
Technical Submittal

POWER-PROTECT W-70



Submitted to:

Job Name:

Submitted by: POWER PROOF TRADING AND CONTRACTING

Date:

This Submittal Form is provided to assist you in specifying and selecting the proper products. Basic product descriptions and performance data are included. For further information or technical assistance, contact Power Proof representative.

Power Proof Trading & Contracting , P.O.Box 7643 Doha , Qatar

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- **Method Statement**
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Technical Submittal

POWER-PROTECT W-70

Part 1.

METHODE STATEMENT



METHOD STATEMENT

Power-Protect W-70

Water-based Polyurethane Gel Injection Resin

1-PURPOSE

To provide guidance on use of injection to repair cracks in concrete.

2- DESCRIPTION

This method can be used to repair cracks as narrow as 0.1 mm. The method generally consists of drilling holes at close intervals along the cracks, in some cases installing Packers, and injecting the concrete under pressure.

3-EQUIPMENT, TOOLS, AND PERSONNEL REQUIREMENTS

a concrete drill, injection machine (we recommend the **SMART-X** or **COMPACT 6** injection machine), a means of cleaning holes and cracks, and normal hand tools are required. One man can repair cracks using this method, but a two- or three-man operation is more efficient. concrete injection requires personnel with a high degree of skill for satisfactory execution.

4-PREPARATION

1- Clean the cracks. The first step is to clean cracks that have been contaminated. Oil, grease, dirt, or fine particles of concrete prevent epoxy penetration and bonding.

2- contamination should be removed by flushing with water or some other specially effective solvent. The solvent is then blown out using compressed air or adequate time is provided for air-drying.

5- DRILLING & FIXING

1-Use a high quality rotary hammer drill to make injection holes with a varied distance from 15-50 cm to each other, according to the width of crack.

The drilling angle should be approximately 45 degrees or less to concrete surface and intersecting the crack, at a distance of ½ the depth of the concrete element from the crack. Then clean all the holes from dust using air blower .

2-Install injection packers into drilled holes ensuring that top of the sleeve is just below the surface of the concrete to secure sealing of the injector.



METHOD STATEMENT

Power-Protect W-70

Water-based Polyurethane Gel Injection Resin

6-INJECTION

- 1- Power-Protect W-70 is to be applied using the Injection machine (Ex. Smart X).
- 2-Make sure that the delivery line and all the fitting are connected tightly and in new condition at all time. Also ensure that no contamination has entered the delivery system.
- 3-Start the Injection machine with low speed to start the pumping process and increase gradually.
- 4-Once the desired working pressure is obtained set the switch of the machine so that this pressure will both be exceeded. In a regular injection the injection pressure will be well below the 4 bar mark.
- 5-Continue until the crack is filled completely and resin can be seen emerging from the crack surface.
- 6-Then start the process with the next packer until all the packers are done.
- 7-Allow curing overnight and removing the packers and close the holes with special epoxy mortar that can be applied by trowel, spatula or knife.
- 8-If the water is seen at adjacent place 7 days later, the procedure should be repeated until the whole structure is dried.
- 9- Power-Protect W-70 is used to Seal the crack permanently after injected by Power-Protect O-95.
- 10- Subsequent to injection of Power-Protect O-95, the same packers shall be used for injecting Power-Protect W-70 to get a permanent seal.
- 11- Remove the packers and make good any holes or voids with any mortar and allow to cure.



METHOD STATEMENT

Power-Protect W-70

Water-based Polyurethane Gel Injection Resin

7-CLEANING

1-Resins must be cleaned up immediately before it sets using any thinner.

2-Packers must be removed within 24 - 48 hours and patched with appropriate epoxy mortar .

3-Electrical grinder can be used to remove excess cured resin that flowed out the cracks.

8- ENVIRONMENTAL CONSIDERATIONS

Reasonable caution should guide the preparation, repair, and cleanup phases of any crack repair activities involving potentially hazardous and toxic chemical substances.

Manufacturer's recommendations to protect occupational Health and environmental quality should be carefully followed. In instances where the effects of a chemical substance on occupational health or environmental quality are unknown, chemical substances should be treated as potentially hazardous and toxic materials.

Technical Submittal

POWER-PROTECT W-70

Part 2.

MATERIAL DATASHEET

Power-Protect W-70

Water-based Polyurethane Gel Injection Resin

Description

Single component, low viscosity, high flexible hydrophilic polyurethane gel injection resin

Applications

It can stop the water leaking in the building very fast, widely used in Subway Station, Tunnel, Culvert, Foundation Improvement, Soil Settlement, Reservoir, Port Project, Top Slab, Cracks Construction Join, Shrinkage Crack, Basement hairline crack etc.

Advantages

- Low viscosity
- Adjustable set time-as fast as 20 seconds
- Water impermeable
- Injected as a single component, direct use without to mix extra catalyst
- Used for injecting cracks widths from 0.2 - 10 mm.
- Suitable for hairline Cracks .

Test report for Hrophilic polyurethane injection resin

Item	Standard Index	Test Results
Density (g/cm ³ 25°C±0.5°C)	≥1.00	1.07
Viscosity (Mpa.S 25°C±0.5°C)	≤1.0×10 ³	300 to 600
Gel Time /s	≤150	10 to 130
Foaming Capability /%	≥350	350
Non-Volatile Content/ %	≥75	80
Flash Point °C	≥124	160.6
The ignite Temperature °C		402

Usage

Hairline cracks are defined as cracks less than 1.5mm. These cracks can be the most difficult to seal as it is tough to force a thick resin into a tight crack. This situation are suitable to use "Power-Protect W-70 ". Joints are easy to seal if you know the proper procedures. "Power-Protect W-70", while great in tight cracks, works as well as sealing wide cracks

Consumption

Has to be estimated by the engineer or operator and depends on the size of the cracks and voids, which need injecting and on the expansion rate of the chosen resin.

Cleaning

- Resins must be cleaned up immediately before it sets.
- Packers must be removed within 24 - 48 hours and patched with appropriate epoxy mortar .
- Electrical grinder can be used to remove excess cured resin that flowed out the cracks.

Packaging

Power-Protect W-70 is available in 10 KGS Special Iron Pails

Power-Protect W-70

Water-based Polyurethane Gel Injection Resin

Preparation

If water leakage is found in the water tank or retaining wall, conduct a visual survey to locate the apparent source of the leakage. If the concrete structure is plaster all plaster should be removed from the affected area to expose the concrete below. There after mark the crack, through which the water leakage is observed .

Drilling

Use a high quality rotary hammer drill to make injection holes with a varied distance from 15-50 cm to each other, according to the width of crack.

The drilling angle should be approximately 45 degrees or less to concrete surface and intersecting the crack, at a distance of ½ the depth of the concrete element from the crack.

Clean all the holes from dust using air pump.

Fixing

Install injection packers into drilled holes ensuring that top of the sleeve is just below the surface of the concrete to secure sealing of the injector.

Application

- All it have to be done after closing the cracks with Power-Protect O-95 foaming resin .
- Power-Protect W70 is to be applied using the Injection machine (Ex. Smart X).
- Make sure that the delivery line and all the fitting are connected tightly and in new condition at all time. Also ensure that no contamination has entered the delivery system.
- Start the Injection machine with low speed to start the pumping process and increase gradually.

Application(Continue..)

Once the desired working pressure is obtained set the switch of the machine so that this pressure will both be exceeded. In a regular injection the injection pressure will be well below the 400 bar mark.

Continue until the crack is filled completely and resin can be seen emerging from the crack surface.

- Then start the process with the next packer until all the packers are done.
- Allow curing overnight and removing the packers and close the holes with special epoxy mortar that can be applied by trowel, spatula or knife.
- If the water is seen at adjacent place 7 days later, the procedure should be repeated until the whole structure is dried.

Health & Safety

Power-Protect W70 is classified as harmful.

Power-Protect W70 is classified as irritant.

In case of spills and accidents, refer to the Material Safety Data Sheet of the products or when in doubt contact the Manufacturer .

Always wear protective clothing, gloves and protective goggles when handling chemical products.

For full information, consult the relevant Material Health and Safety Data Sheet.

Appearance

Transparent maple liquid

Power-Protect W-70

Water-based Polyurethane Gel Injection Resin

Storage

To avoid problems, it is very important to understand that Power-Protect W-70 is both temperature and moisture sensitive.

Therefore, materials should be stored in an area with temperatures not exceeding 30°C or not lower than 10°C.

The maximum shelf-life is one year.

Equipment

- SMART-X Integrated Injection Machine
- Compact 6 powerful Injection Machine
- SP-5 single component injection machine
- Set of Injection Packers



Important Note:

The technical information and application advice in this publication is based on the present state of our best scientific and practical knowledge. As the nature of the information herein is general, no assumption can be made as to the product's suitability for a particular use or application, and no warranty as to its accuracy, reliability or completeness, either expressed or implied, is given other than those required by State legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use. Field service, where provided, does not constitute supervisory responsibility.

www.powerproofqatar.com/W70



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Technical Submittal

POWER-PROTECT W-70

Part 3.

MATERIAL SAFETY DATASHEET

POWER-PROTECT Safety Data Sheet

Part I Chemical Name

chemical name: Polyurethane Injection Resin

Company Name: POWER PROOF TRADING & CONTRACTING

Tel: +974 44 88 32 66

Fax: +974 44 88 32 66

Emergency Phone: +974 7000 9311

Part II Composition / Ingredients:

Chemical Name	CAS Number	EINECS formula	ingredients
Polyurethane Injection Resin	9009-54-5		100%

Part III Overview of hazards

Potential health hazards

Eyes: May cause eye irritation, may cause swelling or pain.

Skin: May cause skin irritation, may be harmful through skin absorption, repeated skin contact may cause skin dry and chapped skin.

Ingestion: May cause gastrointestinal irritation, symptoms may be nausea, vomiting, diarrhea. May be harmful if swallowed.

Inhalation: Inhalation of vapors may cause respiratory irritation, inhalation of high concentrations of vapor may cause central nervous system response, nausea, headache. Inhalation may be harmful.

Part IV Aid Measures

Eye contact: Immediately flush with plenty of water for at least 15 minutes, lift upper and lower eyelids from time to time, if the stimulus appear, immediately seek medical attention.

Skin contact: immediately wash with soap and plenty of water, remove contaminated clothing and shoes, if stimulated continuous, seek medical care.

Ingestion: Do not induce vomiting, do not put anything into an unconscious person's mouth. Rinse mouth with water, seek medical care immediately.

Inhalation: Immediately move to fresh air from the exposure, if not breathing give artificial respiration, if breathing difficult give oxygen; if any symptoms, seek medical advice immediately.

Part V Fire-fighting measures

In general: in any case the fire, wear self-suction pressure to meet the requirements of the ventilator, MSHA / NIOSH (or equivalent standard), with full protection. In fire conditions due to thermal decomposition or combustion may produce irritation or toxic gases.

POWER-PROTECT Safety Data Sheet

Extinguishing Media: Use water spray to keep containers cool with water spray, carbon dioxide, dry powder or appropriate foam.

Part VI Accidental Emergency

General information: select the appropriate personal protective equipment.

Disclosure: to absorb with inert material (such as vermiculite, sand or soil) and then placed in an appropriate waste container. Move away all sources of ignition, ventilation. Do not let the material come into the drainage system.

Part VII Handling and Storage

Operating: to maintain proper air circulation, avoid inhalation of dust, vapor, mist or gas. Avoid contact with eyes, skin and clothing, avoid ingestion and inhalation. Keep away from heat and fire. Avoid prolonged exposure.

Storage: Store in a dry, ventilated place. Keep container seal. Keep away from fire.

Part VIII Exposure controls / personal protection

Engineering Control: Choose the right ventilation, use and storage of the material should be equipped with eyewash and shower equipment, using general ventilation to ensure that the local concentration of air within a limited level.

Eye protection: Wear protective chemical safety glasses.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin contact.

Part IX Physical and chemical properties Physical State: Liquid

Color: light brown Odor: pungent odor PH value: 6.5

Saturated vapor pressure: Not available Vapor

Density: Not available

Viscosity: 200 mpa.s Boiling Point:

Not available Melting Point: Not

available Flash point:> 100 °C

Explosion Limits: Lower: Not available Explosion

limits: upper limit: Not available Decomposition

Temperature: Not available

Partition coefficient (octanol / water): Not available

Density: 1.060g/m³

Part X Stability and reactivity

Stability: Under normal temperature and pressure stability.

Conditions to avoid: incompatible materials, fire, overheating.

Incompatible materials: strong oxidizers, acids, alkalis.

POWER-PROTECT Safety Data Sheet

Hazardous decomposition products: irritation or toxic smoke or gases, carbon dioxide, carbon monoxide.

HAZARDOUS POLYMERIZATION: None.

Part XI Toxicological information RTECS: CAS #

9009-54-5: TR7875000 LD50/LC50: Not available

Carcinogenicity: Polyurethane Injection Resin - have not been adequately studied.

Other: In the context of our knowledge, the substance of the physical, chemical and toxicological properties have not been adequately studied.

Part XII ECOLOGICAL INFORMATION

Ecological toxicity: Not available

Other: Do not go directly to the drainage system.

Part XIII DISPOSAL

Waste treatment

Disposal in state and local regulations.

Part XIV TRANSPORT INFORMATION

	IATA	IMO	RID	ADR
Proper shipping	no control	no control	no control	no control

Part XV REGULATORY INFORMATION

Regulatory Information: Consult your local, national and EU / international regulations.

Danger sign: Not available

Dangerous terms: no information Safety

Description:

S 24/25 Avoid contact with eyes and skin.

S 26 In case of contact with eyes, rush immediately with plenty of water and seek medical advice. S 37/39 Wear suitable gloves and eye / face protection.

Part XVI Other Information

MSDS preparation date: March 3rd, 2013

This MSDS information is based on our current information of the materials, just to describe the product's health, safety and environmental requirements to enable a better understanding of the parties concerned. This information is provided to you for study and confirmation. The risk and damage prevention measures described is not unique. One use of such information without any implied warranties or description. POWER PROOF Company does not assume any liability. So this MSDS cannot achieve the guarantee of any specific purpose. The relevant user has responsibility to test the safety of this product in advance, and to judge whether they meet your use purpose.

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Part 4.

MATERIAL TEST REPORTS



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TEST REPORT ON TENSILE STRENGTH & ELONGATION OF POWER PROTECT W-70

ACES Client	Power Proof Trading & Contracting	Report No.	TMR17084015 Rev-1
Owner	N.P.	Date Reported	25-09-17
PMC	N.P.	Sample No.	TMS17038172
Project Client	N.P.	Request No.	TMQ17024251
Consultant	N.P.	Client Reference	Full payment in advance
Contractor	N.P.	Project No.	N.P.
Project Name	Private		
Sample Description	Power Protect W-70 (Gel)	Sampled By	Client's Rep.
Source / Supplier	N.P.	Sampling Date	18-07-17
Sample Location	N.P.	Sampling Cert.	N.P.
Sample Reference	N.P.	Sampling Method	N.P.
RFI No.	PT17002256 Rev.1	Sample Size	See Below
Test Method	As Below	Sample Brt. in By	Client's Rep.
Test Method Var.	Nil	Dated Received	18-07-17
Tested By	David	Dated Tested	22-07-17

Test	Units	Test Method	Average Test Results
Tensile strength	MPa	ASTM D638	5.49
Elongation	%		62

Remarks : -The test results related only to the specimen(s) tested

-This report supersedes our report with ref. TMR17084015 dated 23-07-2017 which shall be considered as void.



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Eng. Ghaleb Al - Zubi
Deputy Branch Manager

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IND. 16.5088/U/Q -4/5



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TEST REPORT ON MODULUS ELASTICITY OF POWER PROTECT W-70

ACES Client	Power Proof Trading & Contracting	Report No.	TMR17084015/2 Rev-1
Owner	N.P.	Date Reported	23-07-17
PMC	N.P.	Sample No.	TMS17038172
Project Client	N.P.	Request No.	TMQ17024251
Consultant	N.P.	Client Reference	Full payment in advance
Contractor	N.P.	Project No.	N.P.
Project Name	Private		
Sample Description	Power Protect W-70 (Gel)	Sampled By	Client's Rep.
Source / Supplier	N.P.	Sampling Date	18-07-17
Sample Location	N.P.	Sampling Cert.	N.P.
Sample Reference	N.P.	Sampling Method	N.P.
RFI No.	PT17002256 Rev.1	Sample Size	See Below
Test Method	As Below	Sample Brt. in By	Client's Rep.
Test Method Var.	Nil	Dated Received	18-07-17
Tested By	David	Dated Tested	22-07-17

Test	Units	Test Method	Average Test Results
Modulus of elasticity	MPa	ASTM D638	4.69

Remarks : -The test results related only to the specimen(s) tested

-This report supersedes our report with ref. TMR17084015 dated 23-07-2017 which shall be considered as void.



Eng. Ghaleb Al - Zubi
Deputy Branch Manager

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TEST REPORT ON HARDNESS SHORE OF POWER PROTECT W-70

ACES Client	Power Proof Trading & Contracting	Report No.	TMR17084015/3 Rev-2
Owner	N.P.	Date Reported	27-09-17
PMC	N.P.	Sample No.	TMS17038172
Project Client	N.P.	Request No.	TMQ17024251
Consultant	N.P.	Client Reference	Full payment in advance
Contractor	N.P.	Project No.	N.P.
Project Name	Private		
Sample Description	Power Protect W-70 (Gel)	Sampled By	Client's Rep.
Source / Supplier	N.P.	Sampling Date	18-07-17
Sample Location	N.P.	Sampling Cert.	N.P.
Sample Reference	N.P.	Sampling Method	N.P.
RFI No.	PT17002256 Rev.1	Sample Size	See Below
Test Method	As Below	Sample Brt. in By	Client's Rep.
Test Method Var.	Nil	Dated Received	18-07-17
Tested By	David	Dated Tested	22-07-17

Test	Units	Test Method	Average Test Results
Hardness Shore 'A'	-	ASTM D2240 - 05 Reapproved 2010	A/64/1

Remarks : -The test results related only to the specimen(s) tested

-This report supersedes our report with ref. TMR17084015/3 Rev-1 dated 23-07-2017 which shall be considered as void.



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Eng. Ghaleb Al-Zarbi
Deputy Branch Manager



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IND. 16.5088/U/Q -4/5

Technical Submittal

POWER-PROTECT W-70

Part 5.

MATERIAL APPROVALS

Certification of Registration



POWER PROOF TRADING & CONTRACTING

ADDRESS: BINMAHMOUD AREA, AL- JEZEERA STREET, BUILDING NO-56,
FLOOR NO-03, OFFICE NO-303 DOHA, QATAR

QACS INTERNATIONAL

Certify that the quality management system of the above organisation has been audited and found to be in accordance with the requirements of standard detailed below.

ISO 9001:2015

BUILDING CHEMICALS MATERIALS & ADDITIVES FOR CONCRETE SOLUTIONS,
CONCRETE INJECTION MACHINES, CONCRETE INJECTION ACCESSORIES,
CONCRETE INJECTION RESIN, CONCRETE CORING, CONCRETE CUTTING,
CONCRETE REPAIR, CRACKS INJECTION, LIGHT WEIGHT CONCRETE,
FLOORINGS & COATINGS, CAR PARKING COATING, CONCRETE
GRINDING SCREED WORKS, SHOTCRETE WORKS

Certificate No:- QAIS-Q-QAT-PP-02.18.117

This certification was conducted in accordance with the qacs international f.z.c auditing and Certification procedures and it is remain valid subject to annual surveillance audits.

Certificate Issue Date: 23rd April 2018
Date of Initial Registration: 23rd April 2018
Certificate Validity:- 3 Years

1st Surveillance Date: 22nd April 2019
2nd Surveillance Date: 22nd April 2020
Recertification Date:- 22nd April 2021

Note: Certificate shall be valid after surveillance, only if continuation letter by QACS is present.

To Check the certificate validity please

Refer Web:- (www.qacsintl.ae).




Authorised Signatory



QACS International F.Z.C

Email id: info@qacsintl.ae, operationqacs@gmail.com
www.qacsintl.ae


 Hyder Material Approval Request	Document No. :	PWA-RPD-CON-FM-1519
	Revision No. :	03
	Issue Date :	15 Jan. 2019

Project Details

Document No:	DN107-P05-BTC-CON-MAR-G10233	Rev. No.:	00	Date:	16 July 2019
Project No:	IA 2016 C 066 G	Area:	Package 05		
Project Title:	Infrastructure FS Gaps for Bani HAJER Package 05 (P107-P05)				
GEC	HYDER Consulting Middle East Limited	Contractor:	Bin Omran Trading and Contracting Company		

We request the approval of the Engineer to supply the following materials for incorporation into the works

Part 1 - Material Particulars (one item per form)

Type of Material:	POLYESTER CRACK SEALER (POWER PROTECT O-95 & W-70)		 No. 2531 Date Rec'd 16/7/19 AM/AD CB F.I.P. File Action SJ-JR Copied to:
Area of Application:	INJECTION AND SEALING WATER LEAKS in the shafts		
BoQ Ref:	Section 11	Drawing Ref:	
Specification:	QCS 2014 Section 8		
Applicable Standards:			
Country of Origin:	Qatar		
Availability:	As Required		

List and attach all relevant technical literature marked to identify relevant description, current test certificates, samples as appropriate

- Company Profile
- Certificates , Compliance Statement , Technical Data Sheet , Warranty Certificate
- Test Certificate , Country of Origin
- Sample Warranty Certificates , Project Reference List
- Previous Approval , Product Catalogues ,

Part 2 - Particulars of Manufacturer / Supplier

Company Name:	POWERPROOF TRADING AND CONTRACTING
Address 1:	Doha, Qatar P.O. Box 7643
Address 2:	
Address 3:	
Address 4:	
e-mail:	aya@powerproofqatar.com



Telephone No: +974-44883266/70009311

Part 3 - Particulars of Local Agent (if applicable)

Company Name:

Address 1:

Address 2:

Address 3:

Address 4:

e-mail:

Telephone No:

Part 4 - Delivery Details

Ex-Works Total Duration:

Latest Date for Order:

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 accordance with the contract drawings and specifications except as otherwise stated, and also that the material sources indicated above have been reviewed in detail and that we will supply the submitted items in full compliance with the schedule delivery plans

Name: ABDULSALAM AL DAMLAKHI

Signature:



Date: 16 JULY 2019

Part 5 - GEC Recommendation Comments

To Contractor: NO COMMENT.

NOTE MUST RECORD WHERE THIS PRODUCT IS USED. INRS TO BE ISSUED FOR ALL REPAIRS. J. K. 20/07/19.

Action Code A: Approved as Submitted

Action Code B: Revise and Re-submit

Action Code C: Rejected

Name:

Signature:

[Handwritten Signature]



RE 20/7/19.

Footnote:

Approval by the GEC 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 any recognition whatsoever of additional time or cost to the contract.



17 April 2016

Ref.: M006-LBE-COM-LTR-01966

To: **AKTOR-L&T-YAPI-STFA-JEC-JV (ALYSJ JV)**
 Near Al Waab Petrol Station
 Behind Qtel Building
 Al Waab Street
 P.O. Box 24375, Doha, Qatar

Attention: Mr. Carlo Germani - Contractor's Representative

Project: Qatar Integrated Railway Project (QIRP) – Gold Line Underground - Contract No:
 RTC/ 040/2012

Subject: Approval request under Sub-Clause 4.7.3 – General Conditions of Contract for
 * Subcontractor: Power Proof Trading and Contracting for Floorings, Coatings, Light
 Weight Foamed Concrete and Screeding Works

The Engineer's Approval Request of local Subcontractors and Suppliers to carry out Lump Sum Works, all in accordance with Conditions of Contract Sub-Clause 4.7

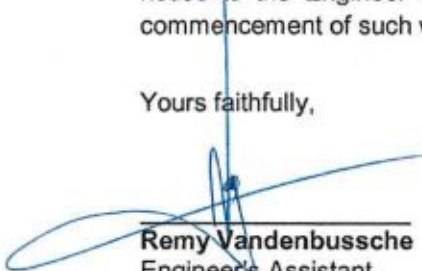
SUBCONTRACTOR	✓	LUMP SUM	✓	LOCAL	✓	STAGE 1 (Add to App'd List)	N/A
SUPPLIER	N/A	PROVISIONAL SUM	N/A	INTERNATIONAL	N/A	STAGE 2 (App'd for duties)	✓
Scope	Subcontractor for Floorings, Coatings, Light Weight Foamed Concrete and Screeding Works						

We refer to your Subcontractor Approval Request (SAR) submission ref: M006-GDB-COM-SAR-00705 Rev.2 dated 31 March 2016.

Pursuant to the Conditions of Contract, Sub-Clause 4.7.3, the Engineer hereby approves **Power Proof Trading and Contracting** as an approved Subcontractor for Floorings, Coatings, Light Weight Foamed Concrete and Screeding Works as a part of the LUMP SUM work elements.

The Contractor's attention is drawn to Sub-Clause 4.7.5, which requires the Contractor to give 28 days' notice to the Engineer of the intended date of commencement of the Subcontractor's work and of the commencement of such work on the Site.

Yours faithfully,


Remy Vandebussche
 Engineer's Assistant

- Cc:**
- Saad Ahmed Al Muhannadi – Employer
 - Daniel Leckel – Engineer
 - Samuel Adair McChesney – Qatar Rail Project Director Sm
 - John Thomas Gillespie, Qatar Rail Contract Administration Manager

ALYSJ		Gold Line Underground		
NAME	DATE	ACTION	INFO.	F-LIP
Craig H			✓	
Ismael G			✓	
Richard M			✓	
M. Sh. Hub			✓	


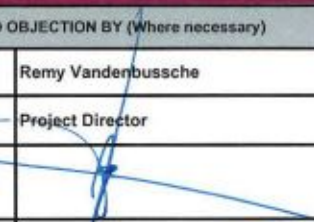
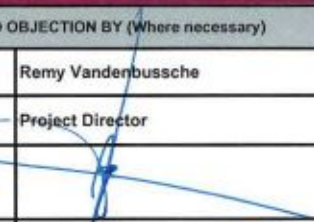
Enclosed: Qatar Rail Document Review Sheet (1 page)

Response required on or before: N/A

RDA/AQU

Acknowledged by

Qatar Rail
Document Review Sheet (Engineer)

PROJECT:		Gold Line Metro		PROJECT NO.:		M006		
DRS NUMBER:		M006-COM-ERS-00293		REV.:		2		
ORIGINATOR:		ALYSJ JV		DATE:		14-Apr-16		
DOCUMENT NO.:		M006-GDB-COM-SAR-00705		TRANSMITTAL NO. / DATE:		M006-GDB-WTRAN-135298/ 31 March 2016		
DOCUMENT TITLE:		Subcontractor Approval Request for Power Proof Trading and Contracting – Floorings, Coatings, Light Weight Foamed Concrete and Screeding Works (LS)		DISCIPLINE:		Commercials		
DOCUMENT TYPE:				Supplier / Sub Contractor Approval Request				
Comment Code Legend (for individual comments):				Reply Code Legend				
1 = Action required for this issue 3 = to be addressed at DD2				i=incorporated, ii= evaluated and not incorporated for reason stated				Open/Closed
2 = advisory comment								
No.	Initial	Page/Section	Comment Code	Reviewers Comments (PMC/CPO, CTO)	Reply Code	D&B Contractor/Other Party Reply	Reply Status by Reviewer	
1	MMM	General	1	The proposed subcontractor is approved but for Tunnel and Cross Passage associated works. Please define clear scope of works.	i	Please be informed that the proposed Company is intended to be used in Stations and in Subways <u>only</u> , for Floorings, Coatings, Lightweight Foamed Concrete and for Screeding Works as a part of Lump Sum (LS) work element. Note: The Company's scope was also modified in page 3/3 accordingly.	Closed	
2	RDA	General	2	Please note that no Sub contractor/ Supplier are allowed to participate to the project until receiving the Engineer's prior written approval as per GCC Sub Clause 4.7.3 <u>corroborated</u> with the Contractor's notice required under GCC Sub clause 4.7.5.	i	In accordance with your comment; Please be informed that this SAR submission is also a notice under Sub-clause 4.7.5 of Contract RTC/040/2012 for Qatar Rail Integrated Railway Project (QIRP) – Gold Line Underground that the intended date of commencement of above mentioned Subcontractor is 28 days from the date of this SAR submission.	Closed	
Status Code Legend:								
Document Review Status Code:		A		A. Approved		C. SONO		
				B. Approved with comments		D. NOWC: No Objection with comments		
						E. Fail/Not approved		
						F. Responded/Reviewed/Actioned		
Reviewer's Name		Position		COMMENTS/STATUS RECOMMENDED BY PMC		COMMENTS/STATUS RECOMMENDED BY CTO		
Name:		Position:		Name:		Position:		
Maung Maw		Sr. Tunneling Er.		Paul Hegarty				
Dan Radu		Contract Administrator		Commercial Manager				
Date:		Date:		Date:		Date:		
14-Apr-16								
						18. Apr 2016		
Name:		Position:		Name:		Position:		
Remy Vanderbussche		Project Director		Carlo Germani		Project Director		
Signature:		Signature:		Signature:		Signature:		
								



اتحاد قطر للتخطيط ذ.م.م


QATAR DESIGN CONSORTIUM W.L.L


ARCHITECTS, ENGINEERS, PROJECT MANAGERS & CONSULTANTS

P.O. BOX: 5171, Doha-Qatar, TEL. 44191700,44191777, fax. 44433873

E-mail : mail@qdcqatar.net ; www.qdcqatar.com.qa



DOCUMENT TRANSMITTAL						
QDC Ref. No	T/PM/S-449/2019/0494		Job No	S-449	Date	11-05-19
Contractor Ref. No	FLK-TRNS-2019-0409		Project	DESIGN, BID AND BUILD FOR FIREFIGHTING INFRASTRUCTURE AT MAIN CAMPUS AT QATAR UNIVERSITY		
To	FIRELINK WLL P.O. Box: 17202					
Fax	44995054		Subject	Material Submittal		
Tel	44995040/44995048		Attention	Mr. Christopher Clemente - PM Cc: Eng.Irfan Ahmed Siddiqi - Project Engineer - QU		
Please find enclosed the following						
SR NO	Drawing/ Document No.	Description	Rev. No.	No. of Copies	Format (Electronic copy/ Hardcopy)	Status
1	FLK-DMS-2019-0478	MATERIAL SUBMITTAL - WATER BASED POLYURETHANE GEL INJECTION RESIN -POWER PROJECT W-70 (INCLUDING METHOD STATEMENT)	0	1	Hardcopy + Softcopy	2
						
Kindly check the status of the following						
SR NO	STATUS	SR NO	STATUS	SR NO	STATUS	
1	Approved	6	For review and comments	11	Reissued for tender	
2	Approved with comments	7	Reissued for approval	12	Approved for construction	
3	Not approved	8	Issued for tender	13	For information only	
4	Revise and resubmit	9	Issued for Construction	14	See remarks	
5	For approval	10	Reissued for Construction	15	For Retention	
Remarks						
Initiator's Signature		Designation		Date: 12/05/19		
Please acknowledge receipt of the item(s) listed above by signing and returning a copy of this form						
Receiver's Signature		Designation		Date		
Clients Approval (Applicable only for design submissions)						
Please give your comments within <i>days</i> , otherwise the submission would be considered as approved						
Approved		Approved with comments		Revise and Resubmit		
Remarks						
Authorized Signature		Designation		Date		

Date : 29-04-2019	MATERIAL SUBMITTAL		Submittal No. : FLK-DMS-2019-0478
PROJECT TITLE	FIRE FIGHTING INFRASTRUCTURE AT MAIN CAMPUS		
CONTRACT NO.	EIN/190/2014		
CONTRACTOR	FIRELINK		
DISCIPLINE :	CIVIL		
SUB CONTRACTOR	AL HUDA		
Material Description			
Material Name	Water Based Polyurethane Gel Injection Resin – Power Protect W-70 (including method statement)		
B.O.Q. Ref.	N/A		
Manufacturer:	Power Proof Trading and contracting	Country of Origin: Qatar	
Supplier Name:	Power Proof Trading and contracting	Agent Name: Power Proof Trading and contracting	
Literature :	YES	Sample: NO	
Fully Complies to Specifications: YES	Fully Complies to Design Drawings: YES	Fully Complies to Technical Requirements: YES	
In case of Non Compliance to any of the above items contractor to provide details of Non Compliance & Justification. IF not provided the Approval is Not Valid			
Contractor Signature:		Stamp:	
Consultant Discipline Engineer Comments/ Acceptance:			
- SUBMIT UPDATED TEST RESULT FOR TENSILE STRENGTH & ELONGATION, MODULUS OF ELASTICITY AND HARDNESS SHORE.		Name : <u>puh</u>	
- FINAL APPROVAL AFTER FINISHED WORKED AND INSPECTION WITH INSPECTION REQUEST.		Signature : <u>[Signature]</u>	
- FINAL APPROVAL AFTER FINISHING LEAK TEST.		Date : <u>11/5/19</u>	
- STRICTLY FOLLOW THE METHOD OF STATEMENT AS PER			
Approval Status: <u>As recommended by manufacturer.</u> <u>AWD</u>			
Consultant Project Manager Comments/ Acceptance :			
<u>As above</u>		Name : <u>steve ho</u>	
		Signature : <u>[Signature]</u>	
Approval Status: <u>Approved with comment</u>		Date : <u>12/05/19</u>	
QU Comments / Acceptance :			
		Name : _____	
		Signature : _____	
Approval Status:		Date : _____	

QU Decision :			
<input type="checkbox"/>	APPROVED	Date :	_____
<input type="checkbox"/>	APPROVED WITH COMMENTS	Signature:	_____
<input type="checkbox"/>	REVISE & RESUBMIT		
<input type="checkbox"/>	NOT APPROVED		



Material Transmittal

Project Name: AL NASSEM TOWER at AL KHARAJ RES/19, LUSAIL **AOT** Project No: AK-RES/19
 Owner: KHALID MOHAMED A AL-ATTEYAH Submittal No.: AS-ANT-MT-MZP-037 Rev.02 A
 Date: 24 / 04 / 2018
 Contractor's Representative Printed Name & Signature: *[Signature]*
 Prepared by: Engr. Mike Belegado Engr. Omar Kassem
 QA/QC Engineer Technical Engineer
 Submitted by: Engr. Mahmoud Omar
 Project Manager

24 APR 2018
 Received by: 14:57
 Checked by: Site Supervision
 Time:

Description:

MATERIALS SUBMITTAL OF POWER-PROTECT O-95 FOR INJECTION CHEMICAL @ SWIMMING POOL WATER LEAKAGE

1. COMPLIANCE FOR CONSULTANT COMMENTS

2. SPECIFICATION COMPLIANCE STATEMENT

3. COMPANY PROFILE

4. MATERIAL TECHNICAL SUBMITTAL

POWER-PROTECT O-95

- METHOD OF STATEMENT
- MATERIALS DATA SHEETS
- MATERIALS SAFETY DATA SHEETS
- MATERIALS TEST REPORT
- MATERIALS CONSULTANT APPROVAL

Drawing Ref: _____
 Specification Ref: _____
 Bill of Quantities Ref: _____
 Other Ref: _____

MZP SITE SUPERVISION DEPARTMENT		
Date:		
Discip.	Act.	Info.
P.M.		
Arch.		
Civil		
Mech.		
Elect.		
I.D.		
Planner		
Q.S.		
Head Office		
H.S.E.		
Sec/DC		
M/FILE		
Samples		
S/FILE		
RECEIVED:		

[Handwritten] 25/4/18
 25/4/18

Attachment: Literature/Catalogue Test Certificates

Manufacturer/Supplier: From Approved Vendor List Equivalent or Approved

Name of Manufacturer/Supplier: POWER PROOF
 Address: PO BOX 7643 Doha, Qatar Local Agent: POWER PROOF
 Agent Tel. No.: +974-55897238 email add: infopowerproofqatar.com Tel No: +974 44883266

Delivery: As Required Country of Origin: QATAR
 Availability: Locally Manufactured: Overseas:
 Mode of Transport: Overland: Air Freight:
 Manufacturer: Production Period: Sea Freight:
 Delivery ex Work: Latest Date of Orders:
 Total Delivery Limit: Date Material Required:
 Expected Date on Site:

Approved as not: Rejected: Additional Info. Required: Others:

Comments:

- STRUCTURALLY WE HAVE NO OBJECTION, SUBJECT TO:
 1) COMPLIANCE TO MANUFACTURER'S RECOMMENDATION.
 2) APPROVAL OF MTR.

MECH: No technical objection:
 Subject to compliance with manufacturer standards & recommendations
 Subject to testing & commissioning approval.

Consultant: *[Signature]* 25.04.18
 Owner: Engineering Department Comments (if applicable)

Printed Name: _____ Signature: _____
 Received by: (Contractor) _____
 Printed Name: _____ Signature: _____

AL SEAL CONTRACTING & TRADING CO.
 AL NASSEM TOWER PROJECT
 25 APR 2018
 11:15 AM
 RECEIVED
 By: _____



Construction, Completion and Maintenance of General Takaful C-Ring Road Office Building (4B+G+2)



DOCUMENT REVIEW SHEET

PROJECT:		CONSTRUCTION, COMPLETION AND MAINTENANCE OF GENERAL TAKAFUL C-RING ROAD OFFICE BUILDING (4B+G+2)		DATE: 27/02/2017	
TRANSMITTAL NUMBER		C-270/OE/KA/EF/TN/837		DOCUMENT REVISION : 00	
DOCUMENT TITLE		MATERIAL APPROVAL REQUEST FOR WATER - BASED POLYURETHANE GEL INJECTION RESIN POWER - PROTECT W -70 (WATERPROOFING)			
DISCIPLINE		<input checked="" type="checkbox"/> CIVIL <input type="checkbox"/> ELECTRICAL <input type="checkbox"/> MECHANICAL <input type="checkbox"/> STRUCTURAL <input type="checkbox"/> ARCHITECTURAL <input type="checkbox"/> OTHERS			
SL.NO.	DOCUMENT / DRAWING NO.	REV.NO.	SECTION	COMMENTS BY K&A	RESPONSE BY
1.	OE-CIV-MAT-084	00		<ul style="list-style-type: none"> Follow the manufacturer recommendations. Subject to mock up sample approval at site. Subject to site conditions. 	
2.					
3.					



APPROVED
 NOT APPROVED
 APPROVED AS NOTED
 REVISE & RESUBMIT

Reviewed By: Name: BASSEM KARAM	Designation: RE + PM	Signature:	Date: 27.02.2017
--	-----------------------------	------------	-------------------------



Project	AL KHARAEJ-RES 20, RESIDENTIAL TOWER @ LUSAIL									
MATERIAL SUBMITTAL										
Submittal No.	ALSEAL-AK-MS-ST-0024	Rev	00	X	New submittal	Date	14 APRIL 2018			
Material Description	MATERIAL SUBMITTAL FOR WATER LEAKAGE INJECTION CHEMICAL - POWER-PROTECT O-95									
Country of Origin	QATAR	Specified	X	Alternative		Architecture	Structure	Electrical	Mechanical	Other
Manufacturer	POWER PROOF	Local Supplier/Agent	POWER PROOF	Details						
Name				MATERIALS SUBMITTAL OF POWER-PROTECT O-95 FOR WATER LEAKAGE INJECTION CHEMICAL 1. COMPANY PROFILE 2. MATERIAL TECHNICAL SUBMITTAL 3. POWER-PROTECT O-95 4. METHOD OF STATEMENT 5. MATERIALS DATA SHEETS 6. MATERIALS SAFETY DATA SHEETS 7. MATERIALS TEST REPORT 8. MATERIALS CONSULTANT APPROVAL 9. COMPLIANCE FOR CONSULTANT COMMENTS 10. SPECIFICATION COMPLIANCE STATEMENT						
	+974 44883266		+974 44883266							
Tel	PO BOX 7643 Doha, Qatar	PO BOX 7643 Doha, Qatar								
Fax										
POBox										
EMAIL										
BOQ		BS	Specs	Attached: Hard Copy (3Nos.) & Soft Copy (1Nos.)						
Drawings ref.										
Attached	Data Sheet	Sample	Catalogue	Profile	Calculation	Test Results	Other			
	X		X	X		X	X			
Prepared by:	QA/QC Dept. Eng. SHAMNAS		Checked & verified by: Technical Dept. Eng. OMAR KASSEM			Project Manager: Eng. MAHMOUD OMAR				
Name			Received by Consultant		Signature		Date			
					16 APR 2018					
Consultant comments:										
By:										
<input checked="" type="checkbox"/> Approved	<input checked="" type="checkbox"/> Approved With Comments	<input checked="" type="checkbox"/> More Information Required		<input checked="" type="checkbox"/> Rejected						
Commented by		Name		Signature		Date				
QA/QC										
Project Manager										
Received Back By the contractor										

United Consultants

Architectural, Structural, Mechanical & Electrical Consultants



الشركة الدولية للتدوير والمقاولات
International Dec. & Cont. Co.
Tel.: 4440350 - Fax: 4421654 P.O. Box: 4013, Doha, Qatar



الاتحاد للاستشارات

الهندسية

استشاريون-معماريون-إنشائيون-كهرباء-ميكانيكا

MATERIAL SUBMITTAL No .125 Rev 01

Date	: 24/01/2017
Project Title	: Al Rabban Establishment Building (2B+G+M+7) Farij Bin Mahmoud
Contractor	: International Decoration & Contracting Co.
Owner	: Al Rabban Establishment Building (2B+G+M+7) Farij Bin Mahmoud
Sub-Contractor	:
Manufacturer	:
Supplier Name	: Power Proof Trading & Contracting
Literature	: Concrete injection :- - Power Protect O-95 - Power Protect W-70
Contractor Signature	:
Country of Origin:	
Agent Name : Power Proof Trading & Contracting	
Sample:	
Stamp:	
Consultants Comments:	
Architectural:	A B D E F G
Structural: Approved as Notes	A B C D E F G
* final Approval with inspection in site After finish injection	A B C D E F G
Mechanical: * final Approval After finish leakage	A B C D E F G
Electrical:	A B C D E F G
Client's Signature (Acknowledgment & Approval)	Contractor's Receipt
Signature:	Signature:
Date: 26/11/2017	Date:

Received Date: 29-1-17
Received By:
Pass to: Action Note
Civil Engr.
Technical Engr.
Account
Safety
Name & Signature
Date

- A. Approved
- B. Approved as Noted
- C. Revise & Resubmit
- D. Rejected
- E. Additional info. Required
- F. Samples Required
- G. Test Required

Approval by Consultants/Client shall not relieve the Contractor from this obligations under the Contract, the Contractor shall be solely responsible for the soundness and correctness of the submitted materials and/or documents.



SPECIFICATION COMPLIANCE STATEMENT

New Port Project Steering Committee

NPP Port Infrastructure & Buildings Package NPP0057

Contractor : Sinohydro - United Construction Est. - JV

Material: Concrete Crack Injection (Wet Cracks)

NO.	PROPERTIES	QCS SPECIFICATION	TESTED VALUES	COMPLIANCE		REMARKS
				YES	NO	
REFERENCE: QCS 2010 SECTION 5, PART 16.6.6, TABLE 16.6						
1	Description	Polyurethane foaming crack injection resin	Polyurethane foaming crack injection resin	Yes		
2	Elongation at Break	60% (ASTM D638 or Equivalent)	62%	Yes		Check the attached Accos Test Report No: 17084015 Rev-1
3	Modulus of Elasticity	4MPa (DIN53457 or Equivalent)	4.69 Mpa	Yes		Check the attached Accos Test Report No: 17084015/2 Rev-1
4	Shore A Hardness	4MPa (ASTM D2240 or Equivalent)	A/64/1	Yes		Check the attached Accos Test Report No: 17084015/3 Rev-2

