



工程指示 / 要求簡箋(E.I.)

工程指示編號：EI 6804/17 修改版次：
 工程編號：035 工程名稱：TKO 66D2
 工程項目：SS Spider x 3nos
 收件人：羅小姐 發件人：Johnny 日期：10/2/2017

要求提供 / 確認 事項：

- | | | |
|--|-------------------------------------|-------------------------------|
| <input type="checkbox"/> 初步鋁料 B.M. | <input type="checkbox"/> 加工拆圖，然後生產 | <input type="checkbox"/> 尺寸表 |
| <input type="checkbox"/> 正式鋁料 B.M. | <input type="checkbox"/> 技術上資料 / 指示 | <input type="checkbox"/> 報價 |
| <input type="checkbox"/> 配件 B.M. | <input type="checkbox"/> 樣辦或貨品說明書 | <input type="checkbox"/> 分判合約 |
| <input checked="" type="checkbox"/> 其他：_____ | | |

內容：

KINLONG 300A11, 300A21 & TF12 x 3 SETS For PROOF TEST
 300A11 x 3 nos
 300A21 x 3 nos
 TF12 x 9 nos

*待 MC 確認 Method Statement 交 LAB 做 TEST

請在 _____ 前完成上列要求。

附有關圖紙 / 文件：

1+

以上項目為：

- 原合約工程包 原合約工程加 / 減賬 新工程報價

原因：- PROOF TEST FOR GLASS CURTAIN WALL AND GLASS CANOPY

分發東莞各部門：

- () 生產技術總監 連附件 () 技術部 連附件 () 生產部 連附件 () 機械設計部 連附件
 () 採購部 連附件 () 生產統籌部 連附件
 () 質檢部 連附件 () 會計部 連附件 () 報關組 連附件 () 其他 _____ 連附件

分發香港各部門：

- () 行政部 連附件 () 會計部 連附件 () 統籌部 連附件 () 工程部地盤科文 連附件
 () 採購部 連附件 () QS 部 連附件 () 維修部 連附件 () 其他 _____ 連附件

傳遞編號：

HK

(FTP)

發件人簽署：

項目經理簽署：



30 DEC 2016

YOUR REF 來函檔號 :
OUR REF 本署檔號 :
FAX 圖文傳真 :
TEL 電話 :
www.bd.gov.hk

BD 3/9243/12 (Pt.IV)
2845 1559
3579 2398

LAM Kwok Leung
22nd Floor,
Sun Hung Kai Centre,
30 Harbour Road,
Wanchai, Hong Kong

Date rec'd	Action	Copy	Issue to Site
Kelvin Lam			
Stephen Chiu			
K S Lau			
Kevin Lam			
C W Wu			
Ricky Leung			
Ernest Chan			
Kelvin Chan			
Teddy Siu			
Douglas Tsang			
Julian Yeung			
Larry Lam			
Chau Ka Ki			
Project Team			

23 December 2016

Dear Sir,

Area 66 D2, Tseung Kwan O - T.K.O.T.L. 118

I refer to your application received on 4 November 2016 for approval of proposals in respect of Superstructure (Curtain Wall and Glass Canopy - Podium).

- Your submission of plans has been checked under the curtailed check system announced in Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers ADM-19. On this basis, I am satisfied that your submission is fundamentally acceptable and may be approved.
- You are reminded that the curtailed check system covers only the fundamental issues of a building proposal. Although non-fundamental issues will not be raised as reasons for disapproving a submission, I expect that all contraventions of the Buildings Ordinance and its subsidiary legislation are rectified as and when they are discovered and in any event, before completion of the works is certified. In this connection, I ask you to note that the Building Authority attaches great importance to the proper assumption of duties and responsibilities by authorized persons and registered structural engineers.
- In accordance with the provisions of regulation 30(1) of the Building (Administration) Regulations, this is to notify that the above - mentioned plans submitted with your application received on 4 November 2016 are hereby approved. One set of the said plans, on which I have signified my approval, is enclosed. Your client has been sent a copy of this letter but I would request that you ensure that the contents are understood by him.
- This approval should not be deemed to confer any title to land or to act as a waiver of any term in any lease or licence. This approval does NOT authorize the commencement or the carrying out of any works shown in the approved plans. Section 14(2) of the Buildings Ordinance refers.
- This approval is subject to the conditions and requirements given in Appendices I to VI attached.
- To ensure full compliance with the Buildings Ordinance, it is prudent for the Authorized Person who acts as the coordinator of the building works to inform the Registered General Building Contractor/Registered Specialist Contractor of all the imposed conditions attached to this approval.

/8....

S.L.9 (11/2009)

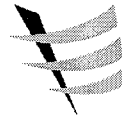
- (b) A copy of the compliance report for the heat soak process issued by the glass manufacturer and endorsed by the Registered Structural Engineer by confirming that the compliance report has adequate provisions in ensuring the heat soak process has been duly carried out to all tempered glass. Such submission should be prepared in accordance with PNAP APP-37 and should be submitted prior to the application for occupation permit.
- (c) A copy of the quality supervision report** prepared by the Registered Structural Engineer and the Registered General Building Contractor for the quality supervision of manufacturer's heat soak process should be submitted by the Registered Structural Engineer prior to the application for occupation permit. Such submission should be prepared in accordance with PNAP APP-37. The report should include a statement signed by the Registered Structural Engineer to confirm that adequate supervision has been provided in accordance with the quality supervision plan as mentioned in paragraph 4(c) above. The following should be contained in the inspection log book:

The names and qualifications of the quality control supervisors** representing the Registered Structural Engineer and the Registered General Building Contractor for supervising the heat soak process for all tempered glass panes should be entered into the inspection log book. The date, time of inspections and data of the independent temperature logger for the heat soak process should be clearly recorded in the inspection log book, which should be kept in the factory and a soft copy of it should be kept on site and, when required, produced to the Building Authority for inspection.

6. The following condition is imposed under item 6 in section 17(1) of the Buildings Ordinance for the use of proprietary stainless steel spider fixing [model nos. KINLONG 300A series: 300A21 (2 Arms 180°) and 300A11 (1 Arms 0°)], including its associated "routel" (model nos. KINLONG TF12), for supporting glass panes of the glass canopy works:

- (a) Proof load test of the spider fixing, including its associated "routel", as directed by the Registered Structural Engineer, is required to be carried out in accordance with the test criteria specified in PNAP APP-37 by a laboratory independent of the contractor. Testing procedures, such as apparatus set-up, load application and results presentation, may make reference to the Code of Practice for the Structural Use of Steel 2011. Reports of the proof tests results@ duly signed by the Registered Structural Engineer shall be submitted prior to the application of occupation permit or the submission of Form BA14 as appropriate.
- (b) A method statement on the proof load test mentioned above is required to be submitted at least one week prior to the actual commencement of the works.

7. Also, under Building (Administration) Regulation 10, where proprietary stainless steel spider fixing, including its associated "routel", is used for the glass canopy works, a copy of the mill certificate of the stainless steel used, is required to be submitted within 60 days of the delivery of the proprietary stainless steel spider fixing to the site which should be appended with a statement signed by the Registered Structural Engineer to confirm that the requirements of chemical composition and mechanical properties appropriate to the type of stainless steel have been complied with.



Method Statement for Strength Test of Spider Fitting

Project: Area 66 D2, Tseung Kwan O – TKOTL 118

0.0 Scope

This procedure specifies the procedure to determine the vertical capacity of spider fitting by applying an axial (tensile) force via a reaction frame at specified load for a given time period.

1.0 Reference

- (a) Code of Practice for Structural Use of Steel 2011 Clauses 16.2
- (b) PNAP APP-37 Appendix C

2.0 Specified Requirement

- (a) No creep for a period of at least 15 minutes under the test load
- (b) A running plot in respect of loading increment/decrement against deformation should indicate substantial linear behavior under the test load.
- (c) On removal of the test load, the recorded residual deformation should not exceed 5 % of the maximum deformation recorded.

3.0 Spider/Sampling Rate

Manufacturer	Kin Long		
Spider Type	300A21	300A11	TF12
Sampling Rate	1% or 3 nos, whichever is greater.		

Table 1: Spider/Sampling Rate



4.0 Equipment

- 4.1 Annulus hydraulic jack
- 4.2 Load Indicator
- 4.3 Hydraulic Hand pump
- 4.4 Reaction frame
- 4.5 Loading bracket, extension bar and retaining nut with washer
- 4.6 Dial gauges

5.0 Test Procedure

5.1A spider fitting is chosen for testing. Check the following information

- a) Reference assigned to the spider
- b) Type of spider
- c) Particular kind of loading test required for the spider
- d) Visual anomalies on the spider before test

5.2 Set up the equipment as listed in accordance with the sketch. A steel plate with prefabricated holes is designed to hold the spider and bolt under test. The test spiders should be set up in such a manner that is compatible with the proposed fixing details given in the approved plans.

5.3 Apply an in-setting force of approximately 1% specified test load (TL). Check alignment of the set-up. Release the load and adjust the set up where necessary. Reset the dial gauge.

5.4 Load the spider fittings in axial (tensile) by five equal increments to the specified maximum test load (TL). The load shall be increased in a steady rate. Hold each increment / decrement for 5 minutes.

5.5 At the maximum test load, a reading on deformation should be taken when it has become completely stable and the reading of deformation should be taken at three 5-minutes' intervals at least on attainment of the test load until there is no significant increase in deformation.

5.6 Release the load in equal 5 decrements to seating force. Measured the relative displacement in every decrement.

5.7 Release the hydraulic pressure. Inspect and record for defects, damage, and anomalies of the spider.

5.8 Failure of a test spider should be considered to have occurred

- (a) if there is collapse or fracture
- (b) If a crack begins to propagate spread in a vital part of the test spider; or
- (c) If the displacement becomes grossly excessive.
- (d) There is creep for a period of at least 15 minutes under the maximum test load.
- (e) If, on removal of the test load, the recorded residual deformation exceeds 5 % of the maximum deformation recorded.



Load Type	Loading Stage	Load Applied (kN)	Holding Time (MINUTES)
tensile	1	0.01TL	In-setting force
	2	0.2TL	5
	3	0.4TL	5
	4	0.6TL	5
	5	0.8TL	5
	6	1.0TL	At least 15 minutes with reading taken every 5 minutes
	7	0.8TL	
	8	0.6TL	
	9	0.4TL	
	10	0.2TL	
	11	0.01TL	5

Table 2: Loading Stage

Manufacturer	Kin Long		
Spider Type	300A21	300A11	TF12
Mode	Axial (tensile)		
Tensile Test load TL per arm (kN)	7.1	7.1	7.1

Table 3: Spider type and axial (tensile)

PROOF TEST TO BE CARRIED OUT IN ACCORDANCE TO Cl.16.2.1 OF CODE OF WIRE (IMPOSED LOAD) = 0.88KN
 PRACTICE FOR THE STRUCTURAL USE OF STEEL 2011 (WIND LOAD) = 4.8KN
 THE TEST LOAD SHOULD BE TAKEN AS EQUAL TO THE SUM OF: (REMAINDER OF DEAD LOAD) = 0.72KN
 a). 1.25x(IMPOSED LOAD)+1.15x(REMAINDER OF DEAD LOAD) WIND(UPLIFT) = 4.8KN
 b). 1.15x(REMAINDER LOAD OF DEAD LOAD)+1.2(WIND LOAD) TEST LOAD = 7.1KN/ARM
 c). 1.2x(WIND UPLIFT)+1.0(REMAINDER OF DEAD LOAD)
 d). 1.15x(REMAINDER OF DEAD LOAD)+1.0(IMPOSED LOAD AND WIND LOAD)

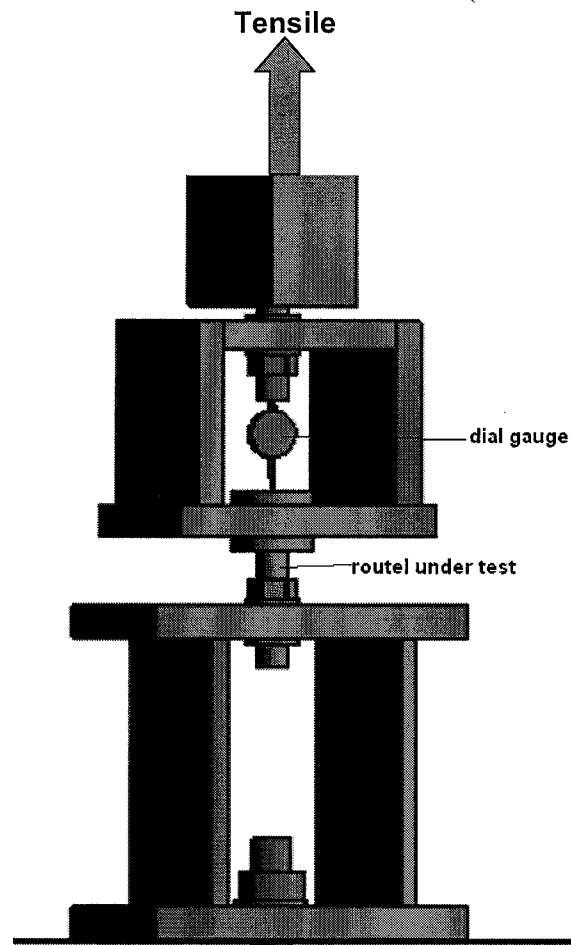
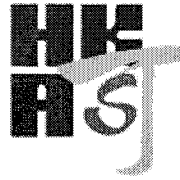


Figure 3: Axial (tensile) load test on rounel TC11



東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED



Hong Kong Accreditation Service
香港認可處

Certificate of Accreditation
認可證書

This is to certify that
特此證明

ETS-TESTCONSULT LIMITED
東業德勤測試顧問有限公司

8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fo Tan, New Territories, Hong Kong
香港新界火炭坳背灣街34-36號豐盛工業中心B座8樓

has been accepted by the HKAS Executive, on the recommendation of the Accreditation Advisory Board, as a
為香港認可處執行機關根據認可諮詢委員會建議而接受的

HOKLAS Accredited Laboratory
「香港實驗室認可計劃」認可實驗室

This laboratory meets the requirements of ISO / IEC 17025 : 2005 – General requirements for the competence of testing and calibration laboratories and it has been accredited for performing specific tests or calibrations as listed in the HOKLAS Directory of Accredited Laboratories within the test category of
此實驗室符合ISO / IEC 17025 : 2005 – (測試及校正實驗室能力的通用規定) 所訂的要求。這項認可資格表示在指定範疇所需的技术能力及實驗室質量管理體系的運作 (見國際認可論壇、國際實驗室認可合作組織及國際標準化組織的聯合公報)。
測試或校正工作

Construction Materials
建築材料

This laboratory is accredited in accordance with the recognised International Standard ISO / IEC 17025 : 2005.
本實驗室乃根據公認的國際標準 ISO / IEC 17025 : 2005 獲得認可。

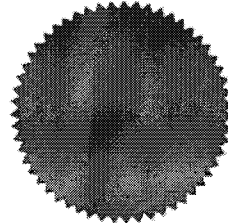
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (see joint IAF-ILAC-ISO Communiqué).
這項認可資格表示在指定範疇所需的技术能力及實驗室質量管理體系的運作 (見國際認可論壇、國際實驗室認可合作組織及國際標準化組織的聯合公報)。

The common seal of the Hong Kong Accreditation Service is affixed hereto by the authority of the HKAS Executive
香港認可處根據認可處執行機關的權限在此書上通用印蓋

CHAN Sing Sing, Terence, Executive Administrator
執行幹事 陳成城
Issue Date : 5 May 2009
簽發日期：二零零九年五月五日

Registration Number : **HOKLAS 022**
註冊號碼：

Date of First Registration : 10 February 1990
首次註冊日期：一九九零年二月十日



This certificate is issued subject to the terms and conditions laid down by HKAS
本證書係根據香港認可處訂立的條款及條件發出

L 000497