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REPORT

Attn: Mr. Bimal Seebaran

Project Code: EC03826713/23

Client: ABEL BUILDING SOLUTIONS – ANSA MCAL ENTERPRISES LTD

Client Address: Depot Road Longdenville, Chaguanas

Report Title: Testing of 6" x 8" x 16" Columbia 1600 concrete blocks

Report No: 0969/23/01

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Reviewed By:

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Date: 2023/06/27

Authorized By:

Lisa Ramoutar, Laboratory Manager

Date: 2023/06/27

Copy No: 1 of 1

Appendices:

Report Version:

ORIGINAL

RE-ISSUE

AMENDED



Introduction

The client submitted six (6) 6 inch concrete blocks labeled "140 x 190 x 390 Columbia 1600" for water absorption and compressive strength determination. The samples were submitted on June 13, 2023 and were assigned CARIRI Identification numbers T231393 to T231398.

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: June 14 to 21, 2023.

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
T231393	140x190x390 Columbia 1600	389×141×187	31 081	796 273	25.6	Min. net area compressive strength Average of 3 units - 13.8 N/mm ² Individual unit - 12.4 N/mm ²
T231394		389×141×189	31 120	941 170	30.2	
T231395		388×141×190	31 156	944 819	30.3	
				Average	28.7	

Date tested: June 21, 2023

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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
T231396	140x190x390	2160	113	Max. water absorption For conc. density >2000 kg/m ³ Average of 3 units - 208 kg/m ³ Individual unit – 240 kg/m ³
T231397	Columbia	2157	115	
T231398	1600	2160	116	
	Average	2159	114	

Date tested: June 14 to 16, 2023

END OF REPORT

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