

頭條報道 Headline

Periodic Test for Fixed Electrical Installations (WR2)

Introduction

Regular checking electrical system not only provide a stable and healthy electricity to user, but also reduce the risk of hazard occurs. Therefore, Periodic Inspection, Testing and Certification (PITC) for Fixed Electrical Installation been introduced had Electrical and Mechanical Services Department (EMSD).



Or we normally call this "WR 2 inspection".

To promote the importance of PITC, EMSD makes concerted efforts with property management companies, trade organizations, District Council, Home Affairs Department (District Offices), Building Department, etc. to facilitate the PITC works over the territory.

Definition

The PITC scheme were divided into TWO parts: (i) High Voltage Fixed Installations and (ii) Fixed Electrical Installations.



Reference is made to Code of Practice for the Electricity (Wiring) Regulations (2020 Edition), for those HV fixed installation that are fed directly from a HV supply are required to be inspected, tested

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二零二三年一月至四月會員通訊 Contents 日錄

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and certified **ANNUALLY** while fixed installation is required to be inspected, tested and certified for every **FIVE** years.

Attention should be drawn to the fixed installation at "Public Entertainment" for instance concert, stage play, stage performance etc...and, "Dangerous Goods Storage". Those fixed installation are required to be inspected, tested and certified **ANNUALLY**.

A fixed electrical installation means "a low or high voltage electrical installation that is fixed to premises but does not include any electrical equipment that is supplied with electricity after passing through a socket of the installation at which the supply can be disconnected without the use of a tool".

The communal electrical installations of a building to be inspected and tested periodically normally include the main switch, riser, secondary meters and switches of all floors, earthing arrangements, equipotential bonding etc. of the power supply system. For buildings, housing estates and clubs completed recently, communal fixed electrical installations may include main switchboards, emergency generators, lifts, fire services installations, pump installations, lightning protection installations and the supply system of security equipment.

Test to be conducted

The following tests should be conducted to fixed equipment and results should be recorded properly. The test record should be submitted together with WR2 form;

| (i) | Continuity test of protective conductor, including main and supplementary equipotential bonding | |
|--------|---|--|
| (ii) | Continuity test of ring final circuit conductors | |
| (iii) | Insulation Resistance | |
| (iv) | Polarity | |
| (v) | Earth electrode resistance | |
| (vi) | Earth fault loop impedance | |
| (vii) | Function of all protective devices | |
| (viii) | Function of all items of equipment | |

頭條報道 Headline

Periodic Test for Fixed Electrical Installations (WR2)

Important Notes to Test

The test **MUST** be carried out by a Registered Electrical Contractor (REC) because it involves electrical work. Electrical gloves should be properly used by Registered Electrical Worker (REW) when live work measurement is unavoidable.

Lock Out / Tag Out (LOTO) System should be implemented for switching off power circuit and

resuming power supply. The switches **MUST** be locked provided with and information for instance locking date and time; responsible person and contact number. Key lock is recommended instead of code lock to prevent from accidental unlock and power energized. After the switches is



locked, de-energized checking of circuit should be done priory to carry out the test. It can be done by means of Voltage Tester Pen.

Submission of Periodic Test Certificate (WR2)

After completion of the inspection and testing and restoration of electricity supply, the registered electrical contractors and workers should resume electricity supply and, issue Periodic Test Certificate (WR2) within the statutory period and prepare the following documents;

- 1. Periodic Test Certificate (Part of the installation) (Form WR2(A)), (if any)
- 2. Detailed circuit diagram (From main circuit to final circuit)
- 3. Testing results and records of all installations
- 4. Power company's record for power suspension (if any)

Owners of electrical installations or their agents shall submit the test certificates, other relevant information, and the endorsement fees to the EMSD for endorsement within 2 weeks after the date of the certificate. In addition, registered electrical contractors should keep all records of electrical work for the last 5 years. They should also provide the EMSD with their records, drawings, or documents for inspection upon request.

Common mistake found in Periodic Test Certificate

The following are some common mistakes found in the certificates.

- (i) Make mistakes when filling in the dates
- The date should be later than the date of signature by the registered electrical worker
- Should be within ONE month before the date of signature by the REW
- Should be later than the issuing dates of all additional forms WR2A
- (ii) The date (1C) is earlier than (1B) or (1A), the date (1B) is earlier than (1A), or the date (1A), (1B) or (1C) is late than the date of the endorsement application.
- The correct sequence should be $(1A) \rightarrow (1B) \rightarrow (1C)$ and then the date if the endorsement application The certificate must be submitted to the EMSD for application for endorsement within TWO weeks from the dates signed (1B) and (1C)
- (iii) A photocopies signature is given
 - Own handwriting signature should be provided
- (iv) The WR2 form is signed by a person not authorized by the REC
 - If the test is carried out by a REC, it should be signed by a person who is authorized by the REC and whose name has been recorded by the **EMSD**
 - If the test is carried out by a REW who is a full time employee at a regular wage or salary of the owner of the electrical installation, it should be signed by the owner of the electrical installation
- (v) Provide wrong information
 - Should be filled in according to the type of premises where the electrical installation is located. For instance, cinema, factory and industrial undertaking etc...

Conclusion

Periodic Inspection, Testing and Certification could help to maintain a healthy and safety electrical power supply to user. The submission of test certificate can be applied online through "EMSD (Regulatory Services) Web Based Registration Services" or, "iAM Smart +". For details, please refer to following link for more information;

https://www.emsd.gov.hk/en/electricity_safety/periodic_ test_for_fixed_electrical_installations/online_application_ for feipt certificate/index.html

搵食資料 Notes To Trade

香港房屋委員會 招標公告

香港房屋委員會招標公告可在以下網頁查看:

http://www.housingauthority.gov.hk/en/business-partnerships/ tenders/

恭賀盈電工程有限公司 **Congratulations to REC Engineering Company Limited**

本會恭賀盈電工程有限公司中標於朗邊第一期公營房屋發展 計劃建築工程的電力裝置工程,並祝順利如期完成。

On Behalf of Hong Kong Electrical Contractors' Association, we would like to convey our congratulations to REC Engineering Company Limited for the Electrical Installation for Construction of Public Housing Development at Long Bin Phase 1 (Sub-contract to Contract No. 20210207).

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恭賀金碧電器

Congratulations to Grandeur Electrical Company Limited

本會恭賀金碧電器中標於安達臣道石礦場R2-5地盤公營房 屋發展計劃建築工程的電力裝置工程,並祝順利如期完成。

On Behalf of Hong Kong Electrical Contractors' Association, we would like to convey our congratulations to **Grandeur Electrical Company** Limited for the Electrical Installation for Construction of Public Housing Development at Anderson Road Quarry Site R2-5 (Sub-contract to Contract No. 20210293).

機電工程署機電優良作業推廣典禮 EMSD E&M Best Practices Ceremony

機電工程署舉辦機電優良作業推廣典禮已於2022年9月29日(星期四)舉行。向來自機電業界、學術界和物業管理界的參加者介紹《優良操作和維修作業手冊及指引》,並動機電優良作業電子平台。這套手冊及指引推廣機電工程的優良作業模式,並期望以電子平台凝聚業界智慧和力量,促進業界合作和交流,提升操作和維修服務質素。他鼓勵業界應用並推廣優良作業模式,推動機電行業不斷進步。優良操作和維修作業手冊及指引(一套八本),涵蓋暖通空調裝置、升降機及自動梯裝置、電力裝置、消防裝置及設備、太陽能發電系統、太陽能熱水系統、氣體設施及石油氣車輛燃料系統。

The Electrical & Mechanical Best Practices Ceremony was held by The Electrical and Mechanical Services Department (EMSD) on 29 September 2022 (Thur) introducing the Operation and Maintenance (O&M) Best Practices Booklets and Handbooks to participants from the electrical and mechanical trade, academia and the property management sector. An e-platform on electrical and mechanical (E&M) best practices was also launched.



The best practices of E&M works through this set of booklets and handbooks would pool together wisdom and efforts through the e-platform for co-operation and exchanges in the trade with a view to enhancing the O&M service quality as well as continuous improvement The O&M Best Practices Booklets and Handbooks comprise eight volumes covering heating, ventilation and airconditioning installations, lift and escalator installations, electrical installations, fire service installations, solar photovoltaic systems, solar water heating systems, gas utilisation facilities and fuel systems of liquefied petroleum gas vehicles.





機電・啟航 E&M GO!

由機電工程署聯同業界組成的香港機電業推廣工作小組,已於2022年10月6日(星期四)舉辦「E&M Go!機電、啟航」2022迎新典禮。香港機電業推廣工作小組於2012年成立,由19個機電業相關機構組成,包括政府部門、公共機構、教育培訓機構、公用事業公司、商會和工會等。工作小組致力推廣及提升機電業的專業形象,吸引青年人投身機電業。是次活動約750名參與由公私營機構舉辦的機電業技術人才培訓計劃的年輕學員加入機電行業。勉勵出席的年輕學員要不斷提升工作技能,善時機電裝備合成法、建築信息模擬資產管理等新技術,以促進機電行業走向數碼化。希望青年人在機電業內發展事業,為香港未來作出貢獻。

The Hong Kong Electrical and Mechanical (E&M) Trade Promotion Working Group, formed by the Electrical and Mechanical Services Department and the E&M trade, organised the "E&M GO!" orientation ceremony



2022 on 6 October 2022 (Thur). The Hong Kong Electrical and Mechanical Trade Promotion Working Group, established in 2012, comprises of 19 E&M-related including: government departments, organisations, public organisations, education institutes, public utilities, trade associations and unions. It aims to promote and enhance the professional image of the E&M industry and attract more young people to join the industry. The ceremony was participated by some 750 young trainees of various E&M training schemes organised by public and private organisations joining the E&M trade. These trainees are encouraged to continuously upgrade their skills and make good use of innovative technology, such as Multi-integrated Mechanical, Electrical and Plumbing, BIM Asset Management, to facilitate the digitalisation in the industry. It is hoped these trainees can develop their careers in the E&M industry and contribute to the future of Hong Kong.





教育局「商校合作計劃」Business-School Partnership Programme

教育局「商校合作計劃Business-School Partnership Programme」舉辦「並肩同行:如何籌辦雙贏事業探索活動」機構伙伴分享會,已於2022年10月13日(星期四)舉行。教育局致力推廣生涯規劃教育,除了為學校和教師提供相關支援外,更透過「商校合作計劃」與不同工商機構、政府部門和社區組織合作,為學生提供多元化的事業探索活動,協助他們認識不同行業和建立正確的工作態度,為日後升學或投身社會做好準備。計劃除了為學生帶來益外,參與機構伙伴亦表示獲益良多,他們一方面可回饋社會和提升企業形象,另一方面,可向學生介紹行業和培養有志投身行業的年青人。本會已加入成為「商校合作計劃」的機構伙伴,攜手推動生涯規劃教育,帶領學生走出課堂,認識不同的行業和工種,讓學生有更多、更廣的事業探索機會。







香港國際秋季燈飾展

HKTDC International Lighting Fair (Autumn Edition)

香港國際秋季燈飾展已於2022年10月13日至16日(星 期四至星期日)在香港會議展覽中心展覽廳舉行。呈獻各 款智能及環保照明產品,精選產品包括柔性軌道燈系統和 智能天花燈等。

HKTDC International Lighting Fair (Autumn Edition) was held during 13 to 16 October 2022 (Thur to Sun) at the Hong Kong Convention and Exhibition Centre. The Expo displaying a spectrum of smart and green lighting products. Among them are flexible track lighting systems and smart ceiling lamps.







建造業議會15周年慶祝及展覽開幕典禮 **CIC 15th Anniversary & Exhibition Grand Opening Ceremony**

建造業議會15周年慶祝及展覽開幕典禮已於2022年 10月31日(星期一)在九龍博物館道38號西九文化區M+ 地下大堂舉行。建造業議會成立15周年以來,與行業合 作夥伴吸引新人財、加強培訓和為建築從業者建立提供多

方面所做的努力。更 支持年輕人成為技術 人員,提升業界技術 能力。

The Celebration for the 15th Anniversary of the Construction Industry Council and the Hona Construction Kong Exhibition Grand



Opening Ceremony was held on 31 October 2022 (Mon) at Main Hall, M+, West Kowloon Cultural District, 38

Museum Drive, Kowloon. The 15-year journey of the CIC marks the efforts of the CIC and industry partners in attracting new worker, enhancing training, and building paths for construction practitioners. CIC also support young people to be groomed as technicians to enhance the industry's technology capability.

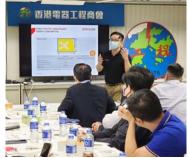


DALI-2 照明系統研討會

Sensor Technology & DALI-2 Lighting **Control Seminar**

DALI-2 照明系統研討會,已於2022年11月10日(星期 四)在本會舉行。研討會講者為Esylux Aisa Limited,內容 為:DALI-2 照明系統安裝程序及運用。多謝各會員踴躍

Sensor Technology and DALI-2 Lighting Control for Installers in Hong Kong was held on 10 November 2022 (Thur) at HKECA Office with presenters from Esylux Aisa Limited. The seminar explained: Sensors, Difference between a Presence and a Motion Detector, DALI-2 lighting control for Electrical Installer. Thank you thosel members attended the seminar.









亞洲創新建築、電氣、保安科技展覽會 2022 **Build4Asia 2022**

年度行業盛事Build4Asia已於2022年11月16日至18日(星期三至星期五) 在香港會議展覽中心。本會很高興成為Build4Asia的支持機構。

Build4Asia 2022 was held during 16 to 18 November 2022 (Wed to Fri) at the Hong Kong Convention and Exhibition Centre. Our Association are delighted as one of the supporting organisations of Build4Asia!















香港建造學院畢業典禮2022

Graduation Ceremony of HKIC 2022

香港建造學院2022年度畢業典禮,已於2022年11月 18日(星期五)假建造業零碳天地順利舉行。學院於典禮 上頒發畢業證書、最佳學生獎及數十項由業界持份者贊助 的獎學金,以表揚在工藝上,以至整體個人發展方面表現 優秀的畢業生。

The HKIC Graduation Ceremony 2022 was successfully held on 18 November 2022 (Fri) at CIC-Zero Carbon Park. At the Ceremony, graduate certificates, certificate of excellence and various prizes and scholarships contributed by industry stakeholders were presented to the graduates who had excelled in different trades, courses and overall personal development.



香港電器工程商會

Hong Kong Electrical Contractors' Association 7

2022電力規例研討會 **2022 Electricity Regulations Technical Seminar**

為加強與業界溝通和提高業界的安全意識,由機電工程署 聯同港九電器工程電業器材職工會、建造業議會和本會協 辦的電力規例研討會,已於2022年11月22日(星期二) 以網上順利舉行。

With a view to strengthening communication with the industry and enhancing their safety awareness, Technical Seminar co-organized with EMSD, the Hong Kong and Kowloon Electrical Engineering & Appliances Trade Worker's Union, and the Construction Industry Council. The Seminar was held on 22 November 2022 (Tue) by webcasting.





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2022年度週年會慶

HKECA 2022 Anniversary Dinner

2022年度週年會慶,已於2022年11月25日(星期五) 在香港九龍紅磡黃埔天地螢幕圈(第8期)4樓會所1號博藝 會設宴舉行。非常感謝各會員前來慶祝。

HKECA 2022 Anniversary Dinner was held on 25 November 2022 (Fri) at ClubONE Spotlight, 4/F, Screen World (Site 8), The Whampoa, Kowloon. We had many honourable guests and members to join the celebrating dinner.











觀香港人工智能企業-商湯科技

認識國家最新科技成果之旅,參觀香港人工智能企業 - 商 湯科技,已於2022年11月26日(星期六)在香港沙田科 學園海濱大樓舉行。活動內容:當今中國,人工智能發 展已經劃入'十四五'規劃的總體框架。商湯科技作為 國家及全球頂尖的人工智能獨角獸企業,代表國家人工 智能科技最新發展。為加強各界對國家最新科技成果及 人工智能科技的發展概況的了解,商湯科技舉辦「參觀 人工智能實驗室」。







機電安全健步嘉年華2022

E&M Safety Walk & Carnival Fair 2022

機電安全健步嘉年華2022,已於2022年12月4日(星 期日)在馬鞍山白石燒烤場舉行。此活動乃是連續第十九 年由香港機電工程商聯會與香港機電業工會聯合會合作 舉辦機電安全推廣計劃之項目。目的是為機電行業提升 工地機電安全意識。多謝各會員參加。

The E&M Safety Walk and Carnival Fair 2022 was held on 4 December 2022 (Sun) at the Whitehead Barbecue in Ma On Shan. This sizable event is jointly organized by The Federation of Hong Kong Electrical & Mechanical Industries Trade Unions and Federation. This event has held for the past 19th consecutive years!



機電業持續職業安全推廣活動

港九勞工社團聯會及香港機電業工會聯合會聯合舉辦 「2022機電業持續職業安全推廣活動 - 同心推動職安 健・勞資協作至關鍵」,已於2022年12月29日(星期 四)在九龍觀塘翠屏道3號基督教家庭服務中心1樓禮堂舉 行。本會會長韋業堅先生為擔任啟動禮儀式主禮嘉賓。



「學校起動」計劃 Project WeCan

九龍倉集團有限公司「學校起動」計劃和本會協辦職業行 業講座及活動:

於2022年11月26日(星期六)在香港聖公會何明華會督 中學舉行生涯規劃日及啟動禮,進行共二場電網特工網上 直播,教學中學生安裝插頭體驗班,勞工及福利局局長孫 玉菡先生, JP到場支持及參觀。



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「學校起動」計劃 Project WeCan





即將舉辦之活動 Upcoming Activities

機電業博覽2023

Electrical and Mechanical Expo 2023

機電業博覽2023 - 機電新世代,將於2023年3月3日(星期五) 在葵芳新葵街13-19號職業訓練局葵涌大樓2樓禮堂舉行。機電 工程署聯同香港機電業推廣工作小組舉辦主題日及講座,由機電 業界代表向參觀人士介紹機電業的工作範疇、就業前景、晉升機 會、培訓和進修資訊。

The Education & Careers Expo 2023 - Grooming Young Talent Building Smart City, the E&M Expo 2023 will be held on 3 March 2023 (Fri) at the 2/F, VTC Youth College, 13-19 San Kwai Street, Kwai Chung, NT. The Electrical and Mechanical Services Department (EMSD) and the Hong Kong Electrical and Mechanical Trade Promotion Working Group jointly organise the theme day with a series of seminars. Representatives of the E&M trade will explain to visitors on the scope of work, career prospects & promotion opportunities, including training and continuing education inside our industry.

啤酒同樂日 Beer Fun Day

港九電業總會與本會聯合舉辦『啤酒同樂日』,將於2023年3 月24日(星期五)在北角英皇道58號康福園地下A及B號舖太平 洋酒吧舉行。是晚節目內容豐富,包任飲任食大會指定啤酒及小 食,為增加節目氣氛,是晚設有獎遊戲,由於面積有限,歡迎會 員儘快報名參加,以免向隅

The Beer Fun Day jointly organized by "Hong Kong & Kowloon Electric Trade Association" and HKECA will be held on 24 March 2023 (Fri) at Bar Pacific, Shop A&B, G/F, Comfort Gardens, 58 King's Road, North Point, Hong Kong.

亞洲創新建築、電氣、保安科技展覽會2023 Build4Asia 2023

年度行業盛事Build4Asia將於2023年5月10日至12日(星 期三至星期五)再度回歸香港會議展覽中心。本會很高興成為 Build4Asia的支持機構。展覽會將繼續引領建築行業走向更環保 的道路,在建築材料和自動化、監控系統、智慧城市和綠色科技 等方面展示一系列創新技術。多場專業會議將匯聚香港特區政府 代表、國際行業協會、市場領導及業界專才共同探討建築及保安 趨勢,推動行業發展。

Build4Asia 2023 will be held during 10 to 12 May 2023 (Wed to Fri) at the Hong Kong Convention and Exhibition Centre. Our Association are delighted to become the supporting organisation of Build4Asia! The exhibition will continue to lead the construction services industry towards a greener path, presenting a board range of inspiring innovations in building materials & automation, surveillance systems, smart city and green technologies etc. A series of educational programmes will bring together the HKSAR government, international industry associations, leading companies and opinion leaders to drive the industries ahead!

員動態 Members' News

| 香港電器工程商會 9/2022 - 12/2022年度新會員名單 | | | |
|----------------------------------|--|----------------------|---------------------------------|
| 入會日期 | 申請會員名稱 | 會籍 | 代表人 |
| Joining Date | Applicant Name | Membership Types | Representative |
| 11/2022 | 裕興機電工程有限公司 Yue Hing Engineering Limited | 普通會員 Ordinary Member | 彭石聰先生 Mr. Pang, Shek Chung |
| 11/2022 | 忠興(國際)建築工程有限公司 Chung Hing (International) E&C Limited | 普通會員 Ordinary Member | 劉家豪先生 Mr. Lau, Ka Ho Tony |
| 11/2022 | 泓鋒機電工程有限公司 Wellfield M&E Engineering Limited | 普通會員 Ordinary Member | 曾栢倫先生 Mr. Tsang, Pak Lun Calvin |
| 11/2022 | 有運(放線)工程有限公司 Lucky (Cable) Engineering Limited | 普通會員 Ordinary Member | 徐銀先生 Mr. Chui, Ngan |
| 12/2022 | TTK Asia Limited | 普通會員 Ordinary Member | 許健明先生 Mr. Kevin Hui |
| 12/2022 | 柏藝(香港)工程有限公司 Pak Ngai (HK) Engineering Limited | 永遠會員 Life Member | 陳柏衡先生 Mr. Chan, Pak Hang |
| 12/2022 | 超裕電器工程有限公司 Chiu Yue Electrical Engineering Limited | 普通會員 Ordinary Member | 黃偉茵小姐 Miss Wong, Wai Yan |



盈電工程有限公司

REC Engineering Company Limited

(A wholly-owned subsidiary of Yau Lee Holdings Limited)



Business 盈電業務

- Electrical Installation
- Environmental Engineering
- Fire Services
- General Services Engineering
- HVAC System
- Design & Built Project

- Green & Sustainability Technologies
- Automated Parking System / Mechanical Vehicle Parking System
- O-Link Limited
 MiMEP / DfMA Services



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Tai Lung Veterinary Lab



Shek Pik Floating PV



Smart Car Parking System

APS



Grandeur Electrical Co. Limited (金碧電器) has been awarded for the Electrical Installation for Construction of Public Housing Development at Anderson Road Quarry Site R2-5 (Sub-contract to Contract No. 20210293).



Over the years, Grandeur Electrical Co. Limited has honored the top performer in the industry. We master the art of engineering with an engineering philosophy that lies in our core values.