CEMA GROUP

Version Feb 2024

Foamina

FOAMINA DECORATION



- An outdoor decoration product that is lightweight, Thermal-insulator, good waterproof and moisture insulation, easy to install, provide a multi-designs that achieve the creative space of the architectural designer for ease of formation, impact resistant material, which facilitates its maintenance and achieves longer sustainability of the facility.

Technical Data

Test Name	Specification Code	Unit	Values
Impact Resistance	EN 13497	Joule	No damage or effect at 10 J : 1000g
			No damage or effect at 20 J : 2000g
Liquid Water Permeability	EN 1062 PART3	$(kg/m^2.h^{0.5})$	0.256
Tensile bond strength of base coat	EN 13494	(Kpa)	337

Foamina

PRODUCT PROPERTIES & KEY FEATURES:


Variety in design


Light Weight


Thermal Insulation & UV resistance


Water Insulation


Soundproof


Easily Cutting


Anti flammability & Fire Resistance


Saving In Time


Saving Energy


High Compressive Strength


Impact resistance


ECO Friendly

PRODUCT BENEFITS:

- Creativity in design is now available.
- High variety of designs.
- Thermal insulator & weather factors resistant.
- Rot & discoloration resistant.
- Anti-humidity effect.
- Fire Resistant & Better protection of high heat temperatures.
- Light weight product & easy to handle.
- Easy to clean & easy to maintain.
- Fast delivery & fast installation.
- Sustainable paint layer directly applied.
- Saving the cost of painting by 40%.
- High adhesion strength to the paint layer.
- Putty layer dispense.
- Up to 60% cost saving for Exterior wall cladding.
- Energy savings (low energy needed for heating & cooling).
- Extremely low water absorption.
- High resistance to mechanical stress.
- Excellent adhesion to the substrate.
- Exceptional elasticity.

CEMA GROUP

Foamina

AREA OF USE:

Exterior Decoration.

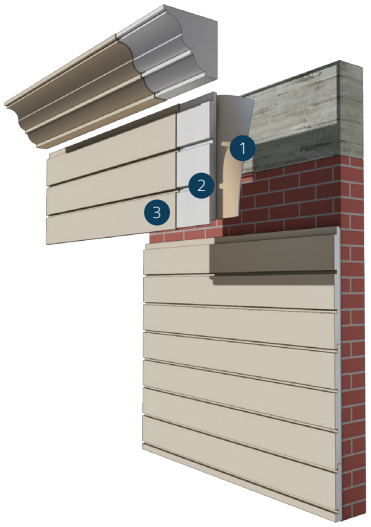
Interior Decoration.

Home Art & Antiques.



FACADE FINISHING SYSTEM:

1. ADHESIVE LAYER.
2. FLAME RETARDENT FOAM.
3. ANTI-CRACKS & PROTECTION LAYER (MESHLESS).



CHEMA GROUP

Foamina

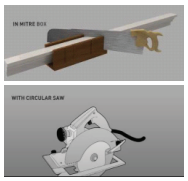
STEP BY STEPTO HAVE A PERFECT DECORATIVE FAÇADE

Step 1



CUT THE PIECE ACCORDING TO ANGLES.

YOU CAN USE THIS TOOLS FOR CUTTING.



Step 2



USE CHEMA ADHESIVE BY SPREADING ON THE PIECE.

ADHESIVE MORTAR READY TO USE BY ADDING WATER ONLY.

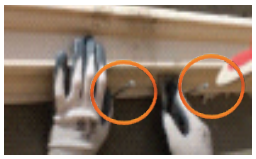


Step 3



FIX THE PIECE IN ITS PLACE.

YOU SHOULD USE BOLTS UNDER LINE TO ENSURE IT BE STRAIGHT;



Step 4



USE ANCHOR BOLTS FOR MECHANICAL INSTALLATION.



CHEMA GROUP

Step 5



REPAIR JOINT & COVER BOLTS BY FOAMINA COATING.

PROVIDED BY
CHEMA FOAM



Step 7



PREPARE SURFACE FOR PAINTING.

OUR RECOMMENDATIONS:

- FOAMINARECOMMEND YOU TO FILL THE JOINTS BY THE CHEMA ADHESIVE 102 -READ DATASHEETS FOR MORE DETAILS.



Foamina

CHEMA GROUP

19211

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Tel : (+202) 22 635 129 - 240 382 59
Fax : (+202) 22 609 332
11Obour Buildings - Salah Salem
Nasr City Cairo - Egypt.

FACTORY
Tel : (+20554) 501243
Fax : (+20554) 501243
10th of Ramadan
B4 industrial zone

TÜV NORD EGYPT S.A.E. ISO 9001

Since 1987

environmentally FRIENDLY

OFFICIAL TESTS

Egyptian Organization for
Standardization &Quality (EOS)

الهيئة المصرية العامة
للمواصفات والجودة

Quality control center
General department for testing
Chemical products, building&
Construction material

(Test results report for coated expanded polystyrene For coated EPS Foam)

EOS C2/3-1

Sample submitting entity : Chema Foam.
Date of Sample submission : 23/1/2024
Submitted sample : Expanded polystyrene Elements coated with protective layer of chemacoat acrylic based Coating (Foamina)
Assigned Lab. : Construction & Material Lab.
Code No : k/m/12698/1/2024
No. of testing results report Pages: 1 page.
Customer requirements : Analysis according to EN 13497- EN 1062-3- EN 13494
Date of report issuance : 7/2/2024
Inspection and testing have been conducted on the sample submitted by the customer according to EN 13497- EN 1062PART3- EN 13494
and the results were as follow :-

Test	Result
1 - The resistance to impact of the material for external facade thermal insulation systems: - At 10 J: 1000g - At 20 J: 2000g	 No damaging or affecting the protective layer of coating. No damaging or affecting the protective layer of coating.
2 - Liquid water permeability ($Kg/m^2.h^{0.5}$)	0.256
3 - The tensile bond strength of the base coat (KP_a)	337

It is noteworthy that the testing results of this sample is not representing anything except itself and it is not permitted to rely on this testing results for approval of quantitative production or for approval if any commodities in tenders or purchasing practices or in exporting. This testing results report could not be authorized as conformity certificate.

Ramadan Hehi

الهيئة المصرية العامة للمواصفات والجودة
التاريخ ٧ / ٢ / ٢٠٢٤
رقم الصادر ٤٢٥ مرفقات
امضاء

General Manager
7/2/2024
(Ch / Hesham Mostafa Mohamed)

16 Tadreeb El-Modarrebeen St., Ameriya. CAIRO - EGYPT
Departments Service :22845522 / 22845524
Fax:22845501 / 22845504
E-mail :eos@idsc.net.eg

١٦ شارع تدريب المدربين - الأميرية - القاهرة
خدمة الإدارات: ٢٢٨٤٥٥٢٢ / ٢٢٨٤٥٥٢٤
الفاكس : ٢٢٨٤٥٥٠١ / ٢٢٨٤٥٥٠٤

Egyptian Organization for
Standardization &Quality (EOS)

الهيئة المصرية العامة
للمواصفات والجودة

مركز ضبط جودة الإنتاج الصناعي
الإدارة العامة لاختبارات المنتجات الكيماوية و التشييد

" تقرير نتائج اختبار عينة " مادة عازلة بوليسترين EPS foam "
EOS C2/3-1

الجهة الوارد منها العينة :	كيمافوم	تاريخ دخول العينة :	٢٠٢٤/١/٢٣
العينة المقدمة :	Expanded polystyrene Elements coated *with protective layer of chemacoat acrylic based Coating (Foamina)*	المعمل المختص :	مواد البناء
الرقم كودي / السري :	ك/م/ ٢٠٢٤/١/١٢٦٩٨	عدد صفحات التقرير :	١
متطلبات العميل :	إجراء الاختبارات طبقا EN 13497- EN 1062PART3- EN 13494	تاريخ إصدار التقرير :	٢٠٢٤/٢/٧

تم إجراء الفحوص و الاختبارات علي العينة المقدمة بمعرفتكم طبقاً لـEN 13497- EN 1062PART3- EN 13494
وكانت نتائج الاختبارات كالتالي:

الاختبار	النتيجة
١- مقاومة الصدم لانظمة العزل الخارجية: - عند ١٠جول: ١٠٠٠ جرام - عند ٢٠ جول: ٢٠٠٠ جرام	لم يسبب ضررا أو تأثيرا على طبقة الحماية لم يسبب ضررا أو تأثيرا على طبقة الحماية
٢- نفاذية الماء (كجم/متر^{٢}.ساعة^{٠,٥})	٠,٢٥٦
٣- قوة شد طبقة الحماية(كيلوباسكال)	٣٣٧

هذا وتجدر الإشارة إن نتائج اختبارات هذه العينة لا تمثل إلا نفسها ولا يعتد بها لاعتماد إنتاج كمي أو في الممارسات أو التوريدات أو التصدير ولا يعتد بها كشهادة مطابقة.

مدير الإدارة

المدير العام
(أ.د / هشام مصطفى محمد)

الهيئة المصرية العامة للمواصفات والجودة
التاريخ ١٨/٢/٢٠٢٤
رقم الصادر ٤٩٩ مرفقات
المختص

16 Tadreeb El-Modarrebeen St., Ameriya. CAIRO - EGYPT
Departments Service :22845522 / 22845524
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١٦ شارع تدريب المدربين - الأميرية - القاهرة
خدمة الإدارات: ٢٢٨٤٥٥٢٢ / ٢٢٨٤٥٥٢٤
الفاكس : ٢٢٨٤٥٥٠١ / ٢٢٨٤٥٥٠٤

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

المركز القومى للبحوث
الدقى . القاهرة . جمهورية مصر العربية
وحدة التحاليل و الخدمات العلمية المركزية
معمل اختبار المواد

Test Report

Report No.	***MO1 3861 02 2024***
Client	***CHEMA FOAM CO.***
Authority & date	*Request Orders 21/2/2024*
Items Tested	***Chema adhesive 102 white***
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	*4/4/2024*
Condition of Test & Issue	*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 .*

شارع التحرير - الدقى - القاهرة
مباشر ٣٣٣٨٧٨٠٣ فاكس
داخلى ١٨١٠ ١٤٢٤
٣٣٣٧١٣٦٢ - ٣٣٣٧١٦١٥
٣٣٣٥٥١٩٢ - ٣٧٦٠٧٥٤١
E-mail : nrc1302a@yahoo.com

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Central Unit For Analysis And
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الدقى . القاهرة . جمهورية مصر العربية
وحدة التحاليل و الخدمات العلمية المركزية
معمل اختبار المواد

To / CHEMA FOAM CO.

Dear Sir.,

With correspondence to your request dated 21/2/2024 concerning the testing sample of Chema adhesive 102 white , We would like to inform you that the all following needed tests were carried out which namely:

1- Initial tensile adhesion strength test after 28 days (Regular condition) - according to EN 12004-2-2017

2- Tensile adhesion strength test after 20 days water immersion according to EN 12004-2-2017

3- Tensile adhesion strength test after 14 days heat ageing at 70°C according to EN 12004-2-2017

4- Open time test according to EN 12004-2-2017

5- Vertical slip test according to EN 12004-2-2017

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 ± 0.01mm was used for dimensions evaluation.

3- On heating a Memmert West Germany oven was used .

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

5- JSR digital water bath model JSWB - 30T made in Korea .

5- 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 فاكس
داخلى ١٨١٠ ١٤٢٤
٣٣٣٧١٣٦٢ - ٣٣٣٧١٦١٥
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الدقى . القاهرة . جمهورية مصر العربية
وحدة التحاليل و الخدمات العلمية المركزية
معمل اختبار المواد

Test results on a sample of Chema adhesive 102 white

Delivered from CHEMA FOAM CO.

1- Initial tensile adhesion strength test after 28 days

(Regular condition) - according to EN 12004-2-2017

No.	*Results (N/mm2)*	*The mean value (N/mm2)*	*EN 12004 C2 limit (N/mm2)*
1	*1.32*	*1.31*	*≥ 1.0*
2	*1.27*		
3	*1.29*		
4	*1.31*		
5	*1.35*		

** Failure pattern CF-A*

2- Tensile adhesion strength test after 20 days water immersion according to EN 12004-2-2017

No.	*Results (N/mm2)*	*The mean value (N/mm2)*	*EN 12004 C2 limit (N/mm2)*
1	*1.21*	*1.16*	*≥ 1.0*
2	*1.17*		
3	*1.15*		
4	*1.13*		
5	*1.12*		

** Failure pattern CF-A*

شارع التحرير - الدقى - القاهرة
مباشر ٣٣٣٨٧٨٠٣ فاكس
داخلى ١٨١٠ ١٤٢٤
٣٣٣٧١٦١٥ - ٣٣٣٧١٣٦٢
٣٣٣٥٥١٩٢ - ٣٧٦٠٧٥٤١
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معمل اختبار المواد

Test results on a sample of Chema adhesive 102 white

Delivered from CHEMA FOAM CO.

3- Tensile adhesion strength test after 14 days heat ageing at 70°C

according to EN 12004-2-2017

No.	*Results (N/mm2)*	*The mean value (N/mm2)*	*EN 12004 C2 limit (N/mm2)*
1	*1.11*	*1.11*	*≥ 1.0*
2	*1.12*		
3	*1.09*		
4	*1.10*		
5	*1.13*		

** Failure pattern CF-A*

5- Open time test according to EN 12004-2-2017

Open time = 47 min

EN 12004 E limit ≥ 30min

6- Vertical slip test according to EN 12004-2-2017

Vertical slip = 0.32 mm

EN 12004 T limit ≤ 0.5mm

شارع التحرير - الدقى - القاهرة
مباشر ٣٣٣٨٧٨٠٣ فاكس
داخلى ١٨١٠ ١٤٢٤
٣٣٣٧١٣٦٢ - ٣٣٣٧١٦١٥
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وحدة التحاليل و الخدمات العلمية المركزية
معمل اختبار المواد

This report was given to you representing only the results for the testing Sample of Chema adhesive 102 white , 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 Depertment
for Scientifical Analysis and Tests
&
SUPERVISOR
OF CERAMICS, POLYMER AND
SOLID MATTER DEPARTMENT

PROF.DR. MOSTAFA ZAKI MOSTAFA

شارع التحرير - الدقى - القاهرة
مباشر ٣٣٣٨٧٨٠٣ فاكس
داخلى ١٨١٠ ١٤٢٤
٣٣٣٧١٦١٥ - ٣٣٣٧١٣٦٢
٣٣٣٥٥١٩٢ - ٣٧٦٠٧٥٤١
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وحدة التحاليل و الخدمات العلمية المركزية
معمل اختبار المواد

Test Report

Report No.	***MO1 3855 02 2024***
Client	***CHEMA FOAM CO.***
Authority & date	*Request Orders 21/2/2024*
Items Tested	***Chema adhesive 102 grey***
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	*4/4/2024*
Condition of Test & Issue	*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 .*

شارع التحرير - الدقى - القاهرة
مباشر ٣٣٣٨٧٨٠٣
فاكس
داخلى ١٨١٠
١٤٢٤
٣٣٣٧١٣٦٢ - ٣٣٣٧١٦١٥
٣٣٣٥٥١٩٢ - ٣٧٦٠٧٥٤١
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وحدة التحاليل و الخدمات العلمية المركزية
معمل اختبار المواد

To / CHEMA FOAM CO.

Dear Sir.,

With correspondence to your request dated 21/2/2024 concerning the testing sample of Chema adhesive 102 grey , We would like to inform you that the all following needed tests were carried out which namely:

1- Initial tensile adhesion strength test after 28 days (Regular condition) - according to EN 12004-2-2017

2- Tensile adhesion strength test after 20 days water immersion according to EN 12004-2-2017

3- Tensile adhesion strength test after 14 days heat ageing at 70°C according to EN 12004-2-2017

4- Open time test according to EN 12004-2-2017

5- Vertical slip test according to EN 12004-2-2017

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 ± 0.01mm was used for dimensions evaluation.

3- On heating a Memmert West Germany oven was used .

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

5- JSR digital water bath model JSWB - 30T made in Korea .

5- All used Machineries and apparatuses were calibrated periodically

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

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مباشر ٣٣٣٨٧٨٠٣ فاكس
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٣٣٣٧١٣٦٢ - ٣٣٣٧١٦١٥
٣٣٣٥٥١٩٢ - ٣٧٦٠٧٥٤١
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معمل اختبار المواد

Test results on a sample of Chema adhesive 102 grey

Delivered from CHEMA FOAM CO.

3- Tensile adhesion strength test after 14 days heat ageing at 70°C

according to EN 12004-2-2017

No.	*Results (N/mm2)*	*The mean value (N/mm2)*	*EN 12004 C2 limit (N/mm2)*
1	*1.17*	*1.16*	*≥ 1.0*
2	*1.18*		
3	*1.13*		
4	*1.15*		
5	*1.17*		

** Failure pattern CF-A*

5- Open time test according to EN 12004-2-2017

Open time = 46 min

EN 12004 E limit ≥ 30min

6- Vertical slip test according to EN 12004-2-2017

Vertical slip = 0.35 mm

EN 12004 T limit ≤ 0.5mm

شارع التحرير - الدقى - القاهرة
٣٣٣٨٧٨٠٣ مباشر
١٨١٠ داخلى
١٤٢٤ فاكس
٣٣٣٧١٦١٥ - ٣٣٣٧١٣٦٢
٣٣٣٥٥١٩٢ - ٣٧٦٠٧٥٤١
E-mail : nrc1302a@yahoo.com

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وحدة التحاليل و الخدمات العلمية المركزية
معمل اختبار المواد

Test results on a sample of Chema adhesive 102 grey

Delivered from CHEMA FOAM CO.

1- Initial tensile adhesion strength test after 28 days

(Regular condition) - according to EN 12004-2-2017

No.	*Results (N/mm2)*	*The mean value (N/mm2)*	*EN 12004 C2 limit (N/mm2)*
1	*1.41*	*1.36*	*≥ 1.0*
2	*1.37*		
3	*1.33*		
4	*1.35*		
5	*1.34*		

** Failure pattern CF-A*

2- Tensile adhesion strength test after 20 days water immersion according to EN 12004-2-2017

No.	*Results (N/mm2)*	*The mean value (N/mm2)*	*EN 12004 C2 limit (N/mm2)*
1	*1.30*	*1.25*	*≥ 1.0*
2	*1.21*		
3	*1.25*		
4	*1.23*		
5	*1.27*		

** Failure pattern CF-A*



شارع التحرير - الدقى - القاهرة
مباشر ٣٣٣٨٧٨٠٣
داخلى ١٨١٠
فاكس ١٤٢٤
٣٣٣٧١٣٦٢ - ٣٣٣٧١٦١٥
٣٣٣٥٥١٩٢ - ٣٧٦٠٧٥٤١
E-mail : nrc1302a@yahoo.com

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

المركز القومى للبحوث
الدقى . القاهرة . جمهورية مصر العربية
وحدة التحاليل و الخدمات العلمية المركزية
معمل اختبار المواد

This report was given to you representing only the results for the testing Sample of Chema adhesive 102 grey, 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 Depertment for Scientifical Analysis and Tests
&
SUPERVISOR OF CERAMICS, POLYMER AND SOLID MATTER DEPARTMENT

PROF.DR. MOSTAFA ZAKI MOSTAFA

شارع التحرير - الدقى - القاهرة
مباشر ٣٣٣٨٧٨٠٣ فاكس
داخلى ١٨١٠ ١٤٢٤
٣٣٣٧١٦١٥ - ٣٣٣٧١٣٦٢
٣٣٣٥٥١٩٢ - ٣٧٦٠٧٥٤١
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وحدة التحاليل والخدمات العلمية المركزية
معمل اختبار المواد

Test Report

Report No.	***MO1 3645 07 2020***
Client	***CHEMA FOAM Co.***
Authority & date	*Request Orders 27/7/2020*
Items Tested	***Sample of EPS white foam thickness 50mm***
Results	*The detailed test results are given on the following pages of this report (5 pages) .*
Report Typist	**** Mis. Sara Abdel Reheam – Naglaa Mohamed - Noha Samir***
Test carried	**** Mis . Fatma El – Zahraa Fikry***
	**** H.Eng. Ahmed Said***
	**** Chem. Amr El Shafey***
supervised by	**** 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	*13/8/2020*
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*

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داخلى ١٨١٠ ١٤٢٤
٣٣٣٧١٦١٥_٣٣٣٧١٣٦٢
٣٣٣٥٥١٩٢_٣٧٦٠٧٥٤١
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وحدة التحاليل والخدمات العلمية المركزية
معمل اختبار المواد

To / CHEMA FOAM Co.

Dear Sir.,

With correspondence to your request dated 27/7/2020 concerning the testing samples of EPS white foam thickness 50mm , We would like to inform you that the all following needed tests were carried out which namely:-

1- Density Test according to ASTM D1622

2- Compressive strength at 10% deflection according to ASTM D1621

3- Flexural Strength Test according to ASTM C203

4- Water absorption test according to ASTM C272

We would like to inform you that the all needed tests were 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- On heating a Memmert West Germany oven was used .

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

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

5-The all used Machinery and the apparatus were calibrated periodically

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

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وحدة التحاليل والخدمات العلمية المركزية

(2/5-3645)

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مباشر ٣٣٣٨٧٨٠٣ وفاكس
داخلى ١٨١٠ ١٤٢٤
٣٣٣٧١٣٦٢ - ٣٣٣٧١٦١٥
٣٣٣٥٥١٩٢ - ٣٧٦٠٧٥٤١
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الدقى . القاهرة . جمهورية مصر العربية
وحدة التحاليل والخدمات العلمية المركزية
معمل اختبار المواد

Density Test according to ASTM D1622

On a sample of EPS white foam thickness 50mm Density 25 Kg/m^3

Delivered from CHEMA FOAM Co.

No.	*Density (Kg/m3)*	*The mean (Kg/m3)*
1	*25.91*	
2	*26.17*	
3	*25.93*	*25.78*
4	*25.23*	
5	*25.67*	

Compressive strength at 10% deflection according to ASTM D1621

No.	*Compressive strength (Kpa)*	*The mean (Kpa)*
1	*165.46*	
2	*166.33*	
3	*168.19*	*167.3*
4	*167.11*	
5	*169.41*	

Flexural strength Test according to ASTM C203

No.	*Flexural strength (Kpa)*	*The mean (Kpa)*
1	*347.21*	
2	*349.19*	
3	*353.61*	*348.46*
4	*352.08*	
5	*340.21*	

المركز القومى للبحوث
وحدة التحاليل والخدمات العلمية المركزية

(3/5-3645)

شارع التحرير - الدقى - القاهرة
مباشر ٣٣٣٨٧٨٠٣ وفاكس
داخلى ١٨١٠ ١٤٢٤
٣٣٣٧١٦١٥ - ٣٣٣٧١٣٦٢
٣٣٣٥٥١٩٢ - ٣٧٦٠٧٥٤١
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Water absorption test according to ASTM C272

On a sample of EPS white foam thickness 50mm Density 25 Kg/m^3

Delivered from CHEMA FOAM Co.

No.	*Volume change (%)*	*The mean (%)*
1	*0.691*	
2	*0.711*	
3	*0.682*	*0.6948*
4	*0.706*	
5	*0.684*	



(4/5-3645)

٣٣٣٧١٣٦٢_٣٣٣٧١٦١٥
٣٣٣٥٥١٩٢_٣٧٦٠٧٥٤١
داخلى ١٨١٠
١٤٢٤
مباشر ٣٣٣٨٧٨٠٣
وفاكس
شارع التحرير - الدقى - القاهرة
E-mail: nrc1302a@yahoo.com

مشروع مزارين ٢ حصة القوات المسلحة ٥٧ %

الهيئة الهندسية للقوات المسلحة	الاستشارى معمارى	الشركة المنفذة للأعمال

A.G.A.P CONSULT
ALEX GROUP FOR ARCHITECTURE & PLANNING
ARCH. MOHAMED ATTIA ABDUSHOSHA

Inspection material Request
طلب فحص خامات

IR #: رقم طلب الفحص :		Location منطقة العمل		Date التاريخ	05/02/2024	
Type of work / نوع العمل	مساحة Survey ☐	ميكانيكا .MECH ☐	كهرباء .ELEC ☐	معمارى ARCH ■	انشائى Civil ☐	اخرى Other ☐
Attachments: المرفقات	data sheet					
Description: وصف العمل	طلب اعتماد خامة EPS من شركة ايجيكو					

توقيع مهندس المقاول / Signature	
اسم / NAME	كريم طارق
توقيع / SIGNATURE	

موافقة مهندس الاستشارى / Approval					
A	☐	معتمد Approved	C	☐	يعاد التقديم مرة اخرى بعد اتمام الملاحظات Resubmit
B	☐	معتمد مع ملاحظات - يمكن للمقاول ان يستمر بناءا على الملاحظات Approved with comments	D	☐	الطلب مرفوض Reject
الأسم		توقيع / SIGNATURE			

Comments ملاحظات/

مدير المشروع المقاول		مدير المشروع الاستشارى	

Received for M.Y. 12/1/2025

11 JAN 2025 RECEIVED

DMA DESIGN | ENGINEERING

ACE PROJECT MANAGEMENT
MOHARRAM BAKHOUM

Trans. No. ICO-MO-PARK-ALSHOROUK-DMA-ACEPM -TRA-0013 | Rev. No. (00) | Date 11-Jan-2025

PROJECT NAME I CITY October | OWNER MOV
CONTRACT NO MO-PARK | CONTRACTOR Al-Shorouk
ENGINEER DMA | SUB CONTRACTOR

FROM: DMA I CITY (Supervision) | TO ACEPM
SENDER Sameh Anbar (Resident Engineer) | ATT. Mahmoud Attiya (Project Manager)

WE ARE SENDING		SUBMITTED FOR re-submit
Design Drawings	Catalogue / Brochure	Approval
Shop Drawings	CD	Your Use
Specifications	Data Sheet	As Required
Schedule	Certificates	- Review & Comment
Samples	Guarantees & Warranties	
Change Order	Test Results	SUBMITTALS VIA
- Other Submittals - RFA	Prints	- Attached
		Courier
		E-mail
		Fax
		Others: ftp-link

DMA 16 JAN 25 RECEIVED

We enclose herewith the attachements identified below for your action, with expected response due date:

Ref : ICO-MO-PARK AL-SHOROUK-DMA-RFA-ARCH-003-REV.00
Subject : EPS Cornice and Decoratin Chema Group

REMARKS:

ALSHOROUK CONSTRUCTION COMPANY
19 JAN 2025
Received
I city oct project M.V

ACE PROJECT MANAGEMENT
MOHARRAM BAKHOUM
15 JAN 2025
RECEIVED

FROM :
Name: Sameh Anbar

DMA DESIGN | ENGINEERING
Signature Date: 12/1
Sign: ICOPSV
Date : 14/1/25

ACEPM Notes

Confirmed with Tek
15/1/2025

DISTRIBUTION TO	CC:	CC:

ACE PROJECT MANAGEMENT
MOHARRAM BAKHOUM

DMA
DESIGN | ENGINEERING

ALSHOROUK
CONSTRUCTION COMPANY

I-City October - Mountain View

Contractor Name: AL SHOROUK	REQUEST FOR ALTERNATIVE (RFA)	To : DMA

Contract : Mountain Park
Contractor : AL SHOROUK
Package No. : MV-NOCT-MB-24-B-46-1

RFA No.: ICO-MO PARK-ALSHOROUK-DMA-RFA-ARCH-0003
Rev.: 0
Date.: 8-Jan-2025

ALSHOROUK CONSTRUCTION COMPANY
I city oct project M.V

This submittal will not be reviewed unless the Contractor complies with the minimum submittal requirements of comparison sheets, product data and cost comparison as per the contract requirements.

PROPOSED ALTERNATIVE OR SUBSTITUTION:

☑ PRODUCT ☐ METHOD OF FABRICATION ☐ METHOD OF INSTALLATION ☐ DESIGN CHANGE

SPECIFIED PRODUCT: EPS CORNICA AND DECORATIN (CHEMA GROUP)
PROPOSED PRODUCT: EPS CORNICA AND DECORATIN (CHEMA GROUP)
SPEC. SECTION #: VOR PAGE #: ARTICLE #:
SPECIFIED MANUFACTURER:
PROPOSED MANUFACTURER:
LOCATION / AREA OF USAGE: ICO- MOUNTAIN PARK
PROGRAM ACTIVITY ID: PLANNED START: PLANNED FINISH:
BRIEF PRODUCT DESCRIPTION: EPS CORNICA AND DECORATIN (CHEMA GROUP)
Another supplier:
REASON FOR PROPOSED ALTERNATIVE OR SUBSTITUTION:

THE CONTRACTOR CERTIFIES AND UNDERTAKES THAT:

* Same warranty will be furnished for proposed alternative or substitution as for specified product.
* Same maintenance service and source of replacement parts, as applicable is available.
* Cost data as stated above is complete. Claims for additional costs or time related to accepted alternative or substitution which may subsequently become apparent are to be waived. Other costs to other disciplines and/or contractors shall be borne by the Contractor.
* Proposed alternative or substitution does not affect dimensions and functional clearances.
* The cost for all changes to design, including architectural or engineering design, detailing, and construction cost including authorities approvals, caused by the requested alternative or substitution shall be fully the responsibility of the contractor at no cost to the employer.
* Coordination, installation, and changes in the Work as necessary for accepted alternative or substitution will be complete in all respects.

ALSHOROUK CONSTRUCTION COMPANY
28 JAN 2025
SEND
I city oct project M.V

THE CONTRACTOR FURTHER ACKNOWLEDGES THAT APPROVAL FOR ALTERNATIVE/SUBSTITUTION DOES NOT WAIVE HIS OBLIGATIONS TO THE EMPLOYER AS PER THE CONTRACT.

THE CONTRACTORS REP: DATE/TIME:

REVIEWED AND COMMENTS BY DMA :

* Technical approved # out of Vendor list
* to be Considrate by (PCE - PM) for Cost assessment
* there is previous work for the materials provided
* Contractor must Submit Sample according to design drawing & approved (SD) For final approval

Signature: Date: 11-1-2025

REVIEWED AND APPROVAL BY Mountain view :

Commercial Director
Signature
Projects Senior Director
Signature

THE APPROVAL OF ANY ALTERNATIVE OR SUBSTITUTE PRODUCT/METHOD SHALL BE SOLELY AT THE DIRECTION OF THE ENGINEER AND SUCH APPROVAL SHALL IN NO WAY RELIEVE THE CONTRACTOR OF ANY OF HIS LIABILITIES AND OBLIGATIONS UNDER THE CONTRACT.
THIS APPROVAL DOES NOT ENTAIL ANY ADDITIONAL COST OR TIME.
This approval is exceptional for this job task and will not be applied to other jobs or projects unless approved for it separately.

RECEIVED BY DMA/ACE: DATE/TIME:
Distribution: ☑ Construction Manager ☑ QC Manager ☐ Contractor ☐ Others

ALSHOROUK CONSTRUCTION COMPANY
19 JAN 2025
Received
I city oct project M.V

DMA
08 JAN 2025
RECEIVED