







〉〉 免責聲明 **《**《

儘管我們(發展局及建造業議會)已盡合理努力以確保本刊物所載列資料均屬準確, 惟我們仍鼓勵讀者須在可能的情況下,向其專業顧問尋求適當獨立意見, 並且讀者不應將本刊物視作採取任何相關行動之專業意見的替代, 亦不應依賴本刊物作所述用途。

Whilst reasonable efforts have been made to ensure the accuracy of the information contained in this publication, we (the Development Bureau and the Construction Industry Council) nevertheless would encourage readers to seek appropriate independent advice from their professional advisers where possible and readers should not treat or rely on this publication as a substitute for such professional advice for taking any relevant actions.



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必須留意,遵從此刊物的內容並不會免除在香港的法律責任。 僱主及承建商仍需遵守和符合法定條款、有關工作守則及其他政府部門的要求, 以履行其有關高空工作的法律和其他相關的責任。

It is important to note that compliance with this publication does not itself confer immunity from legal obligations in Hong Kong. Employers and contractors are reminded to observe and comply with statutory provisions, relevant codes of practice and other government departments' requirements so as to discharge their legal and other pertinent duties related to work at height.

為持續及更有效地推廣工地安全,主辦單位希望以"工地齊FUN享"作為建造業安全周 2019的延續活動,於不同工地推廣,以便讓更多工友參與。

主辦單位 (發展局及建造業議會) 為協助工地舉行相關的安全推廣,會向參與單位提供安全資訊包。 資訊包內容包括本刊物 (高空工作安全手冊) VR體驗套件、安全周2019活動精華片段、

研討會演講者的簡報撮要、14套建造業議會安全短片及相關資料。

本刊物簡介一般高空工作的安全資料及重點,以供參閱,

並進一步讓持份者了解進行相關工作的風險及安全預防措施。

In order to promote the safety of construction site on a continuous and more effective basis,

"Site Safety Gathering" is organized as a continuation of the Construction Safety Week 2019.

The organizer (the Development Bureau and the Construction Industry Council) will provide relevant safety promotion packages for the participating sites as auxiliary tools for this event. The information package includes this publication (Work-at-Height Safety Handbook), VR goggle set, Construction Safety Week 2019 Highlights,

Power-point slides of speakers in Conference, 14 sets of Construction Industry Council safety videos, etc.

This booklet has been specially prepared to summarise safety information and highlights of work-at-height for reference purpose and for duty holders to understand the risks and the safety measures to be taken when conducting related works.

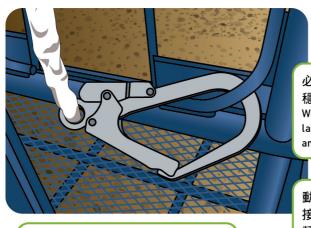
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>> 動力操作升降工作台 POWER-OPERATED ELEVATING WORKING PLATFORMS (PEWP)



必須配戴全身式安全吊帶及繫 穩在製造商指明的繫穩位置。 Wear full body safety harness with its lanyard anchored to a specified anchorage point.

當有工人停留在升降工作台的平台 時,貨車不可移動。

Ensuring that the lorry would not travel with workers staying on the platform of the PEWP.

動力操作升降工作台只限由曾 接受適當訓練和合資格操作該 類機器的人士操作。

A PEWP should only be operated by persons who have received suitable training and are competent to operate the machine.





• 在架空電纜等公共設施附近使用升降台時,要採取預防措施防止對操作 員或工人造成危險,例如使電纜不帶電等。

Where a PEWP is required to work in the vicinity of any public utilities, precautions shall be taken, for example rendering dead the electricity supply line.

在移動升降台前,將升降台下降至托架上。 The PEWP should be lowered to the cradle position before it is moved.



》)動力操作升降工作台

POWER-OPERATED ELEVATING WORKING PLATFORMS (PEWP)



- 操作的位置不可超出製造商建議的最大傾斜度。 The PEWP should not be used on the slopes with gradient exceeding the recommended limit by the manufacturer.
- 行駛的路線須堅固平坦,並與障礙物、洞穴及凹陷處保持安全距離。 The PEWP should be operated on a firm and level route and a safe distance is kept from obstacles, holes and depressions.

- 切勿過份伸展身體出升降 台護欄外。
 - Do not overstretch the body outside the working platform.
- 切勿超逾升降台的安全操 作負荷。
 - Do not overload the working platform.







>> 金屬棚架 **METAL SCAFFOLDS**



確保地面堅固、平坦及 適宜搭建棚架。

The ground should be firm, level and suitable for erecting the scaffolds.



使用合適的支撐腳以防止因橫向力,扭力或撞擊力引致金屬 棚架的過分移動及翻倒情況。

Provision of adequate outriggers to prevent undue movement and overturn due to lateral forces, torsion or impact forces.



>> 金屬棚架 **METAL SCAFFOLDS**



棚架上的工作平台必須設置適當的安全進出口。

The working platform on the scaffolds should be provided with suitable and safe access and egress.







>> 金屬棚架 **METAL SCAFFOLDS**



不可擅自改動棚架,也 不要在未搭建完成的棚 架上工作。

Do not make unauthorised alteration to the scaffold and do not work on an unfinished scaffold.



在搭建、更改、拆卸棚架、或設置安全工作平台或提供安全進出口 並不切實可行時,須配戴全身式安全吊帶,並繫於穩固的繫穩點或 獨立救生繩上。

When erecting, altering, dismantling of scaffolds or it is impracticable to erect a safe working platform or provide safe access and egress, the use of full body safety harness attached to a secure anchorage point or an independent lifeline is required.



>> 輕便工作台/流動工作台

LIGHT-DUTY WORKING PLATFORM / MOBILE WORKING PLATFORM

上落時,必須面向輕便工作 台,並保持三點接觸。

When ascending or descending, worker should face to the working platform and keep 3 points contact.





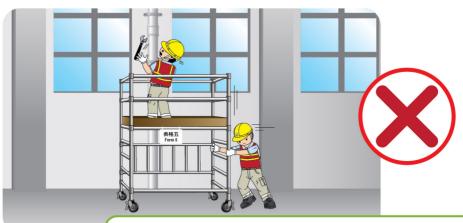
不可把身體過分探出工作台之外,不可依靠在工作台的護 欄上。

Do not overstretch the body outside the working platform. Do not lean on the guard-rail of the working platform.





>> 輕便工作台/流動工作台 LIGHT-DUTY WORKING PLATFORM / MOBILE WORKING PLATFORM



當有人或有物料放置於工作台上,切勿移動工作台。

When moving the mobile working platform, no person should be allowed to stand and no object should be placed on the mobile working platform.

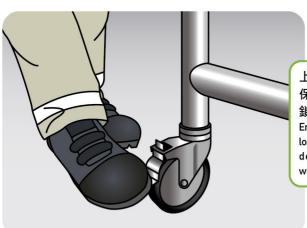


在流動工作台內攀上/攀下流動工作台。

Ascending/descending the mobile working platform from the inside of a mobile working platform.



》 輕便工作台/流動工作台 LIGHT-DUTY WORKING PLATFORM / MOBILE WORKING PLATFORM



上落和使用流動工作台前,確 保平台的所有腳輪已經牢固地 鎖上。

Ensure that all the castors are firmly locked in position while ascending / descending and using a mobile working platform.



工作台應在穩固、平坦和水平的地面上。架置工作台的周圍應無 廢物和雜物。

Working platforms should be erected on firm, even and level ground. The surrounding of working platforms should be kept free from waste and miscellaneous materials.





》 樓面孔洞/樓邊的保護 FLOOR OPENING / EDGE PROTECTION



在樓邊設置適當的護欄及底護板。 Provide guard-rails and toe-boards at the floor edge.



在樓面孔洞設置穩固的覆蓋板,並提供警告告示。

Provide secure coverings with warning signs at the floor opening.



FLOOR OPENING / EDGE PROTECTION



在樓面孔洞設置護欄、底護板及警告告示。

Provide guard-rails, toe-boards and warning signs at the floor opening.







》 樓面孔洞/樓邊的保護



Do not alter or dismantle any fall protection facilities unless authorized.

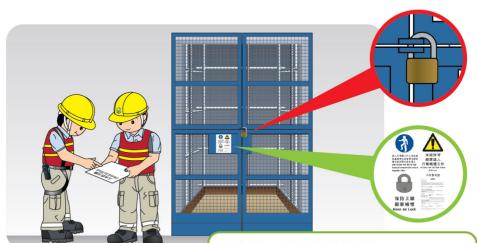


當安裝、改動或拆除樓邊/孔洞/窗邊等防墮措施時,應提供 適當的防墮系統予工友。

Whilst installing, altering or dismantling fall protection facilities at the floor edge, opening and windows, suitable fall arresting system should be provided to workers.



LIFT SAFETY - UNDER CONSTRUCTION



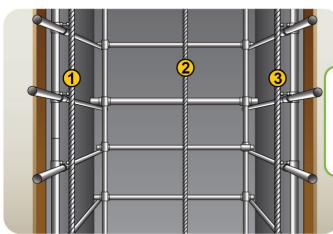
- 未經許可嚴禁進入升降機槽。 No entry into lift shaft unless authorized.
- 閘門須保持上鎖及張貼告示。 Keep the gate locked and display warning notice.







>> 興建中之升 と機工作安全 LIFT SAFETY - UNDER CONSTRUCTION



升降機槽內須安裝至少 三組獨立救生繩。

Provide at least 3 sets of independent lifelines securely anchored inside a lift shaft.

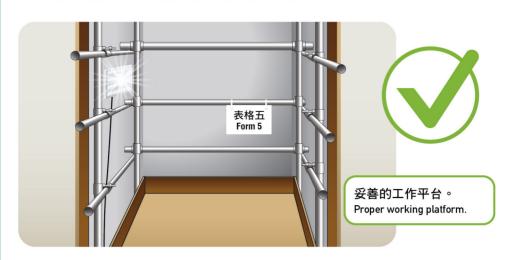


當需要進入升降機槽工作時,工人必須將全身式安全吊 帶的縣掛繩連同防墮器繫於獨立救生繩上。

Worker should attach the lanyard of the full body safety harness with fall arrestor to the independent lifeline before making access to lift shaft.



》) 興建中之升降機工作安全 **LIFT SAFETY - UNDER CONSTRUCTION**









>> 升 路 機 保 蓍 工 作 LIFT MAINTENANCE WORK



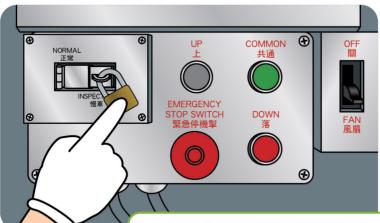
- 在升隆機門前,架起附有警 告標誌的圍欄。 Provide barriers with warning
- signs at the lift door. • 把層站門打開前,將全身式 安全吊帶尾繩繫於穩固點。 Before opening the landing door.
- attach the safety lanyard of the full body safety harness to the anchorage point.



- 在檢查機廂位置時,層站門不應開啟多於90毫米闊的縫隙。 The landing door should be opened not more than a clearance of 90 mm in width for checking the position of lift.
- 核實工作點層站門聯鎖的有效性。 Verify the landing door lock at working floor in order.

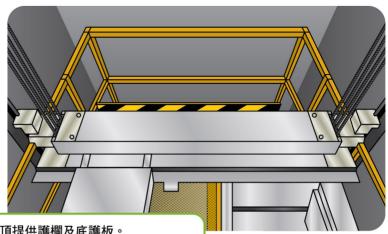


>> 升 路機保養工作 LIFT MAINTENANCE WORK



在機廂頂工作時,升降機須以檢查模式(俗稱"手動慢車") 運作及上鎖。

Whilst lift workers are on the car top, the lift should be operated at inspection mode with the selector locked.



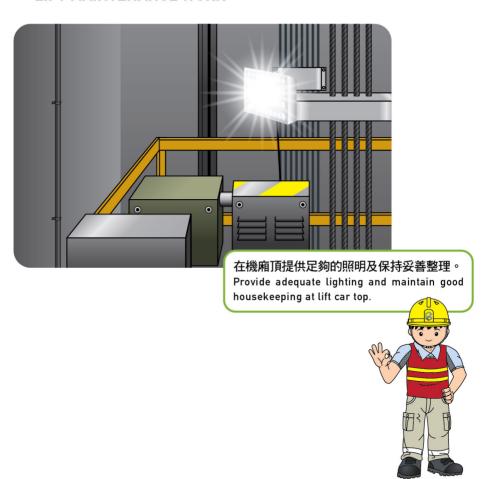
於升降機機廂頂提供護欄及底護板。

Guard-rails and toe-boards should be provided at lift car top.





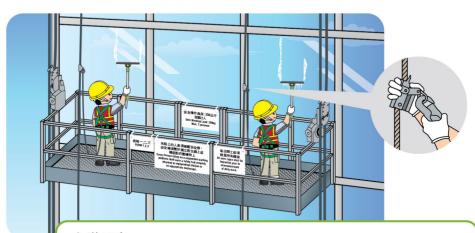
>> 升降機保養工作 LIFT MAINTENANCE WORK



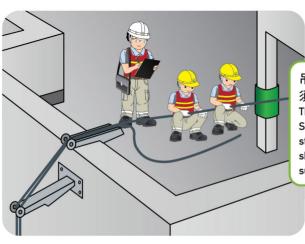


>> 吊船

SUSPENDED WORKING PLATFORM (SWP)



- 年滿18歳。 At least 18 years old.
- 取得有吊船操作訓練證明書。 Obtained a training certificate for operating the SWP.
- 必須配戴全身式安全吊帶, 並把安全吊帶以防墮裝置繫於獨立救生繩。 Wear full body safety harness and attach it to independent lifeline with fall arrestor.



吊船的架設、拆卸或結構改動 須在合資格的人監督下進行。 The erection and dismantling of SWP and the alteration of any structure from its original design should only be carried out under the supervision of a competent person.





》 吊船

SUSPENDED WORKING PLATFORM (SWP)

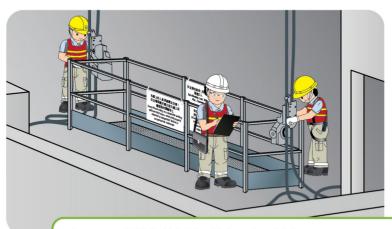






>> 吊船

SUSPENDED WORKING PLATFORM (SWP)



- 每日開工前檢查所有懸吊纜索及安全纜索。
 - All suspension ropes and safety ropes should be inspected prior to the commencement of work daily.
- 吊船於安裝或移位後, 須由合資格檢驗員(註冊專業工程師)進行檢驗及 負荷測試。此外每星期亦須由合資格的人最少檢查一次吊船。
 - The SWP should be load tested and examined by a competent examiner (RPE) after erection or repositioning and it should be inspected by a competent person at least once a week.





>> 竹棚架 **BAMBOO SCAFFOLDS**



竹棚架每個棚層均應鋪設工作平台。如整個竹棚架為密竹棚 式設計,則須在各棚層每個工作位置架設合適的工作平台。 A working platform should be laid on every lift of a bamboo scaffold. If the entire scaffold is designed as a closely spaced bamboo scaffold, a suitable working platform shall be erected at every working location on a lift.



竹棚架的架設/攜建/更改/拆 卸工作須由曾受訓練的工人在 合資格的人直接監督下進行。 Bamboo scaffolds shall be erected. added to, altered or dismantled by trained workmen under the immediate supervision of a competent person.



》竹棚架 **BAMBOO SCAFFOLDS**



不應存放過量物料在 棚架上。

No excessive materials are stored on the scaffolds.



不可擅自改動棚架,也 不要在未搭建完成的棚 架上工作。

Do not make unauthorised alteration to the scaffolds and do not work on an unfinished scaffold.



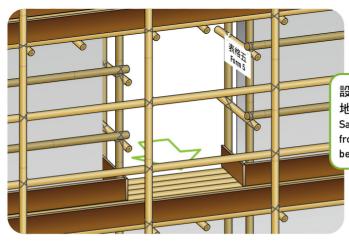


》竹棚架 **BAMBOO SCAFFOLDS**



工人在搭建、更改、拆卸棚架、或當設置安全工作平台或提供安全進 出口並不切實可行時,須配戴全身式安全吊帶,並繫於穩固的繫穩點 或獨立救牛繩上。

When erecting, altering, dismantling scaffolds or it is impracticable to erect a safe working platform or provide safe access and egress, the use of full body safety harness attached to a secure anchorage point or an independent lifeline is required.



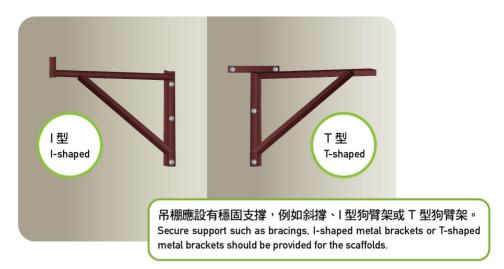
設置安全進出口到工作 地點。

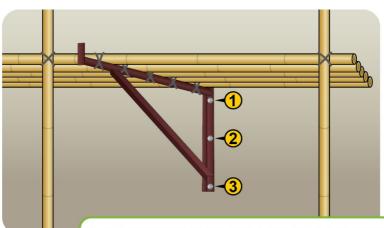
Safe access to and egress from place of work should be provided for the workers.



>> 吊棚

TRUSS-OUT BAMBOO SCAFFOLDS





每個支撐吊棚的狗臂架必須裝上3顆或以上的繫穩螺絲,以確保吊棚 的承重力及穩定性。

Each metal bracket supporting the scaffold must be fixed with 3 or more anchor bolts to ensure the load-bearing capacity and stability of the scaffolds.





>> 吊棚

TRUSS-OUT BAMBOO SCAFFOLDS



繫穩螺絲的底部結構物料應有足夠的強度和穩定性(例如混 凝土),不應把吊棚錨固在磚牆上或不適當的牆身批盪上。 The base materials of anchor bolts (e.g. concrete) should have adequate

strength and stability. The scaffolds should not be erected on brick walls or plastering surface.





>> 吊棚

TRUSS-OUT BAMBOO SCAFFOLDS



工人在搭建、改動、拆卸棚架或在吊棚上施工時,必須配戴全 身式安全吊帶,並把懸掛繩繫於穩固的繫穩裝置(例如羊眼圈)或 連接到獨立救生繩上的防墮裝置。

When erecting, altering, dismantling scaffolds or working on a truss-out bamboo scaffold, workers must wear a full body safety harness with its lanyard attached to a secure anchorage (e.g. an eye bolt) or an independent lifeline with a fall arrester.

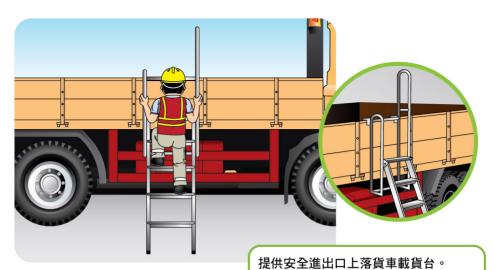




》 貨車式起重機/貨車 LORRY-MOUNTED CRANE/LORRY



避免於貨車式起重機/貨車的載貨台上工作。 Avoid working on the deck of lorry-mounted crane / lorry.



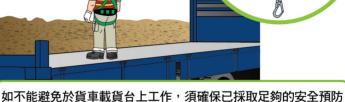
Provide safe access to and egress from the deck.

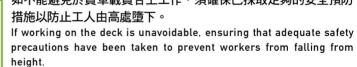


》 省重式起重機/省重 LORRY-MOUNTED CRANE/LORRY

使用可伸縮式防墮器並繫穩於吊 鈎上,以供工人在載貨台工作時 連接全身式安全吊帶之用。

Use of retractable fall arrestor with anchoring to lifting hook for attachment of full body safety harness of worker when working on the deck.









》 個人防護裝備/防墮系統 PERSONAL PROTECTIVE EQUIPMENT / FALL ARRESTING SYSTEMS



使用全身式安全吊帶配合獨立繫穩錨固裝置或防墮系統, 是別無其他選擇(例如:工作台)下的防墮保護方法。

The use of full body safety harness with an independent anchorage or fall arresting system is only a last resort of fall protection when there is no alternative (i.e working platforms).



在配戴安全吊帶之前檢查安全 吊帶的狀況,以確保全身式安 全吊帶是可以使用。

Make a visual inspection for the safety harness prior to use to ensure that the full body safety harness is in a serviceable condition.



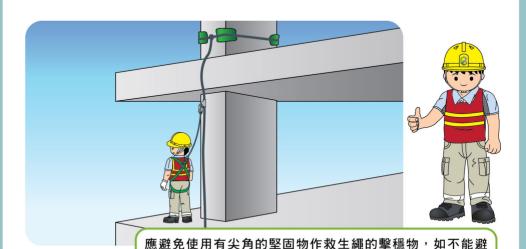
>> 個人防護裝備/防墮系統

PERSONAL PROTECTIVE EQUIPMENT / FALL ARRESTING SYSTEMS

如礙於工地環境而無法提供 固定繫穩物及以其他方法連 接防墮裝備,可使用流動式 臨時防墮繫穩裝置。

When it is impracticable to provide fixed anchors or other means for attachment of fall arresting equipment due to restrictions of the site environment, transportable temporary anchor devices can be used.



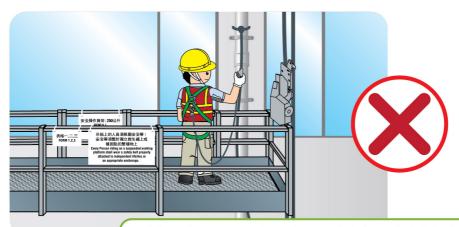


免,救生繩應以適當的墊件保護。 Do not use a structural member with sharp edges as an anchorage for lifeline. If it is unavoidable, then the lifeline must be protected by suitable packing.





>> 個人防護裝備/防墮系統 PERSONAL PROTECTIVE EQUIPMENT / FALL ARRESTING SYSTEMS



不應把全身式安全吊帶的懸掛繩繫於欄杆、臨時支架或竹 棚的任何一處、或任何輸水、煤氣或排水管上。

The lanyard of the full body safety harness should not be anchored to the railings or any member of a temporary scaffolding or bamboo scaffolding, or to any section of water, gas and drainage pipes.



Each lifeline should be used

by only one person at any time.



我們(發展局及建造業議會)謹此答謝以下機構為本刊物提供珍貴的資料,包括:

勞工處 職業安全健康局 香港機場管理局 香港房屋委員會 香港鐵路有限公司

We (the Development Bureau and the Construction Industry Council) would like to acknowledge the organisations below for providing a vast amount of valuable information.

> Labour Department Occupational Safety and Health Council Airport Authority Hong Kong Hong Kong Housing Authority MTR Corporation Limited

參考資料 《《

- 1. 職業安全及健康條例(509章)及其附屬規例
- 2. 工廠及工業經營條例(59章)及其附屬規例
- 3. 金屬棚架工作安全守則,勞工處刊物
- 建築地盤(安全)規例VA部有關安全工作地方的條文簡介,勞工處刊物
- 5. 慎防從高處墮下,勞工處刊物
- 6. 建築地盤工作安全及健康事項查核表,勞工處刊物
- 7. 竹棚架工作安全守則,勞工處刊物
- 8. 安全使用和操作吊船工作守則,勞工處刊物
- 9. 安全帶及其繫穩系統的分類與使用指引,勞工處刊物
- 10. 安全使用動力操作升降工作台指引,勞工處刊物
- 11. 有關「狗臂架」懸空式竹棚架工程職業意外致命個案集,勞工處刊物
- 12. 高處工作意外致命個案集,勞工處刊物
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- 15. 竹棚架工作安全簡介, 勞工處刊物
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- 17. 「狗臂架」式棚架安全須知,勞工處刊物
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- 19. 升降機槽工程安全指引:第1卷-施工期間直至移交予升降機安裝承建商前,建造業議會刊物
- 20. 升降機槽工程安全指引:第2卷-升降機安裝期間直至獲發佔用許可證及交予發展商, 建造業議會刊物
- 21. 使用輕便工作台及流動工作台的安全指南,職業安全健康局刊物
- 22. 工地安全手冊,香港房屋委員會刊物
- 23. 高空工作實務指南: 確保安全作業, 香港房屋委員會刊物
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- 27. 竹棚架工作平台安排指引,建造業議會刊物
- 28. 離地工作的安全指引,建造業議會刊物



- 1. Occupational Safety and Health Ordinance, Cap 509 and its subsidiary regulations
- 2. Factories and Industrial Undertakings Ordinance, Cap 59 and its subsidiary regulations
- 3. Code of Practice for Metal Scaffolding Safety, Labour Department
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- 28. Guidelines on Work-Above-Ground Safety, Construction Industry Council



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