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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

Author(s): Kareem Jennings

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

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