



LADDER SAFETY FOR TOWN COUNCILS

- a common yet deadly equipment

SS EN 131 Workgroup, presented by: Lim Cheong (20 mins)

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Overview

- Ladder accidents in Singapore
- Legal requirements and ACOP
- Brief coverage of SS EN 131
- How to choose a conforming ladder

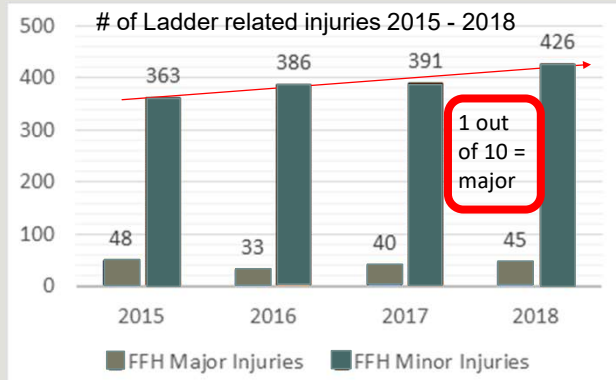
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From the WSH **National Statistics Report 2019**, it was noted that a significant number of fall from heights injuries resulted from falls from ladders and the breakdown as follow:
It was also noted that there was an increasing trend in the number of injuries resulting from falling from ladders since 2015:

2019 report – No. of FFH injuries Vs. Falls from Ladders

Type of injury	Total number of incidents	Falls from ladders
Fatal injury	7	1
Major injury	62	29
Minor injury	619	431
Total	688	461

In 2018 67% of the FFH injuries was contributed by ladder



Increasing trend in the number of injuries resulting from falling from ladders since 2015

WSH National Statistics Report 2019

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Workplace Safety and Health Act

Your sub-con sub-standard equipment may become your liability...

Duty of occupier of workplace

S11 - It is the duty of every occupier of any workplace to take, so far as is reasonably practicable, such measures to ensure that —

- (b) all means of access to or egress from the workplace; and
- (c) any ... **equipment** ... kept on the workplace, are safe and without risks to health to every person within those premises..."

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Workplace Safety and Health (Work at Heights) Regulations 2013

18.—(1) Where a ladder is being used to carry out any work at height in a workplace, it shall be the duty of the **responsible person** ...

(2) Every ladder in a workplace shall —

- be of **good construction, sound material and adequate strength; (ACOP)**
- **be free from patent defects; and (Inspection & maintenance)**
- **be suitable and safe for the purpose** for which it is intended. **(Proper RA and right choice of ladder)**

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What is an ACOP?

FRIDAY, NOVEMBER 19, 2021

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First published in the *Government Gazette*, Electronic Edition, on 19 November 2021 at 5 pm.

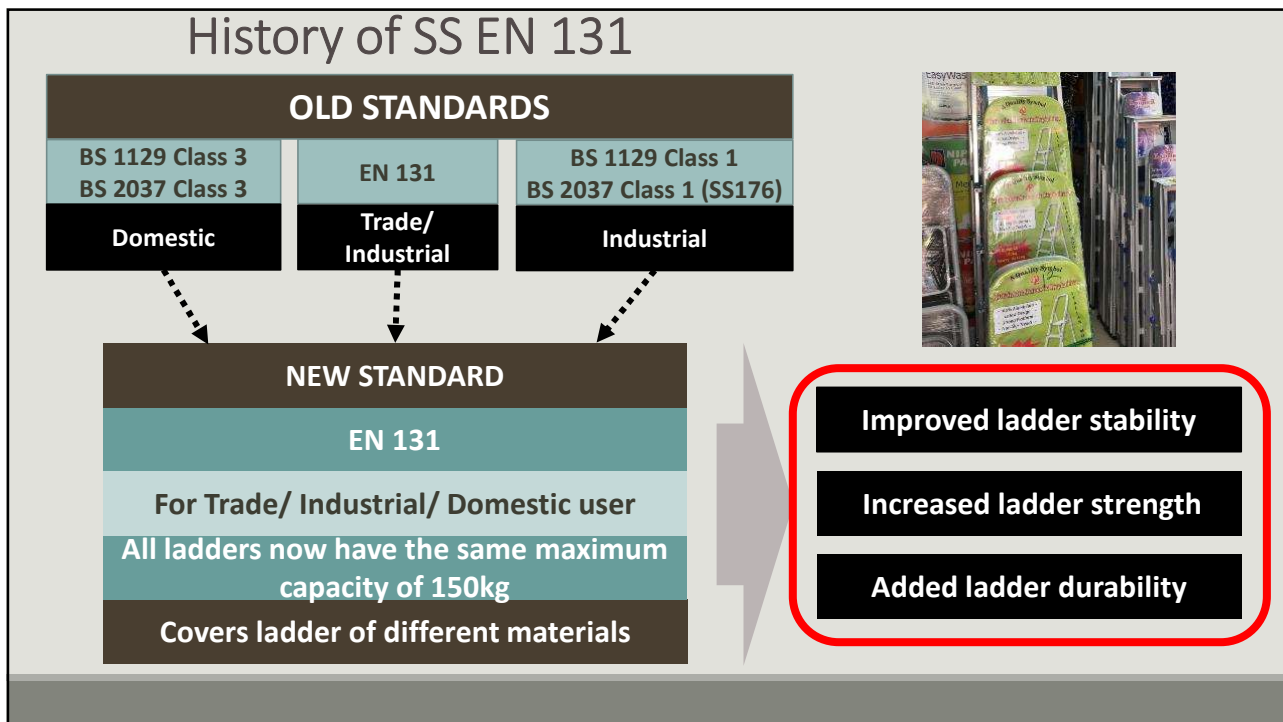
No. 2470 — WORKPLACE SAFETY AND HEALTH ACT (CHAPTER 354A)

WORKPLACE SAFETY AND HEALTH (APPROVED CODES OF PRACTICE) NOTIFICATION 2021

In accordance with section 40B(3) of the Workplace Safety and Health Act (Cap. 354A), the Workplace Safety and Health Council hereby notifies that the Council has approved the Codes of Practice set out in the Schedule, with effect from 01 December 2021.

SS ISO 10218: Robots and robotic devices – Safety requirements for industrial robots	2016
Part 2: Robot systems and integration	
SS ISO 45001: Occupational health and safety management systems – Requirements with guidance for use	2018
81. SS EN 131: Ladders – Part 1: Terms, types, functional sizes	2019
82. SS EN 131: Ladders – Part 2: Requirements, testing, marking	2019
83. SS EN 131: Ladders – Part 3: Marking and user instructions	2019
84. SS EN 131: Ladders – Part 4: Single or multiple hinge-joint ladders	2019
85. SS EN 131: Ladders – Part 6: Telescopic ladders	2019
86. SS EN 131: Ladders – Part 7: Mobile ladders with platform	2019
87. SS EN 13374: Temporary edge protection systems – Product specifications – Test methods	2018

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Workplace Safety and Health (Work at Heights) Regulations 2013 (safe usage + adequate training)

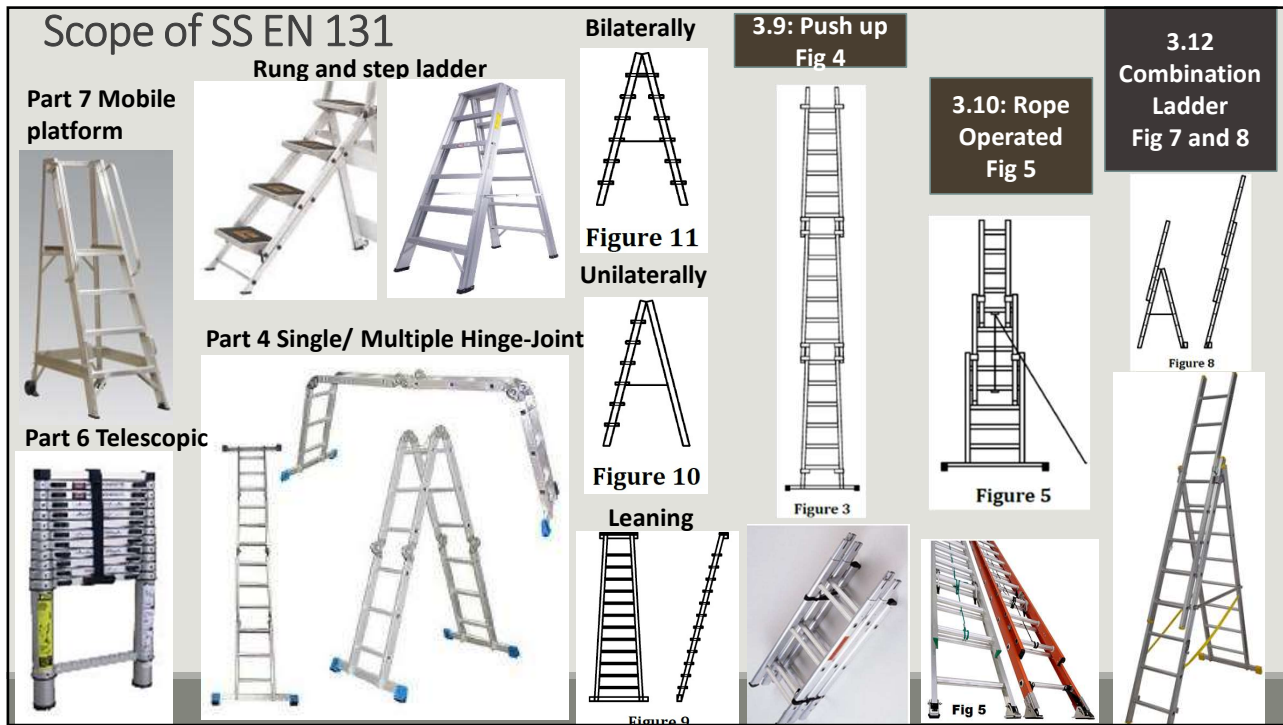
18 (3) The **surface upon which any ladder** (except for fixed ladders) rests or bears upon when used by a person shall —

- be **stable**;
- be **level** and **firm**; and
- be of **sufficient strength** to safely support the ladder and any person and load intended to be placed on it.

(4) Every ladder in a workplace shall be so **positioned as to ensure its stability** during use.

(5) Notwithstanding paragraph (4), every ladder which **leans** against a wall, building, structure or tree during use shall be **securely fixed or lashed**, or is **firmly held by a person** stationed at the foot of the ladder to prevent the ladder from slipping.

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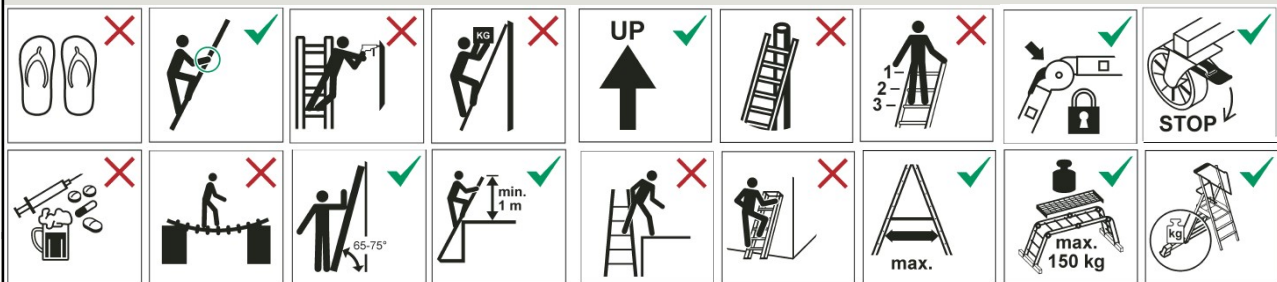
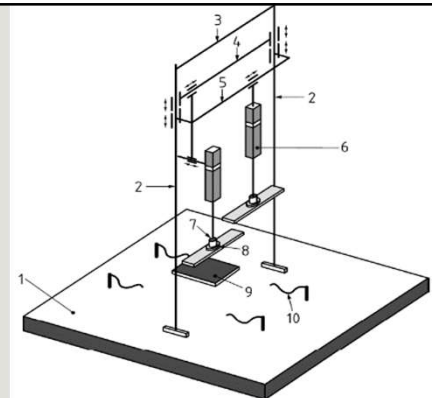
Scope of EN 131

SS EN 131 Part 2:

- Requirements, testing and marking

SS EN 131 Part 3:

- Marking and user instructions



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Do not stand on the top two steps/rungs of a standing ladder without a platform and a hand/knee rail.



Standing ladders shall not be used as a leaning ladder



Do not stand on the top three steps/rungs of a leaning ladder.

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Ladder usage in Singapore

- Ladder is a common and convenient equipment
- Accidents occurred at homes and workplaces
- Risks are underestimated
- Ladder may not conform to code
- Lack of user instructions
- Ladder safety awareness is lacking

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Ladder usage – Duties & Liabilities

Occupier has a general duty to ensure ladder kept in the workplace is in **good conditions**. (S11.C)

Principal has to ensure their contractors take adequate safety and health measures in respect of any equipment or process used by the contractor and their employees. (S14A)

Employer has to ensure **proper equipment** provided (e.g. tested to SS EN 131 and suitable for the job), **proper training & proper RA**.

Note: Short duration work. Eliminate/ Substitute the use of ladder if possible.

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Questions:

1. Is your ladder conforming to code?
2. Is your ladder properly maintain?
3. Is your ladder suitable for the job?
4. Is your worker adequately trained?

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Go for proper training



Ladders and Stepladders
Combined User & Inspection

Duration: 1 Day

Key Learnings:

- ✓ How to SELECT a ladder
- ✓ How to INSPECT a ladder
- ✓ How to USE a ladder safely

Ladder Association Approved Training Centre

1. SAE Resources and Technologies Pte Ltd

PASMA Approved Training Centre in Singapore

1. BMS Specialist Training Pte Ltd
2. CYCC Access Systems Pte Ltd
3. Galmon (S) Pte Ltd
4. Global Training Services Pte Ltd -
5. SAE Resources and Technologies Pte Ltd

PASMA Approved Hire and Dealer member :

1. Instant Access System Pte Ltd – Hire and Dealer
2. SAE Resources and Technologies Pte Ltd

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How to recognise ladders that are tested fully by SAC accredited laboratory?

RECOGNIZING EN131

LTA HSE
GENERAL SPECS S37

SAMPLE

CHECKING THE AUTHENTICITY OF EN131

1. PSB STICKER
2. CERTIFICATE OF CONFORMITY
3. PSB ONLINE DIRECTORY

SAMPLE

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How to recognise ladders that are tested fully by SAC accredited laboratory?

CERTIFICATE OF CONFORMITY



TUV SUD PSB Certificate Explorer

• <https://www.tuev-sued.de/product-testing/certificates>

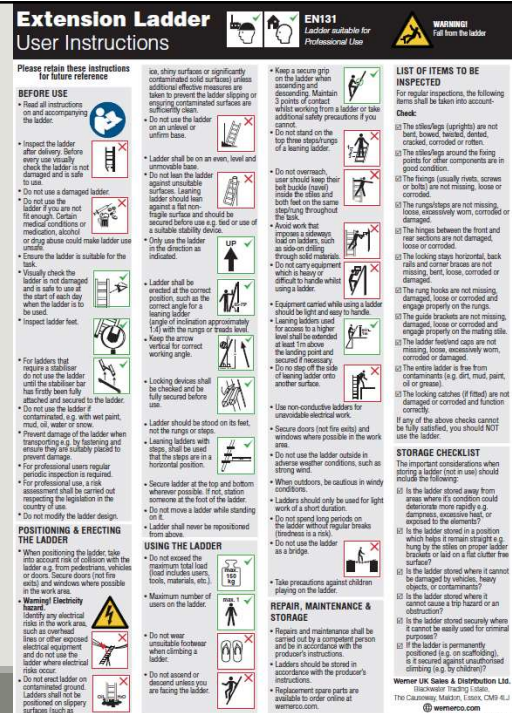
• Key in certificate number or Manufacturer Name



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User instructions

For every SS EN131 ladder, user instructions must be provided. It can be a hard copy or a link to reference materials online



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From 1-30 June 2022, Toppan is having a Mid-Year sale. Any purchase of a Singapore Standard (including the SS EN 131) entitles the customer to a 20% discount (25% for purchases of 10 copies and above).

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Some new standards that may interest you!

SS 603:2021	Code of practice for hazardous waste management
SS 679:2021	Code of practice for workplace safety and health management system for construction workites
SS ISO 14045:2022	Environmental management – Eco-efficiency assessment of product systems
SS ISO 22320:2022	Security and resilience – Emergency management
TR 25 Parts 1-4:2022	Electric vehicles charging system
TR 97:2021	Safety management in a rapid transit system
TR 99:2021	Artificial intelligence (AI) security – Guidance for assessing and defending against AI security
TR ISO/PAS 45005:2022	Occupational health and safety management – General guidelines for safe working during the COVID-19 pandemic

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Useful resources

For the safe use of ladders, you may refer to the following for more information:

- Code of Practice for Working Safely at Heights - <https://www.tal.sg/wshc/Resources/Publications/Codes-of-Practice/Code-of-Practice-for-Working-Safely-at-Heights---English>

- Safe Use of Ladders Checklist - <https://www.tal.sg/wshc/Resources/Publications/Checklists-and-Articles/Safe-Use-of-Ladders-Checklist>

- Ladder Safety Pack - <https://www.tal.sg/wshc/Resources/Publications/Resource-Kits/Ladder-Safety-Pack>

Please note that portable ladders have to conform to SS EN 131 ladder standard series.

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