



Test Report

Report No.	<u>MO1 6942 03 2025</u>
Client	DIAR special works
Authority & date	Request Orders 12/3/2025
Items Tested	<u>VOGA FLOOR 150 , produced by VOGEL SYSTEM</u>
Results	<i>The detailed test results are given on the following pages of this report (5 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	17/4/2025
Condition of Test & Issue	<i>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 .</i>





To / DIAR special works

Dear Sir.,

With correspondence to your request dated 12/3/2025 concerning the testing sample of VOGA FLOOR 150 , produced by VOGEL SYSTEM , We would like to inform you that the all following needed tests were carried out which namely:

- 1- Compressive strength test according to ASTM C579
- 2- Flexural strength test according to ASTM C580
- 3- Tensile strength test according to ASTM D638
- 4- Pull-off test to concrete according to ASTM D7234
- 5- Hardness test (Shore D) according to ASTM D2240

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 .





Test results on a sample of VOGA FLOOR 150

produced by VOGEL SYSTEM

Delivered from DIAR special works

1- Compressive strength test according to ASTM C579

No.	Compressive strength (N/mm ²)	The mean value (N/mm ²)
1	77.17	
2	80.53	
3	79.92	79.01
4	78.01	
5	79.43	

2- Flexural strength test according to ASTM C580

No.	Flexural strength (N/mm ²)	The mean value (N/mm ²)
1	43.07	
2	42.53	
3	45.73	44.02
4	44.13	
5	44.66	

3- Tensile strength test according to ASTM D638

No.	Tensile strength (N/mm ²)	The mean value (%)
1	17.93	
2	19.73	
3	19.01	19.12
4	18.66	
	20.27	

17





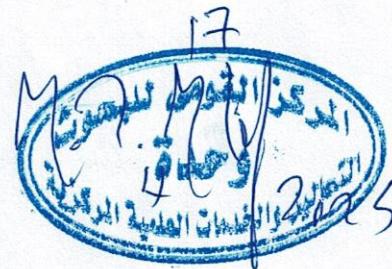
4- Pull-off test to concrete according to ASTM D7234
 on a sample of *VOGA FLOOR 150* - produced by *VOGEL SYSTEM*

Delivered from DIAR special works

No.	Bond strength (N/mm ²)	The mean value (N/mm ²)	Failure mode
1	2.11		
2	1.97		
3	1.85	1.97	A
4	1.94		
5	1.99		

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

No.	Hardness (Shore D)	Mean
1	90	
2	91	
3	90	
4	90	90
5	91	





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

المركز القومى للبحوث
الدقى . القاهرة . جمهورية مصر العربية
وحدة التحاليل والخدمات العلمية المركزية
معلم اختبار المواد



This report was given to you representing only the results for the testing sample of VOGA FLOOR 150 , produced by VOGEL SYSTEM , Delivered from DIAR special works , 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 Depertment
for Scientifical Analysis and Tests**

&

**SUPERVISOR ١٧
OF CERAMICS, POLYMER AND
SOLID MATTER DEPARTMENT**

PROF.DR. MOSTAFA ZAKI MOSTAFA

٤ ٢٢٥