Playground Equipment Critical Fall Height
How deep should my surface be?

The surface under and around playground equipment can be a major factor in determining the injury-causing potential of a fall. It is self evident that a fall onto a shock absorbing surface is less likely to cause a serious injury than a fall onto a hard surface. Because head impact injuries from a fall have the potential for being life threatening, the more shock absorbing a surface can be made, the more is the likelihood that the severity of the injury will be reduced. However, it should be recognized that all injuries due to falls cannot be prevented no matter what playground surfacing material is used.

The depth and area of the safety surface depends on the critical fall height of the playground equipment.

The diagram below gives the critical fall height and the minimum required safety surface thickness.

![Diagram showing critical fall height and rubberised safety surface thickness](image)

**Disclaimer:** The above specifications are derived from periodic tests taken on actual product from the manufacturing process. The data shown above represents the average values and/or performance calculated from these tests. Some variances are possible due to the use of recycled raw materials and common manufacturing tolerances. All users of the product despite our application examples should test for suitability of purpose prior to application. All orders for this product are subject to our standard Terms and Conditions of Sale.