

FUGRO-SUHAIMI LTD.

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**COMPRESSIVE STRENGTH OF MASONRY HOLLOW BLOCK – TEST REPORT**

Client	Houssam Eldine Jaamour Block Factory	Report Date	20 March 2024
Project	Shuaibah 3 water desalination plant - IWP	Job No.	245090
Material	Non-Load Bearing Light Weight Concrete Masonry Hollow Blocks Three Holes Closed at Bottom with Groove	Lab No.	0085-1
Source	Job Site	Sampling Date	14 March 2024
Sampling plan/ Method	ASTM C 140	Date Tested	17 March 2024
Client Contact	Mr.Mohieddine Kalo Mobile: 0504450416 Email: kalomohieddine@gmail.com	Sample By:	Client

Fugro-Suhaimi Ltd. (FSL) has performed standard laboratory testing on six concrete masonry hollow blocks delivered to FSL laboratory on 14 March 2024 with labeled identification by HEJBF. The testing was carried out in accordance with the procedure outlined in ASTM C 140 "Standard Methods of Sampling and Testing Concrete Masonry Units and Related Units". The test result and pertinent information are as follows:

A. Dimensions

Sample No.	1	2	3	ASTM C-129 Specification limit
Length (mm)	400	400	400	No dimension shall differ by more than ± 3.2 mm from the nominal specified dimension
Width (mm)	200	199	200	
Height (mm)	200	200	199	

B. Water Absorption & Density

Sample No.	1	2	3	Average	ASTM C-129 Specification limit
Water Absorption (kg/m ³)	156	227	168	183	-
Density (kg/m ³)	1634	1590	1624	1616	Less than-1680 (Light Weight)

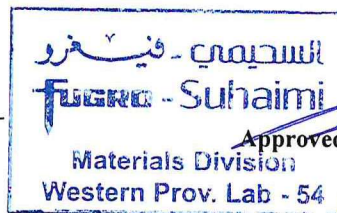
C. Compressive Strength

Sample No.	Weight, gram	Net Area (cm ²)	Maximum Load (kN)	Compressive Strength (Based on Net Area)	
				Test Result	
				MPa	Psi
4	14060	420.1	218	5.2	750
5	13300	420.1	270	6.4	930
6	13026	420.1	246	5.9	950
Average Compressive Strength				5.8	840
ASTM C-129 Requirement (Average of 3 Units)				4.14	600

Remarks	1.The test results indicated that the concrete hollow blocks conform to the density and Compressive strength requirements of ASTM C-129 specification for Non-load-Bearing Concrete Masonry Units. 2. The test result relate only to the items tested
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Tested by: Dilawar

Reviewed by: Dilawar Khan, CTTA # 0998
Senior Lab Supervisor, Jeddah



Approved by: Irfan Zaib Khan, CTTA 0360
Asst. Lab. Manager, Jeddah