



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 vertical core

Report No: 0767/25/02 Amendment Report Supersedes CARIRI Report No 0767/25/01*

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Reviewed By:



Neal Hassim, Civil Technologist

Date: 2025/05/06

Authorized By:



Lisa Ramoutar, Laboratory Manager

Date: 2025/05/06

Copy No:

1 of 1

Appendices:

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Report Version:

ORIGINAL

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RE-ISSUE

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AMENDED

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Introduction

The client submitted ten (10) 4" vertical core hollow clay blocks for compressive strength determination and water absorption. The samples were submitted on March 28, 2025 and were assigned CARIRI Identification numbers as T251017 to T251021 and T251032 to T251036.

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 14, 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)
T251017	4x8x16 Hercules Block	394.0×89.0×191.5	35 066	556 279	15.9
T251018		392.5×90.0×191.5	35 325	676 824	19.2
T251019		392.0×89.0×192.0	34 888	767 859	22.0
T251020		391.5×89.0×190.0	34 844	1 037 915	29.8
T251021		393.5×90.5×190.5	35 612	815 231	22.9
				Average	21.9

* Report amended to make a correction to the size of the block reported in the introduction and in the Client ID of the results. Changes indicated by columns in the sidebar.

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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 (%)
T251032	4x8x16 Hercules Block	6478.8	6943.0	7.2
T251033		6188.5	6646.8	7.4
T251034		6008.8	6357.9	5.8
T251035		6155.9	6492.3	5.5
T251036		6205.2	6603.9	6.4
			Average	6.5

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

END OF REPORT

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