



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: Mr. Bimal Seebaran

Project Code: EC03826713/23

Client: ABEL BUILDING SOLUTIONS – ANSA MCAL ENTERPRISES LTD

Client Address: Churchill Roosevelt Highway, Golden Grove, Arouca

Report Title: Testing of 60 mm Brick Pavers

Report No: 1032/23/01

Project Chief: Lisa Ramoutar

Author(s): William Calliste

Reviewed By:

Lisa Ramoutar, Laboratory Manager

Date: 2023/07/14

Authorized By:

Lisa Ramoutar, Laboratory Manager

Date: 2023/07/14

Copy No:

1 of 1

Appendices:

Report Version:

ORIGINAL

RE-ISSUE

AMENDED

Introduction

The client submitted six (6) 60 mm Brick Pavers for determination of compressive strength and water absorption. The samples were submitted on June 13, 2023 and were assigned CARIRI Identification numbers T231423 to T231428.

Approach

Guidelines given in *ASTM C140-18a: Standard test method for sampling and testing of concrete masonry units* were used in the investigation. Sample requirements are extracted from *ASTM C936-16: Standard Specification for Solid Concrete Interlocking Paving Units*.

Results

Testing period: June 14 to 29, 2023

Test results are presented in Tables 1 and 2.

Table 1: Compressive strength results of 60 mm Brick Pavers

CARIRI ID	Avg. overall dimensions L x B x H (mm)	Net cross-sectional area (mm ²)	Load (N)	Net area compressive strength (N/mm ²)	Requirements of ASTM C936-16
T231423	199×99×60	19 502	1 293 300	66.3	Minimum Compressive Strength - Average of 3 units shall be 55 MPa (N/mm ²) For any individual block shall be 50 MPa (N/mm ²)
T231424	199×99×60	19 502	1 115 350	57.2	
T231425	199×99×62	19 104	1 251 500	65.5	
			Average	63.0	

Table 2: Water absorption results of 60 mm Brick Pavers

CARIRI ID	Oven dry density (kg/m ³)	Water absorption (%)	Requirements of ASTM C936-16
T231426	2214	4.3	Maximum Water absorption - Average of 3 units shall be 5% and for any individual unit shall be 7%
T231427	2154	5.4	
T231428	2177	4.8	
Average	2182	4.8	

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