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: EC03826566/26

Client: ABEL BUILDING SOLUTIONS – ANSA MCAL ENTERPRISES LTD

Client Address: Depot Road Longdenville, Chaguanas

Report Title: Testing of 8" x 8" x 16" SP concrete blocks

Report No: 0458/26/01

Project Chief: Lisa Ramoutar

Author(s): Kareem Jennings and Delroy John

Reviewed By: Neal Hassim, Civil Technologist **Date:** 2026/03/17

Authorized By: Lisa Ramoutar, Laboratory Manager **Date:** 2026/03/17

Copy No: 1 of 1 **Appendices:** ☐

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

Introduction

The client submitted nine (9) 8 inch concrete blocks labeled "190 x 190 x 390 SP" for compressive strength and water absorption determination. The samples were submitted on January 09, 2026 and were assigned CARIRI Identification numbers T260314 to T260322.

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: January 20 to February 23, 2026.

Test results are presented in Tables 1 and 2.

Table 1: Compressive strength results of 8 inch concrete blocks

CARIRI ID	Client ID	Avg. overall dimensions LxBxH (mm)	Net cross-sectional area (mm^2)	Load (N)	Net area compressive strength (N/mm^2)	Requirements of ASTM C90-16a
T260315	140x190x390 SP	390.0×190.0×187.5	47 700	1 056 550	22.1	**Min. net area compressive strength** Average of 3 units - 13.8 N/mm^2 Individual unit - 12.4 N/mm^2
T260316		390.0×190.0×190.0	47 450	938 450	19.8	
T260317		390.0×190.0×190.0	47 450	814 100	17.2	
T260318		390.0×190.0×190.0	47 600	859 700	18.1	
T260319		392.5×190.0×190.0	48 100	1 031 800	21.5	
T260320		392.5×190.0×190.0	47 800	756 400	15.8	
				Average	19.1	

Date tested: February 23, 2026

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 8 inch concrete blocks

CARIRI ID	Client ID	Oven dry density (kg/m^3)	Water absorption (kg/m^3)	Requirements of ASTM C90-16a
T260320	190x190x390 SP	2177	135	**Max. water absorption** For conc. density >2000 kg/m^3 Average of 3 units - 208 kg/m^3 Individual unit – 240 kg/m^3
T260321		2217	130	
T260322		2199	128	
	Average	2198	131	

Date tested: January 20 to 22, 2026

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

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.