

# PLAYGROUND SAFETY TILE SPECIFICATIONS

This playground safety tile/mat will be required to adhere to the below listed components:

## 1. Playground Safety Standards

- **Critical Fall Height:** Comply with the relevant safety standard, being either: ASTM F1292; AS4422:2016, NZS5828:2015; and/or EN1177:2018, for the required critical fall height of the specific installation.
  - **Disabled Accessibility:** Comply with ASTM F1951 ADA Accessibility and Maneuverability Performance.
  - **Slip Resistance:** Using BSEN 7188:1998 Clause 5 have a minimum slip resistance in either wet or dry conditions of no less than 40, but no greater than 70.
  - **Ease of Ignition:** Product to be classified as having a “LOW” radius of effects of ignition” when tested in accordance with BSEN 7188:1998 Clause 7.
  - **Abrasion Resistance:** Using BSEN 7188:1998 Clause 4, have a wear index have a wear index less than 1.0 and a wear ratio ( $p$ ) between 1.0 and 3.0.
  - **Resistance to Indentation:** Using BSEN 7188:1998 Clause 6 have a residual indentation after 24 hours of no more than 5.0mm.

## 2. Design and Manufacture

- The specifically designed top mat is to be plastic, with color right through the mat, injection molded, with a Durometer Scale Reading (shore hardness) of  $A-82 \pm 3$ . The top mat is to be manufactured to this specific size: 20” by 20” by 1” (500mm by 500mm and 25mm). Two sides of this mat are to have 9 interlocking lugs each for proper connection to the female side of the connecting mats.
- The tile/mat is to be manufactured in an ISO accredited environment.
- The tile/mat is to be self draining: able to pass water through all levels of the system so as to eliminate surface retention of water.
- The surface mats are to be welded together in such a way that: 1. Eliminates the effects of the labile chemical components found in plastic and rubber that cause glue failure, shrinkage, curling and other surface failure. 2. Once installed, results in a monolithic surface.
- Any part of the completed monolithic surface can be removed and replaced for reasons of vandalism. This replaced area to be re-bound so as to produce a new and complete monolithic surface and not a patched surface.

### 3. Installation

- Installation of the tile/mat is to be accomplished by “Certified Installers” of the product to be installed. The contractor must be able to produce a “certificate” from the manufacturer stating they are properly trained to install this tile/mat.
- The tile/mat can be successfully laid in wet or dry, as well as in hot or cold, conditions, without any subsequent failure of the surface through expansion or shrinkage.
- Each top plastic tile/mat is to be secured on all four sides with plastic welding process.
- The edge of the playground tile/mat is to be pinned with nylon fixing pins.

### 4. Warranty

- The surfacing system is to have a 6-year product warranty.