

## Hong Kong Council for Testing and Certification Internship Opportunities for the Testing and Certification Industry for "Summer 2025"

Part A: Company Information

Company Name: Wilson Curtain Wall Consultant (HK) Ltd. (Chinese) 威而遜建築幕牆顧問 (香港)有限公司

Office Address: Rm. 1514, 15/F, Technology Park, 18 On Lai Street, Shatin, N.T., HK

Nature of Business: Testing, Inspection Website: www.curtainwall.com.hk

Brief Introduction of the Company (or attach Company Brochure)

See attachment.

Part B : Internship Informati	on for Summer 2025
Job title	Assistant Engineer
No. of vacancies	2
Job description	- Conduct building material tests
	- Inspection on existing curtain walls on site
	- Will provide training
Duration with dates	8 weeks
Work location (if different from	Same as office address
the office address )	
Remuneration/Allowance	HK\$8,000 / month
Requirements on applicants	
Students from	Universities, VTC
Major/Programme/Field of study	Mechanical Engineering
Year of study	Year 1 - Year 3
Language skills	Cantonese, English
Other skills or attributes required:	N/A
Documents Required (e.g. CV,	CV
Transcript, Cover Letter etc.)	
(Please specify)	
<b>Application Deadline</b>	30-4-2025
	Contact person: Mr Wilson ZHOU
<b>Application Method</b>	Telephone: 2645 1802
	Email: wilson@curtainwall.com.hk

Although extreme care has been taken to ensure that the information provided on our website is accurate and up-to-date, the Hong Kong Council for Testing and Certification (HKCTC) does not warrant that all information or any part thereof provided is accurate in all respects. The HKCTC shall not be held liable for any loss or damage suffered as a result of any use or reliance on any of the information provided in its website.

### WILSON Curtain Wall Consultant (Hong Kong) Limited 威而遜(Wilson)建築幕牆顧問(香港)有限公司

Company Profile 公司簡介

Our websites 公司網址

www.curtainwall.com.hk www.curtainwall.com.cn

> April 2024 二〇二四年 四月版



#### 1. GENERAL INTRODUCTION 簡介

WILSON Curtain Wall Consultant (Hong Kong) Limited is a specialist consultancy company in the curtain wall industry that provides the following services: 威而遜(Wilson)建築幕牆顧問(香港)有限公司是為建築幕牆工業提供咨詢的專業顧問公司,主要提供如下服務:

- Professional Curtain Wall Consultancy to Architects, Main Contractors and Developers.
   為建築師,總承包商和業主提供專業的幕牆顧問咨詢服務.
- Professional Inspection on Building Façade Failures.
   為建築外牆之各種失效提供專業的檢查.
- Performance Tests for Curtain Walls, Aluminum Windows, Glass Walls and Skylights etc. 為建築幕牆, 鋁窗, 大玻璃牆和天窗系統實施物理性能試驗.
- Various Tests on Building Materials. (HOKLAS has accredited us for glass bending stress tests, load tests on spiders, pull-out tests on anchor bolts and Non-destructive tests for concrete. HOKLAS registration No. 139) 對各種建築外牆所用之材料進行測試. (本公司之玻璃的彎曲應力測試,玻璃爪的受力測試,拉爆螺栓之拉力測試和現場混凝土無損傷測試等得到了香港認可處 HOKLAS 之認可, 註冊號碼: HOKLAS 139).
- High Quality Structural Calculations for Curtain Walls, Windows, Stone Claddings and other Building Façade Systems.
   為各種幕牆, 鋁窗, 雲石外牆及其它的建築外牆系統提供高質素的結構計算.
- OTTV (Overall Thermal Transfer Value) Calculations for Building Envelopes. 為建築外牆提供總體傳熱系數的計算.
- Expert Witness to Technical Disputes on Building Façade Projects. 為有關建築外牆工程中的技術爭議提供專業的公証服務.
- Arrangement for Wind Tunnel Tests for Different Buildings.
   爲各種建築物安排風洞試驗.
- T4 Site Safety Supervisions and Witness Heat-soak Tests for Tempered Glass (T1 & T3). 為地盤安全之監督提供 T4 的服務及見證強化玻璃之熱浸試驗 (T1 及 T3 服務).
- Design Shop Drawings for Unitized Curtain Wall System.
   爲單元式幕牆等外牆系統提供設計圖.



## 2. Professional Curtain Wall Consultancy to Architects, Main Contractors and Developers 為建築師,總承包商或業主提供專業幕牆顧問咨詢服務

Wilson Curtain Wall Consultant (HK) Limited and Dr. Wilson ZHOU have worked on many curtain wall projects as consultants for architects, main contractors or developers. The consultancy services are provided at the following stages:

威而遜建築幕牆顧問(香港)有限公司和 Wilson 周博士已為許多幕牆工程提供了專業的顧問服務. 其顧問服務涵蓋如下幾個階段:

#### At tendering stage:

#### 在招標階段:

The tendering documents are prepared or reviewed. The contractors are interviewed. Tender drawings are reviewed together with the supporting structural calculations.

為業主準備或檢查業主等準備的招標文件,面見及質詢各投標商,審核投標用之各設計圖 及其有關的結構計算書.

#### At design stage:

#### 在設計階段:

Workshop drawings and structural calculations are reviewed, commented on and approved. Professional comments are given for the contractor(s) to modify their design to fully achieve the architects design intentions and the structural and weather tightness requirements.

審核,評估並批准各設計大樣圖和結構計算.為幕牆承建商提供專業的意見供他們完善他們的設計,從而可充分地實現建築師的設計意圖並滿足對幕牆的結構與氣密和水密等的各項要求.

#### At fabrication stage:

#### 在加工階段:

Fabrication drawings and die drawings are checked. Factory visits are conducted to ensure high quality fabrications to the approved designs.

審核加工圖及擠壓用模圖. 前往幕牆之加工廠檢查加工的質量, 從而保證高水平的加工質量, 並使加工後的幕牆單元, 與設計相符合.

#### At installation stage:

#### 在安裝階段:

Site visits are carried out to ensure the installation meets design intentions, and of good quality. 去地盤檢查,以保證安裝與各設計要求相符,並保證安裝質量.

All the above services will be conducted by Dr. Wilson ZHOU himself and supported by experienced engineers so that high quality consultancy service is ensured through the whole process of the curtain wall construction.

為保證此部分服務的高質量,所有上述各項在幕牆建設之各個階段的服務,將會由周永生博士親自參與並得到另外幾位工程師的協助.



#### Job references Wilson 周博士已服務的工程

Wilson Curtain Wall and Dr. Wilson ZHOU has been the consultant for the following curtain wall projects: 威而遜建築幕牆曾為如下各幕牆工程提供了顧問服務:

#### → World Trade Centre in Shen Zhen (2000) 深圳世貿中心 (2000):



Façade consultant for the Main Contractor. Cladding systems include unitized curtain walls, stick (45° inclined) curtain walls, curved glass walls, 18m high plane glass walls, window walls and stone claddings.

含有單元式幕牆,45°傾斜的標準式幕牆,圓弧形大玻璃牆,18米高的大玻璃牆,窗牆和雲石外牆等外牆系統.(爲總包提供顧問服務)

#### → 180 Tung Lo Wan Road (2001) 香港銅鑼灣道 180 號 (2001):



Façade consultant for the architect. Cladding systems include curtain walls, window walls, glass walls and louver systems.

含有幕牆,窗牆,鋁窗,大玻璃牆和百葉窗等外牆系統.(爲建築師提供顧問服務)

#### → Hong Kong University-New Medical Complex (2001) 香港大學新醫學中心 (2001):

Façade consultant for the Architect. Cladding systems include curtain walls, window walls, aluminium windows and louver systems.

含有幕牆、窗牆、鋁窗和百葉窗等外牆系統.(爲建築師提供顧問服務)



#### → Movie City in TKO (2003) 香港將軍澳電影城 (2003):





Facade consultant for the Contractor. The cladding systems include semi-unitized curtain walls, stick (10° inclined) curtain walls, glass walls, window walls, skylights, louvers, balustrades, canopies and aluminium claddings. [Dr. Wilson ZHOU checked, commented and approved all the design drawings and structural calculations. Wilson Zhou had also attended meetings with the client, architect and the consultant hired by the client.]

含有半單元式幕牆,標準幕牆,大玻璃牆,窗牆,天窗,百葉窗,玻璃欄河,雨篷和鋁板等系統. (爲幕牆分包提供顧問服務)

#### → No. 1 Barker Road (2005) 香港山頂白加道一號 (2005):

Façade consultant for the contractor. The cladding systems include a small curtain wall, a steel stair case, balustrades and metal screen walls etc.

小型幕牆, 樓梯, 玻璃欄河, 金屬屏幕等. (為幕牆分包提供顧問服務)

## → Times Tower at 391-407 Jeffe Road, Wan Chai, HK (2006) 香港灣仔謝斐道 391-407 號 新時代大廈 (2006):

As a Consultant for the client for the remedial works on the defects associated with the curtain walls and window walls.

作為業主的顧問,對本工程之幕牆和窗墻之修補工作進行監管.

#### → Sun Hung Kai Centre, Wan Chai, HK (2007) 香港灣仔新鴻基中心 (2007):

As a Consultant for the client for the remedial works on pivot-type sashes on curtain walls. 作為業主的顧問,對本工程之幕牆上所用的插銷式開啟窗之修補工作提出修補建議並進行監管.

#### → Sun Hung Kai Centre, Wan Chai, HK (2008) 香港灣仔新鴻基中心 (2008):

Façade consultant for the client for the remedial works on the curtain wall. Proposed remedial works for the existing curtain wall. On behalf of the client, called for tender, interviewed tenderers, analyzed tenders, and give suggestions to the client for them to select the contractor for the remedial works.

作為業主的外牆顧問,為本大廈之幕牆系統的修補工程提供全套顧問服務.



#### → New Extension for Prince Wales Hospital (2009) 威爾斯醫院擴建 (2009):

Internal consultant for the contractor for curtain walls, window walls, aluminum claddings, glass walls and canopies etc.

作為承建商的外牆顧問,為醫院的擴建大樓之幕牆,玻璃牆,鋁板及遮雨棚等工程提供全套顧問服務.

#### → Harbour Centre, Wan Chai, HK (2008) 香港灣仔海港中心 (2008):

Façade consultant for the client for the remedial works for the inclined curtain wall. 對一傾斜式幕牆之維修工程為業主提供顧問服務.

→ New Civil Aviation Department Headquarters on Airport Island, HK for ASD (2009-2011) 香港民航在機場的新的總部 (2009-2011) (香港建築署工程):

As an Independent Design Checker for the Main Contractor for all the curtain walls and other building façade system for the ASD project.
作為幕牆設計的獨立檢查者,為承建商審批所有的幕牆及其它外牆系統的設計和計算.

#### → Wing On Kowloon Centre, Kowloon, Hong Kong (2010) 香港永安九龍中心 (2010):

Façade consultant for the client for the remedial works for the curtain wall. Proposed remedial works for the existing curtain wall. On behalf of the client, called for tender, interviewed tenderers, analyzed tenders, and give suggestions to the client for them to select the contractor for the remedial works.

作為業主的外牆顧問,為本大廈之幕牆系統的修補工程提供全套顧問服務.

→ GP Clinic in Tin Shui Wai Area 109, New Territories, HK for ASD (2009-2011) 香港天水園醫院 (2009-2011) (香港建築署工程):

As an Independent Design checker for the Main Contractor for all the curtain walls and other building façade systems for this ASD project.
作為幕牆設計的獨立檢查者,為承建商審批所有的幕牆及其它外牆系統.

→ North Lantau Island Hospital, HK for ASD (2010-2012) 香港北大嶼山醫院 (2010-2012) (香港建築署工程):

As an Independent Design Checker for the Main Contractor for all the curtain walls and other building façade system for the ASD project. Checked and endorsed design drawings, structural calculations and material. 作為幕牆設計的獨立檢查者,為承建商審批所有的幕牆及其它外牆系統之設計和計算.





## → Cruise Terminal Building in Kai Tak, Kowloon, HK for ASD (2010-2013) 香港郵輪碼頭 (2010-2013) (香港建築署工程):

As an Independent Design Checker for the Main Contractor for all the curtain walls and other building façade system for the ASD project. Checked and endorsed design drawings, structural calculations and material.

作為幕牆設計的獨立檢查者,為承建 商審批所有的幕牆及其他外牆系統的 設計和計算.



→ Guang Zhou Chuang Yi Ya Yuan in Guang Zhou, PR China (2010-2013) 中國廣州創意 雅苑 (2010-2013):

As the consultant for the client, we have checked, commented and approved the design (drawings and calculations) and materials for the windows, glass walls, timber sun-shades, skylights and glass balustrade for this luxury apartment building.

作為業主的外牆顧問,審核及審批所有外牆系統,包括玻璃幕牆,石材干掛牆,鋁百葉,玻璃攔河,鋁窗等之設計圖纸和結構計算書.

→ Burberry Flagship Store in Kowloon, HK (2011) 香港九龍 Burberry 旗艦店 (2011):

As an internal consultant for the client, we checked and endorsed the design and structural calculation including a scaffolding and platform design and the design for the new "Burberry" façade and LED screens for BD submission.

作為業主的顧問,對位於香港九龍的 "Burberry"旗艦店的設計,結構計算包括棚架和平台的設計及外牆和 LED 顯示屏幕進行評審及通過香港屋宇署的審批.

→ Ever Gain Plaza in Kwai Chung, New Territories, Hong Kong (2011) 香港葵涌永得利廣場大廈維修工程 (2011):

Façade consultant for the client for the remedial works on the curtain wall. Proposed remedial works for the existing curtain wall. On behalf of the client, called for tender, interviewed tenderers, analyzed tenders, and gave suggestions to the client for them to select the contractor for the remedial works.

作為業主的外牆顧問,為本大廈之幕牆系統的修補工程提供全套顧問服務.

→ Construction of Trade & Industry Tower in Kai Tak, HK for ASD (2012-2014) 香港啟 徳工貿大廈 (2012-2014) (香港建築署工程):

As an Independent Design Checker for the Main Contractor for all the curtain walls and other building façade systems for this ASD project.

作為幕牆設計的獨立檢查者,為承建商審批所有的幕牆及其它外牆系統的設計和計算.



→ SS W326, Design and Construction for the Redevelopment of Tai Lam Centre for Women, HK for ASD (2012-2016) 香港大欄婦女中心重建 (2012-2016) (香港建築署工程):

As an Independent Design Checker for the Main Contractor for all the curtain walls and other building façade systems for this ASD project.

作為幕牆設計的獨立檢查者,為承建商審批所有的幕牆及其它外牆系統的設計和計算.

→ Construction of Tin Shui Wai Hospital, Area TSW32, HK for ASD (2014-2016) 香港天水園醫院 (2014-2016) (香港建築署工程):

As an Independent Design Checker for the Main Contractor for all the curtain walls and other building façade systems for this ASD project.

作為幕牆設計的獨立檢查者,為承建商審批所有的幕牆及其它外牆系統的設計和計算.

→ Residential Redevelopment at 90 Repulse Bay (2015-2017) 淺水灣道 90 號住宅大廈 (2015-2017):

As an Independent Design Checker check the design for the windows, skylights etc. 作為鋁窗設計的獨立檢查者, 檢查所有的鋁窗及天窗的設計.

→ Construction of New Territories West Regional Office & Water Resources Education Centre of Water Supplies Department at Junction of Tin Cheung Road & Tin Pak Road, TSW, NT, HK (2016-2017)

香港水務署新界西分署及水資源教育中心 (2016-2017):

As an Internal Consultant for the curtain wall contractor to check the designs for the curtain walls etc. and provided structural calculations.

作為幕牆承建商的內部顧問,為承建商檢查所有的幕牆及其它外牆系統的設計並提供了結構計算.

→ 97 How Ming Street, Kwun Tong Hong Kong (2017-2018) (For the client/developer) 香港觀塘巧明街 97 號 (2017-2018):

As a consultant hired by the client in a later stage to solve a tough problem associated with the curtain wall. Proposed remedial works to the curtain wall. Commented on the Design Shop Drawings and Structural Calculations for the curtain walls, and helped to get the BD approval for the remedial works.

作為客戶後期聘請的顧問,解決與幕牆相關的難題。 提供對幕牆進行修補工程的建議。 對幕牆的設計圖和結構計算進行評論,並幫助客戶通過屋宇署批准其修補工程。



#### → Construction of Kowloon East Regional Headquarters and Operational Base cum Ngau Tau Kok Divisional Police Station at 105 Concorde Road, Kai Tak, Kowloon, HK (2017-2018)

#### 香港東九龍總部及行動基地暨牛頭角分區警署 (2017-2018):

As an Internal Consultant for the curtain wall contractor to check the designs for the curtain walls etc. and provided structural calculations.

作為幕牆承建商的內部顧問,為承建商檢查所有的幕牆及其它外牆系統的設計並提供了結構計算.

## → Man Yee Building, 68 Des Voeux Road Central, HK (2018-2020) – Curtain Wall 香港中環萬宜大廈 (2018-2020):

Façade consultant for the client for the remedial works on the curtain wall. Proposed remedial works for the existing curtain wall. On behalf of the client, called for tender, interviewed tenderers, analyzed tenders, and gave suggestions to the client for them to select the contractor for the remedial works. Check the final completed works.

作為業主的外牆顧問,為本大廈之幕牆系統的修補工程提供全套顧問服務. 檢查最終修補工程的質量。

#### → AIA Central, 1 Connaught Road Central, HK (2019) 香港友邦金融中心 (2019):

Façade consultant for the client for the remedial works on the curtain wall. Proposed remedial works for the existing curtain wall. On behalf of the client, called for tender, interviewed tenderers, analyzed tenders, and gave suggestions to the client for them to select the contractor for the remedial works.

作為業主的外牆顧問,為本大廈之幕牆系統的修補工程提供全套顧問服務.

#### → AIA Tower, 251A-301 Avenida Comercial De Macau, Macau (2019-2020) 澳門友邦廣場 (2019-2020):

Façade consultant for the client for the remedial works on the curtain wall. Proposed remedial works for the existing curtain wall. On behalf of the client, called for tender, interviewed tenderers, analyzed tenders, and gave suggestions to the client for them to select the contractor for the remedial works.

作為業主的外牆顧問,為本大廈之幕牆系統的修補工程提供全套顧問服務.

## → The commercial development at 207 Wai Yip Street, Kwun Tong, HK (2019-2021) 香港觀塘偉業街 207 號項目(2019-2021):

As a Façade Consultant, on behalf of the client, checked/comented on all the curtain walls and other building façade systems for this project. Dr. Wilson ZHOU and his capable team had checked, commented and approved all the design drawings and the materials adopted for the curtain wall system

作為業主的外牆顧問,審核及審批所有幕牆及其他外牆系統的設計圖及採用的物料.



## → Man Yee Building, 68 Des Voeux Road Central, HK (2021-2022) – Skylight 香港中環萬宜大廈 (2021-2022):

Façade consultant for the client for the remedial works on the skylight. Proposed remedial works for the skylight. On behalf of the client, called for tender, interviewed tenderers, analyzed tenders, and gave suggestions to the client for them to select the contractor for the remedial works. Check the final completed works.

作為業主的外牆顧問,為本大廈之天窗系統的修補工程提供全套顧問服務. 檢查最終修補工程的質量。

→ SSJ501 – Construction of Hospital Authority Supporting Service Centre in North Lantau Island, Hong Kong (2021-2024)
香港東涌北大嶼山醫院管理局支援服務中心 (2021-2024):

As a Façade Consultant, on behalf of the client, checked/comented on all the curtain walls and other building facade systems for this ASD (Architectural Services Department of Hong Kong Government) project. Dr. Wilson ZHOU and his capable team had checked, commented and approved all the design drawings and the materials adopted for all the façade systems. 作為幕牆顧問,代表客戶檢查/審批了該 ASD(香港政府建築署)項目的所有幕牆和其他外牆系統。 周博士和他的團隊審核及審批了所有設計圖以及採用的材料。

→ SS H502 – Design & Construction of Joint-user Government Office Building in Tseung Kwan O, Hong Kong (2021-2024) 香港將軍澳政府聯用辦公大樓 (2021-2024):

As a Façade Consultant, on behalf of the client, checked/comented on all the curtain walls and other building facade systems for this ASD (Architectural Services Department of Hong Kong Government) project. Dr. Wilson ZHOU and his capable team had checked, commented and approved all the design drawings and the materials adopted for all the façade systems. 作為幕牆顧問,代表客戶檢查/審批了該 ASD(香港政府建築署)項目的所有幕牆和其他外牆系統。 周博士和他的團隊審核及審批了所有設計圖以及採用的材料。

→ SSK504 – Construction of DOS, Sports Centre cum Public Vehicle Park at Sze Mei Street, Hong Kong (2023-2025) 香港四美街地區休憩用地、體育館及公眾停車場 (2023-2025):

As an Independent Design Checker for the Main Contractor for all the curtain walls and other building façade systems for this ASD project.

作為幕牆設計的獨立檢查者,為承建商審批所有的幕牆及其它外牆系統的設計和計算.

→ Tower 3 Tregunter, 14 Tregunter Path, Mid Levels, HK (2023-2024) 香港半山地利根徳閣 3 座 (2023-2024):

Façade consultant for the client for the remedial works on the curtain wall (window walls plus aluminum claddings). Proposed remedial works for the curtain wall. On behalf of the client, called for tender, interviewed tenderers, analyzed tenders, and gave suggestions to the client for them to select the contractor for the remedial works. Check the final completed works. 作為業主的外牆顧問,為本大廈之幕牆系統(窗牆及鋁板的修補工程提供全套顧問服務.檢查最終修補工程的質量。



## 3. Professional Inspection on Building Façade Failures 建築外牆失效的專業檢查

Dr. Wilson ZHOU and Wilson Curtain Wall has carried out on-site inspections of failures to building façade systems for more than 350 projects. Inspection reports are prepared together with professional comments on the causes to the failures and with remedial proposals as well. Wilson 周博士及威而遜建築幕牆已為超過 350 個建築工程的外牆失效問題進行了檢查. 在檢查過程中,他不僅提供了外牆失效的原因,還提供了解決問題的辦法和建議.

The following are some of the projects for which Dr. Wilson ZHOU and Wilson Curtain Wall has conducted site inspections in the last 20 years:



Tempered glass with spontaneous breakage

#### Job references: 已檢查的工程:

Dr. Wilson ZHOU has conducted site inspections for the following projects: Wilson 周先生曾為如下的工程作了現場檢查:

	Project	Extent of Inspection	Year inspected
	工程名稱	檢查範圍	檢查年份
1	Revenue Tower at Wan Chai, HK (for ASD)	Inspected weather sealant and aluminium from both inside	2002
		and outside the building.	
	香港灣仔稅務局大樓(受建築署委託)	從內,外兩側檢查密封膠和鋁框的狀況.	
2	Hong Kong Station (Northern Site), HK	Inspection and comments on the sealant detachment to	2003
		a glazed glass wall.	
	香港中環,香港站(北地盘)	檢查並評論大玻璃牆之結構膠的脫落原因.	
3	Rresidential development at Sheung Shui,	Inspected the glass scratched, and evaluated the	2003
	NT, HK	acceptance criteria.	
	香港上水住宅	對玻璃表面之划痕進行檢查,並提出合格之玻璃的	
		基本要求.	
4	Residential development at Aberdeen, HK	Inspection on the glass scratched, and evaluated the	2003
		acceptance criteria.	
	香港之香港仔區住宅	對玻璃表面之划痕進行檢查,並提出合格之玻璃的	
		基本要求.	
5	Low-rise residential development	Inspection on water leakage through roofs.	2003
	on Barker Road, HK	Proposed remedial works.	
	香港柏道住宅	檢查屋頂之漏水,並提出解決之方案.	
6	Residential development at Pok Fu Lam, HK	Inspected and commented on the site-applied coating on	2003
		aluminium alloy extrusions.	
	香港薄扶林住宅	檢查並評估在現場油漆之鋁框.	
7	North Part of West Kowloon Reclamation,	Inspection on the sealant detached from aluminium windows	2004
	Site 10, HK	and commented on the reasons for the detachment.	
	香港西九龍北區 10 號地盘	檢查鋁窗之密封膠的脫落問題並調查和評論脫落的原因.	
8	Residential development at Yuen Long	Inspected tempered glass near a swimming pool.	2004



Kau	Hui	Road

	Kau Hui Koau		
	香港元朗元朗舊墟路一住宅發展項目	檢查在泳池邊強化玻璃的自爆.	
9	A hotel in Ma On Shan	Inspection on a glass balustrade for a swimming pool.	2004
		The allowable bonding strength of the sealant under short term	
		and long term loading was discussed.	
	香港馬鞍山酒店	檢查泳池邊之玻璃欄河的結構安全性.	
10	Shatin Junior School, HK	Inspection on sash windows.	2004
		Structural safety of the sashes was evaluated.	
	香港沙田英基學校	檢查泳池邊之玻璃欄河的結構安全性.	
11	Residential development at Robinson Road,	Inspected on the curtain wall with noises.	2004
	НК	Remedial works proposed.	
	香港羅邊臣道住宅	幕牆噪音問題之檢查,並提出解決之方案.	
12	Residential development at rural building	Inspected and confirmed tempered glass used for the	
	Lot 1138, Wong Ma Kok Road, Stanley, HK	balustrades.	2004
	香港赤柱黄麻角道高級住宅	檢查強化玻璃.	
13	A shopping centre at Shun Lee Estate	Inspection on the steel elements fabricated in a factory in China.	2004
	順利村的商場	對中國工廠生產的鋼件進行檢查.	
14	Mongkok Ambulance Depot at SS L369, HK	Inspection on the stainless steel elements manufactured in a	2005
		factory in China.	
	香港九龍旺角晏架街救護車站	對中國工廠生產的不銹鋼件進行檢查.	
15	An office building in Sheung Wan, HK	Inspection on the curtain wall to find the source of water	2005
		leakage. Remedial proposals were given.	
	香港上環商業大樓	檢查幕牆滲水問題.	
16	Two Office towers in Kwai Fong,	General Inspection on the curtain walls, tests on sealant on site	2005
	Kwai Chung, NT, HK	and in a laboratory. Proposed remedial works to solve the	
		problems with the curtain walls.	
	葵涌葵芳雨幢辦公大樓	幕牆性能之全面檢查,並測試鋁框之涂層厚度和矽膠之	
		性能.並對發現的各問題提出了解決方案.	
17	A residential development in Ma On Shan,	Inspection on tempered glass with spontaneous breakage.	2005
	N.T., HK		
	香港新界馬鞍山住宅	強化玻璃之自爆問題的調查.	
18	A residential development by HKHA in	Inspection on aluminium windows for their safety.	2005
	MongKok, HK		
	香港旺角一大型居屋屋苑	應業主的邀請,對本工程之鋁窗的安全性進行了抽樣檢查	
		並提供評估報告.	
19	Da Ning International Commercial Plaza,	Inspected the curtain walls, glass walls, aluminium windows,	2006
	Shanghai, PRC	aluminium claddings, louvers, glass canopies, balustrades and	
		glass doors etc for a due diligence study.	
	中國上海大寧國際商業中心	爲一評估報告提供了對所有外牆:大玻璃牆,鋁窗,	
		鋁板外牆,鋁百葉,雨篷,玻璃欄河和大玻璃門等的檢查.	
20	China Ferry Terminal, China Hong Kong	Inspection on the curtain wall with water leakage. Proposed	2006
	City Tsim Sha Tsui, HK (for ASD)	remedial works to solve the water leakage problem. Conducted	
	Tom one rous, the (tot 110D)	sealant tests and the test for the coating thickness for the	
		bearant tests and the test for the coating unexhess for the	



		aluminium ect.	
	香港尖沙咀中港城(受建築署委託)	檢查了整個海事處部分的幕牆,對硅膠進行測試,	
		並提出了修補方案.	
21	An office building on Jeffe Road, Wan Chai,	Inspection on the curtain wall with water leakage. Check the	2006
	HK	aging of the weather sealant by testing the sealant on site and	
		in our laboratory	
	香港灣仔一辦公大樓	檢查了整個幕牆及鋁窗之防水性能,對硅膠進行了測試,	
		並提出針對漏水問題之修補方案.	
22	Hotel Development at Qing Yuan,	Inspected the installation of curtain walls, aluminium windows,	2006
	Guang Dong Province, PRC	glass walls and skylights. Checked design drawings and	
	中國度事法清本顯日本方	structural calculations and checked the performance test report.	
	中國廣東清遠市麗晶酒店	檢查了幕牆, 鋁窗,大玻璃牆和天窗系統之安裝及設計. 檢查了結構計算書及三性試驗報告.	
23	Central Plaza in Macau	恢复了結構可具音及二性試驗報音.  Inspected the curtain walls, window walls and tiles on the	2006
23	Central I laza III Macau	building. Proposed remedial works to solve water leakage	2000
		through the façade systems. Proposed also the possible	
		renovation works to make the façade systems more valuable	
		and structurally safer.	
	澳門中央廣場	檢查了幕牆,玻璃牆和瓷磚外牆之防水性能.提出了對	
		有關之外墻的補救方案.並提出了對各外牆系統進行進	
		一步的裝修,以使其更有價值及更安全的建議.	
24	A commercial development on	Inspected the curtain walls, glass walls, aluminium windows,	2006
	Hua Shan Road in Shanghai, PRC	aluminium claddings, louvers, glass canopies, balustrades and	
		glass doors etc for a due diligence study.	
	中國上海華山路一办公大樓	爲一評估報告提供了對所有外牆:大玻璃牆,鋁窗,	
		鋁板外牆,鋁百葉,雨篷,玻璃欄河和大玻璃門等的檢查.	
25	A residential development on Peak Road, HK	Inspected the curtain wall and aluminium windows with water	2006
		leakage. Proposed remedial works to rectify the defects due to	
	香港山頂道一住宅	installation or design.	
	省 <b>港山</b>	檢查了其幕牆和鋁窗的防水性能.對因安裝質量和設計 錯誤引起之漏水問題提出了修補方案.	
26	Kwun Tong Magistracy, Kwun Tong,	国 缺 可 是 之 欄 不 问 是 促	2006
20	Kowloon, HK (for ASD)	with water leakage. Checked the quality of the weather sealant	2000
	120 . 1002, 122 (201 1 202 )	by testing the sealant on site and in our laboratory. Proposed	
		remedial works to restore the façade system to be watertight.	
	香港九龍觀塘法院大樓(受建築署委託)	檢查了各幕牆,鋁窗及天窗系統的狀況.對密封膠進行了	
		現場測試和實驗室測試.並對各漏水問題提出了修補方案	
		以使整個外牆系統恢復水密性.	
27	An office building in Wanchai, HK	Inspected curtain walls to find all the possible sources for water	2007
		leakage. Proposed remedial works to restore the curtain wall to	
		become water tight.	
	香港灣仔一辦公大樓	檢查了全部的幕牆, 並對各種漏水問題提出了修補方案	
		以使整個幕牆系統恢復水密性.	



28	An office building on Harbour Road in Wanchai, HK	Inspected the curtain wall to identify defects with the façade systems, if any, on behalf of the client.	2007
	香港灣仔港灣道一辦公大樓	代表客戶檢查幕牆,以確定外牆系統的缺陷(如果有).	
29	An office building in Mongkok, HK	Inspected curtain wall for any possible problems with its safety, water tightness and air tightness.	2007
	旺角區一辦公大樓	檢查了全部的幕牆的安全性和水密性.	
30	Shatin Government Office Building, HK	Inspection on the curtain wall, stone cladding and window walls.	2008
30	(for ASD)		2000
	香港沙田政府大樓(受建築署委託)	檢查了幕牆, 雲石外牆和窗墙系統.	
31	Pumping Tower in Stone Cutters Islands, HK 香港昂船洲水塔	Inspected curtain walls. 檢查了幕牆系統.	2008
32	Wing On Centre in Kowloon, HK	Inspected curtain walls, window walls and tiles-cladded walls.	2009
	香港九龍永安中心	檢查了幕牆, 鋁窗以及窗邊之磁磚的狀況.	
33	An Office Building on Mody Road in TST, Kowloon, HK	Inspected curtain walls.	2009
	香港尖沙咀麼地道一辦公大樓	檢查了幕牆系統.	
34	15 Oil Street, HK	Inspection on reflective glass on window walls / curtain walls.	2009
	香港油街 15 號	檢查了幕牆上的反光玻璃之現況,並評估其是否符合有關	
		之國際標準的要求.	
35	Residential Development on Anderson Road HK	Inspected self-cleaning glass on site.	2009
	香港,香港仔的一住宅發展項目	檢查並討論了自潔玻璃產生黑斑之原因.	
36	Public Records Building	Inspected stone cladding on 6/F.	2009
	Kwun Tong, HK (for ASD)		
	香港觀塘檔案館大樓(受建築署委託)	檢查了六樓處之雲石外牆之現狀.	
37	21st Century Building in Lu Jia Zhui,	Checked and evaluated the quality of the curtain wall, stone	2009
	Shanghai, HK	cladding etc.	
	上海陸家嘴 21 世紀大廈	檢查和評估了幕牆及石材外牆之質量.	
38	Tuen Mun Town Hall, NT, HK	Inspected window walls, windows etc.	2009
	香港屯門市政大樓	檢查了鋁窗和窗牆等. 記錄存在之問題, 並提出修補方案.	
39	Eastern Law Court Building, HK (for ASD)	Inspected curtain walls and windows.	2009
	香港東區法院(受建築署委託)	檢查幕牆及鋁窗.	
40	Southern Centre Building in Wan Chai, HK	Condition survey on the exterior facade system (window walls	2009
		and aluminum claddings)	
	香港灣仔修頓中心	檢查了鋁窗牆和鋁板外裝飾板.	
41	Public Record Building in Kwun Tong HK (for ASD)	Inspected stone cladding for the building.	2010
	香港公共檔案資料館(受建築署委託)	檢查了全部的雲石外牆.	
42	Harbour city, Tsim Sha Tsui, Kowloon, HK	Inspected tempered laminated glass which has been installed as	2010
		partitions in the toilets. The reasons for the yellowish color in	
		the glass have been discussed. Remedial works have been	
		proposed. Caution to prevent future color change has been	
		suggested.	



	香港尖沙咀海港城	檢查了作為洗手間內之隔離欄的夾層玻璃.分析夾膠變黃之原因,並提出了修補方案.	
43	Louis Vuitton Shop in Guam LV 在關島之商場	Inspected artificial stone claddings. Causes for the failures to the stone cladding analyzed. Remedial works proposed. 检查現場所安裝之人造石外牆,分析外牆脫落之原因,並	2010
		提出修補方案.	
44	3-11 Nullah Road, Mongkok, Kowloon, HK	Inspection on glass to confirm the glass has been tempered.	2010
15	香港旺角水渠道 3 號	檢查並核實現場所用之玻璃為強化玻璃.	2010
45	Wing On Centre in Kowloon, HK	Inspected and instructed other engineers in our company to inspect the curtain wall, aluminum windows and the	2010
		tile-claddings on the building. Conditions of the façade systems	
		evaluated. Sealant was tested on site and in our lab. Remedial	
		works proposed. (nominated by the client as the consultant to	
		supervise the remedial works recently).	
	香港九龍永安大廈	檢查了幕牆, 鋁窗以及窗邊之磁磚的狀況, 評估了現狀,	
		並對所有現有之問題提出了修補意見和方法.	
46	Ever Gain Plaza at 88 Container Port Road,	Inspected and instructed other engineers in our company to	2010
	Kwai Chung, N.T., HK	inspect the curtain walls and aluminum claddings on the	
		building. Conditions of the façade systems evaluated. Sealant	
		was tested on site and in our lab. Remedial works proposed.	
	香港葵涌永得利大廈	檢查幕牆之現狀,並對有關之瑕疵提出了修補意見和方法.	
47	A "Pai Lau" in Lai Yu Mun, Sam Ka Tsuen	Inspected and instructed other engineers in our company to	2010
	Waterfront Extension, Kowloon, HK	inspect the GRC claddings on the "Pai Lau". Conditions of the	
	(for ASD)	GRC cladding systems evaluated. Causes for the failures	
	石山加夕田 1614年校(企业校四千以)	analyzed. Remedial works proposed.	
	香港鯉魚門一牌樓建築(受建築署委託)	檢查了 GRC (玻璃纖維加強的混凝土)的外牆面之現狀.	
40	A.D. '1-4' 1D1411144	討論了產生裂痕之原因. 並提出了補救措施.	2010
48	A Residential Development on Larch Street	Inspected the tempered glass broken 2 years after installation.	2010
	in Tai Kok Tsui, Kowloon, HK	Reasons for the breakage is discussed. Risk for future breakage has been discussed.	
	香港旺角洋松街一地盤	現場檢查強化玻璃,討論了玻璃破碎之原因,	
		並評估了將來產生玻璃破碎的風險.	
49	A Development on Justice Drive, Admiralty HK	Inspected on laminated tempered glass with delamination.	2011
	香港金鐘法院道上一住宅地盤	檢查了現場所安裝之夾層玻璃,	
	H O TO THE COURT	並討論了夾膠產生脫離的原因.	
50	A Residential Development at	Inspected block stone floor tiles with white stain.	2011
	West Kowloon at KIL11167, HK		
	香港西九龍一地盤	檢查並了解黑色雲石地磚上產生白色色斑之原因.	
51	A project on Deep Water Bay Road, HK	Inspection on glass for a balustrade around a swimming pool.	2011
	香港深水灣一住宅地盤	檢查了在泳池邊的玻璃攔河之玻璃質量.	
52	51 Paterson Street, Causeway Bay, HK	Inspected glass to confirm it is tempered.	2011
	香港銅鑼灣百德新街 51 號商場	核查其大玻璃是否強化玻璃.	



53	Signboard at 63 Nathan Road, Kowloon, HK	Inspection on the signboard design and installation.  Water tightness evaluated and structural stability of the system checked and commented.	2011
	香港九龍彌敦道	檢查告示牌的設計和安裝. 評估防水和結構的穩定性.	
54	High Court Building in Admiralty, HK (for ASD) 香港金鐘高等法院(受建築署委託)	Inspection on the curtain walls and window walls in the building for both high block and low block. 檢查幕牆和玻璃牆.	2011
55	Wing On Centre in Central, HK	Inspection on the window walls, windows and aluminum claddings on the building.	2011
	香港中環永安中心	檢查外牆包括玻璃牆,窗和鋁板等.	
56	One Pacific Place, HK 香港太古廣場	Inspection on the curtain walls on the building. 檢查幕牆等.	2012
57	Wan Chai Tower, HK (for ASD)	On site inspection on curtain walls etc.	2012
	香港灣仔政府大樓(受建築署委託)	為建築署檢查幕牆等外牆系統.	
58	Offices in a Building Tower in Kowloon, HK 香港九龍辦公大樓	Inspection on tempered glass in the offices. 檢查強化玻璃.	2012
59	A Hotel in Macau 澳門一酒店	Inspected curtain wall etc. 檢查幕牆等.	2012
60	Hong Kong Government Revenue Tower 香港政府稅務大樓	Site survey on the curtain walls and aluminum claddings etc. 檢查了幕牆及鋁板外牆等.	2013
61	The Disciplined Services, Sports and	Condition survey on the external curtain walls and	2013
	Recreation Club, Causeway Bay, HK	window walls etc.	
	香港灣仔紀律部隊人員體育及康樂會	檢查了幕牆和窗牆等.	
62	Central Library, Causeway Bay, HK 香港銅鑼灣中央圖書館	Site survey on the external curtain walls and window walls etc. 檢查了幕牆和窗牆等.	2013
63	The Immigration Tower at 7 Gloucester Road Wan Chai, HK	Site survey on the external curtain walls and claddings etc.	2013
	灣仔入境處大樓	檢查了幕牆與金屬板外牆等.	
64	The Police Head Quarter, Arsenal House, HK	Condition survey on the external curtain walls, window walls, aluminum claddings etc.	2013
	香港警察總部警政大樓	檢查了幕牆、窗牆及鋁板外牆等.	
65	The Police Head Quarters and Wan Chai	Inspection on the external curtain walls, window walls, stone,	2013
	Station, HK	aluminum claddings etc.	
	香港灣仔警察總署大樓	檢查了幕牆、窗牆、雲石與鋁板外牆等.	
66	Two office towers and the podium in	Inspected curtain walls, aluminum claddings and glass walls etc.	2013
	Sheung Wan		
	上環的兩幢高層寫字樓及平台樓	檢查了幕牆、鋁板外牆及大玻璃牆.	
67	Central Police District Headquarters, HK 香港中環警察總署	Site survey on the window walls and aluminum claddings etc. 檢查了窗牆與鋁板外牆.	2014
68	在他下來言於總有 Central Police Station Building, HK	<b> </b>	2014
00	香港中環警署	檢查了幕牆、鋁板外牆等.	2017
69	Central Government Pier No. 8, HK	Condition survey on the curtain walls, balustrades, canopies,	2014
		louvers and skylights etc.	



	香港中環八號碼頭	檢查了幕牆,鋁窗,扶手,雨蓬以及天窗,並提供改善措施.	
70	Central Government Pier No. 7, HK	Inspection on the curtain walls, balustrades, canopies and	2014
		skylights etc.	
	香港中環七號碼頭	檢查了幕牆,鋁窗,扶手,雨蓬以及天窗,並提供改善措施.	
71	Central Government Pier No. 6, HK	Condition survey on the curtain walls, balustrades, canopies,	2014
		louvers and skylights etc.	
	香港中環六號碼頭	檢查了幕牆,鋁窗,扶手,雨蓬以及天窗,並提供改善措施.	
72	Central Government Pier No. 5, HK	Inspection on the curtain walls, balustrades, canopies and	2014
		skylights etc.	
	香港中環五號碼頭	檢查了幕牆,鋁窗,扶手,雨蓬以及天窗,並提供改善措施.	
73	Central Ferry Pier No. 4, HK	Condition survey on the curtain walls, balustrades, canopies,	2014
		louvers and skylights etc.	
	香港中環四號碼頭	檢查了幕牆,鋁窗,扶手,雨蓬以及天窗,並提供改善措施.	
74	Central Government Pier No. 3, HK	Inspection on the curtain walls, balustrades, canopies and	2014
		skylights etc.	
	香港中環三號碼頭	檢查了幕牆,鋁窗,扶手,兩蓬以及天窗,並提供改善措施.	
75	Central Government Pier No. 1, HK	Condition survey on the curtain walls, balustrades, canopies,	2014
		louvers and skylights etc.	
	香港中環一號碼頭	檢查了幕牆,鋁窗,扶手,兩蓬以及天窗,並提供改善措施.	
76	Macau Ferry, Outer Pier, HK	Site survey on the window walls, aluminum windows and	2014
		claddings etc.	
	香港上環港澳碼頭(外碼頭)	檢查了玻璃窗牆 , 鋁窗和鋁板外牆等.	
77	Macau Ferry, Inner Pier, HK	Site survey on the window walls, aluminum windows and	2014
		claddings etc.	
	香港上環港澳碼頭(內碼頭)	檢查了玻璃窗牆 , 鋁窗和鋁板外牆等.	
78	Harbour Building on Pier Road, HK	Condition survey on the curtain walls, windows, aluminum	2014
		claddings and louvers etc.	
	香港上環海港大廈	檢查了幕牆、鋁窗、百葉及鋁板外牆等.	
79	Hang Seng Bank Building in Mongkok, HK	Condition survey on the curtain walls, windows, aluminum	2014
		claddings and louvers etc.	
	香港旺角恆生銀行大樓	對幕牆、鋁窗和鋁板外牆等作了檢查.	
80	An office tower in Kowloon Tong, HK	Condition survey on the windows for the curtain walls.	2015
	香港九龍塘一寫字樓	對幕牆之所有扇窗進行了檢查和測試.	
81	The Trade and industry Tower, Kai Tak, HK	Condition survey on the distortion of the reflected images of the	2015
		IGU glass unit on the curtain wall and and measure the bowing	
		on the curtain wall.	
	香港啟德工業貿易大廈	對幕牆的扭曲反射影像作出調查和量度玻璃的平整度.	
82	A Residential Development, Hung Hom, HK		2016
	香港紅磡一大廈	對玻璃進行了檢查和測試.	
83	An office building in Mongkok, HK	Condition survey and dimension test on the curved glass.	2016
	香港旺角一大廈	對玻璃進行了檢查和測試.	
84	An office building in Causeway Bay	Inspected the curtains and windows with remedial works	2016
		proposed.	



		•	
	香港銅鑼灣一辦公大樓	檢查了幕牆及鋁窗並提供修正方案.	
85	The Lee Garden One in Causeway Bay, HK	Inspected glass walls, assessed structural sealant etc.	2016
	香港銅鑼灣利園一期	檢查了玻璃牆及評估了結構膠.	
86	An office building on King Lam Street in	Inspected the curtain walls and windows.	2016
	Cheung Sha Wan, HK		
	香港長沙灣瓊林街一辦公大樓	檢查了幕牆及鋁窗.	
87	A Residential Development in Tung Chung	Inspected the curtain wall leaks water.	2016
	HK		
	香港東涌一住宅地盤	檢查了一個漏水的幕牆.	
88	An office building in Kwai Chung, HK	Checked and identified the causes to the s/s capping felt off	2016
		remedial works proposed.	
	香港葵涌一辦公大樓	檢查及確定了不透鋼蓋板的失效原因並提供修正方案.	
89	Three government office buildings in Central	Condition survey on curtain walls, louvers, sunshades, metal	2016
	НК	claddings etc.	
	在中環的三座政府辦公大樓	檢查了幕牆、百葉、太陽擋和金屬外牆等.	
90	An office building on Nathan Road	Condition survey on curtain walls, windows with remedial works	2017
	in Mongkok, HK	proposed.	
	香港旺角彌敦道一辦公大樓	檢查了幕牆及鋁窗,並提供修正方案.	
91	An office building on Des Voeux Road	Condition survey on curtain walls, windows with remedial works	2017
	Central, HK	proposed.	
	香港德輔道中一辦公大樓	檢查了幕牆及鋁窗,並提供修正方案.	
92	Three buildings in HK Science Park, HK	Condition survey on curtain walls, windows with remedial works	2017
		proposed.	
	香港科學園三座辦公大樓	檢查了幕牆及鋁窗,並提供修正方案.	
93	Two office towers in Kwun Tong, HK	Condition survey on curtain walls, windows with remedial works	2017
		proposed.	
	香港觀塘兩座辦公大樓	檢查了幕牆及鋁窗,並提供修正方案.	
94	An office building in Taikoo Shing, HK	Condition survey on curtain walls with remedial works proposed.	2017
	香港太古城一辦公大樓	檢查了幕牆,並提供修正方案.	
95	~	Inspection on the curtain walls and other façade systems.	2018
	Nape, Macau		
	澳門孫逸仙大馬路一酒店	檢查了幕牆及其他外牆系統,並提供修正方案.	
96	An office building on Connaught Road	Consultancy services for the remedial works for the curtain walls.	2018
	Central, HK		
	香港干諾道中一辦公大樓	檢查了幕牆,並提供修正方案.	
97	An office building on King's Road,	Inspection on ceiling panels.	2018
	Quarry Bay, HK		
	香港鰂魚涌英皇道一辦公大樓	檢查了天花板,並提供修正方案.	
98	An office building on the Avenida Comercial	Inspection on the curtain walls and proposal for remedial works.	2018
	De Macau		
	澳門商業大馬路一辦公大樓	檢查了幕牆,並提供修正方案.	
99	A commercial and residential property in	Inspection on the window wall with water leakage complained.	2018
	Tai Hang, Hong Kong		



		香港大坑一商業及住宅大廈	檢查了玻璃牆的漏水情況,並提供修正方案.	
	100	An office building on Des Voeux Road	An inspection to determine the design followed where such	2018
		Central, Hong Kong	drawings were missing.	
		香港中環德輔道中一辦公大樓	檢查缺乏設計圖紙的地方並確認其設計.	
	101	An office building in San Po Kong, HK	Inspected the curtain wall with cracking sounds.	2018
		香港新蒲崗一辦公大樓	檢查了幕牆的噪音問題,並提供修正方案.	
	102	A&A works for a commercial building in	Visits to a glass factory in Guang Dong Province to check	2018
		Quarry Bay, HK	double glazing glass units for this project.	
		香港鰂魚涌的一個幕牆維修工程	檢查其中空隔音玻璃.	
	103	An office building at 863-865 King's Road,	Inspection on the suspended ceilings and proposal for remedial	2019
		Quarry Bay, HK	works.	
		香港鰂魚涌的一辦公大樓	檢查了倒掛天花,並提供修正方案.	
	104	An office building on Chung On Street &	Inspection on the curtain walls and proposal for remedial works.	2019-2020
		Sha Tsui Road, Tsuen Wan, HK		
		香港荃灣眾安街及沙咀道一辦公大樓	檢查了幕牆,並提供修正方案.	
	105	Five office Towers in Taikoo Place, HK	Inspection on the curtain walls and proposal for remedial works.	2019-2020
		太古坊五棟辦公大樓	檢查了幕牆,並提供修正方案.	
	106	A shopping centre on Yau Tong Estate,	Inspection on the curtain walls, window walls, canopies and	2019
		Phase 4, TKO, HK	alum. claddings and proposal for remedial works.	
		香港將軍澳油塘邨第4期一購物商場	檢查了幕牆、玻璃牆、雨蓬及鋁板外牆,並提供修正方案.	
	107	A hotel at Tsim Sha Tsui, Kowloon, HK	Inspection on the glass walls and stone claddings with remedial	2019
			works proposed.	
		香港九龍尖沙咀一酒店	檢查了玻璃牆及雲石外牆,並提供修正方案.	
	108	Houses at Peak Road, HK	Inspection on the stone claddings with remedial works proposed.	2019
		香港山頂道幾棟洋房	檢查了雲石外牆,並提供修正方案.	
	109	An office building at Kowloon Bay, HK	Inspection on the glass door and proposal for remedial works.	2019
		香港九龍灣一辦公大樓	檢查了玻璃門,並提供修正方案.	
	110	0 0 0	Inspection on the curtain walls, window walls and tiled external	2019
		King Lam Street, Lai Chi Kok, Kowloon, HK	• •	
		香港九龍荔枝角一辦公大樓	檢查了幕牆、玻璃牆及磁磚外牆,並提供修正方案.	
	111	·	Inspection on the window walls that have experienced a fire.	2019
		of Hong Kong, HK		
		香港中文大學醫院	檢查了經歷過火災的玻璃牆.	• • • • •
	112	• •	Inspection on the window wall with water leakage complained.	2019
		at the Colonnade, Tai Hang, HK	The causes for the water leakage commented and remedial works	
		子供 L L 主 中 青 化 L L L 压 古 的	suggested to solve the leakage problems with the windows.	
		香港大坑嘉崙臺新加坡領事館	檢查有漏水投訴的窗牆.對漏水的原因進行了評審並提出 了紹为空快泥水問題的法故堪称	
	112	West Gate Tower, 7 Wing Hong Street,	了解決窗牆漏水問題的補救措施. General inspection on curtain walls. Reports issued include list	2019
	113	Kwun Tong, Kowloon, HK	of defects, causes for the defects and remedial works to be	2019
		Kwan Tong, Kowioon, HK	conducted to repair.	
		香港九龍觀塘永康街7號西港都會中心	檢查了幕牆,報告含有缺陷列表,缺陷原因並提供修正	
		日心儿爬帆烙小原料/流沟心制胃干心	放宣 J 称	
			√ √ √ √ √ ← ← ← ← ← ← ← ← ← ← ← ← ← ← ←	



114	Two office towers: Oxford House and Lincoln House, Taikoo Place, HK 香港太古坊兩棟商業大廈: 濠豐大廈及林肯大廈	General inspection on curtain walls. Reports issued include list of defects, causes for the defects and remedial works to be conducted to repair. 检查了幕牆,報告含有缺陷列表,缺陷原因並提供修正方案.	2019-2020
115	Dorset House and PCCW Tower, Taikoo Place, HK 香港太古坊三棟商業大廈: 德宏大廈、 多盛大廈及電訊盈科中心	General inspection on curtain walls. Reports issued include list of defects, causes for the defects and remedial works to be conducted to repair. 检查了幕牆,報告含有缺陷列表,缺陷原因並提供修正方案.	2019-2020
116	Yan Fook Centre, 789 Cheung Sha Wan Road HK 香港長沙灣 789 號恩福中心	Condition survey on curtain walls, aluminum claddings and windows with remedial works proposed. 检查了幕牆、鋁板及鋁窗,並提供修正方案.	2020
117	Ballistic Window Wall on the 39 <sup>th</sup> floor of Windsor House Building at 311 Gloucester Road, Causeway Bay, HK 香港銅鑼灣告士打道 311 號溫莎大廈 39 樓的防彈窗牆	Inspecte don the bullet proof glass with defects complained by the client. The reasons for the defects explained. The report is going to be used by the contractor to request the supplier from an European company to replace the defected glass 檢查了客戶投訴之有缺陷的防彈玻璃.解釋了缺陷的原因.承建商將使用該報告要求一家歐洲公司的供應商更換其有缺陷的玻璃.	2020
118	Cityplaza One, Taikoo Shing, HK 香港太古城中心一期	Condition survey on curtain walls, windows with remedial works proposed. 检查了幕牆及鋁窗,並提供修正方案.	2019-2020
119	Man Yee Building in Central, HK 香港中環萬宜大廈	Condition survey on a skylight with remedial works proposed. 检查了一個天窗, 並提供修正方案.	2021
120	,	Condition survey on glass walls (including aluminum cladding), windows with remedial works proposed.	2020-2021
	香港又一城	檢查了玻璃牆(包括鋁板)及鋁窗,並提供修正方案.	
121	East Hotel in Quarry Bay, HK 香港鰂魚涌東隅酒店	Condition survey on curtain walls, windows etc. 檢查了幕牆及鋁窗,並提供修正方案.	2021-2022
122	A flat at Lohas Park 5, Tseung Kwan O, HK 香港將軍澳日出康城 5 期一單位	Inspection on tempered glass with spontaneous breakage. 強化玻璃之自爆問題的調查.	2022
123	A flat at Seamorama, 1 Choi Sha Street, Wu Kai Sha, HK 香港鳥溪沙彩沙街 1 號星連海一單位	Inspection on tempered glass with spontaneous breakage. 強化玻璃之自爆問題的調查.	2022
124	The Lee Garden One, Causeway Bay, HK 香港銅鑼灣利園一期	Condition survey on the structures supporting the curtain walls on the roof. 检查了支撑屋頂處之幕牆的結構.	2022
125		做查了支持壓頂處之奉稿的結構。 Condition survey on curtain walls, windows etc. 检查了幕牆及鋁窗等。	2022-2023
126	Over 80 nos. flats at Lohas Park 9, Tseung Kwan O, HK	Inspection the glass panels installed on the curtain wall with complained as "defected". Confirm the quality and safety of the glass panels.	2022-2024



	香港將軍澳日出康城9期超過80個單位	檢查安裝在幕牆上,被投訴有「缺陷」的玻璃板,並確認玻璃板的品質和安全性.	
127	2 nos. flats at Lohas Park 7, Tseung Kwan O HK	Inspection the glass panels installed on the curtain wall with complained as "defected". Confirm the quality and safety of the glass panels.	2023
	香港將軍澳日出康城7期之2個單位	檢查安裝在幕牆上,被投訴有「缺陷」的玻璃板,並確認玻璃板的品質和安全性.	
128	Mont Vert, 9 Fung Yuen Road, Tai Po, NT, HK	Inspection and Comment on the Causes for the Breakage to a Glass Panel Enclosing a Swimming Pool.	2023
	香港新界大埔鳳園路9號嵐山	檢查及評審游泳池圍護玻璃板破裂的原因.	
129	Harbourview Place, West Kowloon, HK	Check the condition of the wire rope deformed for a gongola on site, and also to identify the causes for the accidental deformation happened during one operation. A remedial work to repair this deformed wire rope is also suggested.	2023
	香港西九龍港景匯	檢查現場吊船鋼纜變形的狀況,並找出意外變形的原因,也提供補救措施來修復變形的鋼纜.	
130	Lohas Park 7, Tseung Kwan O, HK	Inspection the glass panels installed on the curtain wall with complained as "defected". Confirm the quality and safety of the glass panels.	2023
	香港將軍澳日出康城7期	檢查安裝在幕牆上,被投訴有「缺陷」的玻璃板,並確認玻璃板的品質和安全性.	
131	May Tower II, May Road, Mid-levels, HK	Inspection on the curtain wall with noises complained. The causes for the noises commented and remedial works suggested to solve the noises problems with the curtain wall.	2023
	香港半山梅道梅苑2座	檢查有噪音投訴的幕牆.對噪音的原因進行了評審並提出了解決幕牆噪音問題的補救措施.	
132	Sun Hung Kai Centre, Wan Chai, HK 香港灣仔新鴻基中心	Condition survey on curtain walls etc. 檢查了幕牆,並提供修正方案.	2023
133	Three residential developments at Pak Shek Kok, Tai Po, N.T., HK	Inspection on tempered glass with spontaneous breakage.	2023
124	香港大埔白石角三間住宅	強化玻璃之自爆問題的調查. Condition survey on curtain walls and stond claddings etc.	2023
134	Bank of China Building, Dr. Mario Soares Avenue, Macau 澳門中國銀行大廈	Condition survey on curtain walls and stond claddings etc. 檢查了幕牆及石板,並提供修正方案.	2023
135	The Sculpture "Wind Wheels" at Times Square in Causeway Bay, HK 香港銅鑼灣時代廣場之雕塑「風車」	Check the condition of the Sculpture "Wind Wheels" on site.  現場檢查雕塑「風車」的狀況.	2023
136	Tai Tung Building, Wan Chai, HK	Condition survey on curtain walls and claddings etc.	2023
	香港灣仔大同大廈	檢查了幕牆及鋁板,並提供修正方案.	
137	AIA Tower, Macau	Inspection on the curtain wall with water leakage complained.  The causes for the water leakage commented and remedial works suggested to solve the leakage problems with the curtain wall.	2023
	澳門友邦廣場	檢查有漏水投訴的幕牆.對漏水的原因進行了評審並提出	



#### 了解決幕牆漏水問題的補救措施.

138 Mandarin Orient Hotel Building,	Condition survey on curtain walls, aluminum claddings, window	2023-2024
5 Connaught Road Central, Central, HK	walls and concrete walls etc.	
香港中環文華東方酒店	檢查了幕牆、鋁板、窗牆及混凝土牆,並提供修正方案.	



## Common problems with building envelopes: 建築外牆的常見問題:

Spontaneous breakage of tempered glass has been complained of by many building users. Nickel sulfide inclusions in the tempered glass are responsible for most such breakage. The heat-soak test, which is very effective in breaking the tempered glass with potential danger for spontaneous breakage in an oven, can only be conducted on the glass before it is installed.

強化玻璃的自爆已被很多使用者投訴. 大部分情况是由於強化玻璃中存在硫化鎳所引致. 熱浸試驗, 能有效降低玻璃安裝後自爆的風險. 然而, 此熱浸試驗只適用於未安裝的玻璃.

An on-site check on the tempered glass to identify the glass with a high-risk of spontaneous breakage has always been a dream to many building users. Wilson Curtain Wall Consultant (HK) Limited has used a non-destructive method to test and check the tempered glass on site to assess its future risk of spontaneous breakage for several projects. Results are encouraging.

現場檢查玻璃的強化程度以防止自爆是很多業主的夢想. 威而遜建築幕牆顧問(香港)有限公司採用了無損傷方法在現場檢測強化玻璃以評估其自爆的風險. 結果令人鼓舞.

Water leakage through curtain walls or windows is a great inconvenience to building owners. Remedial works to seal the leaking systems are hardly effective simply because the real leakage source is very hard to determine. Dr. Wilson ZHOU has good experience in building failure (including water leakage) inspections. His experience plus his knowledge on curtain wall designs has enabled him to successfully determine water leakage sources.

幕牆或鋁窗之漏水對大廈業主而言是一個非常頭痛的問題. 而各種補漏措施又往往不怎麼有效. 這是因為要找到真正的漏水位置和原因是非常困難的. Wilson 周先生在檢查包括漏水問題在內的建築外牆的失效問題方面非常有經驗. 他在這方面的經驗再加上他在幕牆設計方面的知識, 使他能準確地找出漏水的原因和位置.

Cracking sounds are often heard from curtain walls. Since they are increasingly used on residential buildings, although such noises are usually of low sound levels (less than 55 dBs), they are very annoying when the residents are sleeping and are awakened by such sounds. Remedial works are seldom effective because the sound sources are hard to determine and remedial works are not adequate. Dr. Wilson ZHOU has helped to solve such problems for various projects in Hong Kong. The results are satisfactory.

幕牆系統經常會發出一些響聲. 由於幕牆系統已開始被用於住宅樓,這些響聲雖然其音量較低(約 55dBs),然而當住戶正在睡覺時,由於這種響聲會令人難以入睡或吵醒睡覺者而變得令人惱火. 由於發聲之部位比較難以確定而使得補救工作不太有效. 問永生博士曾為幾個有這種噪音問題的幕牆提供了解決的方法. 其補救工作取得了理想的效果.

To avoid cracking sounds from curtain walls, the design for the curtain wall should take into consideration of this problem and should be carefully checked by a qualified curtain wall consultant. To give a requirement of "no cracking sound is allowed" in the specification for the curtain wall is not enough to avoid this problem.

為避免在幕牆中產生爆裂似的響聲,從設計開始都需有專業的幕牆顧問小心評估.在工程規範中規定"不可有爆裂似的響聲"是不足以避免這個問題的.

The so-called "pressure equalization" principle has been very often used incorrectly in curtain walls of various design. Our inspections have found many curtain walls, especially unitized curtain walls, which were designed to be watertight using this principle were finally found leaking water, simply because the principle was adopted incorrectly.

幕牆系統中之"等壓原理"常常被用錯.在我們的對現有幕牆的檢查中,發現很多幕牆系統, 尤其是單元式幕牆,根據等壓原理設計的防水系統往往會漏水,且漏水的原因是由於用錯這個原理.



## 4. Performance Tests for Curtain Walls, Aluminum Windows, Glass Walls and Skylights 為建築幕牆, 鋁窗, 大玻璃牆和天窗系統等提供物理性能試驗



A curtain wall mock-up is ready for tests

Job references

Dr. Wilson ZHOU and Wilson Curtain Wall has tested more than 1600 mock-ups in the last twenty two years for various projects in Hong Kong, P R China and Tai Wan. The tests were carried out to different international standards include American Standard ASTM. British Standard BS, China Standard GB/T Australian/New Zealand Standard AS/NZS as well as Hong Kong BD PNAP 106. Wilson 周永 生博士及威而遜建築幕牆在過去的 22 年中, 曾為在香港,中國大陸和台灣的各項建築工程 測試了超過 1600 個建築外牆樣件. 有關各測 試是依據各個不同的國際標準進行. 如美國規 范 ASTM, 英國規范 BS, 中國大陸的規范 GB/T, 澳洲/紐西蘭的規范 AS/NZS 以及香港 屋宇署的 PNAP 106.

# Following are some of the building façade projects that have been tested by Wilson Curtain Wall Consultant (HK) Limited in the last 22 years (only the projects in lst decade are presented.): 以下所列為威而遜建築幕牆顧問(香港)有限公司在過去的二十二年中,近十年來所測試的建築外牆工程中的一部分:

	Project	System type	Year tested
	工程名稱	外牆種類	測試年份
1	Hong Kong Science Park Building 20, HK (ASD) 香港科學園 20 號大樓	Curtain wall 幕牆	2011
2	Pui Ching Primary School at 80 Waterloo Rd, HK (ASD) 寫打老道 80 培正小學	Curtain wall 幕牆	2011
3	"China Wing" Roof Cladding system, HK (HKHA) 香港中永公司屋頂系統	Roof cladding 金屬物面	2011
4	Composite Development at 1-3 Victoria Avenue (BD) 維多利亞道 1 號混合發展項目	Curtain wall 幕牆	2011
5	Tarmar, SS P318, Hong Kong (ASD) 添馬艦政府大樓	Louver 百葉	2011
6	96 Java Road, North Point, HK (BD) 香港北角渣華道 96 號項目	Curtain wall 幕牆	2011
7	Lam Tin North Municipal Services Building 藍田北市政服務大樓	Curtain wall 幕牆	2011
8	Public Rental Housing Development at Kwai Shing Circuit (HKHA) 香港葵涌葵盛徑公屋	Three windows 三幅鋁窗	2011
9	Pak Shek Kok, TPTL 188, Tai Po	Sliding doors (2 Mockups)	2012



		11.00	
	大埔白石角住宅大樓	趟門	
10	Pak Shek Kok, TPTL 188, Tai Po	Curtain wall	2012
	大埔白石角住宅發展	幕牆	
11	Residential development in Tung Tau Cottage (HKHA)	Windows	2012
	東頭村重建項目	鋁窗	
12	Hotel development at Kwai Shing Circuit	Windows	2012
	香港葵涌葵盛徑酒店項目	鋁窗	
13	Ocean Park (on site water test with a pressure)	Windows	2012
	香港海洋公園	鋁窗	
14	A & A Works for Mongkok Stadium	Windows	2012
	旺角運動場改建工程	鋁窗	
15	Residential Tower at 2A Seymour Road	Curtain wall	2012
	西摩道 2A 號住宅大樓	幕牆	
16	SIT Business Centre in Mauritius	2 Mockups	2012
	毛利求斯 SIT 商務中心大樓	鋁窗和窗牆	
17	Two-integrated Teaching Buildings, CUHK	Curtain wall	2012
	香港中文大學綜合教學大樓	幕牆	
18	Pak Shek Kok TPTL 187	2 Mockups	2012
	大埔白石角住宅項目	趙門和幕牆	
19	Public Rental House at So Uk Estate, Phase 1 (HKHA)	Window	2013
	香港蘇屋邨公屋第一期	鋁 窗	
20	Leung Hung Kee Building in CUHK	Curtain wall	2013
	香港中文大學梁雄姬樓	幕牆	
21	99 Percival Street, HK	Curtain wall	2013
	香港銅鑼灣波斯富街項目	幕牆	
22	Development at 179-180 Connaught Road West	Curtain wall	2013
	香港干諾道西 179 號發展項目	幕牆	
23	173 Des Voeux Road	Curtain wall	2013
	香港德輔街 173 號住宅項目	幕牆	
24	Development at 18-32 Junction Road	Window	2013
	香港聯合道 18 至 32 號發展項目	鋁窗	
25	Development at Tung Chung Area 55B, TCTL 37,	2 Nos. Window	2013
	Tung Chung, HK		
	香港東涌 55B 區住宅項目	鋁窗(2 幅)	
26	Wynn Cotai Project, Macau	Louver	2013
	澳門永利仙德麗項目	百葉	
27	West Kowloon Law Courts Building, HK	Glass wall	2013
	香港西九龍法院大樓	大玻璃	
28	TWGHS – Jockey Club, Rehabilitation Complex, HK	Curtain wall	2013
	香港東華三院-賽馬會復康中心擴展項目	幕牆	
29	55 Conduit Road, HK	Curtain wall	2013
	香港干德道 55 號發展項目	幕牆	
30	Redevelopment at 38 Kwun Chung Street, Jordan HK	Curtain wall	2013
20		<del></del> ·· <del></del>	2013



	香港佐敦官涌街混合重建項目	幕牆	
31	68 Nathan Road, Kowloon, HK	Curtain wall	2013
	香港九龍彌敦道加建及改建工程	幕牆	
32	Heung To Middle School, 33 To Street, HK	Roof cladding	2013
	香島中學	金屬物面	
33	Hotel Redevelopment at 15 to 16 Connaught Road West	Curtain wall	2013
	香港干諾道西酒店重建項目	幕牆	
34	8 Minden Avenue, HK	Curtain wall	2013
	香港棉登徑加建及改建工程	幕牆	
35	New Kowloon Inland Lot 6515, Kowloon, HK	Concrete façade	2013
	香港啟德樓換樓計劃新九龍 6515 地段發展頁項目	混凝土外牆	
36	20-22 Granville Road, TST, Kowloon, HK	Curtain wall	2013
	香港九龍加連威老道 20 號項目	幕牆	
37	52-56 Tsun Yip Street, KTIL 758,	2 Nos. Curtain wall	2013
	Kwun Tong Kowloon, HK		
	香港九龍觀塘駿業街 52 號辦公室大樓	幕牆(2 幅)	
38	24 <sup>th</sup> Street, New Yok, U.S.A.	2 Nos. Window	2014
	美國紐約 24 街工程	鋁窗(2 幅)	
39	Site A, Lee Tung Street, HK	Window	2014
	香港利東街 A 地盤項目	鋁窗	
40	Section A of KTIL 760 at the remaining of	Tempered glass	2014
	KTIL 760 at 15 Chong Yip St., Kwun Tong, HK		
	香港九龍觀塘創業街 15 號商業大廈工程	強化玻璃	
41	Conversion of Industrial Building at KTIL 81,	Curtain wall	2014
	71 Hung To Road, HK	at at	
	香港鴻圖道 71 號工業大廈活化工程	幕牆	
42	Redevelopment of Caritas Medical Center, Phase 2, HK	Curtain wall	2014
42	香港明愛醫院第二期重建計劃	幕牆	2014
43	Hong Kong Disneyland Resort project,	Window	2014
	Back of House Administrative Building	ka 17c	
4.4	香港迪士尼渡假村項目	名窗 Windows	2014
44	Tsuen Wan Town Lot 403, HK 香港荃灣區 403 地段項目	Window 鋁 窗	2014
45	Shanghai Commercial Bank, HK	细 图 Glass fin	2014
43	香港上海商業銀行工程	玻璃片	2014
46	Tung Fong Street, HK	Curtain wall	2014
-70	香港東方街項目	幕牆	2017
47	133 Wai Yip Street, Kowloon, HK	Curtain wall	2014
.,	香港九龍觀塘偉業街 133 號工程	幕牆	2011
48	1, 1A, 3, 5, 5A, 7 and 7A Gordon Road, HK	2 Nos. Curtain wall	2014
-	香港歌頓道工程	幕牆	,
49	Composite Building at 11-29 Davis Street, HK	Window	2014
	香港爹核士街綜合大樓工程	鋁窗	



50	C2002, HY2013/11, Barrier-free Access Facilities, HK 香港無障礙通道設施工程	Glass panel 玻璃板	2014
51	31 and 31A Granville Road, Kowloon, HK 香港九龍加連威老道 31 號項目	Curtain wall 幕牆	2015
52	1 John Street, Brooklyn, New York, USA 美國紐約布魯克林約翰街 1 號住宅大樓	Window 鋁窗	2015
53	9 Lee Kung Street, HHIL556 Hung Hom, Kowloon, HK 香港九龍紅磡利工街 9 號工程	Window 鋁窗	2015
54	Residential Development 1, 1A, 3, 5, 5A, 7 and 7A Gordon Road, HK 香港歌頓道 1, 1a, 3, 5, 7 and 7A 號住宅發展	Curtain wall 幕牆	2015
55	Hotel development, 82-100 Tak Cheong Street, 2-4 Soy Street, Kowloon, HK	Curtain wall	2015
	香港德昌街 82-100 號及豉油街 2-4 號酒店發展項目	幕牆	2017
56	Domestic development 11 Ching Sau Lane, Chung Hom Kok, HK 香港舂坎角靜修里 11 號國內發展項目	Curtain wall	2015
57	Trban Development (K21), Sham Shui Po, Kowloon, HK	幕牆 Curtain wall	2015
37	香港九龍深水埗城市發展工程	幕牆	2013
58	Office Development, 279 Prince Edward Road West, Kowloon, HK	Curtain wall	2015
	香港九龍太子道西 279 號辦公室發展項目	幕牆	
59	Office Development, 3 Tai Yau Street, San Po Kong, HK 香港新蒲崗大有街 3 號辦公室發展項目	Curtain wall 幕牆	2015
60	Composite Development, TKO 117, Area 66C2, Tseung Kwan O, HK 香港將軍澳第 66C2 區將軍澳市地段第 117 號	Curtain wall 幕牆	2015
61	日本所平漢第 00C2 四府平漢市地投第 117 號 Development 9 Lee Kung Street, Hung Hom, HK	本値 2 Nos. Window	2015
61	香港紅磡利工街9號發展項目	名窗	2013
62	New Building, J/O of On Kwan Street and On Yiu Street Shek Mun, Shatin, HK	Curtain wall	2015
	香港沙田石門安群街及安耀街新大樓項目	幕牆	
63	Commercial Development, 14 Hankow Road, HK 香港九龍漢口道 14 號商業發展項目	Curtain wall 幕牆	2015
64	Hong Kong Disneyland Theme Park, HK 香港迪士尼項目	Glass wall 玻璃牆	2015
65	Residential Development, Tung Chung Area 39, HK 香港東涌第 39 區住宅發展項目	Window 鋁窗	2016
66	XiQu Centre, West Kowloon Cultural Area, HK 香港西九文化區戲曲中心項目	Curtain wall 幕牆	2016
67	Residential Development, THIL 165 RP, 2 to 12 Jones Street & 1 to 11 Lan Yin Street, HK	Curtain wall	2016
	香港銅鑼灣重士街及禮賢街住宅開發	幕牆	



68	Passenger Clearance Building, HKBCF, Hong Kong – Zhuhai-Macao Bridge, HK	Curtain wall & Skylight	2016
	香港港珠澳大橋旅客出入境大樓	幕牆及天窗	
69	Residential development for HKHA, HK 香港房屋委員會住宅發展項目	Window 鋁 窗	2017
70	Development at Tung Chung Area 39, HK 香港東涌第 39 區發展項目	Window & Hinge 鋁窗及窗鉸	2017
71	378-382 Lockhart Road, Wan Chai, HK 香港灣仔駱克道 378-382 號	Curtain wall 幕牆	2017
72	47-49 Perkins Road, Jardine's Lookout, HK 香港渣甸山白建時道 47-49 號	Window 鋁窗	2017
73	Subsidized Sale Flats at Shatin Area 36C, HK 香港沙田 36C 區資助出售單位	2 Nos. Window 鋁窗(2 幅)	2017
74	105 Ng Ka Tseun, Kam Tin South, HK 香港錦田南分區吳家村 105 號	Curtain wall 幕牆	2017
75	New World Centre, TST, HK 香港尖沙咀新世界中心	Glass cylinder wall 大玻璃	2017
76	2 York Road, Kowloon Tong, HK 香港九龍塘約道 2 號	Window 鋁 窗	2017
77	Lamma Power Station, HK 香港南丫發電廠	Roof Cladding 金屬物面	2017
78	URA Project H18, HK 香港 H18 發展計劃項目	Curtain wall 幕牆	2017
79	French International School of Hong Kong Tseung Kwan O Campus, HK 香港將軍澳校區法國國際學校	Sliding door, Curtain wall, Window (3 Mockups for 3 systems) 趟門,幕牆,鋁窗	2017
80	Window project HKHA, HK 香港房屋委員會一鋁窗項目	3 No. Sashes 扇窗(3 幅)	2017
81	Hong Kong Museum of Art, HK 香港藝術博物館	Curtain wall 幕牆	2017
82	New World Centre Remodeling, TST, HK 香港尖沙咀新世界中心重建項目	Glass Wall 大玻璃	2017
83	New World Centre Remodeling, TST, HK 香港尖沙咀新世界中心重建項目	Sliding door 趟門	2017
84	West Regional Office of Water Supplies Departmen, HK 香港水務處新界西辨事處	Curtain wall, Window wall 幕牆及窗牆	2017
85	Hotel development at Sai Kung, HK 香港西貢酒店發展項目	Curtain Wall, Glass Wall (2 Mockups for 2 systems) 幕牆及大玻璃	2017
86	Hotel Extension at Hung Hom, HK 香港紅磡酒店擴充項目	Roof Cladding 金屬物面	2017
87	TW5 at TWTL 401, NT, HK 香港新界荃灣西鐵站荃五灣畔項目	Roof Cladding 金屬物面	2017



88	23 South Bay Close, RBL911, HK 香港 RBL911 南灣坊 23 號	Window 鋁窗	2017
89	14-20 Inverness Road, Kowloon, HK 香港九龍延文禮士道 14-20 號	Curtain Wall 幕牆	2017
90	301 Prince Edward Road West, Kowloon, HK 香港九龍太子道西 301 號	Curtain Wall 幕牆	2017
91	Shau Kei Wan, Inland Lot 854, HK 香港筲箕灣號內地段 854 號	2 Nos. Curtain Wall 幕牆(2 幅)	2017
92	Luen Hing St., FSSTL 255, Fanling, HK 香港粉顯聯興街	Curtain Wall 幕牆	2017
93	Kai Tak Area 11, Site 1, Kai Tak, HK 香港啟德第 11 區 1 號地盤	Curtain Wall 幕牆	2017
94	7-7G Victory Avenue, Mongkok, HK 香港旺角勝利道 7-7G 號	Curtain Wall 幕牆	2017
95	Shau Kei Wan Inland Lot 854, HK 香港筲箕灣內地段第 854 號	Curtain Wall 幕牆	2018
96	Luen Hing Street, FSSTL 255, HK 香港粉嶺上水市地段第 255 號	Curtain Wall 幕牆	2018
97	29-31 Argyle St. & 468 Reclamation St., Mongkok, HK 香港旺角亞皆老街 29-31 號及新赫地街 468 號	Curtain Wall 幕牆	2018
98	Hong Kong Museum of Art, HK 香港藝術館	Curtain Wall 幕牆	2018
99	TWTL 393, Yueng Uk Road, Tsuen Wan, HK 香港荃灣楊屋道荃灣市地段 393 號	Curtain Wall 幕牆	2018
100	1-19 Nam Cheong Street, Cheung Sha Wan, HK 香港長沙灣南昌街 1-19 號	Window 鋁窗	2018
101	Public Rental Housing Development at Wing Tai Road, Chai Wan, HK  新地域 表 美 人 共和 在 是 是 是 是 是 是 是 是 是 是 是 是 是 是 是 是 是 是	Window	2018
102	香港柴灣永泰道公共租住房屋發展計劃 15 Gough Hill Road, HK	鋁窗 Window	2018
103	香港山頂歌賦山道 15 號 HKHA project in Shek Kei Mei, Kowloon, HK 香港九龍石硤尾房屋署項目	鋁窗 Window 鋁窗	2018
104	31 Chong Yip Street, Kwun Tong, Kowloon, HK 香港觀塘創業街 31 號	Curtain Wall 幕牆	2018
105	C2062 – South China Athletic Association, HK 香港南華體育會	Roof Cladding 金屬物面	2019
106	NKIL 6514, Kwun Tong, Kowloon, HK 香港九龍觀塘市地段 6514 號	Curtain Wall + Skylight 幕牆+天窗	2019
107	URA Redevelopment at Kwun Tong Kowloon, HK 香港九龍觀塘市區重建局重建計劃	Curtain Wall 幕牆	2019
108	Car Park 4 Expansion for the Hong Kong International Airport 香港國際機場 4 號停車場擴建	Curtain Wall (3 Mockups) 幕牆	2019



	•		
109	45-65A Pok Fu Lam Road, Sai Ying Pun, HK	Curtain Wall + Skylight	2019
110	香港西營盤薄扶林道 45-65A 號	幕牆+天窗	2010
110	Ngan Ying Road, Clear Water Bay, HK 香港清水灣銀影路	Curtain Wall 幕牆	2019
111	TWTL 393, Yeung Uk Road, Tsuen Wan, HK	Curtain Wall (2 Mockups)	2019
	香港荃灣楊屋道荃灣市地段 393 號	幕牆(2 幅)	
112	A project in USA	Window	2020
	美國一項目	鋁窗	
113	4A-4P Seymour Road, HK	Sliding door	2020
	香港西摩道 4A-4P 號項目	趟門	
114	TKO to Lam Tin Tunnel, TKO, HK	Window wall (2 Mockups)	2021
	香港將軍澳-藍田隧道	窗牆(2 幅)	
115	25-31 Sugar Street, Causeway Bay, HK	Curtain Wall	2021
	香港銅鑼灣糖街 25-31 號項目	幕牆	
116	Kai Tak Sports Park, Kai Tak, Kowloon, HK	Roof cladding (2 Mockups)	2021
115	香港九龍啟德啟德體育園	鋁板屋頂系統(2幅)	
117	TKO to Lam Tin Tunnel, TKO, HK	Glass Wall (2 Mockups)	2021
110	香港將軍澳-藍田隧道	大玻璃牆(2幅)	
118	The Sky Bridge, HKIA, KH 香港國際機場天際走廊	Curtain Wall 幕牆	2021
110	省心國際機場入除足邸 Anderson Road, Quarry Site RS-1, Kwun Tong, HK		2021
119	香港觀塘安達臣道石礦場 RS-1 地盤	Window 鋁窗	2021
120	1-11 Au Pui Wan Street, Fortan, Shatin, N.T., HK	Aluminum Panel	2021
120	香港新界沙田火炭坳背灣街 1 號	名duminum Fanci 鋁板	2021
121	STTL 614, Lai Ping Road, Kau To, Shatin, HK	Curtain Wall	2021
	香港沙田九肚麗坪路沙田市第 614 號地段	幕牆	2021
122	KCTL 524, Wing Kei Road, Kwai Chung, HK	Window Wall & Glass Cladding	2022
	香港新界葵涌永基路葵涌市第 524 號地段項目	窗牆及玻璃物面	
123	7, 7A, 9 and 9A Cheung Wah Street, Kowloon, HK	Curtain Wall	2022
	香港九龍昌華街 7,7A,9 及 9A 號住宅	幕牆	
124	1-11 Au Pui Wan Street, Fortan, Shatin, N.T., HK	Ceiling	2022
	香港新界沙田火炭坳背灣街1號住宅項目	天花板	
125	South Island Line, Site A and Estate Road of	Window	2022
	Wong Chuk Hang Station, AIL 467, HK		
	香港南港島綫黃竹坑站邨道,地盤 A	鋁窗	
126	Po Leung Kuk Youth Hostel, HK	Windows (3 Mockups)	2022
	香港保良局李兆基青年綠洲	鋁窗(3 幅)	
127	The United Christian Hospital, HK	Window Wall	2022
	香港基督教聯合醫院	窗牆	
128	Lot. No. 5382 in D.D. 116 Tai Kei Leng, Yuen Long, N.T., HK		2022
120	香港新界元朗大旗嶺 116 號第 5382 地段住宅項目	幕牆	
129	The Public Housing Development at Anderson Road,	Window	2022
	Quarry Site RS-1, HK		



	香港安達臣道石礦場 RS-1 公共房屋發展項目	鋁窗	
130	The Hostel and Academic Building Complex,	Curtain Wall	2023
	Hong Kong Baptist University, HK		
	香港浸會大學宿舍及學術大樓	幕牆	
131	Redevelopment of Kowloon Tsai Swimming Pool Complex, HK	Curtain Wall	2023
	香港九龍仔游泳池綜合大樓重建工程	幕牆	
132	Proposed Development at Site D, Wong Chuk Hang Station Property Development, Aberdeen Inland Lot No. 467, HK	Curtain Wall	2023
	香港仔內地段第 467 號黃竹坑站第三期住宅發展項目	幕牆	
133	Construction of Walkway Cover at Hoi Hing Road and	Roof Cladding	2023
	Hoi On Road, Tsuen Wan, New Territories, HK and		
	Footpath Widening Works at Cape Collinson Road, Chai Wan		
	香港新界荃灣海興路及海安道行人路蓋建造工程	金屬物面	
	及柴灣歌連臣角道行人路擴闊工程		
134	The United Christian Hospital, HK	Curtain Wall	2023
	香港基督教聯合醫院	幕牆	
135	BWDC Residential Project at BGC, Taguig, Philippines	Sliding Window	2023
	菲律賓達義市波尼法西奥堡壘的 BWDC 住宅項目	趟窗	
136	A Public Rental Housing Development in Hong Kong 香港一公共房屋發展項目	Window 鋁窗	2024

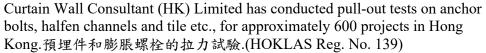


#### 5. Building Material Tests 建築材料的測試

In addition to performance tests on façade systems, WILSON Curtain Wall Consultant (HK) Limited tests different building materials include glass, stones, mild steel and anchor bolts etc. Tests are conducted to various international standards. 除對建築外牆進行物理性能測試之外, 本公司還可為不同的建築材料包括玻璃,石材,鋼材和膨脹螺栓以及預埋件等進行測試.這些測試將按各有關的國際標準進行.

The following are the tests we conduct: 我們可進行如下的測試:

- Bending stress tests for glass (HOKLAS accredited).玻璃之彎曲應力測試 (香港認可處 HOKLAS 認可).
- Load tests on spiders (HOKLAS accredited, registration No. HOKLAS 139)
   Wilson Curtain Wall Consultant (HK) Limited has tested spiders for more than 300 projects in Hong Kong in the last decade.
   對玻璃的固定件(不鏽鋼玻璃爪)進行強度試驗. (香港認可處認可, 註冊編號: HOKLAS 139).
- Pull-out tests on anchor bolts (HOKLAS Reg. No. 139) or embeds. Wilson



- Measure surface concrete strength using rebound hammers (accredited by HOKLAS).
  - 用回彈儀檢測混凝土應力強度(香港認可處 HOKLAS 認可).
- Detect the locations of steel reinforcements in concrete including the depth and diameter using covermeters (accredited by HOKLAS).用 "Covermeter" 探測鋼筋的位置,埋藏深度及直徑 (香港認可處 HOKLAS 認可).
- Shear load test to BS5080 part 2 on anchor bolts or embeds 按 BS 5080 Part 2 實施預埋件和膨脹螺栓的剪力試驗.
- Pull-off tests on tiles to BS 5080 瓦仔之黏結力試驗.
- Tests to ASTM C880, C99 and C1354 etc. on stone panels and anchorage etc. 按 ASTM C880, C99 和 C1354 等標準, 對幹掛石材進行抗彎強度試驗和固定處抗剪強度試驗.
- Glass tests to BS 6206, BS952 and BS 5544 etc. 按 BS 6206, BS 952 和 BS 5544 等, 對玻璃進行試驗.
- Load tests on glass balustrades. 對玻璃扶欄進行載荷試驗.
- Field water test to AAMA 501.2 and to ASTM E1105 按照美國規範 AAMA501.2 和 ASTM E1105 實施現場噴水試驗.
- Sealant Tests to BS 5889 and BS 3712 根據 BS5889 和 BS3712 對硅膠進行性能試驗.
- Light, Transmittance tests and calculation to BS EN1794-2 for noise barriers 對玻璃(膠板)進行透光度試驗,並依 BSEN1794-2 計算透明度.
- Dye Test on stone panels to check the quali the stone for the stone panels. 用染色法, 石材表面之裂縫.
- On-site sound level measurements. 現場噪音量之測量.



Bending stress test for glass



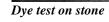
Load test on spiders



Pull-out test for anchor bolt



Load test on glass balustrades





#### **Job references**

The following are some of the building façade projects for which pullout tests and other material tests have been conducted by Wilson Curtain Wall Consultant (HK) Limited in the last two decades:

以下所列為威而遜(Wilson)建築幕牆顧問(香港)有限公司在過去二十年內所測試的其中一些工程:

	Project 工程名稱:	Specimen 試件:	Years 年份:
1	A project in Middle East	Glass bending strength test	2011
	中東一項目	玻璃彎曲強度測試	
2	The Hamburg Sud Office, Landmark East, HK	Measured sound levels in	2013
		neighbouring offices. The effectiveness	
		of partitions in reducing sound levels	
		was assessed.	
	香港城東誌寫字樓	辦公室的聲量測量	
3	PMMA sheet products for a project in Hong Kong	Flexural strength test, Elastic modulus test	2014
		Light transmittance and Reflectance tests	
		for the 15mm thick PMMA sheets	
	用於香港一項目之亞克力板產品	15 毫米厚 PMMA(亞克力)板的抗彎強度測試、	
		彈性模數測試、透光率和反射率測試	
4	Tung Chung Area 55B, Tung Chung, HK	Glass bending strength test	2014
	香港東涌第 55B 區地盤	玻璃彎曲強度測試	
5	PMMA sheet products for a project in Hong Kong	Flexural strength tests for the 15mm thick	2015
		PMMA sheets and 25mm thick PMMA sheets	
	用於香港一項目之亞克力板產品	15 和 25 毫米厚 PMMA(亞克力)板的抗彎強度測試	
6	Glass Screen for MTRCL contract 1154, HK	Glass impact tests on two glass samples	2015
	- ,	in Wah Tung's factory in Guang Dong	
	香港港鐵合約 1154 之玻璃屏幕	於華東幕牆的廣東工廠	
		對 2 個玻璃樣板進行玻璃撞擊測試	
7	10 Chater Road, Central, HK	Pull-out tests for chemical anchor	2015
	香港中環遮打道 10 號	化學錨栓之拉力測試	
8	Hong Kong University of Science and	Sound levels measurement in offices	2015
	Technology 香港科技大學	辦公室的聲量測量	
0	日で行収入子 Hong Kong Disneyland Theme Park, HK		2015
9	香港迪士尼樂園	Glass banding strength test 玻璃彎曲強度測試	2013
10	イルモエル东国 Hong Kong Disneyland Theme Park, HK	吸物等曲速度例訊  Bending strength test for composite panels	2015
10	香港迪士尼樂園	複合板的彎曲強度測試	2013
11	A gasket product proposed for a Highway project	Gasket test	2015
11	一個擬用於香港路政署工程之膠條產品	膠條測試	2013
12	PMMA sheet products for a project in Hong Kong	Light transmittance and Reflectance tests	2016
	p	for the 15mm thick clear PMMA sheets	-010
	用於香港一項目之亞克力板產品	15 毫米厚 PMMA(亞克力)板的	
	2	透光率和反射率測試	
13	Hang Seng Bank Building in Hong Kong	Light transmittance and Reflectance tests	2017
		for the 14mm thick Green-Tinted PMMA sheets	



		•	
	香港恆生銀行大廈	14mm 厚綠色 PMMA(亞克力)板的 透光率和反射率測試	
14	A development at Hong Kong Disneyland Resort	Glass tests to BS EN 1288-3 for 4mm thick	2017
		tempered "Art glass" of various types	
	香港迪士尼樂園度假區的發展項目	據 BS EN 1288-3 進行 4 毫米厚的玻璃測試	
		各種鋼化"工藝玻璃"	
15	Express railway, West Kowloon Station	Spiders for 10 systems	2017-2018
	香港高鐵西九龍站	玻璃爪及駁接頭測試	
16	Glass products for a project in Hong Kong	Light transmittance and Reflectance tests	2018
		for the double glazing glass unit with a solar film	
	用於香港一項目之玻璃板產品	太陽能玻璃板的透光率和反射率測試	
17	Hong Kong University on Sassoon Road, HK	On site test for the external reflectance of a typical	2018
	of alkali a average and a 199	glass panel on the curtain wall	
10	香港沙宣道香港大學	幕牆上典型玻璃板的現場反射率測試	2010
18	New World Centre TST, Kowloon, HK 秦进丸鹤小边园蛇山景中小	Impact tests on the glass on a glass wall on site	2018
10	香港九龍尖沙咀新世界中心 The Davidenment of NVII 6524 Kendeen HV	在地盤現場對玻璃牆上的玻璃進行撞擊測試	2019
19	The Development at NKIL 6534, Kowloon, HK	Bending stress and surface compression tests on tempered glass	2018
	香港九龍 NKIL 6534 的發展項目	在鋼化玻璃上的彎曲應力和表面應力測試	
20	Wo Hing Sports Centre, HK	Bending strength test	2018
20	wo ring sports centre, rix	anchorage test for sandwich panel	2010
	香港和興體育館	彎曲強度測試,夾芯板的錨固測試	
21	Hing Tung Estate, HK	Pull-out test for the fall-arrest system	2018
	香港興東邨	防墜落系統之拉力測試	
22	80 Queen's Road, HK	Pull-out test for the fall-arrest system	2018
	香港皇后大道中80號	防墜落系統之拉力測試	
23	Junction of Shuoson Hill Road West	Pull-out test for anchor bolts	2018-2019
	and Wong Chuk Hang Path, HK		
	香港壽臣山道西與黃竹坑徑交界項目	拉爆膨脹螺栓之拉力測試	
24	KTTL 2640, Kowloon, HK	Pull-out test for anchor bolts	2018-2019
	香港九龍 KTTL 2640 號	拉爆膨脹螺栓之拉力測試	
25	Lohas, Phase 6, TKO Area 86, HK	Pull-out test for anchor bolts	2018-2019
	香港將軍澳市地段第86號日出康城6期	拉爆膨脹螺栓之拉力測試	
26	TCTL 38, Tung Chung, HK	Pull-out test for anchor bolts	2018-2019
27	香港東涌 TCTL 38 號	拉爆膨脹螺栓之拉力測試	2010
27	A self-cleaning glass product	Haze tests for the 8mm thick glass with	2019
	一自潔玻璃產品	self-cleaning coating to BS EN 1096 據 BS EN 1096 對塗上纳米玻璃清洗塗層之	
	- 日泳牧崎座吅		
28	Development at 393 Yeung Uk Road	8 毫米厚玻璃進行霧度測試 Glass tests to BS EN 1288 for tempered	2019
20	Tsuen Wan, HK	glass with one face fritted	2017
	香港荃灣楊屋道 393 號發展項目	據 BS EN 1288 對單面鋼化玻璃進行玻璃測試	
29	A tempered glass with one face fritted used	Glass bending strength test	2019
	for a project in HK		
	表面有陶瓷塗膜之鋼化玻璃產品	玻璃彎曲強度測試	



			•	
	30	Fuk Wah Street, Sham Shui Po, Kowloon, HK	Glass bending strength test & Surface compression test	2019
		香港九龍深水埗福華街	玻璃彎曲強度測試及玻璃表面應力測試	
	31	Development at Lung Kui Road, Beacon Hill, HK	Glass bending strength tests and Surface	2020
			compression test	
		香港筆架山龍葵道發展項目	玻璃彎曲強度測試及玻璃表面應力測試	
	32	23 Pine Street and 87 Oak Street, Kowloon, HK	Glass bending strength test &	2020
			Surface compression test	
	22	香港九龍 23 號杉樹街及 87 號像樹街	玻璃彎曲強度測試及玻璃表面應力測試	2020
	33	Columbation at South Bides Countered for	Load test for the routels	2020
		Columbarium at Sandy Ridge Cemetery for Infrastructural Works at Man Kam To Road and		
		Lin Ma Hang Road, HK		
		香港文錦渡路及蓮麻坑道基礎設施工程	駁接頭之受力測試	
		沙嶺墳場骨灰安置所發展之有蓋行人道		
	34	Footbridge Enhancement Works at NKIL6514	Load test for the routels	2020
		Kowloon, HK		
		香港九龍 NKIL6514 行人天橋加強工程	駁接頭之受力測試	
	35	A glass used for a project in HK	Light transmittance test for the 15mm thick	2020
			"Optix" PMMA sheet (4 types) and "AcouGlas"	2020
		香港一項目所用之玻璃產品	(1 type) to RN 1794-2 (for noise barriers)	2020
			根據 RN 1794-2 (用於隔音屏障) 對 15 毫米 厚的「Optix」PMMA 板材 (4 種) 和	
			「AcouGlas」(1種)進行透光率測試	
	36	25-31 Sugar Street, Causeway Bay, HK	Load test on hydraulic hinges	2021
		香港銅鑼灣糖街 25-31 號	液壓窗鉸之受力測試	
	37	A laminated glass used for a project in HK	Light transmittance test for a laminated glass	2021
			with one face fritted	
		香港一項目所用之夾膠玻璃產品	含陶瓷塗層之夾膠玻璃的透光率測試	
	38	HKIA, 3 <sup>rd</sup> runway, Hong Kong	Glass bending tests to BS EN 1288 (laminated)	2021
	39	香港香港國際機場第三跑道 Skycity, HKIA, HK	據 BS EN 1288 對夾膠玻璃的彎曲強度測試 Light reflectance test for the aluminum roof	2021
	39	Skychy, fikia, fik	cladding panel with PEACOFOUR finish of two	2021
			types	
		香港國際機場航天城	兩種 PEACOFOUR 飾面鋁屋面板進行	
			反射率測試	
	40	A glass used for a project in HK	Light transmittance and Reflectance tests	2021
			for the 15mm thick "AcouGlas" PMMA sheet	
			to EN 1794-2 and to BS 2782 part 5 Method 520A	
		香港一項目所用之玻璃產品	根據 EN 1794-2 和 BS 2782 第 5 部分方法 520A	
			對 15 毫米厚的「AcouGlas」PMMA 板 進行透光率和反射率測試	
	41	Development at Choi Yuen Road, NT, HK	Glass bending tests to BS EN 1288 (laminated)	2021
		香港新界彩園路發展項目	據 BS EN 1288 對夾膠玻璃的彎曲強度測試	2021
	42	Lai Ping Road, Kau To, N.T., HK	Glass bending strength test &	2021



### Surface compression test

	香港新界九肚山麗坪路項目	玻璃彎曲強度測試及玻璃表面應力測試	
43	Proprietary honeycomb panel by a honeycomb panel	Tests for alum. honeycomb plates	2021
	supplier	to BS EN 13121-3:2016 (E), Annex D	
	鋁蜂窩板產品	據 BS EN 13121-3:2016 (E), Annex D	
		實施鋁蜂窩板測試	
44	Alice Cheng Hall, CityU, HK	Load test for the spiders and routels	2021
	香港城市大學張永珍學人樓	玻璃爪及駁接頭測試	
45	Singapore International School (Hong Kong), HK 香港新加坡國際學校	Load test for the spiders and routels 玻璃爪及駁接頭測試	2021
46	21-27 Ashley Road, Kowloon, HK	Load tests on interlocks	2021
	香港九龍亞士厘道 21-27 號	Interlock 系統之受力測試	
47	28 Yin Ping Road, HK	Load test for the spiders and routels	2021
10	香港延坪道 28 號項目	玻璃爪及駁接頭測試	2021
48	1-11 Au Pui Wan Street, Fotan, HK	Load tests on locking devices	2021
49	香港火炭坳背灣街 1 號住宅 Ma Sik Road, Fanling, HK	鎖點/鎖扣之極限力測試 Glass bending strength test & Boiling test	2021
47	香港粉嶺馬適路	玻璃彎曲強度測試及沸水測試	2021
50	KCTL 524, Wing Kei Road, Keai Chung, HK	Load tests on interlocks	2021
	新界葵涌永基路 KCTL 524 地段	Interlock 系統之受力測試	
51	Welfare Services Complex in Area 29, Kwu	Measurement for the flatness of glass panels	2021
	Tung, HK 香港古洞 29 區特建福利服務綜合大樓	測量玻璃平整度	
52	28 Yun Ping Road, HK	Load test for the spiders and routels	2021
	香港恩平道 28 號	玻璃爪及駁接頭測試	
53	368 Kwun Tong Road, Kowloon, HK	Load test for the spiders and routels	2021
	香港九龍觀塘道 368 號	玻璃爪及駁接頭測試	
54	Weighing Room Forecourt, HKJC Shatin Race Course	Load test for the spiders and routels	2021
	香港賽馬會沙田馬場稱重室前院	玻璃爪及駁接頭測試	
55	Sheraton Hotel, 20 Nathan Road, Kowloon, HK	Light transmittance test, Light reflectance test	2022
		and U-value test for the FRR glass	
	香港九龍彌敦道 20 號喜來登酒店	防火玻璃的透光率測試、光反射率測試	
		及 U 值(熱導)測試	
56	Development at Ma Sik Road, Area 18	Glass durability tests to BS EN ISO 12543-4 and	2022
	Fanling, HK	"CoP for Structural Use of Glass, 2018" for	
	香港粉嶺馬適路發展項目	laminated glass of various types 據 BS EN ISO 12543-4 及 2018 年玻璃結構作業	
	百亿份领内型好放农农口	守則對各種夾膠玻璃之耐久性進行測試	
57	The Kwong Wah Hospital, Hong Kong	Glass durability tests and bending tests to	2022
		BS EN ISO 12543 for a laminated glass using	
		composite action	
	香港廣華醫院	據 BS EN ISO 12543 對夾膠玻璃進行合成效應	
		測試及耐久性測試, 並進行了彎曲強度測試	
58	New Air Traffic Control Tower, HKIA, HK	Glass tests to BS EN 1288-1 and BS EN 1288-3	2022
		(for 2-ply laminated glass)	



	香港國際機場新空中交通管制塔	據 BS EN 1288-1 及 BS EN 1288-3 進行玻璃測試(2 層夾膠玻璃)	
59	Sha Tsui Road, HK 香港沙咀道	Glass bending test and surface compression test 玻璃彎曲強度測試及玻璃表面應力測試	2022
60	NKIL 6514, Kwun Tong, Kowloon, HK 香港觀塘觀塘市中心 6514 地段	Load test for the spiders and routels 玻璃爪及駁接頭測試	2022
61	Two Taikoo Place Walkway, Hong Kong 香港太古坊二期行人道	Glass durability tests to BS EN ISO 12543-4 and "CoP for Structural Use of Glass, 2018" for laminated glass 據 BS EN ISO 12543-4 及 2018 年玻璃結構作業	2022
	省心人占切一期们 八追	家 BS EN 130 12545-4 及 2016 平玻璃結構作業 守則對夾膠玻璃之耐久性進行測試	
62	Fire Integrity and Insulation Glass Products 防火及隔熱玻璃產品	Light transmittance test, Light reflectance test and U-value (Thermal conductance) test 透光率測試、光反射率測試及 U 值(熱導)測試	2022
63	Reprovisioning of Fu Shan Public Mortuary at Shatin, N.T., HK	Glass impact tests on four glass samples	2022
64	香港沙田富山公眾殮房重置工程 Proposed A&A Works at Shop 418 At the Junction of Tat Tung Road and Mei Tung Street, Tung Chung	對 4 個玻璃樣板進行玻璃撞擊測試 Surface compression test on the tempered glass	2022
	香港東涌達東路與美東街交界處 418 號鋪 擬加建改建工程	對鋼化玻璃的表面應力測試	
65	A & A Works at the South China Hotel 67-75 Java Road, Wan Chai, Hong Kong 香港灣仔渣華街 67-75 號粵華酒店加建改建工 程	Load tests on locking devices 鎖點/鎖扣之極限力測試	2022
66	1 Cheung Wah Street, Cheung Sha Wan, HK 香港長沙灣昌華街 1 號	Load tests on locking devices 鎖點/鎖扣之極限力測試	2022
67	PMMA sheet products for a project in Hong Kong 用於香港一項目之亞克力板產品	Accelerated exposure test to generally ISO 4892-2 Method A for the 15mm thick PMMA sheets 據一般 ISO 4892-2 方法 A 的加速暴露測試 15和 25mm 厚 PMMA(亞克力)板的	2022
68	PMMA sheet products for a project in Hong Kong	Flexural strength test for 20mm thick PMMA panels	2022
69	用於香港一項目之亞克力板產品 A sealant product in HK	20mm 厚 PMMA(亞克力)板的彎曲強度測試 Sealant test to BS 5889 and BS 3712 Part 1,	2022
03	一硅膠產品	Part 2 and Part 4 據 BS 5889 及 BS 3712 第 1 節,第 3 節及第 4 節的 硅膠測試	2022
70	College of International Education, HKBU No. 8 On Muk, Street, Shatin, N.T., HK	Glass bending strength test and surface compression test	2022-2023
	香港新界沙田安睦街 8 號香港浸會大學國際學院	玻璃彎曲強度測試及玻璃表面應力測試	

Load tests on the pulley systems

健身器材滑輪系統的受力測試

Margaret

Princess Margaret Hospital, 2-10 Princess

Hospital Road, Lai Chi Kok, Kowloon, HK 香港九龍荔枝角瑪嘉烈醫院道 2-10 號瑪嘉烈 2023



	醫院		
72	Kai Tak Sport Park, Kai Tak, Kowloon, HK	Load test on the seam clamp & human foot traffic load test (2 systems)	2023
	香港啟德體育園	2款屋頂夾具的受力測試及人體步行受力測試	
73	Two Taikoo Place Walkway, Hong Kong 香港太古坊二期行人道	Field water test (lift car system) 現場試水測試(斜道升降機)	2023
74	A laminated glass panel embedded with Photo Voltaic (PV) cells product 嵌入光伏 (PV) 電池的夾膠玻璃產品	Boiling test under high temperature and humidity Temperature monitoring test, Tensile load test Weathering Test and Oil-wet ramp test 高溫高濕煮沸測試、溫度監測測試 拉伸受力測試、耐候性測試及油濕斜坡測試	2023
75	2-16 Lam Tin Street, Kwai Chung, HK	Pull-out test for anchor bolts	2023
, 5	香港葵涌藍田街 2-16 號	拉爆膨脹螺栓之拉力測試	2023
76	Nos. 30-50 Gillies Avenue South, 75-81 Baker Street, 23-41 Whampoa Street and 12A-22A Bulkeley Street, H.H.M.L. (Site E), HK	Pull-out test for anchor bolts	2023
	香港紅磡地段(地盤 E)機利士南路 30-50 號,必 嘉街 75-81 號,黃埔街 23-41 號及寶其利街 12A-22A 號	拉爆膨脹螺栓之拉力測試	
77	Kwun Chui Road, Area 56, Tuen Mun, HK	Pull-out test for anchor bolts	2023
	香港屯門第56區管翠路地盤	拉爆膨脹螺栓之拉力測試	
78	1 Shau Kei Wan Road, HK	Pull-out test for hook-eye anchor bolts	2023
	香港筲箕灣道1號	羊眼圈拉爆膨脹螺栓之拉力測試	
79	HKHB – Kai Tak New Acute Hospital (Site B),	Pull-out test for stud bolts	2023
	香港啟德新急症醫院	雙頭螺栓之拉力測試	
80	A 50mm thick sandwich panel product  - 50mm 厚夾芯板産品	Anchorage tests, bending strength test, durability test, shear strength test and tensile and commpressive test for the sandwich panel 夾芯板的錨固測試、彎曲強度測試 耐久性測試、剪力強度測試 拉伸及壓縮測試	2023
81	Proposed development at Yellow Area & Yellow Hatched Black Area, Kai Tak Area, 4B Site 1, Kai Tak, Kowloon, HK	Load test for the routels	2023
	香港九龍啟德啟德 4B 區地盤 1 黃色範圍及 黃色間黑斜線範圍	駁接頭之受力測試	
82	Footbridge near MTR Kowloon Bay Station Exit A, Kowloon, HK	Load test for the spiders and routels	2023
	香港九龍近九龍灣港鐵站 A 出口之行人天橋	玻璃爪及駁接頭測試	
83	Proposed Office Redevelopment at 120 Harcourt Rd. IL8286, Central, HK	Load test for the spiders and routels	2023
	香港中環夏愨道 120 號 IL8286 擬建辦公室	玻璃爪及駁接頭測試	
	1 .0   M/ O W/ 120200 M/ O F/ A E	100 1411-50 B. B. B. B. A. V. J. J. J.	



		•	
84	Mixed Housing Development at Pak Wo Road Fanling, N.T., HK	Load test for the spiders and routels	2023
	香港粉嶺百和路混合房屋發展項目	玻璃爪及駁接頭測試	
85	A laminated glass used for a project in HK	Glass bending strength test	2023
	香港一項目所用之夾膠玻璃產品	玻璃彎曲強度測試	
86	A fritted tempered glass used at	Glass bending strength test	2023
	11-15 Matheson Street, Causeway Bay, HK		
	香港銅鑼灣勿地臣街 11-15 號一彩釉強化玻璃	玻璃彎曲強度測試	
87	Terminal 2 of Hong Kong International Airport, HK	Impact load test on the "Kick Rail"	2023
	香港國際機場 2 號客運大樓	"Kick Rail"撞擊受力測試	
88	15mm thick clear PMMA products for a project	Light transmittance test and gloss value test	2023
	in Hong Kong		
	用於香港一項目之 15 毫米壓克力產品	透光率測試及光澤度測試	
89	Proposed Commercial Development at	Ultimate load test for brackets, test using optical	2023
	21-27 Ashley Rd., Tsim Sha Tsui, Kowloon, HK	emission spectrometry method for aluminum alloys	
	香港九龍尖沙咀亞士厘道 21-27 號	支架之極限受力測試、鋁合金之光學發射	
	擬建商業發展項目	光譜法測試	
90	Aluminum Standing Seam Profile and Aluminum Halter	Ultimate load test	2023
	for a project in HK	Annual Control	
0.1	用於香港一項目之鋁屋面和鋁支架	極限受力測試	
91	Proposed Redevelopment at NKIL 6603, Kai Tak	Load test on the operable ceiling panel	2023
	Kowloon, HK	- ++ 1-11 & 1- 101 A 10	
	香港九龍啟德 NKIL 6603 擬重建項目 The URA Residential / Commercial Development	天花板的受力測試	
92	at Lot 4312, DD124, Hung Shui Kiu, Pin Shan, Yuen Long	Load tests on locking devices	2023
	N.T., HK		
	香港新界元朗屏山洪水橋 DD124 地段 4312 號	鎖點/鎖扣之極限力測試	
	市建局住宅/商業發展項目		
93	The Proposed Residential Development at	Load tests on locking devices	2023
	5 Sham Mong Road, Kowloon, HK		
	香港九龍深旺道5號擬建住宅發展項目	鎖點/鎖扣之極限力測試	
94	The Proposed Composite Building at 16 Soy Street	Load tests on locking devices	2023
	Mangkok, HK		
	香港旺角豉油街 16 號擬建綜合大樓	鎖點/鎖扣之極限力測試	
95	The Proposed Office Redevelopment, 10 Harcourt Rd	Load test for the spiders and routels	2023
	IL8286, Central, HK 香港中環 IL8286 夏愨道 10 號擬建辦公室重建		
	項目	玻璃爪及駁接頭測試	
96	SS K250 Construction of Town Park in Area 68	Load test for the spiders and routels	2023
	Tseung Kwan O, N.T., HK		
	香港新界將軍澳第 68 區市鎮公園建設 SS K250 項目	玻璃爪及駁接頭測試	
97	Proposed Service Building 1, the Entrance of Ko	Load test for the spiders and routels	2023
	Chiu	•	



	Road, Junk Bay Chinese Permanent Cemetery , HK		
	香港華人永遠墳場高超道入口處一號服務大樓	玻璃爪及駁接頭測試	
98	Nina Fossil Garden, No. 8 Yeung Uk Road, Tsuen Wan N.T, HK	Pull-out test for the fall-arrest system	2023
	香港新界屯門楊屋道8號如心化石公園	防墜落系統之拉力測試	
99	Package Two, Property Development at KIL 11264	Pull-out test for the anchor bolts	2023
	(Site B), Kowloon, HK	In 1년 마시 DE 1명 IV 그 IL 나 그리스브	
	香港九龍內地段第 11264 號(B 地盤)何文田站 第二期擬建新大樓	拉爆膨脹螺栓之拉力測試	
100		Pull-out test for the anchor bolts	2023
100	(Phase 3), Sin Fat Road, Kwun Tong, Kowloon, HK	run-out test for the anchor boits	2023
	香港九龍觀塘茜發路 NKIL6584(第三期)擬建 住宅發展項目	拉爆膨脹螺栓之拉力測試	
101	Road	Pull-out test for the anchor bolts	2023
	Area 56, TMTL 520, Tuen Mun, N.T., HK 香港新界屯門市地段第 520 號 56 區管翠路 版建化完發展項目	拉爆膨脹螺栓之拉力測試	
	擬建住宅發展項目 Proposal Development of the Hong Kong Visual		
102	Art Centre at 7A Kennedy Road, Central, HK	Pull-out test for the anchor bolts	2023
	香港中環堅尼地道 7A 號擬建香港視覺藝術中 心	拉爆膨脹螺栓之拉力測試	
103	Wan	Pull-out test for the anchor bolts	2023
	Road, HK 香港筲箕灣道 1 號擬建住宅發展項目	拉爆膨脹螺栓之拉力測試	
104	A 50mm thick sandwich panel used for a project in HK 香港一項目所用之 50mm 厚夾芯板產品	Bending strength test for sandwich panel 夾芯板的彎曲強度測試	2023
105		のil-wet ramp test	2023
10.	香港一項目之用作地磚的玻璃板	油濕斜坡測試	2023
106	New Kowloon Inland, LOT No. 6607, Shing Kai Road Kai Tak, Kowloon, HK	Pull-out test for the fall-arrest system	2023
	香港九龍啟德承啟道新九龍內地段第 6607 號	防墜落系統之拉力測試	
107		Flexural strength test, Tensile strength test, Tensile elastic modulus test, Compressive strength test, Light transmittance and Reflectance tests	2023-2024
	用於香港一項目之蜂窩板產品	抗彎強度測試、拉伸強度測試 拉伸彈性模數測試、透光率和反射率測試	
108	Working Platform of the Eastern District Community Green Stationat Hing Man Street and Oi Shun Road Sai Wan Ho, HK	Pull-out test for the fall-arrest system	2024
	香港西灣河興文街及愛信道綠在東區的工作台	防墜落系統之拉力測試	



109	Additional District Cooling System at the Kai Tak Development, Kowloon, HK	Pull-out test for the fall-arrest system	2024
	香港九龍啟德發展區新增區域供冷系統	防墜落系統之拉力測試	
110	A sealant product in HK	Sealant test to BS 5889 and BS 3712 Part 1,	2024
	一硅膠產品	Part 2 and Part 4, BS EN ISO 11600 據 BS 5889 及 BS 3712 第 1 節,第 3 節及第 4 節及 BS EN ISO 11600 的硅膠測試	
111	The Proposed Multi-Purpose Building for the Hong	Load tests on locking devices	2024
	Kong Sports Institute, HK		
	香港體育學院擬建多用途大樓	鎖點/鎖扣之極限力測試	
112	The Proposed Multi-Purpose Building for the Hong Kong Sports Institute, HK	Load tests on locking devices	2024
	香港體育學院擬建多用途大樓	鎖點/鎖扣之極限力測試	
113	Proposal Residential Development at NKIL 6542	Pull-out test for the anchor bolts	2024
	Tai Wo Ping, Kowloon, HK		
	香港九龍大窩坪新九龍內地段第 6542 號住宅 發展項目	拉爆膨脹螺栓之拉力測試	

### Louver Tests 百葉窗:

1	URA Development K2 at Mong Kok	Louver test to AMCA 500	2003
	香港旺角市區重建局 K2 發展項目	據 AMCA 500 實施百葉窗測試	
2	Two proprietary louver systems	Pressure drop test and water penetration	2007
		test to HEVAC for proprietary	
		louvers (2 Nos.)	
	兩個百葉系統產品	據 HEVAC 進行百葉窗測試	
3	Redevelopment of Kowloon Junior School	Louver tests to BS EN 13030	2012
	香港九龍小學重建項目	據 BS EN 13030 實施百葉窗測試	
4	Proprietary louvers by a louver supplier (H H Robertson)	Louver tests: Tests for 4 louver types	2013
		to AMCA 500 and BS EN 13030	
	預製百葉產品(H H Robertson)	據 AMCA 500 及 BS EN 13030 實施	
		4款百葉窗測試	
5	Proprietary louvers by a louver supplier (Wah Lam)	Louver tests: Tests for 2 louver types	2015
		to BS EN 13030	
	預製百葉產品(Wah Lam)	據 BS EN 13030 實施 2 款百葉窗測試	
6	Proprietary louvers by a louver supplier (Wide Grand)	Louver tests: Tests for 2 louver types	2017
		to BS EN 13030	
	預製百葉產品(Wide Grand)	據 BS EN 13030 實施 2 款百葉窗測試	
7	Proprietary louvers by a louver supplier (Wide Grand)	Louver test: Test for 1 louver type	2017
		to BS EN 13030	
	預製百葉產品(Wide Grand)	據 BS EN 13030 實施 1 款百葉窗測試	
8	Proprietary louvers by a louver supplier	Louver test: Test for 2 louver type	2017
	(Harvest Time Facade)	to BS EN 13030	



	預製百葉產品(Harvest Time Facade)	據 BS EN 13030 實施 2 款百葉窗測試	
9	Proprietary louvers by a louver supplier (Vortec)	Louver test: Test for 3 louver type	2020
		to BS EN 13030 and AMCA 500	
	預製百葉產品(Vortec)	據 BS EN 13030 及 AMCA 500 實施 3	
		款百葉窗測試	
10	Proprietary louvers by a louver supplier (Hop Hat)	Louver tests: Tests for 3 louver types	2020
		to BS EN 13030	
	預製百葉產品(Hop Hat)	據 BS EN 13030 實施 3 款百葉窗測試	
11	Proprietary louvers by a louver supplier (Wo Ming)	Louver tests: Tests for 2 louver types	2021
		to BS EN 13030	
	預製百葉產品(Wo Ming)	據 BS EN 13030 實施 2 款百葉窗測試	
12	Proprietary louvers by a louver supplier (Ever Grand)	Louver tests: Tests for 1 triple bank	2021
		louver system to BS EN 13030	
	預製百葉產品(Ever Grand)	據 BS EN 13030 實施 1 款三層百葉窗	
1.0		系統測試 	2022
13	The Highways Department: Package 4, Contract 1 of Provision of universal accessibility facilities at	Louver tests: Tests for double bank and triple bank louver system to BS EN	2022
	footbridge,	13030	
	elevated walkways and subways		
	路政署:為行人天橋、高架行人道及行人隧道	據 BS EN 13030 實施兩層百葉窗	
	提供暢道通行設施—第四組第一份合約	及三層百葉窗系統測試	
14	HQRE projects, the Office Development	Elevated temperature test	2023
	at 54 Queen's Road East, 2-12 Anton Street and	on louver blades and grills	
	1-11 Landale Street, Wan Chai, Hong Kong		
	香港灣仔皇后大道東 54 號、晏頓街 2-12 號及	對百葉窗和格子窗進行高溫測試	
	蘭杜街 1-11 號的 HQRE 辦公室發展項目		

Etc.



# 6. High Quality Structural Calculations for Curtain Walls, Windows, Stone Claddings and other Building Façade Systems. 為幕牆, 鋁窗, 雲石外牆及其它建築外牆系統提供高質量的結構計算

Dr. Wilson ZHOU and engineers in Wilson Curtain Wall, are the engineers with wide and deep knowledge on Curtain Wall Design, Structural Analysis, Wind Engineering and Mechanics. We have conducted many structural calculations for different projects and for different cladding systems. Calculations are approved by Registered Structural Engineers (RSE) and Buildings Department (BD) etc. We will also attend meetings with BD or clients / architects / structural engineers whenever necessary to explain the calculation results on behalf of the contractors / architects and/or clients.

Wilson 周博士和威而遜建築幕牆的其他工程師們作為在幕牆設計,結構計算,風工程和力學方面具有廣博的知識的工程師,曾為許多不同的建築外牆系統提供了結構計算.我們的計算為各注冊結構工程 (RSE) 和屋宇署 (BD) 所接受.我們還常常代表幕牆承包商,建築師和業主去屋宇署開會,以解釋他們的計算結果.

Wilson Curtain Wall Consultant (HK) Limited have conducted structural calculations for more than 800 cladding systems (include aluminum windows, curtain walls, glass walls, skylights, canopies, glass enclosure for a swimming pool, balustrades, shop fronts, stone claddings, metal claddings etc.).

Wilson 威而遜建築幕牆顧問(香港)有限公司已為超過 800 項工程的各種不同建築外牆系統進行了結構計算.這些系統包括: 鋁窗,幕牆,大玻璃牆,天窗,雨篷,泳池之玻璃分隔牆,玻璃扶欄,雲石外牆和金屬外裝飾牆等.

#### Job references:

(Available upon request)

### 7. OTTV (Overall Thermal Transfer Value) Calculations for Building Envelopes 對建築的圍護牆進行總體傳熱系統的計算

Wilson Curtain Wall Consultant (HK) Limited has conducted Overall Thermal Transfer Value (OTTV) calculations for the building envelopes for several projects. The calculation reports for about 30 projects were well received by the Buildings Department and the architects.

Wilson 周博士已為香港的一些幕牆工程進行了總體傳熱系數(OTTV)的計算. 所有的大約30份的計算報告被建築師和屋宇署所接受.



# 8. Expert Witness to Technical Disputes on Building Façade Projects 為有關建築外牆工程中的技術爭議提供專業的公証服務

Dr. Wilson ZHOU is a building cladding specialist with good knowledge and experience of building cladding systems. This makes him a qualified expert witness to the technical disputes with relation to any building façade systems. As an engineer trained in Mechanical Engineering and Civil Engineering, Dr. Wilson ZHOU can provide professional judgments and opinions on the disputes between two parties in relation to many various technical issues.

Wilson 周博士是在建築外牆領域有着廣博的知識和經驗的專家. 這使他成為了為與建築外牆系統有關的各技術爭議提供公證的專業證人. 作為一個具有機械工程和土木工程等方面之專業知識的工程師, Wilson 周博士能為爭議雙方間的爭議點, 就各技術性問題提供專業的評估和意見.

### 9. Arrangement for Wind Tunnel Tests 安排不同建築物之風洞試驗

In the new wind code "Code of Practice on Wind Effects in Hong Kong 2019", the clause 6.6 of chapter 6 says "Where wind tunnel testing is used to substantiate design loads, sufficient detail of the test conditions and results should be provided to enable independent verification of applicability of the modelling." Wilson Curtain Wall and Dr. Wilson ZHOU as a wind engineering specialist will help our clients to arrange the necessary wind tunnel tests, verify and provide advices on the applicability of the wind tunnel test results to ensure the experimental results correctly applied in determining the wind-induced loads on buildings. 在 2019 年出版之香港風力效應作業守則中的第 6.6 條是這樣陳述的:「如果使用風洞試驗來證實設計載荷,則應提供足夠的試驗條件和結果的詳細信息,以便能夠獨立驗證模型的適用性.」威而遜建築幕牆及周博士,作為風工程之專家,可以幫助在有關之風洞試驗室安排風洞試驗,還可以幫助核對風洞試驗之結果,以確保試驗結果可以被正確地應用,以確定建築物上的風載荷.



## 10. T4 Site Safety Supervisions and Witness Heat-soak Tests for Tempered Glass (T1 & T3) T4 地盤安全監督及為強化玻璃之熱浸試驗作見證 (T1 & T3 服務)

Site supervision should be carried out by qualified engineers with a higher degree as required by BD. Dr. Wilson ZHOU has been a T4 for the site safety supervision for more than 80 building cladding projects in the last few years for more than 100 projects.

根據屋宇署之要求, 地盤安全監督應由合格的並具有高等學歷之工程師來進行. Wilson 周博士在過去的幾年內, 已為超過 100 個建築外牆系統工程提供了 T4 的安全檢查服務.

As an independent third party from the contractor, the glass suppliers and the client, Wilson Curtain Wall Consultant (HK) Limited has witnessed heat-soak tests in factories in China, and/or checked and calibrated the heat-soak test appliances for more than 150 projects. 作為獨立於承建商,玻璃供應商和業主的獨立第三者. 威而遜建築幕牆顧問(香港)有限公司已見證了在中國大陸之工廠所進行的熱浸試驗. 並對有關廠家之測試設備進行核准檢查和核准. 共為超過 150 個工程之玻璃見証了熱浸試驗.

#### Job references for witnessing heat-soak tests:

(Available upon request.)

在最近十年內, 我司曾見證了如下的熱浸試驗.

(如有需要,可以提供.)



# 11. Design Shop Drawings and Structural Calculation for Curtain Walls and other Façade Systems 為單元式幕牆及其它外牆系統提供設計圖及結構計算書

Wilson Curtain Wall Consultant (HK) Limited has prepared design drawings and structural calculations as a whole package for many projects in Hong Kong for various façade systems including unitized curtain walls, aluminium claddings and canopies etc.

The design drawings prepared are of high quality. The design is supported by high quality calculations, which have been well received by the architects and structural engineers and approved by Hong Kong Architectural Services Department (ASD) and Hong Kong Buildings Department (BD).

威爾遜建築幕牆顧問(香港)有限公司已為在香港的許多不同的外牆系統提供了詳細的設計圖,並配合以結構計算.其中包括單元式幕牆,鋁板外牆及雨蓬等系統.我司所提供的設計圖皆為高質量,且以一高質量之結構計算配合之.所有的設計和計算皆已獲香港建築署(ASD)和香港屋宇署(BD)所批核.

#### **Job references:**

(Available upon request.)



### PERSONAL RESUME OF DR. WILSON Y.S. ZHOU 周永生博士的個人簡歷

Dr. Wilson ZHOU graduated from Fudan University in Shanghai, P R China, and attained Bachelor degree and Master degree of Science in Mechanical Engineering in 1982 and 1985 respectively. From 1985 to 1990, he worked in the Applied Mechanics Department at Fudan University as a teacher and subsequently promoted to a lecturer in 1987. During this period, he lectured and tutored several courses on Fluid dynamics, Mechanics of Materials, Calculus and Partial Differential Equations etc. He had also carried out research in the field of Biofluid Dynamics.

Wilson 周博士畢業於中國上海的復旦大學,並於 1982 年和 1985 年分別獲得了機械工程方面的學士和碩士學位. 在 1985 年至 1990 年期間,他在復旦大學的應用力學系當教師,並於 1987 年,被提升為講師.在此期間,他曾輔導和主講了流體力學,材料力學,微積分和數學物理方程等方面的課程. 他還進行了生物流體力學方面的科學研究.

In 1990, he left Fudan University to study for a PhD at the Centre for Building Studies, Concordia University in Montreal, Canada. He obtained fellowship awards from the Concordia University in two successive years of 1992 and 1993. He carried out Computer Simulation as well as Wind Tunnel tests to study the wind effects on buildings. He was awarded the PhD in 1995 for his success in the research.

在1990年,他離開了復旦大學前赴加拿大蒙特利爾市的 Concordia 大學的建築研究中心修讀博士學位. 他於1992年和1993年連續兩年獲得了該大學的獎學金的榮譽. 在他修學期間,他以電腦模擬和風洞試驗等手段,來研究風對建築物的影響. 並於1995年成功獲得了博士學位.

Dr. Wilson ZHOU became involved in the curtain wall industry in 1995 when he joined a curtain wall manufacturer. His responsibilities include: structural calculations of curtain wall systems and management of curtain wall projects.

Wilson 周博士自 1995 年起,加入了一家建築幕牆公司,並開始了他在幕牆工業領域的生涯.他在該幕牆公司的工作主要包括幕牆的結構計算和幕牆工程的管理.

Dr. Wilson ZHOU joined a leading curtain wall testing company in Hong Kong in early 1997 where he had the opportunity to see a lot of different curtain wall designs from the testing mock-ups which were built for performance tests based on their typical designs. The failures of the curtain wall systems during the tests whenever happens were analyzed, and remedial works were witnessed and recorded in testing reports.

Wilson 周博士於 1997 年初,加入了在香港的一家著名的幕牆測試公司.在該公司的工作,使他有機會從根據幕牆設計而建造的各個供物理性能測試用的幕牆試件上,看到了各種不同的幕牆設計.當幕牆試驗失敗時,他分析了產生失敗的原因.他還見證了承建商對失效的幕牆進行的各種補救工作,並紀錄在測試報告中.

In his role as a senior engineer and a general manager of this testing company, Dr. Wilson ZHOU helped the company to expand the testing business to various tests other than the curtain wall mock-up tests. He had also helped the company to expand the business into some new fields such as curtain wall consultancy, structural calculation and engineering design of curtain walls. He had carried out or instructed other engineers to carry out structural calculations, engineering design and OTTV calculations for curtain wall, window wall, glass wall and granite cladding systems etc.

作為在該幕牆測試公司的總經理和高級工程師, Wilson 周博士幫助該公司的生意從單純的幕牆 測試擴展到了其它各種類型的測試. 他還幫助該公司, 將生意擴展到了如幕牆顧問咨詢, 結構 計算和工程設計等新的領域. 他曾經進行了或指導其它工程師進行了幕牆, 鋁窗, 玻璃牆和其 它建築外牆的結構計算, 工程設計和總體傳熱系數的計算等.



In January 2002, Dr. Wilson ZHOU established his own company – WILSON CURTAIN WALL CONSULTANT (HK) LIMITED.

Wilson 周博士於 2002 年一月, 創立了他自己的公司 —— 威而遜建築幕牆顧問(香港)有限公司.

During his 25 years in the industry, Dr. ZHOU has conducted performance tests for more than 1600 mockups for versions projects of different building cladding systems. Tests were conducted to various international standards including ASTM, BS, AS/NZS and PR China's GB/T.

在他的幕牆領域工作的 25 年中, 他共對各種不同工程的不同建築外牆系統進行了多達 1600 個性能試驗. 各性能測試按照美國的 ASTM, 英國的 BS, 澳大利亞/新西蘭的 AS/NZS 以及中國的 GB/T 等測試規範進行.

Dr. Wilson ZHOU has inspected cladding failures on various buildings and provided remedial proposals. He has also helped cladding contractors to determine the wind pressures on buildings of different shapes and at different locations by using wind tunnel tests and/or the Hong Kong wind code.

Wilson 周博士曾對各種不同的建築外牆的失效問題進行了現場檢查,並提供了修補措施. 他還幫助建築外牆的承建商以香港的風規範或以風洞試驗來決定處於不同地方的具各種不同形狀之建築物表面的設計風壓.

As a consultant for the Clients, Architects, Main (General) Contractors and Curtain Wall Subcontractors, Dr. Wilson ZHOU has checked, commented and approved as Independent Design Checker (IDC) the designs for curtain walls for more than 30 projects in Hong Kong.

作為業主、建築師、承建商的分判商, 周博士已為 30 多個工程的外牆的設計及結構計算等擔任評審, 評估和批核.

In the summers of 2001 and 2003 and in autumn 2009, Dr. Wilson ZHOU organized and gave lectures for a course on the design of curtain walls, glass walls, skylights, window walls, windows and stone claddings etc. More than 140 professionals in the building façade industry or academic attended the course. Course notes were prepared and distributed during the classes. Dr. ZHOU has also written and published two books on curtain wall design based on these course notes in 2002 and 2018 respectively.

分別在 2001 和 2003 年的夏天以及 2009 年的秋天, Wilson 周博士組織了一門有關建築幕牆, 大玻璃牆, 天窗, 窗牆, 鋁窗和雲石外牆等的課程. 並在課上主講了各堂課. 他還準備了一份課程資料供各修讀該課程之專業人士參考. 並將有關的課程資料經充實整理後出版成兩本書, 分別發表於 2002 年和 2018 年.

As an engineer educated in Canada and China, Dr. Wilson ZHOU can understand both the western and the Chinese styles of doing business in both Hong Kong and Mainland China.

作為一個同時在加拿大和中國大陸受了教育的工程師, Wilson 周博士能理解西方式的和中國式的, 在香港和在中國大陸做生意的方法.