



Caribbean Industrial Research Institute

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REPORT

Attn: Mr. Bimal Seebaran

Project Code: EC03826640/26

Client: ABEL BUILDING SOLUTIONS – ANSA MCAL ENTERPRISES LTD

Client Address: Depot Road Longdenville, Chaguanas

Report Title: Testing of 6" x 8" x 16" Superpac concrete blocks

Report No: 0745/26/01


Project Chief: Lisa Ramoutar

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Reviewed By: 

Neal Hassim, Civil Technologist

Date: 2026/06/11

Authorized By: 

Lisa Ramoutar, Laboratory Manager

Date: 2026/06/11

Copy No: 1 of 1

Appendices:

Report Version: ORIGINAL

RE-ISSUE

AMENDED



Introduction

The client submitted nine (9) 6 inch concrete blocks labeled "140 x 190 x 390 Superpac" for water absorption and compressive strength determination. The samples were submitted on March 27, 2026 and were assigned CARIRI Identification numbers T260830 to T260838.

Approach

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

Results

Testing period: May 12 to June 10, 2026.

Test results are presented in Tables 1 and 2.

Table 1: Compressive strength results of 6 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
T260830	140x190x390 Superpac	395.0×140.0×187.5	32 800	623 550	19.0	Min. net area compressive strength Average of 3 units - 13.8 N/mm ² Individual unit - 12.4 N/mm ²
T260831		395.0×142.5×192.5	33 200	758 150	22.8	
T260832		392.5×140.0×190.0	32 600	600 150	18.4	
T260833		392.5×140.0×190.0	31 800	757 500	23.8	
T260834		390.0×140.0×190.0	30 800	575 600	18.7	
T260835		390.0×140.0×190.0	30 400	478 450	15.7	
			Average		19.7	

Date tested: May 19 to June 10, 2026

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Table 2: Water absorption results of 6 inch concrete blocks

CARIRI ID	Client ID	Oven dry density (kg/m ³)	Water absorption (kg/m ³)	Requirements of ASTM C90-16a
T260836	140x190x390 Superpac	2163	106	Max. water absorption For conc. density >2000 kg/m ³ Average of 3 units - 208 kg/m ³ Individual unit – 240 kg/m ³
T260837		2182	107	
T260838		2161	105	
Average		2169	106	

Date tested: May 12 to 14, 2026

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

END OF REPORT

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