

**STAY GREEN ... STAY PERMEABLE**



**GrassGuard** [www.grassguard.biz](http://www.grassguard.biz) <sup>®</sup>  
**Grass Reinforcement Mesh**



## WHY GRASSGUARD?

- **MINIMAL SITE PREPARATION**
- **QUICK INSTALLATION**
- **COST EFFICIENT**
- **USGBC LEED CREDITS**
- **LIMITED PERMITTING**
- **LOW MAINTENANCE**
- **AQUIFER REPLENISHMENT**
- **SURFACE REMAINS GREEN**
- **UV STABILIZED**



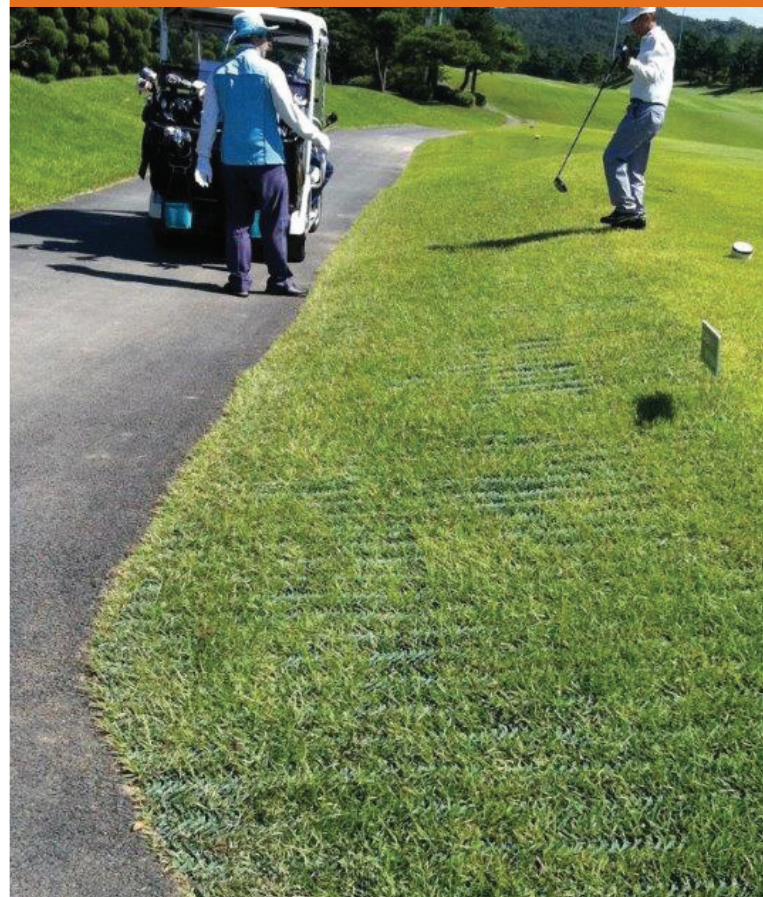
**PROJECT:** Louisiana State University  
Baton Rouge, Louisiana

**PRODUCT:** GrassGuard®HD

**GrassGuard**<sup>®</sup>  
Grass Reinforcement Mesh  
[www.grassguard.biz](http://www.grassguard.biz)










## APPLICATIONS

- **GRASS / OVERFLOW PARKING**  
Universities  
Churches  
Fairgrounds  
Festivals
- **PATHS**  
Bicycle  
Pedestrian  
Equestrian
- **ACCESS**  
Recreational Vehicles / Bays  
Shoulder / Median  
Handicap
- **GOLF COURSES**
- **HELICOPTER / LANDING PADS**
- **CANOE / SMALL CRAFT LAUNCH**
- **SCOUR & SLOPE PROTECTION**





# TRAFFIC CONDITIONS

 <p><b>GrassGuard<sup>SD</sup></b> STANDARD DUTY</p>	 <p>OCCASIONAL / CONSECUTIVE VEHICULAR USE</p>	<p>SCOUR PROTECTION, LIGHT TRAFFIC AREAS, WALKWAYS, BIKE PATHS, HANDICAP ACCESS</p>	
 <p><b>GrassGuard<sup>HD</sup></b> HEAVY DUTY</p>	 <p>OCCASIONAL / CONSECUTIVE VEHICULAR USE</p>	<p>HEAVIER TRAFFIC AREAS, PARKING LOTS, R.V. PARKING, ACCESS BAYS, EQUESTRIAN PATHS, LANDING PADS, TAXIWAYS</p>	
 <p><b>GrassGuard<sup>HDX</sup></b> XTRA HEAVY DUTY</p>	 <p>REGULAR VEHICULAR USE</p>	<p>(HEAVY DUTY WITH A GEOGRID BACKING) AREAS WHERE ADDITIONAL REINFORCEMENT MAY BE REQUIRED</p>	

The GrassGuard® system is suitable for use in the applications described in our literature and our website, provided proper installation and engineering principles are followed. A professional engineer should be consulted before installation of GrassGuard®. ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.

## LEED CREDITS

### Building Design & Construction

#### Location and Transportation (LT)

Sensitive Land Protection  
Reduced Parking Footprint

#### Sustainable Sites (SS)

Protect or Restore Habitat  
Open Space  
Rainwater Management  
Heat Island Reduction

#### Water Efficiency (WE)

Prerequisite -  
Outdoor Water Use Reduction

### Building Operations & Maintenance

#### Sustainable Sites (SS)

Site Improvement Plan  
Rainwater Management

Site Management  
Heat Island Reduction



PROJECT: 2017 Annual Tarpon Rodeo  
Grand Isle, Louisiana

PRODUCT: GrassGuard®HD

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## EXISTING GRASSED AREA

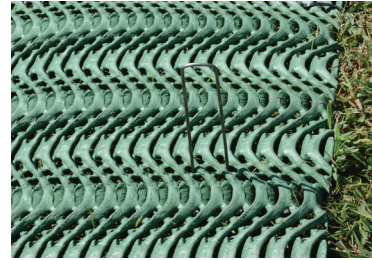
1. Ensure the surface is relatively flat and well drained. Cut the grass short and remove clippings. Fill any shallow depressions on the grassed surface with a 70:30 blend of sharp sand and good quality topsoil-level and firm. Seed may be applied at this stage or later to avoid disturbance while laying the mesh.
2. It is advisable to unroll the mesh rolls and leave for a minimum of one hour. This helps the mesh regain its natural flatness.
3. Lay the mesh directly onto the existing surface **[ROUGH SIDE UP]** and fix one edge using metal sod staples or sod pins, pulling the mesh taut. For external edges, we advise installing every 12" to ensure there are no raised edges. Ensure the mesh lies flat to surface.
4. Along the middle of each roll, install 3.5' as required.
5. Butt adjacent rolls together. Overlapping only recommended when used for scour or slope protection.
6. Secure the butt joints by using the pins/staples every 12" (each metal sod staple can join both edges). Fix the middle of the new roll every 3.5' - 7' as required. Repeat this process, using additional pins/staples to secure any raised areas or where any bridging or rippling of the rolls is evident.
7. When you are satisfied that the mesh is laid flat and secure, a brushing of good quality sandy topsoil over the mesh may be applied to any low areas, but this is not essential.
8. Any areas that have been leveled with sandy topsoil can be seeded at this stage.
9. Best results are obtained by not using the area until the grass has grown through the mesh apertures. This usually takes 4-8 weeks in the growing season. The area can be trafficked immediately, but grass will benefit from traffic restriction during establishment. If the product is used too early before the grass has had time to grow through, the mesh can become slippery in wet conditions.
10. Once the grass has grown through, initial mowing can be carried out. Set blades to cut fairly high so that contact with the mesh is not made. When the grass is established and the plants are entwined with the mesh, the grass can be cut normally (this may take up to 3 cuts).
11. If any raised areas appear after the initial installation, these can be addressed by using additional U-pins/plastic pegs.



EASY HANDLING



CUTTING THE MESH



INSTALLING WITH SOD STAPLES



AFTER INSTALLATION

# SPECIFICATIONS

## GrassGuard®SD

### STANDARD DUTY

INDEX PROPERTIES			
MEASUREMENT	TEST METHOD	UNITS	MD VALUES
Weight	Direct Measurement	lbs/sf	0.24
Polymer	HDPE	N/A	N/A
Color	Green	N/A	N/A
UV Protection	N/A	N/A	YES
Thickness	Direct Measurement	in	0.43
Tensile Strength	ISO 10319	lb/ft	800
Residual Thickness @ 500 kPa	ASTM D1621	%	40
Strain at Max Tensile Load	ISO 10319	%	19.0
Slip Risk OTV Value	ASTM E303		>40 (low slip potential)

## GrassGuard®HD

### HEAVY DUTY

INDEX PROPERTIES			
MEASUREMENT	TEST METHOD	UNITS	MD VALUES
Weight	Direct Measurement	lbs/sf	0.41
Polymer	HDPE	N/A	N/A
Color	Green	N/A	N/A
UV Protection	N/A	N/A	YES
Thickness	Direct Measurement	in	0.55
Tensile Strength	ISO 10319	lb/ft	1,150
Residual Thickness @ 500 kPa	ASTM D1621	%	60
Strain at Max Tensile Load	ISO 10319	%	16.5
Slip Risk OTV Value	ASTM E303		>40 (low slip potential)

## GrassGuard®HDX

### XTRA HEAVY DUTY

INDEX PROPERTIES			
MEASUREMENT	TEST METHOD	UNITS	MD VALUES
Weight	Direct Measurement	lbs/sf	0.42
Polymer	HDPE	N/A	N/A
Color	Green	N/A	N/A
UV Protection	N/A	N/A	YES
Thickness	Direct Measurement	in	0.61
Tensile Strength	ISO 10319	lb/ft	1,150
Residual Thickness @ 500 kPa	ASTM D1621	%	60
Strain at Max Tensile Load	ISO 10319	%	16.5
Slip Risk OTV Value	ASTM E303		>40 (low slip potential)

Tensar TX 160 mechanically attached to the HD GrassGuard® .

## ROLL SIZES

DIMENSIONS	LENGTH (ft)	WIDTH (ft)	AREA (sf)
Standard Roll Sizes	33	3.5	115.5
	66	3.5	231
	33	7	231
	66	7	462
Master Roll Sizes	350	7	2,450



# FREQUENTLY ASKED QUESTIONS

## 1. What is GrassGuard®?

- GrassGuard® is a green plastic mesh used to reinforce and strengthen grass surfaces.

## 2. What applications can GrassGuard® be used for?

- Surface Reinforcement
- Scour Protection

## 3. What are the available product types?

- Standard Duty (SD)
- Heavy Duty (HD)
- Xtra Heavy Duty (HDX)

## 4. What are the available product dimensions?

- 3.5' x 33'
- 3.5' x 66'
- 7' x 33'
- 7' x 66'
- 7' x 350'

## 5. Can GrassGuard® be installed directly onto existing grass?

- Yes, but mowing is recommended prior to application.

## 6. Can GrassGuard® be installed on recently prepared surfaces with no existing grass growth?

- Yes; however, the area must be seeded prior to installation to promote grass or other native vegetative growth.

## 7. What site preparation is necessary prior to installation of GrassGuard®?

- If there is existing grass on the desired area, simply mow the grass short and remove any debris before installing GrassGuard®.
- If there is no vegetation on the desired area, surface must be cleared of any debris prior to installation, and seeded prior to installation.

## 8. Do you seed before or after installation?

- You can seed either before or after installation. The open space in GrassGuard® allows for the seed to make contact with the ground.
- If you are installing on a slope, it is recommended to install a double net straw blanket or equal over the seed prior to installation of GrassGuard®. The straw blanket will prevent erosion, secure the seed, trap moisture and heat to promote growth.

## 9. How is GrassGuard® secured?

- Either using Sod Staples or Sod Pins.
- Recommended installation rate is one (1) staple or pin per SF.

## 10. How do I delineate parking spaces?

- A temporary solution is to paint the lines.
- A permanent solution is to install yellow plastic soil markers to delineate the lines.

## 11. How does GrassGuard® compare to concrete pavement and porous concrete products?

- Concrete pavement requires substantial site prep: clearing and grubbing, excavation, forming and then pouring and leveling of concrete. Concrete pavement is impervious and typically requires stormwater detention.
- Porous concrete and certain concrete pavers are considered pervious options, however both require similar site prep as concrete pavement with the addition of an aggregate drainage layer.
- GrassGuard® installation requires little to no site prep. Simply mow grass, roll product out and secure using sod staples or pins.

# TOOLS FOR SUCCESSFUL INSTALLATION

## SOD STAPLES

1 PER SQUARE FOOT

AVAILABLE  
6" X 1" 6"  
8" X 1" X 8"



1,000  
PER BOX

## SAND SHOVEL



## PINS

AVAILABLE  
8"  
12"  
18"



100  
PER BOX

## SOD STAPLE PRO DRIVER



## SPIKE NAIL WITH WASHER FOR HARD SURFACES



VARIABLE LENGTH

## BATTERY OR ELECTRIC SKILL SAW / FINE TOOTH BLADE



## SOD STAPLE APRON



(FOR LABORER TO CARRY STAPLES)

## 2" X 4" X 8' STRAIGHT EDGE

(to slide under material to keep  
saw out of dirt)



## LARGE HEAD HAMMER



(MANUAL DRIVER)





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800 848 4500

**GrassGuard®**  
GRASS REINFORCEMENT MESH



GrassGuard® may change product specifications without notice. The GrassGuard® system is suitable for use in the application described in our literature and on our website, provided proper installation and engineering principles are followed. Professional engineering should be consulted before installation of GrassGuard® units to assure proper design. ALL EXPRESSED OR IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.