

# 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 a component of two-part system, manufactured in an ISO accredited environment.
- The two-part system is to be self draining: able to pass water through all levels of the system so as to eliminate surface retention of water.
- The under laid rubber shock pad is to be manufactured to dimensions whereby the edges of the shock pads and the edges of the overlaid tiles overlap (do not exactly coincide, except at the outside edges of the playground). The thickness of the shock pad is to vary depending on the critical fall height required for a particular job. The shock pad is to also incorporate a loose weave design to facilitate the flow of rain water through the surface, and formed holes on the underside to enhance critical fall height performance.
- The surface mats are to be welded together in such a way that: 1. Reduces 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.
- The two-part system is to be installed in accordance with ISO accredited installation procedures.
- 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.