



工程指示 / 要求簡箋 ENGINEER INSTRUCTIONS(E.I.)

工程指示編號:	EI- 8957	修改版本:	-
	HK-		
工程編號:	J 861	工程名稱:	己連拿利
收件人:	羅小姐	發件人:	細佬
工程項目:	Pull out Test	日期:	28/05/2025

<input type="checkbox"/> 原合約工程包	<input type="checkbox"/> 原合約工程加 / 減賬 QT-	<input type="checkbox"/> 新工程報價 QT-
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信件批核號碼/圖紙參考編號:	批核模具圖紙編號:
客戶指示附件:	管理內部批簽署:

<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 type="checkbox"/> 其他:		

內容: 請安排公證行到地盤驗拉爆 有關的資料看附件  時間會由地盤呀明打電話回公司約時間
完成上列要求日期: 18/06/2025

國內

<input type="checkbox"/> 生產技術總監	<input type="checkbox"/> 連附件	<input type="checkbox"/> 技術部	<input type="checkbox"/> 連附件	<input type="checkbox"/> 生產部	<input type="checkbox"/> 連附件
<input type="checkbox"/> 採購部	<input type="checkbox"/> 連附件	<input type="checkbox"/> 生產統籌部	<input type="checkbox"/> 連附件	<input type="checkbox"/> 報關組	<input type="checkbox"/> 連附件
<input type="checkbox"/> 質檢部	<input type="checkbox"/> 連附件	<input type="checkbox"/> 會計部	<input type="checkbox"/> 連附件	<input type="checkbox"/> 機械設計部	<input type="checkbox"/> 連附件
<input type="checkbox"/> 香港辦	<input type="checkbox"/> 連附件	<input type="checkbox"/> 其他:			

香港

<input type="checkbox"/> 行政部	<input type="checkbox"/> 連附件	<input type="checkbox"/> 會計部	<input type="checkbox"/> 連附件	<input type="checkbox"/> 統籌部	<input type="checkbox"/> 連附件	<input type="checkbox"/> 工程部	<input type="checkbox"/> 連附件
<input type="checkbox"/> 採購部	<input type="checkbox"/> 連附件	<input type="checkbox"/> QS部	<input type="checkbox"/> 連附件	<input type="checkbox"/> 地盤管理	<input type="checkbox"/> 連附件	<input type="checkbox"/> 維修部	<input type="checkbox"/> 連附件

*發件人簽署:	*組別成員批核簽署:
傳遞編號:	項目經理簽署: 

項目	Type of Anchor	Test Load	Total number used	BD required	proposed test QTY 要驗的數量
curtain wall	HILT HST3-R M10	10.07kN	850	1%或最少五粒	10
alum feature and cladding	HILT HST3-R M8	5.64kN	400		5
	HILT HST3-R M10	10.07kN	4600		46
	HILT HST3-R M12	13.49kN	50		5
Glass Balustrade, Al AC grille, Al Feature & Ceiling (on the Balcony)	HILT HST3-R M10	10.07kN	2800		28
	HILT HST3-R M12	13.49kN	3400		34
Glass Wall	HILT HST3-R M10	10.07kN	200		5
	HILT HST3-R M12	13.49kN	300	5	
Metal Canopy	HILT HST3-R M8	5.64kN	50	5	



**METHOD STATEMENT**

**Tensile Proof Load Test of Structural Fixings in Concrete**

**(PNAP APP-169 October 2023)**

Customer : Hien Lee Engineering Co., Ltd (Main Contractor) / Midi Aluminium Fabricator Ltd.

Project : 3-6 Glenealy, Hong Kong - I.L. 140 s.E ss. 1 R.P., s.E R.P., s.D R.P. and I.L. 7986 R.P.

**1. Introduction**

- 1.1 This method statement described the procedure for conducting test under axial tensile force on structural fixings installed in concrete.
- 1.2 The method statement was made reference to PNAP APP-169 October 2023.

**2. Specimen information (Provided by customer)**

2.1 Model of specimen : Hilti HST3-R M8

Maintain period	Recommended Load	Test Load
2 minutes	3.76 kN	5.64 kN

2.2 Model of specimen : Hilti HST3-R M10

Maintain period	Recommended Load	Test Load
2 minutes	6.71 kN	10.07 kN

2.3 Model of specimen : Hilti HST3-R M12

Maintain period	Recommended Load	Test Load
2 minutes	8.98 kN	13.49 kN

**3. Sampling**

- 3.1 The specimen shall be randomly selected for each type and size of the fixings by the customer. Sampling rate should be at least 1% or 5 numbers, whichever is more.

**4. Test Requirement**

4.1 Test load

The test load shall be minimum equal to 1.5 times of the recommended tensile load or specified by the customer.

4.2 Maintain period

The test load will be maintained for at least 2 minutes, or other time period as specified by the customer.





## 5. Equipment

- 5.1 For the tensile proof loading of structural fixings, the following equipment shall be used:
  - a. Hydraulic hand pump & cylinder
  - b. Load cell
  - c. Timing device
  - d. Loading frame
  - e. Pulling rod, coupler, adaptor or fixture for assembling to the fixing

## 6. Procedure

- 6.1 Ensure that the fixings to be tested are as specified on the job or by the customer, including type, model & size of specimen, test location and installation details e.g. hole diameter & embedded length.
- 6.2 Check visually the test specimen and surrounding base material without any abnormality / irregularity / defect / crack.
- 6.3 Select suitable loading device according to the test load provided by the customer, the type / diameter of the specimen and the environmental condition.
- 6.4 Set up the apparatus according to the diagram. The reaction of the loading frame shall be applied to the base material at least **8A** from the axis of the fixing. "A" shall be the hole diameter or ¼ of the embedded length, whichever is the greater.
- 6.5 Ensure that the alignment of the whole test set up is such that the tensile force is applied along the axis of the test specimen.
- 6.6 Initially a force not exceeding 1% of the test load sufficient to take up any slack in the apparatus and attachment shall be applied.
- 6.7 Without re-setting the load cell, increase the load steadily to reach the required test load.
- 6.8 The test load shall be maintained for at least 2 minutes.
- 6.9 If failure has not taken place, release the load gradually.
- 6.10 Detach the test apparatus and examine the test specimen and surrounding base material for any damage. Damage of test specimen or surrounding base material shall be recorded as a failure.
- 6.11 If failure occurs before attaining the test load or specified holding period, the failure load or holding time and mode of failure shall be recorded.

## 7. Acceptance criteria

- 7.1 Fixings can be said to have satisfied the proof test if the tested anchor and its surrounding area should not have any signs of separation, plastic deformation or deleterious effect.

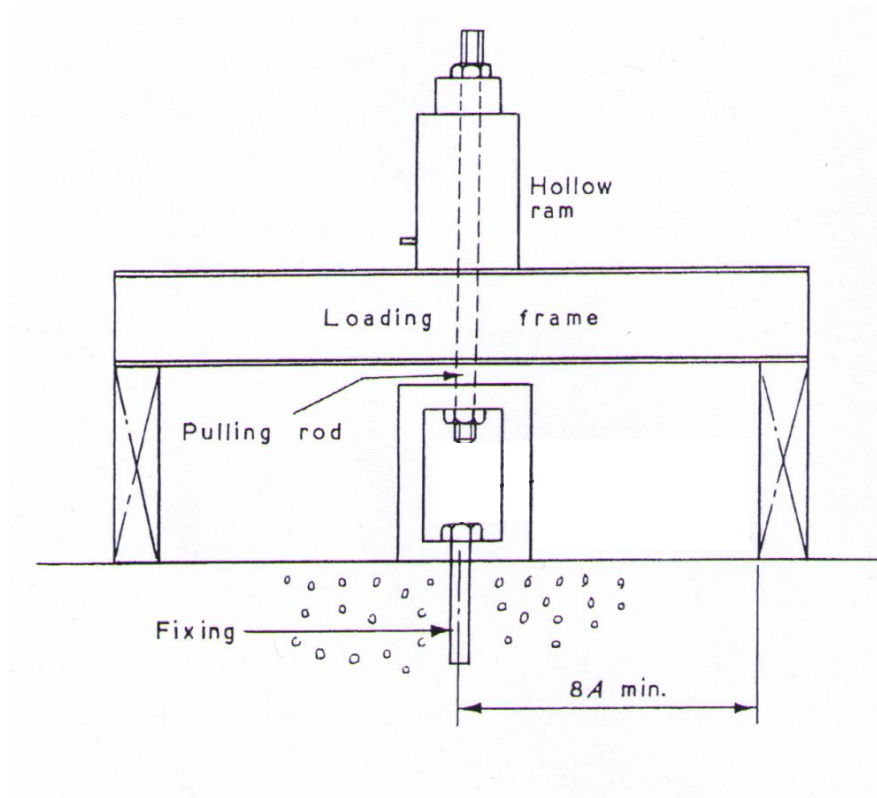




**8. Record**

8.1 The test results shall be recorded in a standard form for the record to the customer.

**9. Typical set-up of the tensile proof load test of structural fixing (anchor bolt)**



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