



## **General Specification Playground Surfaces Reflex Standard**

### **Soft Fall Rubber - General**

*Reflex Standard* is supplied and installed as a cold wet poured monolithic surface with minimal joins in various thicknesses to meet individual applications such as playgrounds, paths, golf courses and anywhere that requires a long-term hardwearing surface.

All soft fall is installed as per the design, falls and levels as supplied on drawings by the client, to be free draining without any puddling or ponding and to ensure even drainage. The soft fall rubber is to be installed progressively and be fully maintained during the contract period as may be required.

### **Standards**

The soft fall rubber is to comply with and installed to meet the applicable standards:

- Australian - AS/NZS 4422:1996 Playground Surfacing
- European Standard EN 1177

Note: The Australian Standard is based upon the European Standard EN 1177.

*Reclaim* Soft fall surfaces are seamless, cast in-situ wet-pour rubber systems designed and installed to meet various Safety Standards throughout the world. As well as having met these safety standards *Reclaim* has conducted various testing to meet various material advice listed within these standards. The results of these will be made available upon request.

## Materials

Three layers of materials are required for most Playground Safety Surfaces. These are detailed below:

### *Top Layer*

Soft fall rubber material top colour layer is to be from Reflex Standard colour range from Reclaim Industries Ltd. The top layer is to be comprised of 1-3mm 100% Recycled Rubber Tyre site-coloured granules or 12 mesh rubber fibre.

### Composition

*Reflex Standard* is a mixture of Recycled SBR Tyre rubber combined with a polyurethane pre-polymer with a site-introduced pigment in a specific ingredient ratio. This is then hand batched and layed to *Reclaim* surface specifications to meet various surface thicknesses and various polymer ratios to achieve the following

- Meet safety criteria as listed in the applicable standards, which reflects *Reclaims* certified test results.
- Individually meet each surface requirement in areas that require a stronger polymer ratio to meet heavy-duty usage requirements e.g. golf courses, walkways and tracks.

### *Cushion Layer*

The cushion layer is to be comprised of Recycled SBR Tyre Rubber to graded size (8-15mm) as to match manufacturers test specifications. The material used is to be clean of all contaminants such as nylon and have no loose wire fibres.

The cushion layer is to be mixed as per the top layer in a specified pre-polymer polyurethane & rubber ratio to *Reclaim* specifications and installed at thickness and density to match the *Reclaim* certified soft fall testing. The soft fall plan supplied prior to the commencement of each project should reflect the laid thickness minus the specified top layer thickness.

The base layer is to be laid as a single monolithic surface with minimal joins in the same fashion as the top layer.

## Base Layer

### Standard Base Layer Preparation

The base layer is to be prepared to a high standard to ensure surface quality and to prevent future subsidence and growth of plant matter through the surface.

### Base Material

*Reclaim* has a number of different recommendations for base material to be used a footing to the above mentioned “cushion and top layers”. Highly compacted materials such as ground blue metal dust, crushed limestone and their equivalents are all highly recommended bases as they provide not only a secure strata but are free draining and an extremely economical alternative to concrete. A free-formed base also allows for a greater variety of thicknesses to be utilised, which is unviable using concrete.

Below are some useful guidelines that should be followed which will give the best results when doing the base preparation for a *Reflex Standard* surface. From this point on the base material will be referred to as “quarry dust or equivalent”

#### 1. Existing Sand Area

A 100mm pad of 4mm diameter compacted “quarry dust or equivalent” should be installed over the existing sand. The existing sand should be levelled out and all organic matter removed prior to the installation of the compacted base pad. The compacted base pad must be sufficiently wetted and compacted to a level firm finish.

#### 2. Existing Turf Area

All of the turf and associated root system along with all other organic matter must be removed and a 100mm pad of “quarry dust or equivalent” should be installed over the turfed area. The base pad must be sufficiently wetted and compacted to a level firm finish.

#### 3. Existing Concrete Area

The concrete should be cleaned and allowed to completely dry and all loose material thoroughly removed prior to installation of surface directly over concrete pad. If the existing concrete is polished or has a similarly textured surface the area should be scoured to allow a suitable “key” for the new surface to bind to.

### New Concrete Area

New concrete should be left to cure for 20 days prior to rubber surface being applied and should have no more than 10% water content before commencement of surfacing. The concrete should have a lightly “broomed finish” to provide an adequate “key”. Adequate drainage should be available for recessed concrete base areas.

### 4. Existing Paved Area

Follow the same steps as for Existing Concrete Area however it is important to ensure that pavers are level, as the rubber surface will follow the contour of the paved surface.

Failure to plan adequate base layer preparation will potentially result in adverse effects in long-term surface quality and standards.

## Typical Section

