

**AMUSEMENT RIDES SAFETY
(AMENDMENT) REGULATIONS 2020**

S.L. 855 of 2020

**Presented to Parliament pursuant to section 52 of the
Building Control Act.**

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**AMUSEMENT RIDES SAFETY ACT
(CHAPTER 6A)**

**AMUSEMENT RIDES SAFETY
(AMENDMENT) REGULATIONS 2020**

In exercise of the powers conferred by section 72 of the Amusement Rides Safety Act, the Minister for National Development makes the following Regulations:

Citation and commencement

1. These Regulations are the Amusement Rides Safety (Amendment) Regulations 2020 and come into operation on 1 January 2021.

Amendment of regulation 2

2. Regulation 2 of the Amusement Rides Safety Regulations 2011 (G.N. No. S 343/2011) (called in these Regulations the principal Regulations) is amended —

- (a) by inserting, immediately after the words “zip line” wherever they appear in the definition of “access level”, the words “or roller glider”;
- (b) by inserting, immediately after the words “means a device” in the definition of “air-inflated enclosure”, the words “(whether or not the device contains openings)”;
- (c) by deleting the words “wholly enclosed within it” in paragraph (b) of the definition of “air-inflated enclosure” and substituting the words “enclosed within the device, so that no part of the patron is outside of the device when the device is in use”;
- (d) by deleting the definitions of “British Standards Institution” and “British Water Ski Federation Ltd”;

(e) by inserting, immediately after the definition of “drop tower”, the following definition:

““European Committee for Standardization” means the standards organisation of that name that provides a platform for development of European standards and other technical documents;”;

(f) by inserting, immediately after the definition of “foundation”, the following definitions:

““free-fall jump device” means a device (other than a diving tower) consisting of —

(a) a catch device that is designed to break the fall of a patron; and

(b) a structure that allows one or more patrons to jump off or be released from the structure and free-fall onto the catch device;

“funicular” means a device for the carriage of patrons in or on a carrier —

(a) that is supported and guided by a level or inclined guideway; and

(b) that is propelled by means of a haul rope or other flexible element that is driven by a power unit that remains at a single location,

and does not include a lift that is used or designed for use for raising or lowering, or both raising and lowering, people or goods, or both people and goods, in a substantially vertical direction;”;

(g) by inserting, immediately after the definition of “luge”, the following definition:

““mechanical simulator” means a device —

- (a) that consists of a unit in the shape of an animal, a saddle, a seat, a surfboard or any other platform that is mounted on a static base or support;
- (b) that uses mechanical movements of the unit to simulate a rodeo, surfing or any other activity that requires a patron to maintain the patron’s balance; and
- (c) that is designed to allow a patron to fall off the unit during the patron’s use of the ride;”;

(h) by inserting, immediately after the definition of “patron restraint”, the following definition:

““play net” means a device consisting of one or more nets —

- (a) made of any material or combination of materials including, but not limited to, ropes, wires, webbing, fabric or chains that form a flexible interlaced structure; and
- (b) that are intended for one or more patrons to bounce on, walk on, crawl on, roll on, lie on or play on;”;

(i) by inserting, immediately after the definition of “roller coaster”, the following definition:

““roller glider” means a device that includes a gliding mechanism (whether power-driven or not) —

- (a) that moves on or is suspended from an elevated track; and

(b) that allows a patron holding on to or attached to the gliding mechanism to move along the track,
but excludes a roller coaster;”.

Amendment of regulation 14

3. Regulation 14 of the principal Regulations is amended —

- (a) by inserting, immediately before the words “be accompanied by the appropriate fee” in paragraph (1)(c), the words “unless the applicant is a specified person;”;
- (b) by inserting, immediately before the words “appoint a qualified person” in paragraph (2)(a), the words “unless the person is a specified person;”;
- (c) by inserting, immediately after the words “operating permit is sought” in paragraph (4)(b), the words “by the applicant (not being a specified person)”;
- (d) by inserting, immediately after paragraph (5), the following paragraph:

“(6) In this regulation, “specified person” means a person who —

- (a) is the holder of an existing operating permit that is valid for a period of less than 12 months only because —
 - (i) the insurance policy mentioned in section 13(1)(b)(iii) of the Act that relates to the existing operating permit; or
 - (ii) the certificate of compliance, in respect of the fire and rescue management system of the amusement ride, that relates to the existing operating permit,

will not be in force after the existing operating permit expires; and

- (b) makes an application for a renewal of the existing operating permit for a period —
 - (i) starting immediately after the existing operating permit expires; and
 - (ii) ending on a date not later than 12 months after the date the existing operating permit was issued or renewed, if the amusement ride to which the operating permit relates had been inspected and certified for that issuance or renewal by a qualified person appointed under paragraph (2)(a).”.

Amendment of regulation 16

4. Regulation 16(1) of the principal Regulations is amended —

- (a) by deleting the word “and” at the end of sub-paragraph (g); and
- (b) by deleting the full-stop at the end of sub-paragraph (h) and substituting the word “; and”, and by inserting immediately thereafter the following sub-paragraph:

“(i) ensure that —

- (i) the operation of the amusement ride is monitored by installing a closed-circuit television or other electronic visual monitoring system at each location that the Commissioner may direct; and
- (ii) the video recordings recorded by the closed-circuit television or other electronic visual monitoring system are retained for at least 14 days after the video recordings were recorded.”.

Amendment of regulation 18

5. Regulation 18 of the principal Regulations is amended —

(a) by inserting, immediately after paragraph (4), the following paragraph:

“(4A) The operator of go-karts must ensure that —

(a) on or after 15 June 2021, a restraint device is installed for each seat in each vehicle used in the go-karts and the restraint device for each patron is properly fastened or secured before the vehicle is driven;

(b) on or after 15 June 2021, a rollover protection device is installed on each vehicle used in the go-karts;

(c) each vehicle used in the go-karts is not driven unless —

(i) each patron wears a full-face protective helmet securely on the patron’s head;

(ii) any loose clothing worn or accessory carried by a patron is stored securely; and

(iii) where the length of a patron’s hair (whether tied or untied) is below the patron’s shoulders — the patron’s hair is covered with a hair net; and

(d) only the vehicles specified in the operating permit for the go-karts are operated as part of the amusement ride.”;

(b) by inserting, immediately before the definition of “remote emergency stop system” in paragraph (5), the following definition:

““full-face protective helmet” means a protective helmet that —

- (a) conforms to the requirements of the Singapore Standard SS 9 : 2014 “Specification for protective helmets for motor cyclists” established and published by the Standards, Productivity and Innovation Board (G.N. No. 2523/2014) and continued by section 66(1) of the Enterprise Singapore Board Act 2018 (Act 10 of 2018); and
- (b) bears the Certification Mark, or Batch Inspected label, by TUV SUD PSB Pte. Ltd. (UEN 199002667R), unless the certification mark or label is worn out through wear and tear;”; and
- (c) by inserting, immediately after the definition of “remote emergency stop system” in paragraph (5), the following definitions:

“restraint device” means any restraint system relating to a vehicle used in go-karts —

- (a) specified in the applicable standard or code for the go-karts; or
- (b) that is recommended or specified by the manufacturer of the go-karts and approved by the Commissioner;

“rollover protection device” means a feature installed on a vehicle used in go-karts that —

- (a) in the event that the vehicle rolls over —
 - (i) protects every patron in the vehicle; and
 - (ii) is able to support the weight of the vehicle and all patrons in the vehicle; and

(b) is made of the material, or combination of materials, and with the dimensions that are —

- (i) specified in the applicable standard or code; or
- (ii) recommended or specified by the manufacturer;”.

Amendment of regulation 19

6. Regulation 19 of the principal Regulations is amended —

- (a) by deleting the words “tandem jumping, or” in paragraph (2)(b);
- (b) by inserting, immediately after the words “using bungee cords” in paragraph (4), the words “(whether of one or more types)”; and
- (c) by inserting, immediately after the words “a specimen of” in paragraph (4)(a), the words “each type of”.

Amendment of regulation 19A

7. Regulation 19A of the principal Regulations is amended —

- (a) by inserting, immediately after the words “an aerial ropeway” in paragraph (1), the words “or a funicular”;
- (b) by inserting, immediately after the words “on every grip of the aerial ropeway” in paragraph (1)(a) and (b), the words “or on every rope-fixing of the funicular”;
- (c) by inserting, immediately after the words “manufacturer of the aerial ropeway” in paragraph (1)(a), (b) and (d)(i) and (ii), the words “or the funicular”; and
- (d) by inserting, immediately after the words “aerial ropeway” in the regulation heading, the words “or funicular”.

New regulations 19B, 19C, 19D, 19E and 19F

8. The principal Regulations are amended by inserting, immediately after regulation 19A, the following regulations:

“Further duties of operator of free-fall jump device

19B. The operator of a free-fall jump device must —

- (a) ensure that the catch device used for the free-fall jump device has a suitable landing area, position and cushioning to safely slow down and stop the fall of the patron;
- (b) ensure that the use of the free-fall jump device is at all times directly supervised by one or more employees of the operator, and any employee supervising the free-fall jump device does not have more than one patron under the employee’s supervision at any one time;
- (c) ensure that only one patron jumps off the structure onto the catch device at any one time;
- (d) ensure that the structure that allows a patron to jump off onto the catch device is —
 - (i) a static structure; and
 - (ii) designed and built only for the purposes of the free-fall jump device; and
- (e) ensure that the vertical displacement of the free-fall jump device from the structure to the catch device does not exceed 50 metres.

Further duties of operator of play net

19C. The operator of a play net must —

- (a) where the vertical displacement of a patron on the play net above the ground is at least one metre, ensure that the boundaries of the play net are barricaded or otherwise protected with a physical barrier to prevent the patron from falling off the play net; and
- (b) impose adequate control measures to ensure that all patrons of the play net can safely access and exit the play net.

Further duties of operator of roller glider

19D. The operator of a roller glider must ensure that —

- (a) each lanyard of the harness securing a patron to the roller glider has a backup safety device so that, if any point on the lanyard fails, the harness continues to secure the patron to the roller glider;
- (b) only one patron rides the roller glider at a time, unless the roller glider has engineering controls in place to ensure that there is a sufficient distance, between patrons riding the roller glider, to avoid a collision;
- (c) the roller glider is installed with a braking system that decelerates the gliding mechanism of the roller glider and brings the gliding mechanism to a safe stop; and
- (d) the roller glider is installed with an additional braking system (such as an over-travel restraint, a buffer or an additional brake) that —
 - (i) will bring the gliding mechanism of the roller glider to a safe stop in the event that the braking system mentioned in paragraph (c) fails; and
 - (ii) does not require any action on the part of the patron.

Further duty of operator of bumper cars

19E. The operator of bumper cars must ensure that only the vehicles specified in the operating permit for the bumper cars are operated as part of the amusement ride.

Further duties of operator of inflatable

19F. The operator of an inflatable must ensure that, if the inflatable is used on water (whether floating on, partially submerged within or fully submerged within the water) —

- (a) there is a sufficient number of life-guards (who are properly trained and certified by an organisation

acceptable to the Commissioner) to rescue any patron of the inflatable when the necessity arises; and

(b) there is available for use on site all equipment necessary to conduct the rescue (such as a pair of scissors and floatation devices).”.

Amendment of First Schedule

9. The First Schedule to the principal Regulations is amended —

(a) by deleting item 1 and substituting the following item:

“

1. Aerial ropeway	ANSI B77.1.	American National Standards Institute.
	CSA Z98.	Canadian Standards Association.
	EN 12929 (Parts 1 and 2).	European Committee for Standardization.

”;

(b) by deleting item 5 and substituting the following item:

“

5. Cable ski	ASTM Committee F24 Standards.	ASTM International.
	EN 13814.	European Committee for Standardization.

”;

(c) by inserting, immediately after item 9, the following items:

“

9A. Free-fall jump device	ASTM Committee F24 Standards.	ASTM International.
9B. Funicular	ANSI B77.2.	American National Standards Institute.
	CSA Z98.	Canadian Standards Association.
	EN 12929 (Parts 1 and 2).	European Committee for Standardization.

”;

(d) by inserting, immediately after item 16, the following item:

16A. Mechanical simulator	ASTM Committee F24 Standards.	ASTM International.
	EN 13814.	European Committee for Standardization.

(e) by inserting, immediately after item 17, the following item:

17A. Play net	ASTM F 1487 on Standard Consumer Safety Performance Specification for Playground Equipment for Public Use, combined with ASTM Committee F24 Standards.	ASTM International.
	EN 1176 on Playground Equipment and Surfacing, combined with EN 13814.	European Committee for Standardization.

(f) by inserting, immediately after item 20, the following item:

20A. Roller glider	ASTM Committee F24 Standards.	ASTM International.
	EN 13814.	European Committee for Standardization.

Amendment of Second Schedule

10. The Second Schedule to the principal Regulations is amended —

(a) by inserting, immediately after item 3, the following items:

“3A. A free-fall jump device where the maximum vertical displacement of a patron above the catch device is at least 5 metres.

3B. A funicular.”;

(b) by deleting item 6 and substituting the following item:

“6. An inflatable or a group of inflatables that a patron may enter upon or within or climb on —

(a) in a case where the inflatable or group of inflatables is used on land —

(i) that has any space that is fully or partially roofed over or covered, and the total roofed over or covered space occupies an area that is at least 30 square metres;

(ii) where the maximum vertical displacement above the ground of a patron using the inflatable or group of inflatables is at least 5 metres;

(iii) that has any space within the inflatable or group of inflatables that is fully or partially roofed over or covered, and that has at least one point within that space, accessible by a patron, where the distance to the nearest exit is at least 15 metres; or

(iv) that has a total base area (when viewed vertically above) that is at least 150 square metres, whether or not the inflatable or group of inflatables has any enclosed space; or

(b) in a case where the inflatable or group of inflatables is used on water (whether floating on, partially submerged within or fully submerged within the water) —

(i) where the maximum vertical displacement of a patron using the inflatable or group of

inflatables above the base of the inflatable or group of inflatables is at least 5 metres;

(ii) that has a total base area (when viewed vertically above) that is at least 15 square metres, whether or not the inflatable or group of inflatables has any enclosed space; or

(iii) that has any linear dimension (when viewed vertically above) that is at least 7 metres.”;

(c) by inserting, immediately after item 8, the following item:

“8A. A play net, where at least 150 square metres of its total area is installed —

(a) horizontally, or substantially horizontally, such that a patron may recline without holding on to the play net; and

(b) at least 5 metres above the ground or water surface.”;

(d) by inserting, immediately after item 9, the following item:

“9A. A roller glider that is not power-driven, where —

(a) the maximum vertical displacement a patron is taken through in the course of the ride is at least 5 metres; or

(b) at any point along the course of the ride —

(i) the vertical displacement of the patron may be at least 10 metres above the access level; or

(ii) there is no access level.”; and

(e) by deleting “ASTM F 2291-09b” in item 10(a) and substituting “ASTM F 2291”.

Amendment of Third Schedule

11. Item 2 of the Third Schedule to the principal Regulations is deleted and the following item substituted therefor:

“2. Any power-driven amusement ride that has a total motive power rating of not more than 1.1 kilowatts, other than the following amusement rides:

(a) a mechanical simulator;

(b) go-karts;

(c) bumper cars;

(d) a roller glider that is power-driven.”.

Amendment of Fourth Schedule

12. The Fourth Schedule to the principal Regulations is amended —

(a) by deleting item 8 and substituting the following item:

“8. A free-fall jump device where the maximum vertical displacement of a patron above the catch device is at least 10 metres.”;

(b) by inserting, immediately after the words “swinging ride” in item 9, the words “, flume ride, river rafting ride, roller coaster, train”;

(c) by deleting “ASTM F 2291-09b” in item 9(a) and substituting “ASTM F 2291”; and

(d) by inserting, immediately after item 9, the following items:

“10. A funicular.

11. A power-driven roller glider where —

(a) the maximum vertical displacement a patron is taken through in the course of the ride is at least 5 metres; or

(b) at any point along the course of the ride —

(i) the vertical displacement of the patron may be at least 10 metres above the access level; or

(ii) there is no access level.”.

Miscellaneous amendments

13. The principal Regulations are amended —

(a) by deleting “BS EN” in the following provisions and substituting in each case “EN”:

Regulation 19A(1)(d) and (e), items 2, 3, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 21A, 22, 23, 24, 25, 26, 27, 28 and 29 of the First Schedule, item 10(a) of the Second Schedule and item 9(a) of the Fourth Schedule; and

(b) by deleting the words “British Standards Institution” in the following provisions and substituting in each case the words “European Committee for Standardization”:

Regulation 19A(1)(d) and items 2, 3, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 21A, 22, 23, 24, 25, 26, 27, 28 and 29 of the First Schedule.

[G.N. Nos. S 229/2014; S 326/2015; S 650/2017]

Made on 12 June 2020.

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Ministry of National Development,
Singapore.*

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