

Enhancing MEWP Safety in HK Third Runway Division Sharing



Journey of MEWP Safety Strategy

三跑道項目處
流動式升降台安全策略旅程

Timothy CHENG

Manager, Safety

Third Runway Division

Airport Authority Hong Kong



21 June 2023



Today's Speakers



Today's Speakers



Enhancing MEWP Safety in HK Third Runway Division Sharing

提高香港流動式升降台安全 三跑道項目處的分享



香港建造商會
HKCA



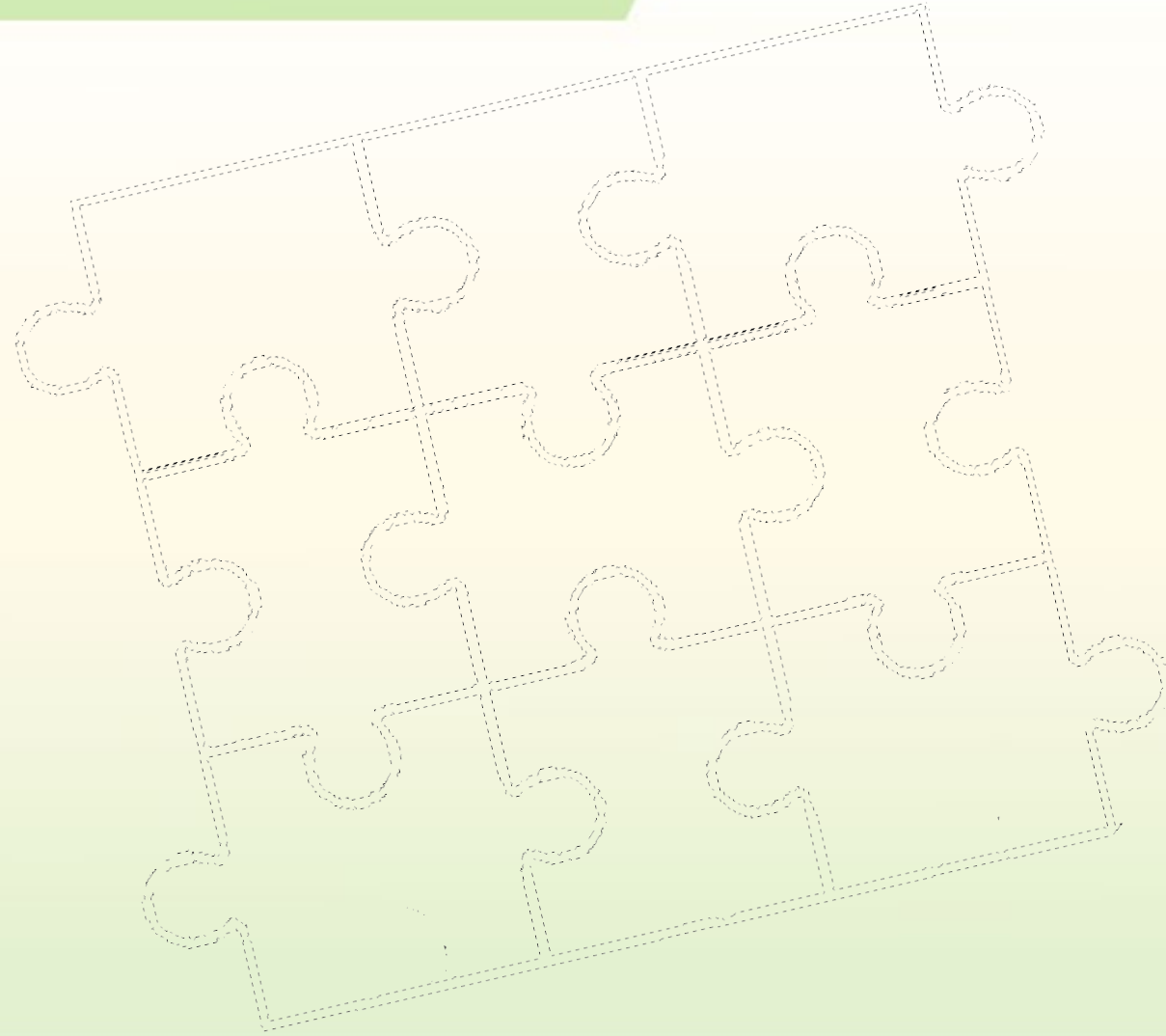
同航
Same Boat Same Goal



現代
MODERN



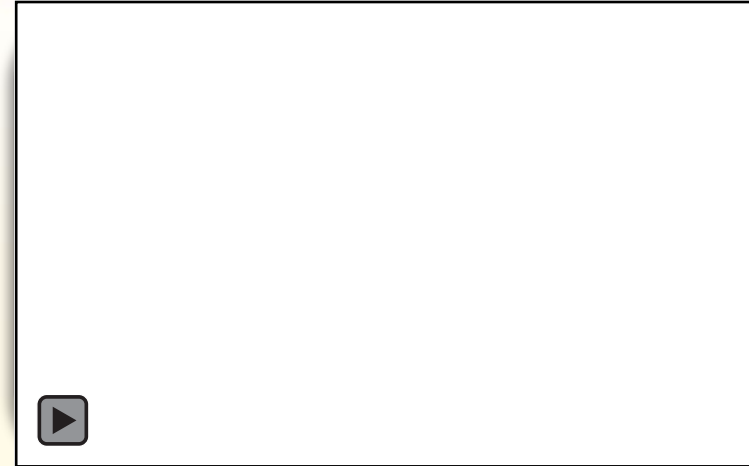
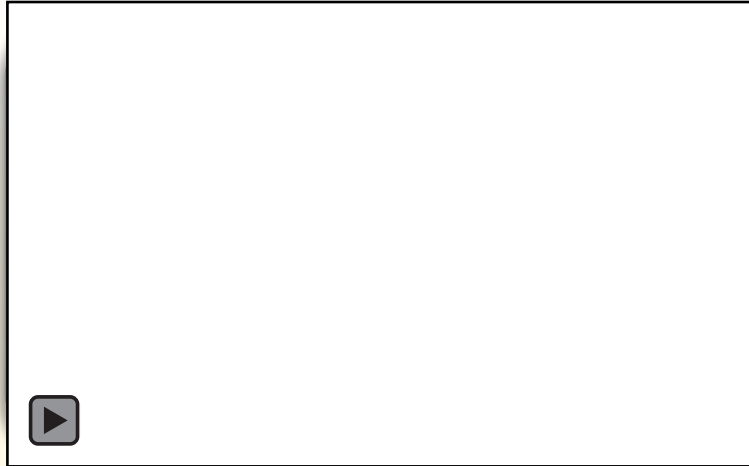
What's Missing ?



Why is MEWP needed for management ?



Safety of MEWP managed ?



Global MEWP Accident



6 April 2018

2 scissors
toppled
3 Injuries



2018

Boom Lift
toppled
2 Dead



23 Nov 2020

Boom Lift operator
trapped between
basket and structure
1 Dead



17 August 2021

Boom Lift touching
overhead power
line and caught fire

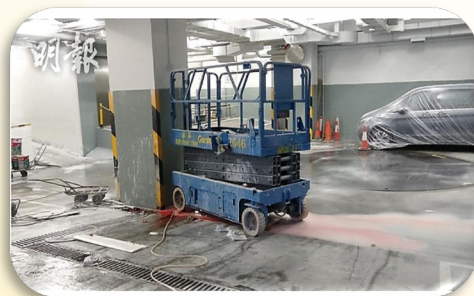


20 October 2022

Boom Lift operator
trapped between
basket and ceiling
1 Dead



HK MEWP Accident



3 April 2021

Crushed by Scissor

1 Dead



8 June 2021

Worker trapped between Scissor basket and ceiling

1 Dead



18 August 2021

Vehicle-mounted boom collapsed

1 Dead, 1 Injury



7 October 2021

Scissor collapsed

1 Dead



20 May 2023

Vehicle-mounted boom collapsed

8 Injuries



In 21 months time !



18 August 2021, Vehicle
1 Dead & 1 Injury



20 May 2023
8 Injuries



Current HK Trade Practice in MEWP Management

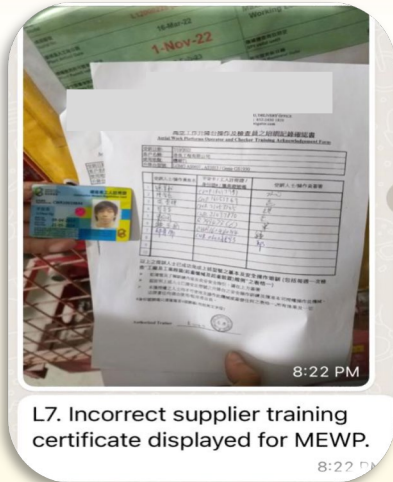


Current HK Trade Practice in MEWP Management



L4. Incorrect supplier training certificate displayed on MEWP (MEWP was not in use today and confirmed that the training certificate was wrongly displayed by another subcontractor as stated on the cert)

Incorrect Training Cert.



L7. Incorrect supplier training certificate displayed for MEWP.

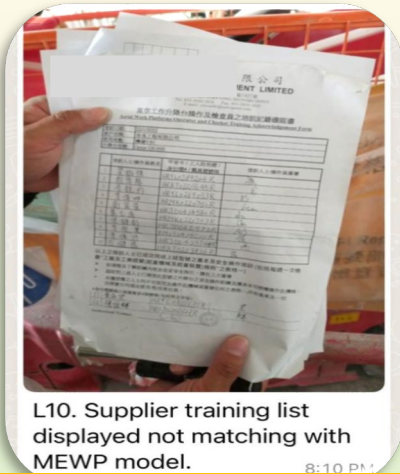
Operator NOT on List



Crowded Training > 30 workers



MEWP Training Conduct at Workplace



L10. Supplier training list displayed not matching with MEWP model.

Wrong Model No.



Lack of MEWP Management Training to Managerial Staff



No Practical Training nor Practical Testing



HK Legal Regime for MEWP



HK Legal Regime for MEWP

Covered by:

- ✓ Cap 59. F&IUO (Section 6A) - General Duties of Proprietors
- ✓ Guidance Notes on Safe Use of Power-operated Elevating Work Platforms

Area of Concerns:

- Competence of Operator
- Maintenance and Examination
- Supervision



Guidance Notes on Safe Use of Power-operated Elevating Work Platforms



安全使用動力操作升降工作台指引



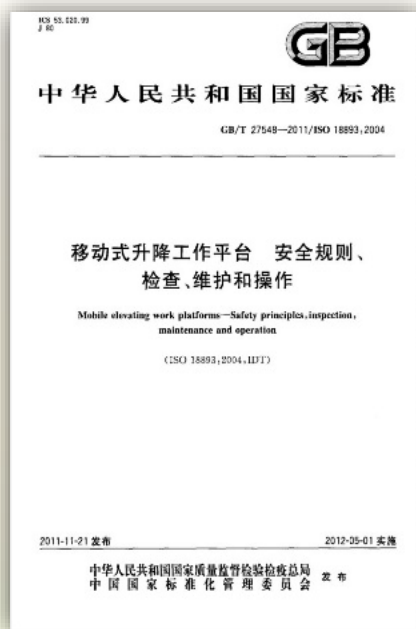
勞工處 職業安全及健康部



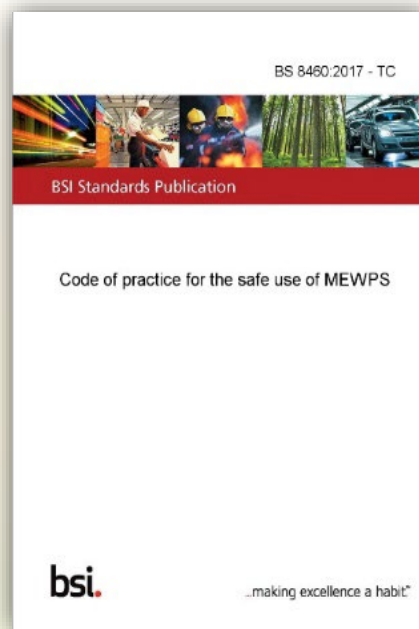
International MEWP Code of Practice and Standard



International COP and Standard



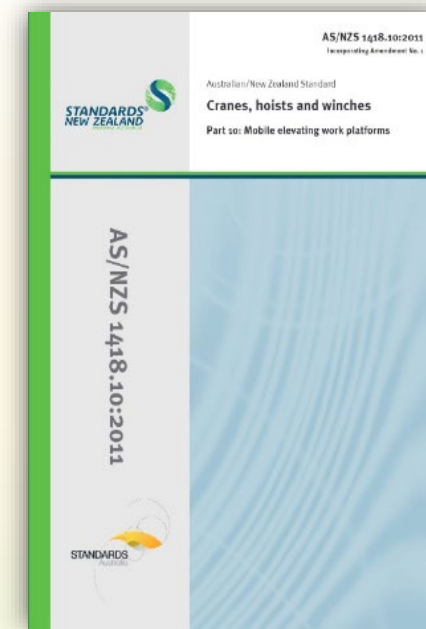
GB/T 27548-2011/ISO 18893:2004



UK - BS 8460 : 2017

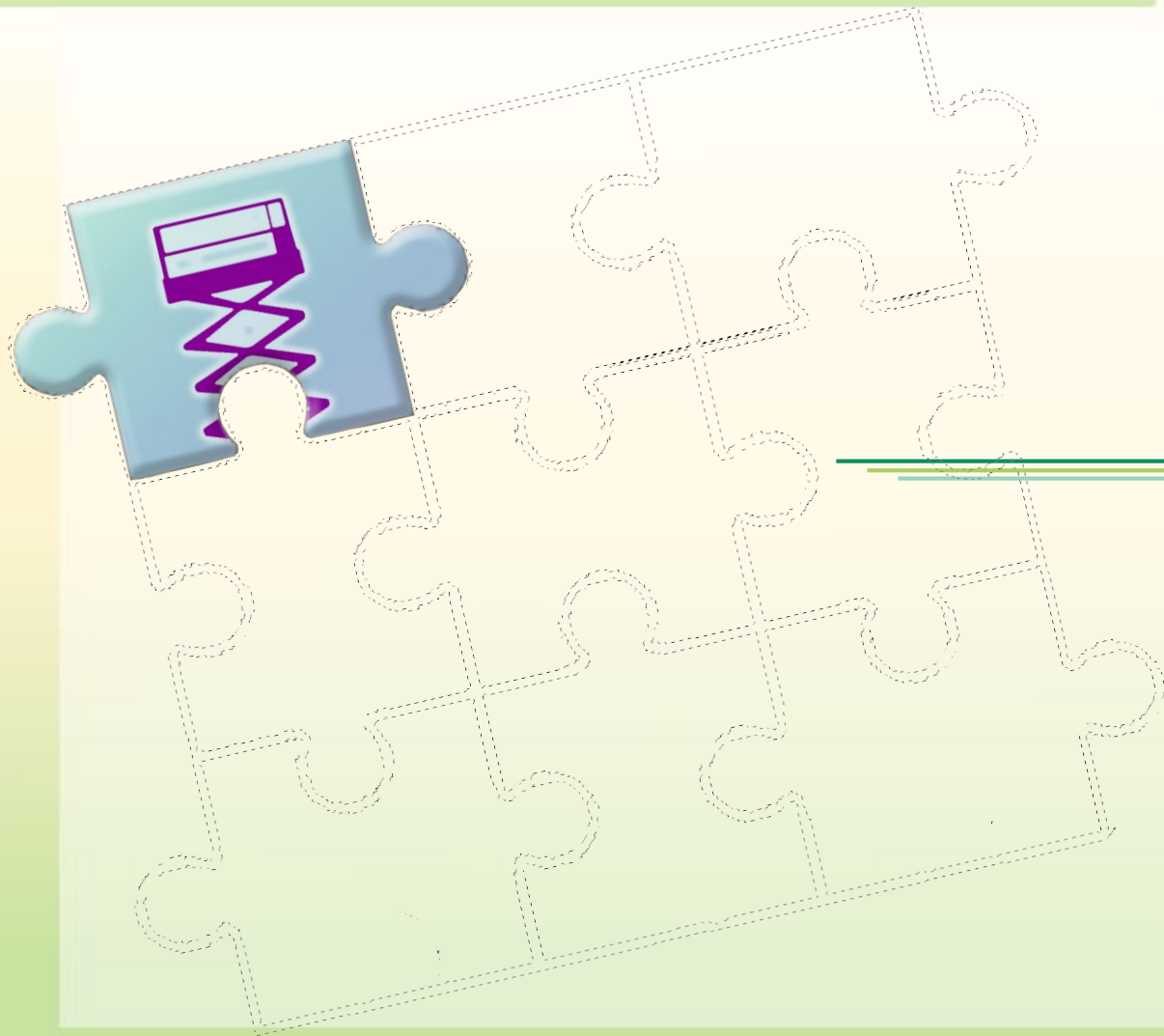


OSHA 1910.67



AS/NZS 1418.10:2011





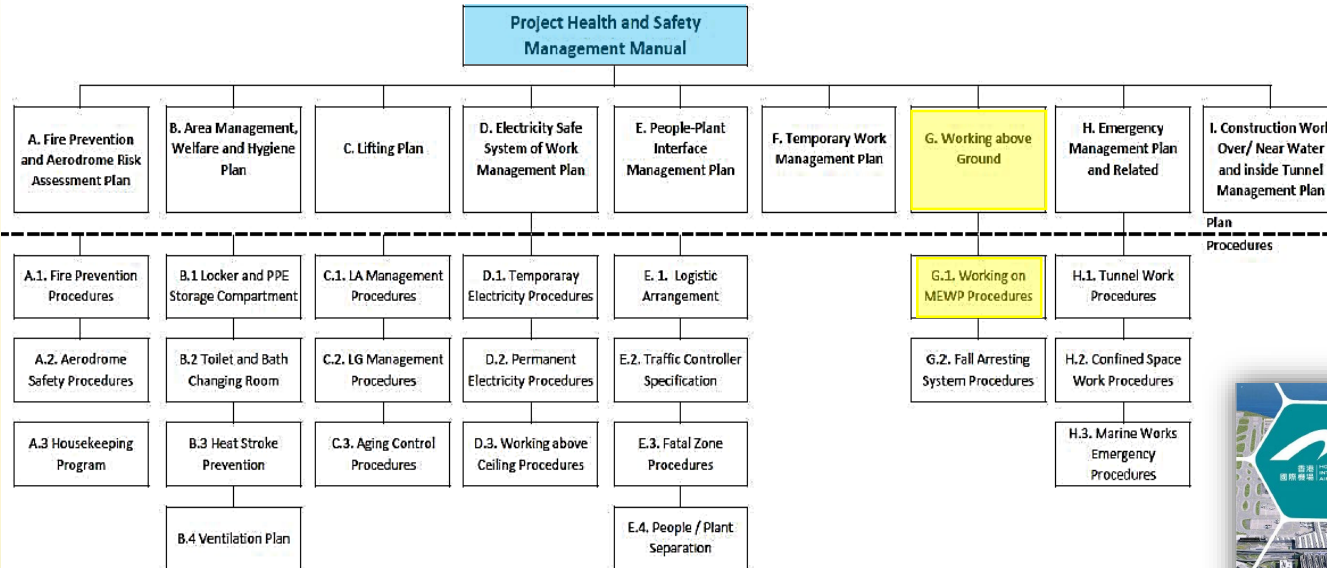
Client's Support ✈️



TRD Safety Strategy in MEWP



TRD Safety Management Manual



Hierarchy

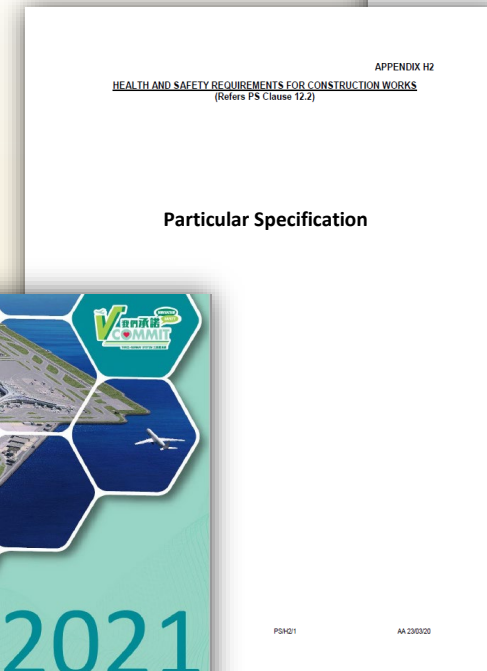
Project Health and Safety Management Manual

Plan G - Working Above Ground

Plan G.1 - MEWP Procedures



CSM



P.S.

GENERAL SPECIFICATION
Issue 9
(July 2016)

G.S.



Contract Requirement and Briefing Pack

P.S. Requirements – 1.14.4.7

1.14.4.7 Mobile Elevated Working Platforms (MEWPs)

1.14.4.7.1 The Contractor shall submit a "Working on MEWP Procedures" as part of the "Work above Ground Plan".

The "Working on MEWP Procedures" shall address, but not be limited to :-

- Competence of "Operator's Trainer"
- Competence of MEWP Inspector
- Training Plan and Program for "Operator"
- Identification System for Operator being trained
- Training Card issued to Operator and tracking system.
- Testing, Inspection Plan and Programme
- Record Management for Testing and Inspection

1.14.4.7.2 Flashing light and audible alarms shall be provided and function normally when the MEWPs are in operation and during travelling. *Flashing light and audible alarms*

1.14.4.7.3 MEWPs shall be used on ground within the angle stated in the manual and its tires shall be with correct pressure. (if applicable) *Working angle*

1.14.4.7.4 The maximum load capacities in both English and Chinese shall be displayed on the machine. The load capacities specified by the manufacturer shall not be exceeded. *Maximum load capacities*

1.14.4.7.5 The fatal zone (Works area and areas with potential falling objects) shall be fenced off with red, continuous and connected barriers to prevent unauthorized entry. *Fatal Zone*

1.14.4.7.6 The key shall not be left in an unattended MEWPs. *Key*

1.14.4.7.7 The working platform of MEWP should be lowered down to the lowest level before travelling except allowed by the Operational Manual *Travelling of MEWPs*

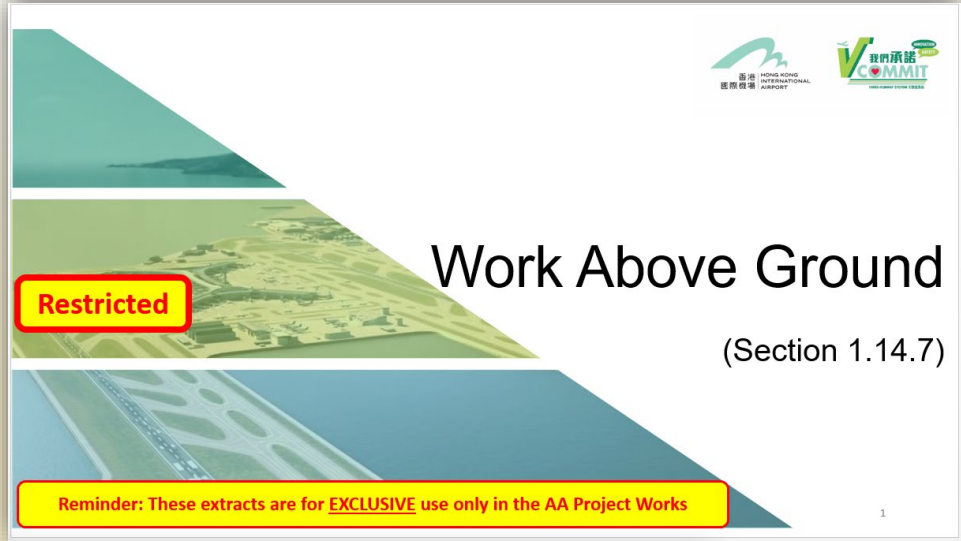
1.14.4.7.8 The Contractor shall provide short lanyard safety harness, i.e. length not more than 1m, to each worker working on MEWPs to prevent falling outside of the working platform. *Short Lanyard*

Version 2019

- *Competence of "Operator's Trainer"*
- *Competence of MEWP Inspector*
- *Training Plan and Program for "Operator"*
- *Identification System for Operator being Trained*
- *Training Card Issued to Operator and Tracking System*
- *Testing, Inspection Plan and Program*
- *Record Management for Testing and Inspection*



Contract Requirement and Briefing Pack



Restricted

Work Above Ground

(Section 1.14.7)

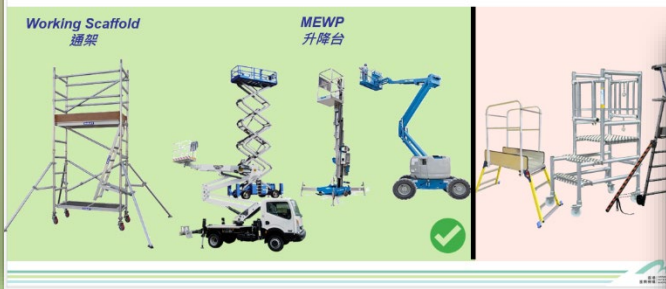
Reminder: These extracts are for **EXCLUSIVE** use only in the AA Project Works



Platform for Working at Different Height

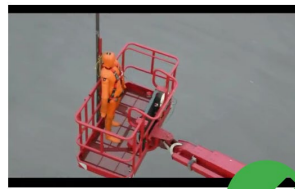
1.14.7.2 Working height $\geq 2m$

- Working platform shall be provided with guardrail and toe boards
- Mobile Scaffold : The height to least base ratio shall not be more than 3




MEWP Procedure - Short Lanyard on MEWP

1.14.7.12 MEWP Procedure \rightarrow Working at Height Plan
Length of Lanyard $< 1m$ working on MEWP



Short lanyard ✓



Long lanyard ✗

NOTE: MEWP-PS 1.14.4.7

Briefing Pack
to Contractor's Management,
Supervisory
and safety staff



How many MEWPs currently in HK ? ✈️



MEWPs Quantity in Hong Kong

Types of MEWP	 Scissor	 Boom	 Spider	Total
No. of MEWP in HK	20,000	3,000	300	23,300
No. of MEWP in Use	15,000	2,000	100	17,100

 No. of Operators	22,500	3,000	150	25,650
--	--------	-------	-----	---------------

* Source from AWP Association



TRD's Challenge on MEWPs



Terminal 2 Expansion Project

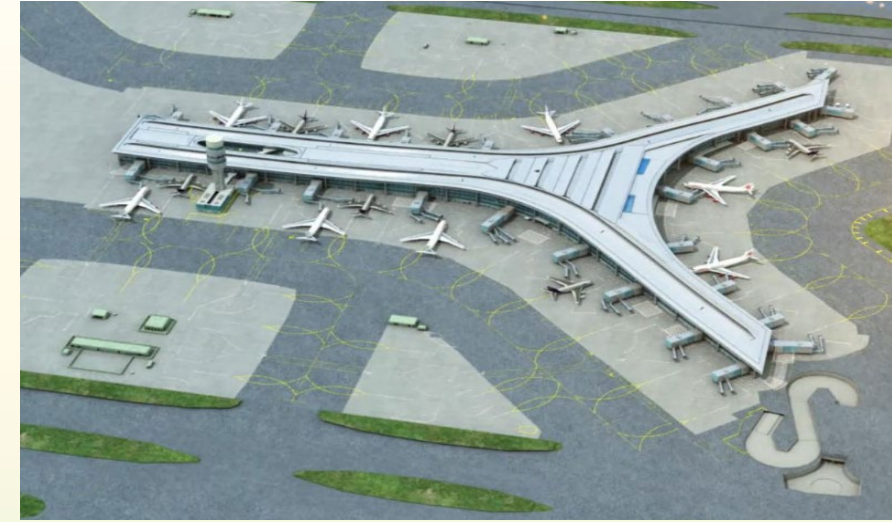
Terminal 2 Concourse Project



Contract No.: C3508
Terminal 2 Expansion
Area on plan : 88,704 m²
Total Floor Area : 552,000 m²



北京城建-其士建築聯營 BUCG-CCCL JV



Contract No.: C3408
T2 Concourse
Area on plan : 120,020 m²
Total Floor Area : 519,368 m²



Estimation of MEWPs in TRD



TRD Management Safety Initiative




31 March 2023

Annual Safety Management Review Meeting chaired by Executive Director and General Managers, Third Runway Division (TRD) committed to initiate the MEWP Safety Program via VCommit Incentive Scheme.

MEWP Safety Program 2023

- 1. Training for Operator**
- 2. Training for Manager and Supervisor**
- 3. Innovative and Best Safety Device**
- 4. Supporting Safety Device for CITF Application**
- 5. Incentive and Subsidizing Program**



Coming Up ! 



Partnering for MEWP Safety in Hong Kong

攜手提升香港流動式升降台安全

