



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

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Project Code: EC03826741/23

Client: ABEL Building Solutions – Ansa McAl Enterprises Limited

Client Address: Depot Road, Longdenville

Report Title: Testing of Hercules 4×8×16 inch Vertical core hollow clay blocks

Report No: 1147/23/01


Project Chief: Lisa Ramoutar

Author(s): William Calliste and Kamraj Mahadeo

Reviewed By: 

Neal Hassim, Civil Technologist

Date: 2023/08/18

Authorized By: 

Lisa Ramoutar, Laboratory Manager

Date: 2023/08/18

Copy No: 1 of 1 **Appendices:**

Report Version: **ORIGINAL** **RE-ISSUE** **AMENDED**

Introduction

The client submitted ten (10) 4×8×16 inch hollow clay blocks which they identify as “Hercules blocks” for water absorption (5 hr boil) and compressive strength determination. The samples were submitted on July 21, 2023 and were assigned CARIRI Identification numbers T231662 to T231671.

Testing and Methodology

Guidelines given in ASTM C67-18: *Standard Test Methods of Sampling and Testing Brick and Structural Clay Tile* were used in the investigation. Gypsum capping was used for end preparation.

Results

Test period: July 25 to August 03, 2023

Test results are presented in Tables 1 and 2.

Table 1: Water absorption test results

CARIRI ID	Dry weight (g)	Saturated weight (24hr cold water) (g)	Saturated weight (5 hr boiling water) (g)	Absorption after immersion (%)	Absorption after immersion and boiling (%)
T231662	6668.4	7016.8	7226.2	5.2	8.4
T231663	6679.0	7028.7	7239.2	5.2	8.4
T231664	6658.2	7080.8	7270.2	6.3	9.2
T231665	6673.9	7115.3	7298.8	6.6	9.4
T231666	6445.4	6815.7	7020.8	5.7	8.9
			Average	5.8	8.8

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

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Table 2: Compressive strength test results

CARIRI ID	Avg. overall dimensions L x B x H (mm)	Surface Area (mm ²)	Load (N)	Compressive strength (N/mm ²)
T231667	396×92×193	36 432	909 382	25.0
T231668	392×92×192	36 064	912 532	25.3
T231669	394×91×192	35 854	886 591	24.7
T231670	391×90×191	35 190	922 123	26.2
T231671	391×91×195	35 581	681 121	19.1
			Average	24.1

END OF REPORT

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

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