

SECTION 09 68 18 SHEET CARPETING & SYNTHETIC TURF

Grid – builtbygrid.com - Dallas, Texas USA – 469.482.9800

CSI | Grid Training Turf

PART 1 – GENERAL

1.1 SCOPE INCLUDES

- A. Section Includes: Grid Training Turf synthetic system including sport foam backing, field turf, inlaid markings and accessory components.
- B. Related Sections: Section(s) related to this section include:
 1. Concrete Substrate: Division 3 Concrete Section(s).
 2. Plywood Substrate: Division 6.

1.2 REFERENCES

- A. Standards listed by reference, including revisions by issuing authority, form a part of this specification section to extent indicated. Standards listed are identified by issuing authority, authority abbreviation, designation number, title or other designation established by issuing authority. Standards subsequently referenced herein are referred to by issuing authority abbreviation and standard designation.
- B. American Society for Testing and Materials (ASTM):
 - a. D1577 – Standard Test Method for Linear Density of Textile Fiber
 - b. D5848 – Standard Test Method for Mass Per Unit Area of Pile Yarn Floor Covering
 - c. D418 – Standard Test Method for Testing Pile Yarn Floor Covering Construction
 - d. D1338 – Standard Test Method for Tuft Bind of Pile Yarn Floor Coverings
 - e. D1682 – Standard Method of Test for Breaking Load and Elongation of Textile Fabrics
 - f. D5034 – Standard Test Method of Breaking Strength and Elongation of Textile Fabrics (Grab Test)
 - g. F1015 – Standard Test Method for Relative Abrasiveness of Synthetic Turf Playing Surfaces
 - h. F1551 – Standard Test Methods for Water Permeability
 - i. D2859 – Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials
 - j. F355 – Standard Test Method for Shock-Absorbing Properties of Playing Surfaces
 - k. F1936 – Standard Test Method for Shock-Absorbing Properties of North American Football Field Playing Systems as Measured in the Field
 - l. D1557 – Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort.
- C. National Federation of High School (NFHS) Rules; FIFA Rules of the Game; NCAA Soccer Rules, as applicable.
- D. ASBA Sports Fields Contractor Manual
- E. Carpet & Rug Institute suggested guidelines.

1.3 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide a synthetic turf system, which has been manufactured and installed to maintain performance criteria stated by manufacturer without defects, damage, or failure.

1.4 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of Contract and Division 1 Submittal Procedures Section.
- B. Product Data: Submit product data, including manufacturer’s guide specifications product sheet, for specified products.
- C. Shop Drawings: Submit shop drawings showing layout, profiles, and product components, including anchorage, accessories, finish colors, patterns, and textures.
 1. Including a color key code showing roll direction, locations of each type of material & field markings
- D. Samples: Submit selection and verification samples for finishes, colors, and textures.
- E. Quality Assurance Submittals: Submit the following:

1. Test Reports: Certified test reports showing compliance with specified performance characteristics and physical properties.
2. Certificates: Product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.
3. Manufacturer's Instructions: Manufacturer's installation instructions.
4. Manufacturer's Field Reports: Manufacturer's field reports specified herein.

F. Closeout Submittals: Submit the following:

1. Operation and Maintenance Data: Operation and maintenance data for Installed products in accordance with Division 1 Closeout Submittals (Maintenance Data and Operational Data) Section. Include methods for maintaining installed products and precautions against cleaning materials and methods detrimental to finishes and performance.
2. Warranty: Warranty documents specified herein.

1.5 QUALITY ASSURANCE & WARRANTY

Specifier Note: Coordinate paragraph below with listed obligations for code compliance particular to this sections and project requirements. General statements to comply with code are typically addressed in Division 1.

A. Qualifications:

1. Installer Qualifications: Installer experienced in performing work of this section who has specialized in installation of work like that required for this project.
 - a. Certificate: When requested, submit certificate indicating qualification.
2. Manufacturer's Qualifications: Manufacturer capable of providing field service representation during construction and approving application method.

B. Mock-Ups: Install at project site a job mock-up using acceptable products and manufacturer-approved installation methods. Obtain Owner's and Architect's acceptance of finish color, texture and pattern, and workmanship standard. Comply with Division 1 Quality Control (Mock-Up Requirements) Section.

1. Mock-Up Size: 12"x12" sample specific to project requirements

C. Pre-installation Meetings: Conduct pre-installation meeting (in-person or virtual) to verify project requirements, substrate conditions, manufacturer's instructions, and manufacturer's warranty requirements.

1.6 DELIVERY, STORAGE & HANDLING

- A. General: Comply with Division 1 Product Requirements Sections.
- B. Ordering: Comply with Grid's ordering instructions and lead time requirements to avoid construction delays.
- C. Delivery: Deliver materials in Grid's original, unopened, undamaged containers with identification labels intact.
- D. Storage and Protection: Store materials at temperature and humidity conditions recommended by manufacturer and protect from exposure to harmful weather conditions.

1.7 PROJECT CONDITIONS

- A. Temperature Requirements: Maintain air temperature in spaces where products will be installed for 72-hour period before, full duration during and 72 hours after installation as recommended by Grid.
- B. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings.

1.8 WARRANTY

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Grid's warranty is in addition to and not a limitation of other rights the Owner may have under Contract Documents.
 1. Material Limited Warranty Period: 6 years after substantial completion is reached
 2. Fiber Fade Warranty Period: 10 years after substantial completion is reached
 3. Installation Limited Warranty Period: 1 year after substantial completion is reached

Specifier Note: Coordinate paragraph above with manufacturer's warranty details

1.9 MAINTENANCE

- A. Comply with manufacturer’s written maintenance guide specific to usage of a pH neutral cleaner such as Vital Oxide.
- B. Extra Materials: Deliver to Owner extra materials from same production run as products installed. Package products with protective covering and identify with descriptive labels. Comply with Division 1 Closeout Submittals (Maintenance Materials) Section.
 - 1. Quantity: Furnish quantity of Grid Training Turf equal to % required by project documents
 - 2. Delivery, Storage and Protection: Comply with Owner’s requirements for delivery, storage, and protection of extra materials.

Specifier Note: *Coordinate paragraph above with specifying percentage, if any required as attic stock*

PART 2 – PRODUCTS

2.1 MATERIALS & ATTRIBUTES

- A. Designed with a 50/50 fiber blend featuring a primary Polyethylene stalk supported by a secondary Nylon thatch fiber. This blend creates a stable system durable for indoor push sleds, tires, weights, and cleats. The 8mm sport foam backing creates a safe surface, and no rubber infill makes for easy maintenance. Innovated by Grid specifically for both indoor and outdoor fitness applications. Combine Grid Training Turf with Grid Recycled & inlaid lifting platforms.
- B. Surface: Grass texture & seamless with nano-venting throughout surface
- C. **Grid Training Turf.** Dallas, TX 75206 | Phone 469.482.9800 | Email: info@builtbygrid.com
 - 1. Grid Training Turf Colors:
 - a. Primary: Green
 - b. Colors: 8 additional options. Refer to Grid’s color options
 - 2. Grid Training Turf Thickness:
 - a. Fiber Pile Height: 18mm
 - b. Sport Backing: 8mm
 - c. Total Thickness: 24mm (1”)
 - d. Optional Grid Recycled G-Shock Underlayment
 - 1. 8mm
 - 2. 12mm
 - 3. 20mm
 - 3. Primary Backing
 - a. Primary backing must be a dual layered woven polypropylene material

Specifier Note: *Below Grid Training Turf for sports surfacing combines quality turf fibers in a 50/50 dual blend with a built-in sport foam backing all without rubber infill. It is available in 9 colors and custom inlaid gamelines and field markings are cut in Grid’s waterjet machine for precise location and sewn-in durability.*

PERFORMANCE	STANDARD	THICKNESS: 1"
Height	ASTM D5823	
Total		1" (24mm) Nominal
Pile		1 1/16" (18mm)
Backing		5/16" (8mm)
Roll Width		12' - All Colors 15' - Green Only
Roll Length		Custom per project - Refer to Grid's Layout
Weight	ASTM D5823	
Face		45 oz/yd ²
Fabric Weight		145 oz/yd ²
Primary Backing		8 oz/yd ²
Secondary Coating		80 oz/yd ²
Tolerances		Height: +1mm -1mm Width: +1/2" - 0 Weight: +5oz -10oz
Tuft Bind	ASTM D1335	>8 lbs.
Grab Tear Strength	ASTM D2256	>200 lbs.
Lead Content	ASTM D2766	<50 ppm
Total Yarn Linear Density	ASTM D1577	9550 Denier
Tensile Strength	ASTM D5034	8.0 lbs
Flammability	ASTM D2859	Pass
Stitch Rate	ASTM D5793	14.5 per 3"
Machine Gauge	ASTM D5793	1/4"
Fiber Thickness	ASTM D3218	10 mils

D. **Gamelines & Field Markings:** Determines per the project requirements. Refer to Grid for specific design options

1. Gamelines and Markings are to be inlaid, secondary turf color and sewn into the primary turf
 - a. Logo/Branding
 - b. Agility Ladder
 - c. Hash Marks and 5-Yard Lines
 - d. Yardage Numbers
 - e. Track Lines
2. Painted markings are approved

E. **Grid Sport Bond Adhesive.**

1. 5 gallon, single-component, moisture cured adhesive. Applied with a 1/8" Trowel

PRODUCT	Grid Sport Bond Adhesive
Description	Grid Sport Bond Adhesive is specifically designed for the installation of Grid sport flooring both indoors and outdoors. This single-component adhesive is moisture cured and results in a superior adhesion to concrete, elastomers and wood substrates.
Adhesive Type	One-Part urethane adhesive
Size	5-Gallon Pail
Method of Applying	Trowel - 1/16" Square Notch
Working Time	45 - 60 Minutes
Coverage Rate	Up to 100 ft ² /gal
Cure Method	Moisture Cured
Reaction to Moisture	Waterproof
Weight	60 Lb per Pail
VOC Content	.35lb p/gal
Freeze/Thaw	Stable
Flashpoint	>200 degrees F
Application Temperature	40-100 degrees F
Calcium Chloride Test	Maximum 3.0lb p/ 1,000 ft ² in 24 hours
Relative Humidity (rH) Test	99%
Shelf Life	18 months

2.2 PRODUCT SUBSTITUTIONS

A. Substitutions: No substitutions permitted.

2.3 RELATED MATERIALS

A. Related Materials: Refer to other sections listed in Related Sections paragraph herein for related materials.

2.4 SOURCE QUALITY

A. Source Quality: Obtain turf materials from a single manufacturer based in the United States.

PART 3 – EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

A. Compliance: Comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions and product carton instructions for installation.

3.2 EXAMINATION

A. Site Verification of Conditions: Verify substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer's instructions.

3.3 PREPARATION

A. Surface Preparation: [Specify applicable product preparation requirements.].

Specifier Note: Coordinate article below with manufacturer's recommended installation details and requirements.

3.4 INSTALLATION/APPLICATION/CONSTRUCTION

A. Training Turf Installation: Comply with Grid Installation Manual for procedures and techniques.

B. Finish Color/Textures/Patterns: [Specify installation finishes coordinated with finishes specified in Part 2 Products.].

C. Related Products Installation: Refer to other sections listed in Related Sections paragraph herein for related products installation.

3.5 FIELD QUALITY REQUIREMENTS

Specifier Note: *Edit paragraph below. Establish number and duration of periodic site visits with Owner and manufacturer and specify below. Consult with manufacturer for services required. Coordinate paragraph below with Division 1 Quality Assurance Section and Part 1 Quality Assurance Submittals herein. Delete if manufacturer's field service not required.*

A. Manufacturer's Field Services: Upon Owner's request, provide manufacturer's field service consisting of product use recommendations and periodic site visit for inspection of product installation in accordance with manufacturer's instructions.

1. Site Visits: *[Specify number and duration of periodic site visits.]*

3.6 CLEANING

A. Cleaning: Remove temporary coverings and protection of adjacent work areas. Repair or replace damaged installed products. Clean installed products in accordance with manufacturer's instructions prior to Owner's acceptance. Remove construction debris from project site and legally dispose of debris.

3.7 PROTECTION

A. Protection: Protect installed product and finished surfaces from damage during construction.

Specifier Note: *Retain article below to suit project requirements. Article may be used to describe specific criteria requirements of similar products or equipment.*

3.8 SCHEDULES

Specifier Note: *Retain paragraph below to suit project requirements. Reference a schedule or include a schedule as an attachment, which indicates where to locate products and equipment.*

A. Schedules: *[Specify reference to applicable schedules.]*

END OF SECTION