



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: EC03826773/25

Client: ABEL BUILDING SOLUTIONS – ANSA MCAL ENTERPRISES LTD

Client Address: Depot Road Longdenville, Chaguanas

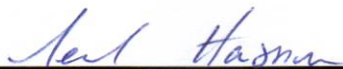
Report Title: Testing of 80mm Tri-Hex Pavers

Report No: 0055/26/01

Project Chief: Lisa Ramoutar


Author(s): Kareem Jennings and Vinesh Lall

Reviewed By:


Neal Hassim, Civil Technologist

Date: 2025/11/05

Authorized By:


Lisa Ramoutar, Laboratory Manager

Date: 2025/11/05

Copy No:

1 of 1

Appendices: ☐

Report Version:

ORIGINAL ☒

RE-ISSUE ☐

AMENDED ☐

Introduction

The client submitted six (6) 80mm Tri-Hex Pavers for water absorption and compressive strength determination. The samples were submitted on May 21, 2025 and were assigned CARIRI Identification numbers T251428 to T251433.

Approach

Guidelines given in *ASTM C140-18a: Standard test method for sampling and testing of concrete masonry units* were used in the investigation.

Results

Testing period: June 25 to October 09, 2025

Test results are presented in Tables 1 and 2.

Table 1: Compressive strength results of 80mm Tri-Hex Pavers

| CARIRI ID | Avg. overall dimensions LxBxH (mm) | Net cross-sectional area (mm ²) | Load (N) | Net area compressive strength (N/mm ²) | Requirements of ASTM C936-16 |
|-----------|------------------------------------|---------------------------------------------|-----------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| T251428 | 185.0×187.5×80.0 | 21 850 | 1 456 350 | 66.7 | Minimum Compressive Strength - Average of 3 units shall be 55 MPa (N/mm ²) and for any individual block shall be 50 MPa (N/mm ²) |
| T251429 | 185.0×187.5×80.0 | 21 850 | 1 499 100 | 68.7 | |
| T251430 | 185.0×187.5×80.0 | 21 850 | 1 233 050 | 56.5 | |
| | | | Average | 64.0 | |

Date tested: October 09, 2025

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: Water absorption results of 80mm Tri-Hex Pavers

| CARIRI ID | Oven dry density (kg/m ³) | Water absorption (%) | Requirements of ASTM C936-16 |
|-----------|---------------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------|
| T251431 | 2114 | 6.8 | Maximum Water absorption - Average of 3 units shall be 5% and for any individual unit shall be 7% |
| T251432 | 2200 | 3.9 | |
| T251433 | 2171 | 5.3 | |
| Average | 2162 | 5.3 | |

Date tested: June 25 to July 01, 2025

END OF REPORT

-
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.