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## **2014 CSA STANDARD FOR CHILDREN'S PLAYSPACES AND EQUIPMENT**

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The 2014 edition of the Canadian Standards Association (CSA) Standard for Children's Playspaces and Equipment (Z614-14) is available for use in the field. It supersedes the earlier versions of the document which came out in 2007, 2003, 1998 and 1990. It is an important document for anyone concerned with the safety of children while they use playspaces. Copies of the document may be purchased by calling the CSA office at 1-800-463-6727 or visit: [www.csagroup.org](http://www.csagroup.org)

The Canadian Parks and Recreation Association offers a number of training courses through the Canadian Playground Safety Institute (CPSI) to help make playgrounds safer for children across the country. With the CSA releasing this fifth edition of their standard it may be a good time for recreation practitioners and volunteers to consider participating in one or more of these courses. Participants in past CPSI courses should confirm what updates to their certificates are needed based on when they took their training. For further information on the CPSI please call their office at 1-877-536-2338 or visit: [www.cpsionline.ca](http://www.cpsionline.ca)

To help people in the field work with this new CSA standard the following list of "Ten Key Areas" is a way to introduce some of the topics included in this document. There are many other important subjects covered by the standard but by focusing on these ten key areas first, people can start to feel more comfortable with the material and its field applications.

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**TEN KEY AREAS – CSA STANDARD – Z614-14**  
**CHILDREN’S PLAYSPACES AND EQUIPMENT**

1. **USER AGE GROUPS**
  - Clause 1.1 (page 13)
  - Section 4 (page 19)
2. **REQUIREMENTS FOR PROTECTIVE SURFACING ZONES AND NO-ENCROACHMENT ZONES**
  - Section 14 (page 43)
3. **SURFACING**
  - Section 10 (page 26)
  - Section 15, Clause 15.16.1 (page 67)
4. **INSPECTION AND MAINTENANCE OF PROTECTIVE SURFACING**
  - Section 10.4 (page 28)
5. **ACCESSIBLE OPENINGS (HEAD AND TORSO PROBES, PARTIALLY BOUNDED OPENING TEMPLATE)**
  - Section 12 (page 31)
6. **SHARP POINTS, SHARP EDGES, PROTRUSIONS AND SURFACES**
  - Section 12.3 (page 34)
7. **ENTANGLEMENT**
  - Section 12.4 (page 35)
8. **GUARDRAILS AND PROTECTIVE BARRIERS**
  - Section 13.4 (page 41)
9. **REQUIREMENTS FOR SPECIFIC TYPES OF PLAY EQUIPMENT**
  - Section 15 (page 49)
10. **INSPECTION AND MAINTENANCE OF EQUIPMENT**
  - Section 11 (page 29)



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**1. USER AGE GROUPS**

- Clause 1.1 (page 13) states this standard provides requirements for children aged 18 months to 12 years with anthropometric limits based on the 95<sup>th</sup> percentile with requirements split into two age groupings: 18 months to 5 years and 5 years to 12 years.
- Section 4 (page 19) states that the standard takes into account the physical size, special characteristics and developmental needs of children so that appropriate and challenging play experiences are provided.
- All play equipment designed for a specific age group shall have all play activities on that equipment meet the requirements for the designated age group.

**2. REQUIREMENTS FOR PROTECTIVE SURFACING ZONES AND NO-ENCROACHMENT ZONES**

- Section 14 (page 43).
- Playspace layout requirements are covered in this section.
- Protective surfacing requirements must comply with section 10 (page 26).
- The protective surfacing zone for stationary play equipment shall extend no less than 1.8 m (70.87 in.) on all sides of the play structure.
- The protective surfacing zones for the sides of swing structure shall be no less than 1.8 m (70.87 in.) measured in a semicircle from the end of the top beam.
- No-encroachment zone exemptions for swings less than 2.4 m (94.49 in.) high (enclosed seats) (Clause 14.11.2 – page 49) and slides with a starting platform of 1.2 m (47.24 in.) in height or less (Clause 14.5.3 – page 47).

**3. SURFACING**

- Section 10 (page 26).
- All play equipment with a fall height shall be located on a protective surface.
- Exemption for play equipment with no designated fall height.
- 60-70% of all injuries on playground equipment are caused by falls to the surface (Protective Surfacing protects against serious head injuries).
- Clause 15.16.1 (page 67) states – On elevated platforms where guardrails or protective barriers are required, the fall height shall be measured from the protective surfacing to 725 mm (28.54 in.) above the elevated platform when intended for children 18 months to 5 years old and 950 mm (37.40 in.) above the elevated platform for children 5 to 12 years old.

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**4. INSPECTION AND MAINTENANCE OF PROTECTIVE SURFACE**

- Section 10.4 (page 28).
- The owner/operator shall maintain the protective surface to the appropriate fall height for each piece of equipment.
- Periodic site testing of installed protective surfacing shall be performed.

**5. ACCESSIBLE OPENINGS (HEAD, TORSO AND PARTIALLY BOUND OPENING PROBES AND TEMPLATES)**

- Section 12 (page 31).
- Large Probe – Head (head entrapment), Small Probe – Torso (feet first entry)
- Opening between 88.9 mm (3.5 in.) and 228.6 mm (9 in.) is a potential entrapment space.
- Partially Bounded Opening Template is used to test for possible neck entrapment openings such as can be found in picket fence style barriers.

**6. SHARP POINTS, SHARP EDGES, PROTRUSIONS, AND SURFACES**

- Section 12.3 (page 34).
- There shall be no accessible sharp points or sharp edges.
- There shall be no protrusions including bolt ends with more than two threads exposed (Exemption if inaccessible per Fig. 11) (page 82).
- Protrusion Test Gauges (Test per Clauses 12.3.1-12.4.6.4 (pages 34 - 37) and Figures 7 thru 12) (pages 77-83).

**7. ENTANGLEMENT**

- Section 12.4 (page 35)
- On play equipment where there is uncontrolled motion, (slides and sliding poles) there shall be no causes of entanglement that could entangle drawstrings or other pieces of clothing.
- Entanglement test per Section 12.4.6.1 (page 36) and Figures 14 thru 17 (pages 86-88).

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**8. GUARDRAILS AND PROTECTIVE BARRIERS**

- Section 13.4 (page 41)
- Guardrails (Sec. 13.4.3 – page 41) and Protective Barriers (Sec. 13.4.4 – page 42) requirements are based on the user group, (18 months to 5 years – 5 years to 12 years).
- Height of platform based on user group determine where a guardrail can be used and where protective barriers must be used.
- Guardrails and protective barriers have specified requirements for entrance exit openings.
- Guardrails and protective barriers shall contain no designated play surfaces.

**9. REQUIREMENTS FOR SPECIFIC TYPES OF PLAY EQUIPMENT**

- Section 15 (page 49).
- Equipment section outlines specific requirements for various types of play equipment listed within the standard.

**10. INSPECTION AND MAINTENANCE OF PLAY EQUIPMENT**

- Section 11 (page 29).
- Inspection and maintenance is a requirement of ownership.
- The owner/operator shall establish a comprehensive maintenance program.
- The owner/operator shall establish and maintain detailed installation, inspection, maintenance and repair records for each playspace.
- Installation of new and replacement equipment shall be completed according to the manufacturer’s instructions and the standard.

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**NOTES:** This list of Ten Key Areas has been created from an interpretation of the CSA Standard – Z614-14. If there are any differences between this list and the CSA Standard – Z614-14, the latter shall prevail.

As mentioned previously there are many other important subjects covered by the standard that are not listed here in this Ten Key Areas document. By flipping through the standard to these recommended reading points however it will give you at least an idea of what the intent of the overall standard is about and a good start to making use of it in your work setting.