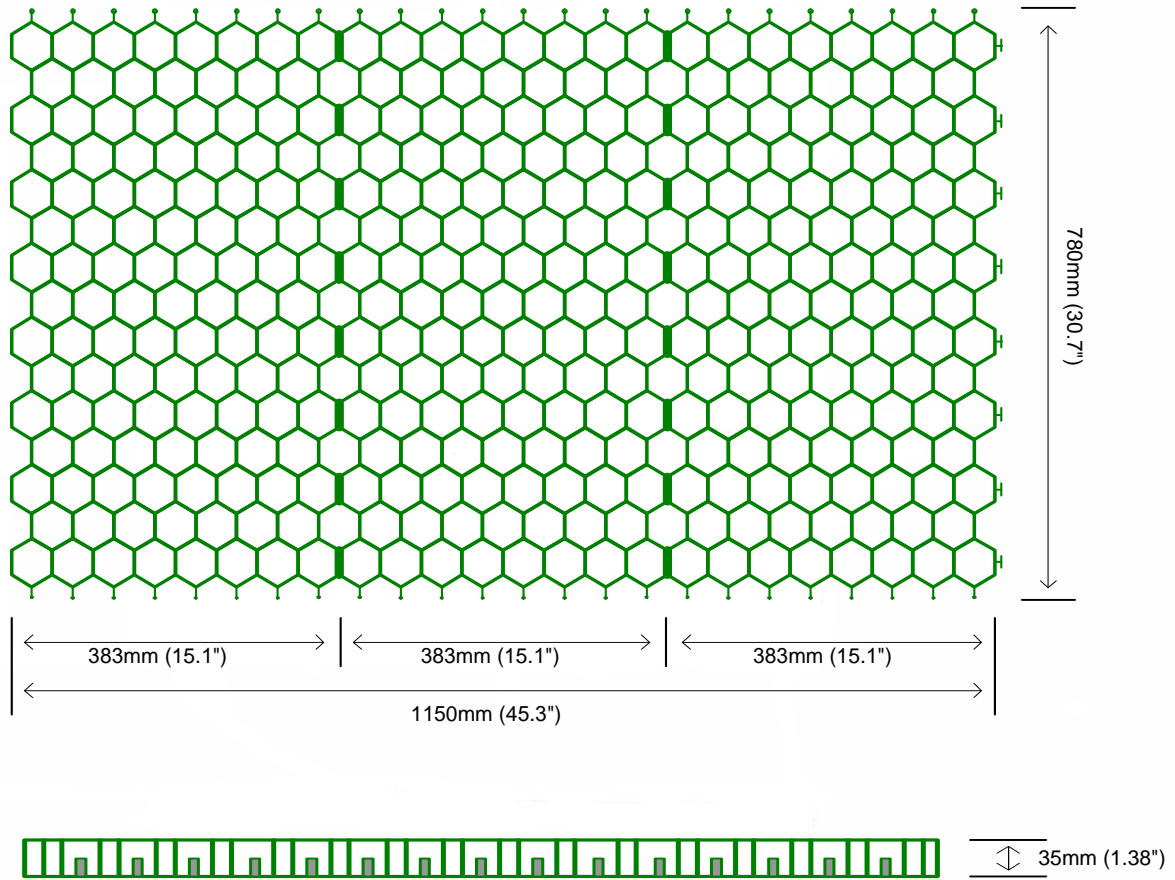
1. Excavate and shape foundation soils to grades, elevations, and dimensions as indicated on the drawings. Be sure water will flow away from any structures. Install moisture barrier if projects meets a foundation with a basement.
2. Confirm foundation soil meets specified compaction through proof rolling or other conventional method and is examined by the Engineer. If unacceptable foundation soils are encountered, excavate affected areas and replace these areas with suitable quality material as directed by the Engineer. For subgrade soil compaction a vibratory plate, compactor, or roller is recommended.

B. Base Preparation:

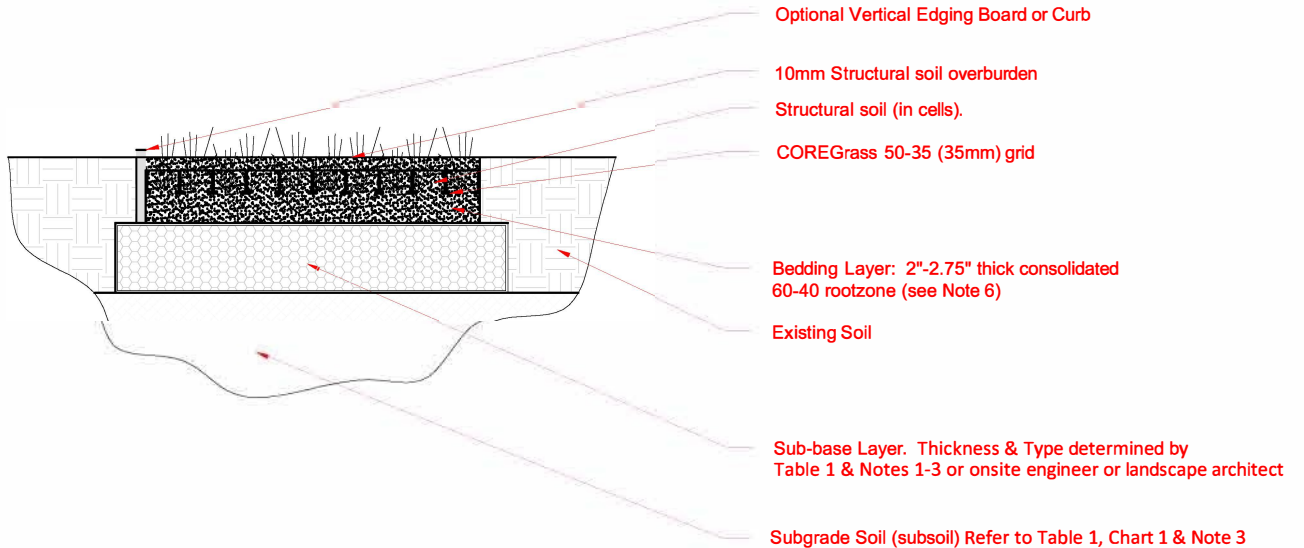
1. For subgrade or base preparation, level and clear the area of large objects such as rocks, or pieces of wood. Excavate area allowing for unit thickness and top layer. Leave 45 mm (1.8 inches) for COREgrass® 50-35 (35 mm) and top layer (10 mm) to meet final grade.
2. Examine Horticultural subsoil at the XXXX to verify suitable compaction, elevation, drainage, and/or improper gradients before commencing work. Discrepancies from detailed or specified conditions shall be reported to the Landscape Architect and the Owner's Representative so as to not delay work.
3. Installation constitutes acceptance by the Contractor of existing conditions and assuming responsibility for satisfactory performance of the system.
4. Place the panels. Position the panels on the prepared subgrade. Cut to shape with aviation shears or skill saw with fine-toothed blade. Use protective gloves to avoid abrasions. Top of cell panels should be 1 cm (10 mm) below adjacent hard surfaced pavements or final grade.
5. All hard surfaces abutting areas to receive Grass Surfacing shall be in place prior to commencing work. Finished soil work shall be no more or no less than 1/2" below adjacent hard surfaces. Adjust soil levels accordingly so that this will be possible.
6. Place first row of panels against a stationary edge if possible. The panels have interlocking connectors; however some installations do not require them to be used. Use connectors only in areas with greater traffic or steeper grades. No anchors are needed for grass stabilizer panels under a 20 degree slope.
7. Fill cells with chosen infill. Cell walls must be sufficiently covered with infill to prevent any equipment or load bearing vehicular traffic from damaging the grid.
8. Compact infill as per Landscape Architect or Project Engineer specifications.
9. Contour compacted surface to specified elevation and grade as indicated on the drawings.
10. Install edge restraint if desired. Standard metal, plastic, concrete edge restraints or concrete curbing may be used.

Post-Placement

- A. Snow plowing – Use shovels or blades with plastic blades.
- B. Use of salt for de-icing is allowed.



1 COREgrass™ 50-35 :Grassed Surface Paving Grid
Scale : N.T.S.



2 COREgrass™ 50-35 :Grassed Surface: Typical Construction Profile
Scale : N.T.S.

Table 1 : Typical Sub-base Thickness (Tx) Requirements - refer to 2 Typical Construction Profile

APPLICATION/LOAD	CBR (%) STRENGTH OF SUBGRADE SOIL	(Tx) DoT SUB-BASE THICKNESS (mm & inches) (see Notes 1-5)	
		mm	inches
Fire trucks, Coaches and occasional HGV access	≥ 6	100mm	4"
	= 4 < 6	120mm	4.75"
	= 2 < 4	190mm	7.5"
	= 1 < 2	380mm	15"
Light vehicle access and overspill car parking	≥ 6	100mm	4"
	= 4 < 6	100mm	4"
	= 2 < 4	135mm	5.4"
	= 1 < 2	260mm	10.3"

Table 2 : Paving Grid Specification

Description	Data
Product	COREgrass™ 50-35
Material	100% Recycled Polypropylene
Color options	Green
Paver dimensions	45.3" x 30.7" x 1.38" (1150 x 780 mm)
Nominal internal cell size	2.0" (50 mm)
Structure Type	Rigid-walled closed cell
Cell wall thickness	90 mil (2.3 mm)
Weight (Per square meter)	6.4 lbs/m² (2.9 kg/m²)
Load bearing capacity (filled)	>250 tons/m²
Crush Resistance (unfilled)	150 tons /m²
Basal support & Anti-Shear	Integral 5.5" (140 mm) long section ground spikes (on slopes > 20°)
Connection type	Interlocking built-in Male-Female connector
Chemical resistance	Excellent
UV resistance	High
Toxicity	Non Toxic
Bedding Layer	60:40 rootzone (see Note 6) : 2"-2.75" (50-70mm) thick
Grid fill (seed bed)	Structural Soil (see Note 7)
Grass seed	Seed as per local specifications.
Fertiliser	Pre-seed fertiliser followed up with appropriate seasonal fertiliser
Sub-base type	DoT Class 5 or a modified permeable Class 7 reduced Fines sub-base (Table 1 & Notes 1-5)
Sub-base reinforcement	Geogrid optional

DESIGN NOTES:

- Note 1: A subbase (i.e. 'Class 5' Aggregate) may be used provided that an adequate drainage system is installed. Alternatively, a permeable / open-graded 'reduced fines' subbase layer may be specified as part of Low Impact Development (LID) or National Pollutant Discharge Elimination System (NPDES).
- Note 2: Where drains are omitted and a 'reduced fines' subbase is specified for LID/NPDES this must be covered with either a geotextile fabric and/or a clean, suitably graded gravel blinding to avoid the bedding layer leaching into the subbase.
- Note 3: Specific advice on CBR% strengths, ground conditions and construction over weak ground with a CBR less than 1% is available upon request. CBR% = California Bearing Ratio, a measurement of subgrade soil strength. (or equivalent measures for your state / province)
- Note 4: If required, typical drainage systems (not pictured) use 4" diameter perforated pipe drains laid at minimum gradient 1:100, bedded on gravel in trench backfilled with covered with a geotextile fabric, pipes leading to a suitable outfall or dry well. Drains installed down center or one edge of areas up to 16' wide. Wider areas may require additional lateral drains at 16'-32' centers. Drainage design should be determined by specific site conditions.
- Note 5: Drainage for a LID/NPDES application will vary according to the site but generally omits the requirement for extensive pipe and trench drainage systems within the subbase layer and may require an additional layer of geotextile fabric at base of construction.
- Note 6: Root zone bedding and paver fill must be a free-draining, structurally sound proprietary blend of sand:soil or sand:compost such as used in sports/golf construction and normally identified as a 60:40 or 70:30 ratio blend. The use of site-won materials or in-situ self blending is NOT recommended without taking further advice.
- Note 7: Structural Soil mix as provided by Core Landscape Products.
- Note 8: Maximum advised gradient for traffic applications: 12% (1:8) 7°. Make use of specific pegging points if required for steep slope applications (i.e. >20°). Pegging is not necessary for standard access.

Please note that the information above is given as a guide only. All sizes and weights may vary to what is published.

Chart 1: Field guidance for estimating sub-grade strengths

Consistency	Indicator			Strength	
	Tactile (feel)	Visual (observation)	Mechanical (test)	CBR	CU
			SPT	%	kN/sqm
Very Soft	Hand sample squeezes through fingers	Man standing will sink > 3"	<2	<1	<25
Soft	Easily moulded by finger pressure	Man walking sinks 2"- 3"	2-4	Around 1	25-40
Medium	Moulded by moderate finger pressure	Man walking sinks 1"	4-8	1-2	40-75
Firm	Moulded by strong finger pressure	Utility truck ruts 0.5" - 1"	8-15	2-4	40-75
Stiff	Cannot be moulded but can be indented by thumb	Loaded construction vehicle ruts by 1"	15-30	4-6	75-150

This field guide is provided as an aid to assessing the mechanical stabilization requirements in commonly encountered site conditions. CORE Landscape Products accepts no responsibility for any loss or damage resulting from the use of this guide.

Please note that the information above is given as a guide only. All sizes and weights are nominal figures and may vary to what is published. CORE Landscape Products cannot be liable for damage caused by incorrect installation of this product. Final determination of the suitability of any information or material for the use contemplated and the manner of its use is the sole responsibility of the user and the user must assume all risk and responsibility in connection therewith.