



Caribbean Industrial Research Institute

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REPORT

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Project Code: EC03826704/25

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: 0766/25/01

Project Chief: Lisa Ramoutar

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Reviewed By:

Neal Hassim, Civil Technologist

Date: 2025/05/05

Authorized By:

Lisa Ramoutar, Laboratory Manager

Date: 2025/05/05

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 March 28, 2025 and were assigned CARIRI Identification numbers as T251012 to T251016 and T251027 to T251031.

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: April 09 to 15, 2025

Test results are presented in Table 1.

Table 1: Compressive strength of blocks

CARIRI ID	Client ID	Dimensions (L×W×H)	Surface Area (mm²)	Load (N)	Compressive strength (N/mm²)
T251012	Classic 4x8x12	301.5×89.5×194.5	26 984	282 232	10.5
T251013		300.5×89.5×195.0	26 895	242 786	9.0
T251014		299.5×88.5×194.0	26 506	298 650	11.3
T251015		300.5×89.0×194.5	26 745	235 394	8.8
T251016		300.0×88.5×194.0	26 550	163 397	6.2
				Average	9.1

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Table 2: Water absorption test results

CARIRI ID	Client ID	Dry weight (g)	Saturated weight (24hr cold water) (g)	Absorption after immersion (%)
T251027	Classic 4x8x12	4777.3	4996.7	4.6
T251028		4386.5	4678.3	6.7
T251029		4630.1	4901.1	5.9
T251030		4534.5	4811.1	6.1
T251031		4461.9	4688.4	5.1
			Average	5.7

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

END OF REPORT

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