

## **CRITICAL HEIGHTS OF PROTECTIVE SURFACING\***

<b>Material</b>	<b>Uncompressed Depth</b>	<b>Uncompressed Depth</b>	<b>Uncompressed Depth</b>	<b>Compressed Depth</b>
	<b>150 mm (6 in.)</b>	<b>225 mm (9 in.)</b>	<b>300 mm (12 in.)</b>	<b>225 mm (9 in.)</b>
Wood Chips	2.1 m (7 ft.)	3.0 m (10 ft.)	3.3 m (11 ft.)	3.0 m (10 ft.)
Double-shredded bark mulch	1.8 m (6 ft.)	3.0 m (10 ft.)	3.3 m (11 ft.)	2.1 m (7 ft.)
Engineered wood fibres	1.8 m (6 ft.)	2.1 m (7 ft.)	3.6 m (12 ft.)	1.8 m (6 ft.)
Fine sand	1.5 m (5 ft.)	1.5 m (5 ft.)	2.7 m (9 ft.)	1.5 m (5 ft.)
Coarse sand	1.5 m (5 ft.)	1.5 m (5 ft.)	1.8 m (6 ft.)	1.2 m (4 ft.)
Fine gravel	1.8 m (6 ft.)	2.1 m (7 ft.)	3 m (10 ft.)	1.8 m (6 ft.)
Medium gravel	1.5 m (5 ft.)	1.5 m (5 Ft.)	1.8 m (6 ft.)	1.5 m (5 ft.)
Shredded tires	3.6 m (12 ft.)	N/A	N/A	N/A

\* - Source of Data - Table 1, Page 97 - CSA-Z614-98 - Children's Playspaces and Equipment (May, 1998)

### **Playground Safety:**

As many as 70% of serious playground injuries result from falls onto inadequate or improperly maintained ground surface beneath the play structures. Although it may be difficult or expensive to retrofit or replace the play structure with CSA-compliant equipment, maintaining proper protective surfacing can be one of the most effective risk management strategies to reduce serious playground injuries.

The above table indicates the MINIMUM depth of the given materials necessary to protect against head injuries from the fall heights indicated.

Maintaining the protective surfacing to at least the MINIMUM depth indicated is crucial to providing reliable protection against injury.

Most types of protective surfacing are ineffective at temperatures below freezing - PLAYGROUNDS SHOULD NOT BE USED DURING WINTER CONDITIONS.