

COMMITTEE ME-005

DR AS/NZS 1418.10:2011 Amd 1:2016

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Draft for Public Comment Australian/New Zealand Standard

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**BEGINNING DATE
FOR COMMENT:**

7 December 2016

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FOR COMMENT:**

8 February 2017

Important: The procedure for public comment has changed – please read the instructions on the inside cover of this document.

**Amendment 1 to AS/NZS 1418.10:2011
Cranes, hoists and winches
Part 10: Mobile elevating work platforms**

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Committee ME-005—Cranes

Subcommittee ME-005-10—Elevating Work Platform

DRAFT

Australian/New Zealand Standard

Cranes, hoists and winches

Part 10: Mobile elevating work platforms

(Amendment 1 to AS/NZS 1418.10:2011)

Comment on the draft is invited from people and organizations concerned with this subject. It would be appreciated if those submitting comment would follow the guidelines given on the inside front cover.

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This document is a draft Australian/New Zealand Standard only and is liable to alteration in the light of comment received. It is not to be regarded as an Australian/New Zealand Standard until finally issued as such by Standards Australia/Standards New Zealand.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Amendment No. 1
to
AS/NZS 1418.10:2011
Cranes, hoists and winches
Part 10: Mobile elevating work platforms

REVISED TEXT

The 2011 edition of AS/NZS 1418.10 is amended as follows; the amendment(s) should be inserted in the appropriate place(s).

SUMMARY: This Amendment applies to Clauses 1.1, 1.2, 1.3.4, 1.3.22, 1.3.26, 1.3.29, 1.3.43, 2.1.4.1.2, 2.1.5.1, 2.1.5.3, 2.1.5.5, 2.1.6.3.3, 2.2.2, 2.2.7.1, 2.2.7.2, 2.2.10, 2.2.12, 2.2.18, 2.3.1.2, 2.3.1.4, 2.4.1.5, 2.5.1, 2.5.2, 2.5.5, 2.5.6, 2.5.10, 2.5.14, 2.6.4, 2.6.5, 2.6.6, 2.8.10, 3.2, 3.3, 3.4, 3.6.3.1.1, 3.6.3.1.2, 3.6.3.2.2(c), 3.6.4, 4.1.2, 4.1.3, 4.2.6, 5.1, 5.2.6, 5.2.10.1, 5.2.12, 6.2.5.2, 7.1, 7.3.3, 7.9.11.2, Tables 2.1.5.5, 7.9, 7.9.16.2 and M4(A), Figures 2.1.5 and 7.9.17, and Appendices A, H and M.

Published on .

Approved for publication in New Zealand on behalf of the Standards Council of New Zealand on

AMDT
No. 1

Clause 1.1

Delete first paragraph and *replace* with the following:

This Standard specifies requirements for mobile elevating work platforms (MEWPs), as defined in Clause 1.3. It does not apply to passenger and goods lifts, hoists, fixed elevating work platforms, suspended scaffolding or mast climbing platforms.

AMDT
No. 1

Clause 1.2

In the referenced documents list, *delete* the following Australian Standard:

1687 Knapsack spray pumps for firefighting

AMDT
No. 1

Clause 1.3.4

Delete existing clause text and *replace* with the following:

A material that is not ductile as defined by Clause 1.3.11.

AMDT
No. 1

Clause 1.3.22

Delete existing Note and *replace* with the following:

NOTE: The system includes the measuring device(s), the method of mounting the measuring device(s), the signal processing systems, indicators, displays and warning systems.

AMDT
No. 1

Clause 1.3.26

Delete the following from third line:

‘, but does not include mast climbing work platforms’

AMDT
No. 1

Clause 1.3.29

Delete existing clause text and *replace* with the following:

An area of land where crops are specifically planted for commercial sale.

AMDT
No. 1

Clause 1.3.43

Delete existing heading and *replace* with the following:

1.3.43 Totally manually powered MEWP

AMDT
No. 1

Clause 2.1.4.1.2

First paragraph, third sentence, *delete* '400 mm' and *replace* with '500 mm'.

AMDT
No. 1

Clause 2.1.5.1

Delete existing Note and *replace* with the following:

NOTE: See examples in Figures 2.1.5.1 and 2.1.5.2.

AMDT
No. 1

Clause 2.1.5.3

Delete existing Note and *replace* with the following:

NOTE: See examples in Figures 2.1.5.1 and 2.1.5.2.

AMDT
No. 1

Clause 2.1.5.5

Delete existing Note and *replace* with the following:

NOTE: Examples are shown in Tables 2.1.5.5.1 and 2.1.5.5.2, and in Figures 2.1.5.1 and 2.1.5.2.

AMDT
No. 1

Clause 2.1.6.3.3

Second paragraph, last line, *delete* '2.5.16' and *replace* with '2.5.14'.

AMDT
No. 1

Clause 2.2.2

Delete the existing clause text and *replace* with the following:

Every MEWP shall have a device to indicate when the inclination of the chassis has reached or exceeded maximum permissible limits. This device shall be automatic, in accordance with Clause 2.10, and shall minimize the potential for damage, accidental change of its setting and unauthorized operation (e.g. be sealed or locked).

For MEWPs of Type 1 with a manually controlled chassis levelling system, the device may be replaced by a spirit level that clearly indicates the permissible limits of inclination.

For MEWPs with power-driven stabilizers/outriggers, the indication shall be able to be monitored from each stabilizer/outrigger control position.

For vehicle mounted MEWPs supported entirely or partly on pneumatic tyres when elevated, an inclination-indicating device shall be fitted to each end of the vehicle in close proximity to the points of support.

On MEWP's of Type 2 and Type 3 while travelling out of the transport configuration the device shall prevent the chassis exceeding the limits of inclination permitted by the manufacturer. When the chassis has reached the limits of inclination and the safety device according to Clause 2.10 has been triggered, it shall prevent continuation of travel in the selected direction. For vehicle mounted MEWPs of Type 2 the cut-out can be replaced by an audible alarm.

When the safety device is triggered, controls used for emergency retrieval may remain active.

Verification shall be carried out by functional test.

AMDT
No. 1

Clause 2.2.7.1

Delete the existing heading and clause text and *replace* with the following:

2.2.7.1 MEWPs with stabilizing devices or systems

Except for totally manually operated MEWPs (see Clause 2.2.8) every MEWP with devices/systems that are required to be deployed to satisfy the stability tests specified in Clause 3.6.3 shall be fitted with a safety device in accordance with Clause 2.10, which shall prevent the work platform operating outside permitted positions unless the devices/systems are set in accordance with the operating instructions. The safety system shall function without the need for operator intervention or connection.

NOTE: Stabilizing devices or systems include stabilizers, outriggers, extendible axles, axle lockouts and pothole protection.

Verification shall be carried out by design check and functional test.

AMDT
No. 1

Clause 2.2.7.2

1 In the heading, *delete* 'stabilizing media' and *replace* with 'stabilizing devices'.

2 In the clause text, first paragraph, *delete* 'stabilizing media' and *replace* with 'stabilizing devices'.

AMDT
No. 1

Clause 2.2.10

In the first paragraph, first line, *delete* 'For MEWPS with powered stabilizers/outriggers or chassis, a levelling system' and *replace* with 'MEWPS with powered stabilizers/outriggers or a chassis levelling system'.

AMDT
No. 1

Clause 2.2.12

In the first paragraph, second line, *delete* 'when power to the brakes' and *replace* with 'when power or signal to the brakes'.

AMDT
No. 1

Clause 2.2.18

Delete existing first paragraph and *replace* with the following:

Except for scissor mechanisms (see Clause 2.3.4) guards shall be provided to prevent persons at control positions, or standing adjacent to the MEWP at ground level or at other points of access from touching hot parts or dangerous parts of drive systems. Opening or removal of these guards shall only be possible by devices located in fully enclosed and lockable enclosures (e.g. cabs, compartments) or by the use of tools or keys provided with the MEWP. When it is foreseen that the fixed guards will be removed regularly (e.g. for routine maintenance) then the fastenings shall remain attached to the guards or to the MEWP.

This requirement does not apply to the exhaust systems of vehicles conforming to road traffic regulations unless they are located near the control or access position.

AMDT
No. 1

Clause 2.3.1.2

In Item (b), second line, *delete* 'at each pre-selected control position' and *replace* with 'at each control position'.

AMDT
No. 1

Clause 2.3.1.4

In the first paragraph, second line, after the word 'visual', *insert* 'and audible'.

AMDT
No. 1

Clause 2.4.1.5

Delete the Note.

AMDT
No. 1

Clause 2.5.1

- 1 *Delete* existing first paragraph and *replace* with the following:

After the initial levelling (if applicable) of the platform, the level of the work platform shall not vary by more than 5 degrees from the initial setting during movements of the extending structure.

- 2 In the existing Note, after the second sentence, *insert* the following sentence:

For the purpose of this Clause, the enhanced overload criteria do not apply.

AMDT
No. 1

Clause 2.5.2

Delete 'the rotational speed of the platform shall not exceed 0.3 rad/s' and *replace* with 'the speed of the platform levelling shall not exceed 0.3 rad/s'.

AMDT
No. 1

Clause 2.5.5

- 1 After the second paragraph, *insert* the following:

Fall arrest anchorages shall be marked to indicate the number of persons that can be attached—see Clause 4.2.2(j). Their capacity shall not be shown.

- 2 *Delete* the existing third paragraph and *replace* with the following:

When fitted with a fall-restraint anchorage, each anchorage shall be capable of withstanding a static force of 6 kN without reaching ultimate strength and shall be located no more than 750 mm above the floor. For anchorages rated for more than one person, the strength requirements shall be multiplied by the number of persons. This strength requirement shall only apply to the anchorage and its attachment to the MEWP in all possible load directions.

Fall restraint anchorages shall be marked 'Restraint Only', with words or symbols, and shall indicate the number of persons that can be attached"

AMDT
No. 1

Clause 2.5.6

Delete the existing first two paragraphs and *replace* with the following:

Any part of the protection movable for the purpose of access to the work platform shall not fold or open outwards. The gate shall be designed to either return automatically to the closed and latched position, or be interlocked in accordance with Clause 2.10 to prevent operation of the MEWP until it is closed and latched. Inadvertent opening shall be prevented.

Sliding or vertically opening intermediate guardrails that return automatically to their protective position do not need to be latched or interlocked. Sliding or vertically opening intermediate guard-rails shall be capable of being held in the open position with one hand whilst a person enters or leaves the platform.

AMDT
No. 1

Clause 2.5.10

Delete the existing first paragraph and *replace* with the following:

Trapdoors in work platforms shall be designed so that inadvertent opening is not possible. It shall not be possible for trapdoors to open downward or to slide sideward.

AMDT
No. 1

Clause 2.5.14

After 'The work platform', *insert* 'of vehicle and trailer mounted MEWPs'.

AMDT
No. 1

Clause 2.6.4

Fifth paragraph, *delete* first sentence.

AMDT
No. 1

Clause 2.6.5

Delete existing third paragraph and *replace* with the following:

A mechanism, in accordance with Clause 2.10, shall be provided such that movement is possible from only one preselected control station. Where the mechanism incorporates a key, the key shall only be able to be removed when the mechanism is in the neutral or off position. The base or ground-level controls shall override all additional controls, including the platform emergency-stop (E stop) control. If the emergency-stop output of a control station is bypassed when another control station is in use, this shall occur in such a way that operation of that station is positively prevented should the bypass fail to release.

AMDT
No. 1

Clause 2.6.6

Second paragraph, second line, *delete* 'control modes' and *replace* with 'operating modes'.

AMDT
No. 1

Clause 2.8.10

Third paragraph, *delete* 'Duplicate information' and *replace* with 'The same information'.

AMDT
No. 1

Clause 3.2

As a second paragraph, *add* the following:

Vehicle mounted MEWPs installed on a different vehicle design shall be subject to the applicable tests specified in Clause 3.6.

AMDT
No. 1

Clause 3.3

- 1 *Delete* existing Item (a).
- 2 *Redesignate* Item (b) to (a).
- 3 *Redesignate* Item (c) to (b).
- 4 *Delete* existing Item (d) and *replace* with the following:
 - (c) In addition, each vehicle-mounted MEWP shall undergo the static stability test in accordance with Clause 3.6.3.1.1.

AMDT
No. 1

Clause 3.4

At the end of current list, *add* new Item (g) as follows:

- (g) Validation reports of the systems that incorporate those safety devices as referred to in Clause 2.10.

AMDT
No. 1

Clause 3.6.3.1.1

- 1 First paragraph, *delete* 'Clauses 2.1.4.1., 2.1.4.2, 2.1.4.3 and 2.1.4.4' and *replace* with 'Clauses 2.1.5.1, 2.1.5.2, 2.1.5.3 and 2.1.5.4'.
- 2 After second paragraph, *insert* a new paragraph as follows:

For MEWPs following the enhanced stability criteria, load cells placed under the outriggers/stabilizers may be used to measure the residual stabilizing moment when the MEWP is subjected to a test load of 150% of the rated capacity. The effect of deflection shall be considered.

AMDT
No. 1

Clause 3.6.3.1.2

First paragraph, sixth line, *delete* 'Clauses 2.1.4.1, 2.1.4.2, 2.1.4.3 and 2.1.4.4' and *replace* with 'Clauses 2.1.5.1, 2.1.5.2, 2.1.5.3 and 2.1.5.4'.

AMDT
No. 1

Clause 3.6.3.2.2(c)

Delete the last paragraph and *replace* with the following:

The drive control shall be maintained at maximum until the MEWP comes to a complete stop in the depression or traverses the depression in its entirety.

AMDT
No. 1

Clause 3.6.4

At the end of the first sentence, *insert* 'and those MEWPs where the enhanced overload criteria applies'.

AMDT
No. 1

Clause 4.1.2

At the end of the current list and before the existing Note, *add* new Item (i) as follows:

- (i) Instructions relating to depressurization of hydraulic systems.

AMDT
No. 1

Clause 4.1.3

- 1 In Item (g), *delete* 'inclination' and *replace* with 'inclinations'.
- 2 In Item (i), *delete* 'insulation rating' and *replace* with 'insulation rating (where applicable)'.

AMDT
No. 1

Clause 4.2.6

Delete the existing clause text and *replace* with the following:

MEWPs designed for orchard use only (see Section 5) shall be permanently and clearly marked with the following:

ORCHARD OPERATION ONLY—NOT FOR GENERAL INDUSTRIAL APPLICATION

AMDT
No. 1

Clause 5.1

First paragraph, *delete* the existing first sentence and *replace* with the following:

This Section sets out design safety requirements for a class of MEWPs used in orchards to lift personnel to a working position for picking fruit, maintaining trees, and erection and maintenance of ancillary orchard structures, e.g. growing trellis and shade structures.

AMDT
No. 1

Clause 5.2.6

After 'not greater', *insert* 'than'.

AMDT
No. 1

Clause 5.2.10.1

In Item (b), *add* a Note to the existing text as follows:

NOTE: For foot controlled MEWPs, where the risk of inadvertent operation is eliminated by constant positioning of the operator standing on the controls, a separate continuously activated control is not required.

AMDT
No. 1

Clause 5.2.12

Delete 'FOR OPERATION IN ORCHARDS ONLY' and *replace* with 'ORCHARD OPERATION ONLY—NOT FOR GENERAL INDUSTRIAL APPLICATION'.

AMDT
No. 1

Clause 6.2.5.2

Delete existing clause text and *replace* with the following:

When raised to its maximum platform height, the portable MEWP shall be capable of withstanding, without overturning, a minimum horizontal test force of 222 N or 15% of the rated capacity (whichever is greater), applied at the platform top rail, in the direction most likely to cause overturning, with the rated capacity distributed on the platform in accordance with the requirements of Clause 2.1.4.1.2.

NOTE: Some movement relative to the support surfaces is permitted providing instability is not reached.

AMDT
No. 1

Clause 7.1

Delete 'ASNI/SIA A92.2,' from second paragraph and *replace* with 'ANSI/SIA A92.2,'.

AMDT
No. 1

Clause 7.3.3

After second paragraph, *insert* new Note as follows:

NOTE: HV insulation may be achieved by a basket or basket and liner combined.

AMDT
No. 1

Clause 7.9.11.2

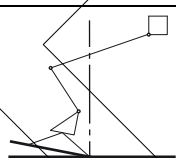
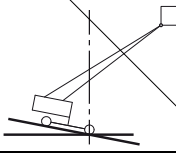
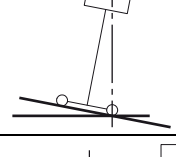
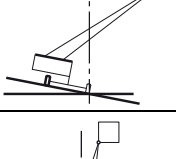
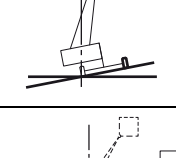
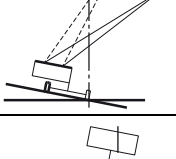
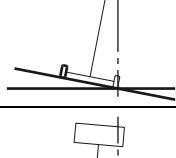
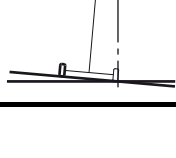
Delete the first sentence.

AMDT
No. 1

Table 2.1.5.5

Delete existing Table 2.1.5.5 and *replace* with the following two tables:

TABLE 2.1.5.5.1
EXAMPLES OF LOAD AND FORCE DIRECTIONS AND COMBINATIONS FOR
STABILITY CALCULATIONS—LOAD SENSING (see Figure 2.1.5.1)

Example	Working condition	Rated capacity		Structural force S_n		Manual force M		Wind force W		Diagram
		× 1.0	× 0.1	× 1.0	× 0.1	× 1.0	× 0.1	× 1.0	× 0.1	
1	Raising (lowering)	V	A	V	A	—	—	H	H	
2	Travelling	V	S	V	S	—	—	H	H	
3	Travelling	V	S	V	S	—	—	H	H	
4	Forwards stability, stationary on slope	V	—	V	—	A	A	H	H	
5	Backwards stability, stationary on slope	80 kg V	—	V	—	A	A	H	H	
		0 kg	—	V	—	—	—	H	H	
6	With limited reach, forward stability, stationary on slope, lowering	V	A	V	A	—	—	H	H	
7	On slope, stationary	V	—	V	—	A	A	H	H	
8	Level ground, stationary.	80 kg V	—	V	—	—	—	H	H	
	(Load always inside the tipping line)	0 kg V	—	V	—	—	—	H	H	

Legend:

V = vertical

H = horizontal

A = angular

S = at slope angle; S represents the mass of the structural component n

NOTE: This Table is not exhaustive.

TABLE 2.1.5.5.2

**EXAMPLES OF LOAD AND FORCE DIRECTIONS AND COMBINATIONS FOR
STABILITY CALCULATIONS—USING ENHANCED OVERLOAD & STABILITY
CRITERIA (see Figure 2.1.5.2)**

Example	Working condition	Rated capacity		Structural force S_n		Manual force M		Wind force W		Diagram
		× 1.5	× 0.15	× 1.0	× 0.1	× 1.0	× 0.1	× 1.0	× 0.1	
1	Raising (lowering)	V	A	V	A	—	—	H	H	
2	Travelling	V	S	V	S	—	—	H	H	
3	Travelling	V	S	V	S	—	—	H	H	
4	Forwards stability, stationary on slope	V	—	V	—	A	A	H	H	
5	Backwards stability, stationary on slope	80 kg V	—	V	—	A	A	H	H	
		0 kg	—	V	—	—	—	H	H	
6	With limited reach, forward stability, stationary on slope, lowering	V	A	V	A	—	—	H	H	
7	On slope, stationary	V	—	V	—	A	A	H	H	
8	Level ground, stationary. (Load always inside the tipping line)	80 kg V	—	V	—	—	—	H	H	
		0 kg V	—	V	—	—	—	H	H	

Legend:

V = vertical

H = horizontal

A = angular

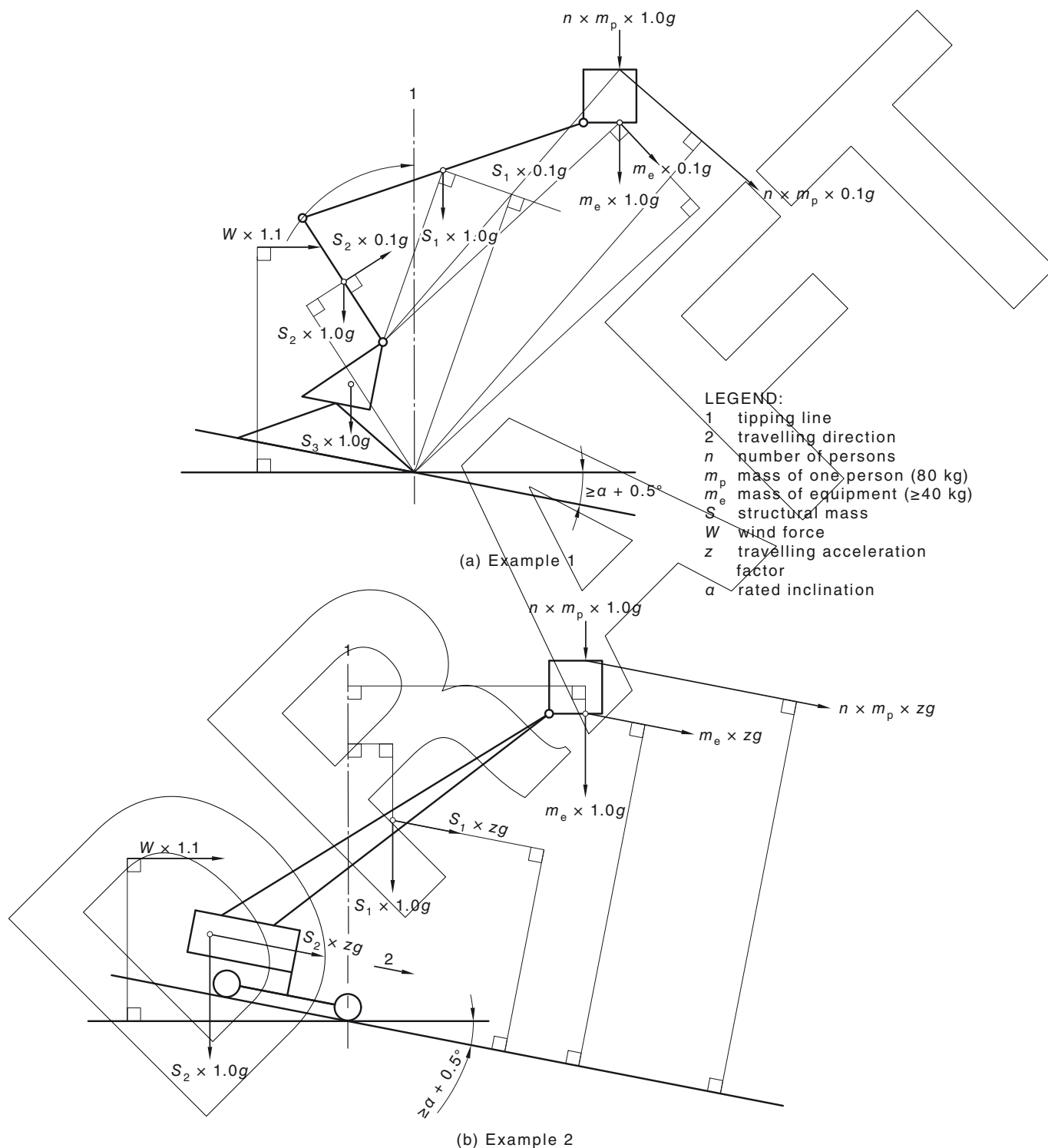
S = at slope angle; S represents the mass of the structural component n

NOTE: This Table is not exhaustive.

AMDT
No. 1

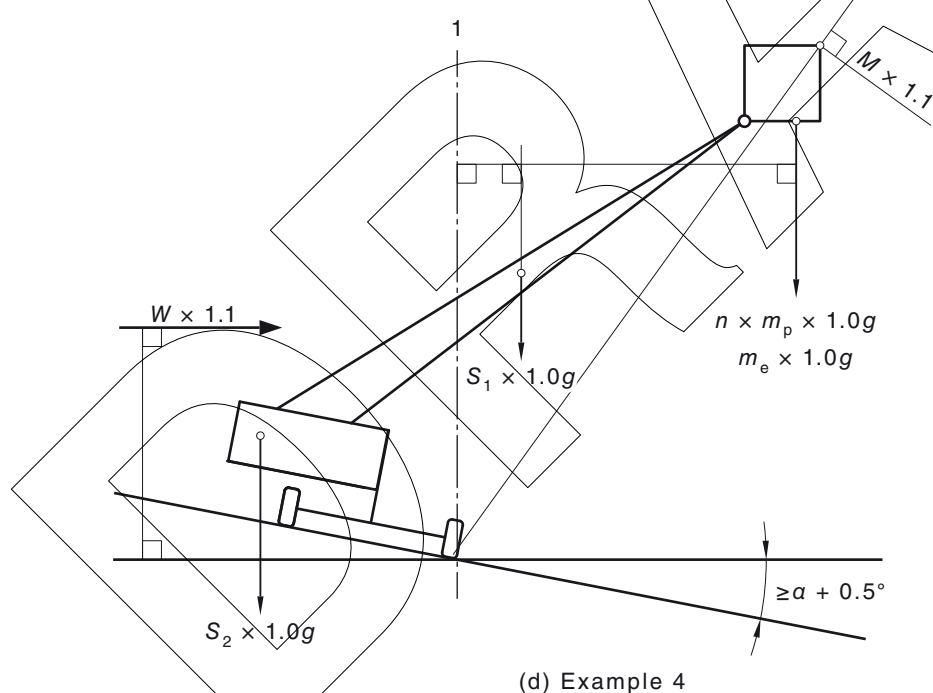
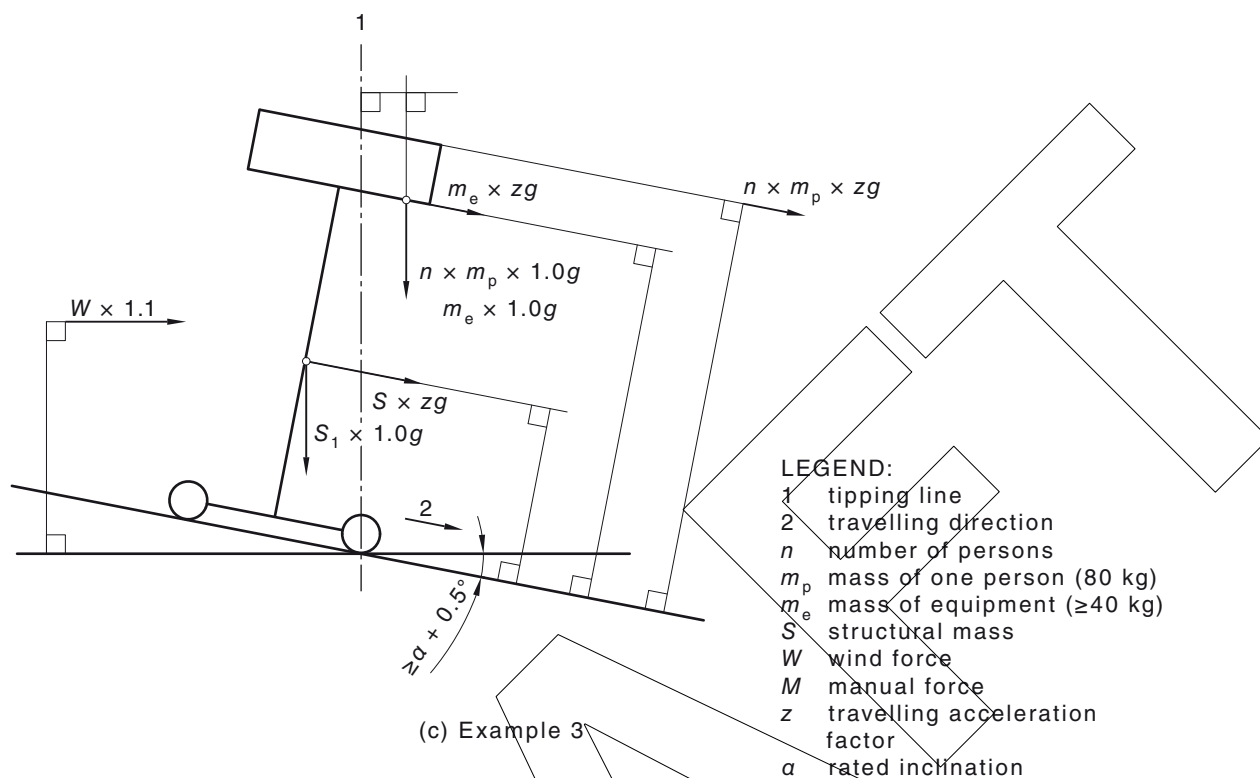
Figure 2.1.5

Delete existing Figure (all parts) and replace with the following two figures:



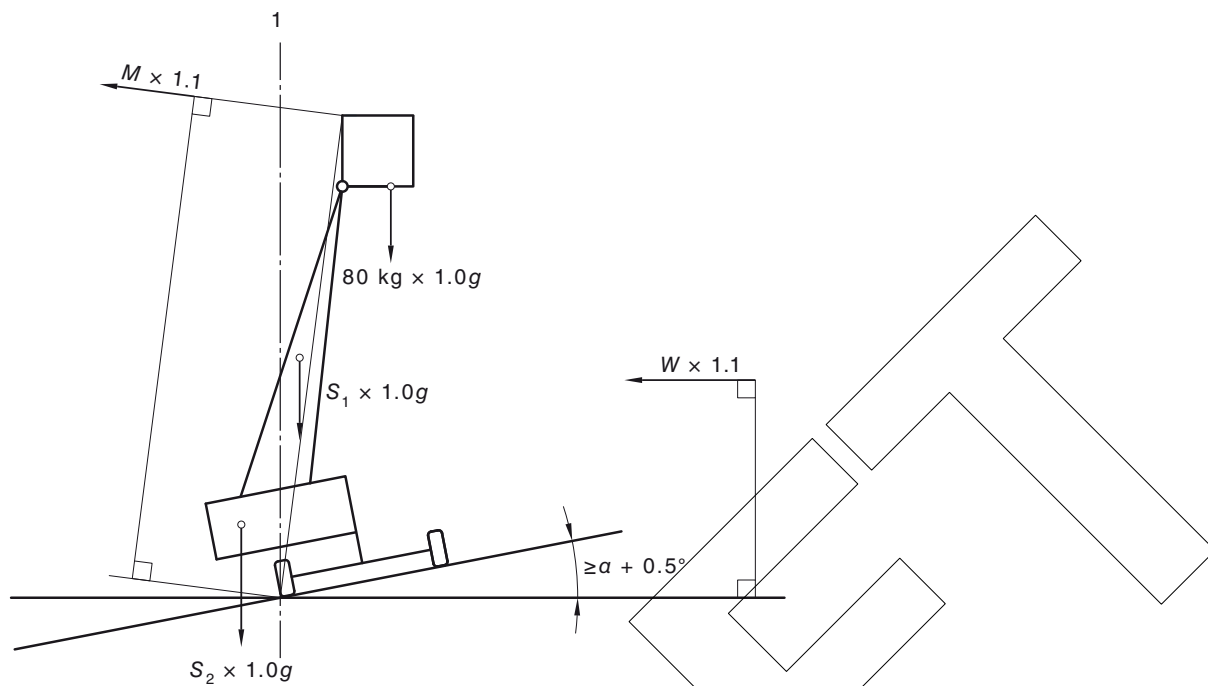
NOTE: For number of persons (n) see Clause 2.1.2; mass of one person (m_p) see Clause 2.1.2; mass of equipment (m_e) see Clause 2.1.2; wind force, see Clause 2.1.4.2; manual force, see Clause 2.1.4.3; and travelling acceleration factor, see Clause 2.1.4.1.1.

FIGURE 2.1.5.1 (in part) EXAMPLES OF MAXIMUM OVERTURNING LOAD AND FORCE MOMENT COMBINATION—LOAD SENSING (see Table 2.1.5.5.1)



NOTE: For number of persons (n) see Clause 2.1.2; mass of one person (m_p) see Clause 2.1.2; mass of equipment (m_e) see Clause 2.1.2; wind force, see Clause 2.1.4.2; manual force, see Clause 2.1.4.3; and travelling acceleration factor, see Clause 2.1.4.1.1.

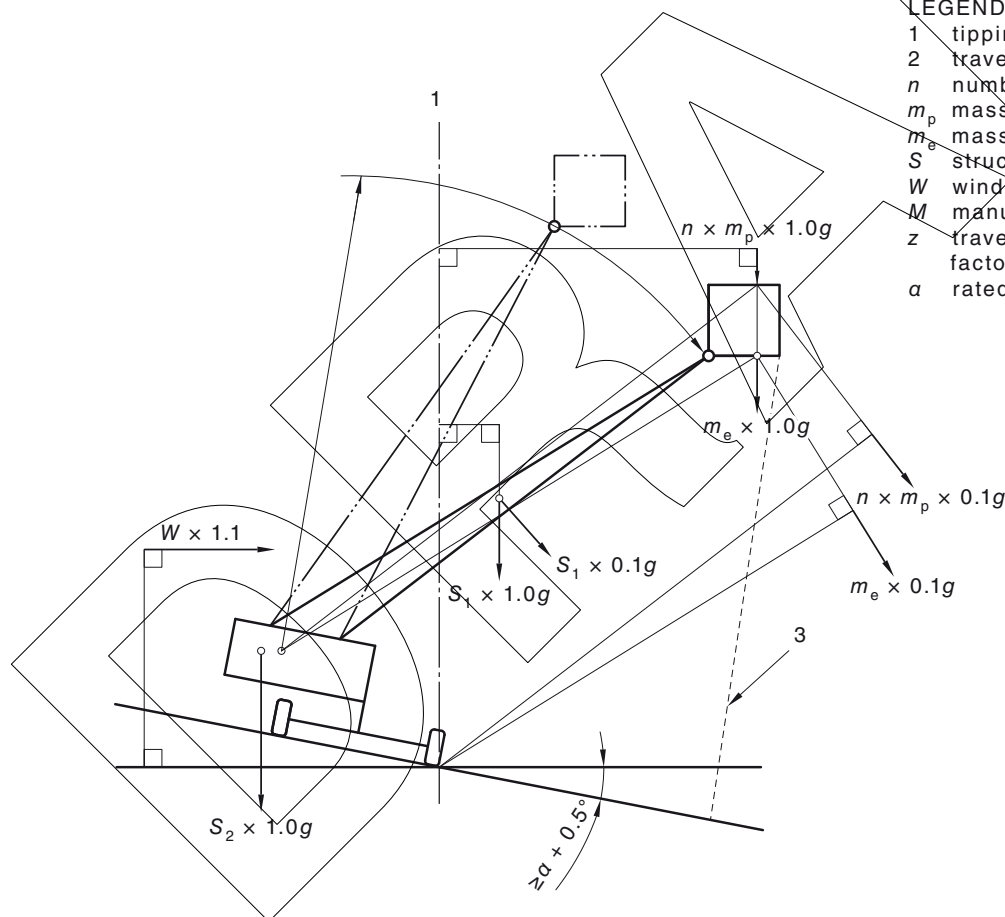
FIGURE 2.1.5.1 (in part) EXAMPLES OF MAXIMUM OVERTURNING LOAD AND FORCE MOMENT COMBINATION—LOAD SENSING (see Table 2.1.5.5.1)



(e) Example 5

LEGEND:

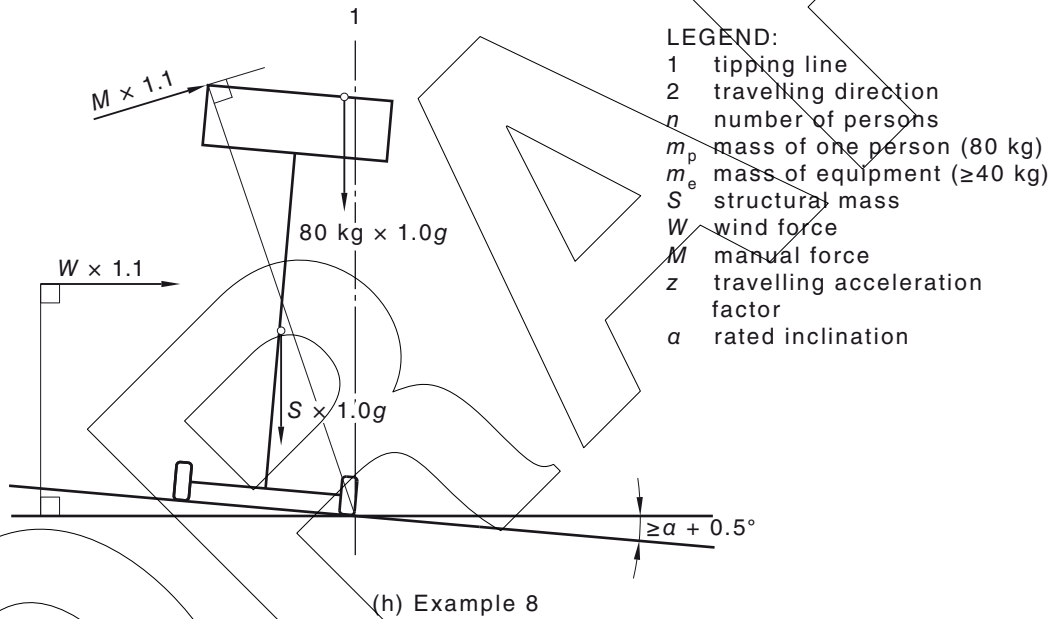
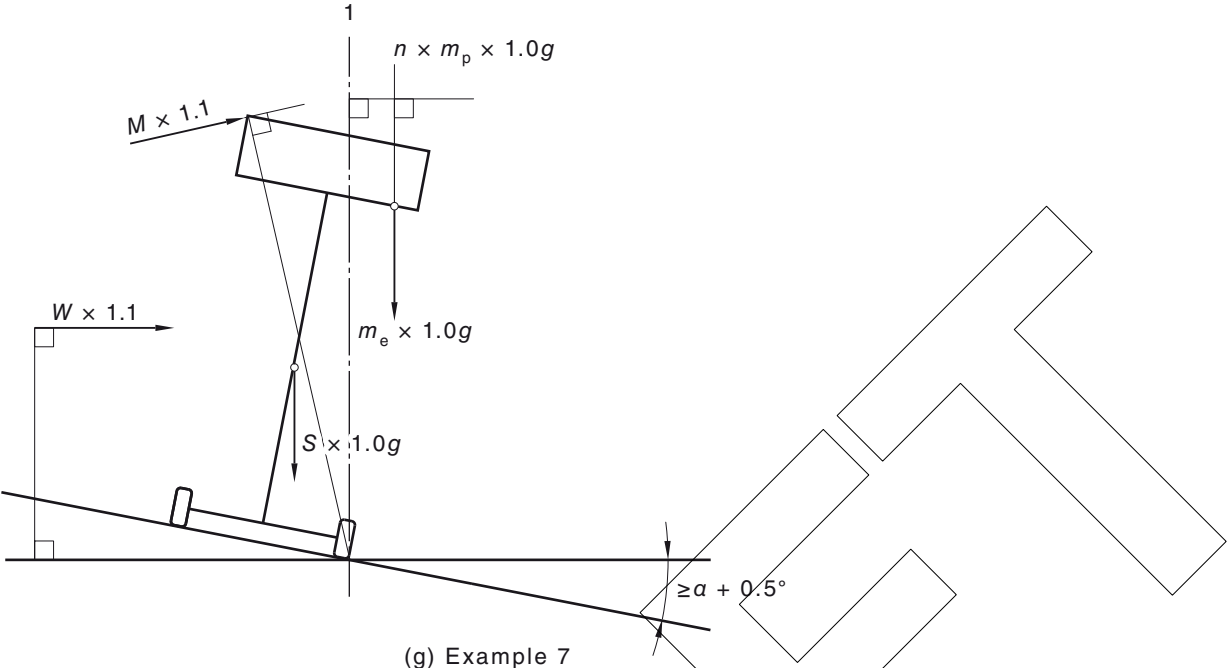
- 1 tipping line
- 2 travelling direction
- n number of persons
- m_p mass of one person (80 kg)
- m_e mass of equipment (≥ 40 kg)
- S structural mass
- W wind force
- M manual force
- z travelling acceleration factor
- α rated inclination



(f) Example 6

NOTE: For number of persons (n) see Clause 2.1.2; mass of one person (m_p) see Clause 2.1.2; mass of equipment (m_e) see Clause 2.1.2; wind force, see Clause 2.1.4.2; manual force, see Clause 2.1.4.3; and travelling acceleration factor, see Clause 2.1.4.1.1.

FIGURE 2.1.5.1 (in part) EXAMPLES OF MAXIMUM OVERTURNING LOAD AND FORCE MOMENT COMBINATION—LOAD SENSING (see Table 2.1.5.5.1)



- LEGEND:
- 1 tipping line
 - 2 travelling direction
 - n number of persons
 - m_p mass of one person (80 kg)
 - m_e mass of equipment (≥ 40 kg)
 - S structural mass
 - W wind force
 - M manual force
 - z travelling acceleration factor
 - α rated inclination

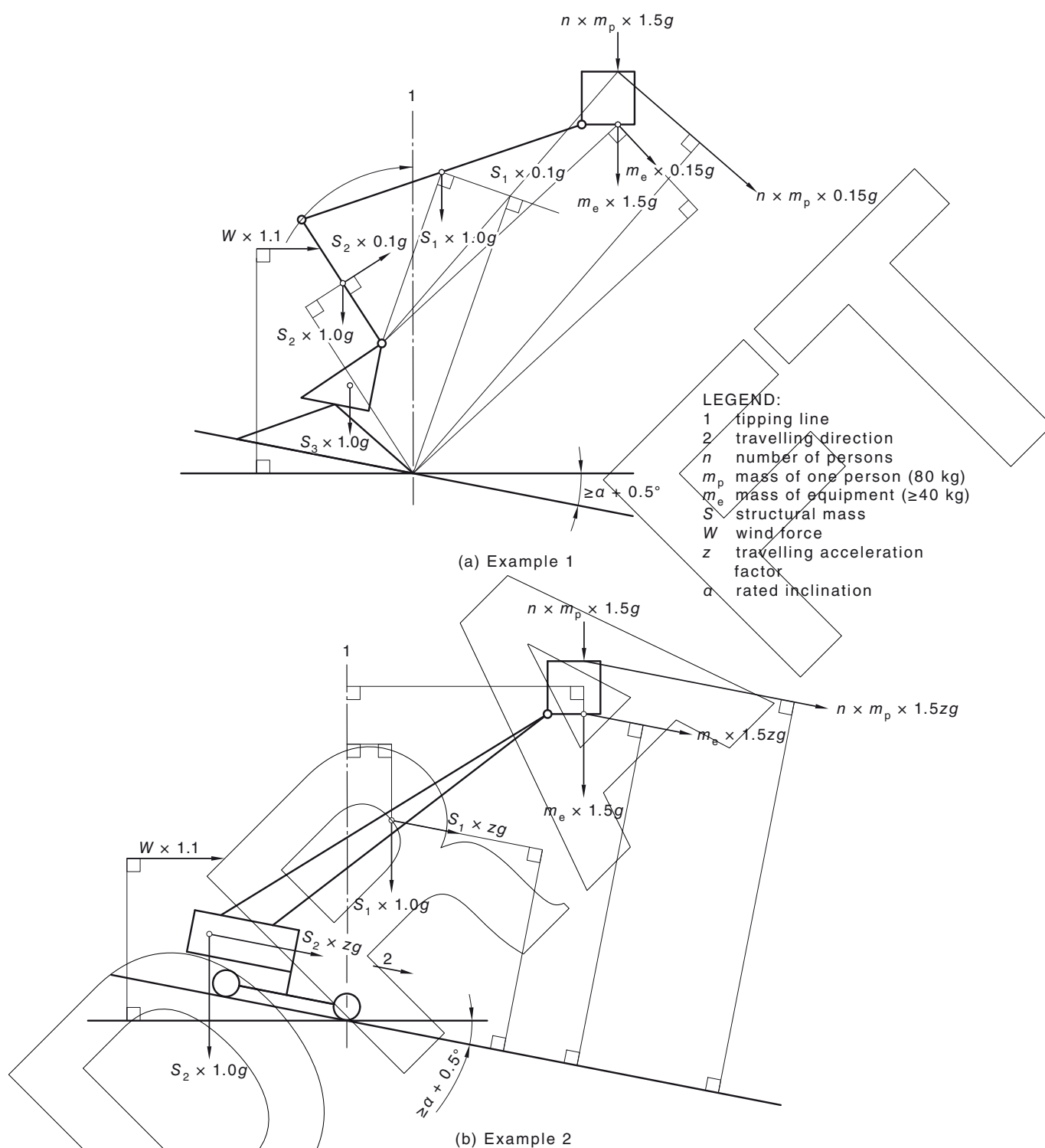
NOTE: For number of persons (n) see Clause 2.1.2; mass of one person (m_p) see Clause 2.1.2; mass of equipment (m_e) see Clause 2.1.2; wind force, see Clause 2.1.4.2; manual force, see Clause 2.1.4.3; and travelling acceleration factor, see Clause 2.1.4.1.1.

FIGURE 2.1.5.1 (in part) EXAMPLES OF MAXIMUM OVERTURNING LOAD AND FORCE MOMENT COMBINATION—LOAD SENSING (see Table 2.1.5.5.1)

Legend:

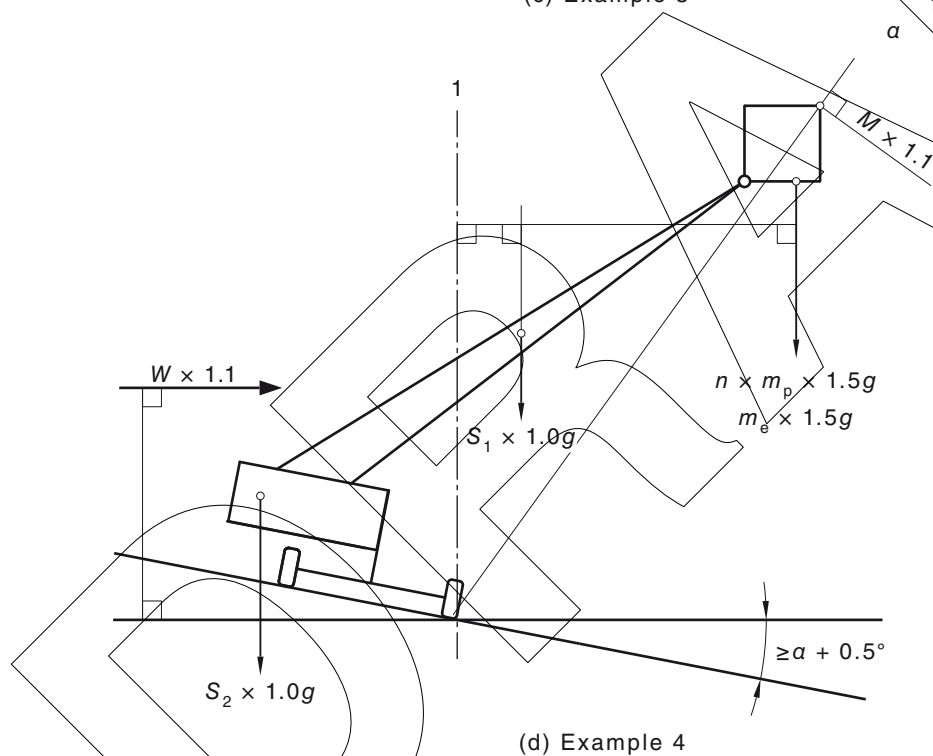
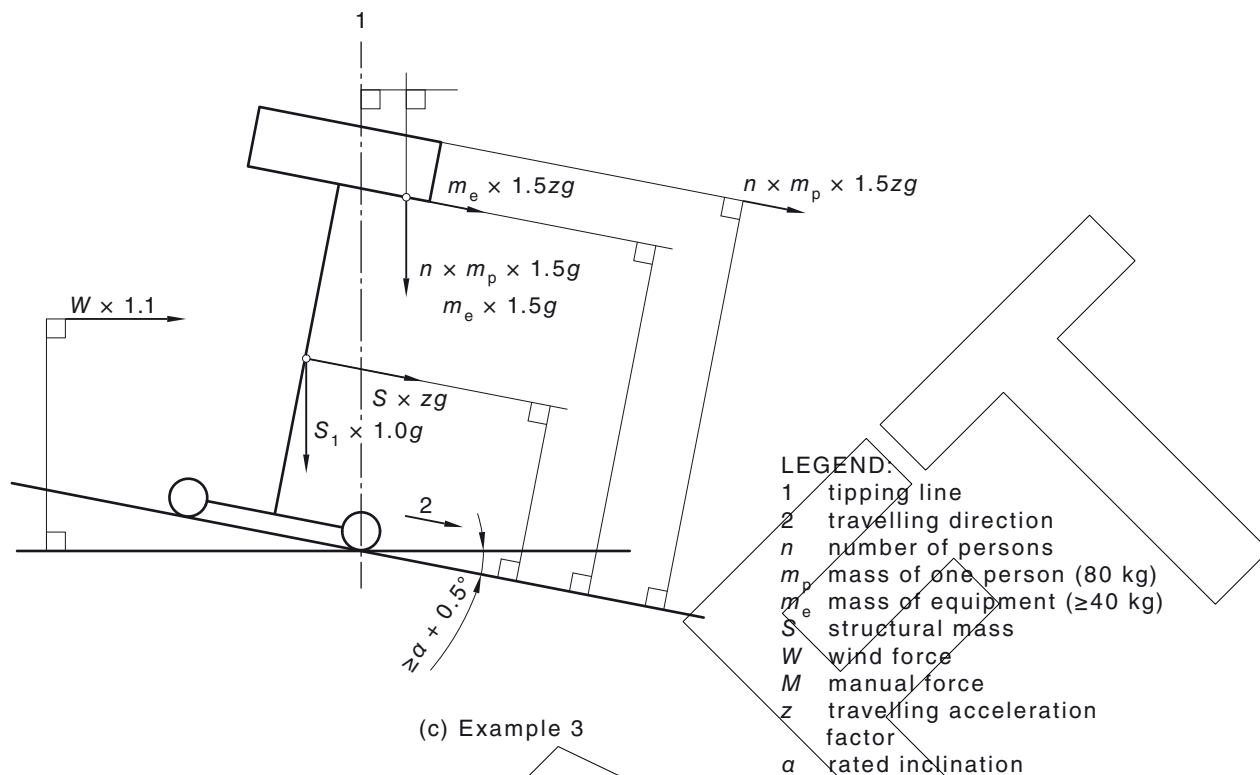
V = vertical
H = horizontal
A = angular
S = at slope angle; S represents the mass of the structural component n

NOTE: This Table is not exhaustive.



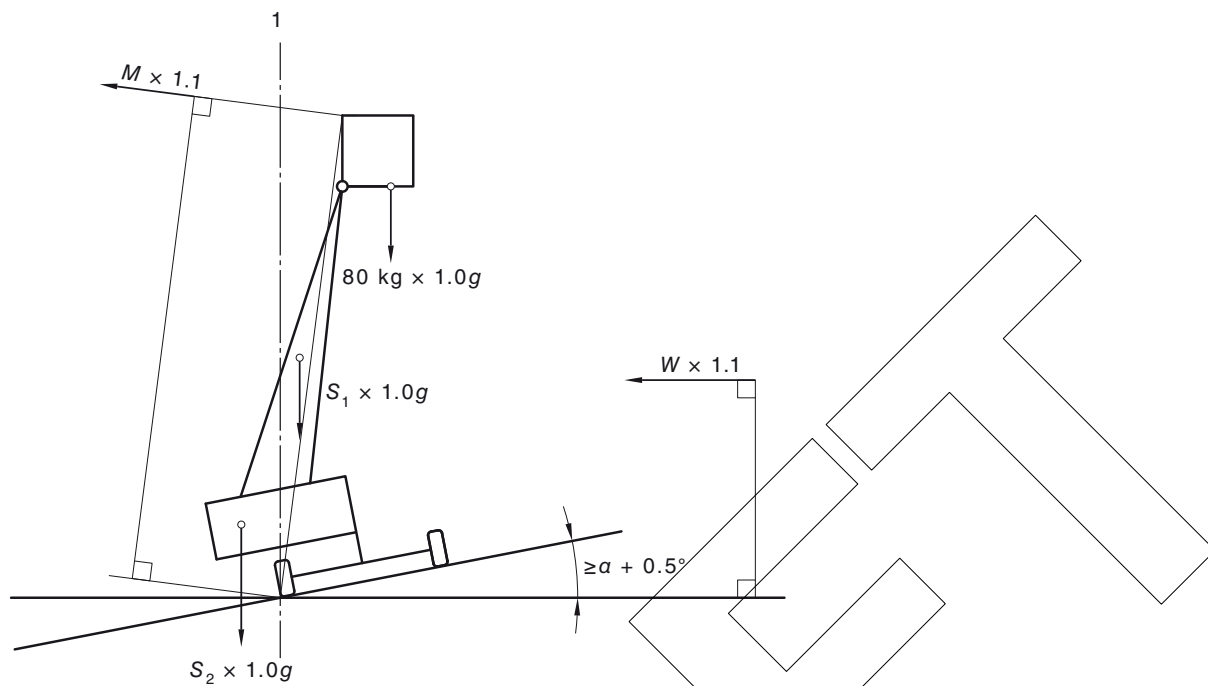
NOTE: For number of persons (n) see Clause 2.1.2; mass of one person (m_p) see Clause 2.1.2; mass of equipment (m_e) see Clause 2.1.2; wind force, see Clause 2.1.4.2; manual force, see Clause 2.1.4.3; and travelling acceleration factor, see Clause 2.1.4.1.1.

FIGURE 2.1.5.2 (in part) EXAMPLES OF MAXIMUM OVERTURNING LOAD AND FORCE MOMENT COMBINATION—USING ENHANCED OVERLOAD AND STABILITY CRITERIA (see Table 2.1.5.5.2)



NOTE: For number of persons (n) see Clause 2.1.2; mass of one person (m_p) see Clause 2.1.2; mass of equipment (m_e) see Clause 2.1.2; wind force, see Clause 2.1.4.2; manual force, see Clause 2.1.4.3; and travelling acceleration factor, see Clause 2.1.4.1.1.

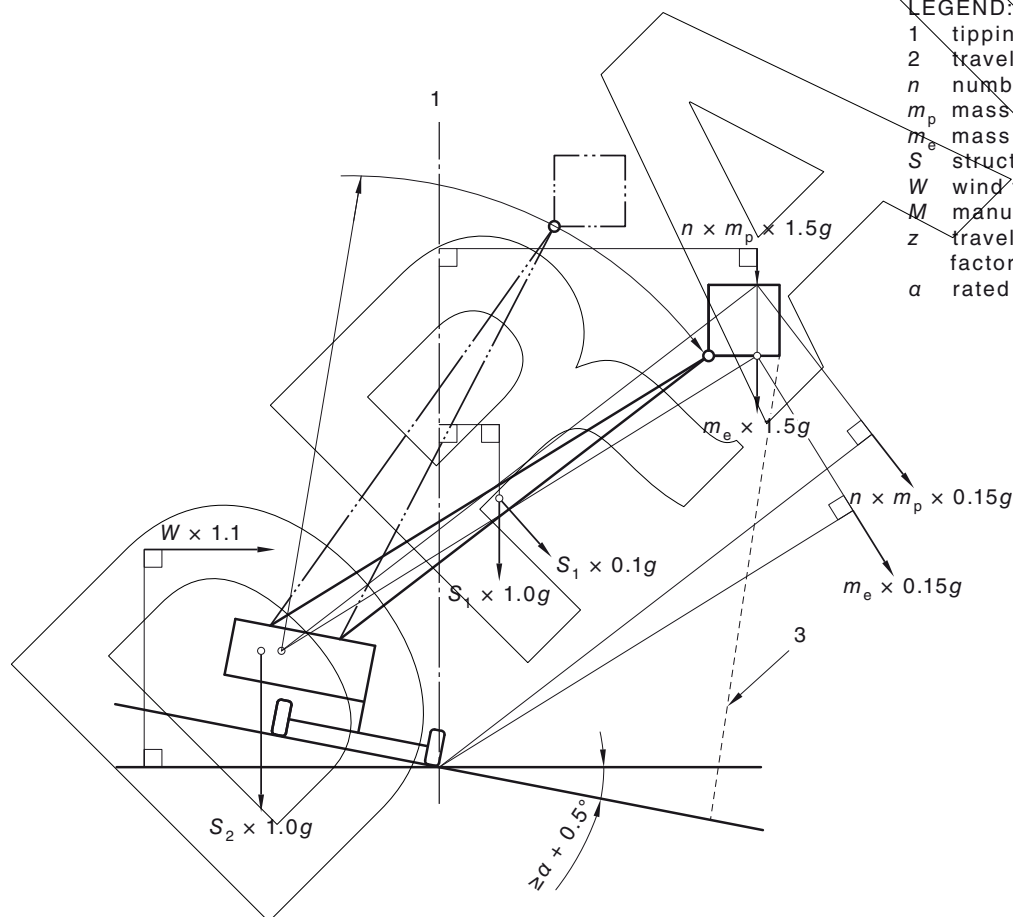
FIGURE 2.1.5.2 (in part) EXAMPLES OF MAXIMUM OVERTURNING LOAD AND FORCE MOMENT COMBINATION—USING ENHANCED OVERLOAD AND STABILITY CRITERIA (see Table 2.1.5.5.2)



(e) Example 5

LEGEND:

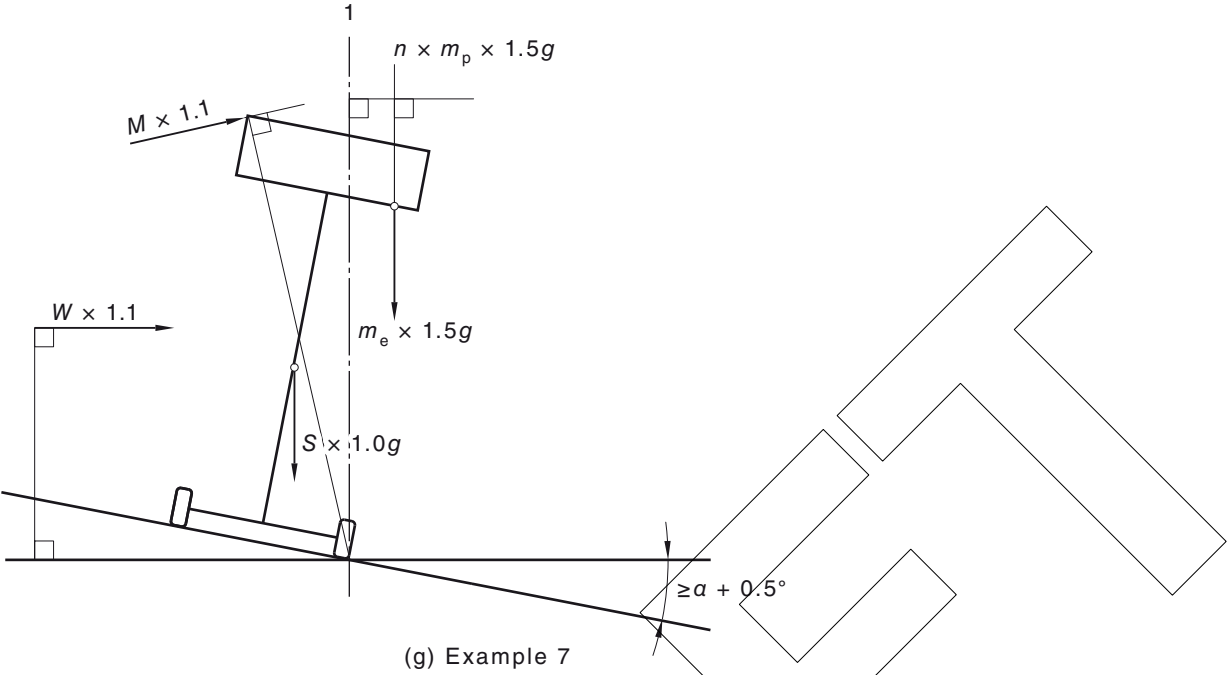
- 1 tipping line
- 2 travelling direction
- n number of persons
- m_p mass of one person (80 kg)
- m_e mass of equipment (≥ 40 kg)
- S structural mass
- W wind force
- M manual force
- z travelling acceleration factor
- α rated inclination



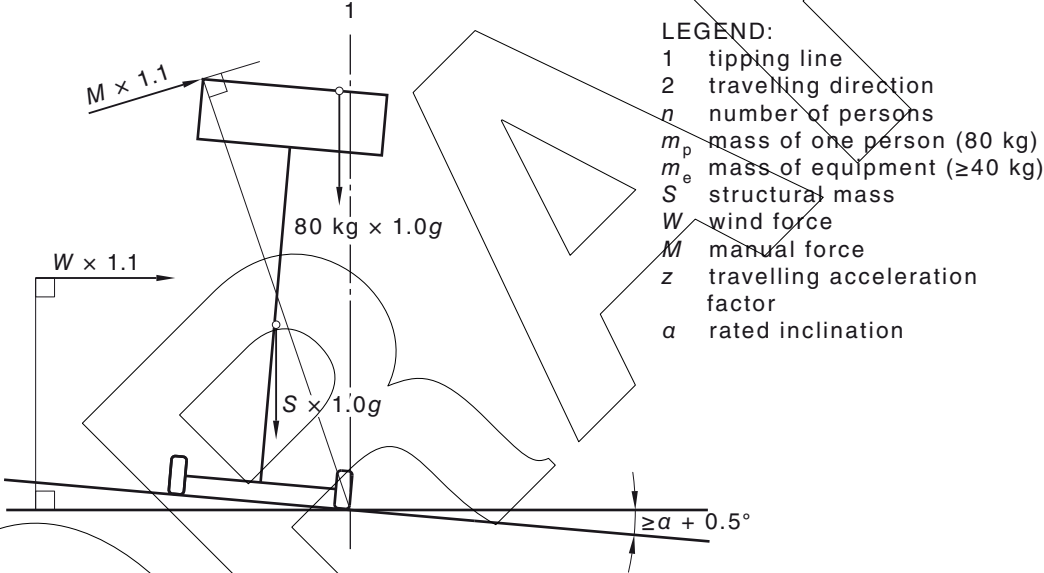
(f) Example 6

NOTE: For number of persons (n) see Clause 2.1.2; mass of one person (m_p) see Clause 2.1.2; mass of equipment (m_e) see Clause 2.1.2; wind force, see Clause 2.1.4.2; manual force, see Clause 2.1.4.3; and travelling acceleration factor, see Clause 2.1.4.1.1.

FIGURE 2.1.5.2 (in part) EXAMPLES OF MAXIMUM OVERTURNING LOAD AND FORCE MOMENT COMBINATION—USING ENHANCED OVERLOAD AND STABILITY CRITERIA (see Table 2.1.5.5.2)



(g) Example 7



- LEGEND:
- 1 tipping line
 - 2 travelling direction
 - n number of persons
 - m_p mass of one person (80 kg)
 - m_e mass of equipment (≥ 40 kg)
 - S structural mass
 - W wind force
 - M manual force
 - z travelling acceleration factor
 - α rated inclination

(h) Example 8

NOTE: For number of persons (n) see Clause 2.1.2; mass of one person (m_p) see Clause 2.1.2; mass of equipment (m_e) see Clause 2.1.2; wind force, see Clause 2.1.4.2; manual force, see Clause 2.1.4.3; and travelling acceleration factor, see Clause 2.1.4.1.1.

FIGURE 2.1.5.2 (in part) EXAMPLES OF MAXIMUM OVERTURNING LOAD AND FORCE MOMENT COMBINATION—USING ENHANCED OVERLOAD AND STABILITY CRITERIA (see Table 2.1.5.5.2)

Table 7.9	In header row under ‘Dry chassis’ and ‘Wet boom and chassis’ (last two columns), <i>delete</i> each instance of ‘Cat B, C’.
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AMDT
No. 1

AMDT
No. 1

Figure 7.9.17
Delete existing Figure and replace with the following:

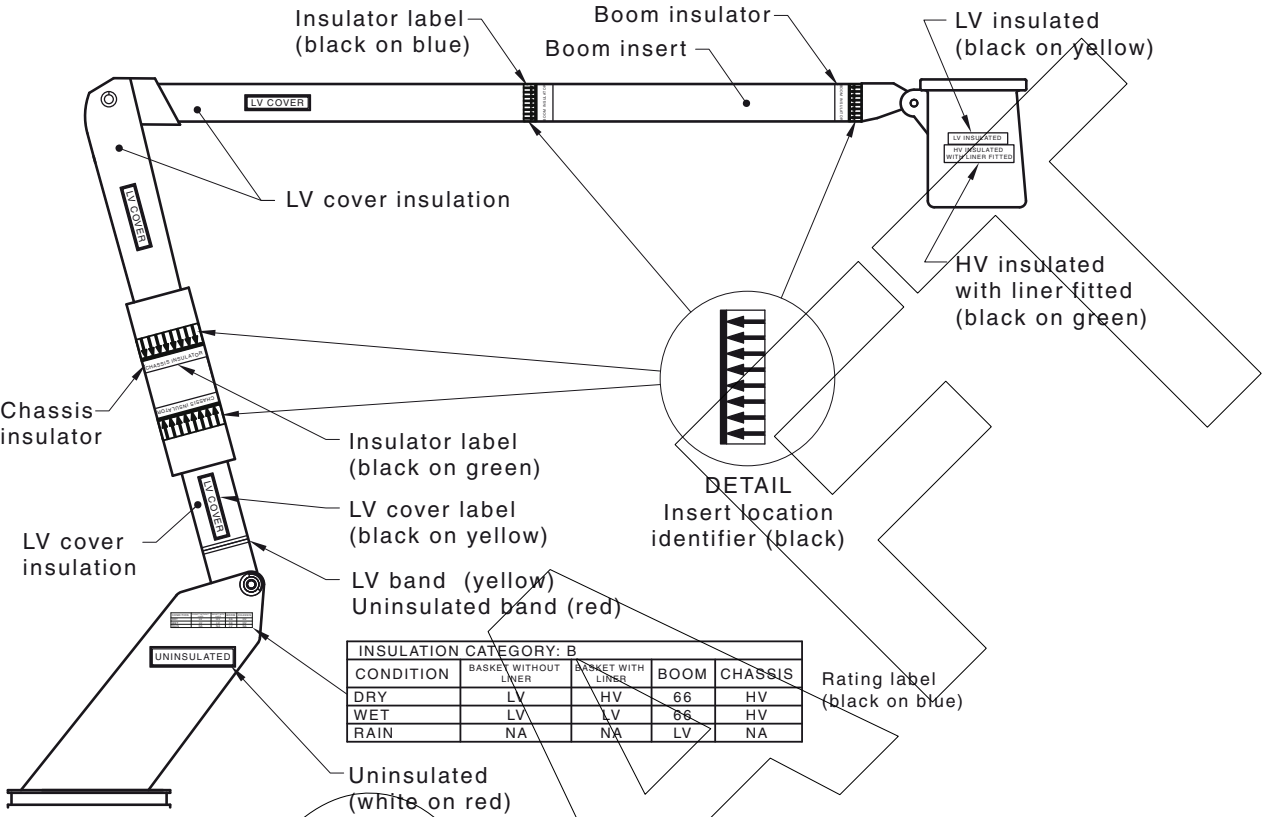


FIGURE 7.9.17 MEWP MARKING

AMDT
No. 1

Table 7.9.16.2
Last column, under the heading 'Basket with liner, kV', *delete* '33' and *replace* with 'HV' for the two instances.

AMDT
No. 1

Appendix A
In Table A1, Row 1.1, last column, *delete* 'I5' and *replace* with 'H5'.

AMDT
No. 1

Appendix H
Delete Paragraph H7.

AMDT
No. 1

Appendix M
Delete the first sentence of Paragraph M4.10.2.

AMDT
No. 1

Table M4(A), Appendix M

1	Third column, second sub-column heading, <i>delete</i> 'kV a.c.' and <i>replace</i> with 'kV d.c.'
2	Fourth column, second sub-column heading, <i>delete</i> 'kV a.c.' and <i>replace</i> with 'kVd.c.'

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Joint Australian/New Zealand Standards are prepared by a consensus process involving representatives nominated by organizations in both countries drawn from all major interests associated with the subject. Australian/New Zealand Standards may be derived from existing industry Standards, from established international Standards and practices or may be developed within a Standards Australia, Standards New Zealand or joint technical committee.

During the development process, Australian/New Zealand Standards are made available in draft form at all sales offices and through affiliated overseas bodies in order that all interests concerned with the application of a proposed Standard are given the opportunity to submit views on the requirements to be included.

The following interests are represented on the committee responsible for this draft Australian/ New Zealand Standard:

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Australian Chamber of Commerce and Industry
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Australian Institute for Non-Destructive Testing
Bureau of Steel Manufacturers of Australia
Concrete Pumping association of NSW
Crane Association of New Zealand
Department of Commerce, Worksafe Division (WA)
Department of Industry, Skills and Regional Development, NSW
Department of Justice and Attorney General (Qld)
Department of Labour New Zealand
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Electricity Engineers Association (New Zealand)
Elevating Work Platform Association of Australia
Engineers Australia
Industry and Investment NSW
Institution of Professional Engineers New Zealand
National Road Transport Association of Australia
SafeWork NSW
The Crane Industry Council of Australia
Transport NSW
Worksafe New Zealand
WorkSafe Victoria

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