Test Report

On-site test of fasteners

Hilti (Malaysia) Sdn. Bhd. Level 8, Brunsfield Oasis Tower 3, No. 2, Jalan PJU 1A/7A, Oasis Square, Oasis Damansara, 47301 Petaling Jaya, Selangor, Malaysia.

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Order number:	**Date of test (yyyy-mm-dd):**
PO n°:	

Customer information: Person requesting the tests	**Specifier information (company/person responsible for test specification):**
Company:	Company:
Address:	Address:
Post code / City:	Post code / City:
Country:	Country:
Customer number:	Customer number:
Contact name:	Contact name:
Phone:	Phone:
E-mail:	E-mail:

Site information	
Jobsite name:	Site number:
Address:	Post code / City:

Fastener information	
Anchor family: Chemical anchor	
Anchor type: HIT-RE 500 V4	Anchor / rod embedment depth [mm]: 170
Rod type: Not applicable	Anchor / rod size [mm]: 16x300

Base material information “non-standard” indicates that the anchor does not have a valid approval for the respective base material or that the base material cannot be fully defined.
Base material: Concrete (standard) | C35/45

Test information	
Load direction: Tension	
Test purpose: Validation of installation quality	
Test type: Proof-load (non-destructive)	Load duration [min]: 1
Number of fasteners to test: 4	Admissible displacement [mm]: -
Support bridge: without load bridge	Support spacing [mm]: -
Measurement of displacement: No	Measurement of load at first movement: No
Test results to be evaluated: No	**Test method: Not applicable**

Installation information	
Fastenings installed by: [redacted]	Installation date (yyyy-mm-dd) and time (hh:mm): 2025-06-17 18:00
Hole diameter [mm]: 20	Hole drilling method: Hammer drilling
Hole depth [mm]: 170	Hole cleaning: Manual cleaning
Tightening torque [Nm]: -	Hole condition: Dry

Test equipment information	
Test equipment type: HAT-180	Gauge type: Analog
Equipment number: -	Gauge number (MANXXXX): ANA4057 180KN
Gauges smallest division [kN]: 10	Gauge last calibration (yyyy-mm-dd): 2025-02-27

Test results

Test no.	Load [kN]	Displ. [mm]	Target load [kN]	Failure mode	Comments
1	40.0	-	30.0	No failure	Passed
2	40.0	-	30.0	No failure	Passed
3	40.0	-	30.0	No failure	Passed
4	40.0	-	30.0	No failure	Passed

Load: "Failure load" in the case of tests to determine the resistance; or "Maximum load applied" in case of tests to validate the quality of installation.
Load-1: "Load at first movement", optional for tests to determine resistance according to BS 8539.
Displ.: Total displacement under maximum load applied, optional for tests to validate quality according to BS8359.

Witnesss: Representatives of the client and/or the engineer requesting the tests

Company	Contact name	Function	Signature
[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	

Test carried out by		
Company	Contact name	Signature
Hilti (Malaysia) Sdn. Bhd.		

Test information	
Test hours: 1	Travelling hours: 1

Important information

General

On-site tests of fasteners do not: evaluate suitability or adequacy of the fastener design; verify proper installation or compliance with approval requirements; establish ultimate capacity of tested fasteners (unless tested to failure); or address performance of untested fasteners. Testing is performed as a service by Hilti in support of its products, and is intended solely to provide information on the general suitability of the base material and/or assist in identification of gross installation errors of tested fasteners – it does not imply any agreement in or endorsement of the suitability or propriety of the test or the application, and is not intended for use in satisfying any project or regulatory requirements for on-site inspection. Refer to the Hilti Fastening Technology Manual for information on fastener design and performance. Proper installation of fasteners is critical – training is available on request – contact Hilti for information.

Execution of on-site tests

Test results only indicate the tested anchor(s) held the stated load for the time applied respectively the applicable failure load values. The location and number of tests as well as the loading parameters and the fasteners to be tested have been carried out according to the test conditions determined by Customer in the relevant Request Form. Hilti does not assess whether these test conditions are suitable for evaluation. Due to the possible variability of the base material and the various loading situations, the test results may not be representative of the entire construction project. On-site tests may damage the structure. Hilti is not responsible for this damage, or its restoration.

Evaluation of on-site tests

If no evaluation of data is requested, it is the Customer's sole responsibility to perform any evaluation required.

Test no.	Photo			
1				
2				
3				
4				

Would you like to provide a short feedback about Hilti's Anchor On-Site Testing Service? Use this LINK or scan the QR code below. Thank you, your feedback is highly appreciated!

SIRIM CALIBRATION

ilac-MRA STANDARDS MALAYSIA ACCREDITED SAMM 088

CERTIFICATE OF CALIBRATION

DATE OF ISSUE : 27 February 2025

CERTIFICATE NO : SST/SA/R/2025B/1922

ISSUED BY : **SIRIM Calibration Sdn. Bhd.**
(Company No. 199401006522 (292201-P))
Lot 12, 18 & 20,
Jalan Beremban 15/12, Seksyen 15,
40200 Shah Alam,Selangor Darul Ehsan
Tel:+603 5510 9066 Fax:+603 5510 9077

APPROVED SIGNATORIES

Muhamad Saiful Bin Jamaludin

Submitted by : Hilti (Malaysia) Sdn. Bhd.
Level 8, Brunsfield Tower 3,
No.2, Jalan PJU 1A/7A Oasis Square,
Oasis Damansara, 47301 Petaling Jaya, Selangor.
Attn:Veerinder Kaur

Job No. : SA2025-996-1
Date Received : 19/02/2025

Instrument : Pressure Gauge (Force)
Manufacturer : Hilti

Model No. : N/A
Serial No. : ANA 4057

Instrument Condition When Received :
Physically in good condition

Instrument Condition When Returned
1.Calibrated and test serviceable
2.Calibration due date requested by customer
3.The user should be aware that there are a number of factors that may caused this instrument to drift out of calibration before the specified calibration interval has expired.

Environmental Condition:-
Temperature : 22.9 °C to 23.6 °C
Relative Humidity : 54 % to 55 %
Calibration Date : 27 February 2025
Requested Cal.Due Date : 27 February 2026

Calibration Method :
This instrument was calibrated using the calibration procedures No. MSP/0011 Rev. 12.0

Calibration Standard(s) Used :

Instrument Type :	Serial No. :	Cal. Due Date :	Cal. Cert. No.:	Traceability :
Budenberg Dead Weight Tester	25951/480	11/02/2026	SST/SA/IR/2025B/15	NMIM

Calibration Sticker No.: SA-02-1922
Measurement Uncertainty : 3 kN
The uncertainty calculation is based on the ISO guide to the expression of uncertainty in measurement.
Coverage Factor, *k=2*

Approved Signatory
Muhamad Saiful Bin Jamaludin

The reported expanded measurement uncertainty is stated as the standard measurement uncertainty multiplied by the coverage factor k such th coverage probability corresponds to approximately 95%.
This certificate is issued in accordance with the laboratory accreditation requirements of Skim Akreditasi Makmal Malaysia (SAMM) of Standards M which is a signatory to the ILAC MRA. It provides traceability of measurement to the SI system of units and/or to units of measurement realized National Metrology Institute of Malaysia (NMIM) and other recognized national metrology institutes.

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CERTIFICATE OF CALIBRATION

DATE OF ISSUE: 27 February 2025 **CERTIFICATE NUMBER:** SST/SA/R/2025B/1922

Instrument : Pressure Gauge (Force) **Serial No.** : ANA 4057

CALIBRATION RESULTS

Range : 250 kN **Graduation** : 10 kN

Standard Applied (kN)	Actual Equipment Reading (kN)				Limits
	Increase		Decrease		
	Before Adjustment	After Adjustment	Before Adjustment	After Adjustment	
0	0	N/A	0	N/A	N/A
50	50	N/A	50	N/A	± 7
100	100	N/A	100	N/A	± 7
150	150	N/A	150	N/A	± 7
[illegible]	198	N/A	[illegible]	N/A	± [illegible]
250	248	N/A	[illegible]	-	± [illegible]

Note : *No adjustment carried out*
: *Limits with reference to manufacturer's manual*
: *Accuracy Class : 2.5% FS*
: *Ram diameter = 56.67 mm*

Calibrated By :

Mohd Rais Bin Ramli

END OF RESULTS

e reported expanded measurement uncertainty is stated as the standard measurement uncertainty multiplied by