



أول شركة مصنعة للألواح الكلادينج
في مصر
| Since 2008 |

إبداع يتخطى الخيال
Innovation Beyond Expectations



ALUMINUM
COMPOSITE PANEL



مهمتنا

نحن ملتزمون بضرورة مواصلة تطوير معايير الجودة لجميع منتجات ويل بوند لتلبية متطلبات عملائنا من خلال الإدارة الفعالة والموظفين الأكفاء وأحدث معدات التصنيع المتاحة للسوق العالمي.

رؤيتنا

نعمل جاهدين لتكون أفضل منتج لألواح الكلادينج في الشرق الأوسط.

من نحن

- شركة ويل بوند للتصنيع هي أول شركة مصنعة لألواح الكلادينج في مصر، وتقع في السويس.
- تم إنشاء شركة ويل بوند في عام 2008، وخلال 10 أعوام أصبح اعتماد العملاء على ويل بوند سواء كانوا من مصر أو بالخارج.
- قامت ويل بوند ببناء شبكات مبيعات ومؤسسات خدمية رائعة في عشرات البلدان والمناطق حول العالم، مثل المملكة العربية السعودية وتنزانيا وأوغندا ولبنان والكويت والسودان وفلسطين وكينيا وقطر وغيرهم.
- يقدم فريق ويل بوند دائمًا أسرع توصيل وأفضل شحن وخدمة ما بعد البيع بشكل مثالي لجميع العملاء.
- يحصل العملاء على شهادة ضمان لمدة 20 عامًا على انحراف اللون والتقشير.
- تتوافق منتجات ويل بوند مع المعايير الدولية مثل 2752/SASO 2008، 7530/EOS 2013 وحصلنا على شهادة ISO9001/2015.

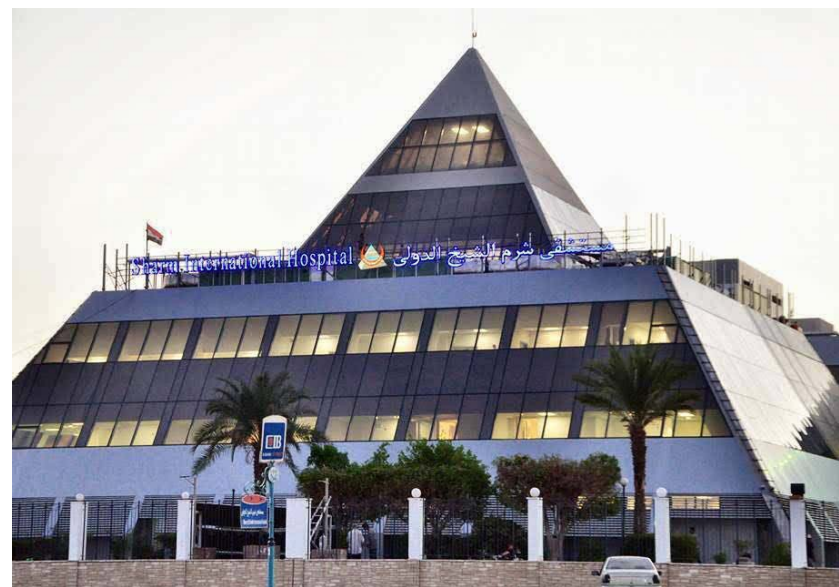


Mega Projects Photo Gallery

من مشروعاتنا العملاقة
صورة من الواقع









إعتمادات المشروعات الكبرى

 EGYPTIAN- FRENCH JOINT VENTURE GREATER CAIRO METRO AL THAWRA LINE (LINE 3) PHASE 3 CONTRACT No. 78 / METRO																													
MATERIAL SUBMITTAL FORM																													
Doc. Numbering	<table border="1"> <tr> <th>Rubric</th> <th>Group</th> <th>Issuer</th> <th>Lot</th> <th>Ref</th> <th>Number</th> <th>Index</th> </tr> <tr> <td>9</td> <td>4</td> <td>0</td> <td>G</td> <td>2</td> <td>J</td> <td>V</td> </tr> <tr> <td>C</td> <td>3</td> <td>0</td> <td>0</td> <td>S</td> <td>2</td> <td>8</td> </tr> <tr> <td>4</td> <td>D</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Rubric	Group	Issuer	Lot	Ref	Number	Index	9	4	0	G	2	J	V	C	3	0	0	S	2	8	4	D	-				
Rubric	Group	Issuer	Lot	Ref	Number	Index																							
9	4	0	G	2	J	V																							
C	3	0	0	S	2	8																							
4	D	-																											
Date: 08-Sep-2021	CONTRACT 78/METRO GREATER CAIRO METRO LINE 3 - PHASE 3 CONSULTING ENGINEER Approved Work Can Proceed The status given by the consultant engineer for this submission does not absolve the contractor from any obligation of liability under the contract, without limitation.																												
Material / Product: MISCELLANEOUS - ALUMINUM COMPOSITE PANEL Description: Aluminum Composite Panel.																													
Supplier: (1) Wellbond: Head office: 22 Ahmed Tayseer Street, el Marwa Buildings, Helwan, Cairo / Egypt. Tel: 202-26900177 / 202-24194139 Fax: 202-24194139 Email: info@wellbond-eg.com																													
Manufacturer: Wellbond																													
Usage & Location: Aluminum Composite Cladding At Overground / Elevated stations or wherever Indicated in the Arrangement Drawings.																													
References:																													
- NAT Letter No. NAT-TD/2019/1310/470, dated on 2th September 2019 & letter No. NAT-TD/2021/338/470. - Approved WF No.40068 "WELLBOND Prequalification for ACP supply and installation".																													
Attachments:																													
1- Compliance with technical specification (4 Pages) 2- Aluminum composite panel material technical data sheet (12 pages). 3- Fixation System, Anchors, accessories & sealant Data sheets (36 Pages). 4- Fire Test Reports (28 Pages). 5- Warranty & Quality Certificates (4 Pages). 6- Colors & Samples (4 Pages).	<table border="1"> <tr> <td>No. of pages</td> <td>Samples</td> </tr> <tr> <td>1 / 92</td> <td>Yes (✓) No ()</td> </tr> </table>	No. of pages	Samples	1 / 92	Yes (✓) No ()																								
No. of pages	Samples																												
1 / 92	Yes (✓) No ()																												
Remarks: Samples previously delivered in Index -A.																													
Function:	Prepared by Sr. Architectural Engineer																												
Date:	Reviewed by Technical Manager for Arrangement																												
Name / Signature:	Approved by QA/QC Manager																												
	08/09/2021																												
	08/09/2021																												
	08/09/2021																												
	M. KAMAL																												
	M. HAMED																												
Employer / Consultant Response (Approval/ Comments):	Material																												
	() Approved																												
	() Approved Except Noted																												
	() Rejected																												
Function:.....																													
Name/ signature:.....																													
Date:.....																													



					
Project NN1 New Capital		Material Approval			
Number: OC-MA-GEN-00-8049	REV: 01	Date: January 15, 2020	Num. Of Pages: 1 + 87 A4		
Area / Location: Project: NN1					
Item used:					
Discipline: Structure ☐ Mechanical ☐ Architecture ☒ Electrical ☐					
Description: Aluminum Works Curtain wall & cladding system This submittal is issued in order to approve Aluminum Works (curtain wall, wall cladding, doors, windows & Sky light) from Alumil (Metal company) for NN1 Project. We herein approve the supplier's catalogues matched with our design / specifications.					
Attachments : 01-Data sheet 02-Manufacturer certificate 03-calibration certificate 04-Free sample 05- Color Chart		06-Copy of standards 07-Copy ref. DWG/specifications 08-Sketch / As built 09-Test Results 10-CDs 11-Catalogues			
Comment : References: 1- Technical Data Sheets 2- References					
Delivery : Country of origin : Local Manufactured ☒ Overseas ☐					
For Contractor: Name: Bassem Moawad Date: 15/1/2020 Results:					
The client / consultant has inspected this submittal with all its contents and the result is:					
Ser. No	Item Description	(A)	(B)	(C)	(D)
1	Curtain wall ALUMIL system M6		☒		
2	Sky light		☒		
3	Top hung window		☒		
4	Automatic sliding door (Dormakaba)		☒		
5	Doors Hinged (Internal & External)		☒		
6	DOORS Hardware		☒		
6	Aluminum composite panel PVDF (WELLBOND)	☒			
7	Air foil louvers		☒		
8	JOTUN Super Durable 2003 powder coating		☒		
9	Sphinx Glass		☒		
10	Rock Wool		☒		
11	Anchor 28.4 HILTI		☒		
12	EPDM Marco compound		☒		
13	Sealant (CPS) Dowsil TW		☒		
14	Structural Glazing Sealant Dowsil coming 993		☒		
15	Sika Backing Rod		☒		
Note: ١- تم فحص العينات المعروضة و ٢- تم فحص العينات المعروضة و ٣- تم فحص العينات المعروضة و					
Legend: (A): Approved (B): Approved with comments (C): Revise and Re-Submitt (D): Rejected.					
Signature :		EHAF Consulting Engineers		Date: 13-1-2020	

وزارة الإسكان والتعمير والتنمية العمرية
 جمهورية مصر العربية
 CPAS

من: مدير المشروع
 إلى: مدير المكتب الفني
 الموضوع: طلب اعتماد نظام عمل الكورتن وال (Curtain Wall & Cladding System)

نوع العينة: كورتن
 وصف العينة: كورتن معزول صوتياً
 مصدر العينة: Wellbond
 مكان الاستخدام: مبنى سكني

تاريخ تقديم العينة: 15/1/2020
 توقيع مدير المكتب الفني:

١- اعتماد النظام
 ٢- تقديم العينات
 ٣- فحص العينات

الملاحظات:
 صورة من المواصفات الفنية الخاصة بالبناء رقم ()
 ملاحظة الاختبارات بالمواصفات الفنية
 مكان تقديم العينة: بالمركز
 توقيع المهندس المشرف:

1- توقيع المهندس المشرف
 2- توقيع رئيس القسم
 3- توقيع مدير المكتب الفني

PM-SX/RY-07 Issue 01 / Year 2021/Revised 01 Page 3 of 4

ECCG
ENGINEERING CONSULTANTS GROUP S.A.
مجموعة الاستشارات الهندسية

١١ / ٢٥٧٧

نموذج اعتماد مسودات

رقم الأصدار	رقم الطلب	رقم المواصفة	تاريخ التقديم
00	O 112	74243	/ 11 / 2021

اسم المشروع : تطوير مستشفى القنطرة غرب رقم المشروع : 2808

المالك : وزارة الصحة و السكان المهندس : جماعة المهندسين الاستشاريين (ج م ا)

المقاول : شركة وادي النيل للمفاوضات والاستثمارات العقارية

الانحالي ☐	محاري ✓ ☒	صحي ☐	كافحة حزين ☐	كبيرة ☐
-----------------------------------	---	------------------------------	-------------------------------------	--------------------------------

الوصف: تجاليد الحوائط من ألواح الألومنيوم

مكان الاستخدام / المبنى: B01 : B08	عينة ☐ مواد مورددة بالموقع ☐
	طبقا للقائمة المستعدة ☒ اقترح جديد ☐

اسم المورد: WELLBOND اسم المصنع: WELLBOND

رقم البند: 102 قسم 74243 من الباب السابع (تجاليد الحوائط من ألواح الألومنيوم) صفحة 10 من 30

مرقق: عينات ✓
✓ كتل وجوات □ مرافصات □ بيانات فنية □ بنود ملحقة

مدبر المكتب الفني للمقاول الاسم: التاريخ: / / 2021 التوقيع:

قرار المهندس (ج م ا) معتمد
معتمد بملاحظات
معتمد مدنيا ويعاد التقديم
غير معتمد

التاريخ: / / 2021 التوقيع:

تطبيق الاستشاري:

WELLBOND لمعالجة الجدران الخارجية

Agence de conseil en architecture et design d'intérieur

P.V.T.

بسم الله الرحمن الرحيم

نحن، الموقعين أدناه، نوافق على تقديم هذا النموذج كإحدى الوثائق اللازمة لإتمام عملية التعاقد بيننا وبينكم.

هذا النموذج لا يُلغى عن باقي الشروط والأحكام الواردة في العقد النهائي.

رد عل التطبيق: للمواصفات الفنية

ECCG ENGINEERING CONSULTANTS GROUP S.A. Technical Office Casablanca M.O.

APPROVED AS NOTED
PROCEED SUBJECT TO INCORPORATION OF CHANGES THEREIN

by A

Dar Al-Hondasah 13 SEP 2020 RECEIVED Doc No.		
Submittal For Approval Of Materials		
Date: 13/9/2020		
Request no: MS/01/AR/0021/REV00		
Project No. & Title: E19016 - The Central Park of the New Capital of Egypt		
Employer: 	Engineer: dar	Contractor: Arab Contractors CP01-A
1. Material description (one item only on this form) : ALUMINIUM CLADDING. Area of application : CP01-A BULIDINGS WORKS Drawing ref. : E19016-0102D-FD-CP01A-PH00-GT1S-A-201 B.O.Q. ref. no.: 57500 Specification Ref. : 57500 Standards: Attach all relevant technical literature marked to identify relevant description, current Test Certificates, samples as appropriate.		
2. Manufacturer / supplier Company Name : WELLBOND Address : 22 AHMED TAYSEER STREET, EL MARWA BUILDINGS, HELIOPLIS, CAIRO Local agent :		
3. Delivery : Country of origin : EGYPT Availability ☒ Locally Manufactured ☐ Overseas Delivery : Ex-works/ total duration [] [] Estimated time of arrival on site [] [] Program : Date material required on site [] [] Latest date for order [] []		
We certify that the above submitted items have been reviewed in detail and are correct and in strict conformity with the contract drawings and specifications except as otherwise stated; also that the material sources indicated above have been reviewed in detail and that they will supply the submitted items in conformity with the above and deliver same timely.		
Submitted by : ENG. MOHAMED HATEM		Signature: Mohamed
4. Engineer's Representative comments: - Refer to the Attachment.		☐ Approved ☐ Approved as noted ☒ Revise and resubmit ☐ Rejected ☐ Sample required ☐ Tests required ☐ Additional information required ☐ Manufacturer's guarantee required
Signature:		Date: 27/9/20
Approval shall not relieve Contractor of his liabilities under the Contract or constitute authorization of any change to Contract Documents.		

المشروع السكني بمنطقة مثلث ماسبيرو

تقديم اعتماد (Approval Submittal) TRNS.

من : شركة انش ايه للانشاءات

إلى : المهندسون المتحدون (AC) / المهندسون الاستشاريون العرب (محرر باخوم) (ACE)

☐ Planning Document ☐ Method Statement ☐ Schedule ☐ Report ☒ Material ☒ Sample

☐ Specification & Standard ☐ Prequalification Document ☐ Sketch ☐ Shop Drawings ☐ QA/QC Document ☐ Catalog

☐ Civil ☒ Architect ☐ Electrical ☐ Plumbing ☐ HVAC ☐ Other

☒ MT-01 ☐ MT-02 ☐ GN

جزء خاص بشركة انش ايه للانشاءات (HAC)

رقم الطلب	رقم الإصدار	تاريخ التقديم	المرفقات	ملاحظات أخرى
HAC-AC-TR-02487	Rev. 00	19, Aug, 2021	عدد: 10 ورقة A4	

الموضوع : Aluminum Composite Panels

مرفق لمساتكم البيانات الفنية الخاصة ب Aluminum Composite Panels لتجاليده مدخل البرج الإداري رقم (01)

انتاج شركة : WELLBOND

عينات من الألواح بألوان مختلفة

برجاء الاطلاع والاعتماد و الافادة،،،،

مدير المكتب الفني للمقاول م / تامر صابر

توقيع مدير المشروع للمقاول م / خالد الجندي

جزء خاص ب المهندسون المتحدون (AC) / المهندسون الاستشاريون العرب (محرر باخوم) (ACE)

الرد من المهندس

تم اعتماد شركة راعته العينة خاصة فقط بمره لونه

21 AUG 2021 HAC-DCC

☐ A: معتمد بدون ملاحظات ☐ B: معتمد مع ملاحظات. يمكن للعمل أن يستمر بناء على الملاحظات ☐ C: معتمد مع ملاحظات ويعد التقديم مرة أخرى ☐ D: التقديم مرفوض ويعد التقديم مرة أخرى

اعتماد المهندس للرد

المكتب الفني

المهندس المقيم

برجاء الرد في خلال 7 أيام

المشروع السكني بمنطقة مثلث ماسبيرو

تقديم اعتماد (Approval Submittal) TRNS.

من : شركة انش ايه للانشاءات

إلى : المهندسون المتحدون (AC) / المهندسون الاستشاريون العرب (محرر باخوم) (ACE)

☐ Planning Document ☐ Method Statement ☐ Schedule ☐ Report ☒ Material ☒ Sample

☐ Specification & Standard ☐ Prequalification Document ☐ Sketch ☐ Shop Drawings ☐ QA/QC Document ☐ Catalog

☐ Civil ☒ Architect ☐ Electrical ☐ Plumbing ☐ HVAC ☐ Other

☒ MT-01 ☐ MT-02 ☐ GN

جزء خاص بشركة انش ايه للانشاءات (HAC)

رقم الطلب	رقم الإصدار	تاريخ التقديم	المرفقات	ملاحظات أخرى
HAC-AC-TR-02487	Rev. 00	19, Aug, 2021	عدد: 10 ورقة A4	

الموضوع : Aluminum Composite Panels

مرفق لمساتكم البيانات الفنية الخاصة ب Aluminum Composite Panels لتجاليده مدخل البرج الإداري رقم (01)

انتاج شركة : WELLBOND

عينات من الألواح بألوان مختلفة

برجاء الاطلاع والاعتماد و الافادة،،،،

مدير المكتب الفني للمقاول م / تامر صابر

توقيع مدير المشروع للمقاول م / خالد الجندي

جزء خاص ب المهندسون المتحدون (AC) / المهندسون الاستشاريون العرب (محرر باخوم) (ACE)

الرد من المهندس

تم اعتماد شركة راعته العينة خاصة فقط بمره لونه

21 AUG 2021 HAC-DCC

☐ A: معتمد بدون ملاحظات ☐ B: معتمد مع ملاحظات. يمكن للعمل أن يستمر بناء على الملاحظات ☐ C: معتمد مع ملاحظات ويعد التقديم مرة أخرى ☐ D: التقديم مرفوض ويعد التقديم مرة أخرى

اعتماد المهندس للرد

المكتب الفني

المهندس المقيم

برجاء الرد في خلال 7 أيام

لجنة التصميم لقرية مدينتكم واللوحة الصورية
- لاس الصورة



ENVIROMENTAL DESIGN GROUP
Architects-Landscape Architects-Environmental Planners

im-404

مشروع/ تطوير بحيرة عين الصيرة
المالك / هيئة المجتمعات العمرانية الجديدة
التاريخ 2021/2/21
السادة شركة / ريدكون

تحية طيبة

بخصوص تشطيبات المطاعم و البوابات

مرسل الي سيادتكم البيانات التفصيلية الخاصة بتشطيب الاتي:

- 1- بوابات المشروع.
- 2- المطاعم الشمالية و الجنوبية.
- 3- مرفق الاكواد طبقا للكتالوجوات المسلمة الينا من طرفكم (للالوان و الخامات)

لسيادتكم جزيل الشكر

ممثل الاستشاري المهندس/ مدحت أحمد

مدحت أحمد





شهادة التخرج
التي هي شهادة التخرج التي هي شهادة التخرج

مصادره لا ٩٧ ملاحظات —

التاريخ ١٢ / ١٠ / ١٨ - ع

وزارة الإسكان والمرافق والمجتمعات العمرانية
هيئة المجتمعات العمرانية الجديدة
جهاز تنمية مدينة دمياط الجديدة

السادة / شركة اوراسكوم للإنشاءات

بالإشارة الى مشروع انشاء الفيلات المرحله الاولى بمدينة المنصورة الجديدة .

وبالإشارة إلى الكتاب الوارد البنا بخصوص اعتماد الكسوة الألومنيوم للواجهات للفيلات المنفصلة المودرن

وطبقا للمواصفات الفنية الواردة اليينا من المكتب الاستشارى ECG .

يرجى العلم بأنه تم اعتماد لوني WB-1101 white و WB-1034 dark gray silver شركة

.wellbond

وتفضلوا بقبول فائق الاحترام والتقدير،،،

رئيس الجهاز

والمشرف على مدينه المنصورة الجديدة

مهندس /
" محمد السيد مصطفى رجب "

مدينة حماط الجديدة - رقم بريدي: ٣٤٥١٧ - ٢٤.٣٨٧٢ - ٢٤.٣٨٧٣ - ٢٤.٣٨٧٩ - فاكس: ٠٥٧ / ١٤.٣٨٧٤ - newdomyat@hotmail.com



Project: 10th of Ramadan Railway Project

Reference:	ACJV-L25-CO-MAS-QAQC-150-0088
Subject:	Reply on (WF-13650) Aluminum composite panels 4mm total thickness used in aluminum cladding from (Manufacturer: Well Bond)
WF:	22779
Date:	Oct 31, 2020

The Documents submitted by the contractor are revised against the following:

- 1) Specs. Ref. (CREEC-L25-DD-SPEC-ARC-400-0001[6])
 - Section 18, Item 4
- 2) B.O.Q.
 - Section 18, Item 3
- 3) Drawing
 - General Detail, Detail No 15
- 4) WF 13650, Aluminum composite panels 4mm total thickness used in aluminum cladding from (Manufacturer: Well Bond)
- 5) NAT Letter No. “TD/2264/690” Aluminum Composite Panels, dated November 26, 2020.

omments:

Location and Scope of work	• Location: not mentioned. • Scope of work: Aluminum work. • Mention the area where the work to be performed is described.
Company Profile	Refer to WF 13650
Qualification Certificates	It includes the following: – ISO 9001:2015 valid to Nov 18, 2018
Job References	Refer to WF 13650
Compliance Sheet	Submit a compliance certificate /evidence for finish coat fluoropolymer, air leakage and deflection limits comply with project specs as mention in the compliance sheet.
Product Catalog / Technical Data Sheet	It includes: • Regular aluminum composite panel (LDPE. core) • Fire retardant aluminum composite panel (B1). • Fire retardant aluminum composite panel (A2): non Combustible mineral and organic core

1046-1



Project: 10th of Ramadan Railway Project

3. The contractor should nominate and submit a certified applicator from the manufacturer for approval.
4. Installation system approval subject to site Mock-up.

Approval Status	Code "B", Approved with comments.
-----------------	-----------------------------------

Prepared by:

Eng. AmanY HikaL

Aman Y H K

Reviewed by:

Eng. JOSE CASTRO

شهادات الاختبارات

Ministry of Trade & Industry
Chemistry Administration
Established in 1898



وزارة التجارة والصناعة
مصلحة الكيمياء
تأسست عام ١٨٩٨ م

الإدارة المركزية لمعامل القاهرة	
المعمل المختص/ التحليل الآلي	الإدارة العامة لمعامل التحاليل الدقيقة
مشروع تقرير اختبار	
بيانات العينة	
كود شهادة الوارد للعينة: —	عدد الصفحات/ العدد الكلي: (١ / ١)
كود المعمل الرئيسي: ٢٠٢٠/٤٣٣/٠٨	كود المعمل الفرعي: —
وصف العينة: عبارة عن قطعة معدنية أبعادها ٢٨,٥ سم X ٢٠ سم طبقة لونيا أزرق والأخري تركواز و العينة غير محرزة .	مسمى العينة: كلاندنج ويل بوند مقاومة للحريق B1
تاريخ ورود العينة: ٢٠٢٠/٠٦/٢٢	تاريخ إصدار التقرير: ٢٠٢٠/٠٦/٢٥
مطالب العميل	
الفحص المطلوب: اختبار مقاومة الحريق لمدة ساعتين باستخدام جهاز Erichsen .	
المواصفة القياسية: —	
بيانات العميل	
اسم العميل: شركة ويل بوند (المينوم كمبوزيت بائل)	جهة العمل: ٠١١٤٦٨٨١١٤٣
نتائج الاختبار	
النتيجة (الوحدة)	الاختبار
اختبار المقاومة للحريق لمدة ساعتين باستخدام جهاز Erichsen	عند تعرض العينة للهب بنزن وجد أن طبقة الطلاء الزرقاء بالعينة تفحمت ولم تشتعل ولم ينتشر بها اللهب .
- هذه النتيجة تخص العينة المقدمة ولا تمثل إلا الكمية الممثلة منها العينة ، وتمثلها لأي كميات أخرى هي مسئولية جهة سحب العينة .	
- يحتفظ ببقايا العينات بعد إختبارها بمعامل المصلحة لمدة أقصاها شهر من تاريخ الإختبار .	
- سريان العمل بتقرير الإختبار لمدة ثلاثة أشهر للعينات الغذائية ولمدة ستة أشهر لبقاى العينات من تاريخ إصدار التقرير . (نهاية التقرير)	
مدير الإدارة	المدير العام
رئيس الإدارة المركزية لمعامل القاهرة	محرر التقرير: ك/ شيماء عبد العزيز
الختم:	محرر التقرير: ك/ شيماء عبد العزيز



Housing and Building National Research Center
Building Physics Institute
Fire Department



FSI and SDI test results
Table (1): The tested sample result

Material Tested/ID	Method/Condition	Test Result	Classification
Well Bond Aluminum Composite panel Grade: A2	ASTM E84	FSI = 0 SDI = 50	Class "A"

Remarks

- The sample was delivered to the laboratory by the entity requesting the test
- The aforementioned data according to what was mentioned in the letter of the body requesting the test without any responsibility on the center.
- The attached results apply only to the results are not valid for the approval of any quantitative production / and practices / supplies / as well as export and is not considered as a conformity certificate
- The Egyptian code must be referred to if there is a mechanism to determine the periodicity of conducting the test.
- This report is valid for Three months. It is not allowed to reproduce this report except with the written consent of the center.
- The laboratory is bound by the terms of the international standard for accreditation of laboratories ISO 17025 of 2017 in terms of confidentiality of data, transparency and neutrality with customer.

Tested and report by

Dr. Hamada Shoukry

Eng. Aya Zaki

Eng. Aya Zaki

Ass. Res. M. M. Ibrahim

Head of Fire Dept.

Prof. Dr. S. S. Shebl



Director of institute

Prof. Dr. M. A. Hassan

4789874946-01
Page 1 of 18

Project number: 4789874946

SUMMARY TEST REPORT

On (product): 10th of Ramadan railway LRT PROJECT

In accordance with:
EN ISO 1716: 2010
Reaction to Fire - Determination
of the gross heat of combustion (calorific value)

On behalf of: Wellbond ACP
Factory
Attaqa Industrial Area
Suez
Egypt

Report Issued:
2021-09-20



Copyright © 2021 UL International (UK) Ltd, Unit 1-3 Horizon, Kingsland Business Park, Wade Road, Basingstoke, Hampshire, RG24 8AH authorizes the above named company to reproduce this Report only for purposes as described in the Conclusion, provided it is reproduced in its entirety.

| 27-LO-F0856-3.3, ISSUE 5.0, EN ISO 1716:2010

4789874946-01
Page 2 of 18

Report summary

Performance objective of product:- Determining the performance of a material when tested in accordance with EN ISO 1716:2010

General Product Description	Product Reference	Product Thickness (mm)	Product weight per unit area (kg/m ²)
A coated aluminium panel with a profiled mineral core	"10 th of Ramadan railway LRT PROJECT"	4.0	8.4628
PVDF Coating	"PVDF Top coat"	0.03	0.040
Aluminium	"Alloy 3003 H16"	0.50	1.3645
Adhesive Film	"20% PE + 80% AR"	0.050	0.0465
Mineral Core	Sponsor was unable to provide this information	3.0	5.7000
Polyester Coating	"Polyester bottom coat"	0.008	0.0160

Test Sponsor	Wellbond Aluminium composite panel factory
---------------------	--

Test Results	Component Part	PCS per mass (MJ/Kg)	PCS per area (MJ/m ²)
	PVDF Coating	18.0467	0.7219
	Aluminium	0.00000	0.0000
	Adhesive	45.3967	2.1109
	Mineral core	2.3430	13.3551
	Adhesive	45.3967	2.1109
	Aluminium	0.00000	0.00000
	Polyester Coating	16.2993	0.2608

Date of test	20 th July 2021
---------------------	----------------------------

Test Location	UL International Germany GmbH, Am Oberfeld 19, 83026 Rosenheim, Germany
----------------------	---

SYSTRA

Our Ref.: SYS-JV (AC&OC)-70M-0801-1245

01 August 2018

Arab Contractors

Orascom Construction JV

34, Adly St, Downtown, Cairo, Egypt

Attention to: Ahmed Shouki,
Project Manager

Project: Contract 70/M
Greater Cairo Metro Line 3
Consultancy Services for Design Revision and Implementation Supervision
Phase 4B (From Haroun Station to Adly Mansour Station)

Subject: Material Submittal - Aluminum composite panels for Stations cladding.

Dear Sir,

In reference to the Arab Contractor & Orascom Construction JV letter, CML / PH4B / NAT / 4798, dated 15th July 2018, regarding the above mentioned subject, please find the attachments

We remain at your disposal to provide any further information/clarification you may need.

Yours Faithfully,


Essam Ali
Project Manager

Encl: Review Notice

CC: NAT

Arab Contractor & Orascom construction JV

Name:

Date:

National Authority for Tunnels (NAT)

Name:

Date:

EGYPT BRANCH

1191 Corniche El Nile • World Trade Center Complex Buildings • Administrative Tower – 16th Floor
Postal Code: 112215 • Cairo • Arab Republic of Egypt (ARE) • Tel: + 202 2 577 5112 • Fax: + 202 2 577 5113

SYSTRA • société anonyme à directeur et conseil de surveillance | Capital social 27 283 102 Euros | RCS Paris 387 949 530 | APE 7112B | TVA Intra FR19387949530
72-76, rue Henry Farman • 75015 Paris • France | Tel: +33 1 40 16 61 00 • Fax: +33 1 40 16 61 04

SYSTRA's Ref: SYS-JV (AC&OC)-70M-0801-1245

Page 1 of 2

SYSTRA

List of the Reviewed Documents



Rubric	Group	Issuer	Lot
9 4 0	G 2	J V C	0 4 B

SN.	Title	Ref	No.	Ind.
1	Discipline: Arrangement Type of Document: Material Submittal Title: Aluminum composite panels for Stations cladding. Group : G2 Lot : Stations Main Use : Aluminum Composite Panels of solid Core extruded thermoplastic material and panel thickness (4mm Thick). Manufacturer: Well Bond Supplier : Technoframe SPC, Reference: 1-59M-TD-INF-ALL-SPC-EHF-2011-V1-0, Sec. 18.20. Samples included : 5 samples (60*80 cm and 4mm thickness).	M S L	0 0 0 6 0	AI

Refer to submittal CML/PH4B/NAT/4375

Status: APPROVED AS NOTED

EGYPT BRANCH

1191 Corniche El Nile • World Trade Center Complex Buildings • Administrative Tower – 16th Floor
Postal Code: 112215 • Cairo • Arab Republic of Egypt (ARE) • Tel: + 202 2 577 5112 • Fax: + 202 2 577 5113

SYSTRA • société anonyme à directeur et conseil de surveillance | Capital social 27 283 102 Euros | RCS Paris 387 949 530 | APE 7112B | TVA Intra FR19387949530
72-76, rue Henry Farman • 75015 Paris • France | Tel: +33 1 40 16 61 00 • Fax: +33 1 40 16 61 04

SYSTRA's Ref: SYS-JV (AC&OC)-70M-0801-1245

Page 2 of 2

LGAI Technological Center, S.A. (APPLUS)
Campus UAB – Ronda de la Font del Carme, s/n
E - 08193 Bellaterra (Barcelona)
T +34 93 567 20 00
F +34 93 567 20 01
www.appluslaboratories.com

Applus⁺
laboratories

E/F
Page 1 of 23

TEST REPORT



Sponsor: **Wellbond ACP**
Factory
Attaqa Industrial Area
Suez
Egypt

Prepared by: **LGAI Technological Center, S.A. (APPLUS)**
Campus UAB
Ronda de la Font del Carme, s/n
E - 08193 Bellaterra (Barcelona)

Product name: **Aluminium Composite Panel**

Report n°: **21/32304980-1**

Date of issue: **14th September, 2021**

Date at which the sample was received: 24-08-2021

The testing of the product was carried out under the witnessing of a UL engineer.

1.- OBJECT OF THE TEST

Fire tests of buildings products in compliance with the following standard:

- EN 13823:2020: "Reaction to fire tests for building products - Building products excluding floorings exposed to the thermal attack by a single burning item".

This document may only be copied in full. Digital reports with an electronic signature will be considered as an original document, as well as its respective electronic copies. The impression of this document will not have legal validity. This document has 23 pages, of which 14 are annexes. LGAI, Technological Center, S.A. is not responsible for the documentation and/or information provided by the petitioner.

LGAI Technological Center S.A. Inscrita en el registro Mercantil de Barcelona, Tomo 35.803, Folio1, Hoja N° B-266.627 Inscripción 1ª C.I.F. : A-63207492

Applus⁺
laboratories

File n° **21/32304980**

Page 9 of 23

6.3.-Results

EN 13823:2020

SAMPLES	I	II	III	Average
FIGRA_{0.2 MJ} (W/s)	0,00	0,00	0,00	0,00
FIGRA_{0.4 MJ} (W/s)	0,00	0,00	0,00	0,00
LFS	<to edge	<to edge	<to edge	< to edge
THR_{600S} (MJ)	0,03	0,09	0,04	0,03
SMOGRA (m²/s²)	0,00	0,00	0,00	0,00
TSP_{600S} (m²)	1,16	2,38	4,52	1,70
Release of inflamed material in 600 s	NO	NO	NO	NO

The test results correspond to the behaviour of test samples of a product under the testing conditions themselves. They do not intend to be the only evaluation criterion to assess the potential fire hazard involved in the use of the product.



Digitally signed by
Salvador Suñol Gálvez



Digitally signed by Vanessa
Tutusaus Domingo

Laboratory Manager
LGAI Technological Center S.A. (APPLUS)

Technician Responsible of Euroclases
LGAI Technological Center S.A. (APPLUS)

The results refer exclusively to the samples tested at the time and under the conditions indicated.

The uncertainties expressed in this document pertain to the expanded uncertainty, which has been obtained by multiplying the typical measurement uncertainty by the coverage factor k=2 which, for a regular distribution, corresponds to a coverage probability of approximately 95%.

Applus+ guarantees that this task has been carried out in compliance with the requirements of our Quality and Sustainability System, and furthermore, that the contractual terms and legal regulations have been complied with. In the framework of our improvement programme, we would appreciate any comments you may deem appropriate. These should be addressed to the manager who signs this document, or to the Quality Director of Applus+, at the following address: satisfaccion.cliente@applus.com

4789874946-07
Page 1 of 8

Project number: 4789874946

CLASSIFICATION REPORT

On (product): 10th of Ramadan railway LRT PROJECT

In accordance with:

EN 13501-1: 2018

Reaction to Fire - Fire classification of construction products and building elements

On behalf of: Wellbond ACP

Factory
Attaqa Industrial Area
Suez
Egypt

Report Issued:
2021-09-20


Copyright © 2021 UL International (UK) Ltd, Unit 1-3 Horizon, Kingsland Business Park, Wade Road, Basingstoke, Hampshire, RG24 8AH authorizes the above named company to reproduce this Report only for purposes as described in the Conclusion, provided it is reproduced in its entirety.

27-LO-F0857-3.6, ISSUE 5.0, EN 13501-1 2018, TABLE 1

4789874946-07
Page 6 of 8

LFS	< to edge	Compliant
SMOGRA	0.00 (m ² /s ²)	Compliant
TSP _{600s}	1.70 m ²	Compliant
Flaming droplets/particles in 600s	None	Compliant

a is For homogeneous products and substantial components of non-homogeneous products.
b is For any external non-substantial component of non-homogeneous products.
d is For any internal non-substantial component of non-homogeneous products.
e is For the product as a whole.

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with Clause 8 of EN 13501-1:2018. Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests.

4.2 Classification

The product 10th of Ramadan railway LRT PROJECT, in relation to its reaction to fire behavior is classified:

Fire Behaviour	Smoke Production	Flaming droplets/Particles
A2	s1	d0

Reaction to fire classification:

A2-s1,d0

This classification is only valid for the final condition of use described in the present report

4.3 Field of Application

The classification of this product is valid only for the following end use applications

- Construction applications applied over any substrate with a minimum density of 870Kg/m³, having a minimum thickness of 9mm and a fire performance of A2-s2,d0 or better

Thickness	No Variation
Colour	No Variation
Density	No Variation
Weight per unit area	No Variation
Composition	No Variation
Construction	No Variation
Mounting and fixing	No Variation
Air gap details	≥ 40mm

27-LO-F0857-3.6, ISSUE 5.0, EN 13501-1 2018, TABLE 1



TEST REPORT

No. : GZIN1911060283SC
Date : Nov 25, 2019
Page: 1 of 7



CUSTOMER NAME: WELLBOND ALUMINIUM COMPOSITE PANEL-EGYPT
ADDRESS: 22 AHMED TAYSEER STREET HELIOPOLIS CAIRO EGYPT

Sample Name : GRADE B FIRE-RESISTANCE ALUMINUM COMPOSITE PANEL
Other Information : PROJECT NAME: CAIRO METRO LINE 3- PHASE 4B

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

Date of Receipt : Nov 08, 2019
Testing Start Date : Nov 08, 2019
Testing End Date : Nov 25, 2019
Test result(s) : For further details, please refer to the following page(s)
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for
SGS-CSTC Standards Technical
Services Co., Ltd. GZ Branch Testing
Center

Quincey lee

Quincey lee
Authorized signatory



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8397 1443, or email: CN.Doccheck@sgs.com
191 Kexu Road, Science Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155961 f (86-20) 82075080 www.sgs.com.cn
中国·广州·经济技术开发区科学城科珠路191号 邮编: 510663 t (86-20) 82155961 f (86-20) 82075080 e sgs.china@sgs.com

Member of the SGS Group (SGS SA)



TEST REPORT

No. : GZIN1911060283SC
Date : Nov 25, 2019
Page: 4 of 7

Classification and direct field of application:

This classification has been carried out in accordance with EN 13501-1:2018.

Classification:

Fire behaviour	Smoke production	Flaming droplets
B	s	d

Remark:

The classes with their corresponding fire performance are given in Table 1.

Reaction to fire classification is based on the 7-step scale of A1 to F, where A1 is good and F is bad

Statement:

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

Warning:

This classification report does not represent type approval or certification of the product.

The test laboratory has, therefore, play no part in sampling the product for the test, although it holds appropriate references to the manufacturer's factory production control that is aimed to be relevant to the samples tested and that will provide for their traceability.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8397 1443, or email: CN.Doccheck@sgs.com
191 Kexu Road, Science Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155961 f (86-20) 82075080 www.sgs.com.cn
中国·广州·经济技术开发区科学城科珠路191号 邮编: 510663 t (86-20) 82155961 f (86-20) 82075080 e sgs.china@sgs.com

Member of the SGS Group (SGS SA)

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH BS EN 13501-1:2018

Test Sponsor:

Wellbond Aluminium Composite Panel Co.
22 Ahmed Tayseer Street
el Marwa Buildings, Heliopolis
Cairo, Egypt
T: +20 122 776 5519
Website: www.wellbond.com.eg

Test Material:

4mm thick Aluminium Composite Panel – "10th of Ramadan Railway Project LRT"

7.2. Classification

The product, 4mm thick Aluminium Composite Panel in relation to its reaction to fire behavior are classified;

Fire behavior		Smoke production		Flaming droplets	
A2	-	s	1	d	0

Reaction to fire classification: A2 – s1, d0

Remark: The classes with their corresponding fire performance are given in annex A.

7.3. Field of application

This classification is valid for the following end use applications:

- i. Construction applications

This classification is also valid for the following product parameters:

Overall product thickness	No variation allowed
Product density	No variation allowed
Product composition	No variation allowed
Colour	No variation allowed
Joints	Results valid for material with or without vertical & horizontal joints of ≤ 15mm

8. LIMITATIONS

This document does not represent type approval or certification of the product.

This report and all records of the test to which it relates may be not be retained by TBWIC further than 5 years from the date of testing.

This test report is respectfully submitted by: Thomas Bell-Wright International Consultants

Prepared by:


Sam Sancho Thomas
Fire Testing Engineer

Reviewed and Approved by:


Suketa Tyagi
Manager - Reaction to Fire



شركاء النجاح

