

Elevating and Amusement Devices Safety Division

Ref. No.:

Date:

June 10, 2022

297 / 22

GUIDELINE

IN THE MATTER OF:

THE TECHNICAL STANDARDS AND SAFETY ACT 2000, S.O. 2000, c. 16

- and -

ONTARIO REGULATION 209/01 (Elevating Devices) made under the

Technical Standards and Safety Act, 2000

- and -

the Elevating Devices Code Adoption Document dated June 1, 2001, as amended by ED CAD 295/21

Subject: Alteration Guideline and Alteration Checklist for CSA B355:19 Platform lifts and

stair lifts for barrier-free access (as amended by 295 / 22)

Distribution: Posted on TSSA website

1. <u>Effective Date</u>

1.1 This Directors Guideline becomes effective August 1, 2022 and is to be used in conjunction with alterations performed under the **CSA B355:19 Platform lifts and stair lifts for barrier–free access**, as adopted in Code Adoption Document (CAD) Amendment 295 / 22.

2. Introduction

- 2.1 The purpose of this Director's Guideline, in conjunction with Code Adoption Document (CAD) Amendment 295 / 22, is to:
 - (a) advise which types of upgrades are classified as alterations;
 - (b) indicate the format of the design submission required (see O.Reg 209/01 s.15), by categorizing the scope of work as "major", "minor A" or "minor B";
 - (c) provide instruction on the use and submittal of the alteration checklist;
 - (d) provide a summarized list of requirements associated with a given alteration scope via a checklist;
 - (e) supplement the adoption of Annex D in **CSA B355:19 Platform lifts and stair lifts for barrier–free access** as detailed in Section 7.3 of the CAD; and
 - (f) identify compliance requirements related to any TSSA specified requirements or TSSA defined alterations.

3. Alterations

- 3.1 Work performed on an elevating device other than worked performed as maintenance, repair, or replacement is an alteration.
- 3.2 This guideline captures the Alteration requirements of 3.1 above and displays these requirements in a checklist format (refer to the Alteration Checklist for B355:19)

3.3 Type of Alteration Work

Columns 3 to 6 of the Alteration Checklist classify the type of work as one of the following types:

- (a) Alteration: Modification / Change (column 3)
 - means a change to the original design or characteristics of a component, assembly or the device as a whole, such as material, strength, size, dimension, rating, setting, function, operational mode, design parameters etc., whereby the change may be made on existing equipment or by substituting new modified equipment.

Note that a change of the component make or model, without any other change, may constitute an alteration under requirements of CAD 295 / 22 or section 7 of this guideline (see item (d) below).

(b) Alteration: Addition (column 4)

means addition of a new component or a design feature, not previously provided e.g. addition of top-of-car operating devices.

(c) Replacement with same (column 5)

means the substituted device, assembly or component is the same as the original and this alteration guideline defines the appropriate submission.

(d) Replacement with different make and model (column 6)

means that the substituted device, assembly or component is the same as the original in its design, performance and safety characteristics, except that it is of a different make and/or model and this alteration guideline defines the appropriate submission.

Note: In addition to the work described in 3.3 and listed in the Alteration Checklist, any other work performed on an elevating device that results in a change to the inherent safety or operational characteristics **constitutes an alteration** per 2.6.2 of the CAD, even though there may be no change in the original design. The list of alterations in the attached Alteration Checklist is not allinclusive.

4. Type of Design Submission

- 4.1 Columns 3, 4, 5, and 6 of the alteration checklist contains information needed to determine the type of submission required.
- 4.2 By selecting the alteration scope (see column 1 of the Alteration checklist, see also **CSA B355:19 Platform lifts and stair lifts for barrier–free access** Annex D as amended by CAD 295 / 22 or section 7 of this guideline), the submission type is identified in columns 3, 4, 5, & 6. These entries may be listed as one of the following:

Major - means Major alteration

Minor A - means Minor alteration type A
Minor B - means Minor alteration type B

Blanks (columns5&6) - work that would not constitute an alteration

mrr - this work may proceed as a maintenance repair and replacement

activity, and no submission is required

n/a - means TSSA has permitted an exception to a compliance requirement

(for the noted alteration scope) however, if another alteration activity

requires compliance, the n/a exemption no longer applies

New - means, not an alteration but a new installation

† - means that no inspection is required following the alteration variance - this activity can only be considered after approval of a variance

Note: The checklist utilizes a star symbol '★' to identify TSSA designated alterations or to identify a supplemental TSSA requirement.

5. Requirements for Design Submissions and Inspections

- 5.1 A design submission or notification (in the case of a Minor B) must clearly specify, for each alteration covered, whether the type of the alteration work is a "modification, "addition", or "replacement".
- Where multiple alterations scopes are undertaken, the "highest ranking" submission shall define the submission type.Example: An alteration combination of Minor B and Major will be designated as a Major alteration.

5.2.1 Major Alteration:

- 5.2.1.1 The design submission shall be registered before the major alteration commences, except as permitted in subsection 7(2) of Ontario Regulation 209/01.
- 5.2.1.2 The alteration shall be inspected by TSSA prior to returning the device to service for public use.

5.2.2 Minor Alteration type A and B:

5.2.1.1 According to Section 19 of Ontario Regulation 209/01, the design submission shall be submitted for registration not later than 30 days after returning the elevating device to service. Contractors are advised to submit alteration documents in advance of the work start to ensure that no expense will be incurred should the registration of the proposed design or a requested variance be rejected.

Minor A and B alterations are permitted to be returned to service after work completion, however, the contractor who completed the alteration shall ensure that a "special inspection" has been requested within 60 days after returning the elevator to service. The contractor shall arrange and conduct any tests required by the inspector. A registered design submission or notification shall be available at the time of inspection.

5.3 Signatures

- 5.3.1 According to subsection 15.(6) of Ontario Regulation 209/01, all individual documents composing the design submission for any Major or Minor A alteration shall bear the **signature and seal, or electronic equivalent, of the professional engineer** who prepared or approved the design submission.
- 5.3.2 In the case of Minor B alterations, per Ontario Regulation 15.(9), the design submission documents (or Notification) may be signed by an officer or director of the company applying for registration if the officer or director is a mechanic or if the document is signed by a mechanic with an appropriate certificate who either performed or supervised the work to which the design submission relates.
- 5.3.3 Minor B's that are electronically transmitted shall be deemed acceptable provided that the signature box of the Minor B Notification form contains the name, designation and mechanic license number of a registered and licensed mechanic who supervised and is competent to oversee the scope of the minor B alteration. Example: Signature: John Smith, EDM-A, 00999999

5.4 Specification Forms

5.4.1 Alterations should be submitted on the appropriate Specification Sheets (depending on device type) and should itemize all entries that are **Directly** and **Indirectly** affected by the alteration scope.

Example: Cab Interior Modification resulting in an increase in cab weight

- Directly affected are interior finishes and flame ratings
- Indirectly affected are items such as: rope factor of safety (for electric & roped hydraulic elevators) or cylinder column strength (for hydraulic elevators)
- Sufficient details are to be provided to show compliance verification.

A list of altered components must also be summarized on the submission (typically box 4000).

- 5.4.2 Items which are not affected by the alterations should be noted with either:
 - N/C or No Change; or
 - The Original Entry followed by Existing. Example Car Wt.: 300 kg Existing.
- 5.4.3 Where a "major alteration" or "minor alteration" affects only a very few items, the abridged form may be used instead of the full specification form provided clarity of the submission is not compromised. The Abridged form should specify box numbers, descriptions, and new entry values.

 (Example: 1670. Maximum System Pressure: 3445 kPa)
- 5.4.4 Some predefined templates exist for Minor B type alterations and are available from the TSSA web site. These templates shall be utilized where appropriate to ensure all relevant entries are completed and included in the submission. Multiple Minor B notification templates may be utilized to fully cover the scope of work and only one Minor B fee shall apply.

5.5 Submitting an Alteration Checklist

- 5.5.1 The design submission for a Major or Minor A alteration must include an Alteration Checklist to assist in demonstrating compliance with Annex D of the code as amended by CAD 295 / 22 or section 7 of this guideline. The Checklist and must clearly specify the following:
 - (a) The scope of the alteration shall be identified with an 'X' in column 0 adjacent to each column 1 item that is part of the primary scope of the alteration
 - (b) All relevant sub requirements identified in column 2b shall be identified with an 'x' placed in column 0 to signify the sub requirement has been given engineering consideration and/or modified. Optional: If desired items which where given engineering consideration but not changed or deemed not applicable to a given installation may be marked with 'r' to indicate reviewed.
- 5.5.2 An Alteration Checklist is not required for Minor B Notifications.
- 5.5.3 Sections of the Alteration Checklist, which are not included in the scope of the alteration work, may be hidden (using the row-hide feature in excel) in order to display relevant alterations and suppress non-relevant alteration items.
- 5.5.4 To assist our clients in completing the Alteration Checklist, TSSA will post on its Website (www.tssa.org) a fillable version of the Alteration Checklist in excel format (ED-297-22.xlsx).
- 5.5.5 The B355:19 reference numbers, shown in column 1 and which are marked with 'X' in the Alterations Checklist, (also shown in BOLD font), are those items that are required to be shown on the Alteration Data Plate as per Annex D.2.4 of CSA B355:19 Platform lifts and stair lifts for barrier—free access.
- 5.5.6 The attached Alteration Checklist forms part of this guideline.

6 Alteration Checklist

6.1 General

- 6.1.1 The Alteration Checklist provides useful information to contractors, submitting engineers, reviewing engineers and inspectors to assist in determining:
 - the scope of the alteration
 - · requirements associated with specified scope
 - exemptions to a requirement (where n/a is shown)
 - additional TSSA requirements (where ★ is shown)
 - type of submission required (Major, Minor A or B)

6.2 Parts of the Checklist

6.2.1 Column 0:

Submitter's shall mark Column 0 with 'X' to identify the scope and applicable sub-requirements that received engineering consideration.

• Sub-requirements related to the alteration are <u>mandatory</u> and shall be identified with an 'x', except where the sub requirement is unrelated to the device being altered.

6.2.2 Column 1:

Column 1 contains the Alteration section numbers from **CSA B355:19 Platform lifts and stair lifts for barrier–free access** Annex D as amended by CAD 295 / 22, as well as specifically noted TSSA alterations.

TSSA designated requirements or alterations (if provided) are denoted by the ★ symbol.

6.2.3 Column 2a, 2b and 2c:

Column 2 describes the scope and applicable alteration sub requirements.

- Column 2a is the primary title of the alteration activity (e.g. interlocks)
- Column 2b is the list of sub requirements by reference number (e.g. 4.2.3)
- Column 2c is a text description of the referenced sub requirement. (e.g. Limit of travel)

6.2.4 Column 3, 4, 5 and 6:

The headings of Columns 3 to 6 define the "Type of Alteration Work" as Modification Change, Addition, Replacement with Same, and Replacement with Different. See 3.3 of this guideline.

The contents of Columns 3 to 6 define the "Type of Design Submission" as, Major Alteration, Minor A Alteration, or Minor B – Notification. See 4 of this guideline.

Roger Neate.

Director, Ontario Regulation 209/01 (Elevating Devices), appointed under the Technical Standards & Safety Act, 2000



Elevating and Amusement Devices Safety Division

Ref. No.:

297 / 22

Director's Order

Date:

June 10, 2022

IN THE MATTER OF:

THE TECHNICAL STANDARDS AND SAFETY ACT 2000, S.O. 2000, c. 16

- and -

ONTARIO REGULATION 209/01 (Elevating Devices)

- and -

the Elevating Devices Code Adoption Document dated June 1, 2001, as amended by ED CAD 295/22

Subject: Alterations pursuant to CSA B355:19 Platform lifts and stair lifts for barrier-free access

(as amended by 295 / 22)

Distribution: Posted on TSSA website

Pursuant to s.14(1) of the *Technical Standards and Safety Act, 2000*, the Director under O. Reg. 209/01 (Elevating Devices) hereby orders, to protect and promote the safety of Ontarians, that pursuant to his power under section 14(2), any device that undergoes an alteration be used only in accordance with the requirements of this Order and that any alterations to any device be conducted in the manner set forth in this Order:

This Order should be read in conjunction with (the applicable Code), the CAD and the Guideline.

1.0 Alterations

All references are to the CSA B355:19 Platform lifts and stair lifts for barrier–free access (as amended by 295 / 22) except, references denoted with the ★ symbol (as defined in the Guideline) have been prefaced by the relevant **[B355 code reference]** to assist in locating / referencing the additional requirements in this document and on the alteration checklist.

In addition to Annex D of CSA B355:19, the Director orders that alterations (as applicable) comply with the following:

1.1 In addition to section D2.2 Alterations not covered, alterations shall comply with the following:

 $[D.2.2] \pm 1$ Where access restriction is added or removed to align with hazard assessed risk mitigations related to access and usage, the change to access restriction shall be submitted as:

- (a) a Minor A alteration (with schematic) where wiring changes to the device are involved;
- (b) a Minor B alteration where wiring changes to/on the device are not involved.

Note: The requirements in (a) do not include the addition of wiring for video or voice systems if they are not on the device.

1.2 In addition to section D.3.8 Landing doors and gates, alterations shall comply with the following:

 $[D.3.8.] \pm 1$ The removal of a door operator or gate is a minor B alteration.

This Directors Order becomes effective August 1, 2022.

Roger Neate.

Director, Ontario Regulation 209/01 (Elevating Devices), appointed under the Technical Standards & Safety Act, 2000

1	1	2a 2b	2c	3	4	5	6
55		Alteration Checklist for Director's Order 297/22			Type of Alter		
Conforms to B355	B355:19		(see also Guideline 297/22)	Alte	ration	Replace	ment with
is to	Reference	Scope	of Alteration - B355:19 as amended by CAD 295/22	Modification	م ما ماند م	Como	Different
form	Number		Part, Section or Requirement	Change	Addition	Same	Make/Model
Sont		Job Reference:	. ,		Гуре of Submiss	sion Required	
X	D.2.1		ation requirements		Type of Cubillion	I required	
	D.Z. 1	General Altera	requirements to acceptance inspection per Annex A				
X							
X			A				
	D.2.2		cifically covered in appendix D				
		D.2.2	Shall not reduce Level of safety below previously existing	consult TSS	A engineering		
	[D.2.2] ★1	[D.2.2] ★1	change to access/usage restriction;	see	below		
			 a) includes wiring changes to the device 	Minor A	Minor A		
			include schematic of changes				
			b) does not include wiring changes to the device	Minor B	Minor B		
	D.2.3	Welding					
		Welding of parts which	ch support: car, drive m/c, trusses, girders, tracks	Major	Major		
		4.7	Welding Design				
			(a) Steel Structure, CSA W59				
			(b) Aluminum, CSA W59.2				
		6.6.1.6	Field Welding of pressure piping / fittings				
	D.2.4	Alteration Data Pla	te				
X		Data plate shall inclu					
X			a) name of contractor				
X			b) date of alteration				
X			c) applicable items in this Checklist (mark with X)				
X			d) edition of standard used for the alteration				
^			a) cultion of standard used for the alteration				
	D.3.1	Travel (Increase o	: Decrease)				
	D.3.1	Enclosed Vertical Pla	,	Major	Major		
		Unenclosed Vertical		Major	Major		
		Stair Chair Lift	Fidulottii Liit	Major	Major		
		Stair Chair Lift Stair Platform Lift		-	-		
		4.1.3	Drataction against falling from the platform at landing	Major	Major		
			Protection against falling from the platform at landing				
		4.2.1	travel				
		4.2.3	Limit of travel				
		5.1.3	Unenclosed vertical platform lifts				
		5.3.	Mechanical Limits				
		5.4.1	Under-platform access				
		5.6.1	Guide Rails				
		7 0 5	Safeties and Overspeed governor				
		7.2.5.					
		7.2.5.2	Alternative safety device				
		7.2.5.2 7.6.2.1c)	Alternative safety device Barrier Arm				
		7.2.5.2 7.6.2.1c) 7.7.3	Alternative safety device Barrier Arm Platform gate				
		7.2.5.2 7.6.2.1c) 7.7.3 8.4.4	Alternative safety device Barrier Arm Platform gate Normal-terminal landing stopping device				
		7.2.5.2 7.6.2.1c) 7.7.3	Alternative safety device Barrier Arm Platform gate				
		7.2.5.2 7.6.2.1c) 7.7.3 8.4.4 8.5.3	Alternative safety device Barrier Arm Platform gate Normal-terminal landing stopping device final terminal-stopping switches				
	D.3.2	7.2.5.2 7.6.2.1c) 7.7.3 8.4.4 8.5.3	Alternative safety device Barrier Arm Platform gate Normal-terminal landing stopping device				
	D.3.2	7.2.5.2 7.6.2.1c) 7.7.3 8.4.4 8.5.3 Line of travel inclin	Alternative safety device Barrier Arm Platform gate Normal-terminal landing stopping device final terminal-stopping switches	Major	Major		
	D.3.2	7.2.5.2 7.6.2.1c) 7.7.3 8.4.4 8.5.3 Line of travel inclin Stair Chair Lift Stair Platform Lift	Alternative safety device Barrier Arm Platform gate Normal-terminal landing stopping device final terminal-stopping switches ation (change in inclination)	Major Major	Major Major		
	D.3.2	7.2.5.2 7.6.2.1c) 7.7.3 8.4.4 8.5.3 Line of travel inclin	Alternative safety device Barrier Arm Platform gate Normal-terminal landing stopping device final terminal-stopping switches	-	-		
	D.3.2	7.2.5.2 7.6.2.1c) 7.7.3 8.4.4 8.5.3 Line of travel inclin Stair Chair Lift Stair Platform Lift	Alternative safety device Barrier Arm Platform gate Normal-terminal landing stopping device final terminal-stopping switches ation (change in inclination)	-	-		
		7.2.5.2 7.6.2.1c) 7.7.3 8.4.4 8.5.3 Line of travel inclir Stair Chair Lift Stair Platform Lift 4.2.5	Alternative safety device Barrier Arm Platform gate Normal-terminal landing stopping device final terminal-stopping switches ation (change in inclination) Inclination (angle not to exceed 45 degrees)	-	-		
	D.3.2 D.3.3	7.2.5.2 7.6.2.1c) 7.7.3 8.4.4 8.5.3 Line of travel inclir Stair Chair Lift Stair Platform Lift 4.2.5	Alternative safety device Barrier Arm Platform gate Normal-terminal landing stopping device final terminal-stopping switches ation (change in inclination) Inclination (angle not to exceed 45 degrees) fall or tripping protection	-	-		
		7.2.5.2 7.6.2.1c) 7.7.3 8.4.4 8.5.3 Line of travel inclin Stair Chair Lift Stair Platform Lift 4.2.5 4.1.2b)	Alternative safety device Barrier Arm Platform gate Normal-terminal landing stopping device final terminal-stopping switches ation (change in inclination) Inclination (angle not to exceed 45 degrees) fall or tripping protection	-	-		
		7.2.5.2 7.6.2.1c) 7.7.3 8.4.4 8.5.3 Line of travel inclin Stair Chair Lift Stair Platform Lift 4.2.5 4.1.2b) Rated speed (char	Alternative safety device Barrier Arm Platform gate Normal-terminal landing stopping device final terminal-stopping switches ation (change in inclination) Inclination (angle not to exceed 45 degrees) fall or tripping protection	Major	Major		
		7.2.5.2 7.6.2.1c) 7.7.3 8.4.4 8.5.3 Line of travel inclin Stair Chair Lift Stair Platform Lift 4.2.5 4.1.2b) Rated speed (charchange in rated speed	Alternative safety device Barrier Arm Platform gate Normal-terminal landing stopping device final terminal-stopping switches ation (change in inclination) Inclination (angle not to exceed 45 degrees) fall or tripping protection age in) d	Major	Major		
		7.2.5.2 7.6.2.1c) 7.7.3 8.4.4 8.5.3 Line of travel inclin Stair Chair Lift Stair Platform Lift 4.2.5 4.1.2b) Rated speed (char change in rated speed	Alternative safety device Barrier Arm Platform gate Normal-terminal landing stopping device final terminal-stopping switches ation (change in inclination) Inclination (angle not to exceed 45 degrees) fall or tripping protection age in) d Rated Speed	Major	Major		
		7.2.5.2 7.6.2.1c) 7.7.3 8.4.4 8.5.3 Line of travel inclin Stair Chair Lift Stair Platform Lift 4.2.5 4.1.2b) Rated speed (char change in rated speed 4.3 6.6.5	Alternative safety device Barrier Arm Platform gate Normal-terminal landing stopping device final terminal-stopping switches ation (change in inclination) Inclination (angle not to exceed 45 degrees) fall or tripping protection age in) d Rated Speed Speed-limiting devices	Major	Major		
		7.2.5.2 7.6.2.1c) 7.7.3 8.4.4 8.5.3 Line of travel inclin Stair Chair Lift Stair Platform Lift 4.2.5 4.1.2b) Rated speed (char change in rated speed 4.3 6.6.5 7.2.5	Alternative safety device Barrier Arm Platform gate Normal-terminal landing stopping device final terminal-stopping switches ation (change in inclination) Inclination (angle not to exceed 45 degrees) fall or tripping protection age in) d Rated Speed Speed-limiting devices Safeties and overspeed governor	Major	Major		

	1	2a 2b	2c	3	4	5	6
55		٨١	teration Checklist for Director's Order 297/22		Type of Alter		
Conforms to B355	B355:19	Ai	(see also Guideline 297/22)	Alte	ration		ement with
t 5	Reference	Soore	of Alteration - B355:19 as amended by CAD 295/22	Modification			Different
Ĕ	Number	Scope	Part, Section or Requirement	Change	Addition	Same	Make/Model
outo	Number		Part, Section or Requirement				
-		Job Reference:			Type of Submiss	sion Required	
	D.3.4	Capacity, rated loa	d or carriage weight (change to)				
		Change in Capacity		Major	Major		
		Change in Rated Loa	d	Major	Major		
		Change in carriage w	eight	Major	Major		
		Table 1	Capacity, rated load and size				
		4.5	Capacity, rated load and size				
		4.5.4	Display max. capacity and rated load on carriage				
		4.6	Safety factors				
		★ 5.6	Guide Rails				
		★ D.2.3	Welding				
		6.1.3	Drive unit brakes				
		6.6.2.2	Check valve				
		6.8	Friction drive				
\vdash		7.2.1.	Carriage construction				
\vdash		7.2.5	Safeties and overspeed governor				
		7.3.1	Platform construction				
		9	Date Plate and signs				
	D.3.5	Platform size (char	<u> </u>				
		change to platform si	ze	Major	Major		
		Table 1	Capacity, rated load and size				
		4.4	Type of carriage (requirements changes based on carriage type)				
		4.6	Safety factors				
		D.2.3	Welding				
	D.3.6	Lighting					
	D.3.0	Alteration to lighting		Minor B	Minor A	mrr	Minor B
		4.8.1	Lighting illumination and logation	IVIIIIVI D	WIII IOI A	11111	IVIII IOI D
			Lighting illumination and location				
		4.8.2	Lighting for totally enclosed vertical platform lift				
		4.8.3	Emergency lighting				
	D.3.7	Runways					
			on of a runway enclosure wall	Major	Major		
		5.1.2	Enclosed vertical platform lifts				
		5.1.2(a)	Minimum height of 1070 mm above the top landing				
		5.1.2(b)	Conform to 5.1.1				
		5.1.2(c)	equipped with landing doors or gate conforming to Clause 5.2.				
		5.1.3	Unenclosed vertical platform lifts				
		5.1.4	Enclosed stair platform lifts				
		5.5.1	Horizontal Clearance - vertical platform lifts				
		Lift added to existing	enclosed runway	N	ew		
		B355-19					
		5.5	Horizontal clearances				
	D.3.8	Landing doors and	gates				
\Box	D.3.8.1		nent to a landing door or gate	Minor B	Minor A		Minor B
\vdash	0.0.1	★ 4.1.4.4	Projections from the internal surfaces		······································		
\mathbf{H}		5.2.1.1					
			strength, vision panel, and fire rating				
\vdash		5.2.2	height and width				
		5.2.3	door or gate interlock				
		5.2.4	testing and certification of Interlocks / locks				
	D.3.8.2	power added to a doc		Minor A	Minor A		Minor B
		5.2.1.3 (a)	timing from close to fully open of swing doors/gates				
		5.2.1.3 (b)	force to stop the movement of the swingdoors/gates				
		8.1.1	electrical equipment and wiring meets Section 38 OESC				
		8.1.2	electrical equipment meets B44.1/A17.5				
	[D.3.8.]★1	Remove door/gate op	perator	Minor B			
	•						

	1	2a 2b	2c	3	4	5	6
ič			teration Checklist for Director's Order 297/22		Type of Alter		
Conforms to B355	B355:19	A	(see also Guideline 297/22)	Alte	ration		ment with
s to	Reference	Scone	of Alteration - B355:19 as amended by CAD 295/22	Modification			Different
Ë	Number	эсоре	Part, Section or Requirement	Change	Addition	Same	Make/Model
onfe	Number	Job Reference:	r art, dection of Requirement		Erman of Ordersion	de a Demoire d	
0		Job Reference:			Type of Submiss	sion Required	
	D.3.9	Door or gate interlo					
		Door or gate interlock					
			n of interlock with the different type (fixed or retiring cam or solenoid)	Minor A	Minor A	mrr	Minor A
		5.2.3	door or gate interlock,				
		5.2.4	testing and certification of Interlocks / locks				
		5.2.5.11	Examination of operation (engagement)				
		8.3.3.3	doors or gates openable within 50mm of landing				
		8.4.2	Protection in case of failure (solenoid interlock)				
		8.5.8	Door or gate interlock contacts				
		8.1.1	electrical equipment and wiring meets Section 38 OESC				
		8.1.2	electrical equipment meets B44.1/A17.5				
	D.3.10	Under platform (pit					
		underplatfrom alterati					
		a) pit drains and sum		Minor A	Minor A		
		5.4.2 f)	prevent ground water entry				
		5.4.2 g)	drains and sumps to the plumbing code				
		b) pit access	The same samps to this planting sour	Minor A	Minor A		
		5.4.2	Under-platform access (where pit >300mm deep)	WIIIOI A	WILLIOI A		
		c) pit illumination	order platform access (where pit >000mm deep)	Minor B	Minor B		
		4.8	Lighting	WIIIIOI D	IVIIIIVI D		
		=	Lighting	Minor A	Minor A		
		d) pit stop switch 8.5.9	Dunway atan dayiga	Minor A	Minor A		
			Runway stop device	Minor D	Minor D		
		e) pit depth	He described as a least series of the series (1, 200 and 1, 200 an	Minor B	Minor B		
		5.4.2	Under-platform access (where pit >300mm deep)				
		f) access to underside	e or platform	Minor B	Minor B		
	D 0 44	Daires consist (alaborators	(4 to - 14 1)				
	D.3.11	Drive unit (drive un	it is altered)	Madan			N 4 = ' = ::
		All Drive unit		Major		mrr	Major
		6.1	Requirements for all drive units				
		6.1.6	Drive unit enclosure				
		8.1	Electrical equipment - General				
	D.3.12		carriage in case of emergency				
			riage is altered or added	Major	Major	mrr	Minor B
		6.1.4.1	not accessible inside				
		6.1.4.2	smooth hand wheel				
		6.1.4.3	instructions				
		6.1.4.4	direction indications				
		6.1.4.5	brake release				
		6.1.4.6	safe and convenient access				
		6.1.4.7	means to prevent automatic operation				
		8.5.11	Manual moving device switch				
	D.3.13	Suspension wire ro	pe				
		Change no. of ropes		Major	N/A		
		Change in rope mate	rial				
		Change in rope diam					
		6.2.1	Suspension wire rope				
		6.2.2	Winding Drum				
		6.2.3	Sheaves				
		8.5.5	Slack belt or chain drive, drum, sheave, and safeties switches				
\vdash	D 2 4 4	Cuan are desired					
	D.3.14	Suspension chain			A1/A		
		Change to a different		Major	N/A		
		Change to a different		Major	N/A		
<u> </u>		6.4.1.2	roller chain to B29.100				
1		6.4.1.3	Link strength equal chain strength				

	1	2a	2b	2c	3	4	5	6
B355	B355:19		Alte	eration Checklist for Director's Order 297/22 (see also Guideline 297/22)	Alte	Type of Altera		ement with
nforms to	Reference Number		Scope o	f Alteration - B355:19 as amended by CAD 295/22 Part, Section or Requirement	Modification Change	Addition	Same	Different Make/Model
So		Job	Reference:			Type of Submiss	ion Required	

	1	2a	2b	2c	3	4	5	6
55			Al	teration Checklist for Director's Order 297/22		Type of Alter		
) B3	B355:19			(see also Guideline 297/22)	Alte	ration	Replace	ment with
ls to	Reference		Scope	of Alteration - B355:19 as amended by CAD 295/22	Modification	Addition	Same	Different
forn	Number			Part, Section or Requirement	Change		Same	Make/Model
Conforms to B355		Job	Reference:			Type of Submiss	sion Required	
	D.3.15	Hvdra	ulic equipme	nt				
	2.01.0		ver unit and pur		Minor A		Minor B	Minor B
		-	6.6	Hydraulic drive				
			6.6.1	General requirements				
			6.6.2	Valves				
			6.6.3	Piping requirements				
			6.6.4	Connections and fittings				
			6.6.5	Speed-limiting devices				
			6.6.6	Levelling device, anti-creep				
			6.6.7	Safety bulkhead				
			6.6.8	Pressure Sensor				
			6.6.9	Telescopic plunger guides				
			6.6.10	Operation dependent on electric power supply				
			8.1	Electrical equipment - General				
			8.1.1	electrical equipment and wiring meets Section 38 OESC				
			8.1.2	electrical equipment meets B44.1/A17.5				
			Iraulic jack	Consequence of the consequence o	Major		MinorA	Major
[6.6.1	General requirements for components under fluid pressure				
		c) Plur	ngor		Mojor		Minor A	Minor A
			6.6.1.1	Factor of aniaty	Major		MINOT A	IVIINOF A
			6.6.1.2	Factor of safety Material				
			6.6.1.4	Component proof test				
			6.6.1.5	Component markings				
			6.6.1.6	Field welding				
			6.6.9	Telescopic plunger guides				
				Total Principle Service				
		d) Cylii	nder		Major		Minor A	Minor A
			6.6.1.1	Factor of safety				
			6.6.1.2	Material				
			6.6.1.4	Component proof test				
			6.6.1.5	Component markings				
			6.6.1.6	Field Welding of pressure piping / fittings				
			6.6.4.2	Grooved pipe fittings				
			6.6.7	Safety bulkhead				
\square		- \ .						
			ease working p		Major			
\vdash			6.6.1.3	Working Presssure				
\vdash			6.6.1.4 6.6.1.5	Component proof test Connection and fitting				
\vdash			6.6.1.6	Field Welding of pressure piping / fittings				
			6.6.1.7	Flexible hose and fitting assemblies				
			6.6.2	Valves				
			6.6.3	Piping Requirements				
			6.6.4	Connections and fittings				
			6.6.5	Speed-limiting devices				
			6.6.6	Levelling device, anti-creep				
			6.6.7	Safety Bulkhead				
			6.6.8	Pressure Sensor				
			6.6.9	Telescopic plunger guides				
				ping, and fittings	Major		Minor B	Minor B
			6.6.1	General requirements for components under fluid pressure				
			6.6.2	Valves				
			6.6.3	Connection and fittings				
			6.6.4	Connections and fittings				
			6.6.5	Speed-limiting devices				
			6.6.6	Levelling device, anti-creep			<u> </u>	

	1	2a	2b	2c	3	4	5	6
B355	D055 46	nce Scope of Alteration - B355:19 as amended by CAD 295/22		Alte	ation Work Replace	Work Replacement with		
Conforms to I	B355:19 Reference Number			of Alteration - B355:19 as amended by CAD 295/22	Modification Change	Addition	Same	Different Make/Model
ပိ		Job	Reference:			Type of Submiss	sion Required	
			6.6.8 6.6.10	Pressure Sensor Operation dependant on electric power supply				
		g) Pipe	es and hoses		Minor A	Minor A	Minor B	Minor B
			6.6.1 6.6.3 6.6.4	General requirements for components under fluid pressure Piping Requirements Connections and fittings				
		h) Pres	ssure sensor			Minor A	mrr	Minor A
			6.6.8	Pressure sensor				
		i) Spec	ed-limiting device	ces	Minor B	Minor B	mrr	Minor B
			6.6.5	Speed-limiting devices				
	D.3.16	Electr	ical equipmer	nt				
			8	Controller and EPD	Major		Major	Major

	1	2a	2b	2c	3	4	5	6
55				eration Checklist for Director's Order 297/22		Type of Altera	ation Work	
B3	B355:19		,	(see also Guideline 297/22)	Alte	eration	Replace	ement with
s to	Reference		Scope o	of Alteration - B355:19 as amended by CAD 295/22	Modification	A alaliti a a	Como	Different
form	Number		•	Part, Section or Requirement	Change	Addition	Same	Make/Model
Conforms to B355		Job	Reference:	•		Type of Submiss	ion Required	<u> </u>
						, , , , , , , , , , , , , , , , , , ,		
Tests Mark with 'X'		3355:1		Indicate which Annex A testings are required for the				
Test rk w		eferen		specified Alteration Scope from Above				
Mai	'	Numbe	er	Specified Attendition Geope from Above				
	A.2 a)	GENE	RAL					
		i)	Hazards					
			4.1.1	General - no defects, adequate strength, suitable quality				
			4.1.2	Protection against hazards				
			4.1.3	Protection against falling from the platform at landing				
			4.1.4	Obstructions and projections				
		ii)	Travel					
			4.2.1	Travel				
			4.2.3	Limits of travel				
		iii)	Floor Penetrat	ion				
			4.2.2	Travel				
			4.2.3					
		iv)	Data Plate and	l Signs				
			9	Data plate and signs				
			9.1	Data plate				
			9.2	Under-platform sign				
			9.3	Markings of data plate and sign				
			9.4	Markings of landing zone for an enclosed vertical platform lift				
	A.2 b)	DRIVE						
		i)	Rated Speed					
			4.3	Rated Speed				
		ii)	Power Transm					
			6.1.2	Power Transmission				
		iii)	Brake with 12					
			6.1.3	Drive unit brakes				
		iv)	Enclosure					
			6.1.6	Drive unit enclosure				
		v)	type of drive,					
			6.2	Suspension wire rope, winding drums, sheaves, protection and gu	arding, and	traction		
			6.3	Rack and pinion drive				
			6.4	Chain and chain sprocket drive				
			6.5	Screw and nut drive				
			6.6	Hydraulic drive				
$\vdash \vdash \vdash$	A 2 a)	DIME	6.7	Rope chain and rope sprocket drives				
\vdash	A.2 c)	RUNV i)	Enclosure					
$\vdash \vdash \vdash$		1)	5.1	Punway analoguras				
\vdash		ii)	Landing Doors	Runway enclosures				
$\vdash\vdash$		")	5.2	Landing doors and gates				
\vdash			8.5.8	Door or gate interlock contacts				
\vdash		iii)	Mechanical Li					
		111)	5.3	Mechanical limits				
		iv)						
$\vdash\vdash\vdash$		iv)	Under-platform 5.4					
$\vdash\vdash\vdash$		v)	Guide Rails	Under-platform access				
		v)	5.6	Guide rails				
		vi)						
\vdash		vi)	Guards at Ceil	=				
			5.7	Stair lift guards at ceiling intersections				

	1	2a	2b	2c	3	4	5	6
2		20		teration Checklist for Director's Order 297/22	Ü	Type of Altera		
B355	B355:19		Al		Alte	ration		ement with
\$			Caana	(see also Guideline 297/22)	Modification			Different
Ë	Reference Number		Scope	of Alteration - B355:19 as amended by CAD 295/22	Change	Addition	Same	Make/Model
Conforms to	Number	l .		Part, Section or Requirement				
ŏ			b Reference:			Type of Submiss	ion Required	
	A.2 d)		RIAGE					
		i)		ed Load, and Size				
			4.5	Capacity, rated load, and size				
		ii)	Enclosure					
			7.5.3	Guard (enclosure) - Standing platform				
			7.6.2	Guard (enclosure) - Wheelchair platform				
			7.7.2	Guard (enclosure) - Wheelchair-and-attendant platform				
		iii)	Sensitive Edg	es or Surfaces				
			7.2.4	Sensitive edges or sensitive surfaces				
			8.5.4	Sensitive edge and sensitive surface switches				
		iv)	Safeties with	125% rated load				
			7.2.5.1 c)	Safeties shall be capable of stopping and holding the carriage loa	aded with 125	5% of the rat	ted load	
			8.5.5	Slack belt or chain drive, drum, sheave, and safeties switches				
		v)	Foldable Com	ponents				
			7.2.6.2	Stair platform lifts with foldable or movable components (except the	he seat) sha	ll be incapat	ole of bein	g started
			8.5.6	Foldable, rotatable, or hinged component contacts	ŕ	•		
		vi)	Rotatable Cha	air				
		•	7.4.3.1	If a chair is rotatable, an electrical protective contact conforming t	to Clause 8.5	5.6 shall be r	orovided	
			8.5.6	Foldable, rotatable, or hinged component contacts		'		
		vii)	Barrier	3				
		•	7.6.2.1 c)	Unenclosed stair platform lift - have retractable passenger restrai	ning arms			
			8.5.7	Gate and passenger restraining arm contacts	Ü			
		viii)	Gate	, ,				
		,	7.7.3	Platform gate				
			8.5.7	Gate and passenger restraining arm contacts				
		ix)	Safety Flaps					
		,	7.6.3	Rollaway protection				
			7.6.5	Ramps, flaps, and hinged-edge stops				
			8.5.6	Foldable, rotatable, or hinged component contacts				
		x)	Handgrips or					
		~,	7.5.2	Handgrips				
			7.7.5	Handrails				
ш			1.1.5	Tallalalis				

	1	2a	2b	2c	3	4	5	6
ıς			·	Iteration Checklist for Director's Order 297/22	-	Type of Altera	ation Work	
B355	B355:19		A	(see also Guideline 297/22)	Alte	ration	Replace	ement with
s to	Reference		Scone	of Alteration - B355:19 as amended by CAD 295/22	Modification			Different
E .	Number		Сооро	Part, Section or Requirement	Change	Addition	Same	Make/Model
Conforms to		lo	b Reference:			Type of Submiss	sion Poquiros	
0	A.2 e)	- 00	ARANCES			Type of Submiss	sion Required	
	A.Z Cj	i)	Vertical					
		',	4.1.5	Vertical clearance				
		ii)	Horizontal	Volume of Surface Surf				
		,	5.5	Horizontal clearances				
			7.2.3.2	Protection on carriages - clearance of not less than 50 mm from a	any part of th	ne fixed insta	allation	
		iii)	at Landings	The second of th	, part or tr	10 11/10 0 11 10 10		
		,	7.5.4	Clearances at landings - Standing platform				
			7.6.4	Clearances at landings - Wheelchair platform				
			7.7.4	Clearances at landings - Wheelchair-and-attendant platform				
	A.2 f)	ELEC	TRICAL EQUIP	· · · · · · · · · · · · · · · · · · ·				
	ĺ	i)	Voltage and 0	Current Reading				
			5.2.4.1.2 c) iii	The following marking requirements shall apply: rated voltage and	d current (ac	or dc)		
			5.2.4.2.	Connections for and test of electrical parts				
			5.2.5.3.2	AC-rated locking devices shall have their electrical parts connected	ed to an indu	uctive circuit		
			5.2.5.3.3	DC-rated locking devices shall have their electrical parts connected	ed to an indu	uctive circuit		
			5.2.5.7	Insulation test				
		ii)	Voltage, Fuse	es, Disconnecting Means				
			8.1	Electrical equipment and wiring shall conform to				
		iii)	Operating De	vices				
			8.2	Operation and operating devices				
		iv)	Alarm and Wa	arning Signals				
			8.3	Alarm and warning signal				
		v)	Control Equip	pment				
			8.4	Control and control equipment				
		vi)	Emergency S	top Device				
			7.3.2 b)	Platform ceilings - solid and capable of sustaining a load of				
			8.5.2	Emergency stop device				
			8.5.9	Runway stop device				
		vii)		al-Stopping Devices				
			8.5.3	Final terminal-stopping switches				