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## RECOMMENDED SPECIFICATIONS

This document is designed to serve as a guide for developing a professional product and installation specification for synthetic turf for landscaping, playground and golfing applications.

### Company Requirements

- 1) Must be experienced in the manufacture and installation of this specific type of synthetic infill grass system for at least 5 years with the same manufacturer, product and company they are proposing for this field. This includes the tuft fiber, the backing, the backing coating, and the installation method
- 2) The designated supervisory personnel on the project must be certified by the turf manufacturer, as competent in the installation of this material, including seams and proper installation of the infill mixture.
- 3) The turf contractor and turf manufacturer (if different from the company) shall provide evidence that their turf system does not violate any other manufacturer's patents, patents allowed or patents pending.

### Materials Requirements

The component materials of the synthetic turf grass system consist of:

- 1) Monofilament, polyethylene fibers tufted into a fibrous, non-perforated, porous backing.
- 2) Infill that is a controlled mixture of graded sand and crumb rubber.
- 3) Fibers tufted into a primary backing with a secondary backing
- 4) Rolls are to be furnished 15 foot wide.
- 5) The primary backing shall be a double-layered polypropylene fabric treated with UV inhibitors. The secondary backing shall consist of an application of porous, heat-activated urethane to permanently lock the fiber tufts in place. A perforated (with punched holes) backing shall not be acceptable
- 6) The fiber shall be 8,000 denier, low friction, UV-resistant fiber, measuring not less than 2 inches high.
- 7) The Infill materials shall be approved by the manufacturer. The infill shall consist of a resilient layered granular system, comprising selected and graded dust-free silica sand and cryogenically hammer-milled SBR rubber crumb. Synthetic turf products without cryogenically processed rubber or a finish application of straight rubber cryogenically processed will not be acceptable. The sand component of the infill must represent a minimum of 51% or more of the total infill, by weight.

## Installation Requirements

- 1) The compaction of the aggregate base shall be 95%, according to the Modified Proctor procedure (ASTM D1557), and the surface tolerance shall not exceed 0-1/4 inch over 10 feet and 0-1/2" from design grade.
- 2) Seaming glue shall be as recommended by the synthetic turf manufacturer.
- 3) The Infill materials shall be installed to fill the voids between the fibers and allow the fibers to remain vertical and non-directional. The Infill installation consists of a base layer of sand followed by a homogenous mixture of the sand and the cryogenically processed rubber. A final application of specifically sized cryogenically processed rubber completes the system. The Infill shall be installed to the depth of 1 1/4". Infill density shall consist of no more than 6 pounds of sand and at least 2 pounds of rubber per square foot. The Infill shall be placed so that there is a void of 3/4" to the top of the fibers, or as otherwise states in contract.
- 4) The installed synthetic turf grass shall have the following properties:

<u>Standard</u>	<u>Property</u>	<u>Specification</u>
ASTM D1577	Fiber Denier	8000 nominal
ASTM D418/D5848	Pile Height	2" nominal
ASTM D418/D5848	Pile Weight	27 oz./sq. yd.
ASTM D1335	Tuft Bind	7 lbs. (without infill)
ASTM D1335	Tuft Bind	12 lbs. (with infill)
ASTM D1682/D5034	Grab Tear (width)	207 lbs/force
ASTM D1682/D5034	Grab Tear (length)	297 lbs/force
ASTM F1015	Relative Abrasiveness Index	20.2
ASTM D4491	Carpet Permeability	>30 inches/hour
ASTM D2859	Flammability (Pill Burn)	Pass

## Warranty Requirements

- 1) The turf contractor and the turf manufacturer (if different from the company) shall provide a sample non-prorated warranty and insurance policy information.
- 2) The turf manufacturer shall provide a warranty to the owner that covers defects in materials of the turf for a period of 8 years and all labor and workmanship for 1 year from the date of substantial completion.
- 3) The turf manufacturer's warranty must be supported by an insurance policy for the full eight (8) year period.
- 4) All turf warranties shall be non-prorated, limited to repair or replacement of the affected areas, at the option of the manufacturer, and shall include all necessary materials, labor, transportation costs, etc. to complete said repairs. All warranties are contingent on the full payment by the owner of all pertinent invoices.