



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: EC03826741/23

Client: ABEL Building Solutions – Ansa McAl Enterprises Limited

Client Address: Depot Road, Longdenville


Report Title: Testing of Classic 4×8×12 inch Horizontal core hollow clay blocks

Report No: 1148/23/01

Project Chief: Lisa Ramoutar

Author(s): William Calliste and Kamraj Mahadeo

Reviewed By:  **Date:** 2023/08/18
Neal Hassim, Civil Technologist

Authorized By:  **Date:** 2023/08/18
Lisa Ramoutar, Laboratory Manager

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

Report Version: ORIGINAL RE-ISSUE AMENDED

Introduction

The client submitted ten (10) 4×8×12 inch hollow clay blocks which they identify as “Classic 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 T231652 to T231661.

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 (%)
T231652	4718.0	4998.0	5101.3	5.9	8.1
T231653	4942.8	5393.0	5507.1	9.1	11.4
T231654	4830.5	5077.5	5238.2	5.1	8.4
T231655	4639.1	4968.6	5058.6	7.1	9.0
T231656	4574.4	4895.7	5015.4	7.0	9.6
			Average	6.9	9.3

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

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: 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)
T231657	302×90×200	27 180	232 403	8.6
T231658	305×91×203	27 755	147 503	5.3
T231659	303×91×201	27 573	207 644	7.5
T231660	305×91×201	27 755	156 999	5.7
T231661	303×91×203	27 573	168 183	6.1
			Average	6.6

END OF REPORT

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

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.