



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 vertical core

**Report No:** 0244/26/01

**Project Chief:** Lisa Ramoutar


**Author(s):** Kareem Jennings & Adrian Cruickshank

**Reviewed By:**

  
\_\_\_\_\_  
Neal Hassim, Civil Technologist

**Date:** 2025/12/08

**Authorized By:**

  
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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" vertical core Hercules hollow clay blocks for compressive strength determination and water absorption. The samples were submitted on June 24, 2025 and were assigned CARIRI Identification numbers as T251590 to T251599.

## 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 <sup>2</sup> )	Load (N)	Compressive strength (N/mm <sup>2</sup> )
T251590	Hercules 4x8x16	390.0×89.0×189.5	34 710	742 874	21.4
T251591		389.5×89.5×190.5	34 860	843 492	24.2
T251592		390.0×88.5×190.0	34 515	819 917	23.8
T251593		389.0×88.5×189.0	34 427	1 057 388	30.7
T251594		389.5×88.5×188.0	34 471	929 140	27.0
				Average	25.4

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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 (%)
T251595	Hercules 4x8x16	6333.7	6675.0	5.4
T251596		6243.9	6536.5	4.7
T251597		6188.3	6471.7	4.6
T251598		6358.3	6721.8	5.7
T251599		6306.8	6609.2	4.8
			Average	5.0

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

**END OF REPORT**

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