



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

المركز القومي للبحوث

الدقي . القاهرة . جمهورية مصر العربية
وحدة التحليل و الخدمات العلمية المركزية
معمل اختبار المواد



Test Report

Report No.	MOI 3997 03 2024
Client	Fly construction chemicals (Millennium-Misr)
Authority & date	Request Orders 5/3/2024
Items Tested	Fly WP 07 flex
Results	The detailed test results are given on the following pages of this report (5 pages).
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.
Condition of Test & Issue	28/4/2024 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 .





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معمل اختبار المواد

To / Fly construction chemicals (Millennium-Misr)

Dear Sir.,

With correspondence to your request dated 5/3/2024 concerning the sample of Fly WP 07flex , we would like to inform you that the all following needed test was carried out which namely :

- 1- Compressive Strength Test after 28days according to ASTM C1 09
- 2- Flexural Strength Test after 28days according to ASTM C580
- 3- Adhesive Strength Test after 28days according to ASTM C321
- 4- Water Permeability test according to EN 12390-8
- 5- Elongation test according to ASTM C307

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-Testing Machine was used This type of GALDABINI 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+0.01mm was used for dimensions evaluation.
- 3-Water Permeability tester model 55CO24613Controls made in Italy
- 4-The all used Machinery and the apparatus were calibrated periodically.





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Tests Results

On a sample of Fly WP 07 flex

Delivered from Fly construction chemicals (Millennium-Misr)

(1) Compressive St. Test after 28days according to ASTM C109.

No.	Compressive St. (N/mm ²)	The mean Value (N/mm ²)
1	32.3	32.12
2	33.4	
3	32.8	
4	30.18	
5	31.88	

(2) Flexural St. Test after 28days according to ASTM C580

No.	Flexural St. (N/mm ²)	The mean Value (N/mm ²)
1	12.92	11.9
2	11.61	
3	11.95	
4	11.79	
5	11.21	

(3) Adhesive St. Test after 28days according to ASTM C321

No.	Adhesive St. (N/mm ²)	The mean Value (N/mm ²)
1	2.21	2.27
2	2.32	
3	2.45	
4	2.33	
5	2.06	



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Test results on a sample of Fly WP 07 flex

Delivered from Fly Construction chemicals (Millennium-Misr)

(4) Water permeability test according to CRD C48

- * The sample un permeable to water pressure up to 3 bar .
- * The sample un permeable to water pressure up to 1 bar in negative direction.

(5) Elongation test according to ASTM C307

No.	Flexural strength (%)	Mean (%)
1	23.15	22.18
2	21.32	
3	22.07	



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This report was given to you representing only the results for the delivered sample of Fly WP 07 flex , delivered form Fly construction chemicals (Millennium-Misr) . 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
SUPER VISOR OF Material Test Lab

PROF.DR. MOSTAFA ZAKI MOSTAFA



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