



Caribbean Industrial Research Institute

Mailing Address: Tunapuna Post Office, Trinidad and Tobago

Telephone: (868) 299-0210 Telefax: (868) 662-7177

www.cariri.com Email: mail@cariri.com

REPORT

Attn: --

Project Code: EC03826802/25

Client: ABEL BUILDING SOLUTIONS – ANSA MCAL ENTERPRISES LTD

Client Address: Depot Road Longdenville, Chaguanas


Report Title: Testing of clay blocks – 4 inch horizontal core

Report No: 0245/26/01

Project Chief: Lisa Ramoutar

Author(s): Kareem Jennings & Adrian Cruickshank


Reviewed By:



Neal Hassim, Civil Technologist

Date: 2025/12/08

Authorized By:



Lisa Ramoutar, Laboratory Manager

Date: 2025/12/08

Copy No: 1 of 1

Appendices: ☐

Report Version: ORIGINAL ☒

RE-ISSUE ☐

AMENDED ☐

Introduction

The client submitted ten (10) 4" horizontal core Classic hollow clay for compressive strength determination and water absorption. The samples were submitted on June 24, 2025 and were assigned CARIRI Identification numbers as T251580 to T251589.

Testing and Methodology

Guidelines given in *ASTM C 67-23: Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile* were used in the investigation.

Results

Test period: November 12 to December 04, 2025

Test results are presented in Table 1.

Table 1: Compressive strength of blocks

| CARIRI ID | Client ID | Dimensions (L×W×H) | Surface Area (mm ²) | Load (N) | Compressive strength (N/mm ²) |
|-----------|----------------|--------------------|---------------------------------|----------|---|
| T251580 | Classic 4x8x12 | 300.5×87.5×196.5 | 26 294 | 187 091 | 7.1 |
| T251581 | | 303.5×89.5×198.5 | 27 163 | 230 383 | 8.5 |
| T251582 | | 302.5×88.0×197.5 | 26 620 | 170 389 | 6.4 |
| T251583 | | 301.5×88.5×197.5 | 26 683 | 139 776 | 5.2 |
| T251584 | | 301.5×89.0×197.0 | 26 834 | 109 955 | 4.1 |
| | | | | Average | 6.3 |

1. This report relates only to the specific item(s)/sample(s) which has been tested, analysed, or calibrated by CARIRI. It shall be used solely for informing the client of the results of this specific item(s)/sample(s) and not any other. Information contained herein, shall not be used for any other purposes including, but not limited to, Certification, Advertising, and Marketing.
2. This report may not be reproduced other than in full, except with the prior written authorization from the Executive Management of CARIRI.
3. Any Opinions and Interpretations expressed within are outside the scope of our Certification and/or Accreditation.

Table 2: Water absorption test results

| CARIRI ID | Client ID | Dry weight (g) | Saturated weight (24hr cold water) (g) | Absorption after immersion (%) |
|-----------|----------------|----------------|--|--------------------------------|
| T251585 | Classic 4x8x12 | 4602.9 | 4881.8 | 6.1 |
| T251586 | | 4669.8 | 5000.0 | 7.1 |
| T251587 | | 4485.8 | 4768.9 | 6.3 |
| T251588 | | 4520.8 | 4776.5 | 5.7 |
| T251589 | | 4534.7 | 4872.1 | 7.4 |
| | | | Average | 6.5 |

☐ Test Laboratory: CARIRI Materials Laboratory, Trincity West Industrial Estate, Macoya

END OF REPORT

1. This report relates only to the specific item(s)/sample(s) which has been tested, analysed, or calibrated by CARIRI. It shall be used solely for informing the client of the results of this specific item(s)/sample(s) and not any other. Information contained herein, shall not be used for any other purposes including, but not limited to, Certification, Advertising, and Marketing.
2. This report may not be reproduced other than in full, except with the prior written authorization from the Executive Management of CARIRI.
3. Any Opinions and Interpretations expressed within are outside the scope of our Certification and/or Accreditation.