#### Managing Suspended Working Platform Safety: Lessons from Singapore and Hong Kong









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# Suspended Working Platform Accident (SG)



THE STRAITSTIMES

2 workers stranded on gondola dangling outside Raffles City Tower rescued by SCDF

#### 2 workers stranded on gondola dangling outside Raffles City Tower rescued by SCDF

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A gondola was seen hanging from the exterior of the building. ST PHOTO: KELVIN CHNG

# Suspended Working Platform Accident (SG)



THESTRAITSTIMES

2 workers rescued after gondola tips sideways at HDB block in Boon Lay Drive

#### 2 workers rescued after gondola tips sideways at HDB block in Boon Lay Drive

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One worker was brought in through the unit's windows by the Singapore Civil Defence Force (SCDF) while the other worker by a member of the public before SCDF arrived.

ST PHOTO: SHINTARO TAY

# Suspended Working Platform Accident (SG)



THE STRAITS TIMES

SCDF rescues two workers stranded on gondola at Capital Tower in Tanjong Pagar

#### SCDF rescues two workers stranded on gondola at Capital Tower in Tanjong Pagar

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SCDF officers preparing to move an injured person into an ambulance, following an incident involving a stuck gondola at 168 Robinson Road on March 20, 2023.

ST PHOTO: JASON QUAH

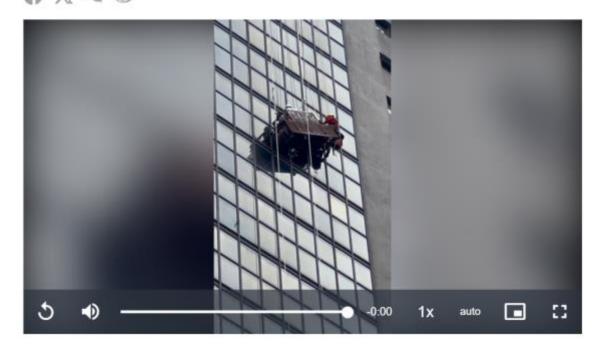
# Suspended Working Platform Accident (HK)



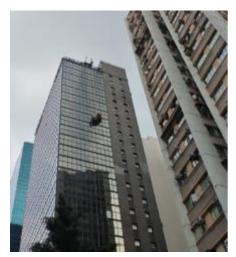
Watch This | Two workers rescued after being trapped on suspended platform outside commercial building in Wan Chai

Video | 2025.04.30 16:28

https://english.dotdotnews.com/a/202504/30/ AP6811dba7e4b0e343b0e88c0f.html







### Temporary Vs Permanent Suspended Working Platform





# Temporary Suspended Working Platform

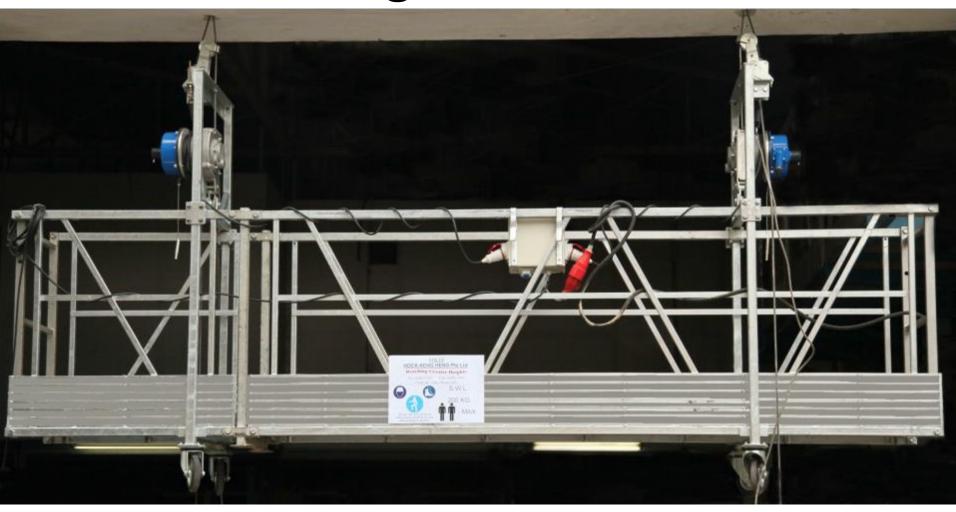






# Temporary Suspended Working Platform





#### Suspended Platform / Cradle







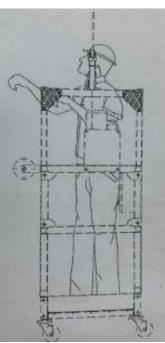












#### Use of SWP



- Cleaning of the external wall
- Applying sealant on the external window frame
- Installation of curtain wall
- Inspection / Repairing of the external wall
- Installation / Inspection of the Air Conditioning Unit
- Replacement of water pipe on external wall

#### Components





Hoist / Motor



Wire Ropes



Hoist / Motor



**Electric Control Box** 



Safety Lock



Wire Ropes

#### **Temporary SWP System**

ASA

- Parapet Clamp
- Counterweight System



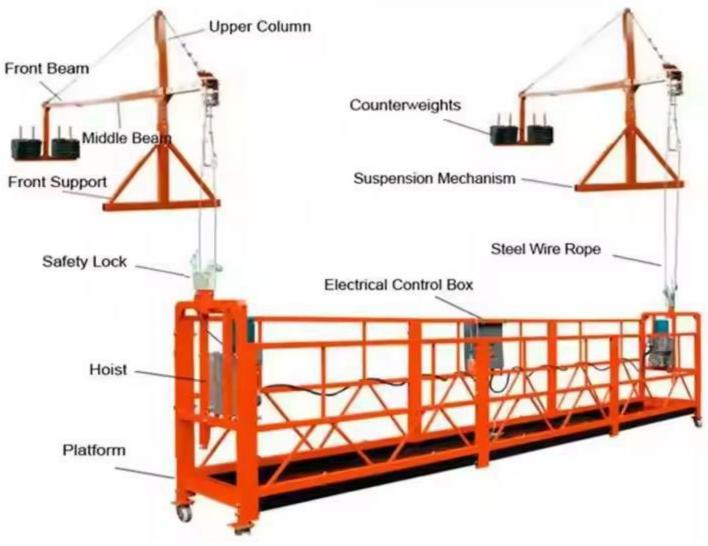






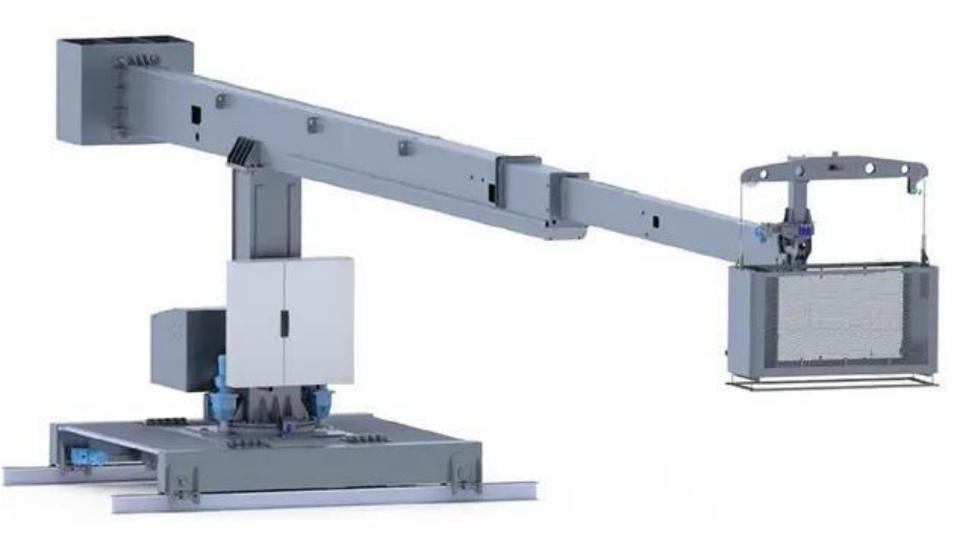
#### **Temporary SWP System**





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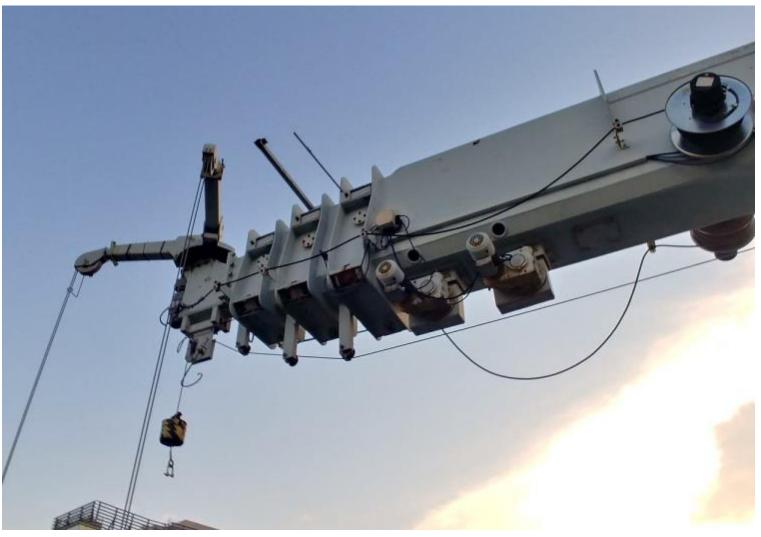






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# Hong Kong - Legal Requirements



- Factories and Industrial Undertakings Ordinance
- Factories and Industrial Undertakings (Suspended Working Platforms) Regulations
- Factories and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulations
- Code of Practice for Safe Use and Operation of Suspended Working Platforms
- Guidance Notes on Inspection, Thorough Examination and Testing of Lifting Appliances and Lifting Gear

## Hong Kong - Certification & Inspection



- Examination by Competent Examiner Registered Professional Engineer (Mechanical or Marine Discipline), every 6 and 12 months
- Inspection by Competent Person immediately preceding 7 days before its use

### Hong Kong



[section 19(1)]

### - Certification & Inspection

Name of Owner	表格一 [規例第 19(1)條] _ FACTORIES AND INDUSTRIAL UNDERTAKINGS (SUSPENDED WORKING PLATFORMS) REGULATION				
擁有人姓名:	ACTORIES AND INDUS	TRIAL UNDERTAKINGS (SUSPENDED WORKING PLATFORMS) REGULA	LIION		
	Form appr	VEEKLY INSPECTIONS OF SUSPENDED WORKING PLATFO oved by the Commissioner for Labour for the purposes of Section 19(1) of the es and Industrial Undertakings (Suspended Working Platforms) Regulation	ORM		
Address of Installation 安裝地址:	本表格乃由勞	工廠及工業經營(吊船)規例 吊船的每週檢查證明書 「工處處長就工廠及工業經營(吊船)規例第19(1)條的需要而認可			
Description of suspend working platform and identification mark 吊船的說明及္別標記	inspection 檢查的日期	Result of inspection (covering all lifting appliances and gear, the working platform, counterbalance, ballast, outriggers, anchoring, supporting or fixing arrangements, all mechanical and electrical apparatus and safety devices)  State whether in safe working order 檢查結果 (包括所有起重機械及裝置、工作平台、平衡系統、壓重物、支撐物、縮定、支撐或固定安排、所有機電器具及安全裝置)  述明是否處於安全操作狀態)。	Name, signature and designation of the competent person who made the inspection 進行檢查的合資格的人 的姓名、簽署及職級		
(1)	(2)	(3)	(4)		

FORM 1

An owner shall ensure that a suspended working platform is not used for carrying persons unless he has obtained a certificate of weekly inspection signed by a competent person stating that the suspended working platform is in safe working order. Otherwise, he commits an offence and is liable on conviction to a fine of \$200,000 and to imprisonment for 12 months.

在来取得合资格的人簽署的每週檢查證明書,述明吊船處於安全操作狀態,擁有人如使用該吊船載人,即屬犯罪;一經定罪,可處賴款二十萬元及監禁十二個月。

SWP-F1

#### Hong Kong



### - Certification & Inspection

Name of Owner 擁有人姓名: FACTORII	FORM 2 [sect 表格二 [規例第 FACTORIES AND INDUSTRIAL UNDERTAKINGS (SUSPENDED WORKING PLATFORMS) REGULATION				
CERTIFICAT  Address of Installation 安装地址:	Form approved by th Factories and Indi		SPENDED WORKING PLATFO coses of Section 20(1) of the ng Platforms) Regulation		
Description of suspended working platform e.g. identification mark, dimensions of working platform, safe working load, maximum number of persons that can be carried safely. 吊船的說明,例如 : ္ 說別樣記、工作平台的尺寸、安全操作負荷、安全運載的最多人數等。	Date of thorough examination 徹底檢驗的日期	Specify repairs required to enable the suspended working platform to be used safely. If no such repairs are required, state "None". 列明所醫修理政能安全地使用此,用船。如無需要修理,則填寫"無"。	Result of thorough examination 徹底檢驗結果  Specify repairs (other than those listed in column (3)) required before the issue of the next certificate. If no such repairs are required, enter "Nose".  列明在下次發證明書前所需的修理(除卻那些在第三欄內所列舉的修理)。如無需要修理,則填寫"無"。  (4)	State whether the suspended working platform is in safe working order. 还明吊船是否處於安全操作狀態。	
I hereby certify that the supended working platform described in this certificate was thoroughly examined by me on					
Any competent examiner who delivers to an owner \$200,000 and to imprisonment for 12 months. 任何合資格檢驗員,如向擁有人送交他自知		_	•	e on conviction to a line of	

# Hong Kong - Certification & Inspection



FORM 3 表格三 [section 20(2) & (3)] [提例第 20(2)及(3)條]

FACTORIES AND INDUSTRIAL UNDERTAKINGS (SUSPENDED WORKING PLATFORMS) REGULATION

CERTIFICATE OF LOAD TEST AND THOROUGH EXAMINATION OF SUSPENDED WORKING PLATFORM

Form approved by the Commissioner for Labour for the purposes of Section 20(2) & (3) of the Factories and Industrial Undersatings (Suspended Working Platforms) Regulation

工廠及工業經費(吊船)規例 吊船的負荷測試及徹底檢驗證明書 本表格乃由勞工處處長款工廠及工業經費(吊船)規例第20(2)及(3)款的需要買認可

1.		e of owner of the suspended weeking platform. 擁有人的效名。	
2.	platf	ress of installation of the suspended working form. 的安徽地址。	
3.	(a)	Description of suspended working platform, e.g. identification mark, mode of suspension, dimensions of platform etc. 品配的說明,例如識別權記、懸吊形式、工作 平台的尺寸等。	
	(b)	Date of manufacture (if ascertainable) 製造日期(如能確定)。	

Design and construction -設計及構造 --Is the suspended working platform of good design and construction, of adequate strength, made of sound material and properly installed? 用船的設計及構造是否良好、強度是否是夠、物料是 否質住及是否妥爲安徽? State "Yes" or "No". If "No", specify what defects have been found. And state the suspended working platform is not in safe working order in paragraph 9 述明"是"或"否"。如屬"否",則列舉其毛病所在。並於 下這第九段內,这明品輸不是處於安全操作狀態。 Details of any renewals or alterations required should be given in paragraph. 如售要進行任何更換或錄改工程。 應將詳懷註明於下述第7段。 5. Are the following parts of the suspended working platform in safe working order? 下列吊船的部分是否建於安全操作狀態? State "Yes" or "No". 述明"是"或"否"。 (a) anchorage and support 编定及支持。 suspension. (c) counterbalance and counterweights. 平衡系統及衡重物。 platform. 工作平台。 (e) access to and egress from the suspended working platform. 吊船的進出途徑。 drums and pulleys. 数及滑輪・ brakes. 制動器

No音

SWP-F3-2

SWP-F3-1

#### Hong Kong





	control levers, switches or other operating	No ill
	devices。 控制桿·開展單収其他操作器材。	
(i)	winches, climbers or other lifting appliances. 仮車・施升器収其他起重機械。	Nn II
(j)	safety ropes and safety devices (if applicable under Section 14, state 'Yes' or 'No'. If not, state 'N.A.'), 空全觀常及安全器材(如明據經例第 14 報道 周 · 述明"是"第" 8 如不適用 · 述明"不適 用 · 述明"不適	NA 不進用
(k)	Other parts. 其物配价。	
	st load applied (tenne). 武時使用的養潔(公職)。	
ens sud are squ	coify repairs, renewals or alterations required to ble the snapended working platform to be used style. If no such repairs, nenewals or alterations required, enter "None". 用所需排程、更換或排改工程效能安全地使用此是,如無需要排理、更換或排改工程效能安全地使用此是。如無需要排理、更換或排改、影響高"曲"。	
	ecify repairs (other than those listed in paragraph required before the issue of the next certificate. to such repairs are required, enter "Noore".	

9.	State whether the suspended working platform is in safe working order. 达明用船是否處炒安全操作款繳。	
10.	Safe working load (tonne). 安全操作負荷(公順) =	
11.	Specify the maximum number of persons that can be carried safely. 列明安全運載的最多人數。	
12.	Other observations. 其他觀察 -	
Suspen 亞證明 試及機 Name a 註册專	fy that on ded working platform and that the foregoing is a con 本人會於 年 月 日 馬此用 數學果是正確的。  and Signature of Registered Professional Engineer 東工學能的故名及奏響 ication	ect report of the result. 帕塞行了負荷潮試及徹底檢驗・而耐文所述的調
資格 Discipl	line	
whom employ	行此項測試及檢驗的人士、公司或機構的姓名或名額	
Date o 簽發日	fissue	
material months. 任何合证	opetent examiner who delivers to an owner a certificate particular commits an offence and is liable on convictio 著格檢驗員,如向擁有人途交拍自知有虛觀要項的整 及監禁十二額月。	n to a fine of \$200,000 and to imprisonment for 12
SWP-F	14	

## Hong Kong - Certification & Inspection



FORM 6 表格六 [reg, [8(1)(d)] [現例第 18(1)(d)條]

Factories and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulations

#### CERTIFICATE OF TEST AND THOROUGH EXAMINATION OF CHAINS, ROPES AND LIFTING GEAR

Form approved by the Commissioner for Labour for the purposes of regulation 18(1)(d) of the Factories and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulations

工廠及工業經營(起重機械及起重装置)規例

條、確索及記重裝置的測試及徹底檢驗結果證明書

			医療和:米証明音 ()現例第18(1)(d)條的需要而能可				
Name of owner and addres chain, rope or lifting goar t 接受调試及檢驗的聽悔、應 賽有人姓名及安裝地址	ested and examined						
Description of chain, rope or lifting gear tested and distinguishing mark 接受剩款的鏈接、機定或 起重裝置的設明及 識別標誌	Test load applied (tonnes) 翻試時所 使用的負荷 (以公顧馬單位)	Safe working load (tonnes) 安全操作負荷 (以公顧為單位)	Defects noted If none, enter "None" and state whether in safe wocking order. 註明所發現的毛鋼 幻無不妥。則讓「無」字並 註明是否處於安全操作狀態。				
Thereby certify that on 19 the gear described in this certificate was tested and 正證明本人曾於一九 年 月 日依照附表し的規定側試及像直接驗本證書所指的 thoroughly examined by me in accordance with the First Schedule and that the above particulars are correct. 紀定装置・且上述各項均屬確實無款・							
Signature of Registered Professional Engineer							
Qualification 註册實格	Qualification 註历資格						
Discipline 註册界别	Discipline 註册界则						
LALG-F6-1							

Person or firm by whom person conducting the test and examination is employed 屬用執行此項測試及檢驗的人士液開號	}
Date of certificate	

Any competent examiner or competent person who delivers to an owner a certificate or makes a report which is to his knowledge false as to a material particular shall be guilty of an offence and shall be liable on conviction to a fine of \$200,000 and to imprisonment for 12 months.

任何合資格檢驗員或合資格的人,如向擁有人交付他明知有任何要項屬虛假的證明書或作出 他明知有任何要項屬虛倒的報告,即屬犯罪;一經定罪,可處數數二十萬元及監禁十二個月。

LALG-F6-2

### Hong Kong - Certification & Inspection



Name of owner 擁有人姓名	FORM 7 表格七	[reg 18(1)(e) [規例第 18(1)(e)#
	Factories and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulations	1-20-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-
Address of installation 安裝地址	CHAINS, ROPES AND LIFTING GEAR CERTIFICATE OF RESULTS OF THOROUGH EXAMINATION IN THE PRECEDING SIX MONTHS Form approved by the Commissioner for Labour for the purposes of regulation 18(1)(e) of the Factories and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulations	

<b>本表格力田労工應應長駅</b>	上廠及工業程曾(起	<b>里俊恢</b> 及赵里装直	[)規例第 18(1)(e)條的需要而認可
Description of chain, rope or gear, e.g. type, size and identification mark 蘇條、擴索及起重裝置的設明。 例如:賴別、尺寸及識別標誌	Date of examination 檢驗日期	Safe working load (tonnes) 安全操作負荷 (以公噸路單位)	Result of examination Enter details of repairs required or defects. If none enter "None" and state whether in safe working order 檢驗結果,註明所需進行的修理或毛術的詳情 如無不安,則填「無」字並註明是否處於安全操作狀態 (4)
	(-)	(5)	(4)
	-		
I hereby certify that the gear described in this certificate was thor 益趣明本人曾於 年 月 日	oughly examined by me o 徹底檢驗本證明書所		
Signature of Registered Professional Engineer 註册專業工程師簽署		Qualification 註册資格	
Date of certificate		Discipline 註册界别	
offence and shall be liable on conviction to a fine of \$200,000 an	d to imprisonment for 12	months.	o his knowledge false as to a material particular shall be guilty of a 何要項屬虛假的報告,即屬犯罪;一經定罪,可處罰款二十
LALG-F7			

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### Hong Kong



- Certification & Inspection

	FORM	1 1	[regs 5(3) & (5)]		_		7	
	表格		[機例第 5(3)及(5)條)	<ol><li>Safe working load or loads.</li></ol>	(1)	(2)	(3)	(4)
Certificate No 證明書編號			2000 2000 - 10-2000 2000 2	In the case of a crape with a variable operating radius (including a crane with a derricking jib or with interchangeable jibs				Safe
CERTIFIC	CERTIFICATE OF TEST AND THOROUGH EXAMINATION OF CRANE, CRABS AND WINCHES			of different lengths) the safe working load at various radii of the Jib, Jibs, trolley or crab must be given; test loads at various radii	Length of jib (metres)	Radius (metres) 中亚	Test load (tonnes) 遊話如所	Working load (tonnes)
Form approved by the Commissioner for Labour for the purposes of regulation 5(3) dt (3) of the Factories and Industrial Undertakings (Lipting Appliances and Lifting Gear) Regulations		and	should be given in column (3) and in the case of a safe working load which has been calculated without the application of a test load "NIL" should be entered in that	(以米為單位)	(以未爲單位)	居負荷 (以公職商單位)	安全操作負荷 (以公曜馬草位)	
1,44,840,86	工廠及工業經營(起業機 、起重滑車及絞車的混	試及徹底檢驗	結果證明書	column.				
本資格乃由勞工總總:	長就工廠及工業經營(起重機物	(及私重装置)提例等	\$5(3)及(5)機約需要推認可	安全操作負荷				
Name of owner a the appliance 獨有人姓名及機	nd address of installation of 械的安徽地址			如該起重捷係有特職性的操作中區等(但 抵装有人和重複。 於其有人和重複。 於國內 於國內 於國內 與國子 之 與國子 與國子 與國子 與國子 與國子 與國子 與國子 與國子				
<ol> <li>Name and addres 機械製造廠名標</li> </ol>	s of maker of the appliance 及地址			李。				
Scotch derrick-m electric; rail mou 機械類別及所使 人字起重機 —	and sature of power (e.g. anual); tower decrick- ated tower-electric) 用的動力例如:蘇格蘭式 人力:塔式人字起重覆 —			<ol> <li>In the case of a crane with a derricking jib or jibs the maximum radius at which the jib or jibs may be worked (in metres). 如該起重體延變有人字用價看,與註明在 該吊臂神至最長時的半徑(以来馬墨位)。</li> </ol>				
電力:茶股軌道	的塔式起重機 — 電力)			<ol> <li>Defects noted and alterations or repairs required before appliance is put into service.</li> </ol>				
Date of manufact 該機械製造日期				If none enter "None" and state whether in safe working order. 註明所是现的毛病及起蜜糖炒使用脂所胃 作的修改或修理。如無不妥,則清「無」				
5. Identification number 識別輻號	(a) Maker's serial number 製造廠繼號			字並註明是否處於安全操作狀態。  9. In the case of a crane, state whether the automatic safe load indicator is in good				
	(b) Owner's distinguish- ing mark or number (if any)			working order. 如該機械為紅重機,註明該機的安全負荷 自動圖示器是否處於安全操作試驗。				
	擁有人的識別揮誌編 號(如有此標誌或編 號者)			1 hereby certify that on	日依照附领	ance described i 友 1 的規定測設 hedule and that	及徹底檢驗本	證書所指的

6.	Safe working load or loads. In the case of a crane with a variable operating radius (including a crane with a derricking jib or with interchangeable jibs of different lengths) the safe working lead at various radii of the jib, jibs, trolley or crab must be given; test loads at various radii should be given in column (3) and in the case of a safe working load which has been calculated without the application of a test load "NIL" should be entered in that column.	(1) Length of jib (metres) 必需長度 (以来馬厚位)	(2)  Radius (metres) 中亚 (以木島單位)	(3)  Test load (bonnes) 蘇試時所 用負荷 (尿公喇瑪單位)	(4) Safe Working load (tonnes) 安全操作員符
	安全操作負荷				
	如該起重機係有拌離性的操作中區看(包 結裝有人字品質或有不同長度的品質可 供調查的起重機,則限列明用質 級輸或 起實滑革在使用各種中延續作時的安全 負別。與試各種中經濟所用的負別經濟於 第(3)欄內,如安全條作負荷並非超過負荷 測試質屬計算者,則應在該觸內漢「舞」 子。				
7.	In the case of a crane with a derricking jib or jibs the maximum radius at which the jib or jibs may be worked (in metres). 如該起重體採繫有人字用實者,與註明在 該用臂神差最長時的中徑(以来爲單位)。				
8.	Defects noted and alterations or repairs required before appliance is put into service. If none enter "None" and state whether in safe working order. 杜明所提出电话的是现象是重要的电话,但是不是,则谓「無」字並在明是否處於安全操作故题。				
9.	In the case of a crane, state whether the automatic safe load indicator is in good working order. 如款機械為起重機,註明該機的安全負荷自動關示器是否處於安全操作狀態。				

LALG-F3-1

LALG-F3-2

### Hong Kong



Certification	&	Inspection

Signature of Registered Professional Engineer 註計專業工程節簽署
Qualification 註册資格
Discipline
Name and address of person, company or association by whom the person conducting the test and examination is employed 健用執行此次到試及檢驗的人士、公司 或機構的姓名或名稱及地址
Date of certificate
Any competent examiner or competent person who delivers to an owner a certificate makes a report which is to his knowledge false as to a material particular shall be guilty an offence and shall be liable on conviction to a fine of \$200,000 and to imprisonment for 12 months.  任何合資格檢驗員或合資格的人,如內籍有人交往如明如有任何要項屬虛擬的證明書或作。 他明如有任何要項屬虛擬的報告,即屬犯數二一概定第一可應數太二十萬元及監禁十二個月

LALG-F3-3

# Hong Kong - Certification & Inspection



[reg 5(l)]

Name of owner 表格五 [規例第 5(1)條] 擁有人姓名 ......... Factories and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulations LIFTING APPLIANCES CERTIFICATE OF RESULTS OF THOROUGH Address of installation EXAMINATIONS IN THE PRECEDING TWELVE MONTHS 安装地址 ..... Form approved by the Commissioner for Labour for the purposes of regulation 5(1) of the Factories and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulations 工廠及工業經營(起重機械及起重裝置)規例 起重機械在過往十二個月內進行的徹底檢驗結果證明書 本表格乃由勞工處處長就工廠及工業經營(起重機械及起重裝置)規例第5(1)條的需要而認可 Result of examination Description of appliance, e.g. type, identification marks, Date of examination Enter details of repairs required or defects. maximum safe working load, etc. 檢驗日期 If none enter "None" and state whether in safe 該機械的說明,例如:類別、識別標誌、 working order. 檢驗結果,註明所需進行的修理或毛病的詳情 最高安全操作负荷等 如無不妥,則填「無」字並註明是否處於安全操作狀態 (2)I hereby certify that the appliances described in this certificate was thoroughly examined by me on ...... ...... and that the above particulars are correct. Signature of Registered Professional Engineer .... **Oualification 注册專業工程師簽署** 註册資格 Date of certificate ... Discipline 簽發日期 註册界别 Any competent examiner or competent person who delivers to an owner a certificate or makes a report which is to his knowledge false as to a material particular shall be guilty of an offence and shall be liable on conviction to a fine of \$200,000 and to imprisonment for 12 months, 任何合資格檢驗員或合資格的人,如向擁有人交付他明知有任何要項屬處假的證明書或作出他明知有任何要項屬處假的報告,即屬犯罪;一種定罪,可處罰款二十 萬元及監禁十二個月。

FORM 5

LALG-F5

# Hong KongSurvey Report





#### Allied Rich Asia Limited 聯發亞洲有限公司

Room 5.29-5.83, SVF Beverday Caretreeccol Caretre, 67-103 Chathare Road, Nian Sha Youi, Rawitson, Hong Rosy 事項人投資中間通過運搬 87-103 電客料産業中心 529-538 変

Report No. ARA-20250618

Inspection Form

Date of Inspection: 18 June 2025

Name of Owner: Electrical and Mechanical Services Department

Site Address: Central Ferry Pier No. 3 Central, Hong Kong Location: Roof

#### Description:

Platform powered by electric with roof car mounted and ran on rails fixed on roof travelling. Platform suspended by two operating arms with wire drums fixed on the platform, c/w devices for prevention of ever running & over-descending of the platform.

Name of Maker: Lalesse B.V. Anhem Holland Serial No.: 960245 Suspension & boist wer rope: 4 x 8mm diameter Year: 1996(car)/1994(platform) Details of eradle as follows: Maker: Power Climber Model: PC-400 Climber Serial No.: 991043 &991011 Life-line: 2 nos. x 16mm diameter Platform Size: 2.904(L) x 0.75h(W) x 1.0M(H)

Travel Heights of Platform: From G/F. to Roof

Remark: Not in Safe Working Order (wire ropes attached to climber was found rusty – refers to photos in page 2 and 3)

Allied Rich Asia Limited

Tse Wing Ning (RP0398760)

MECHANICAL

Registered Professional Engineer









- 3

### Hong Kong - General Duties



- Good design and construction; of adequate strength
- Made of sound material
- Properly installed or assembled
- Properly maintained
- Adequately and securely supported with every supporting structure being of good construction and adequate strength



- Mandatory Basic Safety Training (Green Card) 1 day
- Certificate for Operation of Suspended Working Platform (Yellow Card) – 2 days







Certificate for Operation of Suspended Working Platform



- Relevant occupational safety and health legislation
- General knowledge of suspended working platform
- Electrical apparatus necessary for operation
- Safe operation procedures
- Personal protective equipment and fire extinguishers
- Safety in adverse weather conditions
- Emergency procedures
- Analysis of common accidents to improve safety awareness























### Hong Kong - Key Safety Requirements



- Independent Lifelines
- Safety Devices
- Notice of SWL and max. no. of operators
- Operator Age 18 and above
- Operator with safety harness



# Singapore - Legal Requirements



- Workplace Safety and Health Act (WSHA)
- Workplace Safety and Health (Operation of Cranes)
   Regulations
- Singapore Standard SS 536: 2023 Code of Practice for Safe Use of Mobile Cranes
- Singapore Standard SS 598: 2014 Code of Practice for Suspended Scaffolds (Formerly CP20)
- Singapore Standard SS 617: 2016 Code of Practice for lifting of Persons in Work Platform suspended from Cranes (Formerly CP 63)

### Singapore



#### - Certification & Inspection

- Certificate of Fitness (CoF) by Authorised Examiner for Lifting Equipment (AE)
- Detailed Inspection by scaffold supervisors
- Pre-use Check

# Singapore - Permit to Work (PTW) & Risk Management



- Permit to Work system
- Approved Risk Assessments
- Job-specific Fall Prevention Plans
- Safe Work Procedure (SWP)

# Singapore - Personnel Training & Competency

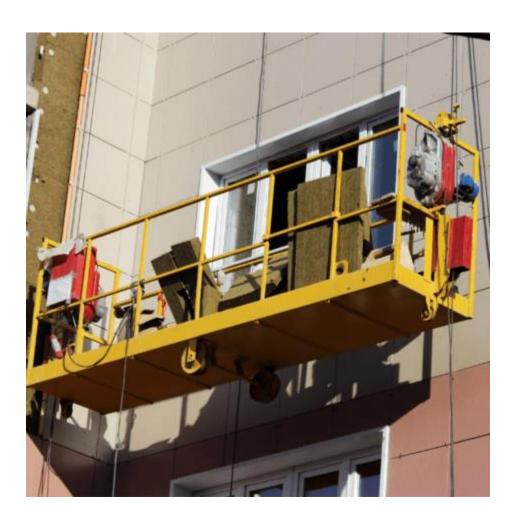


- Risk Management Course
- Multi-skilling (Rigger and Signalman) Course
- Scaffold ("gondola") supervisors, scaffold erectors and suspended scaffold ("gondola") riggers

### Singapore - Key Safety Requirements



- Design certified by Professional Engineer
- Approved scaffold contractors
- Qualified work force
- Securely fastened the working platform
- Fall Protection
- Operator Age 18 and above





- Planning
- Implement a fall emergency rescue plan
- Arrival on-site and assess on-site conditions
- Work area set-up
- Environment
- Check weather conditions & prepare
- Housekeeping
- Manual tasks

- Working with powered & nonpowered tools
- Pre-inspect system components
   & assembling the platform
- Install electrical cabling for hoist operations
- Setting-up supports and anchors
- Commission and handover
- Dismantling
- On completion
- Emergency response





Company Name: Company Address: ABN/NZBN:

ERECTING SUSPENDED POWERED SCAFFOLDS SAFE WORK METHOD STATEMENT (SWMS)									
Business Contact:	Phone #:	Principal Contractor (PC):							
Responsible person (for monitor	ring SWMS and work):	PC Address:	PC Address:						
Signature:	Date:	PC Phone #	Date SWMS provided to F	PC:					
Contact Phone #:		Job Site Address:							
SITE MANAGEMENT PLAN	Is the work associated with a Construction Project	-12 Vee No	SWMS must align with requirer Plan in place for the Construction						
THIS WORK A	CTIVITY INVOLVES THE FOLLOWING "HIGH-RISK (	CONSTRUCTION WORK" (HRCW - A	DENTIFIED IN THE JOB TASK COLUMN)						
☐ Confined spaces	☐ Mobile plant movement	Demolition of a load-bearing str	ructure Asbestos disturba	nce					
Using explosives	☐ Diving work	Artificial extremes of temperatu	Tilt-up or pre-cast	concrete					
Pressurised gas distribution mains or piping chemical, fuel or refrigerant lines energised electrical installations or services									
Structures or building	Structures or buildings involving structural alterations or repairs that require temporary support to prevent collapse								
Involves a risk of a p	erson falling from 2m or more, including work on to	elecommunications towers	☐ Work in a ceiling space	e (W.A. Only)					
☐ Working at depths greater than 1.5 metres, including tunnels or mines ☐ Work in an area that may have a contaminated or flammable atmosphere									
☐ Work carried out adjacent to a road, railway or shipping lane, traffic corridor ☐ In or near water or other liquid that involves the risk of drowning									
WORKING WITH A RISK OF A FALL OVER 2 METRES. Select the fall from height 'hierarchy of control level' considered when establishing controls:									
L 1: Work on the ground or s	olid construction	L 4: Use a fall arrest system e.g., safety harness, catch platforms							
L 2: Use a passive fall restra	int system e.g., guard rails, scaffolding, EWP	L 5: Implement administrative controls e.g., signage, or instruction							
L 3: Use a work positioning s	system e.g., travel restraint, rope access	☐ Other?							
More than one of these measures to reduce risk can be used. For example, engineering controls like edge protection can be implemented with administrative controls like training and use of this SWMS, while wearing PPE (non-slip shoes). Please describe why it is not reasonably practicable to use higher-order control measures. E.g. The job is less than 5 minutes on a ladder.									
DOCUMENT #: VERSION ERECTING SUSPENDED POWERED SCAFFO	1 10	AUTHORISED BY		REVIEW #:					
SAFE WORK METHOD STATEMENT	C SafetyCulture All Rights Reserved	Issue Date:	REVISION DATE:	Page 1 of 14					





Company Name: Company Address: ABN/NZBN:

JOB TASK	HAZARDS	IR	CONTROL MEASURES  INHERENT RISK-RATING (IR) BEFORE CONTROLS - RESIDUAL RISK-RATING (RR) AFTER CONTROLS	RR	RESPONSIBLE PERSON
			<ul> <li>Ensure that footwear is suitable. Snug-fitting shoes/boots with flat, non-slip soles, no loose soles, long laces, soles that are oily, or caked with mud or other contaminants</li> </ul>		
8. Manual tasks	Musculoskeletal Disorder (MSD) injuries	3Н	Materials/equipment placed as close to the work area as possible Ensure there are adequate workers to perform the task Weight of an object should be known; avoid lifting sads more than 1/4 of your body weight Do not use extreme force to move items Lifted items held close to the body whenever possible Keeping knees bent and back straight and lift unload kneping knees bent Use team lifts and mechanical means for heavy items Schedule regular breaks and practice for rotation Avoid overreaching, long periods of repetitive movements, awkward and sustained positions, twisting and side-bending Wear leather safety gloves for platform assembly, setting up supports/anchors and operation.	2M	Supervisor and workers to ensure control measures followed
9. HRCW Working with powered & non-powered tools	Electrocution     Injury     Fire     Asphyxiation	4A	Use tools only for the purpose specified by the manufacturer  Wear PPE as recommended by the manufacturer  Pre-inspect and operate bols following the manufacturer's instructions. If damaged or unsuitable for the task do not use. Take out of service immediately and apply LOTO procedures  Tool operations manual is available, read and understood.  Fire protection adupment accessible  Use mechanical ventilation as required  Electrical  All electric power tools and leads are Tested, Tagged and are current  Use electrical sockets protected by RCD (safety-switches) or use portable RCD devices  Switchboards have appropriately rated circuit breaker  Always ensure that the tool is switched off and power isolated before a pre-start check, adjusting, changing set-ups or repairing  Do not overload power outlets  Dissel/petrol-powered tools - Do not run a diesel/petrol-powered tools inside a building (e.g. shed), or where ventilation is limited.	2M	Supervisor and workers to ensure control measures followed
10. Pre-inspect system components	Equipment failure	4A	Set up work platform (cradle) as per plan/manufacturer's instructions     Construct the stage on the ground or on a sold structure	2M	Supervisor and workers to ensure
DOCUMENT #:	VERSION#: 1	DEVEL	OPED BY AUTHORISED BY		REVEW#:
ERECTING SUSPENDED POWERED SCAFFOLDS SAFE WORK METHOD STATEMENT		© Safe	etyCulture All Rights Reserved Issue Date: Revision Date:		Page 6 of 14





Company Name: Company Address: ABN/NZBN:

JOB TASK	HAZARDS	IR	CONTROL MEASURES  (INHERENT RISK-RATING (IR) BEFORE CONTROLS - RESIDUAL RISK-RATING (IR) AFTER CONTROLS	RR	RESPONSIBLE PERSON
	Falling objects	4A	Anchors/tiebacks secured to a structurally sound anchorage on the building or structure Anchor equipment should not be fastened to the following unless specifically modified to do so: Conduit/cable trays, piping, support racks, vent stacks, scaffolding/supports / suspended platforms, guard rails, handrails, wobd trusses (unless specifically designed), gable ends, facia, overhangs, damaged framing, mobile plant, hoists and areas with sharp edges or protrusions Only use items specifically designed as counterweights to counterweight the scaffolding system Bricks and blocks and other similar construction materials not used as counterweights Counterweights must be secured fixed to the outrigger beams Counterweights must not be removed from an outrigger beam until the scaffold is disassembled.	2М	
13. HRCW  Commission & handover	Fall from height     Suspension trauma     Impact injuries     Fatality	4A	When testing the scaffold wear a fall arrest harness attached to an independent fall arrest system. Controls followed as in setting up supports and anchors  Platform:  Keep the platform-level at all times. Restrict the lateral movement of the cradle, e.g. tying off the cradle with tope  Stop work and lower the platform to the ground during bad weather, e.g. windy conditions  DO NOT:  Overreach  Chino by handrails  Inspect before handover, Items to be checked:  Ensure a secondary moterable and toe-boards fitted correctly, and the working deck is not supported by the drainage holes  Ensure a secondary protective device provided and fitted for each scaffold hoist to operate on a secondary wire rope (in case of failure of the main system)  Ensure backup attachment point is independent of the main suspension rope attachment  Connections between components secured  Access/egress suitable  Certification provided. Ensure it contains:  Name/address of people requiring fall protection  Name/address of installer  Location details, time and date	2M	Supervisor and workers to ensure control measures followed
DOCUMENT #:	VERSION #: 1	DEVEL	OPED BY AUTHORISED BY		Review#:
ERECTING SUSPENDED POWERED SCAFFOLDS SAFE WORK METHOD STATEMENT			etyCulture All Rights Reserved Issue Date: Revision Date:		

#### Discussion & the Way Forward



Philosophy

Certification

**Primary Guidance** 



