

## CRITICAL FALL HEIGHT

The surface under and around playground equipment can be a major factor in determining the injury-causing potential of a fall. 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 greater is the likelihood of reducing severe injuries.

### Critical Height

This is a term originating from Europe and is used to describe the shock absorbing performance of a surfacing material. As used in this publication, the Critical Height for a surfacing material is defined as the maximum height from which the instrumented metal head form, upon impact, yields both a peak deceleration of no more than 200 G's and a **HIC of no more than 1,000** when tested in accordance with the procedure described in **EN 1177**. Therefore, the Critical Height of a surfacing material can be considered as an approximation of the fall height below which a life-threatening head injury would not be expected to occur.

### Critical Fall Height results of FLEXOTOP™ ECO

Thickness	120 mm	110 mm	100 mm	90 mm	80 mm	70 mm	60 mm	50 mm	40 mm	30 mm
CFH	3,00 m	2,80 m	2,70 m	2,40 m	2,30 m	2,10 m	1,90 m	1,60 m	1,20 m	1,00 m