Buliding Chemistry industry
C.R : 2050159093
VAT : 311085240400003

BCI BUILDING CHEMISTRY INDUSTRY

شركة كيمياء البناء للصناعة
السجل التجاري : ٢٠٥٠١٥٩٠٩٣
الرقم الضريبي : ٣١١٠٨٥٢٤٠٤٠٠٠٠٣

Technical submittal and method statement

Customer Name	SEVEN project
Project Location	khobar
Specification Ref	9843
Subject	**Technical submittal and method statement**

Dear valued customer

Greetings of the day from Building Chemistry Industry . We Building chemistry Industry (BCI)are a leading manufacturer high performance water proofing and coating materials and one of the pioneers in hot plural component spray applied polyurea water proofing in kingdom of Saudi Arabia.

We have a manufacturing facility here in Dammam, and are well known for quality products and service, on time delivery

We have strong product portfolio in both pure and hybrid polyurea coatings, Polyurethane , Epoxy and elastomeric acrylic systems with strong customization capabilities for any specific product enquiry .Our products are approved in many leading projects in the Kingdom

In this contect we are pleased to submit our best technical product offer and our experience details , company profile etc for the project in reference .

We hope this submittal meet your requirements and your valuable approval . Your kind

confirmation very much awaited

Building Chemistry industry

Index:

Document Group	**Particulars**
Prochour	PROCHOUR
Method of statement	SHOOTCREAT
Goverment Document	سجل تجاري كيميا
Goverment Document	GOSSI
Goverment Document	Saudiation
Goverment Document	SAUDI MADE
Goverment Document	الغرفه التجاريه
BCI HSE Plan	BCI HSE Plan
Organisation Chart	BCI Organisation chart
Test Report	Polyurea FA 1044
Test Report	BC XPS Board
Test Report	BC 237 BS 6920
Test Report	BC 237 LEED
Approvals	RED SEA - PU FOAM
Approvals	MUSA -BC 237
Approvals	WSP - BC 237
Approvals	ARAMCO - BC 237

Document Group	Particulars
Approvals	RED SEAL -MATERIAL APPROVAL
Approvals	PARSONS - WATER TANK BC 237
Approvals	SAUDI CONSULT -BCI
Approvals	Amaalaa
Approvals	BINJARULLA - BC SEAL
Approvals	GULF PROJECT - BC 702
Approvals	OTAISHAN -BCI

BCI

BUILDING
CHEMISTRY
INDUSTRY

BUILDING CHEMESTRY INDUSTRY

CONTENTS

BCI Water Proofing product assortment

INTRODUCTION

The construction industry and Infrastructure development are considered the foundation of any economy's development, and concrete forms the very base of the construction. BCI has been at the very helm of the Kingdom's socioeconomic transformation, supporting the construction sector with its global expertise and high-performance construction chemicals and building products.

Operating in the Gulf region for over a decade, BCI has evolved and emerged as an Industry leader with extensive knowledge and technical capabilities across all facets of the construction chemicals industry.

BCI MISSION

Our mission is to continuously develop our expertise in the area of waterproofing solutions. We work to ensure that, by combining innovation with the highest quality standards and continuous improvement of our team's qualifications, we can deliver solutions that fully satisfy our customer's needs. Building and maintaining positive relations with our partners and the community is our priority. We wish to be fully trusted by our Customers and our Employees, as it is our Customers and Employees that we rely on for our future growth.

WHY BUILDING CHEMISTRY INDUSTRY

- ✓ **Performance** — Wide range of specialized construction chemical solutions to ensure end users can achieve exceptional performance, both commercially and tech-
- ✓ **Reliability** — Whether residential or commercial, small or large infra structure, BCI delivers the right solutions in right time at the first instance .
- ✓ **Sustainability** — Proven products that ensure long term durability and resistance to harsh elements.
- ✓ **Technology** — Continuously evolving products at par with Internation al standards, R&D, and the latest technological advances.

BCI BUILDING CHEMISTRY INDUSTRY

Brand was born from the need for its own identification or Building Chemistry Industry products

BCI is a brand that includes all the values of the Construction Industry. We are known for strong technical knowledge, a flair for growth, and a passion for sustainable growth and development of our organizations and our Country

Here starts our journey with a Globally renowned polyurea chemical technology and we ventured into manufacturing naval two-component polyurea coatings which finds a niche position in the waterproofing of concrete and metal structures. Now we are one of the world's leading polyurea coating manufacturers and also we focus on other waterproofing chemistries like poly aspartic, elastomeric acrylic, Epoxy and Polyurethane systems, and cementitious waterproofing and repair materials

Our results are always the best in the industry and we are the total solution providers for waterproofing and tank lining segments of the Construction industry

WHAT IS POLYUREA?

Polyurea is a Chemical technology that can form two-component coating material by the chemical reaction between isocyanate and amine resin components.

Definitions

Pure polyurea

A polyurea coating is the result of a one-step reaction between an isocyanate component and a resin blend component. The isocyanate can be a monomer ,based on a prepolymer. a polymer or a blend.

For the prepolymer, amine and/or hydroxyl-terminated resins can be used. Resin blends should only contain amine-terminated resins and/or chain extenders, and no hydroxyl reactive polymer components.

Hybrid Polyurea

A polyurethane or polyurea hybrid coating is composed of a combination of these two coating systems. The isocyanate component can be the same as for the 'pure" polyurea systems. The resin blend is a blend of amine-terminated and hydroxyl-terminated polymer resins and/or chain extenders. The resin blend may also contain additives or non-primary components. To bring the reactivity of the hydroxyl-containing resins to the same level as the amine-terminated resins, the addition of one or more catalysts is necessary.

Polyurea coatings combine extreme application properties such as rapid cure (even at temperatures well below 0 deg C) and insensitivity to humidity to exceptional physical properties such as high hardness, flexibility, tear and tensile strength, and chemical and water resistance.

Polyurea Advantages (Leadership)

Polyurea coatings combine extreme application properties such as rapid cure (even at temperatures well below 0 deg C) and insensitivity to humidity to exceptional physical properties such as high hardness, flexibility, tear and tensile strength, and chemical and water resistance. The result is good weathering and abrasion resistance. The systems are 100%-solids, making them compliant with the strictest VOC regulations. Due to its specific curing profile and exceptional film properties, the polyurea spray coating technique developed in various areas, including corrosion protection, containment, membranes, linings, and caulks.

BCI BUILDING CHEMISTRY INDUSTRY

Our Factory and production facilities

BCI is committed to responsible and sustainable growth by investing in advanced manufacturing and research to continuously develop innovative products for our customers. BCI offer excellent choices to the customer by offering high quality, eco friendly chemical and building solutions that are durable and resilient

BCI is having it corporate office in Dammam city and the company has an ultra-modern, completely sophisticated factory and high tech laboratory in a well-developed industrial area in the city limits. With our wide range of chemical and building solution products, BCI's well trained and technically competent employees are able to provide excellent products services and cost effective solutions to our customers, bringing our close relationships to greater heights.

Our Factory and production facilities

Distrubution network

BCI has ware house facilities in Dammam and Riyadh and rest of Saudi Arabia to serve our customers our highly qualified sales engineers also visiting our project sites and closely work with project engineers to meet all their requirements

BCI
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INDUSTRY

! You can order Now Our Products Through our application soon ..

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Download on the App Store

BCI product segments and assortment

BC ECO PURE POLYOL

Solvent-free. very fast two-component eco-friendly polyurea coating material. This permanently elastic and crack-bridging coating material is designed for use in surface protection, especially concrete protection.

Pack Size
225 KGS
200 KGs

BC 702 Spray 40 Polyol

BC 702 40 Polyol is designed for the production of sprayed foams for cavity filling, with an applied density of 40 kg/m3. Ther action of BC 702 40 Polyol and BC 768 Isocyanate gives foams with good mechanical properties, dimensional stability, and good adhesion to usual substrates. Both high and low-pressure machines can be used during the processing. It is recommended a substrate temperature not lower than 25°C.

Pack Size
250 KGS
200 KGS

PU WATERPROOFING MEMBRANE

One part, is easy to apply, specially formulated polyurethane-based, elastic, crack bridging membrane. It cures to form a highly elastic, seamless, water-proof coating with excellent crack bridging properties. Its performance is maintained even at low temperatures.

Pack Size
20 KGS

BC 914 CA POLYUREA

DESCRIPTION BC 914 CA Polyurea is a two-component, pure aliphatic, brushable polyurea waterproofing coating for concrete substrates, where mechanical durability and outstanding waterproofing properties are required. It forms a blister-free, non-moisture permeable film providing zero water absorption and remarkably high resistance against UV and mechanical stress

Pack Size
20 KGS
20 KGS

BCI TEC30 S

BCI TEC30 S is a general-purpose component,non-sag, gun-grade polyurethane joint sealant which cures moisture to an elastic and tough sealant. It is highly resilient and has excellent recovery characteristics. It can function under a wide range of temperatures

Pack Size
600 ML

BC FR Polyol

Solvent-free, two-component fire retardant grade polyurea coating for fire resistance and flame proof applications. This permanently elastic and crack-bridging coating material is designed for use in surface protection, especially concrete protection.

Pack Size
225 KGS
200 KGS

BCI ECR EPS

BCI ECR EPS is a 100% reactive, solventfree, two component, epoxy poly sulphide coating to yield a tough but flexible coating or waterproofing. BCI ECR EPS has excellent chemical and abrasion resistance.

Pack Size
20 KGS

BCI FLEXI-TANK 6383

BCI FLEXI-TANK 6383 is a two-component, solvent-free epoxy paint, based on advanced epoxy-polysulfide hybrid technology, chemical resistant tank lining coating, specially developed for protecting concrete and steel tanks from aggressive chemicals, oils, mild acids, solvents, fuels, seawater, and sewages. Key applications are a protective coating for silos and storage tanks contain- ing sewage, sludge, chemicals, oils, and fuel. Flooring for warehouses, food processing areas, chemical laboratories, oil refineries, garages, etc. It can be used on roofs as a waterproofing "Excellent leveling properties. ·Self- priming ·Easy to apply.

Pack Size
20 KGS

BC AS Polyol

This product is especially applied to surfaces to build up antistatic coatings to avoid risks of ignition due to electrostatic charge. It can be applied to areas where flammable liquids of danger classes are stored. For protection and coating purposes, this product can be applied to materials like concrete, metal, wood, ceramic, and PU foam. The material must be applied utilizing high pressure, heated plural component spray proportioning equipment

Pack Size
225 KGS
200 KGS

BC EF Polyol

Solvent-free, two-component extra flexible polyurea coating for special applications This permanently elastic and crack-bridging coating material is designed for use in surface protection, especially concrete protection.

Pack Size
225 KGS
200 KGS

BC Fire Film-1

BC Fire film-1 is a very low VOC, one-component waterborne acrylic thin film intumescent coating for passive fire protection of structural steel against cellulosic fires. It has been optimized for On-site applications. Fire film -1 highly recommended for I section beams, H Coloumns, Hallow sections and cellular beams

Pack Size
20 KGS

BC POLYASPHARTIC HARD

BC Polyasphartic hard is a stand above all, two-component poly aspartic aliphatic polyurea utilizing innovative proprietary nanotechnology. It provides a high gloss clear coating. Its superior penetration and bonding strength can provide years of abrasion, impact, and wear resistance.BC Polyasphartic hard yields chemical splash and spill resistance and hot tire pick-up resistance much like its epoxy counterpart.

Pack Size
20 KGS

BCI Seal

BCI SEAL is a special waterproofing coating made of a mixture of cement, carefully controlled aggregates, and special organic and inorganic additives. Its special formula improves the osmotic-penetration in the concrete through its capillary system. The product crystallizes inside sealing, water-proofing, and protecting the concrete structure. It has been designed to be applied on fresh or cured concrete, pre-cast concrete, concrete blocks, and cement plasters but is also suitable on bricks and masonry.

Pack Size
20 KGS

BCI Primer 349

BCI Primer 349 is a two-component medium viscosity, high-performance epoxy primer, designed to seal the porosity of the substrate thus providing a homogenous and adherent surface to various epoxy and polyurethane coating systems. It adheres to a variety of substrates and can be applied as a scratch coat with the addition of graded

Pack Size
30 KGS

BC 690 H Polyol

BC 690H Polyol with BC 6534 Isocyanate is a high-build, solvent-free, and fast curing two component, high-performance waterproof membrane. This elastomeric system is designed for commercial construction, infrastructure, and general waterproofing of concrete, wood, or metal surfaces. Designed to be applied to a wide variety of substrates at high or low ambient temperatures, its fast reaction time produces a sprayed film that is touch dry in seconds. The system is designed for use through 1:1 volumetric spray equipment.

Pack Size
225 KGS
200 KGS

Novaline 321

Self-priming two-component, solvent-free, high build dense cross-linking epoxy novalac based lining coat for very high chemical and water resistance

Pack Size
20 KGS

BC8462 Polyol

BC 8462 50 Polyol is designed for the production of sprayed foams for cavity filling, with an applied density of 50 kg/m3.

Pack Size
250 KGS
200 KGS

Polyurea BC237 Polyol

Solvent-free, two-component polyurea coating material. The permanently elastic and crack-bridging coating material

Pack Size
225 KGS
200 KGS

BC Bond

BC bond is a polymer-modified cementitious adhesive used for the installation of tiles in the flooring and construction industry. Mixed with a designated quantity of water during mixing and

Pack Size
20 KGS

Polyurea BC 104 Polyol

2K Aromatic 100% flexible coating for swimming pools sensitive to moisture

Pack Size
225 KGS
200 KGS

What BCI Can offer for your project requirements

BC POLYASPHARTIC SOFT

BC Polyasphartic soft is a stand above all, two-component poly aspartic aliphatic polyurea utilizing innovative proprietary nanotechnology. It provides a high gloss clear coating. Its superior penetration and bonding strength can provide years of abrasion, impact, and wear resistance.BC Polyasphartic soft yields chemical splash and spill resistance and hot tire pick-up resistance much like its epoxy counterpart.

Pack Size
20 KGS
20 KGS

BC250 EPOXY

BC 250 EPOXY COAT is a two-component solvent-free epoxy system consisting of a base resin and hardener. It adheres perfectly to a variety of substrates like concrete, metal, wood, stoneware, etc. Once cured the product transforms into an anti-dust, chemical-resistant continuous nontoxic membrane. The applied coating is characterized by excellent abrasive resistance and mechanical strength.

Pack Size
20 KGS

BC EPOXY SL 140

BC EPOXY SL140 is a 100% solids, a high-performance coating designed for concrete. BC EPOXY SL 140 is a self-leveling coating that may be applied as a neat, aggregate-filled system or shall be applied over reinforced systems. BC EPOXY SL 140 is designed to withstand vehicular traffic and some of the Industry's most aggressive chemicals.

Pack Size
30 KGS

BC REPAIR 100

BC REPAIR 100 is high-quality water-resistant repair mortar based on Portland cement and crushed limestone aggregates. It can also be used for filling the crack unto a width of 4mm in the concrete surfaces.

Pack Size
20 KGS

BC MC URETHANE

BC MC URETHANE is a single-component moisture-cured polyurethane-based floor
coating with outstanding adhesion. On curing, it produces a very hard, tuff abrasion
resistant flexible UV-resistant coating, resistance to oil, petrol, detergent, and chemical

Pack Size
20 KGS

BC PROOF 330

BC Proof 330 is a two-component, pure aliphatic, brush-able polyurea waterproofing coating for roofs, where mechanical durability and outstanding waterproofing properties are required. It forms a blister-free, non-moisture permeable film providing zero water absorption and remarkably high resistance against UV and mechanical stress.

Pack Size
20 KGS

Elastomeric Acrylic Waterproofing System

ROOF BC- 420 is one component, elastomeric coating system based on Polymeric compounds. It can be used as a waterproofing and flexible protective coat to protect roofs, balconies, and terraces. For external and internal applications.

Pack Size
20 KGS

BC SHIELD

BC Shield is a single-component heavy-duty water-based acrylic waterproofing system that forms a strong barrier against water and moisture. It is designed to remain flexible to withstand cracking and movements of the underlying surface. It has good puncture resistance and is long-lasting.

Pack Size
20 KGS

BC AL Polyol

Solvent-free. very fast two-component aliphatic polyurea coating material for cold applications. This permanently elastic and crack-bridging coating material is designed for use in surface protection, especially concrete protection.

Pack Size
225 KGS
200 KGS

BCI PU TOP COAT (0.07 - 0.1mm)

BCI PU top coat is a high-performance, UV-stable, two-pack polyurethane sealer, available in clear or standard colors. Typically used as a UV-stable seal coat applied to concrete, screeds, or epoxy resin systems.

Pack Size
20 KGS

BC Seal primer 175

Used in conjunction with BC Range PU Joint sealants as a preparation primer.Very good drying and holding properties

Pack Size
20 KGS

BC Flouro line 322

Single pack acrylic resin-based decorative finish coat based on fluorescent pigments and is meant for high visibility in low light areas and safety signs for hazardous areas, Very fast drying and high resistance to UV Radiation

Pack Size
20 KGS

BCI TEC40 S

BCI TEC40 S is a general purpose one-component, non-sag, gun grade polyurethane joint sealant which cures by moisture to an elastic and tough sealant. It is highly resilient and has excellent recovery characteristics. It can function under a wide range of temperatures

Pack Size
600 ML

BC HMP

BC HMP is an elastomeric hot melt pallet adhesive used along with BC bridge deck waterproofing systems

Pack Size
20 KGS

BCI Pigment 400

Concentrated pigment paste based on resins and different colour pigments for use on-site colour mixing of hybrid poly-urea

Pack Size
5 KGS

BC PUR Injection

BC PUR Injection is a very low viscous, elastic, and solvent-free polyurethane injection resin. In contact with water, a uniform closed and therefore water- tight pore structure forms, which is elastic and flexible.

Pack Size
10 KGS
10 KGS

BCI BUILDING CHEMISTRY INDUSTRY

Our Certificates

BCI

MANUFACTURING EXCELLENCE IN POLYUREA
WATER PROOFING, CONSTRUCTION CHEMISTRY
AND PROTECTIVE COATINGS

Get In Touch

Kingdom of Saudi Arabia

PHONE: +966 593120221
EMAIL : info@bcisaudi.com
WEBSITE : www.bcisaudi.com

رمزك التجاري QR Code

من خلاله يمكنك التحقق المباشر من العلومات:

- السجل التجاري
- رخصة البلدية
- شهادة السعودة
- برنامج نطاقات
- شهادة الزكاة
- الغرفة التجارية

وزارة التجارة
Ministry of Commerce

شهادة تسجيل الشركة
Company Registration Certificate

الرقم الموحد : ٧٠٢٩٦٣٥١٨٧
رقم المنشأة : ٢٠٥٠١٥٩٠٩٣
التاريخ : ١٤٤٣/١١/٢١ هـ

الاسم التجاري للشركة : شركة كيمياء البناء للصناعة

نوعها : محدودة أجنبية جنسيتها : سعودى

مدة الشركة : تبدا من : ١٤٤٦/٠٣/١٥ هـ وتنتهي في :

مركزها الرئيسي : ٠٠٠٠ ،٠٠٠٠

هاتف : ٠٥٩٣١٢٠٢٢١ الرمز البريدي : ٣٤٣٤١ ص. ب :

النشاط : للاطلاع على بيانات الأنشطة الرجاء مسح الرمز التجاري ملكية الشركة : أجنبية

رأس المال : ١٠٠,٠٠٠ ريال سعودي

المديرون : 1 محمد عبدالمجيد شعبان القصراوي 2 عبدالمجيد شعبان اسحق القصراوي

3 4

5 6

7 8

9 10

11 12

13 14

15 16

سلطات المدير/المديرون : حسب ما نص عليه عقد الشركة

يشهد مكتب السجل التجاري بمدينة : الدمام بأنه تم تسجيل الشركة المذكورة أعلاه بمدينة : الدمام

وتنتهي صلاحية الشهادات في : ١٤٤٦/١١/٢١ هـ بموجب الإيصال رقم : ١٨٢٦٨٣١٦ وتاريخ : ١٤٤٦/٠٣/١٥ هـ

السادة / شركة كيمياء البناء للصناعة

نسأل الله أن يكتب لكم التوفيق والنجاح في عملكم التجاري وأن تكونوا شريكًا في تعزيز اقتصاد المملكة العربية السعودية.

يسرنا إبلاغكم بأن رقم منشأتكم الموحد هو

٧٠٢٩٦٣٥١٨٧

وقد تم ربطه بالخدمات الحكومية التالية..

وزارة التجارة Ministry of Commerce	٢٠٥٠١٥٩٠٩٣ رقم منشأتك
المؤسسة العامة للتأمينات الاجتماعية General Organization for Social Insurance	٦٣٣٥٥٠٠٨٥ رقم منشأتك
الموارد البشرية والتنمية الاجتماعية	٢٠٠٣٣٨٣-٤ رقم منشأتك
اتحاد الغرف السعودية Federation of Saudi Chambers	٣٥٢٣٦٠ رقم منشأتك
سبل SPL	٢١٠٢٠٦١٣٠١٨ رقم منشأتك
بلدي balady	لايوجد رقم منشأتك
هيئة الزكاة والضريبة والجمارك Zakat, Tax and Customs Authority	تحت الاجراء رقم منشأتك

للاستفادة من الخدمات المقدمة من الجهات الحكومية

دليل التاجر

التاريـــــــخ: 1446/05/15 هـ
الموافـــــق: 2024/11/17 م
رمز الشهادة: 81585340

شهادة السلامة والصحة المهنية

اسم المؤسسة/ الجهة	شركة كيمياء البناء للصناعة	الرقم الوطني الموحد	7029635187
رقم اشتراك المنشأة	633550085	عنوان المنشأة	4320 خالد بن الوليد 7921 الراكة الشمالية 34224 الدمام
نوع النشاط	صناعة لوازم العزل ومنع التسرب		

عدد المشتركين السعوديين الحالي	عدد المشتركين غير السعوديين الحالي
29	44

الفترة التي تشملها شهادة السلامة والصحة المهنية من (2024/09/01 م) إلى (2024/11/30 م).

اجمالي عدد الاصابات	وفاة مهنية	شفاء بعجز	شفاء بدون عجز
0	0	0	0

المعلومات المذكورة في الشهادة تم استخراجها استنادا على الوقائع المثبتة في سجلات المؤسسة الخاصة بصاحب العمل خلال الفترة الموضحة في الشهادة دون أدنى مسؤولية عن أي أحداث لم يتم الإبلاغ عنها أو تسجيلها لدى المؤسسة من قبل المنشأة. البيانات المذكورة في الشهادة تخص الوقائع المثبتة في سجلات المؤسسة الخاصة بصاحب العمل خلال تلك الفترة.

Public عام

تحقق من صحة وصلاحية الشهادة عبر زيارة الرابط أدناه في الموقع الالكتروني للمؤسسة العامة للتأمينات الاجتماعية او عن طريق استخدام الرمز المعرف التالي

التاريـــــــخ: 1446/05/15 هـ
الموافـــــق: 2024/11/17 م
رمز الشهادة: 81585340

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المملكـة العربيـة السعوديـة، الرياض 12622 - 8308 حي الوزارات 3795
Kingdom of Saudi Arabia, Riyadh 12622- 8308 Al Wizarat 3795

800 124 3344
gosi.gov.sa

شهادة التوطين

رقم الشهادة	تاريخ الإصدار	تاريخ انتهاء الصلاحية
202465-11307556	25/04/2024	15/02/2025

تاريخ التجديد/التحديث	17/11/2024
حالة الشهادة	تم التحقق
اسم المنشأة	شركة كيمياء البناء للصناعة
رقم المنشأة	4-2003383
رقم السجل التجاري	2050159093
الرقم الوطني الموحد	7029635187
مستوى نطاقات	اخضر مرتفع
معدل التوطين	% 33

تشهد وزارة الموارد البشرية والتنمية الاجتماعية بأن المنشأة المذكورة أعلاه حققت نسبة التوطين المطلوبة وتم منحها هذه الشهادة بناء عن طلبها.

الشهادة تم إنشاؤها إلكترونياً ومعتمدة من الجهة المختصة ولا تحتاج الى ختم او توقيع

The Ministry of Human Resources and Social Development certifies that the above mentioned Establishment has achieved the required Nationalization rate and has been granted this certificate upon request.

The certificate is electronically generated and approved by the authority. It does not require any signature or stamp.

تأكيد العضوية في برنامج صنع في السعودية

السادة/ شركة كمياء البناء للصناعة
السلام عليكم ورحمة الله وبركاته، وبعد،

نرحب بكم أعضاء في برنامج "صنع في السعودية" ويسعدنا انضمامكم للبرنامج ومساهمتكم في تحقيق أهدافه الرامية إلى تعزيز الثقة بالمنتج الوطني وتفعيل دوره في تنمية الناتج المحلي السعودي غير النفطي، مما يساهم في جعل المملكة قوة صناعية رائدة وفقًا لأهداف رؤية السعودية 2030.

يعد هذا الخطاب بمثابة تأكيد على أن شركتكم الموقّرة والمنتجات المسجلة والمُوافق عليها تستوفي المعايير المطلوبة للانضمام لبرنامج صنع في السعودية، على أن يمتثل جميع الأعضاء امتثالًا كاملًا لقواعد البرنامج طوال فترة صلاحية العضوية، واعتباراً من تاريخ هذا الخطاب، يحق لشركتكم استخدام علامة "صناعة سعودية" على المنتجات المسجلة والمعتمدة، والاستفادة من مزايا العضوية.

وبناءً عليه، نأمل منكم تعريف جميع الموظفين المعنيين بتطبيق العلامة الصناعية بقواعد البرنامج وإرشادات استخدامها على المنتجات والمواد الترويجية الخاصة بالشركة.

وفي حال وجود أي استفسارات أو متطلبات، يسعدنا خدمتكم بتواصلكم معنا عبر البريد الإلكتروني :members@saudimade.sa

نائب قطاع صنع في السعودية والترويج

أ. فيصل بن أحمد المغلوث

شهادة إشتراك

Membership

البوابة الموحدة للغرف السعودية

غرفة الشرقية
ASHARQIA CHAMBER

This is to certify that نشهد بأن

شركة كيمياء البناء للصناعة

Undefined

Is a member in the chamber عضو في الغرفة التجارية

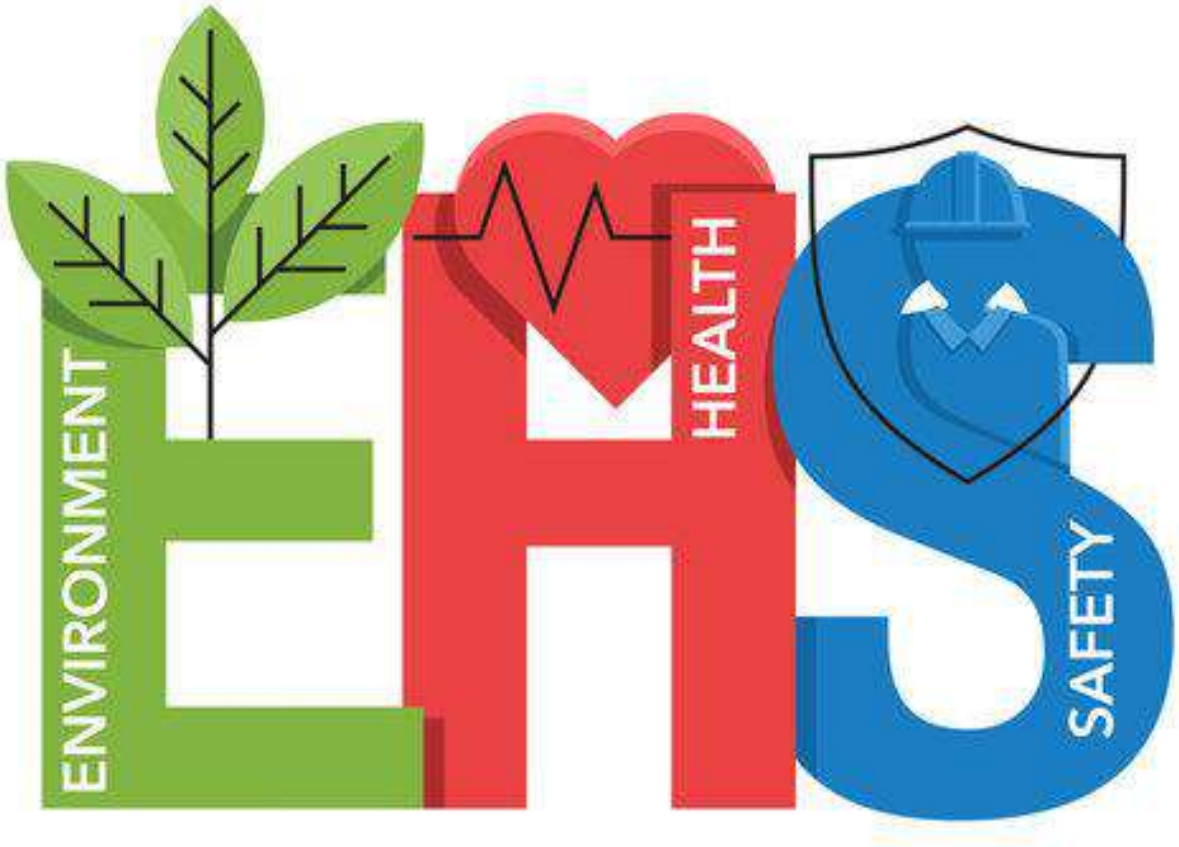
Certificate Date	07/07/2024 - 01/01/1446	تاريخ طباعة الشهادة
Date of Membership	20/06/2022 - 21/11/1443	تاريخ الاشتراك
Date of Expiry	19/05/2025 - 21/11/1446	تاريخ الانتهاء
Subscription Status	فعال	حالة الاشتراك
NUN	7029635187	رقم المنشأة الموحد
Membership No	353360	رقم الإشتراك
Membership Degree	الثانية	درجة الإشتراك
Commercial Record/ License	2050159093	الرخصة / السجل التجاري
P. O. Box	3520	صندوق البريد

التوقيع
عبدالعزيز بن سعد المعمر
مدير إدارة المشتركين والفروع

غرفة الشرقية
ASHARQIA CHAMBER

BCI BUILDING CHEMISTRY INDUSTRY

Health safety and environmental plan



Prepared and Issued by
Building Chemistry Company
Dammam
Kingdom of Saudi arabia

TABLE OF CONTENTS

1. GENERAL

The intent of this Safety procedure is to establish safe working practices and standard, which shall be employed on the SITE and to detail the organizational requirements and obligations .

The purpose of this Project Health, Safety and Environment (HSE) Plan is to provide maximum safety of personnel and property, and to avoid any adverse impact on the environment.

2. REFERENCE:

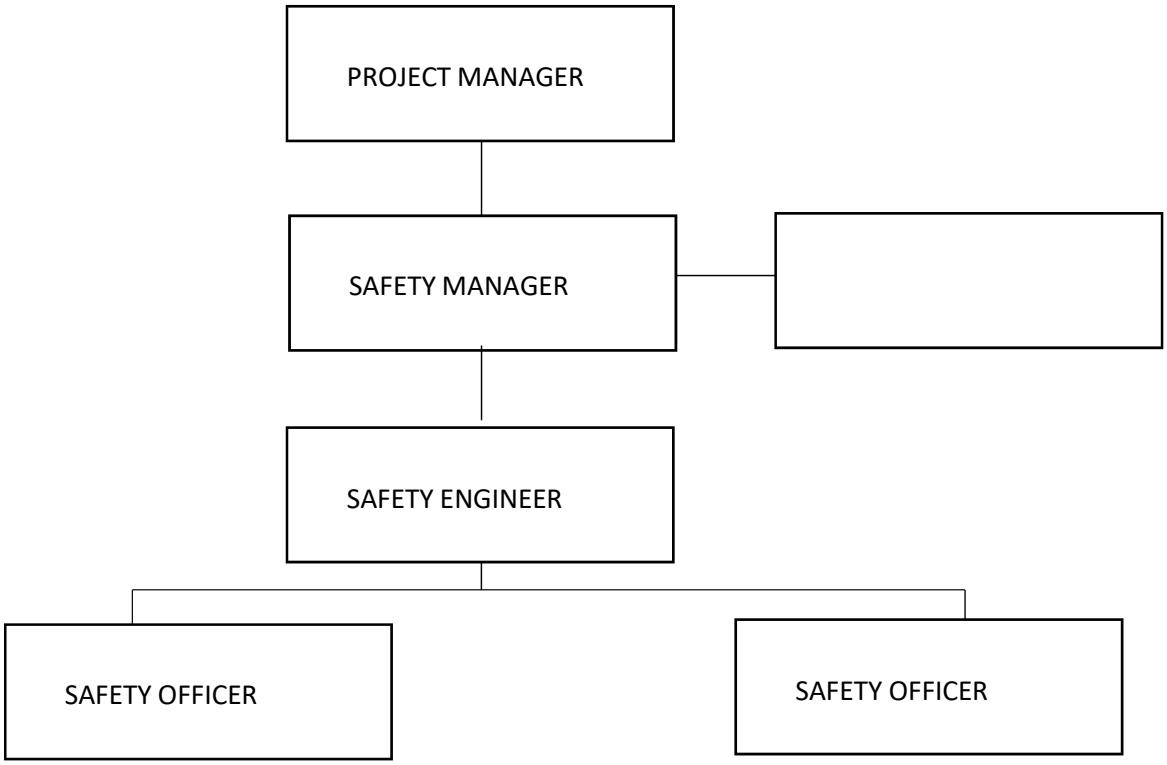
- OSHAS 1910 – Occupational Health & Safety Standards.
- British standards international

3. ROLES AND RESPONSIBILITIES

Management accepts the responsibility for impressing upon all employees that safety and injury prevention have a high priority at Arabian Pioneer Company and that all rules and policies will befollowed.

- Provides leadership and guidance to middle management for the acceptance, maintenance and enforcement of the Loss Prevention Program.
- Provides resources for training and monitoring the Loss Prevention Program.
- Periodically reviews the safety records and reporting functions.
- Promotes and attends safety functionalities.
- Maintains open lines of communication between employees, supervisors and management relative to the free exchange of safety suggestions and information.
- Monitors the follow-up on recommendations made to improve performance and prevent accidents.

4.1.1 HSE Organizational Chart



Name of Consultant :Al Tamimi Safety consultants and Engineering office
Name of owner : Abdul majeed Al qasrawi
Supervision: Ahmed Hilal

Project manager

Establish processes for managing scope during the project lifecycle, setting quality and performance standards and assessing risks

Develop and maintain partnerships with third-party resources, including vendors and researchers

Assign and monitor resources to ensure project efficiency and maximize deliverables

Report project outcomes and/or risks to the appropriate management channels and escalate issues, as necessary, according to project work plan

Construction manager

Overseeing the logistical requirements of a project

Delegating work to colleagues within r team

Meeting regularly with client, third parties and other managers to report on progress

f Regularly reviewing timings, budget, labour, risk and project plans to ensure work stays on track

Conducting site visits to inspect work, check materials and ensure staff are following health and safety guidelines

Ensuring the delivery of high-quality work within contract timescales

Working in an office and on a construction site.

Safety Manager

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- Check and advice on each work plan or procedures for health and safety prior to work commencement.
- Coordinate with health and safety section on matters regarding health and safety.

- Provide advice, guidance such as may be needed in accident prevention.
- Establish and maintain proper health and safety administrative system.
- Investigate all incidents and accidents and submit reports complete with remedial actions to Safety team of head office through Construction Manager for corrective action.
- Ensure that Safety Supervisor conducts their safety activities
- If safety violations are determined high risk, then stop the work as necessary.

4.1.1.1 Safety Supervisor

- Assist Safety Manager and perform the safety activities under the direction of Safety Manager
- Check each Subcontractor's work plan or work procedures from the view of safety point and report to Safety Manager
- Advise the supervisory personnel of each function for safety activities
- Patrol the construction site daily to check that all subcontractor’s works are executed in accordance with the Safety Construction Procedures.

- Report immediately to the safety manager any violations that may require work to be stopped.

Employee (Worker)

- Comply with safety rules and regulations.
- Work safely and shall not do anything that can cause injury to himself.
- Ensure work tools, apparatus, appliances, materials, and/or equipment including Personal Protective Equipment (PPE) are used correctly and maintained in good serviceable conditions.
- Report any unusual occurrences and all defects of plant and equipment to your immediate supervisor.
- Attend all Tool Box Meetings, other meetings and/or training relating the safety.
- Observe all written and verbal safety instructions issued from time to time by Safety Manager and/or Safety Supervisor.
- Observe and obey all safety signs/notices.
- Develop a personal concern.
- Keep work place clean and tidy.
- Seek medical assistance for all injuries
- Report to the medical Centre

5. SAFETY CONTROL

5.1. Training Program

5.1.1 Orientation/Induction course

Each (group of) employee(s) of APC will be given an orientation/induction course prior to start of any work.

5.1.2 Toolbox talk

Tool box talk will be conducted periodically in a group of workers for specific work as required to reach the required level of competencies. During this meetingthe hazards involved in the activity and preventive measures will be highlighted. All topics in connection with SITE activities will be covered in the meeting to create awareness among theworkers regarding safe practices. It will be done as per job/specific SITE requirement.

5.1.3 Training

APC shall arrange training program for their employees to reach the required level of competency in:

- HSE requirements
- Use of PPE's
- Permit System
- Heavy plant & equipment operations
- Fire Fighting & Control
- Emergency Procedures

In addition to the above, training in Electrical Safety, Scaffolding, First Aid, Material handling etc. will also be given to the employees.

5.2. Safety meeting

Objectives of the safety meeting to be conducted is

- To Ensure application of Safety norms, Rules & Regulation.

- To Zero down the risk factors to avoid the accidents.
- Enforce to wear the Personal Protective Equipment by all employees work force.
- To meet the emergency AS AND WHEN arises at SITE.
- To carry out periodically safety inspection, discuss the shortcomings & action to set it right.
- To carry out investigation of all the accidents, review & recommend preventive measures to avoid such recurrence and ensure the implementation of the same.
- To discuss & resolve safety observations at SITE.

Records of Safety Meetings and Training Program shall be maintained

5.3. Safety Inspections, Patrol and Audit

In order to monitor effective implementation of HSE requirements at SITE the following periodic inspections, audits and review shall be carried out.

- **Daily site inspection**

Inspections of SITE shall be carried out regularly, prior to the commencement of daily activity, while executing a new activity or during any time of the day by the SITE Engineers/ supervisors, safety officers and all other SITE management personnel. Weekly Site safety patrol

- **Site safety audit procedure**

Safety audit is a detailed and organized process. It could be time consuming and requires money but it is more beneficial at the long run. It also helps improve the overall health and safety performance and safety culture.

The audit procedures follow five (5) simple steps:

- Prefer for audit: Here you will determine who will do the audit, the scope/objective of

the audit, review applicable standards, and the result of previous audit.

- Conduct audit: As highlighted in the audit technique above.
- Create an audit report with recommendations: The report should highlight the findings. The findings should be both positives and negatives. The summary of the audit report should include recommended actions and areas that need improvement pointed out.
- Set priorities for corrective action: Recommended actions should be prioritized and execution time attached to it. Some may need immediate action while others may not.
- Publish the audit result: The recommendations and corrections should be adequately communicated. This will help everyone understand the necessary changes and how the change could affect them and their work.

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5.4. Work Permit System

Required work permit shall be obtained by APC from Contractor for specific workas required in the document of client. Concerned employees at SITE will be made aware regarding the basic acquirement of the work permit system.

The permit shall be kept at work SITE during the execution of work. The following are the permits, which shall be obtained as per the standard rules and job requirement.

- Hot Work Permit

A hot work permit is required to carry out any work involving the use of a local source of ignition capable of igniting flammable of gases, liquids or any other materials in a restricted hazardous area. Example: Welding, burning, grinding, blasting, soldering, open fire, opening up of electrical equipment in gaseous area

- Height work permit

Height work permit is required to work at the height above 1.8 meters.

- Electrical Permit

An electrical permit is required for any work on energized electrical system

5.5. Health

Medical and First Aid

APC shall maintain adequate number of First Aid Kit in a weatherproof metal or plastic box for initial medical care. APC will check dressings, splints, & cold packs once a month to ensure the expired items are replaced. .

First aid is medical attention that is typically administered immediately after an injury or illness occurs. It usually consists of one-time, short-term treatment, such as cleaning minor cuts, treating minor burns, applying bandages, and using non-prescription medicine. The overall goals of first aid are:

- Keep the victim alive.
- Prevent the victim's condition from worsening.
- Give first aid until help arrives.
- Ensure that the victim receives needed medical care.

5.6. Drinking Water, Welfare and Sanitation

Water Supply and Toilets

Suitable potable water supply shall be provided for drinking purposes. APC will provide sufficient numbers of for their personnel. All such facilities will be needed to be maintained in clean and hygienic conditions.

5.7. Vehicle and Road safety

APC shall take care that all their vehicles entering the project SITE should have necessary documents & register the necessary details at the security gate record at the SITE.

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- The number of passengers in a vehicle may not exceed the seating capacity of the vehicle.
- Vehicle should park side to side in car parks and not nose to tail. This will reduce injuries caused by vehicle maneuvering.
- A vehicle may not be loaded beyond its load capacity.
- Overhanging loads shall not be carried without authorization. Such loads shall be marked by red flags during daylight and by light at night.
- The gross weight of a vehicle using a bridge must not exceed the stipulated maximum permissible load.
- Park vehicles only at designated places so that it doesn't create hindrance to other vehicles.
- The body of the tripper lorry should always be lowered before driving vehicle off.
- Drivers must posses' license while driving.
- APC will ensure that trucks & trailers will not be used for transportation of personnel at SITE.

Note:

- A vehicle and trailer are to be considered as one vehicle
- Vehicles may not be refueled within restricted areas
- Driver to his superior must report all injuries however minor immediately.
- Seat belts must be worn at all times.

6. HOUSE KEEPING

1. Good housekeeping will be practiced by APC personnel at all times site. During and after completion of the work, they are toensure that their work area is kept clean and tidy. Flammable materials shall not bescattered over and shall be collected and disposed of in sufficient frequency

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2. Elevated cables shall be installed at such height as to allow unrestricted movement of construction, Equipments and Vehicles.
3. Particular emphasis shall be placed on maintaining platforms, scaffolding, stairways or other elevated places free of Construction debris.
4. Shuttering materials, platforms or scaffolding segments should be kept in orderly manner before use as well as after dismantling so that they do not cause hindrance to the movement of man and materials.
5. Equipments or materials stored at SITE shall not obstruct to essential facilities and / or Equipments such as fire Extinguisher, fire hydrants, valves gauges, emergency exits etc.
6. Separate manpower will be provided by Al-Joudah for daily housekeeping at SITE.

7. ACCIDENT AND INCIDENT

All accidents causing injury and/or property damage will be thoroughly investigated by the APC Supervisor

The main purpose of these investigations and reports is to determine the underlying causes of the accident or near-miss and to provide for corrective measures in order to avoid recurrence as well as occurrence of a similar incident elsewhere on the project SITE. An additional purpose is to determine the responsibility for the incident and disciplinary measure to be taken if required.

8.1 PROCEDURE:

- Injured person or the first-aider to report accident to Safety personnel giving all relevant details.
- Safety personnel to enter the detail in the accident book taking care to ascertain exactly what occurred.
- Injuries which require the first aider to refer the injured person to hospital or to their doctor should be immediately notified to the Safety Supervisor on site and notified to the company office by telephone.

- In such cases the Safety Supervisor, accompanied by a representative of the employees, must investigate all the circumstances of how the injury was sustained and a company accident investigation report completed.
- The findings of the investigation will be examined by the Safety Manager and the chief executive with the objective of identifying measures to avoid a repetition.
- These control measures will be introduced after consultation by the Safety Manager on site.
- Injuries or incidents at work leading to ill health which result in an absence from work of more than 3 days must be notified to the Health and Safety Executive immediately.
- Injuries or incidents leading to ill health which are more serious than those mentioned above (including injuries leading to death) must be notified to the Safety Department immediately by the quickest possible means (i.e. by telephone). This call must be followed by a written report within seven days. The chief executive must also be notified as soon as possible.
- The accident location should be barricaded off pending an investigation into the circumstances of the incident, which led to the injuries. This investigation should include statements from all witnesses and any plant or equipment involved in the incident should not be touched nor moved until the investigation has been concluded.
- The investigators will discuss their findings with the chief executive to identify measures needed to avoid a repetition. These measures will be introduced as soon as possible after consultation with the construction workers.

8.2 INVESTIGATION & ANALYSIS

Accidents must be investigated and analyzed from three different points of view

A. Direct cause of injury:

A harmful transfer of energy that produces injury or illness.
Example: The worker suffered two broken legs when the truck crashed into the wall.

B. Surface causes of accident:

Specific unsafe conditions or unsafe behaviors that result in an accident.
Example: The truck crashed into the wall because the brakes failed.

C. Root causes of the accident:

Common conditions and behaviors that ultimately result in an accident.
Example: The company did not have a maintenance program for its vehicles.

8.3 ANALYSING METHOD

- When did the accident occur?
- Where did it occur?
- Who was injured or what was damaged?
- What caused the accident (immediate and contributory)?
- Why did it occur?
- How were the employees injured?

9.1. Personal Protective Equipment (PPE)

All employees shall wear Personal Protective Equipment (PPE) at the project SITE, except inside offices, rest-room and accommodation buildings.

APC shall arrange appropriate Personal Protection Equipment for their individual employees that include helmets, safety shoes, and safety belts with full body harness (For height Job) as minimum. All other PPE's like goggle, ear plug, hand gloves etc. shall be provided as per specific job requirement as mentioned in table 1.

Head protection (Safety helmet) and foot protection (safety shoes/gum boots) shall be worn by all the employees while working at SITE. Safety belt with full body harness shall be used while working at height >1.8 m. Safety belt shall be anchored at shoulder or above height.

Table 1 : Personal Protective Equipments

S.NO	WORK ACTIVITIES	SUITABLE PPE
A.	Excavators, breakers, chippers, drillers.	Protective goggles, hand gloves, Safety helmets and Safety shoes.
B.	Mixing cement, concrete, lime mortar, asphalt material, refractory material.	Safety goggles, gloves and protective foot wears.
C.	Electricians	Insulated tools, Rubber hand gloves and electrical resistant shoes, mat.
D.	Grinders	Protective goggles and leather hand gloves
E.	Gas cutters ,welders helper	Colored goggles, leather hand gloves.
F.	Welders	Welding screen, safety shoes with rubber sole, Leather hand gloves.
G.	Workers engaged in insulation	Dust mask ,hand gloves
H.	Workers working at height	Full body harness, Safety net, lifeline. Fall arrestor if required.
I.	High noise level area i.e. D.G operator working, near piling work, compressor operator etc.	Ear plug / ear muff
J.	Working in dusty atmosphere	Dust mask, Safety goggles.
*Safety Helmet with chin strap and Safety Shoes are compulsory at SITE.		

9.2. Working at height and Scaffolding

1. Site Engineer will obtain the permit for working at height duly approved by competent authority. For any work that has to be carried out over water or at height of greater than (1.8m) above ground, well designed scaffolding of adequate strength shall be used as a safe means of access.

9.3. Fire Protection and Prevention

9.3.1 Oxygen and Acetylene Cylinders Storage Area

1. The storage of oxygen and acetylene in cylinders/bottles must be in a sheltered/sun-roofed area, but never inside any building. This storage place shall be located at least 6m from any building, the diesel (fuel) storage (tank) - and gasoline storage area.
2. Oxygen and acetylene cylinders must be stored in separate compartments and always in upright position as well as secured to avoid tipping over. Use Trolleys for oxygen and gas cylinders and chain them.
3. The area shall be fenced all around and each compartment shall have its own gate. The gates shall be locked and only authorized/designated personnel shall unlock them and enter the compartment(s) for handling cylinders. Follow color coding for cylinders and their hoses.
4. "Oxygen" and "Acetylene" storage signs, "No Smoking" and "Authorized Personnel Only" signs shall be placed against the outside of the fence all around. Beside each gate one fire extinguisher (for Class B fire) shall be placed at the outside.

9.3.2 Material, storage & Handling

1. All materials should be maintained in neat stockpiles with well-laid aisles and walkways for ease of access and retrieval. There shall not be any projections in the walkways.
2. Do not store wet or oily materials and materials like jute, cotton gunny bags etc. together. They can ignite spontaneously.
3. Store chemicals and other goods in stable racks, properly labeled. Mutually reactive chemicals should be kept away from each other. Display procedures to be followed in the event of spillage / leakage.
4. Goods at high temperatures must be arranged so as to allow safe cooling and should not come in contact with combustible material.
5. Tools, which are returned back after use, must be kept at the earlier marked place.
6. Storage place should have proper ventilation.

7. “No smoking” boards should be displayed in the store.
8. All containers (full or empty) shall carry tags / labels for quick identification.
9. Drip trays should be provided at all drum-filling locations, including diesel, petrol and oil filling points.
10. Electrical switchboards should be properly secured.
11. No other work such as repair of machinery, testing of grinding machine should be done at SITE- store.

9.3.3 9.3.3 Welding and Gas Cutting

Frames of electric welding machines operated from a power circuit shall effectively Grounded. The electrode & the ground cables should be completely insulated. Electrodes should be removed from holders when not in use. Holder should be protected so that it cannot make electrical contact. Welders and their helpers should be given necessary PPE during welding. For gas cutting job, the torch should be equipped with flash back arrestor. Appropriate PPE should be given to the personfor doing job. Gas cylinders should be kept away from source of heat and shouldbe securely held in upright position. Valve protection caps should be fitted on the cylinders when not in use. Acetylene and Oxygen hoses should be distinguishable and care should be taken that hoses are not interchanged. Welding / Cutting / Hot jobs should not be not permitted in areas where flammable gas mixture, heavy dust concentration is very apparent. Welding or Cutting / burning of metals having toxic significance such as Zinc, Lead, Calcium and Chromium should be done in open air and welder should wear a fitter type respirator.

9.3.4 Electrical Plant & Equipment

A diesel driven power generator, if any, will be covered by a sunroof, whilst its "hot" terminal (or that of the "public power supply company") must be covered for protection against direct sunlight. The power generator must (obviously) be grounded/earthed. The area needs to be fenced all around. The exhaust outlet of the engine shall be away from combustibles/flammables and working area. "High Voltage”, "No Smoking"- and "Authorized Personnel Only" signs shall be placed all around against the fence. Fire extinguishers shall be hung on the fence posts at the outside: at least one for Class B fire at the diesel engine & refueling side of the power generator and one for Class C fire at the generator side.

Stationary (diesel driven) WELDING GENERATORS and - TRANSFORMERS, if any, shall be grounded / earthed. Engine exhausts shall be away from combustibles/ flammables. Underneath each diesel driven generator a tray for catching oil - & fuel spillage needs to be placed. Electrical circuits shall be properly fused. Disconnect switches (switchboards) need to be labeled and easily & freely accessible, whilst ground fault protection shall be installed. A "High Voltage" sign shall be provided at an appropriate place.

9.3.5 Fire Fighting Training & Control

An adequate number of Al-Joudah's employee shall be trained as to properly use the firef ighting equipment and to control fire hazards by their respective SM/SE/SO. These training courses shall be being arranged Al-Joudah's SM/SE/SO and shall be conducted periodically. Fire protection/prevention shall be a subject of attention during safety meetings and be included in employee's induction course.

9.3.6 Fire Extinguishers

An adequate numbers of hand fire extinguishers of adequate type (Generally ABC type) and size shall be placed by Al-Joudah in their workplace and facilities as per:

The fire extinguishers shall be numbered and recorded in a logbook stating date of delivery, date & precise location installed, date of inspection by manufacturer/ distributor and other relevant particulars for each extinguisher. Once in a *Quarter* the fire extinguishers shall be inspected by the manufacturer or distributor on proper operating conditions and records shall be maintained.

"No Smoking", "No Mobile "signs should be displayed at particular locations where and when necessary.

9.3.7 Electrical Safety

- APC shall ensure that all temporary electrical installations comply with local rules and regulation and procedure followed is as follows
- A Safe Clearance Procedure needs to be established during the installation period and the provisions for tagging; lock out and capping of controls shall be followed during the operation and maintenance of the electrical equipment & outfit.
- All Electrical Distribution Boards will be provided with earthing; all power tools will be connected through ELCB.

- All Electrical panel shall be installed at 50 cm height from the ground and the panel shall be covered by plastic shelter.
- Guards shall be provided to avoid accidental breakage to protect lamps. Emergency lighting should be provided for person working in night shifts for standby.
- An experienced electrician should make temporary electrical wiring only and the wiring should be checked regularly for damages insulation, exposed wires, loose joints, overheating of the cable.
- Temporary and extension cords shall be 3-wire type, protected against damage. These should be kept clear of walkways and other locations where they may be exposed to damage or create tripping hazard. Splices in cords are provided with soldered wire connections with insulations to retain the mechanical and electrical capacity of the original cable.
- Underground cables are provided within protective ramps when located at a traffic crossing of motor vehicles or Construction plant & equipment
- Switches, Fuses are enclosed in cases, properly marked, grounded and installed minimizing the danger of accidental operation. Weather proof enclosures / cabinets are provided in wet locations.

9.4. Plant, Tools and Equipment

9.4.1. Hand tools

Accidents arising out of hand tools can be attributed to any of the following reasons:

- Using the wrong tools
- Using the tools which are in poor condition
- Using the tool in a wrong way or ignorance on part of user of particular tools
- Keeping tools in unsafe places

If the above four conditions are taken care of, we can eliminate all the hand tool accidents.

Using the wrong tools

The weight, size and type of tool should be selected to suit the job being carried out. Using pliers or wrenches as hammer, using screw drivers as chisels, using screw

spanners in place of ring spanners, using pipe wrenches as spanners are a few examples of using wrong tools.

Using tools in poor condition

- Tools provided with wooden handle should always be used with the handles intact. The handles should be tightened with wedges whenever necessary. Split or broken handles should be replaced immediately. Pipes or rods shall not be used as handles.
- Sharp tools improve accuracy and are safer than dull tools. Accumulated dirt or grease should be wiped off immediately to avoid slippage. Shovel and pick handles should be free from splinters, splints and cracks. Insulated and non-conducting tools should be tested frequently for their electrical resistance. Mushroomed chisel is a serious source of hazard.

Using tools in wrong ways

- Wrench should always be placed on nuts with jaw opening facing the direction in which the wrench is to be rotated. Wrench should not be pushed but be pulled.
- Chisels should be held with steady but relaxed grip. Chisels being stuck by others should be held by tongs or other holding devices. Always chip away from yourself and protect others by screening. Use goggles while chipping. While using screwdriver, the object should not be held in hand or thigh.
- Blades of hack saw should always point forward and the entire length of the blade should be used in the forward cutting stroke. The stroke should be steady and firm to avoid jumping of blade.

Keeping tools in work places

Hand tools should not be allowed to lie on workbenches, scaffoldings etc. where they can be tipped down. They should be stored properly after the work is over. Sharp tools like screwdriver, etc. should not be kept in pockets. Hand tools shall not be held in hand while climbing up or down through a ladder. Tools should never be thrown up or down. Tools should be cleaned properly after the work and before start of the work.

Jacks

- Select jacks heavy enough to raise and hold the load safely. Jacks should rest on firm level foundation adequate to support the load. Jacks of same capacity and type should be used while using the number of jacks. Simultaneously be sure that

the jack cannot tip and is in line with vertical movement of load. Wooden block should be given over the jack also to avoid metal-to-metal contact. Load must rest on firm packing before releasing the jack or before allowing persons to workbelow the raised load.

- Inspect frequently and use only the proper grade and clean oil. It is advisable to shore up any load that must remain in a raised position for any length of time.

Portable electric tools

- Maintenance of electric tools should be systematic
- Safety guards provided in the tools should not be tampered.
- The operator should wear gloves, safety shoes, goggles etc. wherever necessary.
- Only experienced and authorized personnel should be permitted to operate power tools.
- For all electric power tools, a running earth must be maintained and the supply cable should be handled carefully.
- Electric supply should be disconnected before attempting any repair or servicing. Even a change of wheel in the grinding machine requires the supply to be disconnected.

Drilling machine

- A prick punch or pilot hole should be provided to guide the drill bit.
- Suitable drill bit should be selected for the material being drilled.
- If bit is long enough to pass through the object, care should be taken to avoid damage or injury on the far side.
- If the object is small, it should be secured to prevent spinning.
- Care should be taken to prevent sleeves and other clothing from being wound around the grill

Portable grinder

- Hood guard provided in the machine should be maintained in place always
- Wheels of proper rpm rating should be used. Date of expiry of wheels should always be checked before mounting. If in doubt, a tap test may be conducted to check the minor cracks and the machine be allowed to run under no load in a safe place for some time.

- The grinding wheel shall be stored and handled properly. It shall never be allowed to be dropped and stored in damp place.
- Mounting blotter should be used when provided on the machine. The spindle nut should not be over tightened.
- Only experienced and skilled grinders shall be engaged.
- The grinding machine shall not be allowed to be kept on the ground when the wheel is in rotating condition.
- The face shield, safety goggles and hand gloves should be used.

Bench grinder

- It should be provided with a proper earthing.
- Eye shield and hood guard should be provided and maintained.
- Wheels of proper rpm should be used and they should be carefully inspected to check for cracks. The object should not be forced on the grinding wheel.
- Tools rest should be in place adjusted to a maximum gap of 3 mm from the wheel.

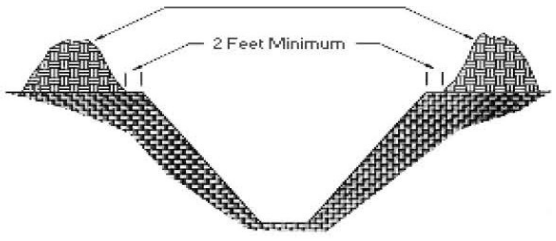
Pneumatic tools

- Air hoses of pneumatic tools should be protected against whipping. They should also be protected against damage by vehicles.
- The air lines should be de-Pressurized before opening any joint.
- Compressed air should not be directed against self or others. It should not be used for removing dirt from the clothes etc.
- Air hoses taken overhead or vertically should be sufficiently supported.

8. Excavation

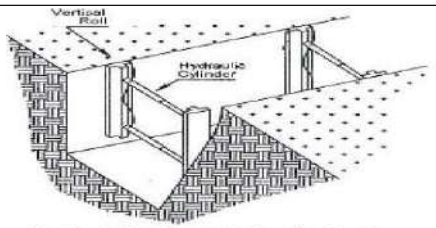
- Prior to excavation, drawings shall be checked by contractor/sub-contractor to determine if there are any underground installations pipes, cables exist. These shall be protected against damage.
- Maintain sufficient angle of repose. Provide slope not less than 1:1 and suitable bench of 0.5m width at every 1.5m depth of excavation in all soils except hard rock.
- As far as possible, excavated material should not be placed within 1 m from the edge of excavation or depth of excavation whichever is greater.

- Drainage system shall be provided to control storm water entering the excavation. Ground water running into the excavated area is controlled. Dewatering Pumps shall be kept ready in case of emergency.
- Barricades, warning lights shall be erected at 1 m from the edge of excavation adjacent to pedestrian or vehicular traffic.
- Two safe access / exits shall be provided by means of ladders, stairs ramps for excavation beyond 1.5m.
- Where vehicles or Equipments operate near excavations, the side of the excavation is made to withstand the forces exerted by the superimposed load.
- Each excavation is checked daily. If there is any cave-in or slide, all the work in the excavation is stopped forthwith.
- Don't allow vehicles to operate too close to excavated area. Maintain at least 2m distance from edge of excavation.

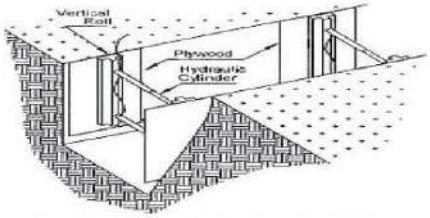


Emergency response contact

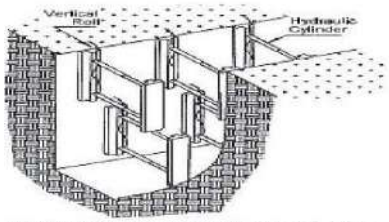
Eng. Mohammed Al Qasrawi	0506612300
Mr. Abdul Rahman	0548390823
Mr. Javid Shiek	0573253231



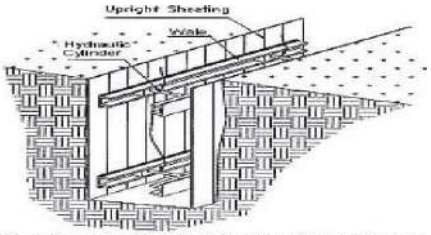
Vertical Aluminum Hydraulic Shoring
(Spot Bracing)



Vertical Aluminum Hydraulic Shoring
(With Plywood)



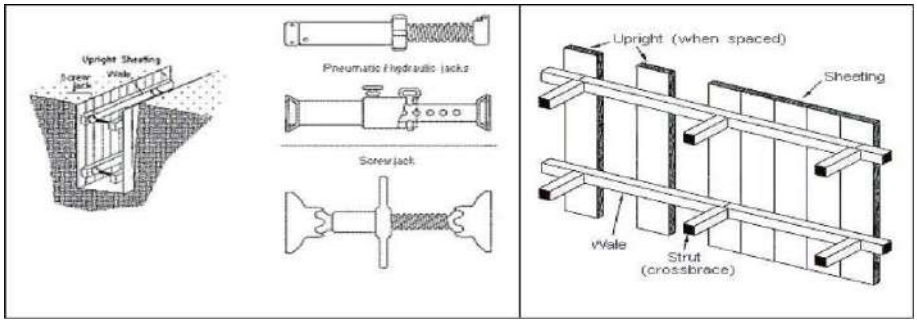
Vertical Aluminum Hydraulic Shoring
(Stacked)



Aluminum Hydraulic Shoring Waler System
(Typical)

Ways to avoid Cave-ins:

- Slope or bench the sides of the excavation.
- Support the excavation.
- Place a shield between side of the excavation and work area.
- Place spoils so rain water runs away from the excavation.
- Grade soil away from excavation.
- Fence or barricade trenches left overnight.



9. Fall protection:

In Site accidents due to fall constitutes the highest rate. Consequently OSHAconfirms full resolution for fall accident from a height of 6 feet (1.8 meters) or more for

which the following are required:

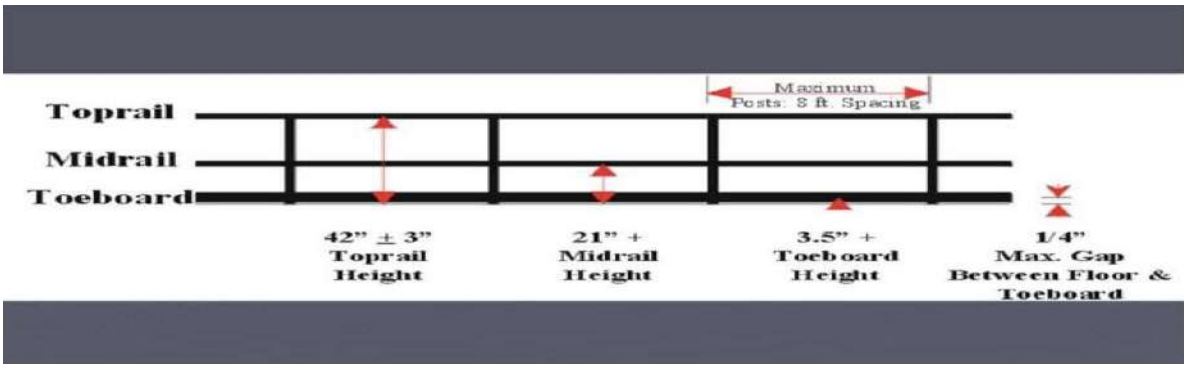
The employer shall make assurance that roof or scaffolds are strong enough to with stand the loads.

The employer should provide the followings:

- Guardrail Systems
- Personal Fall Arrest
- Positioning Device Systems
- Safety Monitoring Systems
- Safety Net Systems
- Warning Line Systems

Guard Rail Systems:

- The diameter of the pipes or thickness of materials making the guardrail should not be less than 6 centimeters.
- The heights of top rail or mid rail from platform should be 42 inches 1.1 meter and 21 inches 0.53 meter respectively.
- Top rail should withstand vertical pressure of at least 200 lbs. at both sides while mid rails should withstand at least pressure of 150 lbs on both sides.
- Distance between two guardrail supports should not exceed 8 feet's (2.5m)_All guardrail materials should be flushes without any sharp edges that render injuries to passers.

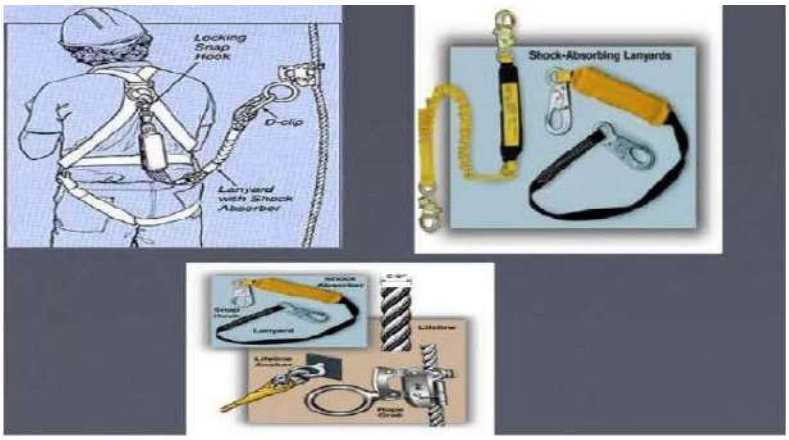


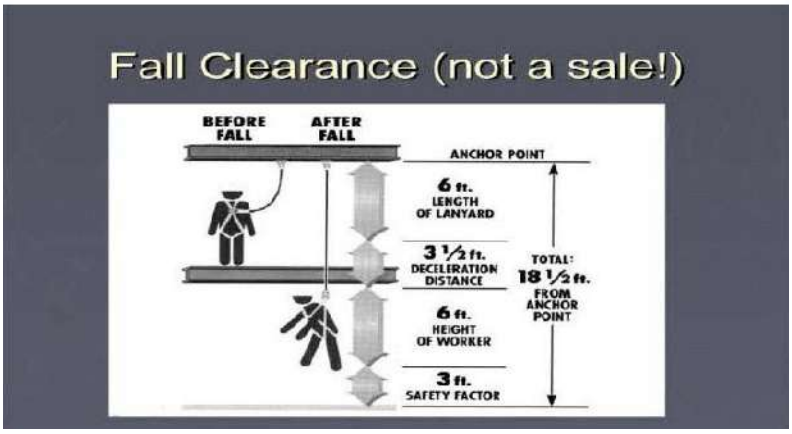
Personal Fall Arrest Systems:

This system consists of anchoring point, communication, lifelines, and safety belts to be designed so that persons should not fall for a distance more than 6 fts (1.8 m) and should not collide with any obstacle while falling down.

All elements of fall arrest system should be thoroughly inspected and defective parts are to be replaced by new ones.

The fall arrest system is to be designed so that it stops totally at a height 3.5 feet (1.07m) from the ground level i.e. (no collision with the ground) so all Rings, Snap — Hooks Anchoring point each should withstand carrying capacity of not less than 5000 lbs.





Positioning Device Systems:

- No fall more than 2 feet's (60cms) from ground level.
- The life line should be tightened to a tie point that withstands at least twice the impact load or 3000 lbs which one is greater.
- The length of the Life line should be made not to reach the roof or ground levels.

rails.

10. CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH (COSHH)

It is a law that requires employers to control substances that are hazardous to health. You can prevent or reduce worker's exposure to hazardous substances by:

- Finding out what the health hazards are;
- Deciding how to prevent harm to health
- Providing control measures to reduce harm to health;
- Making sure they are used;
- Keeping all control measures in good working order;
- Providing information, instruction and training for employees and others;
- Providing monitoring and health surveillance in appropriate cases;
- Planning for emergencies.

13.1. Chemical

Write the full chemical name as identified on the Material Safety Data Sheet (MSDS). Include CAS number if likely to be confused with other chemicals. If a commercial product, write commercial name followed by chemical constituents. If relevant to the hazard, list concentration of chemical (e,g. an acid may be corrosive, irritant or non-hazardous depending upon concentration).

13.2. Hazard

Use the risk phrases from the MSDS e.g. Irritating to eyes, respiratory system and skin. Ecological information (e.g. toxic to aquatic organisms) need not be included but will inform your choice of disposal.

13.3. Biological hazards

Use scientific name of organism/agent wherever possible, together with common or commercial name if appropriate. For biological hazards, list ACDP hazard category. Other hazards may include information on e.g. flammability, radiation safety, heat, cold and sharps.

13.4. Workplace exposure limits

Workplace Exposure Limits (WELs) are occupational exposure limits designed to help protect the health of workers. WELS are concentrations of hazardous substances in the air, averaged over a specified period of time referred to as a time-weighted average. Two time periods are used: long-term (8 hours) and short-term (15 minutes). Short-term exposure limits are designed to reduce effects such as eye irritation that may occur following exposure for a few minutes.

13.5. Control measures

When controlling exposure to a hazardous substance consider whether:

- The process can be changed to eliminate the need for the substance,
- The substance can be replaced with a safer alternative,
- The substance can be used in a safer form e.g. pellets instead of powder, readymade buffers or gels etc.

If prevention is not reasonably practicable, you must adequately control exposure e.g. by one or more of the following:

- Totally enclose the process (e.g. glove box),
- Partially enclose the process (e.g. fume cupboard),
- Improve general ventilation,
- Use systems of work that minimize the chances of spillage etc.,
- Reduce the number of persons exposed.

List all engineering measures appropriate for the control of exposure to the hazard. This should be indicated by the MSDS and the risk phrase (e.g. if toxic by inhalation then use in a fume cupboard). Fume cupboard, glove box, safety cabinet (for biological) and local exhaust ventilation are examples.

11. Emergency Evacuation Procedure:

Emergency Planning:

In the event of a large emergency where the site has to be evacuated the following procedures shall be followed:

- On hearing the continuous sound of the alarm, site personnel will be required to assemble at the Emergency Assembly Point. The persons responsible for

administering the site daily shall simultaneously account for the visitors on the site.

- In these manners a reasonably accurate forecast can be ascertained of the number of site staff and visitors still being in the building or missing.
- A manually operated alarm system, comprising a loud siren and located on the contractors site offices, shall be set up. This alarm will constitute the signal to evacuate the site.
- In the event of the alarm sounding, site staff will be instructed to act as follows:
- Switch-off/disconnect any equipment currently in use (Except those which constitute a means of escape)
- Ensure that all personnel in their vicinity are aware of the alarm
- Do not search for personnel possession that has been brought on site, but not currently with them.
- Move, calmly, to the designated assembly place (or other designated areas)
- Verify all gas cylinders area closed.
- Check all fitting equipment has boom, forks lowered.
- Remain in the designated areas until such time as a head count shall have been completed.
- On hearing the discontinues sound of the alarm, resume your work place.

Fire Emergency Responses:

Upon discovery of a fire, raise the alarm. Any outbreak of fire must be reported immediately to the safety officer, The Construction Manager or any responsible person on site. The persons having discovered the outbreak of the fire will give details of location and nature of the fire.

Fire Emergency Control:

One person of staff level must be directed to the site entrance gate to inform the fire brigade of the location of the fire and to indicate the easiest access routes to the concerned area.

Supervisory Staffs must be posted to access areas at the perimeter of the affected area in order to prevent accidental or unauthorized access to the dangerous area by site personnel.

Fire Emergency Procedure:

- Raise alarm and sound siren immediately when you see a 'Fire', 'Fire', 'Fire' at the top of your voice to alert the people .

- Try to attract others attention as far as possible on your way and request that access is prevented to the area of the fire.
- It is responsibility of the persons who discover any outbreak of fire to inform the safety officer or his site supervisor immediately, and to give full details of location, type of fire etc
- Switch off all electrical equipment and fuel power powered engines.
- Close all gas cylinders
- Clear the passage and/or road for easy access for the fire Brigade.
- In case of small fires, try to identify the type of the fire and use suitable fire extinguisher.
- Escape through the shortest possible route.
- Assemble at designated place.
- All supervisors shall count their workforce and ensure nobody is missing e
- Time-Keeper shall provide the list of persons on duty.
- Nobody is allowed to return to their job site until the affected areas is declared safe.

Alarms:

Subcontractors shall insure that their employees are fully aware of and conversant with the respective alarms associated with the emergency procedures on the job site, and with the measures to be taken in the event of an alarm being sounded.

Evacuation Plan:

subcontractors shall insure that their employees are fully aware of and conversant with the plan for evacuation of the job site should the occasion arise.

Fire Precautions:

In the event of the Safety Officer shall ensure the civil defense Authorities have knowledge of the location of the fire to ensure that no one attempts to enter effected parts of the site. All site facilities/offices and working areas will be regularly inspected by the Safety Officer.

- No burning of rubbish or debris will be permitted on the job site.
- "Danger" and "No Smoking" signs will be placed visible at all required places.
- A procedure for dealing with all fires and alarms shall be displayed an all offices and mess rooms.
- Establish Assembly Point on the site for all emergencies to meet in case of emergencies.

- Until the arrival of the Civil Defense, the Safety Officer has full authority for firefighting, evacuation and emergency procedures and should be obeyed by all without any questions.

12. ENVIRONMENT PROTECTION AND WASTE MANAGEMENT

- During execution of the project different types of solid, liquid or gaseous waste is generated at site, which may be hazardous or non-hazardous in nature
- Dust generated at SITE shall be controlled by spraying water.
- Septic tanks shall be cleaned periodically.
- All waste generated shall be disposed of properly as per the laid procedures and at designated location of the client. This shall be done regularly to maintain hygienic conditions at site. For effective waste management following steps shall be taken:
- Waste bins shall be provided at site, fabrication yard and at storage yard
- Waste shall be collected separately like metallic/non-metallic, oily and disposed at different waste bins with blue, green, red and yellow colour
- All employees at site shall be informed and make aware of the waste disposal system.
- Environment protection is prime responsibility of all employees at site including client, Contractor, Sub-Contractor to avoid any adverse effect on environment.
- APC is responsible for the environmental control specified for the job site including all equipment and machines used.

The following steps are taken to avoid pollution and to protect environment -

- Do not dispose of used oil or liquid waste direct to the ground, pit or storm drain.
- Dispose of these materials only in properly labeled containers.
- Whenever possible, insulation materials scraps, shaving, etc., should be wetted and put into polythene bags in order to eliminate airborne activity.
- It is the responsibility of all levels of management to conduct operations in line with applicable laws and regulations, including those relating to the health of employees, the environment, and the use of toxic or hazardous substances.

HAZARD ANALYSIS AND CONTROL MEASURES		
Task/Activity	Hazard/Risk	Control Measures
Planning the job and conducting pre-start checks	Unsafe work site	1. Before the work on worksites commences, ensure that • Each hazard is identified that may result in: i. Employees or other persons falling. ii. Objects falling from height and hitting employees or other persons. • All risks are assessed. • Control measures are planned and implemented. 2. The control measures must prevent an employee or other persons on worksites from falling, or, if prevention is not reasonably practicable, arrest the fall to prevent the risk of death or injury to the employee or other person.

			3. One or more of the following control measures must be in place before the work proceeds: • Fall arrest harness system. • Edge protection. • Fall protection cover. • Travel restraint system. • Industrial safety net(s).	
	Arrival on site	Unsafe worksite.	1. Record details of hazards and control measures that are implemented. 2. Ensure that all appropriate equipment is available to carry out the job before commencing. 3. Check training records of employees and verify training records of other persons on worksites and ensure that all equipment has service tags. 4. Do not use equipment if the service tag shows servicing is not up to date. 5. Do not allow untrained employees or untrained other persons on worksites to use equipment and fall prevention or fall arrest equipment. 6. Visually inspect all aspects of the fall prevention or fall arrest system prior to use. 7. Do not use equipment if it shows signs of wear. Tag the equipment as out–of –service. 8. No employee or other person on a worksite must work at heights alone. 9. Control measures must be put in place to ensure that: a. The platform has an unobstructed surface b. The platform is wide enough for employees and other persons on worksites to perform the task. c. Protection is put in place to prevent employees and other persons on worksites from falling from one level to another.	
	Accessing heights, working at heights	Unsafe work site. Falling. Falling Objects.	1. Wear appropriate PPE for the work tasks: a. Hard hat, with brim if working in the sun b. Standard uniform of high visibility UV rated long-sleeve shirts and long pants c. Steel cap safety boots d. Other fall prevention or fall arrest equipment as relevant to the control measure used for working at heights. Where	

			possible use a scissor lift for lifting or an elevated work platform for accessing a height. e. A licensed operator must be in control of the elevated work platform used for accessing heights (if over 11 meters) f. Ladders should be used for access only, unless it has a designated work platform. g. Maintain good housekeeping at all times when working at height to prevent objects falling on any person below. h. If fall protection cover is used it must be able to withstand the impact of a fall on to it and be fixed in place to prevent it being moved or removed accidentally.	
	Use of ladder	Fall from ladder Falling object	1. Ensure the ladder: a. Is an industrial rated ladder and in good working order? b. Is on firm, stable and level ground c. Is the correct height for the task to avoid reaching or stretching? d. Is not too close or too far from the support structure. The ratio must be 4:1. For example, the distance between the ladder base and the supporting structure should be approximately one metre out for every four metres of working ladder height e. Is secured against slipping or sliding, and/or there is another person holding the base of the ladder f. Has all the locking devices on the ladder secured into position g. Is extended a minimum of 1m past the access point, where accessing the roof or platform from a ladder 2. Ensure materials or tools are not carried while climbing the ladder. Tools should be carried in a tool belt or side pouch 3. . Ladders are not to be used	

		a. in access areas or next to doors unless steps are implemented to manage the risks of pedestrians entering through the door or past ladder b. on scaffolding or an elevating work platform to get extra height in very wet or windy conditions c. next to traffic areas unless the working area is barricaded
Use of step ladders and platform ladders	Fall from ladder Falling object	1. Workers must not: a. stand on or above the second tread below the top plate of a step ladder b. over reach from the ladder c. use the ladder near open floor, penetration or beside any railing d. use tools that require a high degree of leverage force which, if released, may cause the worker to over balance and fall from the ladder e. face away from the ladder when going up or down, or when working from the ladder.
Use of Elevated Work Platform (EWP) Includes: • Scissor lifts (SL) • Cherry Pickers • Boom Lifts • Travel Towers	• Fall from EWP • Overturning of EWP • Ejected from EWP	1. Operator of a boom-type EWP must hold a High Risk Work Licence where the EWP has the capacity to reach over 11 metres 2. All workers in a boom-type EWP must wear their harness and have it connected to the EWP anchor point 3. EWP should be located close to the work area to prevent the worker from needing to reach from the EWP to undertake the work 4. Where outriggers are used, the outrigger pads must be sufficient to provide the needed stability for EWP 5. Ensure the EWP is operated on consolidated level ground 6. Workers must not stand on the handrails of the EWP

		7. Work must be performed from within the EWP

Work shall be performed in accordance to Safe work method statement is SWMS

17. WEATHER - HOT

Outdoor workers who are exposed to hot and humid conditions are at risk of heat-related illness. The risk of heat-related illness becomes greater as the weather gets hotter and more humid. This situation is particularly serious when hot weather arrives suddenly early in the season, before workers have had a chance to adapt to warm weather.

For people working outdoors in hot weather, both air temperature and humidity affect how hot they feel. The "heat index" is a single value that takes both temperature and humidity into account. The higher the heat index, the hotter the weather feels, since sweat does not readily evaporate and cool the skin. The heat index is a better measure than air temperature alone for estimating the risk to workers from environmental heat source

Training Workers

Train workers before hot outdoor work begins. Tailor the training topic outline to cover employer-specific policies and worksite-specific conditions. A single worksite may have some job tasks that are low risk for heat-related illness and others that are high risk. Training will be more effective if it is matched to job tasks and conditions, and is reviewed and reinforced throughout hot weather conditions. The following training topics may be addressed in one session or in a series of shorter sessions.

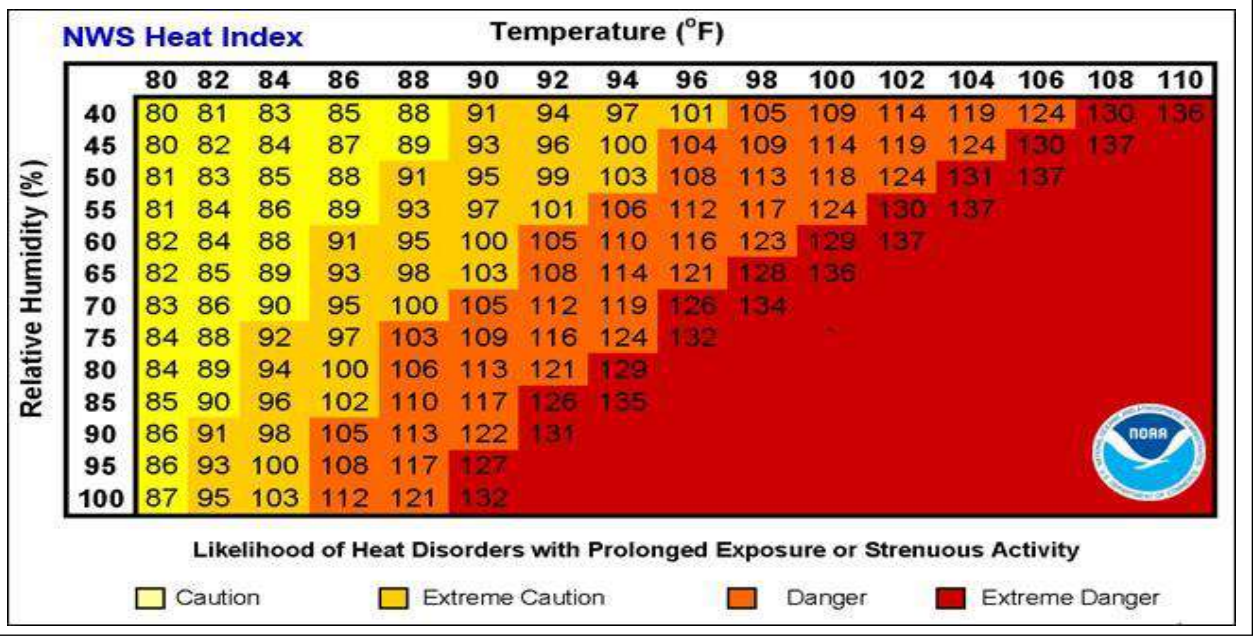
Training Topics:

- Risk factors for heat-related illness.
- Different types of heat-related illness, including how to recognize common signs and symptoms.
- Heat-related illness prevention procedures.
- Importance of drinking small quantities of water often.
- Importance of acclimatization, how it is developed, and how your worksite procedures address it.
- Importance of immediately reporting signs or symptoms of heat-related illness to the supervisor.
- Procedures for responding to possible heat-related illness.
- Procedures to follow when contacting emergency medical services.

- Procedures to ensure that clear and precise directions to the work site will be provided to emergency medical services.

SAFETY TIPS

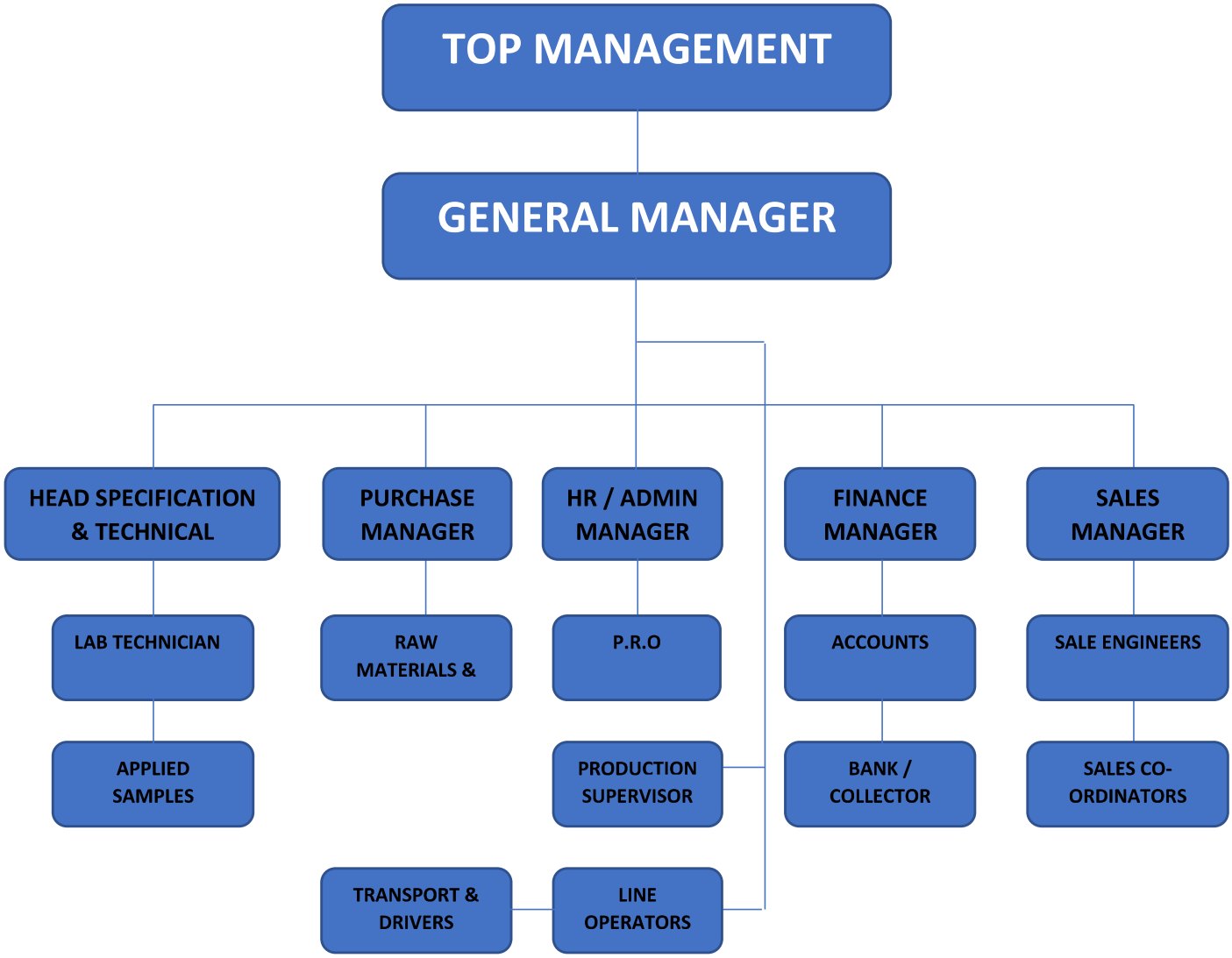
- **Stay hydrated.** Drink plenty of fluids; drink about 16 ounces before starting and 5 to 7 ounces every 15 or 20 minutes.
- **Avoid dehydrating liquids.** Alcohol, coffee, tea and caffeinated soft drinks can hurt more than help.
- **Wear protective clothing**. Lightweight, light-colored and loose-fitting clothing helps protect against heat. Change clothing if it gets completely saturated.
- **Pace yourself.** Slow down and work at an even pace. Know your own limits and ability to work safely in heat.
- **Schedule frequent breaks.** Take time for rest periods and water breaks in a shaded or air conditioned area.
- **Use a damp rag.** Wipe your face or put it around your neck.
- **Avoid getting sunburn.** Use sunscreen and wear a hat if working outside.
- **Be alert to signs of heat-related illness.** Know what to look for and check on other workers that might be at high risk.
- **Avoid direct sun.** Find shade or block out the sun if possible.
- **Eat smaller meals.** Eat fruits high in fiber and natural juice. Avoid high protein foods



BCI BUILDING CHEMESTRY INDUSTRY

CHART

BCI - ORGANIZATIONAL CHART



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TEST REPORT

Building chemistry industry
PO 33894
Dammam
Saudi Arabia

Result	This product has not satisfied the criteria set out in BS 6920: Part 1: 2014 "Specification" and thus is unsuitable for use with wholesome water.

Product	Polyurea FA 1044
Test Undertaken	BS 6920: 2014 - Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water
Job Number	J-00462842
Work Order Number	W0841460

Thank you for having your product tested by NSF Wales Ltd.

Please contact your Account Manager if you have any questions or concerns pertaining to this report.

Report Date 21-NOV-2023

Report Authorisation

Shannara Hook-Mackenzie - Specialist II Labs Wales

UKAS TESTING
0626

Result Summary Section

Test	Result
Odour and flavour of water BS 6920: Part 1: 2014, Clause 4 - 23°C	Fail
Odour and flavour of water BS 6920: Part 1: 2014, Clause 4 - 85°C	Fail
Appearance of Water BS 6920: Part 1: 2014, Clause 5	Pass
Growth of Microorganisms BS 6920: Part 1: 2014, Clause 6	Fail
Extraction of substances that may be of concern to public health BS 6920: Part 1: 2014, Clause 7 - 23°C	Pass
Extraction of substances that may be of concern to public health BS 6920: Part 1: 2014, Clause 7 - 85°C	Pass
Extraction of Metals BS 6920: Part 1: 2014, Clause 8 - 85°C	Pass

Sample Details

Date of Receipt of Application Form	26/04/2023
Date of Receipt of Product for Test	25/4/23
Date Test Sample Prepared *	02/07/2022
Product *	BC 237 Polyurea
Nature of Material *	Coating
Date Test Sample Manufactured *	02/07/2022
Batch Number *	220702-7500
Receipt Conditions	Good Condition
Receipt Packaging	CARDBOARD BOX
Product Manufacturer *	Building Chemistry Industry
Product Manufacturing Site *	Dammam, Kingdom of Saudi Arabia
Tradename and Reference of Product *	BC 237 Polyurea
Method of Manufacture *	Cold Mixing in jacketed vessel
Typical Use of the Product *	For use with potable water
Material Manufacturer *	Building Chemistry Industry
Substrate *	Concrete
Method of Application *	Hot Plural Component spray equipment
Number and Thickness of Coats Applied *	2 coats 2mm thickness
Ambient Temperature at Time of Application *	25 °C
Curing Conditions *	1.125 Parts Isocyanate : 1 Part Polyol
Preparation and Curing Conditions in Accordance with Manufacturer's Instructions *	Yes
Nature of Product *	Coating Material
Sampling Procedure *	Random
Address of Product Manufacturer *	Dammam, Kingdom of Saudi Arabia PO33894

* denotes customer supplied information

Sample Preparation

Description/Appearance of the product	Blue, opaque coating on a rigid substrate
Length	126 mm
Width	65 mm
Thickness	7 mm
Surface area of one article	19054.0 mm2
Number of articles constituting a sample	0.82
Surface area for test	15575 mm2
Calibration mark of test container	1 L
Storage Conditions	As in BS 6920: Part 2: Section 2.1: Clause 5.2

Job Attachments:

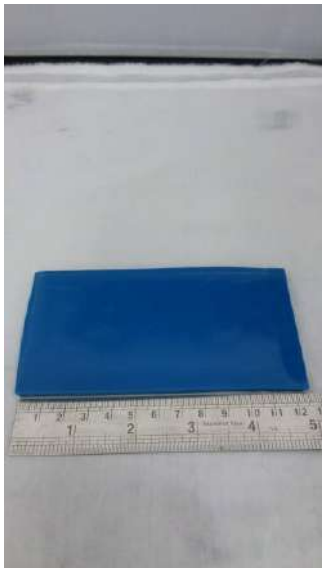

Photo 1.

Odour and flavour of water BS 6920: Part 1: 2014, Clause 4 - 23°C

Methodology: BS 6920: Part 2: Section 2.2 and in-house method PROC/MAT 004 and 006.

Date Leaching Test Started: 30-AUG-2023

First Extract - Chlorinated Test Water

Panellist	Odour Descriptor	Flavour Descriptor	Flavour Dilution Number
1	Plastic (Foaming)	Not Suitable for flavour - failed odour	2
2	None (Foaming)	Not Suitable for flavour - failed odour	2
3	Plastic	Not Suitable for flavour - failed odour	2

First Extract - Chlorine Free Test Water

Panellist	Odour Descriptor	Flavour Descriptor	Flavour Dilution Number
1	Plastic (Foaming)	Not Suitable for flavour - failed odour	2
2	None (Foaming)	Not Suitable for flavour - failed odour	2
3	Potato	Not Suitable for flavour - failed odour	2

Final Extract - Chlorinated Test Water

Panellist	Odour Descriptor	Flavour Descriptor	Flavour Dilution Number
1	None (foaming)	Not suitable for flavour- sample foaming	2
2	None (foaming)	Not suitable for flavour- sample foaming	2
3	None	Not suitable for flavour- sample foaming	2

Final Extract - Chlorine Free Test Water

Panellist	Odour Descriptor	Flavour Descriptor	Flavour Dilution Number
1	None (foaming)	Not suitable for flavour- sample foaming	2
2	Musty (foaming)	Not suitable for flavour- sample foaming	2
3	None	Not suitable for flavour- sample foaming	2

On the basis of these results the samples of this product referred to in this report have been found not to conform to the requirements of BS 6920: Part 1: 2014, Clause 4.

Odour and flavour of water BS 6920: Part 1: 2014, Clause 4 - 85°C

Methodology: BS 6920: Part 2: Section 2.2 and in-house method PROC/MAT 004 and 006.

Date Leaching Test Started: 6-SEP-2023

First Extract - Chlorinated Test Water

Panellist	Odour Descriptor	Flavour Descriptor	Flavour Dilution Number
1	Damp	Suitable for flavour – No odour	2
2	Stale (foaming)	Suitable for flavour – No odour	2
3	Rubber	Suitable for flavour – No odour	2

First Extract - Chlorine Free Test Water

Panellist	Odour Descriptor	Flavour Descriptor	Flavour Dilution Number
1	Damp	Suitable for flavour – No odour	2
2	Stale (foaming)	Suitable for flavour – No odour	2
3	Plastic	Suitable for flavour – No odour	2

Final Extract - Chlorinated Test Water

Panellist	Odour Descriptor	Flavour Descriptor	Flavour Dilution Number
1	Sweet	Suitable for flavour – No odour	2
2	Almond	Suitable for flavour – No odour	2
3	Plastic	Suitable for flavour – No odour	2

Final Extract - Chlorine Free Test Water

Panellist	Odour Descriptor	Flavour Descriptor	Flavour Dilution Number
1	Lead	Suitable for flavour – No odour	2
2	Plastic	Suitable for flavour – No odour	2
3	Plastic	Suitable for flavour – No odour	2

On the basis of these results the samples of this product referred to in this report have been found to conform to the requirements of BS 6920: Part 1: 2014, Clause 4.

Appearance of Water BS 6920: Part 1: 2014, Clause 5 - 85°C

Methodology: BS 6920: Part 2: Section 2.3 and in-house methods PROC/MAT 004, PROC/MAT 027 (colour) and PROC/MAT 030 (turbidity).

Date Leaching Test Started: 30-AUG-2023

First Extract

Name	Blank	Extract	Test Sample Effect
Colour (Hazen)	-0.50	3.8	4.3
Turbidity (FNU)	<0.1	<0.1	<0.1

On the basis of these results the samples of this product referred to in this report have been found to conform to the requirements of BS 6920: Part 1: 2014, Clause 5.

Growth of Microorganisms BS 6920: Part 1: 2014, Clause 6

Methodology: BS 6920: Part 2: Section 2.4 and in-house method PROC/MIC 001.

Date Test Started: 20-JUN-2023

Incubation temperature: (30 ±1) °C

Units: mg $L^{-1}O_2$

Mean Dissolved Oxygen Difference	Day 49
Test Sample	5.4
Positive Reference (paraffin wax)	6.6
Negative Reference (glass)	0.4

Mean Dissolved Oxygen	Day 49
Test Water Control	8.0

Comments: At the end of this test, the test sample showed no change in colour or appearance.

On the basis of these results the samples of this product referred to in this report have been found not to conform to the requirements of BS 6920: Part 1: 2014, Clause 6.

Extraction of substances that may be of concern to public health BS 6920: Part 1: 2014, Clause 7 - 23°C

Methodology: BS 6920: Part 2: Section 2.5 and in-house methods PROC/MAT 004 and PROC/MIC 004.

Date Leaching Test Started: 29-AUG-2023

Cell concentration used: 5×10^{5}

Cell morphology: Confluent growth of elongated cells, some round cells and cell debris. Media orange/pink in colour.

Sample/Control	Cell Morphology	Response
Test Sample	Confluent growth of elongated cells, some round cells and cell debris. Media pink in colour.	Non-Cytotoxic
Blank	Confluent growth of elongated cells, some round cells and cell debris. Media pink in colour.	Non-Cytotoxic
Negative Control	Confluent growth of elongated cells, some round cells and cell debris. Media pink in colour.	Non-Cytotoxic
Positive Control	All cells rounded and mainly still in suspension. Media pink in colour.	Cytotoxic

On the basis of these results the samples of this product referred to in this report have been found to conform to the requirements of BS 6920: Part 1: 2014, Clause 7.

Extraction of substances that may be of concern to public health BS 6920: Part 1: 2014, Clause 7 - 85°C

Methodology: BS 6920: Part 2: Section 2.5 and in-house methods PROC/MAT 004 and PROC/MIC 004.

Date Leaching Test Started: 30-AUG-2023

Cell concentration used: 5×10^{5}

Cell morphology: Confluent growth of elongated cells, some round cells and cell debris. Media orange/pink in colour.

Sample/Control	Cell Morphology	Response
Test Sample	Confluent growth of elongated cells, some round cells and cell debris. Media pink in colour.	Non-Cytotoxic
Blank	Confluent growth of elongated cells, some round cells and cell debris. Media pink in colour.	Non-Cytotoxic
Negative Control	Confluent growth of elongated cells, some round cells and cell debris. Media pink in colour.	Non-Cytotoxic
Positive Control	All cells rounded and mainly still in suspension. Media pink in colour.	Cytotoxic

On the basis of these results the samples of this product referred to in this report have been found to conform to the requirements of BS 6920: Part 1: 2014, Clause 7.

Extraction of Metals BS 6920: Part 1: 2014, Clause 8 - 85°C

Methodology: BS 6920: Part 2: Section 2.6 and in-house methods PROC/MAT 006 (leachate preparation) and PROC/ING 003 (ICPMS analysis).

Date Leaching Tests Started: 14-AUG-2023

First Extract

Metal (µg/L)	MAC (µg/L)	LOD (µg/L)	Blank (µg/L)	Sample 1 (µg/L)	Sample 2 (µg/L)
Aluminium	200	20	<20	<20	<20
Antimony	5	0.5	<0.5	<0.5	<0.5
Arsenic	10	1	<1	<1	<1
Boron	1000	100	<100	<100	<100
Cadmium	5	0.5	<0.5	<0.5	<0.5
Chromium	50	5	<5	<5	<5
Iron	200	20	<20	<20	<20
Lead	10	1	<1	<1	<1
Manganese	50	5	<5	<5	<5
Mercury	1	0.1	<0.1	<0.1	<0.1
Nickel	20	2	<2	<2	<2
Selenium	10	1	<1	<1	<1

Analytical Method - ICPMS Inductively Coupled Plasma Mass Spectrometry
MAC - Maximum admissible concentration
LOD - Required limit of detection

On the basis of these results the samples of this product referred to in this report have been found to conform to the requirements of BS 6920: Part 1: 2014, Clause 8.

<< Testing Laboratories >>

Flag	Id	Address
All work performed at: (Unless otherwise specified)	NSF_WALES	NSF Wales Ltd. NSF Wales Ltd Unit 30 Fern Close Pen-Y-Fan Industrial Estate Oakdale, Newport NP11 3EH, UK

NOTES

1. This report is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service (UKAS). NSF Wales Ltd is UKAS accredited against ISO/IEC 17025:2017 for testing, laboratory number 0626. For details of the laboratory Schedule of Accreditation please see the UKAS website (www.ukas.com).
2. The laboratory provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes.
3. Reported conformity statements have been applied in line with the decision rule inherent in the applicable testing standard.
4. Test reports utilise the simplified test report format option allowed by ISO/IEC 17025:2017 (reference clause 7.8.1.3). This simplified report does not include all of the information on the report specified by ISO/IEC 17025:2017 (clauses 7.8.2 to 7.8.7) but as stated in the standard this data is held by the laboratory and is available to the client on request.
5. Opinions and interpretations in this report are outside the scope of UKAS Accreditation.
6. The results specified in this report relate only to the sample(s) of the product submitted for testing. Any change in the source or nature of the product or materials used in the product, method of manufacture or application could affect the performance of the product.
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Product BC XPS Board

Properties	Specifications	Results
Density Kg/m2, lb/ft2	DIN 53420 ASTM D 1622	32-35, 2-2.2
Thermal Conductivity W/m°k Btu.in / h.ft2.°F	DIN 52612 DIN 52616 ASTM C 518-98	0.028 0.20
Compressive Strength at10% deflection Kpapsi	DIN 53421 ASTM D 1621-04	300 43
Water Vapour Diffusionresistance factor(μ)	DIN 52615	100-200
Water Vapour Permeability (Perm/inch)	ASTM C 355-64 ASTM E 96 00	0.4-0.6
Water Absorption bySubmersion % byVol. % byVol.	DIN 53428 ASTM D 2842 (±1% by Vol.Precision)	0.2 ≤1.0
Linear Co-efficient ofThermal Expansion°C °F	DIN 52328	$70x10^{-6}$ $9x10^{-6}$
Fire Classification Building Material	DIN 4102	Class B2

BCI BUILDING CHEMESTRY INDUSTRY
شركة كيماء البناء للصناعة
BUILDING CHEMESTRY INDUSTRY
المملكة العربية السعودية – C.R : 2050159093

LABORATORY REPORT

Building Chemistry Industry
P.O. Box: 33894
Dammam, Saudi Arabia

Report No: WD-R-231011-0898
Sample No: WD-S-231011-0823
Date of Report: 12/12/2023

Introduction: Further to the request received from **M/s. Building Chemistry Industry dated** 11th October 2023, the sample of 100 % Solids Two Component polyurea Coating was tested, and the results are as follows.

Sample Type	: 100 % Solids Two Component polyurea Coating
Sample Request Number	: WD-Q-231011-0277
Sample Received Date	: 11/10/2023
Date of Test	: 19/10/2023-11/12/2023
Tested By	: AY

General Information

Product Name : BC 237 polyol

Test Method

BS 6920:2014; Part 2; Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water.

Result of Analysis

1. Odour and Flavour Test

1.1. Chlorine free water

Method Reference	: BS 6920 Part 2; Section 2.2.1
Temperature of extraction	: 23±2°C
Extraction started on	: 19/10/2023
Extraction finished on	: 20/10/2023
Duration of extraction	: 24 hours

Description	Extract	Test Reference	Blank*	Sample Extract#	BS 6920-1:2014 Cl. 4 Specification
Odour	First	APHA 2150	No Discernible Odour	No Discernible Odour	No Discernible Odour
	Final		-	-	
Flavour	First	APHA 2160	No Discernible Flavour	No Discernible Flavour$	No Discernible Flavour
	Final		-	-	

*Blank: Chlorine free water.
#Sample extract: Chlorine free water after 24 hours immersion of the test specimen.
$No discernible flavour is detected in the first dilution.
Note: The first extract turn out to be final extract.

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1.2. Chlorinated water

Method Reference : BS 6920 Part 2; Section 2.2.1
Temperature of extraction : 23±2°C
Extraction started on : 19/10/2023
Extraction finished on : 20/10/2023
Duration of extraction : 24 hours

Description	Extract	Test Reference	Blank*	Sample Extract#	BS 6920-1:2014 Cl. 4 Specification
Odour	First	APHA 2150	No Discernible Odour	No Discernible Odour	No Discernible Odour
	Final		-	-	
Flavour	First	APHA 2160	No Discernible Flavour	No Discernible Flavour$	No Discernible Flavour
	Final		-	-	

*Blank: Chlorinated water.
#Sample extract: Chlorinated water after 24 hours immersion of the test specimen.
$No discernible flavour is detected in the first dilution.
Note: The first extract turn out to be final extract.

Remarks: Based on the above test results, the product complies with the requirements of BS 6920 Part 1; 2014, Clause 4 Specifications.

2. Appearance of Water

Method Reference : BS 6920 Part 2; Section 2.3.
Temperature of extraction : 23±2°C
Extraction started on : 19/10/2023
Extraction finished on : 20/10/2023
Duration of extraction : 24 hours

2.1. Color

Test reference : APHA 2120B

Description	Extract	Blank (A) (mg/l-Pt)	Sample extracts (B) (mg/l-Pt)	Result C=A-B (mg/l-Pt)	BS 6920-1:2014 Cl. 5 Specification
Color	First	<5	<5	<5	Max. 5
	Final	-	-	-	

Note: 1. The first extract turn out to be final extract.
2. The lowest detection level of the test is 5.

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2.2. Turbidity

Test reference : APHA 2130B

Description	Extract	Blank (A) (NTU)	Sample extracts (B) (NTU)	Result C=A-B (NTU)	BS 6920-1:2014 Cl. 4 Specification
Turbidity	First	<0.5	<0.5	<0.5	Max. 0.5
	Final	-	-	-	

Note: 1. The first extract turn out to be final extract.
2. The minimum detection level of the test is 0.5.

Remarks: Based on the above test results, the product complies with the requirements of BS 6920 Part 1; 2014, Clause 5 Specifications.

3. Growth of Aquatic Organisms

Method Reference : BS 6920 Part 2; Section 2.4.
Temperature of extraction : 23±2°C
Extraction started on : 23/10/2023
Extraction finished on : 23/10/2023-11/12/2023
Duration of test : 49 days

3.1. Result of control and reference sample

Test Reference : APHA 4500 OC

Description	Mean Dissolved Oxygen (mg/L)
Control sample	8.2
Positive reference (Paraffin wax)	6.75
Negative reference (Glass)	0.1

3.2. Result of test specimen

Test Reference : APHA 4500 OC

Description	Mean Dissolved Oxygen (mg/L)			BS 6920-1:2014 Cl. 6 Specification
	Initial	Final (After 49 days)	Result	
Water sample in contact with test specimen	4.70	5.64	0.94	Max. 1.70

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3.3. Appearance of test specimen

Description	Observation after 49 days
Appearance of test specimen	The test specimen didn't exhibit any discoloration or surface blemishes

Remarks: Based on the above test results, the product complies with the requirements of BS 6920 Part 1; 2014, Clause 6 Specifications.

4. Extraction of substances that may be of concern to public health

Method Reference : BS 6920 Part 2; Section 2.5.
Temperature of extraction : 23±2°C
Extraction started on : 19/10/2023
Extraction finished on : 20/10/2023
Incubation temperature : 37±2°C
Extraction started on : 20/10/2023
Extraction finished on : 21/10/2023
Test reference : USP 87

Description	Observation	Result
Negative control	Confluent growth of cells, and presence of regularly shaped cells	Non-cytotoxic
Water sample in contact with test specimen	Confluent growth of cells, and presence of regularly shaped cells	Non-cytotoxic

Note: Instead of blank, Zinc sulphate solution exhibited cytotoxic results on control sample.
Remarks: Based on the above test results, the product complies with the requirements of BS 6920 Part 1; 2014, Clause 7 Specifications.

5. Leaching test; Extraction of Metals

Method Reference : BS 6920 Part 2; Section 2.6.
Temperature of extraction : 23±2°C
Extraction started on : 19/10/2023
Extraction finished on : 20/10/2023
Test reference : APHA 3120 B/3114 B

Description		Blank*	Sample Extract#	Specification limit
Metals		Results (µg/L)		
Aluminum	Al	<10	<10	Max. 200
Arsenic	As	<5	<5	Max. 10.0
Boron	B	<10	<10	Max. 1000

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Report No: WD-R-231011-0898

Description		Blank*	Sample Extract#	Specification limit
Cadmium	Cd	<5	<5	Max. 5.00
Chromium	Cr	<1	<1	Max. 50.0
Iron	Fe	<3	<3	Max. 200
Lead	Pb	<10	<10	Max. 10.0
Manganese	Mn	<5	<5	Max. 50.0
Nickel	Ni	<2	<2	Max. 20.0
Selenium	Se	<3	<3	Max. 10.0
Mercury	Hg	<1	<1	Max. 1.00

*Blank: Distilled water.
#Sample extract: Distilled water after 24 hours immersion of the test specimen.
Note: The first extract turn out to be final extract.
Remarks: Based on the above test results, the product complies with the requirements of BS 6920 Part 1; 2014, Clause 8 Specifications.

Summary

Test	Results
Odour and flavour of water	Pass
Appearance of water	Pass
Growth of Aquatic Organisms	Pass
The extraction of substances that may be concern to public health	Pass
Extraction of metals	Pass
Loss of sample particles during extraction	Not detected

Test method deviation: None.
Remarks: Based on the above test results, the product was found to be non-toxic and comply with BS 6920-1:2014; Suitability of non-metallic materials and products for use in contact with water intended for human consumption with regard to their effect on the quality of water. Specification.

Signed for and on behalf of Wimpey Laboratories LLC

Arya Rajeev
Chemist
Test results relate only to the samples tested.
This report shall not be reproduced except in full, without the written approval of the laboratory.
End of text.

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SGS GULF LIMITED

Test Report

SGS FILE REFERENCE NUMBER: 40163943

Customer:
BCI – Building Chemistry Industry

Attn: Mr. Neelakandan Subbiah Thevar

Sample Received: 26.07.2023
Reported: 11.08.2023

Sample Details:

Description: BC 237 Polyurea

We report as follows:

In accordance with instructions received from the client BCI – Building Chemistry Industry,

Commodity: BC 237 Polyurea

Testing Outsourced/Sub-contracted:

1. Based on the following test result, Total volatile organic component (TVOC) emission is in compliance with the emission limits as per UL 2818.
2. Test results for individual components are in compliance with CPDH-CREL VOC regulation.

#**Outsourced/Sub-contracted to ISO 17025 accredited lab – Wimpey Laboratories L.L.C. Report Attached.**

Signed for and on behalf of

SGS Gulf Limited

John Thomas
Operations Manager

Upon the request of the Client, the samples were sent to Wimpey Laboratories L.L.C for analysis and the results determined Wimpey Laboratories L.L.C are reported as follows:

The results are reported herein for convenience only. SGS has no liability for these results, which remains with Wimpey Laboratories L.L.C that produced these results.

VOC EMISSION TEST REPORT

BCI – BUILDING CHEMISTRY INDUSTRY
Dammam, Saudi Arabia

Report No. WD-R-230726-0454
Sample No. WD-S-230726-0497
Report Date: 11/08/2023

Introduction: Further to the request received from **M/s. SGS Gulf Ltd.** dated 26th July 2023; the sample of BC 237 Polyurea was tested for below parameters.

1. Sample Information

Manufacturer	M/s. BCI – BUILDING CHEMISTRY INDUSTRY
Request Number	WD-Q-230726-0134
Product Description	BC 237 Polyurea
Product Components	-
Date of Sample collection	26/07/2023
Tested By	AY
Testing Period	26/07/2023-11/08/2023

2. Evaluation of the Results

- VOC measurements determining the suitability of a product are made after the specimen has been exposed for a total of 14 days as per CDPH Standard Method V1.2. 2017.
- For general emission evaluation, private office scenario/School classroom scenario used as per CDPH guidelines.

Test	Method	Unit	Average
TVOC	CDPH Standard Method V1.2 U.S. EPA Methods TO17	mg/m^3	<0.01
Individual VOC		$\mu g/m^3$	Not detected*
Formaldehyde	CDPH Standard Method V1.2 ASTM D5197-03	$\mu g/m^3$	Not detected*
Total Aldehydes		$\mu g/m^3$	Not detected*

*Note: LOD of the test method is 1 $\mu g/m^3$. Below LOD is considered as 'Not detected' or 'Nil'.

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Table of Contents

3. Test Method

Sample preparation, Environmental Chamber operation, sampling and analysis followed the California Department of Public Health "Standard method for the testing and evaluation of volatile organic chemical emissions from indoor sources using environmental chambers version 1.2, January 2017, per the acceptable alternative detailed in Section 8.5 therein.

Test Chamber Parameters

Chamber Volume	: 0.65 m^3
Temperature	: 23±1 °C
Relative Humidity	: 50±5 %
Area of test specimen	: 0.18 m^2
Air exchange rate, 1/h	: 1±0.05
Loading Ratio	: 0.276 m^2/m^3

Sample Preparation

The test was started at 26th July 2023; by unpacking the sample. The test specimen was placed in a separate conditioning container in a room with controlled climate conditions of 23±1°C and 50±5% RH.

After 10 days of conditioning the specimen was placed in an emission chamber of stainless steel.

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Analytical methods and Reporting limits#

Analytical method	Instrumentation	Parameter	Reporting limit
USEPA TO17	GC/MS/HS	Individual VOC	1µg/m³
USEPA TO17	GC/MS/HS	TVOC	0.01mg/m³
ASTM D5197	HPLC/UV	Low molecular weight aldehydes	1µg/m³

#Deviation from the test method: Followed section 8.5 acceptable alternative sampling scheme.

TVOC defined as C_6-C_{16}.

1. Test Results

4.1. Measured Emissions after 11th day. (24 Hrs. after conditioning.)

Compound	CAS No.	Chamber Concentration (µg/m³)	Emission rate (µg/m²*h)
TVOC (C_6-C_{16})	-	<10	<10
Formaldehyde	50-00-0	Not detected*	Not detected*

4.2. Measured Emissions after 12th day. (48 Hrs. after conditioning.)

Compound	CAS No.	Chamber Concentration (µg/m³)	Emission rate (µg/m²*h)
TVOC (C_6-C_{16})	-	<10	<10
Formaldehyde	50-00-0	Not detected*	Not detected*

Form # WLRF 90 Issue No.1 Issued on : 29/05/2019

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E-mail: info.dxb@wimpeylab.com Website: www.wimpeylab.com

4.3. Measured Emissions after 14th day. (96 Hrs. After conditioning.)

TVOC and Complete characterization of TVOC

Compound	CAS No.	Chamber concentration (µg/m³)	Emission rate (µg/m²*h)	Allowable concentration UL 2818 (mg/m³)	Compliance of emission result			
					CREL	CA Prop 65	CARB TAC	UL 2818
TVOC (C_6-C_{16})	-	<10	<10	0.5[u]	-	-	-	✓

Carcinogenic VOCs compounds classified under category 1A & 1B regulation EC. No 1272/2008 listed as per below

Compounds	CAS No.	Chamber concentration (µg/m³)	Emission rate (µg/m²*h)	Allowable concentration CREL (µg/m³)	Compliance of emission result			
					½CREL	CA Prop 65	CARB TAC	UL 2818
Acetaldehyde	75-07-0	Not detected*	Not detected*	70	✓	✓	✓	
Formaldehyde	50-00-0	Not detected*	Not detected*	9	✓	✓	✓	✓
Benzene	71-43-2	Not detected*	Not detected*	1.5	✓	✓	✓	
Chlorobenzene	108-90-7	Not detected*	Not detected*	500	✓	✓	✓	
Chloroform	67-66-3	Not detected*	Not detected*	150	✓	✓	✓	
Ethyl Benzene	100-41-4	Not detected*	Not detected*	1000	✓	✓	✓	
Isophornone	78-59-1	Not detected*	Not detected*	1000	✓	✓	✓	✓
Iso Propanol	67-63-0	Not detected*	Not detected*	3500	✓	✓	✓	
Phenol	108-95-2	Not detected*	Not detected*	100	✓	✓	✓	
Toluene	108-88-3	Not detected*	Not detected*	150	✓	✓	✓	
Xylenes	108-38-3 95-47-6 106-42-3	Not detected*	Not detected*	350	✓	✓	✓	

*Note: LOD of the test method is 1 µg/m³. Below LOD is considered as 'Not detected' or 'Nil'.

تليفون : ٣٢٧٣١٢٣ ٤ ٩٧١+ • فاكس : ٢٣٦٥٣٠٨ ٤ ٩٧١+ • ص.ب : ١٢٣٢٧٩ • دبي • الامارات العربية المتحدة
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2. IAQ Modeling; Private office

The CDPH method requires calculation of the measured emission rates into concentrations in given Reference rooms.

Scenario	Standard office	Resulting VOC (µg/m2*hr)	Limit (µg/m2*hr)
Area specific emission rate, µg/(m²h) obtained	<10	<10	694
Air change, h^{-1}	0.68		
Volume of reference room,m^3	30.6		
Total Surface area	47.93		
ASHRAE Outdoor air flow rate	20.7		

Categories of Identify;

1. Identified and quantified with authentic standard via HPLC/UV analysis.
2. Identified and quantified with authentic standard via GC/MS analysis.
3. Identified by comparison with a mass spectrum obtained from library, match quality ≥90%. Quantified using toluene as a surrogate compound.
4. Tentatively identified by comparison with a mass spectrum obtained from library, match quality ≥75% and <90%. Quantified using toluene as a surrogate compound.
5. Potential identification by comparison with a mass spectrum obtained from library, match quality <75%. Quantified using toluene as a surrogate compound.
6. CREL- CRELs are inhalation concentrations to which the general population, including sensitive individuals, may be exposed for long periods (10 years or more) without the likelihood of serious adverse systemic effects (excluding cancer).
7. CARB TAC - The TAC list includes all substances on the EPA list of Hazardous Air Pollutants plus additional compounds.
8. CA Prop 65- lists of known or probable human carcinogens and reproductive/developmental toxins

3. Test conclusion

1. Based on the above test result, Total volatile organic component (TVOC) emission is in compliance with the emission limits as per UL 2818.
2. Test results for individual components are in compliance with CDPH –CREL VOC regulation.

Signed for and on behalf of Wimpey Laboratories LLC

Anandu VS
Section Incharge Chemistry – Specialty
Test results relate only to the samples tested.
This report shall not be reproduced except in full, without the written approval of the laboratory.
-End of text-

WIMPEY LABORATORIES L.L.C. P.O.BOX: 123279, DUBAI, UAE

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AMAALA

Red Sea Global

MAIL TYPE	MAIL NUMBER	REFERENCE NUMBER
Workflow Transmittal	AMA00032-WTRAN-004067	AMA00032-WTRAN-004067

Final (WF-005811) Tamimi - AMAALA Review - WF - Method Statement for Water Proofing of Roof using Polyurethane Foam

From	Mr Mahmoud Ali - RSG- Amaala Destination
To (5)	Mr Shahulhameed. Abdulrazak - RSG- Amaala Destination (+4 more...)
Cc (6)	Mr Nicholas Reynolds - RSG- Amaala Destination (+5 more...)
Sent	Wednesday, 19 July 2023 3:02:41 PM AST (GMT +03:00)
Status	N/A

DOCUMENT ATTACHMENTS (1)

(**0** selected)

File	Document No	Revision	Revision Date	Title	Status
	1TB00032-TPE-3671911743-33213100-000037	C01	19/07/2023	Method Statement for Water Proofing of Roof using Polyurethane Foam	A1 - Authorised & Accepted

MESSAGE

Workflow Review History

The attached documents have completed the "Tamimi - AMAALA Review - WF - Method Statement for Water Proofing of Roof using Polyurethane Foam" workflow with the following results :

This transmittal was automatically generated.

Doc No	Step	Participant	Review Outcome	Comments
1TB00032-TPE-3671911743-33213100-000037	DC Quality Assurance Check	A Alsaeed	A1 - Authorised & Accepted	

EHAF CONSULTING	AL MOUSA GROUP	HCW - HILTON HOTEL	APC
CONSULTANT	OWNER	PROJECT	CONTRACTOR

Submittal No:		Signature:	
Date:	17-Sep-22		

TECHNICAL SUBMITTAL

No	Description	Drawing sheet no.	No. of copies	Remarks	Consultant action
1	Buildchem Poxy Primer(Mixture of part A & B).		1		
2	BC 237 Polyol		1		

Material Category For:				FOR CONSULTANT'S USE ONLY	
	Approval		Architectural	✓	APPROVED
	Information		I.D.		APPROVED AS NOTED
	Construction		Mechanical		ADDITIONAL INFORMATION REQUIRED
	Record		Electrical		CALCULATIONS REQUIRED
	Working Drawing		Builders Work		REVISE AND RESUBMIT
	Approval other specify		As-built		NOT APPROVED

EHAF Comments:

The waterproofing system and the materials specifications attached are technically approved as per the required specifications.

Resident Engineer:

Signature and date

Comments of Employer Re.& Project Director (ICC):

Note: Approval does not relieve contractor's responsibility and liability towards the project specs and Hilton specs.

Local Address: 5, Abd Elrahman Hussein Street, Mohandeseen, Cairo, Egypt
Tel.: + (202) 76010 99 – Fax: + (202) 760 86 64 Email: ehaf@ehaf.com – www.ehaf.com
CAIRO – ABU DHABI – DUBAI – DOHA – KHARTOUM

BCI BUILDING CHEMESTRY INDUSTRY

BC 237 Polyol

BC 885 Isocyanate

DESCRIPTION

Solvent free, two-component polyurea coating material. The permanently elastic and crack-bridging coating material is designed for use in surface protection, especially concrete protection.

****Based on diamines.**

Precautions

The use of this two component system requires special precautions. Please refer to the material safety data sheet before using. Avoid inhalation of the vapour and contact with skin and eyes. Working areas should be well ventilated with fresh air.

Use protective gloves and glasses in case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water and soap. During spray application, wear suitable respiratory equipment.

Safety Considerations

Material Safety Data (MSD) sheets are available from the BCI Chemical industry. MSD sheets are provided to help customers satisfy their own handling, safety and disposal needs and those that may be required by locally applicable health and safety regulations. MSD sheets are updated regularly, therefore, please request and review the most current MSD sheet before handling or using any product. These are available from the nearest BCI sales office.

Customer Notice

BCI encourages its customers to review their applications of BCI products from the standpoint of human health and environmental quality. To help ensure that BCI products are not used in ways for which they were not intended or tested, BCI personnel are willing to assist in dealing with ecological and products safety consideration. Your BCI representative can arrange the proper contacts.

Typical Component Properties

	Units	BC 237 POLYOL	BC 885 Isocyanate	Test Method
Appearance		Yellowish	yellowish	DIN52002
Density(23ºC)	g/cm³	1,00	1,10	DIN53217/1+2
Viscosity(23°C)(Brookfield)	mPas	500	1500	DIN53019/1
Flashpoint	°C	>200	>200	DIN52578

Recommended Process Conditions

The Additive component must be stirred and homogenised well before use. The material is processed with a two component high pressure dosing machine using the impingement mixing technology.

	Units	Limits
BC 237 Polyol	pbv	100
BC 885 Isocyanate	pbv	100
Typical component template (Pol/Iso)(Tanks and tube package	°C	70-90
Respectively the same typical Pressure (Pol/Iso).	bar	150-180

Typical Reaction Characteristics

	Units	Limits
Geltime	s	2- 3
Potlife	s	6- 7
Finalhardness	days	2

Handling and Storage

	Units	BC 237 POLYOL	BC 885 Isocyanate
Storagetemperature	°C	15-25	15-25
Storagestability/Shelflife(1)	months	6	6

1.Both polyol and isocyanate components must be protected against humidity and stored above 15°C. The ideal storage temperatureis15-25°C.

Typical Polymer Properties

These items are provided as general information only

	Units		Test-Method
Shorehardness	ShoreD	53	DIN53505
Tensilestrength	N/mm^2	23,1	DIN53504
Elongationatbreak	%	310	DIN53504
Tearresistance	N/mm	74,0	DIN53515
Abrasion	mm^3	220	DIN53516
Density	g/cm^3	1,0	DIN53420

Contact information:
For more information about PU Systems products, call The BCI Chemical industry Company. +966 59 312 0221

Quality Management System certified by DQSagainstDINENISO9001 Reg.No.055759QM

Material Approval Request (MAR)

MAR. No. P-0010-PH01-P04-15A02-SAB-MAT-ARC-000003	**Request Date :** 22-Nov-22
Project Name. : Misk City Hena Experience center	**Contract No. :** 55002050
Supervision Consultant : V3 Middle East	**Contractor :** Saudi Arabian BAYTUR

Proposed Material Details (prepared by Contractor)

Contractor is responsible for providing sufficient information to allow the SSC to make a decision on suitability of proposed materials

Civil	☐	Structural	☐	Architectural	☒	Mechanical	☐	Electrical	☐		
HVAC	☐	Plumbing	☐	Lifts	☐	Other	☐	.....			

Manufacturer Details		**Material/ Product Details**	
Name :.	BCI	**Product Name :**	BC 237 POLYUREA
Address :	KSA	**Description :**	BC 237 POLYUREA POLYUREA Component A+B BCI Primer 349
Supplier/ Agent:	Arabian Pioneer Company	**Purpose/ Use :**	Water proofing for internal tank

Material/ Product Technical Requirements

Technical Approval no. :	NA	**Attachment ref. :**	Material submittal
From : Saudi Arabian Bay		**To :** V3 Middle East	
Prepared by (Name & Sign) : **Engr. Mohamed galal**		**Submitted by (Name & Sign) :** **Project Director: Engr. Akif Sarilar**	

Supervision Consultant (SC) Review

Comments (include attachment if necessary) :

APPROVAL STATUS

A- Approved ☐ B- Approved with Comments ☐ C-Revise and Resubmit ☐ D- Rejected ☐ I- InformationNoted ☐

Is Employer approval required ? Yes ☐ No ☐

SC Engineer's Name :	SC Engineer's Signature :	Date :
	Nauf A. Alali	

PM/CM Review (If required)

Comments (include attachment if necessary) :

PM/CM Engineer's Name :	PM/CM Engineer's Signature :	Date :

DOCUMENT TRANSMITTAL

KING SALMAN INTERNATIONAL COMPLEX FOR MARITIME INDUSTRIES AND SERVICES

CONTRACT NO. 6600042823 (IK)

To: MR. CAO YAN
Contractor Representative
Consortium of **Branch of Sinohydro Corporation Company Ltd.**
and **SEPCO Arabia Company**
9 floor, Al Saleem Tower, 6397 King Saud Rd.
Al Khobar 34222, Kingdom of Saudi Arabia

أرامكو السعودية
saudi aramco

IK Ref. No.	**MYDP-42823-IK-T-6286**	Date:	**24-Dec-23**
Contractor Ref.	**MYP-T-SAC-15417**	Package No.	**4**

Subject :	**MAR - COATING MATERIAL POLYUREA FOR BOTTOM OF PONTOON FOR PACKAGE #4 (IK) (VENDOR : BCI - BUILDING CHEMISTRY INDUSTRY)**

Areas/Discipline

☐ ADMINISTRATION	☐ BLDG SERVICES	☐ INTERFACE	☐ PIPING	☐ PLUMBING/ DRAINAGE
☐ QA/QC	☐ OPERATIONS	■ PROCUREMENT / LOGISTICS	☐ PROCESS	☐ ELECTRICAL
■ CIVIL/STRUCTURE	☐ HVAC	☐ HSE	☐ TELECOM	☐ CONSTRUCTION

■ NO OBJECTION **(NO)**	☐ NO OBJECTION WITH COMMENTS **(NOWC)**	☐ TO CORRECT **(TC)**	☐ APPROVED
☐ FOR ACTION **(A)**	☐ INFORMATION/RECORD **(I/R)**	☐ REJECTED **(REJ)**	☐ TO RESUBMIT **(TR)**

COMMENTS

In reference to CONTRACTOR Transmittal no. MYP-T-SAC-SA-15417 , COMPANY has reviewed the "MAR - COATING MATERIAL POLYUREA FOR BOTTOM OF PONTOON FOR PACKAGE #4 (IK) (VENDOR : BCI - BUILDING CHEMISTRY INDUSTRY)" and has no objection.

For any further assistance, please do not hesitate to contact Bader Q. Al-Otaibi at 013-342-5747.

MYP PKG4/5 SEPCO DCC
28 DEC 2023
RECEIVED BY

RIYADH S. AL-SHIBAN — Company Representative **Position** — Signature

Rev.	Date Received	Document No.	ISSUER Review	Initial
6	24-Dec-23	SAC-MYP-PE-MAR-0406	BQO	BQO
			No of Pages:	(1) pages

SAUDI ARAMCO (IK) – MYDP
28 DEC 2023
SUBMITTED
BSL

* The above COMPANY response has no cost nor schedule impact.
Notwithstanding COMPANY Response above, CONTRACTOR is responsible for full compliance to Standard specifications and procedures applicable to this Contract.

AMAALA

Red Sea Global

MAIL TYPE	MAIL NUMBER	REFERENCE NUMBER
Workflow Transmittal	AMA01002-WTRAN-043511	AMA01002-WTRAN-043511

Final (WF-013196) TB-MLH- Builders Works - (002C23 STE)- AML - Material Submittals - Material Approval for Roofing Waterproofing system "RFS-101" from BCI

From	Mr Stuart Prosser - RSG- Amaala Destination
To (16)	Mr Mohammad Azamkhan - AECOM (+15 more...)
Cc (4)	Syed Nusrath - RSG- Amaala Destination (+3 more...)
Sent	Thursday, 26 September 2024 10:36:23 AM AST (GMT +03:00)
Status	N/A

DOCUMENT ATTACHMENTS (1)

(**0** selected)

File	Document No	Revision	Title	Status
	1TB01002-002C23-STE-MAT-AR-0098	C1	Material Approval for Roofing Waterproofing system "RFS-101" from BCI	Accepted with Comments

MESSAGE

Workflow Review History

The attached documents have completed the "TB-MLH- Builders Works - (002C23 STE)- AML - Material Submittals - Material Approval for Roofing Waterproofing system "RFS-101" from BCI" workflow with the following results :

This transmittal was automatically generated.

Doc No	Step	Participant	Review Outcome	Comments
1TB01002-002C23-STE-MAT-AR-0098	DC QA Check	J Asilum	Accepted	
	Supervision Consultant	M Kamel	Accepted with Comments	-Preliminary approval subject to the attached compliance sheet for Rev-C0 comments and the following comments: -The system shall be completed in full, all the remaining materials shall be submitted for approval i.e. Aluminum cast in gutter. -polyethylene sheet shall be .25 mm / Gauge 1000. -Foam concrete material data sheet is short it should be expanded and submitted in full of the maximum anticipated compressive load for our sit case, (the material shall achieve the required light weight screed properties.). -Provide the exact THK. of the BC fire film and confirm is compatibility for the semi external use -as our case in the project. -Final approval is subject to the completion of the ongoing mockup installation at site (at condo roof). -Pedestal is out of the approval kindly provide the sample

				for it and it shall be examined and evaluated accordingly (along with the support frame system for the roof tiles. -The attached concert pavers is not specified, a model shall be selected with specific properties (to be submitted). -PVDF metal flashing is subject to the related RFI response (pending). - Related shop drawing with details for the integrations between the system components shall be submitted for approval, the attached detail in the submittal is not complete and should be developed after complying with the abovementioned given comments. NOTE: 1. A. The warranty shall be adjusted to follow the specs and to include all the components "Systems shall be covered by a single source warranty. Therefore, guarantees shall be obtained on the basis of a 'back to back' type agreement provided jointly by the system manufacturer and the Contractor for the complete product supply and installation (Third Party Accredited for products and installation as specified), and be obtained for the full warranty period with an insurance company backing." 1. B. The warranty period shall be agreed with the client since it is not clear in the specs section. 2. All shop drawings shall be stamped and signed by the waterproofing system manufacturer to confirm that the details shown on the shop drawings are correct and appropriate to provide a watertight barrier for duration of the warranty period as a minimum.
	Sustainability / LEED Review	D Sivakumar	Accepted	No Objection
	Amaala Package Manager	T Odonoghue	Accepted with Comments	
	Project Director Review	S Prosser	Accepted with Comments	

Khaled Jame
SAUDI ARABIAN PARSONS LIMITED

Final (WF-107264) 110C01 - HAI-SAP-Haif Material S…
WORKFLOW TRANSMITTAL

YESTERDAY
SAP10110-WTRAN-268064

AMAALA

PARSONS
SAUDI ARABIAN PARSONS LTD
شركة بارسونز العربية السعودية المحدودة

MAIL TYPE	MAIL NUMBER	REFERENCE NUMBER
Workflow Transmittal	SAP10110-WTRAN-268064	SAP10110-WTRAN-268064

Final (WF-107264) 110C01 - HAI-SAP-Haif Material Submittal for BC 237 Polyurea System– Arabian Pioneer company

From	Mr Khaled Jame - SAUDI ARABIAN PARSONS LIMITED
To (9)	Mr Syed Jibran - Haif Company-RUH (+8 more...)
Cc (18)	Mr usama mumdooh - Haif Company-RUH (+17 more...)
Sent	Tuesday, 4 June 2024 5:26:26 PM AST (GMT +03:00)
Status	N/A

DOCUMENT ATTACHMENTS (1)

(**0** selected)

File	Document No	Revision	Title	Status
	1SV10110-110C01-HAI-MAT-CI-0070	C0	Haif Material Submittal for BC 237 Polyurea System– Arabian Pioneer company	Accepted with Comments

MESSAGE

Workflow Review History

The attached documents have completed the "110C01 - HAI-SAP-Haif Material Submittal for BC 237 Polyurea System– Arabian Pioneer company" workflow with the following results :

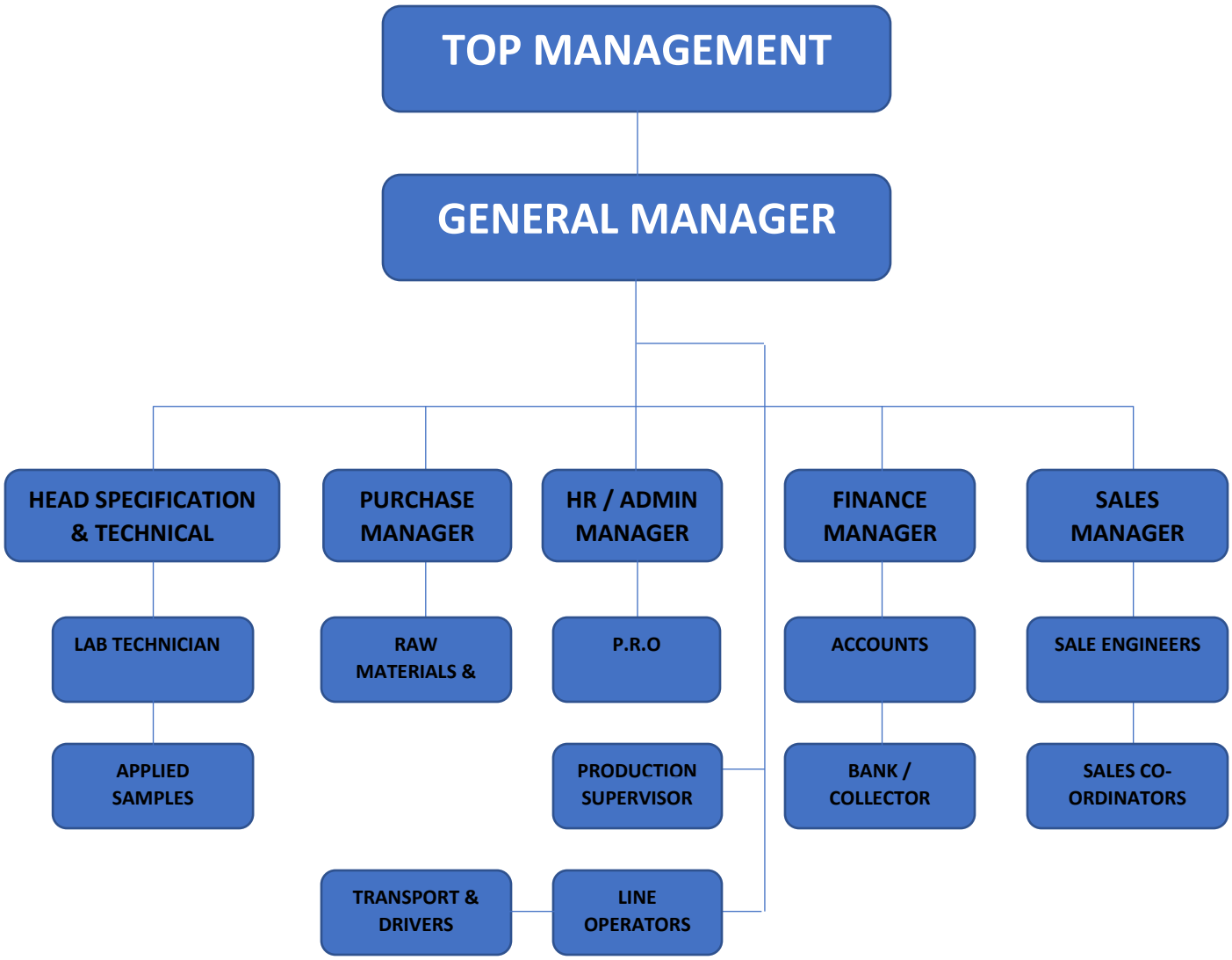
This transmittal was automatically generated.

Doc No	Step	Participant	Review Outcome	Comments
1SV10110-110C01-HAI-MAT-CI-0070	SAPL_DCQC_Check	M Muhammed	Accepted	
	SC_Civil/Structural Review	A Ousta	Review Not Required	
	SC_Mechanical REview	Y Jamil	Review Not Required	
	SC_Electrical Review	M Ghonimi	Review Not Required	

BCI BUILDING CHEMESTRY INDUSTRY

CHART

BCI - ORGANIZATIONAL CHART



BUILDING CHEMISTRY INDUSTRY
3RD INDUSTRIAL CITY, DAMMAM 338941.
KINGDOM OF SAUDI ARABIA
Tel. 013 8050533 / Mobile. 00966 (0) 593 120 221
E-mail: info@bcisaudi.com / Web: www.bcisaudi.com

BCI BUILDING CHEMESTRY INDUSTRY

PROJECT EXECUTED BY BCI

Since 2018,

BCI has Executed or supplied materials to most projects in the Gulf region. various materials have been supplied from admixtures, waterproofing, Polyurea, Sealants & Powders products.

These include Airports, Sea ports, Commercial buildings, Petrochemicals, Refineries, Residential buildings, Royal palaces, Factories, Bridges roads, Power stations, Reservoir, and Sewage treatment plants.

The following is a short list of some of the projects executed with BCI Products;

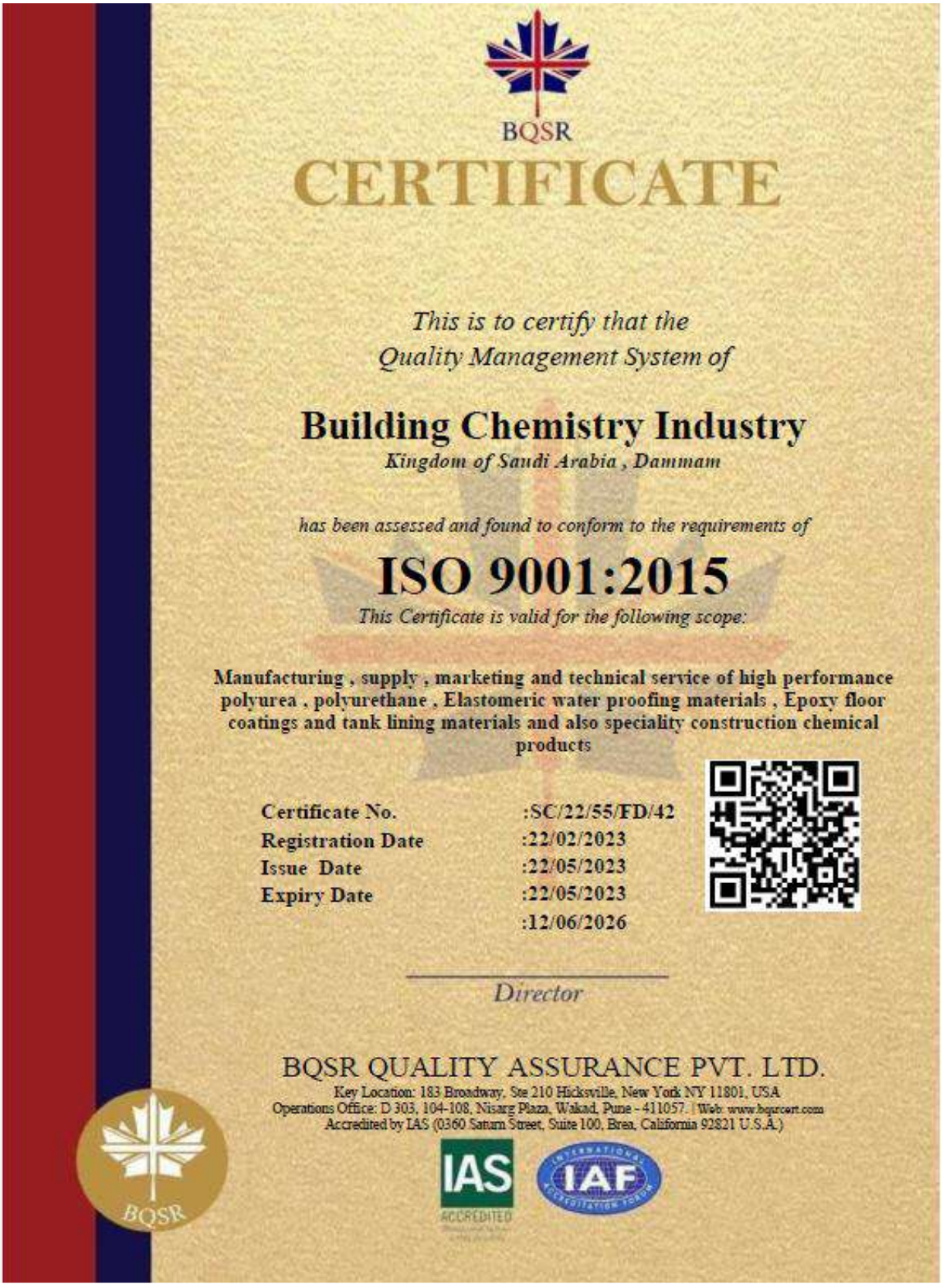
POLYUREA TANK LINING PROJECTS MATERIAL SUPPLY LIST 2018-2024					
S.No	**Contractor Name**	**System Description**	**BCI Products**	**SQM**	**Year**
1	Salaba Rayan Solidarity Projects Contracting Est	Two component poly urea BC 237 Water proofing	BC 237 Polyol and BC 885 Isocyanate	5000	2018
2	Isam Kabbani group	Two component poly urea BC 237 Water proofing	BC 237 Polyol and BC 885 Isocyanate	10000	2018
3	Sulaiman Al Habib	Two component poly urea BC 237 Water proofing	BC 237 Polyol and BC 885 Isocyanate	4500	2018
4	Al Sharq Polystyrene Factory Co	Two component poly urea BC 237 Water proofing	BC 237 Polyol and BC 885 Isocyanate	8000	2018
5	King Samon park	Two component poly urea BC 237 Water proofing	BC 237 Polyol and BC 885 Isocyanate	10000	2019
6	Dar waal emwar Estate	Two component poly urea BC 237 Water proofing	BC 237 Polyol and BC 885 Isocyanate	11000	2019

BUILDING CHEMISTRY INDUSTRY
3RD INDUSTRIAL CITY, DAMMAM 338941.
KINGDOM OF SAUDI ARABIA
Tel. 013 8050533 / Mobile. 00966 (0) 593 120 221
E-mail: info@bcisaudi.com / Web: www.bcisaudi.com

7	Lulu Saudi Supermarkets Co	Two component poly urea BC 237 Water proofing	BC 237 Polyol and BC 885 Isocyanate	10000	2019
8	Dorrat Al huda Contracting company	Two component poly urea BC 237 Water proofing	BC 237 Polyol and BC 885 Isocyanate	8000	2020
9	King salman park riyadh	Two component poly urea BC 237 Water proofing	BC 237 Polyol and BC 885 Isocyanate	10000	2020
10	Wathba Trading Company	Two component poly urea BC 237 Water proofing	BC 237 Polyol and BC 885 Isocyanate	8000	2020
11	Al-Kifa	Two component poly urea BC 237 Tank lining	BC 237 Polyol and BC 885 Isocyanate	6000	2020
12	Lulu Saudi Supermarkets Co	Two component poly urea BC 237 Tank lining	BC 237 Polyol and BC 885 Isocyanate	2000	2021
13	Bunyan Construction Contracting Company	Two component poly urea BC 237 Tank lining	BC 237 Polyol and BC 885 Isocyanate	2400	2021
14	Rowad Al Riyadh Contracting Company -	Two component poly urea BC 237 Tank lining	BC 237 Polyol and BC 885 Isocyanate	2000	2022
15	Salaba Rayan Solidarity Projects Contracting Est	Two component poly urea BC 237 Tank lining	BC 237 Polyol and BC 885 Isocyanate	1400	2022
16	Shan housing	Two component poly urea BC 237 Tank lining	BC 237 Polyol and BC 885 Isocyanate	1200	2022
17	Dorrat Al-Huda Contracting Company	Two component poly urea BC 237 Tank lining	BC 237 Polyol and BC 885 Isocyanate	4200	2023
18	Style Construction Contracting Company	Two component poly urea BC 237 Tank lining	BC 237 Polyol and BC 885 Isocyanate	5800	2024

19	Real Estate Vision Company	Two component poly urea BC 237 Tank lining	BC 237 Polyol and BC 885 Isocyanate	12000	2024
20	Al Rawaf contracting Company	Two component poly urea BC 237 Tank lining	BC 237 Polyol and BC 885 Isocyanate	1400	2022
21	Bin Jarulla Company	Two component poly urea BC 237 Tank lining	BC 237 Polyol and BC 885 Isocyanate	1200	2022
22	Ansab Contacting Company	Two component poly urea BC 237 Tank lining	BC 237 Polyol and BC 885 Isocyanate	4200	2023
23	Neom Royal (Nesma and partners)	Two component poly urea BC 237 Tank lining	BC 237 Polyol and BC 885 Isocyanate	5800	2024
24	Sindala Project	Two component poly urea BC 237 Tank lining	BC 237 Polyol and BC 885 Isocyanate	12000	2024

ISO CERTIFICATES



BQSR

CERTIFICATE

This is to certify that the
Quality Management System of

Building Chemistry Industry

Kingdom of Saudi Arabia , Dammam

has been assessed and found to conform to the requirements of

ISO 9001:2015

This Certificate is valid for the following scope:

Manufacturing , supply , marketing and technical service of high performance polyurea , polyurethane , Elastomeric water proofing materials , Epoxy floor coatings and tank lining materials and also speciality construction chemical products

Certificate No.	**:SC/22/55/FD/42**
Registration Date	**:22/02/2023**
Issue Date	**:22/05/2023**
Expiry Date	**:22/05/2023**
	:12/06/2026

Director

BQSR QUALITY ASSURANCE PVT. LTD.

Key Location: 183 Broadway, Ste 210 Hicksville, New York NY 11801, USA
Operations Office: D 303, 104-108, Nisarg Plaza, Wakad, Pune - 411057. | Web: www.bqrcert.com
Accredited by IAS (0360 Saturn Street, Suite 100, Brea, California 92821 U.S.A.)

IAS ACCREDITED

IAF

BQSR

Certificate of Registration

This is to certify that Environmental Management System of

Building Chemistry Industry

Suit No 203, Al Manar Business park

Ion Bin Khalith Street

Dammam . Kingdom of Saudi Arabia

is in accordance with the requirements of the following standard

ISO 14001:2015

(Environmental Management System)

Scope

Manufacturing , marketing , supply and application service of

High performance chemical water proofing systems Viz Polyurea Polyurethane and Epoxy Flooring and lining materials

Certificate Number : 010323029605

Initial Registration Date : 01-Mar-2023
1st Surveillance Date : 01-Feb-2024
2nd Surveillance Date : 01-Feb-2025
Certificate Expiry Date : 28-Feb-2026

Issued by ARS Assessment Private Limited

Managing Director

BCI BUILDING CHEMESTRY INDUSTRY

NATIONAL ADDRESS

Proof Number	1051101993	رقم الإثبات
Original Date	13/6/2024	تاريخ الإصدار
Expiration Date	10/12/2024	تاريخ الانتهاء

العنوان الوطني
NATIONAL ADDRESS

إثبات عنوان
Address Proof

Address Holder Details — بيانات صاحب العنوان

Name		شركة كيمياء البناء للصناعة — الاسم
Customer Acc.	3 1 3 2 4 4 4 8 9 6 4	رقم الحساب
Reg. Date	6/2/2023	تاريخ التسجيل

Address Details — تفاصيل العنوان

Short Address	E I J A 3 5 2 0	العنوان المختصر
Building No.	3 5 2 0	رقم المبنى
Street	Al Nebras	الشارع: النبراس
Secondary No.	6 3 0 1	الرقم الفرعي
District	Al Khadamat Al Musanida Dist.	الحي: حي الخدمات المساندة
Postal Code	3 4 3 4 1	الرمز البريدي
City	DAMMAM	المدينة: الدمام
	Kingdom of Saudi Arabia	المملكة العربية السعودية

To Verify للتحقق
https://proof.address.gov.sa/VerifyProofNA.aspx

تم إصدار هذا الإثبات إلكترونيا ولا يتطلب التوقيع عليه

تم إصدار هذا الإثبات بناء على طلب الموضح أعلاه، ويحظر قطعيا تقليده أو إدخال أي تعديلات عليه سواء بالإضافة أو الحذف، ويعد الإثبات لاغيا إذا شابه شيء من ذلك، كما يعرض صاحبه للمساءلة القانونية.

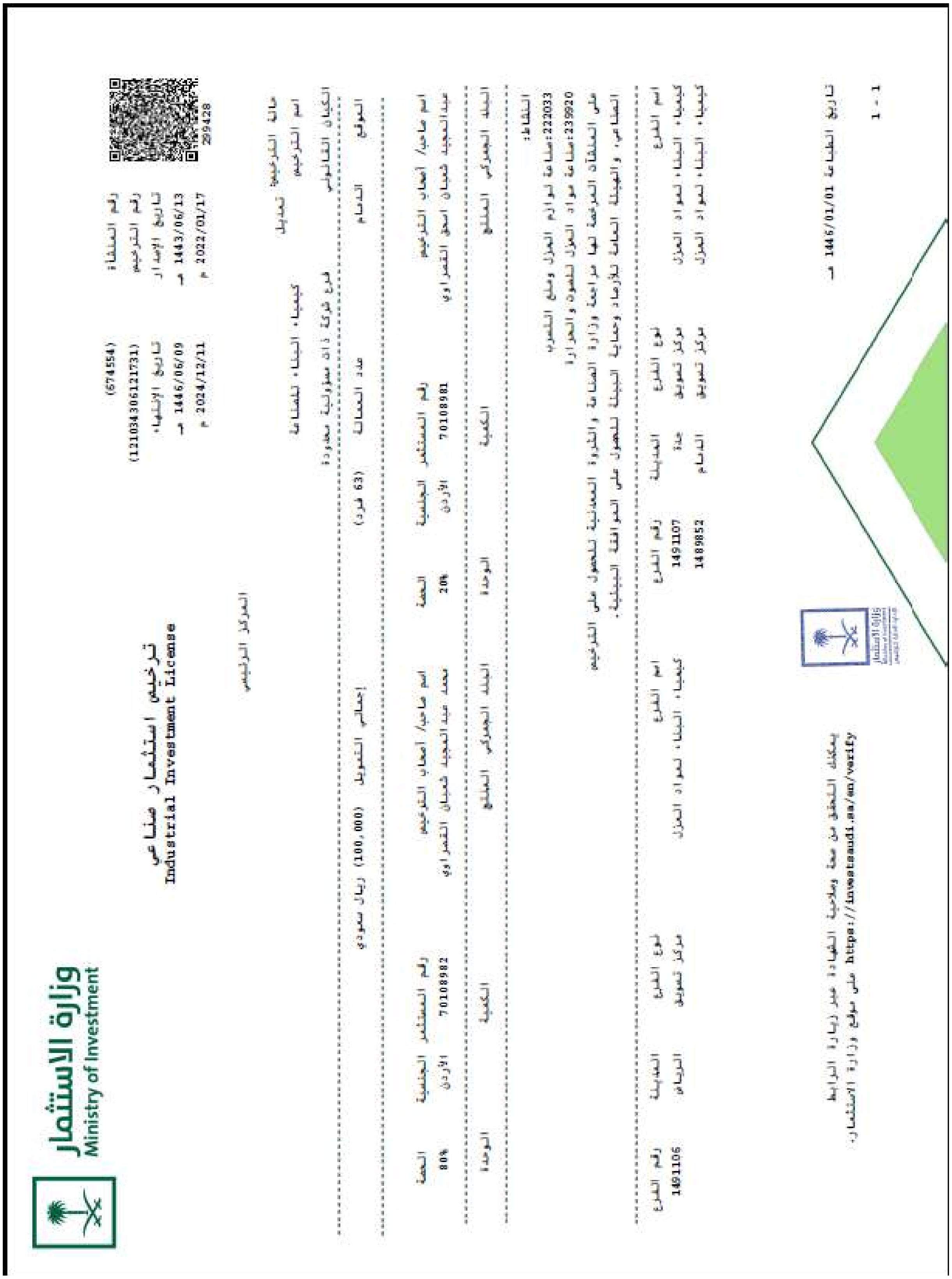
This proof has been issued electronically and does not require a signature

This proof has been issued upon the request of the above-named, and it is absolutely prohibited to imitate it or make any modifications to it, whether by addition or deletion, and the proof is considered void if it is marred by something, and its owner is subject to legal accountability.

19992 https://splonline.com.sa/ar/national-address-1/

BUILDING CHEMISTRY INDUSTRY
3RD INDUSTRIAL CITY, DAMMAM 338941.
KINGDOM OF SAUDI ARABIA
Tel. 013 8050533 / Mobile. 00966 (0) 593 120 221
E-mail: info@bcisaudi.com / Web: www.bcisaudi.com

INDUSTRIAL LICENSE



وزارة الاستثمار
Ministry of Investment

ترخيص استثمار صناعي
Industrial Investment License

رقم المنشأة (674554)
رقم الترخيص (121034306121731)
تاريخ الإصدار 1443/06/13 هـ 2022/01/17 م
تاريخ الإنتهاء 1446/06/09 هـ 2024/12/11 م
299428

المركز الرئيسي

حالة الترخيص: تعديل
اسم الترخيص كيمياء البناء للصناعة
الكيان القانوني فرع شركة ذات مسؤولية محدودة

الموقع	عدد العمالة	إجمالي التمويل
الدمام	(63 فرد)	(100,000) ريال سعودي

اسم صاحب/ أصحاب الترخيص	رقم المستثمر	الجنسية	الحصة
عبدالمجيد شعبان اسحق القصراوي	70108981	الأردن	20%
محمد عبدالمجيد شعبان القصراوي	70108982	الأردن	80%

البند الجمركي المنتج	الكمية	الوحدة	البند الجمركي المنتج	الكمية	الوحدة

النشاط:
222033:صناعة لوازم العزل ومنع التسرب
239920:صناعة مواد العزل للصوت والحرارة
على المنشآت المرخصة لها مراجعة وزارة الصناعة والثروة المعدنية للحصول على الترخيص الصناعي، والهيئة العامة للأرصاد وحماية البيئة للحصول على الموافقة البيئية.

اسم الفرع	نوع الفرع	المدينة	رقم الفرع
كيمياء البناء لمواد العزل	مركز تسويق	جدة	1491107
كيمياء البناء لمواد العزل	مركز تسويق	الدمام	1489852
كيمياء البناء لمواد العزل	مركز تسويق	الرياض	1491106

تاريخ الطباعة 1446/01/01 هـ

1 - 1

يمكنك التحقق من صحة وصلاحية الشهادة عبر زيارة الرابط https://investsaudi.sa/en/verify على موقع وزارة الاستثمار.

BUILDING CHEMISTRY INDUSTRY
3RD INDUSTRIAL CITY, DAMMAM 338941.
KINGDOM OF SAUDI ARABIA
Tel. 013 8050533 / Mobile. 00966 (0) 593 120 221
E-mail: info@bcisaudi.com / Web: www.bcisaudi.com

وزارة الاستثمار
Ministry of Investment

ترخيص استثمار صناعي
Industrial Investment License

رقم المنشأة	(674554)		
رقم الترخيص	(121034306121131)		
تاريخ الإصدار	1443/06/13 هـ	تاريخ الإنتهاء	1445/06/11 هـ
	2022/01/17 م		2023/11/24 م

205871

المركز الرئيسي

حالة الترخيص: تعديل

اسم الترخيص: كيمياء البناء للصناعة

الكيان القانوني: فرع شركة ذات مسؤولية محدودة

الموقع: الدمام — عدد العمالة: (25 فرد) — إجمالي التمويل: (100,000) ريال سعودي

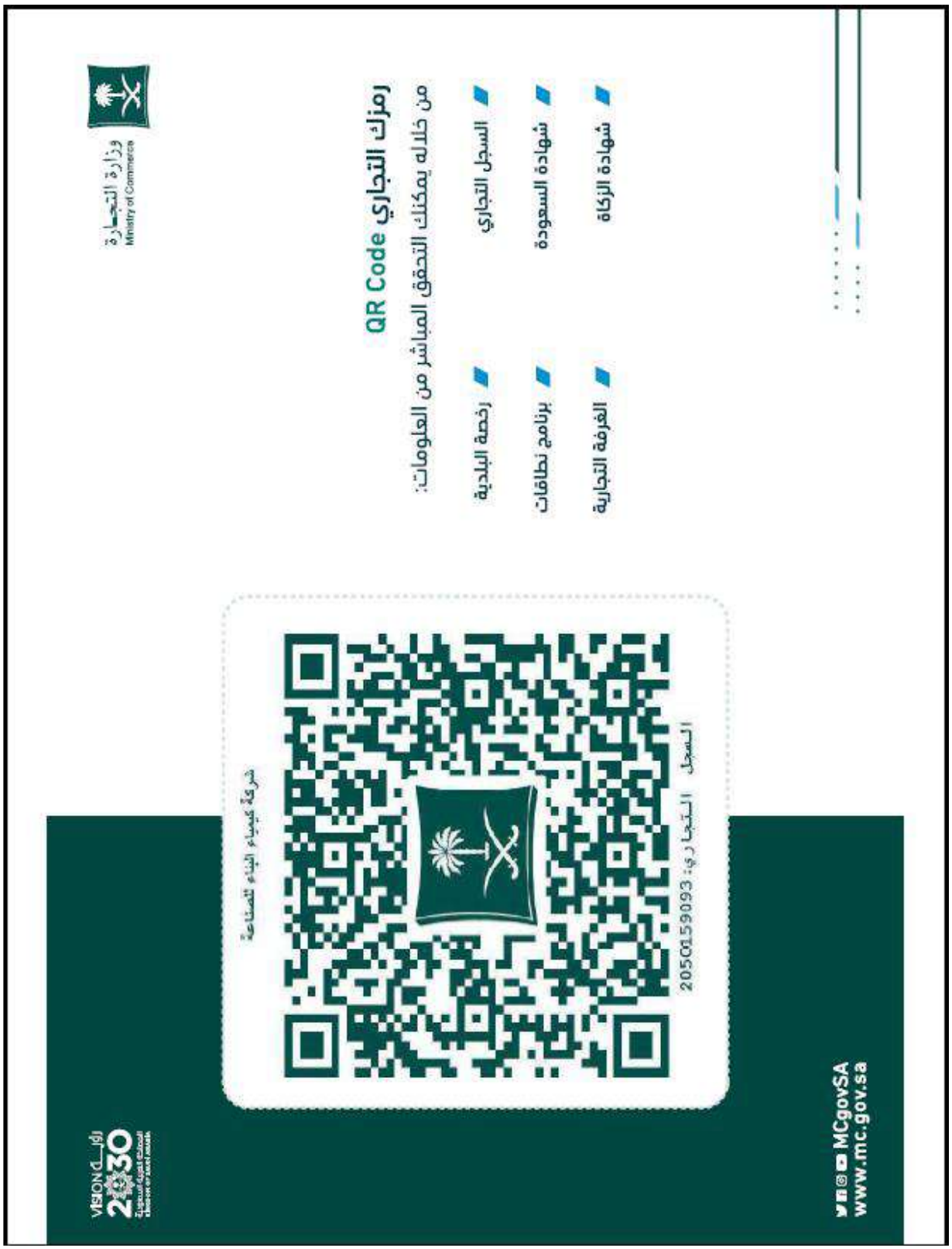
اسم الفرع	نوع الفرع	المدينة	رقم الفرع
كيمياء البناء لمواد العزل	مركز تسويق	الدمام	1489852
كيمياء البناء لمواد العزل	مركز تسويق	الرياض	1491106
كيمياء البناء لمواد العزل	مركز تسويق	جدة	1491107

تاريخ الطباعة 1444/10/26 هـ

2 - 2

يمكنك التحقق من صحة وصلاحية الشهادة عبر زيارة الرابط https://investsaudi.sa/en/verify على موقع وزارة الاستثمار.

COMMERCIAL REGISTRATION



BCI
BUILDING CHEMISTRY INDUSTRY

وزارة التجارة
Ministry of Commerce

شهادة تسجيل فرع شركة
Branch Of Company Registration Certificate

الرقم الموحد: ٧٠٢٩٦٣٥١٨٧
رقم المنشأة: ٢٠٥٠١٥٩٠٩٣
التاريخ: ١٤٤٣/١١/٢١ هـ

الاسم التجاري للشركة: شركة الرواد العربية للمقاولات شركة الشخص الواحد
نوعها: محدودة أجنبية — رأسمالها: ١٠٠,٠٠٠ ريال سعودي
مركزها الرئيسي: 0000 الدمام 00000-0000
هاتف: ٠٥٠٦٦١٢٣٠٠ — الرمز البريدي: ٠٠٠٠٠ — ص.ب: ٠٠٠٠٠٠
رقم سجل المركز الرئيسي: ٢٠٥٠١٤٨٧١٢ — تاريخه: ١٤٤٣/٠٢/٠٧ هـ — مصدره: الدمام
الاسم التجاري: شركة كيمياء البناء للصناعة
العنوان: ٣٥٢٠ الدمام ٣٤٣٤١-٦٣٠١
هاتف: ٠٥٩٣١٢٠٢٢١ — الرمز البريدي: ٣٤٣٤١ — ص.ب:
النشاط: للاطلاع على بيانات الأنشطة الرجاء مسح الرمز التجاري — ملكية الشركة: أجنبية
اسم المدير (رباعيا): محمد عبدالمجيد شعبان القصراوي
الجنسية: أردني — تاريخ الميلاد: ١٤٠٩ هـ — مكان الميلاد: الاردن
رقم السجل المدني: ٢٠٣٧٢٠٦١٥٤ — تاريخه: — مصدره: جوازات الدمام
سلطات المدير: حسب ما نص عليه عقد الشركة — تاريخه: — مصدره:
يشهد مكتب السجل التجاري بمدينة: الدمام — بأنه تم تسجيل فرع الشركة المذكورة أعلاه بمدينة: الدمام
وتنتهي صلاحية الشهادة في: ١٤٤٦/١١/٢١ هـ — بموجب الإيصال رقم: ٤٧٣٥٨٨٥٧ — وتاريخ: ١٤٤٥/١٠/٢٨ هـ

To Verify The Information Of This Certificate Visit: يمكنك التحقق من صحة هذه الشهادة بالدخول على
Kingdom of Saudi Arabia — المملكة العربية السعودية — www.mc.gov.sa — مركز

BUILDING CHEMISTRY INDUSTRY
3RD INDUSTRIAL CITY, DAMMAM 338941.
KINGDOM OF SAUDI ARABIA
Tel. 013 8050533 / Mobile. 00966 (0) 593 120 221
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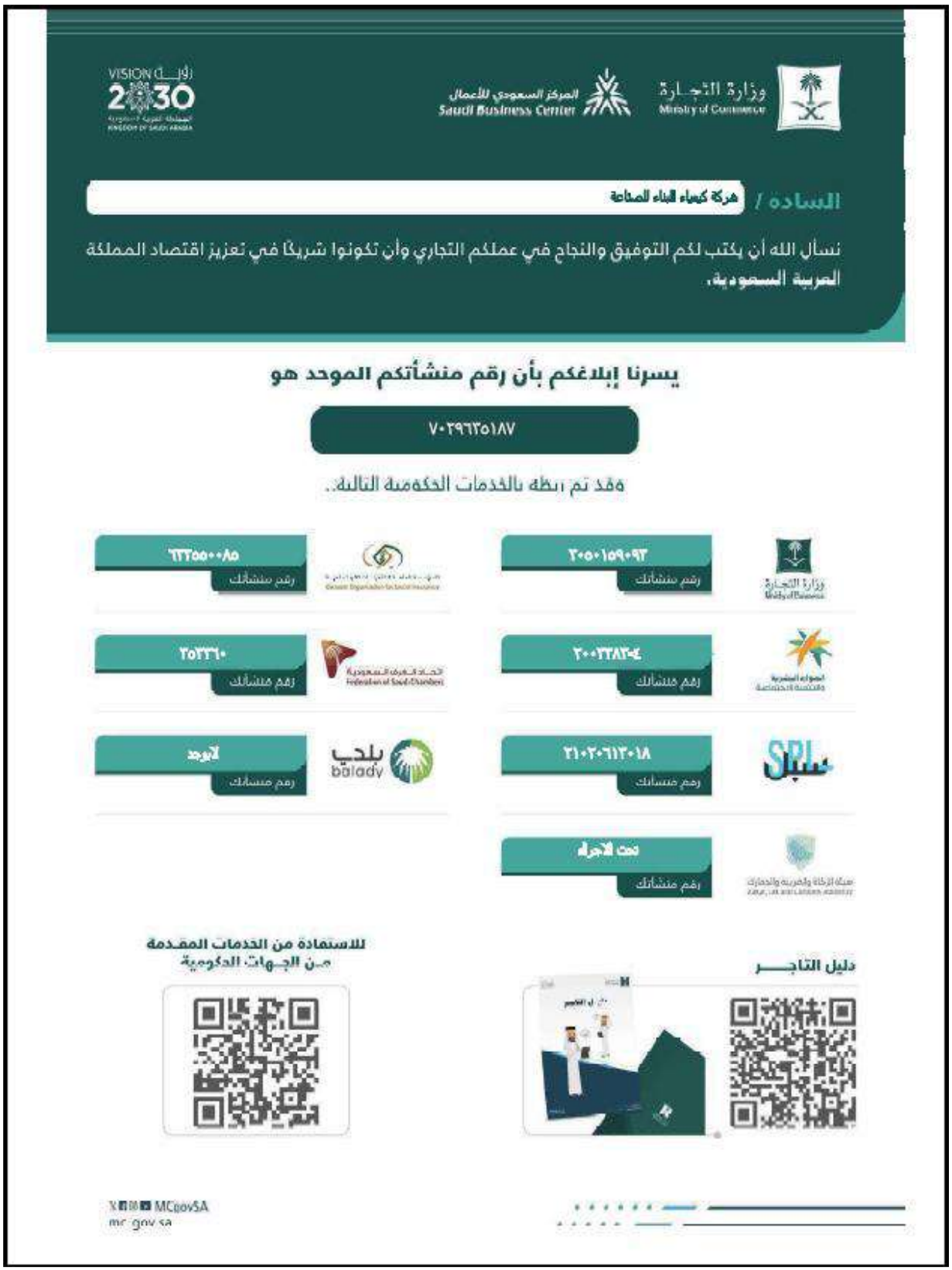

وزارة التجارة
Ministry of Commerce
المركز السعودي للأعمال
Saudi Business Center
VISION 2030
السادة / شركة كيماء البناء للصناعة
نسأل الله أن يكتب لكم التوفيق والنجاح في عملكم التجاري وأن تكونوا شريكًا في تعزيز اقتصاد المملكة العربية السعودية.
يسرنا إبلاغكم بأن رقم منشأتكم الموحد هو
٧٠٢٩٦٣٥١٨٧
وقد تم ربطه بالخدمات الحكومية التالية..
٢٠٥٠١٥٩٠٩٣ رقم منشأتك
٦٢٢٥٥٠٠٨٥ رقم منشأتك
٢٠٠٢٢٨٣٠٤ رقم منشأتك
٢٥٢٢٦٠ رقم منشأتك
٢١٠٢٠٦١٣٠١٨ رقم منشأتك
لايوجد رقم منشأتك
تحت الاجراء رقم منشأتك
للاستفادة من الخدمات المقدمة من الجهات الحكومية
دليل التاجر
MCgovSA
mc.gov.sa

QIWA قوى

وزارة الموارد البشرية والتنمية الاجتماعية

شهادة التوطين

رقم الشهادة	تاريخ الإصدار	تاريخ انتهاء الصلاحية
202465-11307556	25/04/2024	16/10/2024

تاريخ التجديد/التحديث	18/07/2024
حالة الشهادة	تم التحقق
اسم المنشأة	شركة كيمياء البناء للصناعة
رقم المنشأة	4-2003383
رقم السجل التجاري	2050159093
رقم المنشأة الموحد	7029635187
مستوى نطاقات	اخضر مرتفع
معدل التوطين	31%

The Ministry of Human Resources and Social Development certifies that the above mentioned Establishment has achieved the required Saudization rate and has been granted this certificate upon request.

The certificate is electronically generated and approved by the authority. It does not require any signature or stamp.

تشهد وزارة الموارد البشرية والتنمية الاجتماعية بأن المنشأة المذكورة أعلاه حققت نسبة التوطين المطلوبة وقد منحت هذه الشهادة بناء على طلبها

الشهادة تم إنشاؤها إلكترونياً ومعتمدة من الجهة المختصة ولا تحتاج إلى ختم أو توقيع

VISION رؤية 2030 المملكة العربية السعودية KINGDOM OF SAUDI ARABIA

البوابة الموحدة للغرف السعودية

شهادة إشتراك

Membership

نشهد بأن This is to certify that

شركة كيمياء البناء للصناعة

Undefined

عضو في الغرفة التجارية Is a member in the chamber

Certificate Date	07/07/2024 - 01/01/1446
Date of Membership	20/06/2022 - 21/11/1443
Date of Expiry	19/05/2025 - 21/11/1446
Subscription Status	فعال
NUN	7029635187
Membership No	353360
Membership Degree	الثانية
Commercial Record/ License	2050159093
P. O. Box	3520

تاريخ طباعة الشهادة

تاريخ الاشتراك

تاريخ الانتهاء

حالة الاشتراك

رقم المنشأة الموحد

رقم الإشتراك

درجة الإشتراك

الرخصة / السجل التجاري

صندوق البريد

التوقيع

عبدالعزيز بن سعد المعمر

مدير إدارة المشتركين والفروع

غـــرفـــة الشرقيـــة
ASHARQIA CHAMBER

المؤسسة العامة للتأمينات الاجتماعية
General Organization for Social Insurance

التاريخ: 1445/11/25 هـ
الموافق: 2024/06/02 م
رمز الشهادة: 66494881

شهادة السلامة و الصحة المهنية

الصادرة إلى

شركة كيمياء البناء للصناعة

رقم اشتراك المنشأة	:	633550085
الرقم الوطني الموحد	:	7029635187
نوع النشاط	:	222033
عدد المشتركين السعوديين	:	22
عدد المشتركين غير السعوديين	:	38
العنوان	:	4320 خالد بن الوليد 7921 الراكة الشمالية 34224 الدمام

احصائيات إصابات العمل لدى المنشاة خلال الفترة من 2024/01/01 م إلى 2024/06/30 م

شفاء بدون عجز	0	شفاء بعجز	0
وفاة مهنية	0	اجمالى عدد الإصابات	0

المعلومات المذكورة في الشهادة تم استخراجها استنادا على الوقائع المثبتة في سجلات المؤسسة الخاصة بصاحب العمل خلال الفترة الموضحة في الشهادة دون أدنى مسؤولية عن أي أحداث لم يتم الإبلاغ عنها أو تسجيلها لدى المؤسسة من قبل المنشأة. البيانات المذكورة في الشهادة تخص الوقائع المثبتة في سجلات المؤسسة الخاصة بصاحب العمل خلال تلك الفترة

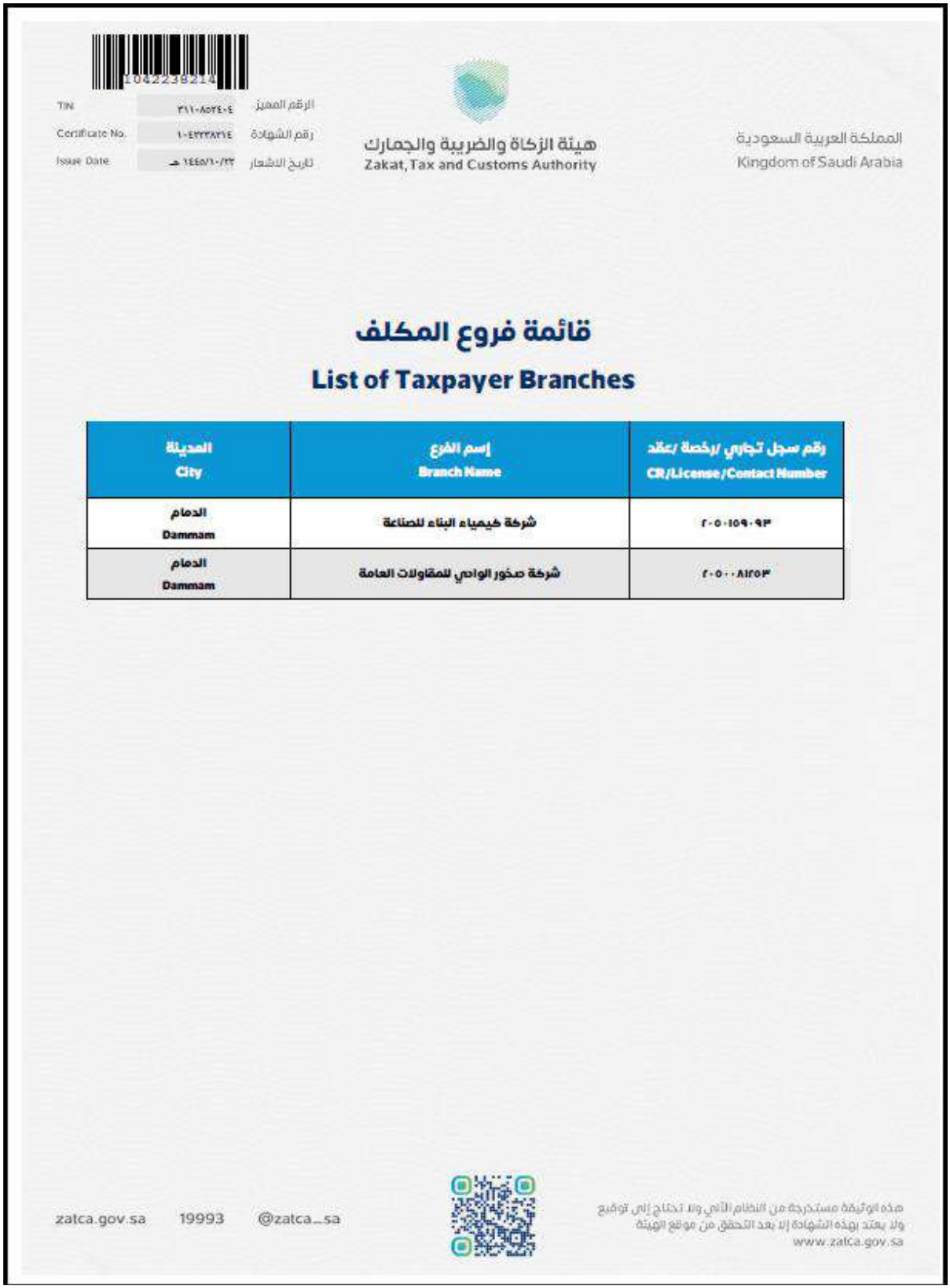
(الشهادة معتمدة من صاحب الصلاحية ولا تحتاج إلى توقيع أو ختم)

800 124 8889 - 920 014 000 www.gosi.gov.sa

Kingdom of Saudi Arabia
P.O.Box 18364 Riyadh 11168
Tel: 800 124 8889 - 920 014 000

www.gosi.gov.sa

المملكة العربية السعودية
صندوق بريد 18364 الرياض 11168
هاتف: 800 124 8889 - 920 014 000



1042238214

TIN الرقم المميز ٣١١٠٨٥٢٤٠٤

Certificate No. رقم الشهادة ١٠٤٣٢٨٣١٤

Issue Date تاريخ الاصدار ١٤٤٥/١٠/٢٢ هـ

هيئة الزكاة والضريبة والجمارك
Zakat, Tax and Customs Authority

المملكة العربية السعودية
Kingdom of Saudi Arabia

قائمة فروع المكلف

List of Taxpayer Branches

المدينة City	إسم الفرع Branch Name	رقم سجل تجاري /رخصة /عقد CR/License/Contact Number
الدمام Dammam	شركة كيمياء البناء للصناعة	٢٠٥٠١٥٩٠٩٣
الدمام Dammam	شركة صخور الوادي للمقاولات العامة	٢٠٥٠٠٨١٢٥٣

zatca.gov.sa 19993 @zatca_sa

هذه الوثيقة مستخرجة من النظام الآلي ولا تحتاج إلى توقيع
ولا يعتد بهذه الشهادة إلا بعد التحقق من موقع الهيئة
www.zatca.gov.sa

TECHNICAL QUERY

KING SALMAN INTERNATIONAL COMPLEX FOR MARITIME INDUSTRIES AND SERVICES

CONTRACT NO. 6600042823 (IK)

To: ZHANG ZHONGXIANG
Contractor Representative
Consortium of Sinohydro Corporation Limited and SEPCO Electric Power Construction Corporation

أرامكو السعودية
saudi aramco

IK Ref. No.	**MYDP-42823-IK-TQ-0091**	Date:	**30-Oct-21**
Contractor Ref.	**MYP-TQ-SAC-SA-0081**	Package No.	**4**

Subject : **COATING MATERIAL SUPERSEDING FOR BOTTOM OF MT-0066 SEAPA PONTOON**

Areas/Discipline

☐ ADMINISTRATION	☐ BLDG SERVICES	☐ INTERFACE	☐ PIPING	☐ INSTRUMENT/ CONTROLS
☐ QA/QC	☐ HSE	☐ PROCUREMENT	☐ MARINE	☐ GENERAL
■ CIVIL/STRUCTURE	☐ ARCHITECTURAL	☐ MECH / HVAC	☐ ELECTRICAL	☐ CONSTRUCTION

☐ NO OBJECTION **(NO)**	■ NO OBJECTION WITH COMMENTS (NOWC)	☐ TO CORRECT (TC)	☐ TQ/IQR	☐ APPROVED
☐ FOR ACTION **(A)**	☐ INFORMATION/RECORD (I/R)	☐ REJECTED (REJ)	☐ Marine	☐ TO RESUBMIT

COMMENTS

In reference to CONTRACTOR Transmittal # MYP-TQ-SAC-SA-0081, COMPANY reviewed " Coating Material Superseding for Bottom of MR-0066 SEAPA Pontoon REV. A" and has no objection the subject proposal with following comments.

-CONTRACTOR may adopt the noted Pure Polyurea Bc237 product by BCi Chemical SL or approved equal as a coating layer to the bottom side of the EPS foam for the pontoons, to be applied as per the provided manufacturers data sheet.
-The minimum thickness of the Polyurea coating layer shall be no less than 1500 microns (1.5mm).

MYP PKG-4&5 SEPCO DCC
02 Nov 2021
RECEIVED BY

NASER K. AL-BISHI Company Representative **Position** Signature

Rev.	Date Received	Document No.	ISSUER Review	ISSUER Initial
A	13-Oct-21	-	SA/JA	SA GB

SAUDI ARAMCO (IK) - MYDP
02 NOV 2021
SUBMITTED

No of Pages: One (1) Only this page

Company General Use

* The above COMPANY response has no cost nor schedule impact.
* Notwithstanding COMPANY Response above, CONTRACTOR is responsible for full compliance to standard specifications and procedures applicable to this contract.

AGOC & KJO SCHOOLS - Khafji, Saudi Arabia

MATERIAL APPROVAL CERTIFICATE

Doc Ref: C-002 Rev. 0 Date: 26/07/2022

Client : AL JALHAMI CONTRACTING & TRADING COMPANY

Consultant : AL JALHAMI CONT. Attn : AL JALHAMI CONT.

Contractor : SKHOOR AL-WADI CONTRACTING EST.

WE REQUEST APPROVAL OF THE FOLLOWING MATERIAL FOR USE ON THE ABOVE CONTRACT

1	MATERIAL / PRODUCT NAME	1	BC 237 POLYOL - BC 885 ISOCYANATE
		2	BC PRIMER 349
		3	BC REPAIR 100
2	DESCRIPTION & LOCATION OF USE	1	BC 237 POLYOL is a solvent free, two-component polyurea coating material. The permanently elastic and crack-bridging coating material is designed for use in surface protection, especially concrete protection.
		2	BC PRIMER 349 is a two-component medium viscosity, high performance epoxy primer, designed to seal porosity of the substrate thus providing a homogenous and adherent surface to various epoxy and polyurethane coating system. Pore blocking primer forcement & concrete substrate.
		3	BC REPAIR 100 is high quality water-resistant repair mortar based on portland cement and crushed limestone aggregates. It can aslo be used for filling the cracks unto a width of 4mm in the concrete surfaces.
3	MANUFACTURER		BUILDING CHEMISTRY INDUSTRY (BCI)
4	LOCAL SUPPLIER / AGENT		SKHOOR AL-WADI CONTRACTING EST.
5	APPROVED APPLICATOR		... do ...
6	RELEVANT SPECIFICATION		As per attached Technical Data Sheet
7	ESTIMATED DELIVERY PERIOD		As per site condition
8	ESTIMATED DATE REQUIRED ON SITE		... do ...
9	APPROVAL REQUIRED BY DATE		07/06/2022
10	ENCLOSURES (SAMPLE, CATALOGUE, TEST RESULTS)		Specifications

Skhoor Al-Wadi's Representative :

Name: Engr. Jonathan Bo Signed : Date : 26/07/2022

For Engineer's use only :

ANO (Approved No Objection) ☐ AAN (Approved As Noted/Resubmit) ☐

NA (Not Approved) ☐

Notes :

شركة الجلوهي للمقاولات والتجارة
س.ت ٢٠٥٧٠٠٢٨٢٢
C. R. 2057002822
AL-JALHAMI CONT. & TRAD. CO.

AL JALHAMI CONT. Signed : Date : 27.07.2022

Khaled Jame
SAUDI ARABIAN PARSONS LIMITED

Final (WF-107264) 110C01 - HAI-SAP-Haif Material S…
WORKFLOW TRANSMITTAL

YESTERDAY
SAP10110-WTRAN-268064

AMAALA

PARSONS
SAUDI ARABIAN PARSONS LTD
شركة بارسونز العربية السعودية المحدودة

MAIL TYPE	MAIL NUMBER	REFERENCE NUMBER
Workflow Transmittal	SAP10110-WTRAN-268064	SAP10110-WTRAN-268064

Final (WF-107264) 110C01 - HAI-SAP-Haif Material Submittal for BC 237 Polyurea System– Arabian Pioneer company

From	Mr Khaled Jame - SAUDI ARABIAN PARSONS LIMITED
To (9)	Mr Syed Jibran - Haif Company-RUH (+8 more...)
Cc (18)	Mr usama mumdooh - Haif Company-RUH (+17 more...)
Sent	Tuesday, 4 June 2024 5:26:26 PM AST (GMT +03:00)
Status	N/A

DOCUMENT ATTACHMENTS (1)

(**0** selected)

File	Document No	Revision	Title	Status
	1SV10110-110C01-HAI-MAT-CI-0070	C0	Haif Material Submittal for BC 237 Polyurea System– Arabian Pioneer company	Accepted with Comments

MESSAGE

Workflow Review History

The attached documents have completed the "110C01 - HAI-SAP-Haif Material Submittal for BC 237 Polyurea System– Arabian Pioneer company" workflow with the following results :

This transmittal was automatically generated.

Doc No	Step	Participant	Review Outcome	Comments
1SV10110-110C01-HAI-MAT-CI-0070	SAPL_DCQC_Check	M Muhammed	Accepted	
	SC_Civil/Structural Review	A Ousta	Review Not Required	
	SC_Mechanical REview	Y Jamil	Review Not Required	
	SC_Electrical Review	M Ghonimi	Review Not Required	

APC COMPANY

د.سليمان الحبيب
DR SULAIMAN AL HABIB

MATERIAL APPROVAL CERTIFICATE

Doc Ref: - **Rev.** 0 **Date:** 05/03/2023

Client : DR. SULAIMAN HOSPITAL.

Consultant : DR. SULAIMAN HOSPITAL. **Attn :**

Contractor : DR. SULAIMAN HOSPITAL.

WE REQUEST APPROVAL OF THE FOLLOWING MATERIALS.

1	MATERIAL / PRODUCT NAME	1	BC REPAIR 100
		2	BC PRIMER 349
		3	BC 237 POLYOL - BC 885 ISOCYANATE
2	DESCRIPTION & LOCATION OF USE	1	BC REPAIR 100 is high quality water-resistant repair mortar based on portland cement and crushed limestone aggregates. It can aslo be used for filling the cracks unto a width of 4mm in the concrete surfaces.
		2	BC PRIMER 349 is a two-component medium viscosity, high performance epoxy primer, designed to seal porosity of the substrate thus providing a homogenous and adherent surface to various epoxy and polyurethane coating system. Pore blocking primer forcement & concrete substrate.
		3	BC 237 POLYOL is a solvent free, two-component polyurea coating material. The permanently elastic and crack-bridging coating material is designed for use in surface protection, especially concrete protection.
3	MANUFACTURER		BUILDING CHEMISTRY INDUSTRY (BCI)
4	LOCAL SUPPLIER / AGENT		ARABIAN PIONEER COMPANY.
5	APPROVED APPLICATOR		... do ...
6	RELEVANT SPECIFICATION		As per attached Technical Data Sheet
7	ESTIMATED DELIVERY PERIOD		As per site condition
8	ESTIMATED DATE REQUIRED ON SITE		... do ...
9	APPROVAL REQUIRED BY DATE		5/3/2023
10	ENCLOSURES (SAMPLE, CATALOGUE, TEST RESULTS)		Submittal form

Tyle's Representative :

Name: Signed : Date : 05/03/2023

For Engineer's use only :

ANO (Approved No Objection) ☐ AAN (Approved As Noted/Resubmit) ☑

NA (Not Approved) ☐

Notes :

→ Be sure color of polyurea not to be change.
→ Site mockup shall be need.
→ Surface of polyurea should be Unscratchable.
→ Need application performance certification.
→ Need quality assurance certification & Quality Control
→ Polyurea peely off at what temperature.

28/5/23

Signed Date : 08-05-2023

13 Sindalah Island
Riyadh, KSA
Riyadh
Saudi Arabia

MAIL TYPE	MAIL NUMBER	REFERENCE NUMBER
Workflow Transmittal	JCB-WTRAN-005512	JCB-WTRAN-005512

Final (WF-108406) 13-4200000086/000-IN-Construction - IFR (MAT/CAL)

From	4800000492 CH2 DCC Site Supervision - Jacobs Engineering Group Inc.
To (2)	Mr Ali Kappireente - AECOM (+1 more...)
Cc (17)	Vitalij Vilesko - AECOM (+16 more...)
Sent	Tuesday, May 14, 2024 3:01:11 PM AST (GMT +03:00)
Status	N/A

DOCUMENT ATTACHMENTS (2)

(**0** selected)

File	Document No	Revision	Revision Date	Title	Status
	13-213001-4200000086-BEI-CIV-CRS-000132	01	5/9/24	4200000086/000 - Material Submittal for BC 702 Spray 40 FR as an Alternative for Foil-Faced SOFFIT MINERAL-WOOL in RF-02 Cluster 3 - (Arabian Pioneer)	B - Incorporate Comments - Proceed
	13-213001-4200000086-BEI-CIV-MAT-000074	01	5/9/24	4200000086/000 - Material Submittal for BC 702 Spray 40 FR as an Alternative for Foil-Faced SOFFIT MINERAL-WOOL in RF-02 Cluster 3 - (Arabian Pioneer)	B - Incorporate Comments - Proceed

MESSAGE

Workflow Review History

The attached documents have completed the "13-4200000086/000-IN-Construction - IFR (MAT/CAL)" workflow with the following results :

This transmittal was automatically generated.

Doc No	Step	Participant	Review Outcome	Comments

Owner	Consultant	Contractor
المنازل المبتكرة InnovativeHomes	AL TAMIMI CONSULTING AND ENGINEERING OFFICE مكتب التميمي للاستشارات الهندسية	مؤسسة تميز العمارة للمقاولات العامة

SUBMITTAL FORM

Date : 26/01/23 — [x] New Submittal

Submittal No : VP-TAM-TAMAUZ- — [ ] Proposal

DISCIPLINE

		Mechanical:	Electrical:	Project Team Discipline
[ ] Drawing	[x] Civil			[ ] Civil
[ ] Sub-contractor		[ ] HVAC	[ ] Medium Voltage	[ ] Structural
[x] Material	[ ] Structural	[ ] Fire Fighting	[ ] Low Voltage	[ ] Architecural
[ ] Project Team		[ ] Water System	[ ] Low Current	[ ] Mechanical
[ ] Document	[ ] Architectural	[ ] Sewer System		[ ] Eectrical

Submittal Description : مادة عزل سقف القبو البولي يوريا [illegible]

BC 237 POLYOL ✓

BCI PRIMER 349 ✓

Specification/Brochure/Catalogue attached: [ ] Yes [ ] No — Mocked Up/Sample submitted [ ] Yes [ ] No [ ] NA

Prepared By : ______

Signature: ______

Position : ______

Date : ______

Company Stamp:

FOR CONSULTANT ONLY

REVIEWAL STATUS

[ ] Approved. Work may proceed

[✓] Approved as Noted, Work may proceed, subject to incorporation of indicated comments

[ ] Not Approved Revise & Resubmit

REMARKS:

1) يراعى عدم اعتماد صلاحية العزل الوارد اعلاه بناءً على المواصفات المرفقة والمقدمة من شركة الرواد العربية للمقاولات مع الالتزام بما يلي :

أ- تقديم method of statement لطريقة تنفيذ العمل للدراسة علماً بالإفادة قبل البدء بتنفيذ الاعمال لعزل سطح القبو [illegible] يلزم :

ب- على المقاول تقديم شهادة ضمان لمادة العزل المطلوبة لمدة 15 سنة من تاريخ الاستلام الابتدائي

ج- يراعى عدم البدء بعزل المناطق من المواد المحددة اعلاه .

د- على المقاول الالتزام بسماكة العزل ٣ ملم للمناطق المكشوفة [illegible]

هـ- يتم العمل ب ٢ [illegible] BC 237

و- معالجة المناطق المتضررة من العزل السابق وربطها بالعزل الجديد

Review & Approved By

CONSULTANT	CONTRACTOR
م/ يحيى القواسمي ٢٦/١/٢٠٢٣	م/ عمر نجار

ز- على المقاول خلط المواد المطلوبة للعزل بالمصنع قبل البدء بالعمل وتنفيذ العمل بالعمالة الفنية لشركة الرواد العربية للمقاولات وبحضور المهندسين والمشرفين على العمل.

EHAF CONSULTING	AL MOUSA GROUP	HCW - HILTON HOTEL	APC
CONSULTANT	OWNER	PROJECT	CONTRACTOR

Submittal No:		Signature:	
Date:	17-Sep-22		

TECHNICAL SUBMITTAL

No	Description	Drawing sheet no.	No. of copies	Remarks	Consultant action
1	Buildchem Poxy Primer(Mixture of part A & B).		1		
2	BC 237 Polyol		1		

Material Category For:				FOR CONSULTANT'S USE ONLY	
	Approval		Architectural	✓	APPROVED
	Information		I.D.		APPROVED AS NOTED
	Construction		Mechanical		ADDITIONAL INFORMATION REQUIRED
	Record		Electrical		CALCULATIONS REQUIRED
	Working Drawing		Builders Work		REVISE AND RESUBMIT
	Approval other specify		As-built		NOT APPROVED

EHAF Comments:

The waterproofing system and the materials specifications attached are technically approved as per the required specifications.

Resident Engineer:

Signature and date

Comments of Employer Re.& Project Director (ICC):

Note: Approval does not relieve contractor's responsibility and liability towards the project specs and Hilton specs.

Local Address: 5, Abd Elrahman Hussein Street, Mohandeseen, Cairo, Egypt
Tel.: + (202) 76010 99 – Fax: + (202) 760 86 64 Email: ehaf@ehaf.com – www.ehaf.com
CAIRO – ABU DHABI – DUBAI – DOHA – KHARTOUM

نموذج ب (اعتماد مواد)

القصيم

وزارة الشئون البلدية والقروية
أمانة منطقة القصيم
الإدارة العامة للسيول
إدارة تنفيذ السيول

المشـــروع:	تصريف سيول حي الفايزيه بمدينة بريدة		
الاستشاري:	شـركـة الإتحـاد الهندسـي - السـعـوديـة Saudi Consolidated Engineering Company		
المقـــاول:	شركة الرواف للتجارة والمقاولات		
الرقـــم:	ELRAWAF- DWG - F.P.S -072	التاريـــخ	29/12/2022م - ٠٥/٠٦/١٤٤٤هـ

خاص بالمراجعة الإدارية

رقم الوارد:	تاريخ الاستلام:
مواصفات المادة المقدمة :اعمال الدهانات الداخلية والخارجية للخزانات . توريد ودهان سطح الخرسانة الداخلى للخزانات بثلاث اوجه من مادة البوليوريا سريعة الشك	اسم المورد: شركة كيمياء البناء للصناعة
مواصفات المادة المقدمة: BC237 POLYOL - BC885 ISOCYANTE - BC REPAIR - ١٠٠ BCI PRIEMER 349	اسم المصنع: شركة كيمياء البناء للصناعة بلد المنشأ: المملكة العربية السعودية

☐ النموذج (أ- اعتماد مواد) كامل ومختوم بالختم الرسمي للاستشاري والمقاول

☐ تم إرفاق نسخة من كتالوجات المادة المطلوب اعتمادها

الإجراء :	☑ الملف مقبول	☐ الملف مرفوض

ملاحظات:

الاسم : م/ فارس العنزي	التاريخ والتوقيع:

خاص بالدراسة الفنية

ملاحظات: الالتزام بالمواصفات الفنية للمشروع والالتزام بالسماكات اللازمة المنفذة طبقاً للجدول الزمني وحسب الكميات المعتمدة للمشروع	☐ يعتمد كما تقدم ☑ يعتمد حسب الملاحظات الموضحة ولا يحتاج الى إعادة تقديم ☐ يتم تلافي الملاحظات الموضحة ويحتاج الى إعادة تقديم ☐ مرفوض

المهندس المشرف : م / فارس العنزي	التاريخ والتوقيع:
مديرالادارة العامة لتنفيذ السيول : م/ فارس الفهيد	التاريخ والتوقيع

☐ المهندس المشرف
☐ ملف المشروع
☐ المكتب
☐ الاستشاري
☐ المقاول
☐ المستلم
☐ التوقيع

الرواف للمقاولات
RECEIVED
05 JAN 2023
مشروع تصريف سيول حي الفايزية بمدينة بريدة

٦/٦/١٤٤٤هـ

Material Approval Request (MAR)

MAR. No. P-0010-PH01-P04-15A02-SAB-MAT-ARC-000003	**Request Date :** 22-Nov-22
Project Name. : Misk City Hena Experience center	**Contract No. :** 55002050
Supervision Consultant : V3 Middle East	**Contractor :** Saudi Arabian BAYTUR

Proposed Material Details (prepared by Contractor)

Contractor is responsible for providing sufficient information to allow the SSC to make a decision on suitability of proposed materials

Civil	☐	Structural	☐	Architectural	☒	Mechanical	☐	Electrical	☐		
HVAC	☐	Plumbing	☐	Lifts	☐	Other	☐	.....			

Manufacturer Details		**Material/ Product Details**	
Name :.	BCI	**Product Name :**	BC 237 POLYUREA
Address :	KSA	**Description :**	BC 237 POLYUREA POLYUREA Component A+B BCI Primer 349
Supplier/ Agent:	Arabian Pioneer Company	**Purpose/ Use :**	Water proofing for internal tank

Material/ Product Technical Requirements

Technical Approval no. :	NA	**Attachment ref. :**	Material submittal
From : Saudi Arabian Bay		**To :** V3 Middle East	
Prepared by (Name & Sign) : **Engr. Mohamed galal**		**Submitted by (Name & Sign) :** **Project Director: Engr. Akif Sarilar**	

Supervision Consultant (SC) Review

Comments (include attachment if necessary) :

APPROVAL STATUS

A- Approved ☐ B- Approved with Comments ☐ C-Revise and Resubmit ☐ D- Rejected ☐ I- InformationNoted ☐

Is Employer approval required ? Yes ☐ No ☐

SC Engineer's Name :	SC Engineer's Signature :	Date :
	Nauf A. Alali	

PM/CM Review (If required)

Comments (include attachment if necessary) :

PM/CM Engineer's Name :	PM/CM Engineer's Signature :	Date :

Saif Shatat
SAUDI ARABIAN PARSONS LIMITED

Final (WF-045924) 110C12 - SC Review (Material Sub…
WORKFLOW TRANSMITTAL

YESTERDAY
SAP10110-WTRAN-101921

AMAALA

PARSONS
SAUDI ARABIAN PARSONS LTD
شركة بارسونز العربية السعودية المحدودة

MAIL TYPE	MAIL NUMBER	REFERENCE NUMBER
Workflow Transmittal	SAP10110-WTRAN-101921	SAP10110-WTRAN-101921

Final (WF-045924) 110C12 - SC Review (Material Submittal for BC 690 H Polyol and BC 6354 Isocyanate - Polyurea Hybrid for Roof Waterproofing, balconies, external corridor, external stair / fire exit corridor from Arabian Pioneer Contracting Co.)

From	Mr Saif Shatat - SAUDI ARABIAN PARSONS LIMITED
To (11)	Mr Akmal saher - ARCHIRODON - ACCE Joint Venture (+10 more...)
Cc (55)	Mr Ayman Gamea - ARCHIRODON - ACCE Joint Venture (+54 more...)
Sent	Sunday, 5 November 2023 11:28:22 AM AST (GMT +03:00)
Status	N/A

DOCUMENT ATTACHMENTS (1)

(**0** selected)

File	Document No	Revision	Title	Status
	1SV10110-110C12-SEA-MAT-AR-0038	C0	Material Submittal for BC 690 H Polyol and BC 6354 Isocyanate - Polyurea Hybrid for Roof Waterproofing, balconies, external corridor, external stair / fire exit corridor from Arabian Pioneer Contracting Co.	Accepted with Comments

MESSAGE

Workflow Review History

The attached documents have completed the "110C12 - SC Review (Material Submittal for BC 690 H Polyol and BC 6354 Isocyanate - Polyurea Hybrid for Roof Waterproofing, balconies, external corridor, external stair / fire exit corridor from Arabian Pioneer Contracting Co.)" workflow with the following results :

This transmittal was automatically generated.

Doc No	Step	Participant	Review Outcome	Comments
1SV10110-110C12-SEA-	SC_QA/QC Check	A Khan	Accepted	

MAT-AR-0038

	SC_Senior Architect Review	F Alqudah	Accepted with Comments	refer to comments on CRS
	SC_Senior Structural Review	G Domel	Review Not Required	
	Sustainability Review	A Ezzat	Accepted	
	SC_QAQC Review	I Ali	Accepted with Comments	Refer to the attached CRS for compliance.
	SC RE Review & Closeout	S Shatat	Accepted with Comments	one source only for whole project, all water proofing shopdrawings shall be stamped by approved supply/apply supplier

Ramzi Haddadin
SAUDI ARABIAN PARSONS LIMITED

Final (WF-023872) 110C08 - BEC SC Review (Material s…
WORKFLOW TRANSMITTAL

11:15 AM
SAP10110-WTRAN-042897

AMAALA

PARSONS
SAUDI ARABIAN PARSONS LTD
شركة بارسونز العربية السعودية المحدودة

MAIL TYPE	MAIL NUMBER	REFERENCE NUMBER
Workflow Transmittal	SAP10110-WTRAN-042897	SAP10110-WTRAN-042897

Final (WF-023872) 110C08 - BEC SC Review (Material submittals) -Material Submittal of POLYUREA WATERPROOFING (BC 690H Polyol with BC 6534 Isocyanate) from ARPIONEER

From	Mr Ramzi Haddadin - SAUDI ARABIAN PARSONS LIMITED
To (7)	Mr Abdelkarim Atman - BEC Arabia Ltd (+6 more...)
Cc (7)	Mr Faris Ali - RSG- Amaala Destination (+6 more...)
Sent	Tuesday, August 1, 2023 11:15:36 AM AST (GMT +03:00)
Status	N/A

DOCUMENT ATTACHMENTS (1)

(**1** selected)

File	Document No	Revision	Title	Status
	1SV10110-110C08-BEC-MAT-AR-0013	C1	Material Submittal of POLYUREA WATERPROOFING (BC 690H Polyol with BC 6534 Isocyanate) from ARPIONEER	Accepted with Comments

MESSAGE

Workflow Review History

The attached documents have completed the "110C08 - BEC SC Review (Material submittals) -Material Submittal of POLYUREA WATERPROOFING (BC 690H Polyol with BC 6534 Isocyanate) from ARPIONEER" workflow with the following results :

This transmittal was automatically generated.

Doc No	Step	Participant	Review Outcome	Comments
1SV10110-110C08-BEC-MAT-AR-0013	SC_QA/QC Check	A Siddik	Accepted	

	SC_Seniro Electrical Review	M Ghonimi	Review Not Required	
	SC_Senior Mechanical Review	Y Jamil	Review Not Required	
	SC_Senior Architect Review	F Alqudah	Accepted with Comments	refer to comments on the attached CRS
	SC_Senior Structural Review	G Domel	Review Not Required	
	SC RE Review & Closeout	R Haddadin	Accepted with Comments	

Material Submittal form					
Submittal Ref:	RCC-AEC-RY18-TSL-STR-0016	Rev No:	00	Date:	24/12/2023
Program Title:	NATIONAL HOUSING PROGRAM (NHC)				
Project Title:	A Contract for the Implementation of Developmental housing for ALASALAH -PKG-1 housing project - Contract No. 23000226				
The Employer:	NHC				
Third party:	(DAR ALRIYADH)				
Consultant:	Almnabr Consulting Engineering Co.				
Contractor:	Alraem Contracting Company				

Guidance notes:					
The submission should only include materials which are compliant with the SOPR and CODE requirements and have been reviewed and coordinated between the Contractor and Designer (and Engineer if applicable) and should include any authorised variations/changes as instructed.					
Review Discipline					
Architectural ☐	Structural/Civil ☒	Mech/Plumb ☐	Elec. ☐	Others (specify ☐	

Material Details
APPROVAL FOR POLYURETHANE FOAM (ALROWAD ALARABIA)

Notes: PMC review will recommend either Objection or No Objection to each item. Non-Objected shall be issued to the NHC with the recommendation to approve. Objected shall be returned to the Contractor with an Objection report. This sheet must be signed by any specialist sub-contractor applicable to the Material element Design/Production (e.g. Pre-cast panel manufacturer)

Proposed by:

The Contractor		The Consultant (Designer & The Engineer)		Specialist / Sub-Contractor	
Sign/Stamp		Sign/Stamp	شركة المنابر للاستشارات المهنية Al Mnabr Consulting Professional co. قسم الإشراف الإعتمادات رقم الختم: G4 +966 11 4733118	Sign/Stamp	

Material Information & Checklist APPROVAL FOR POLYURETHANE FOAM (ALROWAD ALARABIA)		PMC REVIEW	
Location /element Ref:	Riyadh Insulation for Upper Roof	Checklist of Attachments:	
Specified Material:	Insulation Material	Drawing/Specification	☒
Proposed Material:	POLYURETHANE FOAM	Product Datasheet	☒
SOPR/CODE Ref(s):		Compliance Certificates/Documents	☐
Manufacturer & Product code ref:	ALROWAD ALARABIA	Compliance Statement	☒
Remarks/Notes:	RCC-AEC-RY18-SAT-STR-0007	Sample (available)	☒

Approved, Final approval subject to NHC approval

THE ENGINEER*	Review Date:	24/12/2023	Rejected	Approved	Signed:	Ahmed Hassaan
	Print Name:	Ahmed hassaan		✓		
DAR ALRIYADH	Recommendations to NHC Date:	27 Dec 2023	Rejected	Approved	Signed:	
	Print Name:	Anas Mohamed		✓		
NHC	Review Date:	28-12-2023	Objection	Approved	Signed:	
	Print Name:	A.Almuraikhi		✓		

No Objection subject to:
- IFC Drawings, Sample, Roofing system, and MOS approval,
- 10+1 years warranty certificates for materials and applications attested by COC must be provided.

LULU HYPERMARKET

MATERIAL APPROVAL CERTIFICATE

Doc Ref: C-001 **Rev.** 0 **Date:** 27/10/2022

Client : LULU SAUDI HYPERMARKETS

Location : SAIHAT, SAUDI ARABIA | **Project:** DIESEL GENERATOR ROOM - ROOF WATERPROOFING

Contractor : ARABIAN PIONEER COMPANY

WE REQUEST APPROVAL OF THE FOLLOWING MATERIAL FOR USE ON THE ABOVE CONTRACT

1	MATERIAL / PRODUCT NAME	1	BC 702 SPRAY 40 POLYOL - BC 768 ISOCYANATE
		2	BC REPAIR 100
		3	BCI PRIMER 349
		4	BC GUARD
2	DESCRIPTION & LOCATION OF USE	1	BC 702 SPRAY 40 POLYOL is designed for the production of sprayed foam for cavity filling. It has good mechanical properties, dimensional stability and good adhesion to usual substrates.
		2	BC REPAIR 100 is high quality water-resistant repair mortar based on portland cement and crushed limestone aggregates. It can aslo be used for filling the cracks unto a width of 4mm in the concrete surfaces.
		3	BCI PRIMER 349 is a two-component medium viscosity, high performance epoxy primer, designed to seal porosity of the substrate thus providing a homogenous and adherent surface to various epoxy and polyurethane coating system. Pore blocking primer forcement & concrete substrate.
		4	BC guard is single component heavy duty water based acrylic waterproofing system that forms a strong barrier against water and moisture.
3	MANUFACTURER		BCI - Building Chemistry Industry
4	LOCAL SUPPLIER / AGENT		ARABIAN PIONEER COMPANY
5	APPROVED APPLICATOR		... do ...
6	RELEVANT SPECIFICATION		As per attached Technical Data Sheet
7	ESTIMATED DELIVERY PERIOD		As per site condition
8	ESTIMATED DATE REQUIRED ON SITE		... do ...
9	APPROVAL REQUIRED BY DATE		... do ...
10	ENCLOSURES (SAMPLE, CATALOGUE, TEST RESULTS)		TECHNICAL DATA SHEET
	Comments		

BUILDING CHEMICAL INDUSTRY's Representative :

Name: **Engr. Mohammad Qassrawi** Signed : Date : **27/10/2022**

For Engineer's use only :

ANO (Approved No Objection) ☐ **AAN** (Approved As Noted/Resubmit) ☐

NA (Not Approved) ☐

Notes :

LULU HYPERMARKET PROJECT DEPARTMENT * EASTERN PROVINCE * K.S.A.

ENGR. FARIS BASHEER Signed : Date : 29/10/2022.

الشعيبة الثالثة لتحلية المياه SHUAIBAH 3 WATER DESALINATION / ILF CONSULTING ENGINEERS	**14046 - ACWA Power and ILF collaboration -**	DOOSAN

Comment Sheet No.	CRS Rev.	CRS Status	Issued Date	LEGEND:
SH3-01-ZA_-CCB-9784_CRS	A	AWC	19/09/2023	**APP =** Approved **AWC =** Approved with Comment **REJ =** Rejected **FI =** For Information

Drawing / Document No.	Rev.	Drawing / Document title
SH3-01-ZA_-CCB-9784	A	MAR of Spray Foam Insulation (BC702 Spray 45 Polyol & BC 768 Isocyanate) for Building Works. Supplier/Manufacturer: Arabian Pioneer Company (APC)/Building Chemistry Industries

Reviewed by O/OE					Replied by EPC Contractor			
Doc/Drg Rev.No	Received Date	Replied Date	Doc. Status	CRS Status	Doc/Drg Rev.No	Received Date	Replied Date	Doc. Status
Rev. A	17/09/2023	19/09/2023	IFA	**AWC**				

1.	**Owner's Comments Rev. A**	**EPC Contractor's Reply**
	EPC to submit the method statement for application of Spray Foam Insulation (BC702 Spray 45 Polyol & BC 768 Isocyanate).	
2.	**Owner's Comments Rev. A**	**EPC Contractor's Reply**
	EPC to prepare the mockup sample for spray foam on site prior the start the permanent application.	
3.	**Owner's Comments Rev. A**	**EPC Contractor's Reply**
	EPC to note Owner has reviewed the credentials of prequalification's of the Arabian Pioneer Company (APC) / Building Chemistry Industries. The proposed supplier is approved for the services of supply the Spray Foam Insulation (BC702 Spray 45 Polyol & BC 768 Isocyanate).	
4.	**Owner's Comments Rev. A**	**EPC Contractor's Reply**

Remarks: Comments given in this Comment Sheet are for technical clarification only, and have no commercial impact.

The approval of the document does not release the EPC Contractor from his Contract obligations.

Comment Sheet No.	CRS Rev.	CRS Status	Issued Date	LEGEND:
SH3-01-ZA_-CCB-9784_CRS	A	AWC	19/09/2023	**APP =** Approved **AWC =** Approved with Comment **REJ =** Rejected **FI =** For Information

Drawing / Document No.	Rev.	Drawing / Document title
SH3-01-ZA_-CCB-9784	A	MAR of Spray Foam Insulation (BC702 Spray 45 Polyol & BC 768 Isocyanate) for Building Works. Supplier/Manufacturer: Arabian Pioneer Company (APC)/Building Chemistry Industries

	MRIR shall be submit the once the material will be delivered on construction site.	

Remarks: Comments given in this Comment Sheet are for technical clarification only, and have no commercial impact.

The approval of the document does not release the EPC Contractor from his Contract obligations.

EHAF CONSULTING ENGINEERS	الأولى منازل	NHC الشركة الوطنية للإسكان National Housing Company	الأولى alOula	BSCC 25 YEARS

Submittal No: M2-SUB-BSCC-A-126-R01
Date: 03-Jun-2023

From The Contractor: **(BSCC)** Mohammad Hammoud من المقاول:

Signature: For ... التوقيع:

Submittal Form — نموذج تقديم لوحات المقاول

SUBMITTAL TITLE: عنوان اللوحة :

ARABIAN PIONEER FOR WATERPROOFING WET PROFILE AND TECHNICAL DATA SHEET FOR ROOF BC 702 SPRAT 45 (POLYURETHANE) AND WET AREA BCI SEAL CEMEMNTIOUS COATING (Rev-01)

CONTRACTOR DRAWING REF.

DRAWING CATEGORY : نوع اللوحة
For:

Approval	■	للاعتماد	Architectural	معماري	■
Information		للعلم والاحاطة	Structural	إنشائي	
Construction		للتنفيذ	Mechanical	ميكانيكا	
Record		للحفظ	Electrical	كهرباء	
Working DWG		لوحة تفصيلية	Builders work	خدمات اعتيادية	
Approval Other Specify		اعتماد آخر (حدد)	Survey work	أعمال مساحية	
			As- built	كما تم تنفيذه	

CONSULTANTS USE ONLY
لاستخدام الاستشاري فقط

- APPROVED معتمدة ☐
- APPROVED AS NOTED معتمدة بملاحظات ☑
- ADDITIONAL INFORMATION REQUIRED مطلوب معلومات إضافية ☐
- CALCULATIONS REQUIRED مطلوب حسابات
- REVISE AND RESUBMIT تراجع ويعاد تقديمها
- NOT APPROVED مرفوضة

EHAF Comments: تعليقات إيهاف:

لا مانع من الاعتماد إبتدائي على أن يتم عمل
عينة في الموقع من أحد الفيلات قبل التنفيذ
في ظل [illegible] (تم الاعتماد بعد الحصول على [illegible] بتاريخ 11/6/2023) SASO
* [illegible] بين المقاول الرئيسي ومقاول العزل
الالتزام بالمواصفات وكود البناء السعودي

الاستشاري :
Project Manager

التاريخ:
Date : 12/6/2023

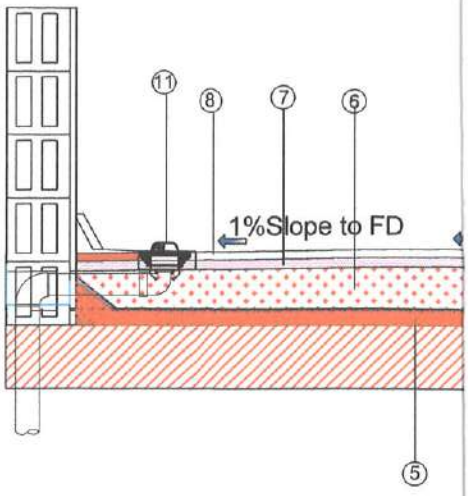
Comments of Client Representative تعليقات ممثل المالك/مدير المشروع:

ممثل المالك/ مدير المشروع:
Client Representative/ Project Manager

BUILDING SPECIALIZED CONTRACTORS — RECEIVED — DATE: 13/06/23 — MURCIA HOUSING PROJECT

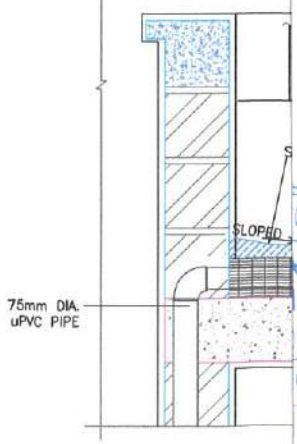
Date التاريخ

RECEIVED 03 JUN 2023 EHAF



LEGEND	D
1	Hollow block
2	Concrete slab
3	Polyurethane
4	Protection lay
5	Geotextile 10
6	Sand backfilli
7	cement morta
8	Cement tiles 2
9	Plaster 2cm
10	Skirting tiles H
11	Rain drain pipe

ROOF & UPPER ROOF WATE



1 / – ROOF DRAIN &
SCALE

KEY PLAN

TYPICAL SECTION

NOTES:

1. ALL DIMENSIONS ARE GIVEN IN METERS AND ALL LEVELS GIVEN IN METERS.

LEGEND:

REFERENCE DRAWINGS

TITLE	DRAWING NO.
ROOF ,UPPER ROOF & WET AREA WATERPROFFING DETAIL	V1–V2

0 2 5 10 15 20
SCALE 1:200 METERS

0 0.5 1 1.5 2 3 4 5
SCALE 1:50 METERS

REV.No.	DATE	REVISIONS	DRAWN	REVIEWED	CHECKED	APPROVED
0	20-JAN-2021	ISSUED FOR CONSTRUCTION	KH	AAR	MBA	KAY

OWNER:
NATIONAL HOUSING COMPANY
الشركة الوطنية للاسكان

DEVELOPER:
ALOULA REAL ESTATE DEVELOPER
شركة الاولى للتطوير العقارى

PROJECT NAME:
MARCIA II NORTH OF RIYADH
مشروع اسكان مرسيه٢-شمال الرياض

CONSULTANT:
ADIB AL ZAMIL & KHALED AL FAWZAN CO.
DAR CONSULTING ENGINEERS

CONSULTANT:
EHAF CONSULTING ENGINEERS | 50 YEARS OF INNOVATION

CONTRACTOR:
شركة التشييد الإختصاصية للمقاولات
Building Specialized Contracting CO.
C.R. 2051062625

LOCATION:			PROJECT NO.	SCALE
NORTH OF RIYADH			20176-DCEK-KY	NTS
SECTOR NO.	BLOCK NO.	LOT NO.	TYPE	REV. NO.
س/ ٣٦-١-٦-٦-٩٠٠			V01	06
SHEET CONTENT:				DRAWING SHEET NO.
V1 & V2 TYP. ROOF ,UPPER ROOF & WET AREA WATERPROFFING DETAIL				1 OF 1

SHUAIBAH 3 IWP PROJECT

SUBCONTRACTOR:

SAUDI FRIENDS ENGINEERING & CONSTRUCTION CO. LTD.

(SFEC)

Type of Document

☐ Work Procedure	☑ Method Statement	☐ Bar Bending Schedule	☐ STQ	☐ Plan / Drawing	☐ Material Submittal
☐ Weekly/Monthly Report	☐ Schedule/Resume	☐ Inspection & Test Plan	☐ Pre-Qualification	☐ QA/QC Report	☐ HSE / MOM

Document Title

Method Statement for Spray Applied Polyurethane Foam

Document No.	Rev.
SH3-01-SFC-DES-MS-0025	B

Issued for:

☑ Approval	☐ Record	☐ Construction	☐ Fabrication	☐ Information	☐ Instruction
☑ Review	☐ Drawings	☐ Comment	☐ Reference	☐ Quotation	☐ For Signature

SUBCONTRACTOR		CONTRACTOR				
Date	Prepared by	Checked by	Revised & Resubmit	Approved w/ Comments	Approved	Rejected
2-Nov-23	SFEC					

☐ PD ☐ PLM ☐ SM ☑ CM ☐ QA/QC ☐ HSE ☐ ADM

Owner

Owner's Engineer

Contractor

DOOSAN

Subcontractor

Project

Shuaibah 3 Independent Water Project

Title

Method Statement for Spray Applied Polyurethane Foam

FOR APPROVAL

B	01-11-2023	GCabigas					
A	03-10-2023	GCabigas					
Rev	**Date**	**Prepared**	**Checked**	**Approved**	**Client**	**Client Signature**	**Approval Status**

Document No.	Identification No.	Rev.	Page-No.
SH3-01-SFC-DES-MS-0025	N/A	B	

Revision History

Rev.	Date	Section	Page	Modification and Basis
A	03 Oct. 23			For Approval
B	01 Nov. 23			Attached the PDS of BC 702 Spray 45 polyol and BC 768 Isocyanate
				Removed the BC Guard in Sec. 7.0 and Sec. 8.5 as it is not originally part of the proposed system.

سما جدة	المطور	الاستشاري	المقاول

اسم المشروع :	سما جدة	رقم المبني :	B2A1, B2A2, B2A3, B2A4	نموذج المبنى :	سما 2
المنطقة :	Zone1				

اعتماد مواد

☑ طلب جديد	رقم الطلب :	PM-SJ-1032-MSB-AR-1-Rev0	رقم الطلب السابق :
☐ طلب معاد تقديمه	تاريخ الطلب:	26-02-2023	تاريخ الطلب السابق:

سبب تقديم طلب الاعتماد:	☐ من أجل معلومات	☐ من أجل الملاحظات والتعليقات	☑ من أجل الاعتماد

التخصص :

☐ عام ☐ مدني ☐ إنشائي ☑ معماري ☐ كهرباء ☐ ميكانيكا ☐ سباكة ☐ مساحة

المرفقات:

☐ كاتالوجات ☐ مخططات ☐ عينات ☑ معلومات تقنية ☑ حسابات ☐ أخرى.

جدول المواد: ملاحظة: يرجى إضافة مرفقات في حالة وجود بنود أكثر من الفراغ المتاح.

مسلسل	اسم المادة	البند بالمواصفات	المصنع / المورد
1	**مواد عزل السطح**		**شركة الرواد العربية**

ملاحظات المقاول: نشهد أن طلب الاعتماد المقدم أعلاه مطابق تماماً لمخططات العقد، ما لم يتم ذكر خلاف ذلك، كما هو موضح أدناه.

استثناء: اعتماد مواد عزل الاسطح

مدير المشروع (المقاول)

اسم المهندس:م محمد طه عبد المحسن

التوقيع:

التاريخ: 26-02-2023

ملاحظات الاستشاري: إن الموافقة على اعتماد المخططات المقدمة أعلاه لا يعفي المقاول من مسؤولياته حسب العقد.

تم الاطلاع علي البطاقة التعريفية (BC 768 LSOCYANATE) – (BC 702 SPRAY 45 POLYOL) من مصنع (BCI) المرفقة ، كمادة رغوة (بولي يوريثان) لعزل الاسطح علي ان يتم العمل طبقاً للمواصفات الفنية وطريقة الاستخدام الموضحة بالمرفق ومن قبل الدعم الفني ، مع تقديم الضمان العشري لاعمال العزل المنفذة .

ممثل الاستشاري:

☐ A - معتمد (مقبول)

☑ B - معتمد مع ملاحظات إعادة التقديم غير ضرورية

☐ C - غير معتمد ويجب إعادة التقديم

☐ D - غير معتمد (مرفوض)

الاسم :مهندس / محمد الدريني

التوقيع:

التاريخ: 06-03-2023

مدير المشروع الإستشارى:

الاسم :م محمد منير

التوقيع:

التاريخ: 06-03-2023

توصيات المطور :	مدير المشروع (المطور):
لا مانع من الاعتماد مع اتباع تعليمات الاستشاري والتقيد بالمواصفات الفنية واعتماد الشركة المتخصصة للقيام بتنفيذ الأعمال	الاسم :مهندس / أحمد المدني التوقيع: التاريخ: 28-03-2023
☐ A - معتمد (مقبول)	☑ B - معتمد مع ملاحظات إعادة التقديم غير ضرورية
☐ C - غير معتمد ويجب إعادة التقديم	☐ D - غير معتمد (مرفوض)

محتويات هذا النموذج معتمدة وغير قابلة قابلة للتعديل إلا بالرجوع لإدارة المشروع	PM-SJ-02

MATERIAL APPROVAL REQUEST

Program:	King Abdullah Financial District - KAFD X	**MAR No.:**	KAFD-KX1-FFX-CIV-MAR-00037		
Employer:	KAFD DMC	**Rev. No.:**	R00	**Date:**	08/10/2023
PMCM:	Saudi Arabian Parsons Ltd	**Supv Consultant:**	Ashbelya		
Contractor:	First Fix	**Purpose/Use:**	KAFD X		

MATERIAL DESCRIPTION

Description	KAFD X - Material approval request for BC 702 Spray 45 (Polyuretthane foam) for roofs	Brand Name:	Polyuretthane foam
Material Status:	☑ Specified ☐ Alternative	Contract Ref:	KAFD00275
Discipline/Trade	Civil	Specification:	Division 9 - Finishes
Cluster/Parcel No.:	KAFD X Temporary Car Parking Project	BOQ Ref. No.:	9000 - General
Attachments:	☐ Production Verification ☐ Sample ☐ Comparison Sheet ☐ Compliance Statement ☑ Third Party Test Report ☑ Catalogue ☐ Previous Approval ☐ Others (....)		

MANUFACTURER DETAILS		SUPPLIER DETAILS	
Company Name:	Building chemistry industry	Company Name:	Arabian pioneer company
Address:	KSA	Address:	KSA
Contact No.:		Contact No.:	+971 55 135 5943
Email:		Email:	

DELIVERY DETAILS

Country of Origin:	Saudi Arabia	Availability:	☑ Locally Available ☐ Imported
Date Material Required on Site:		Estimated Date of Arrival on Site:	

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 otherwise stated; also the material sources indicated above have been reviewed and that they will supply the submitted items in full conformity with timely delivery

For the Contractor:

Name: Ahmad Fathy Signature: Date: 07/10/2023

SUPERVISION CONSULTANT'S REVIEW

Remarks:**BC 702 Spray 45 (Polyurethane foam for roofs waterproofing) is approved subject to follow the attached manufacturer's Sequence/ Method of works and the complete system guide and materials to used to complete the whole process. (Refer to page 117 of 138)
**MIR approval must be done prior to start the work at site.
**Application must be done by a qualified applicator only.

Is Employer's Approval required ☐ Yes ☐ No

Status Code: ☐ Approved ☒ Approved with Comments ☐ Revise & Resubmit ☐ Rejected ☐ No Objection with Comments

Name:	Jessie Paraiso	Signature:		Date:	12-10-2023

PMCM'S REVIEW (Optional)

Remarks:

Name:		Signature:		Date:	

EMPLOYER'S APPROVAL (Optional)

Remarks:

Name:		Signature:		Date:	

Approval shall not relieve the Contractor of its obligations and liabilities under the Contract or constitute authorization of any change to Contract Documents, and therefore, shall not imply on recognition whatsoever of additonal time or cost to the Contract

National Housing Company - Al Mashriqiya	الشـــركـــة الـوطنية للاســـكـــان - مشروع المشـــــرقية

Client:	Project:	Contractor:
الشركة الوطنية للإسكان National Housing Company NHC	المشرقية	آي كيو العقارية IQ Real Estate

Material Approval Form

To: NHC - Technical Support Department	From: شركة اي كيو
Attention: Ahmed Mahana	By: MURTADA YAHYA

TRM No.:	CONT	PROJ	ZONE	TRADE	NO	REV
	IQ	MSH	E	AR	50034	0

☐ Structure	☑ Architectural	☐ Electrical	☐ Mechanical

1. Material Description: المواد المعمارية-العزل-عزل الحرارة والرطوبة للأسطح-	Date:	1-Jan-23

Area of Application:	Zone E	Design Type :	
Plot :		B.O.Q. Ref. No. :	
Drawing Ref. :		Material Color :	
Specification Ref. :		Material code :	

أرفاق جميع المطبوعات الفنية ذات الصلة والمعتمدة لتحديد الوصف ذي الصلة وشهادات الاختبار الحالية والعينات حسب الاقتضاء.

Attach all relevant technical literature marked to identify relevant description, current Test Certificates, samples as appropriate.

2. Manufacturer, Supplier Information:			
Company Name :	Al ruwad alarabyia company/شركة الرواد العربية		
Address:		Tel. No:	0593733207
Approved TRM No. :	E		
Local Agent :			
3. DELIVERY :			
Country of Origin :			

Availability:	Locally Manufactured.	Overseas

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; the submitted items in conformity with the above and deliver same timely. also that the material sources indicated above have been reviewed in detail and that they will supply

Submitted By:	Eng. MURTADA YAHYA	Signature:		Date :	1-Jan-23

4. Comments : - لا مانع من اعتماد المواد (BC 702 Spray 45 Polyol - Elastromic Acrylic) من مصنع BCI لبند عزل الحرارة والرطوبة
مع الأخذ في الاعتبار ما يلي:-
- سمك طبقة البولي يوريثان لا تقل عن 5 سم والكثافة لا تكون من 40 : 45.
- طبقة العزل تكون على طبقة من خرسانة الميول.
- عمل اختبار غمر بالمياه بمدة لا تقل عن 48 ساعة واستلامه من قبل استشاري التنفيذ.

National Housing Company - Al Mashriqiya	الشـــركـــة الـوطنية للاســكـان - مشروع المشـــــرقية

Client:	Project:	Contractor:

- تقديم ضمان على أعمال العزل بمدة لا تقل عن 10 سنوات.
- الأخذ في الاعتبار مواصفات المشروع ومواصفات كود البناء السعودي.
- اتباع توصيات الصانع كما في الداتا شيت المرفقة وكذلك تعليمات المهندس المشرف.

☐ Sample	☐ Tests	☐ Additional Info.	☑ Manufactures Guarantee
☐ A - Approved	☑ B - Approved As Noted	☐ C - Revise & Resubmit	☐ D - Rejected

Technical Engineer:		Signature:	Technical Project Manager:		Signature:
Name:	Eng. Ahmed Mahana		Name:	Eng. Mohamed Assaf	
Date:	3-Jan-23		Date:	3-Jan-23	

Approval shall not relieve Contractor of his liabilities under the contract or constitute authorization of any change to contract document.	لا تعفي الموافقة المقاول من مسؤولياته بموجب العقد أو تشكل تفويضا بأي تغيير في مستند العقد.

RETAL

نسـاج NESAJ

BCC
BUILDING CONSTRUCTION CO. LTD.

MATERIAL APPROVAL REQUEST

PROJECT TITLE:	RETAL HEAD QUARTERS	**Date:**	31-JAN-2023
LOCATION:	RIYADH	**Contract No.**	BCC-RHQ-RIYADH-01

Developer:	Retal Urban Development Co
Project Management:	Nesaj Urban Development
Main Contractor:	Building Construction Co Ltd (BCC)

Submittal No.	RETAL-HQ-CIVIL-013	**Rev.**	00
Submittal Title:	**Material approval request- water proofing – roof top**		

We are sending herewith under separate cover the drawings / documents / samples listed below:

ITEM NO.	REF. DWGS/ SPECS/ BOQ	DESCRIPTION	TYPE	COPIES	ACTION
1.		A. Water Proofing Product name :- 1. BC 702 Spray 45 Polyol (BC 768 Isocyanate) 2. Elastomeric Acrylic Rubberized waterproofing System *.Technical data sheets attached with this for reference	MD/MT		For Approval

TYPE: SD= Shop Drawings, SM= Sample, GT= Guarantee, MD= Manufacturer's Data, CT= Certificates, TT= Test Results, OT= Other, MT= Material Data

Subcontractor/ Supplier/Manufacturer:	**Subcontractor & Supplier :- ARABIAN PIONEER COMPANY** **Manufacturer :- BUILDING CHEMISTRY INDUSTRY**

We certify that the documents / materials submitted herewith have been reviewed in detail and are in strict conformance with the contract drawings and specifications except as otherwise stated.

Contractor Name: ***Eng. Lakpriye weerakkody*** *Project Manager*	Signature: Date: 31/1/2023	Received By: Date:

Project Management Review/ Comments:

* Material Approved to used as per updated Manufacture data sheet (as per attachment)
* Warranty period not less than ten years (10 years) From APC company
* Sample must be done on site before starting site works For above sandwich panel and steel

- ☐ **Approved**
- ☑ **Approved As Noted**
- ☐ **As Noted, & Resubmit**
- ☐ **Not Required**
- ☐ **Not Approved**

Project Engineer:	Signature: structure Date:	Received by: Date:
Project Manager: Eng. Ehab	Signature: Date: 31-01-2023	Received by: Date:

Assist

Corrections or comments made relative to submittals during this review do not relieve the contractor from compliance with the requirements of The Contract. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The contractor is responsible for confirming and correlating all quantities and dimensions, selecting fabrication processes and techniques of construction, coordinating his work with that of other trades and performing his work in a safe and satisfactory manner.

Distribution: ☐ NESAJ ☐ Others ☐ Contractor

Copy Received

Material Submittal form					
Submittal Ref:	EHC-DARS-BH02-TSL-STR-0011	**Rev No:**	00	**Date:**	12/12/2023
Program Title:	Affordable Housing Program				
Project Title:	Design and Construction of housing units in Al Buljurashi – Al Bahah				
The Employer:	National Housing Company				
PMC:	Dar Al Riyadh Engineering Consultant office				
Consultant:	Dar Al Riyadh Engineering Consultant office				
Contractor:	Engineering House Company				

Guidance notes:

The submission should only include materials which are compliant with the SOPR and CODE requirements and have been reviewed and coordinated between the Contractor and Designer (and Engineer if applicable) and should include any authorised variations/changes as instructed.

Review Discipline

Architectural ☐	Structural/Civil ☒	Mech/Plumb ☐	Elec. ☐	Others (specify ☐	

Material Details

Notes: PMC review will recommend either Objection or No Objection to each item. Non-Objected shall be issued to the NHC with the recommendation to approve. Objected shall be returned to the Contractor with an Objection report. This sheet must be signed by any specialist sub-contractor applicable to the Material element Design/Production (e.g. Pre-cast panel manufacturer)

Proposed by:

The Contractor		The Consultant (Designer & The Engineer)		Specialist / Sub-Contractor	
Sign/Stamp		Sign/Stamp		Sign/Stamp	

Material Information & Checklist		PMC REVIEW	
Location /element Ref:	Internal Surface for Concrete walls in underground Tanks	Checklist of Attachments:	
Specified Material:	Epoxy waterproofing	Drawing/Specification	☐
Proposed Material:	1. BC Epoxy Putty 2000 2. BCI Primer 349 3. BC250 EPOXY	Product Datasheet	☒
SOPR/CODE Ref(s):	SOPR/14	Compliance Certificates/Documents	☒
Manufacturer & Product code ref:	BCI / Magad Alhayt	Compliance Statement	☐

Subject to: 1- These materials must applied by an approved specialist, 2- Prequalification approval for applicator-supplier
3- The manufacturer's recommendations and method statement must be followed for proper usage, application, surface preparation, adhesive, priming, storage, etc.
4-10-year Warranty Certificates attested by COC for work and materials Approval.
5- The Method statement in accordance with the approved applicator-supplier must be submitted for approval including all required details, detailed drawing sections, ..etc

THE ENGINEER*	**Review Date:**	14 Dec 2023	**Rejected**	**Approved**	**Signed:**	
	Print Name:	Anas Mohamed		✓		

PMC	**Recommendations to NHC Date:**	18 Dec. 2023	**Objection**	**No Objection**	**Signed:**	
	Print Name:	M. Hunaish		✓		

As per Engineer Comments

NHC	**Review Date:**		**Objection**	**No Objection**	**Signed:**	
	Print Name:					

MAIL TYPE	MAIL NUMBER	REFERENCE NUMBER
Workflow Transmittal	BEC-WTRAN-032261	BEC-WTRAN-032261

Final (WF-031322) CONST-MAT_NEOM-INFRA Internal Review of TAMIMI-4800000393-NEOM Mountain Contractors Village - Material Technical Submittal for Waterproofing on Kitchen Roof (Building Chemistry Industry)

From	Mr Maher Abou Saleh - Bechtel KSA
To (2)	Mr Maher Abou Saleh - Bechtel KSA Mr 4800000393 TAMIMI MVDC - Tamimi PEB
Cc (3)	Mr Charles William Clowes - Bechtel KSA Mr 4800000393 DCC-MQM - Meridian Quality Management Professionals Mr NEOM Infrastructure DC - NEOM - Projects
Sent	Monday, 4 September 2023 8:49:14 AM AST (GMT +03:00)
Status	N/A

DOCUMENT ATTACHMENTS (2)

(**0** selected)

File	Document No	Revision	Revision Date	Title	Status
	07-620000-4800000393-TPE-ARC-CRS-000003	01	10/08/2023	4800000393/000 - CRS File for Material Technical Submittal for Waterproofing on Kitchen Roof (Building Chemistry Industry)	E - Review Not Required - Proceed
	07-620000-4800000393-TPE-ARC-MAT-000001	01	10/08/2023	4800000393/000 - Material Technical Submittal for Waterproofing on Kitchen Roof (Building Chemistry Industry)	E - Review Not Required - Proceed

MESSAGE

Workflow Review History

The attached documents have completed the "CONST-MAT_NEOM-INFRA Internal Review of TAMIMI-4800000393-NEOM Mountain Contractors Village - Material Technical Submittal for Waterproofing on Kitchen Roof (Building Chemistry Industry)" workflow with the following results :

This transmittal was automatically generated.

Doc No	Step	Participant	Review Outcome	Comments
07-620000-4800000393-TPE-ARC-CRS-000003	Neom-Infra Review	M Abou Saleh	E - Review Not Required - Proceed	
07-620000-4800000393-TPE-ARC-MAT-000001	Neom-Infra Review	M Abou Saleh	E - Review Not Required - Proceed	

المالك :

شركة الدريس للخدمات البترولية والنقليات

المقاول :

شركة الأخصائيون للخدمات الإنشائية

طلب تقديم أعتماد

المشروع :	محطة وقود الشاطىء - الدمام			رقم التقديم :	MS-ST-polyurea - 46	التاريخ :	30/4/2023
نوع التقديم	■ تقديم جديد	☐ إعادة تقديم	رقم التقديم السابق			تاريخ التقديم السابق	
نوع المستندات	☐ مخططات	☐ مهمات	☐ بيان اختبار	☐ حسابات	■ كتالوج	☐ خرى :	
نوع الأعمال	☐ الموقع العام	☐ معماري	■ إنشائي	☐ كهرباء	☐ ميكانيك	☐ أعمال الحريق	☐ أخرى :

التقديمات

الرقم	الوصف	الشركة / مقاول الباطن	المرفقات	مكان التركيب	رمز النتيجة	ملاحظات
1	polyurea	BCI	DATA SHEET	مكان تخزين المواد داخلي		
2						
3						

ملاحظات المقاول :

تتعهد نحن : شركة الأخصائيون للخدمات الإنشائية بتعبئة البيانات المدونة أعلاه - وبأن المواد المقدمة أعلاه مطابقة للمواصفات.

المقدم والتوقيع : ENG . YAHYA WAHEED ABDO

ملاحظات المهندس المشرف :

توقيع المهندس المشرف :	رموز النتيجة :
توقيع مدير المكتب الإستشاري :	أ- يعتمد حسب التقديم
التاريخ : ٢٠٢٣/٥/٣	ب- يعتمد مع الملاحظات
	ج - يعتمد مع إعادة التقديم وفق الملاحظات
	د - غير معتمد

LE MASTERS ARABIA
ARCHITECTURE, ENGINEERING, CONSULTANCY

ARABIAN PIONEER COMPANY

APC COMPANY

TECHNICAL DOCUMENT SUBMITTAL

Submittal No. TDC-#01	Submittal Date: 16 JUNE 2022	Project Title/ Ref. No: LE MASTERS ARABIA

☒ CIVIL / STRUCTURAL ☐ ARCHITECTURAL ☐ MECHANICAL ☐ PLUMBING ☐ ELECTRICAL

SUBMITTALS BY CONTRACTOR					Le Masters Arabia REMARKS	
Doc. Ref. No.	Description	Book	Rev.	Date	Remarks	Code
–	APC COMPANY -					
	PRE-QUALIFICATION PROFILE	1	0	16 JUNE 2022		

ISSUED BY:

CONTRACTOR DEVELOPMENT MANAGER	CONTRACTOR OPERATION MANAGER	STAMP
Name: Engr. Mohammad Qassrawi	Name: Engr. Sheraz Khan	شركة الرواد العربية للمقاولات Arabian Pioneer Company C.R.2050148719
Sign:	Sign:	
Date: 16/6/22	Date: 16-6-22	

ACTION REQUESTED BY CONTRACTOR

FOR APPROVAL ☐ FOR REVIEW ☐ FOR INFORMATION ☒ OTHERS (SPECIFY): _____

Le Masters Arabia Representative CODE	ACTION REQUIRED BY CONTRACTOR
[A] Approved & Proceed	Proceed with work.
[B] Proceed, change as noted and resubmit.	Proceed with work in accordance with notes, markings and resubmit for final.
[C] Do not proceed, change as noted and resubmit.	Don't proceed with work, revise as noted & resubmit for review.
[D] Review not required, for information only.	No action required.
[E] Rejected	Don't proceed with work, revise as noted & resubmit for review.

Le Masters Arabia Representative NOTES

Doc. Ref. No.	
	Approved 20/6/2022

APPROVAL

CLIENT PROJECT MANAGER	CLIENT ENGINEERING DEPT.	STAMP
Name:	Name:	
Sign:	Sign:	
Date:	Date:	

شركة المختصون للتصميم الهندسي السعودية للاستشارات الهندسية س ت ٢٠٥١٠٦٤٠٥٢

LE MASTERS ARABIA
ARCHITECTUREL, ENGINEERING, CONSULTANCY

LE MASTERS ARABIA
ARCHITECTURE, ENGINEERING, CONSULTANCY

ARABIAN PIONEER COMPANY

APC COMPANY

MATERIAL APPROVAL CERTIFICATE

Doc Ref: C-003 Rev. 0 Date: 27/06/2022

Client : LE MASTERS ARABIA

Location :

Attn :

Contractor : ARABIAN PIONEER COMPANY

WE REQUEST APPROVAL OF THE FOLLOWING MATERIAL FOR USE ON THE ABOVE CONTRACT

1	MATERIAL / PRODUCT NAME	BC 237 POLYOL - BC 885 ISOCYANATE
2	DESCRIPTION & LOCATION OF USE	BC 237 Polyol BC 885 Isocyanate is a solvent free, two-component polyurea coating material. The permanently elastic and crack-bridging coating material is designed for use in surface protection, especially concrete protection.
3	MANUFACTURER	BCI - Building Chemistry Industry
4	LOCAL SUPPLIER / AGENT	ARABIAN PIONEER COMPANY
5	APPROVED APPLICATOR	... do ...
6	RELEVANT SPECIFICATION	As per attached Technical Data Sheet
7	ESTIMATED DELIVERY PERIOD	As per site condition
8	ESTIMATED DATE REQUIRED ON SITE	... do ...
9	APPROVAL REQUIRED BY DATE	28/06/22
10	ENCLOSURES (SAMPLE, CATALOGUE, TEST RESULTS)	TECHNICAL DATA SHEET
	Comments	

Arabian Pioneer Company's Representative :

Name: Engr. John Bo Signed : Date : 27/06/2022

For Engineer's use only :

ANO (Approved No Objection) ☑ AAN (Approved As Noted/Resubmit) ☐

NA (Not Approved) ☐

Notes :

شركة المختصون للتصميم الهندسي السعودية
للإستشارات الهندسية
س.ت ٢٠٥١٠٦٤٠٥٢
LE MASTERS ARABIA
ARCHITECTUREL, ENGINEERING, CONSULTANCY

Le Masters Arabia

Mohamad Nomani
Projects Manger

Signed : Date : 30/6/2022

SGS GULF LIMITED

Test Report

SGS FILE REFERENCE NUMBER: 40163943

Customer:
BCI – Building Chemistry Industry

Attn: Mr. Neelakandan Subbiah Thevar

Sample Received: 26.07.2023
Reported: 11.08.2023

Sample Details:

Description: BC 237 Polyurea

We report as follows:

In accordance with instructions received from the client BCI – Building Chemistry Industry,

Commodity: BC 237 Polyurea

Testing Outsourced/Sub-contracted:

1. Based on the following test result, Total volatile organic component (TVOC) emission is in compliance with the emission limits as per UL 2818.
2. Test results for individual components are in compliance with CPDH-CREL VOC regulation.

#**Outsourced/Sub-contracted to ISO 17025 accredited lab – Wimpey Laboratories L.L.C. Report Attached.**

Signed for and on behalf of

SGS Gulf Limited

John Thomas
Operations Manager

Upon the request of the Client, the samples were sent to Wimpey Laboratories L.L.C for analysis and the results determined Wimpey Laboratories L.L.C are reported as follows:

The results are reported herein for convenience only. SGS has no liability for these results, which remains with Wimpey Laboratories L.L.C that produced these results.

VOC EMISSION TEST REPORT

BCI – BUILDING CHEMISTRY INDUSTRY
Dammam, Saudi Arabia

Report No. WD-R-230726-0454
Sample No. WD-S-230726-0497
Report Date: 11/08/2023

Introduction: Further to the request received from **M/s. SGS Gulf Ltd.** dated 26th July 2023; the sample of BC 237 Polyurea was tested for below parameters.

1. Sample Information

Manufacturer	M/s. BCI – BUILDING CHEMISTRY INDUSTRY
Request Number	WD-Q-230726-0134
Product Description	BC 237 Polyurea
Product Components	-
Date of Sample collection	26/07/2023
Tested By	AY
Testing Period	26/07/2023-11/08/2023

2. Evaluation of the Results

- VOC measurements determining the suitability of a product are made after the specimen has been exposed for a total of 14 days as per CDPH Standard Method V1.2. 2017.
- For general emission evaluation, private office scenario/School classroom scenario used as per CDPH guidelines.

Test	Method	Unit	Average
TVOC	CDPH Standard Method V1.2 U.S. EPA Methods TO17	mg/m^3	<0.01
Individual VOC		$\mu g/m^3$	Not detected*
Formaldehyde	CDPH Standard Method V1.2 ASTM D5197-03	$\mu g/m^3$	Not detected*
Total Aldehydes		$\mu g/m^3$	Not detected*

*Note: LOD of the test method is 1 $\mu g/m^3$. Below LOD is considered as 'Not detected' or 'Nil'.

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Table of Contents

3. Test Method

Sample preparation, Environmental Chamber operation, sampling and analysis followed the California Department of Public Health "Standard method for the testing and evaluation of volatile organic chemical emissions from indoor sources using environmental chambers version 1.2, January 2017, per the acceptable alternative detailed in Section 8.5 therein.

Test Chamber Parameters

Chamber Volume	: 0.65 m^3
Temperature	: 23±1 °C
Relative Humidity	: 50±5 %
Area of test specimen	: 0.18 m^2
Air exchange rate, 1/h	: 1±0.05
Loading Ratio	: 0.276 m^2/m^3

Sample Preparation

The test was started at 26th July 2023; by unpacking the sample. The test specimen was placed in a separate conditioning container in a room with controlled climate conditions of 23±1°C and 50±5% RH.

After 10 days of conditioning the specimen was placed in an emission chamber of stainless steel.

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Analytical methods and Reporting limits#

Analytical method	Instrumentation	Parameter	Reporting limit
USEPA TO17	GC/MS/HS	Individual VOC	1µg/m³
USEPA TO17	GC/MS/HS	TVOC	0.01mg/m³
ASTM D5197	HPLC/UV	Low molecular weight aldehydes	1µg/m³

#Deviation from the test method: Followed section 8.5 acceptable alternative sampling scheme.

TVOC defined as C_6-C_{16}.

1. Test Results

4.1. Measured Emissions after 11th day. (24 Hrs. after conditioning.)

Compound	CAS No.	Chamber Concentration (µg/m³)	Emission rate (µg/m²*h)
TVOC (C_6-C_{16})	-	<10	<10
Formaldehyde	50-00-0	Not detected*	Not detected*

4.2. Measured Emissions after 12th day. (48 Hrs. after conditioning.)

Compound	CAS No.	Chamber Concentration (µg/m³)	Emission rate (µg/m²*h)
TVOC (C_6-C_{16})	-	<10	<10
Formaldehyde	50-00-0	Not detected*	Not detected*

Form # WLRF 90 Issue No.1 Issued on : 29/05/2019

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4.3. Measured Emissions after 14th day. (96 Hrs. After conditioning.)

TVOC and Complete characterization of TVOC

Compound	CAS No.	Chamber concentration (µg/m³)	Emission rate (µg/m²*h)	Allowable concentration UL 2818 (mg/m³)	Compliance of emission result			
					CREL	CA Prop 65	CARB TAC	UL 2818
TVOC (C_6-C_{16})	-	<10	<10	0.5[u]	-	-	-	✓

Carcinogenic VOCs compounds classified under category 1A & 1B regulation EC. No 1272/2008 listed as per below

Compounds	CAS No.	Chamber concentration (µg/m³)	Emission rate (µg/m²*h)	Allowable concentration CREL (µg/m³)	Compliance of emission result			
					½CREL	CA Prop 65	CARB TAC	UL 2818
Acetaldehyde	75-07-0	Not detected*	Not detected*	70	✓	✓	✓	
Formaldehyde	50-00-0	Not detected*	Not detected*	9	✓	✓	✓	✓
Benzene	71-43-2	Not detected*	Not detected*	1.5	✓	✓	✓	
Chlorobenzene	108-90-7	Not detected*	Not detected*	500	✓	✓	✓	
Chloroform	67-66-3	Not detected*	Not detected*	150	✓	✓	✓	
Ethyl Benzene	100-41-4	Not detected*	Not detected*	1000	✓	✓	✓	
Isophornone	78-59-1	Not detected*	Not detected*	1000	✓	✓	✓	✓
Iso Propanol	67-63-0	Not detected*	Not detected*	3500	✓	✓	✓	
Phenol	108-95-2	Not detected*	Not detected*	100	✓	✓	✓	
Toluene	108-88-3	Not detected*	Not detected*	150	✓	✓	✓	
Xylenes	108-38-3 95-47-6 106-42-3	Not detected*	Not detected*	350	✓	✓	✓	

*Note: LOD of the test method is 1 µg/m³. Below LOD is considered as 'Not detected' or 'Nil'.

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2. IAQ Modeling; Private office

The CDPH method requires calculation of the measured emission rates into concentrations in given Reference rooms.

Scenario	Standard office	Resulting VOC (µg/m2*hr)	Limit (µg/m2*hr)
Area specific emission rate, µg/(m²h) obtained	<10	<10	694
Air change, h^{-1}	0.68		
Volume of reference room,m^3	30.6		
Total Surface area	47.93		
ASHRAE Outdoor air flow rate	20.7		

Categories of Identify;

1. Identified and quantified with authentic standard via HPLC/UV analysis.
2. Identified and quantified with authentic standard via GC/MS analysis.
3. Identified by comparison with a mass spectrum obtained from library, match quality ≥90%. Quantified using toluene as a surrogate compound.
4. Tentatively identified by comparison with a mass spectrum obtained from library, match quality ≥75% and <90%. Quantified using toluene as a surrogate compound.
5. Potential identification by comparison with a mass spectrum obtained from library, match quality <75%. Quantified using toluene as a surrogate compound.
6. CREL- CRELs are inhalation concentrations to which the general population, including sensitive individuals, may be exposed for long periods (10 years or more) without the likelihood of serious adverse systemic effects (excluding cancer).
7. CARB TAC - The TAC list includes all substances on the EPA list of Hazardous Air Pollutants plus additional compounds.
8. CA Prop 65- lists of known or probable human carcinogens and reproductive/developmental toxins

3. Test conclusion

1. Based on the above test result, Total volatile organic component (TVOC) emission is in compliance with the emission limits as per UL 2818.
2. Test results for individual components are in compliance with CDPH –CREL VOC regulation.

Signed for and on behalf of Wimpey Laboratories LLC

Anandu VS
Section Incharge Chemistry – Specialty
Test results relate only to the samples tested.
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-End of text-

WIMPEY LABORATORIES L.L.C. P.O.BOX: 123279, DUBAI, UAE

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TEST REPORT ON TENSILE ADHESION STRENGTH

Client	Building Chemistry Industry Dammam, Kingdom of Saudi Arabia		
Sample Description	BC 702 spray 45 polyol BC 768 Isocyanate	Lab Report No.	WD-R-230610-0871/1
Source	Building Chemistry Industry	Request No.	WD-Q-230610-0228
Test Method	ASTM D1623-17	Sample No.	WD-S-230610-0797
Type of Specimen	Type C	Wimpey Ref No.	23061071
Conditioning Procedure	23±2 °C & 50±5 % Relative Humidity	Date Received	10/06/2023
Relative Humidity	50%	Date Tested	15/06/2023
Test Temperature	23°C	Date Reported	20/06/2023
Test Speed	1.3 mm/min	Tested By	SU

Test Result

Specimen Number	Length (mm)	Width (mm)	Maximum Force (N)	Tensile Strength at Break (MPa)
1	50	50	969.9	388.0
2	50	50	984.8	393.9
3	50	50	978.6	391.4
			Average	391.1

***Legends : N.G** – Information Not Given*

Remarks: None

Method Deviation: None

Signed for and on behalf of Wimpey Laboratories LLC

S.Sarath Kumar
Head of Department

Test results relate only to the samples tested.
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TEST REPORT ON COMPRESSIVE STRENGTH

Client	Building Chemistry Industry Dammam, Kingdom of Saudi Arabia		
Sample Description	BC 702 spray 45 polyol BC 768 Isocyanate	Lab Report No.	WD-R-230610-0871/2
Source	Building Chemistry Industry	Request No.	WD-Q-230610-0228
Test Method	ASTM D1621-16	Sample No.	WD-S-230610-0797
Client's Reference	N.G	Date Received	10/06/2023
Test Temperature	23°C	Date Tested	15/06/2023
Relative Humidity	50%	Date Reported	20/06/2023
Sample brought in by	Client	Tested By	SU

Test Results

Specimen Number	Length (mm)	Width (mm)	Thickness (mm)	Load (N)	Compressive strength at 10% (kPa)
WD-S-230610-0797	50	50	50	851.6	340.6
	50	50	50	848.3	339.4
	50	50	50	850.9	340.4
				Average	340.1

***Legends : N.G** – Information Not Given*

Remarks: None

Method Deviation: None

Signed for and on behalf of Wimpey Laboratories LLC

S Sarath Kumar
Head of Department

Test results relate only to the samples tested.
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TEST REPORT ON DENSITY

Client	Building Chemistry Industry Dammam, Kingdom of Saudi Arabia		
Sample Description	BC 702 spray 45 polyol BC 768 Isocyanate	Lab Report No.	WD-R-230610-0871/3
Source	Building Chemistry Industry	Request No.	WD-Q-230610-0228
Test Method	ASTM D1622/D1622M-14	Sample No.	WD-S-230610-0797
Client's Reference	N.G	Date Received	10/06/2023
Test Temperature	23°C	Date Tested	15/06/2023
Relative Humidity	50%	Date Reported	20/06/2023
Sample brought in by	Client	Tested By	SU

Test Result

Test	Unit	Result
Density	kg/m^3	50.3
		49.6
		51.5
	Average	50.5

Remarks: None.

Signed for and on behalf of Wimpey Laboratories

S.Sarath Kumar
Senior Technician

Test results relate only to the samples tested.
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TEST REPORT ON RESISTANCE TO THERMAL AND HUMID AGEING

Client	Building Chemistry Industry Dammam, Kingdom of Saudi Arabia		
Sample Description	BC 702 spray 45 polyol BC 768 Isocyanate	Lab Report No.	WD-R-230610-0871/4
Source	Building Chemistry Industry	Request No.	WD-Q-230610-0228
Test Method	ASTM D2126-15	Sample No.	WD-S-230610-0797
Client's Reference	N.G	Date Received	10/06/2023
Test Temperature	70°C	Date Tested	15/06/2023
Relative Humidity	100%	Date Reported	20/06/2023
Sample brought in by	Client	Tested By	SU

Test Result

Test	Unit	Result
Dimensional Stability at Length	%	0.03
Dimensional Stability at Width		0.02
Dimensional Stability at Thickness		0.02

Remarks: None.

Signed for and on behalf of Wimpey Laboratories LLC

WIMPEY LABORATORIES L.L.C. P.O.BOX: 123279 DUBAI, UAE

S.Sarath Kumar
Head of Department

Test results relate only to the samples tested
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-End of text-

TEST REPORT ON WATER ABSORPTION

Client	Building Chemistry Industry Dammam, Kingdom of Saudi Arabia		
Sample Description	BC 702 spray 45 polyol BC 768 Isocyanate	Lab Report No.	WD-R-230610-0871/5
Source	Building Chemistry Industry	Request No.	WD-Q-230610-0228
Test Method	ASTM C209-15	Sample No.	WD-S-230610-0797
Client's Reference	N.G	Date Received	10/06/2023
Test Temperature	23°C	Date Tested	15/06/2023
Relative Humidity	50%	Date Reported	20/06/2023
Sample brought in by	Client	Tested By	SU

Test Result

Test	Unit	Result
Water Absorption	Volume %	0.06

Remarks: None.

Signed for and on behalf of Wimpey Laboratories LLC

S.Sarath Kumar
Head of Department
Test results relate only to the samples tested
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TEST REPORT ON WATER VAPOUR PERMEABILITY

Client	Building Chemistry Industry Dammam, Kingdom of Saudi Arabia		
Sample Description	BC 702 spray 45 polyol BC 768 Isocyanate	Lab Report No.	WD-R-230610-0871/6
Source	Building Chemistry Industry	Request No.	WD-Q-230610-0228
Test Method	ASTM C209-15/ASTM E96-22	Sample No.	WD-S-230610-0797
Client's Reference	N.G	Date Received	10/06/2023
Test Temperature	23°C	Date Tested	15/06/2023
Relative Humidity	50%	Date Reported	20/06/2023
Sample brought in by	Client	Tested By	SU

Test Result

Test	Unit	Result
Water Vapour Permeability	Perms	0.57

Remarks: None.

Signed for and on behalf of Wimpey Laboratories LLC

S.Sarath Kumar
Head of Department

Test results relate only to the samples tested.
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-End of text-

TEST REPORT ON STEADY-STATE THERMAL TRANSMISSION PROPERTIES BY MEANS OF THE HEAT FLOW METER APPARATUS

Information Provided to the Laboratory			
Company Name	Building Chemistry Industry	Sample Description	BC 702 spray 45 polyol BC 768 Isocyanate
Contractor	N/A	Nominal size (mm)	200 x 200 mm
Consultant	N.G	Material/Mix Type	N.G
Project Name	N.G	Material/Mix Type	N.G
Sample Identification	N.G	Lot size	N.G
Source	Building Chemistry Industry	Sampled By	N.G
Location	N.G	Sample Brought By	Client

Laboratory Information			
Sampling Date	N.G	Lab Report No.	WD-R-230610-0871/7
Date Received	10/06/2023	Request No.	WD-Q-230610-0228
Test Date	15/06/2023	Sample No.	WD-S-230610-0797
Test Completion Date	15/06/2023	Wimpey ref. No.	23061071
Date Reported	20/06/2023	Room Temperature & Relative Humidity	23°C & 50% R.H
Conditioning Procedure	ASTM C518-21; Clause 7.3	Sample preparation method for Slap	N.G
Test Method	ASTM C518-21	Tested By	SU

EQUIPMENT CALIBRATION DETAILS

Parameters	Unit	Result
Date of Calibration	-	21/02/2023
Source of Certificate	-	NIST
Type of Material used for calibration	-	SRM
Date of Certification	-	20/01/2012
Nominal Thickness of Specimen	mm	24.5
Nominal Density	kg/m^3	118.5
Expiry & Certification Test Number	-	Not Expired/SRM-1450D
No. of Heat Flux Transducers used	Nos.	2
Metering (Test) area	mm	100x100
Orientation and Heat Flux Direction	-	Horizontal and Downwards
Temperature Difference	°C	20
Mean Temperature	°C	35
Thermal Conductivity (K Value)	W/mK	0.0340
Thermal Resistance (R Value)	m^2K/W	0.7206

Uncertainty of measurement	Uncertainty of measurement for thermal conductivity 0.0010mA.K @95% confidence level, k factor 2 Abridged ASTM C518 test report

تليفون : ٣٢٧٣١٢٣ ٤ ٩٧١+ • فاكس : ٢٣٦٥٣٠٨ ٤ ٩٧١ • ص.ب : ١٢٣٢٧٩ • دبي • الامارات العربية المتحدة
TEL : +971 4 3273123 • FAX: +971 4 2365308 • P.O.BOX : 123279 • DUBAI • UNITED ARAB EMIRATES
E-mail: info.dxb@wimpeylab.com Website: www.wimpeylab.com

Report No.: WD-R-230610-0871/7 **Sample No. WD-S-230610-0797**

Request No.:WD-Q-230610-0228 **Wimpey ref. No. 23061071**

Test Results

Test		Unit	Specimen 1	Specimen 2	Average
Measured Thickness		mm	50.10	50.20	50.15
Measured Density		kg/m^3	50.60	50.60	50.60
Specimen conditioned	Temperature	°C	23	23	-
	R.H	%	50	50	-
	Time	Hours	24	24	-
	Mass Loss During Conditioning	%	0.45	0.32	0.39
Mean Temperature Achieved		°C	35	35	10
Temperature Difference		°C	20	20	-
Orientation and Heat Flux Direction		-	Horizontal and Downwards		-
Test Duration		h:mm	1:55	1:50	-
Thermal Conductivity		**W/mK**	**0.0230**	**0.0234**	**0.0232**
		Btu-in/h.squareft.degF	**0.1595**	**0.1622**	**0.1609**
Thermal Resistance		**m^{2}K/W**	**0.2938**	**0.2915**	**0.2927**
		Ft square/Btu	**12.3687**	**12.1815**	**12.2751**
Heat Flux		W /m^2	68.074	68.611	68.342
Thermal Conductance		W /m^{2}K	3.4037	3.4305	3.4171
Mass Regain of the specimen During test		%	-0.12	-0.45	-0.29
Average Temperature Gradient		(K/m)	399.20	398.41	398.80

Remarks: None.

Method Variation: None.

Signed for and on behalf of Wimpey Laboratories L.L.C.

WIMPEY LABORATORIES L.L.C. ★ P.O.BOX: 123279 ★ DUBAI, UAE

S.Sarath Kumar
Head of Department

Test results relate only to the samples tested

-End of text-

تليفون : ٣٢٧٣١٢٣ ٤ ٩٧١+ • فاكس : ٢٣٦٥٣٠٨ ٤ ٩٧١+ • ص.ب : ١٢٣٢٧٩ • دبي • الامارات العربية المتحدة
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info.dubai@element.com
element.com

REPORT OF TESTS

Description	VOC Testing		
Tested for	Building Chemistry Industry, P.O Code 33894, Dammam, Saudi Arabia		
Lab Report No.	WR23-01662 (Page 1 of 1)	Request No.	Lot-126661
Date Received	24.02.2023	Date Reported	01.03.2023

Client's reference : Requisition dated 24.02.2023.
Sample reference : Polyurea water proofing coating
2 Part product - BS 885 Isocyanate (Iso)-A & BC 237 Polyol (Resin)-B
Mix ratio : 1:1 by weight.
AFE no. : Lot-126661/1

1.0 Introduction

Further to the test work instructions received from M/s. Building Chemistry Industry, dated 24.02.2023, one sample of Polyurea water proofing coating has been tested for the following by Al Futtaim Element Materials Technology Dubai L.L.C.

2.0 Results

Test Method: GC-FID (In-house method)

AFE No.	Test	Results (g/L)
LOT-126661/1	Volatile Organic Compounds (VOC)	1.8

VOC content expressed in g/L., based on the density data supplied by the client.

(07)

S.K. Saji
Asst. Laboratory Manager - Chemistry

Al Futtaim Element Materials Technology Dubai L.L.C
PO Box 34924, Dubai, United Arab Emirates
T: +971 (0)4 885 1001 | F: +971 (0)4 885 4004

For and on behalf of Al Futtaim Element Materials Technology Dubai (L.L.C)
Tested by: NH, SAU, Date tested:28.02.2023.

Ramzi Haddadin
SAUDI ARABIAN PARSONS LIMITED

Final (WF-019078) 110C08 - BEC SC Review (Material …
WORKFLOW TRANSMITTAL

YESTERDAY
SAP10110-WTRAN-030634

AMAALA

PARSONS
SAUDI ARABIAN PARSONS LTD
شركة بارسونز العربية السعودية المحدودة

MAIL TYPE	MAIL NUMBER	REFERENCE NUMBER
Workflow Transmittal	SAP10110-WTRAN-030634	SAP10110-WTRAN-030634

Final (WF-019078) 110C08 - BEC SC Review (Material submittals) - Material Submittal of Cementitious Waterproofing(BC SEAL elastomeric)for wet areas from ARPIONEER)

From	Mr Ramzi Haddadin - SAUDI ARABIAN PARSONS LIMITED
To (8)	Mr Abdelkarim Atman - BEC Arabia Ltd (+7 more...)
Cc (7)	Mr Faris Ali - RSG- Amaala Destination (+6 more...)
Sent	Saturday, June 24, 2023 2:04:53 PM AST (GMT +03:00)
Status	N/A

DOCUMENT ATTACHMENTS (1)

(**0** selected)

File	Document No	Revision	Title	Status
	1SV10110-110C08-BEC-MAT-AR-0007	C0	Material Submittal of Cementitious Waterproofing(BC SEAL elastomeric)for wet areas from ARPIONEER	Accepted with Comments

MESSAGE

Workflow Review History

The attached documents have completed the "110C08 - BEC SC Review (Material submittals) - Material Submittal of Cementitious Waterproofing(BC SEAL elastomeric)for wet areas from ARPIONEER)" workflow with the following results :

This transmittal was automatically generated.

Doc No	Step	Participant	Review Outcome	Comments
1SV10110-110C08-BEC-MAT-AR-0007	SC_QA/QC Check	A Siddik	Accepted	

	SC_Seniro Electrical Review	M Ghonimi	Review Not Required	
	SC_Senior Mechanical Review	Y Jamil	Review Not Required	
	SC_Senior Architect Review	F Alqudah	Accepted with Comments	refer to comments on CRS
	SC_Senior Structural Review	G Domel	Review Not Required	
	SC RE Review & Closeout	R Haddadin	Accepted with Comments	

Ramzi Haddadin
SAUDI ARABIAN PARSONS LIMITED

Final (WF-025975) 110C08 - BEC SC Review (Material … YESTERDAY
WORKFLOW TRANSMITTAL SAP10110-WTRAN-048751

AMAALA

PARSONS
SAUDI ARABIAN PARSONS LTD
شركة بارسونز العربية السعودية المحدودة

MAIL TYPE	MAIL NUMBER	REFERENCE NUMBER
Workflow Transmittal	SAP10110-WTRAN-048751	SAP10110-WTRAN-048751

Final (WF-025975) 110C08 - BEC SC Review (Material submittals) - Material Submittal of BC Foam Concrete (roof waterproofing) from ARPIONEER

From	Mr Ramzi Haddadin - SAUDI ARABIAN PARSONS LIMITED
To (7)	Mr Abdelkarim Atman - BEC Arabia Ltd (+6 more...)
Cc (8)	Mr Faris Ali - RSG- Amaala Destination (+7 more...)
Sent	Tuesday, August 15, 2023 2:43:15 PM AST (GMT +03:00)
Status	N/A

DOCUMENT ATTACHMENTS (1)

(**0** selected)

File	Document No	Revision	Title	Status
	1SV10110-110C08-BEC-MAT-AR-0027	C0	Material Submittal of BC Foam Concrete (roof waterproofing) from ARPIONEER	Accepted with Comments

MESSAGE

Workflow Review History

The attached documents have completed the "110C08 - BEC SC Review (Material submittals) - Material Submittal of BC Foam Concrete (roof waterproofing) from ARPIONEER" workflow with the following results :

This transmittal was automatically generated.

Doc No	Step	Participant	Review Outcome	Comments
1SV10110-110C08-BEC-MAT-AR-0027	SC_QA/QC Check	A Siddik	Accepted	
	SC_Seniro Electrical Review	M Ghonimi	Review Not Required	

	SC_Senior Mechanical Review	Y Jamil	Review Not Required	
	SC_Senior Architect Review	I Siddiqui	Accepted with Comments	Refer to attached CRS with Comments
	SC_Senior Structural Review	G Domel	Review Not Required	
	SC RE Review & Closeout	R Haddadin	Accepted with Comments	

Ramzi Haddadin
SAUDI ARABIAN PARSONS LIMITED

Final (WF-024456) 110C08 - BEC SC Review (Material … YESTERDAY
WORKFLOW TRANSMITTAL SAP10110-WTRAN-045972

AMAALA

PARSONS
SAUDI ARABIAN PARSONS LTD
شركة بارسونز العربية السعودية المحدودة

MAIL TYPE	MAIL NUMBER	REFERENCE NUMBER
Workflow Transmittal	SAP10110-WTRAN-045972	SAP10110-WTRAN-045972

Final (WF-024456) 110C08 - BEC SC Review (Material submittals) - Material Submittal of Thermal insulation boards (BC XPS 5cm thickness) for ROOF from ARPIONEER

From	Mr Ramzi Haddadin - SAUDI ARABIAN PARSONS LIMITED
To (7)	Mr Abdelkarim Atman - BEC Arabia Ltd (+6 more...)
Cc (8)	Mr Faris Ali - RSG- Amaala Destination (+7 more...)
Sent	Tuesday, August 8, 2023 3:03:58 PM AST (GMT +03:00)
Status	N/A

DOCUMENT ATTACHMENTS (1)

(**0** selected)

File	Document No	Revision	Title	Status
	1SV10110-110C08-BEC-MAT-AR-0014	C0	Material Submittal of Thermal insulation boards (BC XPS 5cm thickness) for ROOF from ARPIONEER	Revise and Resubmit

MESSAGE

Workflow Review History

The attached documents have completed the "110C08 - BEC SC Review (Material submittals) - Material Submittal of Thermal insulation boards (BC XPS 5cm thickness) for ROOF from ARPIONEER" workflow with the following results :

This transmittal was automatically generated.

Doc No	Step	Participant	Review Outcome	Comments
1SV10110-110C08-BEC-MAT-AR-0014	SC_QA/QC Check	A Siddik	Accepted	

	SC_Seniro Electrical Review	M Ghonimi	Review Not Required	
	SC_Senior Mechanical Review	Y Jamil	Review Not Required	
	SC_Senior Architect Review	I Siddiqui	Revise and Resubmit	Refer to Attached CRS for the Comments
	SC_Senior Structural Review	G Domel	Review Not Required	
	SC RE Review & Closeout	R Haddadin	Revise and Resubmit	

Ramzi Haddadin
SAUDI ARABIAN PARSONS LIMITED

Final (WF-023872) 110C08 - BEC SC Review (Material s…
WORKFLOW TRANSMITTAL

11:15 AM
SAP10110-WTRAN-042897

AMAALA

PARSONS
SAUDI ARABIAN PARSONS LTD
شركة بارسونز العربية السعودية المحدودة

MAIL TYPE	MAIL NUMBER	REFERENCE NUMBER
Workflow Transmittal	SAP10110-WTRAN-042897	SAP10110-WTRAN-042897

Final (WF-023872) 110C08 - BEC SC Review (Material submittals) -Material Submittal of POLYUREA WATERPROOFING (BC 690H Polyol with BC 6534 Isocyanate) from ARPIONEER

From	Mr Ramzi Haddadin - SAUDI ARABIAN PARSONS LIMITED
To (7)	Mr Abdelkarim Atman - BEC Arabia Ltd (+6 more...)
Cc (7)	Mr Faris Ali - RSG- Amaala Destination (+6 more...)
Sent	Tuesday, August 1, 2023 11:15:36 AM AST (GMT +03:00)
Status	N/A

DOCUMENT ATTACHMENTS (1)

(1 selected)

File	Document No	Revision	Title	Status
	1SV10110-110C08-BEC-MAT-AR-0013	C1	Material Submittal of POLYUREA WATERPROOFING (BC 690H Polyol with BC 6534 Isocyanate) from ARPIONEER	Accepted with Comments

MESSAGE

Workflow Review History

The attached documents have completed the "110C08 - BEC SC Review (Material submittals) -Material Submittal of POLYUREA WATERPROOFING (BC 690H Polyol with BC 6534 Isocyanate) from ARPIONEER" workflow with the following results :

This transmittal was automatically generated.

Doc No	Step	Participant	Review Outcome	Comments
1SV10110-110C08-BEC-MAT-AR-0013	SC_QA/QC Check	A Siddik	Accepted	

	SC_Seniro Electrical Review	M Ghonimi	Review Not Required	
	SC_Senior Mechanical Review	Y Jamil	Review Not Required	
	SC_Senior Architect Review	F Alqudah	Accepted with Comments	refer to comments on the attached CRS
	SC_Senior Structural Review	G Domel	Review Not Required	
	SC RE Review & Closeout	R Haddadin	Accepted with Comments	

Material Submittal form

Submittal Ref:	BJC-OEC-JZ08-TSL-CIV-0077	Rev No:	00	Date:	24/11/2024
Program Title:	Developmental Housing Program				
Project Title:	Developmental Housing Project of Khabt Algeniah - Jizan				
Contract N.O	23001026				
Client:	National Housing Company (NHC)				
PMC:	Dar Al Riyadh for Engineering Consulting				
Consultant:	Omran Engineering Consultants				
Contractor:	BinJarallah Group of Contracting & Trading company				

RECEIVED
25 NOV 2024
OMRAN Engineering Consultants

Guidance notes:

The submission should only include documents which are deemed compliant with the SOPR, Applicable Codes and have been reviewed and coordinated between the Contractor and Designer (and Engineer if applicable) and should include any authorised variations/changes as instructed.

Review Discipline

Architectural ☐	Structural/Civil ☒	Mech/Plumb ☐	Elec. ☐	Others (specify ☐	Project Management

Document Details

Notes: PMC review will recommend either Objection or No Objection to each item. Non-Objected shall be issued to the NHC with the recommendation to approve. Objected shall be returned to the Contractor with an Objection report.

PMC Review

Proposed by:

The Contractor	The Consultant (Designer & The Engineer)
Sign/Stamp	Sign/Stamp

Ser No:	Document Title/Description:	Reference No:	Rev No:	Remarks
01	**BC Seal/ Materials approval request**	QBHF 03	00	
	The material will be used for waterproofing works for internal wet areas, and will be supplied qualified manufacturer "**BCI**" and the work will be according to the approved method of statement			

Reviewed for compliance by:

Notes: The Engineer* shall review and approve when the Supervision Consultant differs from the Designer only. PMC shall only issue recommendations based upon 'No Objection' to the Client. Any 'Objections' shall be returned to the Contractor with a review report for action and may be copied to the NHC when necessary.

THE ENGINEER*	Review Date:	25-Nov-2024	Rejected	Approved	Signed:	
	Print Name:	Ayman Diab		✓		

1-Subject To Leakage Test 2- Warranty Certificate shall be submitted as per SOPR for the Material And application 3- comply with Manufacture MOS.

PMC	Recommendations to NHC Date:	2024-11-25	Objection	No Objection	Signed:	
	Print Name:	ANAS MOHAMED		✓		

NHC	Review Date:		Objection	No Objection	Signed:	
	Print Name:			✓		

No objection for wet area only subject to: [The work must be performed by the approved specialist.]
. The manufacturer's instructions, method statement, and recommendations in Uses, Application, Surface Preparation, and Storag 1 followed.
. 10-year warranty certificates attested by COC for work and materials approval.
. Method statement and water leakage test approval

VISION 2030 | DAR AL RIYADH | NHC | OMRAN

RECEIVED
19 NOV 2024

Document Submittal form					
Submittal Ref:	BJC-OEC-JZ08-SAT-CIV-0023	Rev No:	00	Date:	19/11/2024
Program Title:	Developmental Housing Program				
Project Title:	Developmental Housing Project of Khabt Algeniah - Jizan				
Contract N.O	23001026				
Client:	National Housing Company (NHC)				
PMC:	Dar Al Riyadh for Engineering Consulting				
Consultant:	Omran Engineering Consultants				
Contractor:	BinJarallah Group of Contracting & Trading company				

Guidance notes:

The submission should only include documents which are deemed compliant with the SOPR, Applicable Codes and have been reviewed and coordinated between the Contractor and Designer (and Engineer if applicable) and should include any authorised variations/changes as instructed.

Review Discipline

Architectural ☐	Structural/Civil ☒	Mech/Plumb ☐	Elec. ☐	Others (specify ☐	

Document Details

Notes: PMC review will recommend either Objection or No Objection to each item. Non-Objected shall be issued to the NHC with the recommendation to approve. Objected shall be returned to the Contractor with an Objection report.

PMC Review

Proposed by:

The Contractor		The Consultant (Designer & The Engineer)			
Sign/Stamp		Sign/Stamp			
Ser No:	Document Title/Description:	Reference No:		Rev No:	Remarks
01	Construction chemical materials			00	
	- **BC** Company profile	Page 02			
	BJC intends to supply waterproofing materials directly from the manufacturer for toilets and roof. The material data sheets and method of statement (MOS) will be included in the technical submittals.				

2024-11-

Reviewed for compliance by: ANAS MOHAMED

Notes: The Engineer* shall review and approve when the Supervision Consultant differs from the Designer only. PMC shall only issue recommendations based upon 'No Objection' to the Client. Any 'Objections' shall be returned to the Contractor with a review report for action and may be copied to the NHC when necessary.

21-11-2024

THE ENGINEER*	Review Date:	19-11-2024	Rejected	Approved	Signed:
	Print Name:	Ayman Diab		✓	
PMC	Recommendations to NHC Date:		Objection	No Objection ✓	Signed:
	Print Name:	A.Almuraikhi			

Subject to:
Two more suppliers must be submitted/approved, and all governmental registration and certifications must be updated and k[illegible] updated throughout the NHC Project Execution. All materials from this supplier are to be submitted separately individually, for review [illegible] val with quality test reports, technical data, SASO certification, warranty certification, thermal calculation, procedures to be provided, and a t[illegible] conducted for quality compliance. Final approval is subject to Sample, Material, and mock-up approval. All application (MS & checklist) are to be submitted separately for review and approval

NHC	Review Date:		Objection	No Objection	Signed:
	Print Name:				

شركة مشاريع الخليج Gulf Projects Co.		احياء EHYA		الاستشاري AL GHWANEM ARC architecture & engineering consultants
المقاول العام		المطور		الاستشاري
12/8/2024	التاريخ:	اسم المشروع : ROYAL AMWAJ` PROJECT (SAK.148) HALF MOON BAY - AL DAMMAM		

طلب اعتماد مواد

Data Sheet:المرفقات	الاصدار : 00	رقم الطلب : 06
	الموضوع: اعتماد مادة عزل الاسطح والتراس	نوع الطلب :انشائى
المصنع / بلد الصنع	البيان / الوصف	
	BC 702 40 SPRAY POLYOL (A) AND BC 768 ISOCYANATE (B) / iteam(~~A-1~~) (A-2)	

توقيع و ختم المقاول:

	التوقيع	مدير المشروع	التوقيـع	المهندس المختص
		م/ رجب فتحي		م/ رجب فتحي

ملاحظات الإستشاري المشرف

نعتمد المواد حسب المواصفات المطلوبة للبند وحسب الكود السعودي
للاعمال المماثل

التوصية بالموافقـــه A ☐ التوصية بالموافقـــه مع ملاحظات B ☐ التوصية بالرفض مع اعادة التقديم C ☐

المهندس المختص: م/ عماد الصباغ التوقيع : التاريخ: 12/8

ملاحظات المالك

العطيشان
ALOTAISHAN

Vendor Approval Letter

Date	:	October 9, 2023
Attention	:	Building Chemistry Industry.
CR Number	:	2050159093
Country	:	Saudi Arabia

We are pleased to inform you that **Building Chemistry Industry.** is now registered as potential subcontractor/supplier for "Abdul Rahman AI-Otaishan and Sons Group Company (AOSCO)" with vendor number **AOSCO-SUB-359**, provided your office continues to meet all relevant Rules, Regulations and Standards of the Kingdom of Saudi Arabia and AOSCO.

However, this registration, should not be construed as a commitment by AOSCO to procure from you. Being registered as a subcontractor/supplier only grants your company the opportunity. All procurement including but not limited to service contracts, purchase agreements, or purchase. Orders will be issued based on the name and address included in your commercial registration. (CR), as stated in your Supplier Registration.

AOSCO wishes to remind you that being recognized as a subcontractor/supplier carries with its serious obligations and responsibilities to act in a legal and ethical manner.

For further information or assistance please contact the Engineering and Contracts Department Coordinator by forwarding request to contracts@al-otaishan.com.sa , & Chief of Engineering and Contracts s.usman@al-otaishan.com.sa & info.@al-otaishan.com.sa .

Approved by

Engr. Dhary Al-Otaishan

Chief Executive Officer

شركة مجموعة عبدالرحمن العطيشان وابناؤه ذ.م.م
الدمام
س.ت ٢٠٥٠٠١٢٩٣٢
C. R. 2050012932
DAMMAM
Abdulrahman AlOtaishan & Sons Group Co. LLC

Cc: COB / DCEO / GM / ADCEO / CSO / CEC / CAO / CFO / EI / ECC / LEG / AUD/ FILE

Abdul Rahman Al-Otaishan & Sons Group Co. LLC
CR 2050012932
Head Office:
P.O. Box 6978, Dammam 31452 - Kingdom of Saudi Arabia
Tel.: +966 13 811 6048 / 881 9666 / 881 6048
Fax: +966 13 811 6133

Toll Free 920005299
Email: info@al-otaishan.com.sa
Website: www.al-otaishan.com.sa

شركة مجموعة عبدالرحمن العطيشان وابناؤه المحدوده
سجل تجاري 2050012932
المكتب الرئيسي:
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فاكس: +966 13 811 6133