



Test Report

Report No.	MOI 9660 09 2022
Client	CHEMA FOAM CO.
Authority & date	Request Orders 25/9/2022
Items Tested	Chema tile grouting , according to EN 13888
Results	<i>The detailed test results are given on the following pages of this report (6 pages) .</i>
Report Typist	* Mis. Naglaa Mohamed-Sara Abdel Reheam
Test carried by	Noha Samir
	* Mis . Fatma El Zahraa Fikry
	* H.Eng. Ahmed Said
	* Chem. Amr El Shafey
	* Dr. Abou El Ftouh Abd El Hakem
Authorized by	Prof. Dr. Mostafa Zaki Mostafa
	* The Supervisor of ceramics, Polymer and Solid Matter Department.
	Management Representative and Quality Assurance Manager.
Issue date	2/11/2022
Condition of Test & Issue	<i>The test speciemen was conditioned at 23 °C with a humidity of 60 % and the needed calibrations as well as balancing of the all used machines were always done .</i>





NATIONAL RESEARCH CENTRE
TAHRIR St. DOKKI, CAIRO, EGYPT
Central Unit For Analysis And
Scientific Services (CUASS)
Material Test Lab.

المركز القومي للبحوث

الدقى . القاهرة . جمهورية مصر العربية
وحدة التحاليل والخدمات العلمية المركزية
معمل اختبار المواد



To / CHEMA FOAM CO.

Dear Sir.,

With correspondence to your request dated 25/9/2022 concerning the testing sample of Chema tile grouting , according to EN 13888 , We would like to inform you that the all following needed tests were carried out which namely:

- 1- Flexural strength test after 28 days dry storage according to EN 12808-3**
- 2- Compressive strength test after 28 days dry storage according to EN 12808-3**
- 3- Abrasion resistance test according to EN 12808-2**
- 4- Shrinkage test according to EN 12808-4**
- 5- Water absorption test after 30min according to EN 12808-5**
- 6- Water absorption test after 4hrs according to EN 12808-5**

We would like to inform you that the needed test was carried out taking into consideration the following conditions :

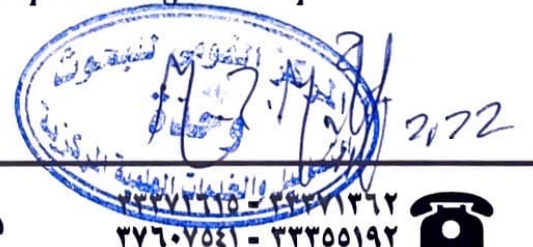
1- In all mechanical properties GALDABINI – QUASAR 600 – Made In Italy Universal Testing Machine was used This type has a self calibration , zero adjusting and automatic balance , which are done daily before testing or during testing this testing instrument is accompanied by a highly reliable system for evaluating the mechanical properties .

2-Measuring drum of sensitivity ± 0.01 mm was used for dimensions evaluation.

3- Weighing Balance with tolerance + 0.0001 g was used in determining the weights .

4- All used Machineries and apparatuses were calibrated periodically

The following tables give the obtained results representing the sample delivered from your company .



شارع التحرير - الدقى - القاهرة

مباشر ٣٣٣٨٧٨٠٣

وفاكس ١٨١٠
١٤٢٤

داخلى ٣٣٣٧١٣٦٢
٣٧٦٠٧٥٤١ - ٣٣٣٥٥١٩٢

٣٧٦٠٧٥٤١ - ٣٣٣٥٥١٩٢



E-mail: nrc1302a@yahoo.com

Test results on a sample of Chema tile grouting

according to EN 13888

Delivered from CHEMA FOAM CO.

1- Flexural strength test after 28 days dry storage

according to EN 12808-3

No.	Flexural strength (N/mm ²)	The mean value (N/mm ²)	EN 13888 limit (N/mm ²)
1	2.93	2.84	≥ 2.5
2	2.75		
3	2.84		
4	2.77		
5	2.90		

2- Compressive strength test after 28 days dry storage

according to EN 12808-3

No.	Compressive strength (N/mm ²)	The mean value (N/mm ²)	EN 13888 limit (N/mm ²)
1	22.78	20.74	> 15
2	21.01		
3	20.33		
4	19.79		
5	19.81		

2

Test results on a sample of Chema tile grouting

according to EN 13888

Delivered from CHEMA FOAM CO.

3- Abrasion resistance test according to EN 12808-2

<i>Revolutions no.</i>	<i>Volume of removed material (mm³)</i>	<i>EN 13888 limit (mm³)</i>
50	1821	< 2000

4- Shrinkage test according to EN 12808-4

<i>No.</i>	<i>Shrinkage (mm/m)</i>	<i>The mean value (mm/m)</i>	<i>EN 13888 limit (mm/m)</i>
1	2.32	2.28	< 3
2	2.27		
3	2.25		

Test results on a sample of Chema tile grouting

according to EN 13888

Delivered from CHEMA FOAM CO.

5- Water absorption test after 30min according to EN 12808-5

No.	Water absorption (%)	The mean value (%)	EN 13888 limit (%)
1	4.93	4.90	≤ 5
2	4.88		
3	4.87		
4	4.99		
5	4.81		

6- Water absorption test after 4hrs according to EN 12808-5

No.	Water absorption (%)	The mean value (%)	EN 13888 limit (%)
1	9.87	9.47	≤ 10
2	9.07		
3	9.13		
4	9.49		
5	9.81		



1/ 2022



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*This report was given to you representing only the results for the testing sample of Chema tile grouting , according to EN 13888 , Delivered from CHEMA FOAM CO. , These results and conclusions were given to you without any responsibility on **THE CERAMICS, POLYMERS AND SOLID MATTER DEP.** of **THE MATERIAL TEST LAB** in **THE NATIONAL RESEARCH CENTRE** for pick up the samples to be tested .*

**Head of Director of The Board of Central Department
for Scientifical Analysis and Tests**

&

SUPERVISOR 2
**OF CERAMICS, POLYMER AND
SOLID MATTER DEPARTMENT**

PROF.DR. MOSTAFA ZAKI MOSTAFA

11 2072

