



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 و الخدمات العلمية المركزية
معمل اختبار المواد



Test Report

Report No.

MO1 8444 04 2022

Client

Tri-chem Construction chemicals

Authority & date

Request Orders 28/4/2022

Items Tested

TRI - FLOOR 1010

Results

The detailed test results are given on the following pages of this report (5 pages) .

Report Typist

* Mis. Naglaa Mohamed-Sara Abdel Reheam
Noha Samir

Test carried by

* 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

19/5/2022

Condition of Test
& Issue

The test specimen 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 .

شارع التحرير - الدقى - القاهرة

٣٣٣٨٧٨٠٣

مباشر

١٨١٠

داخلى

٣٣٣٧١٦١٥ - ٣٣٣٧١٣٦٢

فاكس

١٤٢٤

٣٧٦٠٧٥٤١ - ٣٣٣٥٥١٩٢



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To / Tri-chem Construction chemicals

Dear Sir.,

With correspondence to your request dated 28/4/2022 concerning the testing sample of TRI - FLOOR 1010 , We would like to inform you that the all following needed tests were carried out which namely:

- 1- Bond strength test to concrete according to ASTM D4541
- 2- Hardness test (Shore D) according to ASTM D2240
- 3- Compressive strength test according to ASTM C579
- 4- Flexural strength test according to ASTM C580
- 5- Tensile strength Test according to ASTM D638

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 $\pm 0.01\text{mm}$ was used for dimensions evaluation.
- 3- On heating a Memmert West Germany oven was used .
- 4- Weighing Balance with tolerance $+ 0.0001\text{ g}$ was used in determining the weights .
- 5- Braive Instruments
- 6- 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 ١٨١٠ داخلى
فاكس ٣٣٣٨٧٨٠٣ ١٤٢٤

٣٣٣٧١٦١٥ - ٣٣٣٧١٣٦٢
٣٧٦٠٧٥٤١ - ٣٣٣٥٥١٩٢



E-mail : nrc1302a@yahoo.com

Test results on a sample of TRI - FLOOR 1010

Delivered from Tri-chem Construction chemicals

1- Bond strength test to concrete according to ASTM D4541

No.	Bond strength (N/mm ²)	Mean (N/mm ²)
1	1.27	1.33 Concrete Failure
2	1.33	
3	1.35	
4	1.29	
5	1.39	

2- Hardness test (Shore D) according to ASTM D2240

No.	Hardness (Shore D)	The mean value
1	81	82
2	82	
3	82	
4	82	
5	82	

3- Compressive strength test according to ASTM C579

No.	Compressive strength (N/mm ²)	The mean value (N/mm ²)
1	66.71	66.65
2	67.83	
3	65.01	
4	66.92	
5	66.77	





Test results on a sample of TRI - FLOOR 1010

Delivered from Tri-chem Construction chemicals

4- Flexural strength test according to ASTM C580

No.	Flexural strength (N/mm ²)	Mean (N/mm ²)
1	31.32	30.09
2	31.61	
3	30.31	
4	29.33	
5	29.03	

5- Tensile strength Test according to ASTM D638

No.	Tensile strength (N/mm ²)	The mean value (N/mm ²)
1	17.75	16.96
2	17.09	
3	16.82	
4	16.91	
5	16.23	





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This report was given to you representing only the results for the testing sample of TRI - FLOOR 1010 , Delivered from Tri-chem Construction chemicals , 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 Scientific Analysis and Tests
&**

**SUPERVISOR ¹⁹
OF CERAMICS, POLYMER AND
SOLID MATTER DEPARTMENT**

PROF.DR. MOSTAFA ZAKI MOSTAFA



شارع التحرير - الدقى - القاهرة

مباشر ١٨١٠
٣٣٣٨٧٨٠٣ فاكس ١٤٢٤

داخلي ٣٣٣٧١٦١٥ - ٣٣٣٧١٣٦٢

٣٧٦٠٧٥٤١ - ٣٣٣٥٥١٩٢



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