



C-33

Synthetic Turf Specification and Materials

FIBER

The pile fiber shall be 100% polyethylene, 100 microns thick. No other fiber will be accepted. The fiber shall be non-abrasive polyethylene measuring a minimum of two inches (2"). The fiber shall be designed specifically for outdoor use and treated with UV inhibitor and stabilizers to resist the effects of ultraviolet degradation, heat, foot traffic, water and airborne pollutants. The fiber shall contain no toxic substances or heavy metals. The fiber shall be agitated with a motorized rotary nylon broom prior to installation, rolling or spiraling will not be accepted.

The fiber shall meet or exceed the following requirements :

- (a) Linear Density (Denier): 8,500
- (b) Breaking Load: 30 psi
- (c) Elongation to Break: >16%

The fiber should be further specified as follows:

- (a) Fiber/Pile Weight: 33oz. Extra soft Polyethylene
- (b) Fiber Thickness: 100 microns
- (c) Pile Height:: 1.75 inches
- (d) Color Fastness: Min. ref. Standard 8 Blue Scales (BS1006)
- (e) UV Stability: UV absorbers of Hindered Amine Type
- (f) Fiber Tuft Spacing: one-half of an inch (1/2") in straight stitch

PRIMARY BACKING

The primary backing shall be a heat and UV resistant three layer, woven product. The primary backing shall be and shall provide dimensional stability in all directions to prevent stretching, and distortion upon installation. The components and performance shall meet or exceed the following requirements:

- (a) Weight: at least 8-oz/sq. yard
- (b) 5% Elongation (Warp): 410 minimum
- (c) Force @ 5% Elongation (Weft): 615 minimum
- (d) Grab Tear Strength (X-Y): 400-250 lb
- (e) Backing (Roll) Width: 15 Feet
- (f) Dimensional Stability: 47.10 N/sq meter (warp), 49.10 N/sq meter (weft)

SECONDARY BACKING

The secondary backing shall saturate the primary backing and effectively lock the fiber tufts in place to the primary backing. The components and performance shall meet or exceed the following requirements:

- (a) Material: Polyurethane coating
- (b) Weight: 30 oz/sq. yd
- (c) Drainage Perforations: 3/16" diameter at four inches (4") or less on-center on both axes
- (d) Tuft Bind Strength (W/out Infill): >15 lbs
- (e) Grab Tear X and Y (Turf Assembly): >400 lbs X direction and >250 lbs Y direction