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2020 draft edition	Previous edition(s)	Rationale
<p>Clause 1.4.3 and Annex J (HIRA) - New play components may not specifically fit into the designated prescriptive play component types listed in this standard (see Clause 15); however, all of the other sections of this standard, where applicable, will apply. The designer or manufacturer, or both shall use competent judgement to perform and document a hazard identification and risk/benefit assessment (similar to examples provided in annex J) and take necessary actions to minimize the likelihood of serious and/or life-threatening injuries.</p>	<p>No information present in previous editions of CSA Z614.</p>	<p>To give criteria for equipment not specifically labelled within CSA Z614 Clause 15. In short, this means that new equipment not currently labelled within Clause 15 is possible and Clause 15 should not be applied to these types of new equipment designs. However, all other sections of the CSA Z614 Standard still apply (wherever and when applicable), AND, a HIRA (Annex J) must be completed to evaluate for known risks and/or hazards that may be present on new equipment designs.</p> <p>It is believed this was completed to keep up with modern playground design. In recent years the play industry has been flooded with new and innovative products that are not specifically listed in the Clause 15 requirements. However, by side-stepping Clause 15 some hazards may end up in a playspace when that could have been avoided. This non-mandatory annex is intended to provide manufacturers and owner/operators to evaluate new equipment designs not currently contemplated by Clause 15 and for those pieces to be fairly evaluated for the risks and/or hazards that may be present without automatically titling a component 'compliant' or 'non-compliant' because it does not meet the specific list presented in the current Clause 15.</p>



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<p>Clause 1.7 – The standard does not apply to the following:</p> <ol style="list-style-type: none"> 1. sport, fitness, or gymnasium environments; 2. slides that end in water; 3. soft, contained play equipment that has controlled public access, such as that provided in commercial establishments (e.g., restaurants, department stores); 4. play equipment intended for backyard use; 5. amusement rides; 6. family daycare as defined by provincial/territorial childcare regulations; and 7. <u>adventure playgrounds as defined in the following note.</u> <p>Note: <i>Adventure playgrounds are a specific type of non-commercial playground. They are fenced and secured and have constant supervision during use by "playworkers". They are characterized by a developmental approach supporting free play, the absence of adult-built playground equipment, and the provision of construction materials, tools, and loose parts.</i></p>	<p>Clause 1.7 - This Standard does not apply to the following:</p> <ol style="list-style-type: none"> 1. sport, fitness, or gymnasium environments; 2. slides that end in water; 3. soft, contained play equipment that has controlled public access, such as that provided in commercial establishments (e.g., restaurants, department stores); 4. play equipment intended for backyard use; 5. amusement rides; and 6. family daycare as defined by provincial/territorial childcare regulations. 	<p>Unsure this will have much effect, if any. But does allow for 'pop-up', temporary and/or 'anarchy zones' as a type of play opportunity outside the scope of CSA Z614.</p>
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<p>Clause 4.5 – User age groups as guidelines – For the owner/operator, taking into account the playground equipment used, the needs and abilities of the children, and the level of supervision, the user age groups are intended as guidelines only.</p>	<p>No information present in previous editions of CSA Z614 to suggest the user age groups were only ‘guidelines’.</p>	<p>This is an attempt to assist owner/operators with user age groups different than the CSA Z614 prescribed age groups of 18 months to 5 years, 5 to 12 years and 18 months to 12 years. This may include child care operators (with users potentially lower than 18 months) along with school owner/operators with users just above or below age 5 as well as users over age 12 that may wish to use equipment.</p> <p>The 18 months to 5 years and 5-12 years age windows were never intended to be ‘hard and fast’ rules. In fact, other worldwide standards do not have age limits (simply referring to user age pre-school and school-aged – as an example).</p>
<p>Clause 7.4.1 - Wood that is intended for playground equipment and that is not naturally rot- and insect-resistant shall be treated to resist rot and insect attack.</p> <p>Chromated copper arsenate (CCA), creosote, pentachlorophenol, tributyl tin oxide, and surface coatings that contain pesticides shall not be used for playground equipment.</p> <p>Natural logs, branches, sections, etc. that are provided (with limited manufacturing/machining) shall be selected for durability as well as structural integrity as per the requirements of Clause 9.</p>	<p>7.4 Wood Wood that is intended for playground equipment and that is not naturally rot and insect-resistant shall be treated to resist rot and insect attack. Creosote, pentachlorophenol, tributyl tin oxide, and surface coatings that contain pesticides shall not be used for playground equipment. Wood treaters, playground equipment manufacturers, equipment installers, and owners/operators shall use appropriate technologies and procedures that minimize the level of leachable chemicals and eliminate residues of treatment chemicals on the surface of the wood.</p>	<p>CCA treated wood is now specifically precluded from use in a playspace.</p> <p>Natural logs and branches are now specifically permitted. This will assist those attempting to provide a ‘naturalized’ or ‘landscaped’ playspace (which is still subject to the CSA Z614 Standard).</p>



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<p>Clause 7.4.2 - Rocks/Stones/Boulders that are intended for use as play equipment shall be purposely and individually selected for their intended function before installation.</p> <p>Natural and/or cut stone materials shall be selected for durability as well as structural integrity according to the requirements of Clause 9.</p>	<p>No information present in previous editions of CSA Z614 on logs, stones, boulders, etc.</p>	<p>This will assist those attempting to provide a 'naturalized' or 'landscaped' playspace (which is still subject to the CSA Z614 Standard).</p> <p>As an example, this seems to suggest that a playground owner may want to select armour stone as a 'seat' outside the playspace, but items such as armour stone (with a 90-degree right angle and jagged features) may not be suitable as an item in a playspace intended for play (in which case a more rounded stone may be more suitable).</p> <p>This also goes on to specifically mention that stone materials are subject to the requirements of Clause 9 (for structural integrity testing).</p>
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<p>Clause 10.1 – Energy absorbency of a surfacing material - The surfacing material in the protective surfacing zone shall have a g_{max} not exceeding 200 and an HIC not exceeding 1000 when tested for the defined fall height. The test methods specified in ASTM F1292 and CEN EN 1177 shall be used for testing protective surfacing.</p> <p>Clause 2 – Reference publications:</p> <ul style="list-style-type: none"> • ASTM F1292-2018 • EN 1177:2018 	<p>10.1 Energy absorbency of a surfacing material - The surfacing material in the protective surfacing zone shall have a g_{max} not exceeding 200 and an HIC not exceeding 1000 when tested for the defined fall height. The test methods specified in ASTM F1292 and CEN EN 1177 may be used for testing protective surfacing.</p> <p>Clause 2 – Reference publications:</p> <ul style="list-style-type: none"> • ASTM F1292-1999 • EN 1177:1997 	<p>This updates from the 1999 version of ASTM F1292 and from the 1997 version of EN 1177.</p> <p>Also changes the word 'MAY' to 'SHALL' (meaning preclusive to the prescribed procedures) and options/flexibility are taken away.</p> <p>The EN standard requires a critical height evaluation (which for some surface types will be impossible in a lab or in the field). The ASTM F1292-2018 (also known as ASTM F1292-2017a) requires a lab test with an option to verify/corroborate those results with a field test option.</p> <p>The option for a field test only is not present. Field testing is only an option to corroborate a lab test (in accordance with ASTM F1292-2018).</p> <p>This option seems to 'ban' the use of manual drops previously permitted in the 2014 edition of CSA Z614.</p> <p>Table D.2 (surfacing depth chart) will need to be used for determining suitability of compliance for loose fill surfacing.</p>
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<p>Clause 10.3.1 - Hard surfacing materials, such as asphalt or concrete, shall not be considered suitable for use under and around playground equipment with any defined fall height.</p> <p>Natural ground (such as earth, soil, sod) may be considered as adequate fall height protection for elevated play elements with a fall height no greater than 450 mm (17.72), provided that the play element does not provide forced movement on the body of the user (e.g. swings, slides, rocking, springing, rotating equipment).</p>	<p>Clause 10.3.1 - Hard surfacing materials, such as asphalt or concrete, shall not be considered suitable for use under and around playground equipment with any defined fall height</p>	<p>This allows natural ground (i.e. grass, etc.) up to a fall height of 450mm (17.72 in) above the ground, provided the play element does not provide forced movement of the body.</p> <p>So a spring toy with a seat height below 450-mm (17.72 in) would not be permitted (because of the forced movement).</p> <p>However, a stepping form (i.e. log round) would be permitted up to 450mm (17.72 in) because there is no forced movement of the play element.</p>
<p>Clause 12.1.3 - All tests performed as specified in Clause 12 shall be applied only within the volume defined by the protective surfacing zone surrounding each playstructure and extending 2.1 M above any underlying designated play surface.</p>	<p>No information present in previous editions of CSA Z614.</p>	<p>Previous editions any non-compliant items attached or functionally linked to a playstructure would be considered non-compliant (even if it were 10-meters/30 ft) above the platforms or DPS on a playstructure. An example of this may be a flag on a boat themed playstructure that may have a 'jagged' flag to make it appear to be a shipwreck and the flag may be well above the platforms (at 10-meters or 30 ft above the nearest play component). Common sense would suggest the jagged flag is not a 'practical' sharp edge or protrusion hazard. With this new exemption – that type of jagged flag would be permitted and exempt if it were greater than 2.1-meters above the underlying DPS. Whereas, previous editions of CSA Z614 the jagged flag at 10 meters / 30 ft would be considered non-compliant (despite is being practically inaccessible to users).</p>



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<p>Clause 12.2.1.2 - Openings between the protective surfacing and the bottom edge of the equipment (e.g., rails, platforms, steps, etc.) are exempt from this requirement, as indicated by Figure 2. Enclosed swing seats and swing seats designed for compliance with Annex H are exempt from this requirement.</p>	<p>12.2.1.2 Openings between the protective surfacing and the bottom edge of the equipment (e.g., rails, platforms, steps, etc.) are exempt from this requirement, as indicated by Figure 2 .</p>	<p>This exempts enclosed swing seats (i.e. baby swings, tot swings, etc.) and accessible swing seats (i.e. inclusive swing seats, special needs swings, etc.) from head and neck entrapment.</p>
<p>Clause 12.2.4.6 - The following shall be exempt from the requirements of Clause 12.2.4:</p> <ol style="list-style-type: none"> 1. inverted partially bounded openings (see Clause 12.2.4.4); 2. partially bounded openings that form “V” angles that are less than 55° where the apex of the angle is formed by an inclined or vertical climbing surface and a rope, chain, or cable, if the rope, chain, or cable is in contact with the inclined surface at or below the protective surfacing at the point of the formed “V” angle; and 3. partially bounded openings where simultaneous contact of the “A” portion of the template is less than 610 mm (24 in.) above the protective surfacing. 	<p>12.2.4.5 The following shall be exempt from the requirements of Clause 12.2.4:</p> <ol style="list-style-type: none"> 1. a) inverted partially bounded openings (see Clause 12.2.4.4); and 2. b) partially bounded openings that form “V” angles that are less than 55° where the apex of the angle is formed by an inclined or vertical climbing surface and a rope, chain, or cable, if the rope, chain, or cable is in contact with the inclined surface at or below the protective surfacing at the point of the formed “V” angle. 	<p>This is an adoption from ASTM F1487 (U.S. equivalent to CSA Z614) and is intended to exempt partially bounded opening head and neck entrapment at low elevations (where a user’s body would be supported by the protective surfacing and therefore the risk is non-existent). This will have a significance in areas such as ‘V’ angles formed at low elevations at rope-net climbers, spatial nets, mesh type structures, etc.</p>



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<p>Clause 12.3.1.2 – Unless otherwise covered, the exposed open ends of all tubing shall be covered with caps or plugs that cannot be removed without the use of tools unless the tube is;</p> <p>1. resting on the ground; or 2. an integral part of a play opportunity.</p> <p>All tube ends open or covered shall meet the requirements of Clause 12.3.3 for protrusions and projections.</p> <p>Note: <i>Examples of tubes that provides play opportunities are musical tubes, chimes, and sand chutes.</i></p> <p>Note: <i>Tubing with exposed ends is exempt from caps if used as a play-component with an interior diameter greater than 76.2mm (3.0 in).</i></p>	<p>12.3.1.2 The exposed open ends of all tubing not resting on the ground, or otherwise covered, shall be covered with caps or plugs that cannot be removed without the use of tools.</p>	<p>This is an attempt to allow items such as sand chutes, music chimes, etc. that are required to be open in order to reverberate and produce noise. Without this exemption, all tube ends are required to be capped or plugged (unless otherwise covered).</p>
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<p>Clause 12.3.3.1 – Protrusions (General) - When tested in accordance with Clause 12.3.3.3, there shall be no protrusion on any playstructure extending beyond the face of any of the three test gauges having the dimensions shown in Figure 7.</p> <p>A manipulative device attached to a flexible rope, cable, or chain shall be exempt from meeting the projection criteria using the large 76.2 mm (3.0 in) interior diameter projection gauge. The use of the smaller gauges shall still apply.</p>	<p>12.3.3.1 Protrusions (General) - There shall be no protrusion on any playstructure that extends beyond the face of any of the three test gauges having the dimensions shown in Figure 7 when tested in accordance with Clause 12.3.3.3.</p>	<p>This is an attempt to allow mallets and/or other striking objects used on music instruments and/or chime panels by exempting the mallets or striking object from complying with the largest protrusion gauge (which represents body impalement).</p> <p>The smallest (representing impalement of the temple) and medium protrusion gauge (representing impalement of the eye socket) both still apply.</p>
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<p>Clause 12.6.2 – Looping -</p> <p>Rope, cable, or chain shall be fixed at both ends and shall not be capable of being looped back on itself to create an inside loop perimeter greater than 125 mm (4.92 in). Enclosed swing seats and swing seats designed for compliance with Annex H are exempt from this requirement.</p> <p>For ground level components, ropes, chain or cable used to attach manipulative components (for example, mallet for chime panel) to play panels or similar activities shall not be longer than 610 mm (24 in). The attachment point of the cable to the panel shall not be higher than 685 mm (27 in) above the underlying surface.</p> <p>For moveable hanging rings and hanging rungs, the distance between the uppermost pivot and the bottom of the handgrip device shall be no greater than 380 mm (15.0 in). Any flexible elements (chain, cable, connectors such as “S” hooks, and so forth) used to suspend the ring or rung, shall have a total length no greater than 180 mm (7.1 in).</p>	<p>12.6.2 Looping -</p> <p>Rope, cable, or chain shall be fixed at both ends and shall not be capable of being looped back on itself to create an inside loop perimeter greater than 125 mm (4.92 in).</p>	<p>The addition in the first paragraph exempts enclosed swing seats (i.e. baby swings, tot swings, etc.) and accessible swing seats (i.e. inclusive swing seats, special needs swings, etc.) from looping in order to permit items such as (but not limited to) a 5-point harness.</p> <p>The addition in the second paragraph is an attempt to allow mallets and/or other striking objects used on music instruments and/or chime panels by exempting the mallets or striking object from complying with the largest protrusion gauge (which represents body impalement).</p> <p>The third paragraph is an attempt to limit hanging rings (typically for upper body equipment) from presenting a looping hazard and/or creating an impact hazard (by hanging too low from the pivot).</p>
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<p>Clause 12.6.3.2 - Chain or cable used to support a swing or support a user on a swing shall be exempt from the requirements of Clauses 12.6.1 and 12.6.2.</p>	<p>12.6.3.2 - Chain or cable used to support a swing shall be exempt from the requirements of Clauses 12.6.1 and 12.6.2. Rope shall not be used as a method of suspending swings.</p>	<p>Further clarification that the harness mechanism on a swing is exempt from looping (not just the swing itself).</p> <p>Also provides clarifications that only fibre rope is not permitted to suspend a swing. Steel-core rope is permitted to suspend a swing.</p>
<p>Clause 12.7 – Elevated surfaces - An elevated surface shall also be considered as a designated play surface if it meets both of the following conditions:</p> <ol style="list-style-type: none"> 1. A flat surface test device 50 mm (1.97 in) long x 50 mm (1.97 in) wide and constructed of rigid material (see figure 12.7) shall be placed on the surface. If the entire contact face of the test device (including all four corners) connects simultaneously with the elevated surface the underlying surface shall be considered as flat and accessible. 2. The accessible flat surface shall be less than 30 degrees from horizontal. <p>See figure 12.7 (note: figure # may change)</p>	<p>Not present in previous editions of CSA Z614.</p>	<p>Clarification on how to test for a DPS (designated play surface).</p> <p>Per previous editions of CSA Z614, a DPS being present on a play component is only an indication that there is a fall height requirement. Most play components allow a DPS. Only certain components are not permitted to have a DPS :</p> <ol style="list-style-type: none"> 1. guardrail 2. protective barrier 3. swing support post 4. roof above 2.1-meters (82.68 in) from the underlying DPS 5. equipment support post(s)



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<p>Clause 14.1.2.4 – No-encroachment zone - Two adjacent pieces of equipment that each require a no-encroachment zone may share a single no-encroachment zone, provided that the distance between the respective protective surfacing zones is at least 1.8 m (70.87 in). The no-encroachment zone cannot overlap the protective surfacing zone for stationary or moving equipment unless specifically allowed in other clauses of this standard.</p>	<p>14.1.2.4 - No-encroachment zone - Two adjacent pieces of equipment that each require a no-encroachment zone may share a single no-encroachment zone, provided that the distance between the respective protective surfacing zones is at least 1.8 m (70.87 in). The no-encroachment zone cannot overlap the protective surfacing zone for stationary or moving equipment.</p>	<p>This new additional clause allows the no-encroachment zone to overlap the protective surfacing zones in certain instances where specifically permitted to do so.</p> <p>At this point, the only location this is permitted is the final 0.9-meters (35.43 inches) of a rotating piece of equipment with a diameter greater than 1.0-meter (39.37 inches) in diameter.</p> <p>A vertical rotating device requires a 2.7-meter (106.30 in) protective surfacing zone – of which, the first/initial 1.8-meters (70.87 inches) is a clearance zone that cannot overlap any other zone. The remaining 0.9-meters (35.43 inches) can overlap another protective surfacing zones or a no-encroachment zone (assuming overlap of that ‘other zone’ is permitted).</p>
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<p>Clause 14.3.2 - The protective surfacing zone for equipment with a maximum diameter greater than 1 m (39.37 in) and rotates with an axis of rotation within 45° from vertical shall not be less than 2.7 m (106.30 in) from the perimeter of the playstructure. The outer .9 m (35.4 in) of this protective surfacing zone may overlap into a no-encroachment zone or into another protective surfacing zone, provided the adjacent protective surfacing zone is permitted to overlap (see Figure 22 and 26).</p> <p>The protective surfacing zone for equipment with an axis of rotation within 45° from horizontal shall not be less than 1.8 m (70.87 in) from the perimeter of the playstructure. Equipment with an axis of rotation within 45° from horizontal may be attached to a composite playstructure.</p>	<p>Clause 14.3.2 - The protective surfacing zone for equipment with a maximum diameter greater than 1 m (39.37 in) and rotates with an axis of rotation within 45° from vertical shall not be less than 2.7 m (106.30 in) from the perimeter of the playstructure, including a 1.8 m (70.87 in) clearance zone that shall not overlap any other zone (see Figure 26). Note: Of the 2.7 m (106.31 in) protective surfacing zone required, when measured from the playstructure, the first 1.8 m (70.87 in) will not overlap with any other protective surfacing zone. The remaining 900 mm (35.43 in) may overlap with another protective surfacing zone.</p> <p>Clause 14.3.3 - The protective surfacing zone for equipment with an axis of rotation within 45° from horizontal shall not be less than 1.8 m (70.87 in) from the perimeter of the playstructure. Equipment with an axis of rotation within 45° from horizontal may be attached to a composite playstructure.</p>	<p>It is believed this is an attempt to correct an oversight created when this section changes between the 2007 and 2014 editions of CSA Z614.</p> <p>The 2007 edition required a 1.8-meter (70.87 in) PSZ plus a 1.8-meter (70.87 in) NO-EZ.</p> <p>The 2014 edition did away with the NO-EZ, but because rotating equipment is required to be on the periphery of the playspace, which is often where swings are located and swings still required a NO-EZ...when adjacent to a > 1.0-meter (39.37 in) rotating device, it created an increased space requirement of 2.7-meter (106.30 in) plus a 1.8-meter (70.87 in) NO-EZ for a total of 4.5-meters (177.17-in) instead of the 3.6-meters (141.73 in) per CSA Z614-2007.</p> <p>This new requirement would see the scenario of the swing and > 1.0-meter (39.37-in) rotating device back to the 3.6-meter (141.73-in) requirement (with 2.7-meters/106.30-in required to be composed of protective surfacing, while the final 0.9-meter (39.37-in) of the NO-EZ would not be required to be protective surfacing (but would still need to be 'free and clear' of physical obstacles to comply with the NO-EZ requirements.</p> <p>Thankfully, this is shown in a revised figure to clarify. See figure 22 (27 ?).</p>
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<p>Embankment slides –</p> <p>Clause 14.6.X – Embankment slides - The exit protective surfacing zone of an embankment slide with a starting elevation less than or equal to 1.5m (see Figure 37) is exempt from the side protective surfacing zone requirements and only needs a slide exit protective surfacing zone that meets the requirements of Figure 33b.</p> <p>Clause 15.5.6.5 - Embankment slides are exempt from the requirements of Clause 15.5.6.4, but shall exit no greater than 300 mm above the finished grade.</p>	<p>Embankment slides –</p> <p>Clause 14.6.4 - The protective surfacing at the slide exit shall meet the requirements of Clause 14.5.2. The height of the slide shall be calculated using Figure 37.</p>	<p>Embankment slides \leq to 1.5-meters (59.06 in) do not require a side protective surfacing zone throughout the entire length of travel and only require an exit protective surfacing zone in the direction of descent for the width of the slide + 525mm (20.67 in).</p> <p>Embankment slides previously had to meet the same exit height requirements of any traditional post and platform slide to the end of the sliding section. The new 15.5.6.5 requirement of 300-mm (11.81 in) harmonizes with the requirements for embankment slides throughout their length of travel (without undue pressure during design and/or installation to alter the slope to achieve a differing exit height requirement.</p>
<p><i>Clause 14.2.1.2 -</i></p> <p>The protective surfacing zone for stationary play equipment shall extend not less than 1.8 m (70.87 in) on all sides of the playstructure. Equipment designed so that a user maintains constant contact with the ground during play, or has a maximum standing height of 300mm (11.81 in), has no individual protective surfacing zone requirement (e.g., sandboxes, diggers, free-standing activity walls, free-standing playhouses, play counters)</p>	<p>Clause 14.2.1.2 - The protective surfacing zone for stationary play equipment shall extend not less than 1.8 m (70.87 in) on all sides of the playstructure. Equipment designed so that a user maintains constant contact with the ground during play has no individual protective surfacing zone requirement (e.g., sandboxes, diggers, free-standing activity walls, free-standing playhouses, play counters).</p>	<p>This is an attempt to exempt items with a DPS of 300mm (11.81 in) or less from surfacing entirely.</p> <p>This seems confusing compared with the previous exemption in 10.3.1 for natural ground up to 450-mm (17.72 inches).</p>

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<p>Clause 15.5.6.1 - The exit section shall have a slope between 0°C and -10°C from horizontal (see Figure 40).</p>	<p>2003, 2007 and 2014 editions of CSA Z614 did not have a negative slope requirement. 1998 had a requirement of 0 to -4 degrees for the exit section slope.</p>	<p>The 1998 0 to -4 degree requirement was deemed too difficult to solve whilst still maintaining a flush fit at the top of the slide to solve the toggle test. Because the toggle test was deemed 'life threatening' and the negative drainage requirement of 0 to -4 was non-critical it was removed. Hopefully the increased range of 0 to -10 degrees provides enough leeway during installation to comply whilst still maintaining a flush fit at the top of the slide to prevent entanglement points with the toggle test.</p> <p>This is also an attempt to harmonize with ASTM F1487.</p>
<p>Clause 15.14.2.6 – 3-dimensional mesh structures. Various clauses added and deleted to refresh this section and make it more congruent with modern design. Highlights include:</p> <ul style="list-style-type: none"> • attempt to limit falls within mesh structures to 1.8-meters (70.87 in) or less • minimum fall height added of 1.8-meters (70.87-in) • fall heights on structures above 1.8-meters (70.87 in) to remain the same as 2014 edition • various new figures to be added to provide visual clarification 	<p>2014 and previous editions really did not provide a clear and/or useful internal fall height, OR, a maximum permitted falling height within structures</p>	<p>It is believed this change should be largely inconsequential and was done more to keep up with modern playground design.</p>

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<p>Clause 16.3.1 – Surfacing level markers - Playstructures and composite playstructures should have permanently attached labels or other durable markers, when practical, to indicate the surfacing level for the installed surface.</p> <p>Note: <i>Surfacing level markers are intended to support the work of equipment and surfacing installers and to facilitate the regular inspection of and maintenance of the surface to this level.</i></p>	<p>Not required in any previous edition of CSA Z614</p>	<p>Surfacing level markers are intended to support the work of equipment and surfacing installers and to facilitate the regular inspection of and maintenance of the surface to this level. So this is not phrased in a way to make it a specific requirement. In many cases, surfacing indication markers are not practical or possible. As an example, coil springs, some wood surfaces, textured surfaces, etc. all pose a challenge. Even some rounded surfaces with steel or aluminum labels can create sharp edges and/or sharp surfaces. So this has not been phrased as a requirement.</p>
<p>Clause 16.3.2 – Warning label - Enclosed swing seats and swing seats designed for inclusion with additional support assembly (see Annex H) should have a warning label.</p> <p>Note: <i>The following is an example of a warning label.</i></p> <p>“WARNING: This swing seat has been designed for small users and/or users requiring additional support and/or assistance during use, with adult supervision. Improper installation, unintended use, normal use, lack of supervision, lack of maintenance, vandalism, or damage from weather or other factors can cause damage and/or lead to serious injury.”</p>	<p>As previous editions of CSA Z614 did not provide an exemption for looping or entrapment of enclosed and/or accessible swing seats there was not a need for such a warning label.</p>	<p>It is believed that current swing seats do not pose a risk of entrapment (based on low elevation) and swing chain is already exempt from looping (per 2014 and previous editions) - so the looping exemption would seem straight forward.</p> <p>However, new designs not currently contemplated MAY pose a looping or entrapment risk. Therefore, it was felt that a warning label was a reasonable requirement for enclosed and/or accessible swing seats.</p>



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Table 5 (NEW) – Short-cut guide to protective surfacing and no-encroachment zones	Table 5 not present.	Table 5 not present in previous editions of CSA Z614.
Table G.1 – Revised plant list	2014 and previous editions of the plant list were from 1998 or earlier.	It is believed this was done to keep up with modern playground design. Hopefully will assist those desiring plantings in and around their playspace. In particular, those desiring naturalized or landscaped playspaces.
Annex J – Hazard identification and risk assessment (HIRA). Another non-mandatory annex (to go along with annex H from 2007 edition).	Not present in 2014 and/or previous editions of CSA Z614.	It is believed this was completed to keep up with modern playground design. In recent years the play industry has been inundated with new and innovative products that are not specifically listed in the Clause 15 requirements. By circumventing the Clause 15 requirements the play industry has seen new and exciting designs not currently contemplated by prescriptive standards or sections of standards (like Clause 15). However, by circumventing and/or side-stepping Clause 15 some hazards may end up in a playspace when they could have been avoided. This non-mandatory annex is intended to provide manufacturers and owner/operators to allow new equipment not currently contemplated by Clause 15 to be fairly evaluated for the risks and/or hazards that may be present without automatically titling a component ‘compliant’ or ‘non-compliant’ because it does not meet the specific list presented in the current Clause 15.



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<p>Annex K – Thermal comfort. Another non-mandatory annex to go along with Annex J (HIRA, from 2020) and Annex H (from 2007).</p> <p>Caption: Studies have shown that when thermal conditions become uncomfortable in the summer, the use of the playgrounds by children decreases. Some design elements of parks and playgrounds can also increase heat-related health risks to children (Vanos et al., 2016).</p> <p>Children are particularly vulnerable to hot ambient environments and heat stress compared to adults (Berry et al., 2014). They are also more susceptible to sunburns and burn injuries on playgrounds because of their more sensitive skin (Volkmer and Greinert, 2011). Making play equipment and spaces thermally comfortable in summer helps ensure that children can go outdoors, play, be active and remain at a play area for a longer period of time.</p>	<p>Not present in 2014 and/or previous editions of CSA Z614.</p>	<p>With increased inquiries on climate change and/or global warming, pollution, etc. sun exposure and optimal temperatures, etc. all issues in our society that are ever-increasing in terms of their importance in everyone’s lives. Yet, in terms of playspaces – items such as shade elements, access to drinking water, plantings for wind relief, nearby washrooms are all items that typically get ‘slashed’ out of a playground budgets because they are not ‘REQUIREMENTS’. This annex will hopefully give parks planners, landscape architects, designers, maintainers, etc. some criteria to consider when planning and/or evaluating a playspace for items beyond just ‘safety’ and/or gross motor type play events.</p>
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