



TASCO
ALUMINUM AND GLASS



HADEED
EMIRATES
CONTRACTING

Project: Construction, Completion & Maintenance of Extreme Marine - Abu Dhabi Branch Workshop and Related Services, Plot No. 101NR26, ICAD II, Abu Dhabi

Material Submittal

Ref. No.: A20-16-J235-MS-101- Rev.00

Date: 26/10/2022

Originator of Submittal: UAE

Material Division / Section: Civil

Specs./BOQ/Drg. Ref.: Specs. 090600

Material Specified: Epoxy Floor Coating works

Material Proposed: Envirocon

Manufacturer / Local Supplier: UAE

Reason for Alternative:

Material Description: Epoxy Floor Coating works

List of Enclosures

(Mark the related Box)

☐ Vendor's Technical Literature

☐ Compliance Statement

☒ Test Results

☐ Copy of Related Specs.

☐ Samples

☒ List of Previous Projects done

☒ Others (Specify)

Contractor's PM: (Signature & Date)
Engr. Vipul Nathi

Received by BEAD: (Signature & Date)

Contractor's Statement: We certify that the material submitted herewith has been reviewed in detail and in compliance with the Contract drawings and specifications except as otherwise stated here above.

☐ A. Approved

☐ B. Approved As Noted

☐ C. Revise and Resubmit

☐ D. Not Approved, Resubmit

☐ E. Returned Unchecked

☐ F. Incomplete, Resubmit

Engineer's Representative Comments:

Strictly subject to the Comments in the attached sheet.

Engineer's Representative: (Signature & Date)

☐ A. Approved

☐ B. Approved As Noted

☐ C. Revise and Resubmit

☐ D. Not Approved, Resubmit

Employer's Representative Comments:

Employer's Representative: (Signature & Date)

The Engineer's Representative review, comments and approval to the submitted material is for general conformance with the design concept and specifications and shall not relieve the Contractor from responsibility for any deviations from, or errors or omissions in respect of the requirements of the Contract Documents, unless the Contractor has informed the Project Manager in writing of specific deviations and the Project Manager has given written approval thereto and no time and/or cost implication shall be granted due to the Engineer's /PM instruction.



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Project : Construction, Completion & Maintenance of Extreme Marine - Abu Dhabi Branch Workshop and Related Services, Plot No. 101NR26, ICAD III, Abu Dhabi

Material Submittal

Ref. No. : A20-16-J235-MS-101- Rev.01

Date : 30/11/2022

Originator of Submittal : UAE

Required
By :

Material Division / Section : Civil

List of Enclosures

(Tick the related Box)

Specs./BOQ/Drg. Ref. : Specs. 090600

Material Specified : Epoxy Floor Coating works With ral (colour chart)

Material Proposed : Envirocon

Manufacturer / Local Supplier : UAE

Reason for Alternative :

Material Description : Epoxy Floor Coating works With ral (colour chart)

- ☐ Vendor's Technical Literature
- ☐ Compliance Statement
- ☐ Test Results
- ☐ Copy of Related Specs.
- ☐ Samples
- ☐ List of Previous Projects done
- ☒ Others (Specify)

Contractor's PM: (Signature & Date)
Engr. Vipul Hathi

Received by BEAD: (Signature & Date)

Contractor's Statement: We certify that the material(s) submitted herewith has/have been reviewed in detail and in compliance with the Contract drawings and specifications except as otherwise stated here above.

Review Status

☐ A. Approved

☒ B. Approved As Noted

☐ C. Revise and Resubmit

☐ D. Not Approved, Resubmit

☐ E. Returned Unchecked

☐ F. Incomplete, Resubmit

Engineer's Representative Comments:

1. For Epoxy floor coating system the Contractor may provide Mock up with RAL colors 7023, 7033, 7030 and 7032 for Architect's selection/approval.
2. The main entrance, Showroom and Spaces within shall be in Seamless special Concrete Finish coating of minimum 3mm thick.

Engineer's Representative: (Signature & Date)

☐ A. Approved

☐ B. Approved As Noted

☐ C. Revise and Resubmit

☐ D. Not Approved, Resubmit

Employer's Representative Comments:

Employer's Representative: (Signature & Date)

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Bureau of Excellence in Architecture Design



TASCO
ALUMINUM AND GLASS



HADEED
EMIRATES
CONTRACTING

Project : Construction, Completion & Maintenance of Extreme Marine - Abu Dhabi Branch Workshop and Related Services, Plot No. 101NR26, ICAD III, Abu Dhabi

Material Submittal

Ref. No. : A20-16-J235-MS-118- Rev.00

Date : 28/12/2022

Originator of Submittal : UAE

Material Division / Section : Civil

Specs./BOQ/Drg. Ref. :

Material Specified : Wet Area Waterproofing

Material Proposed : Envirocon Eco Products

Manufacturer / Local Supplier : UAE

Reason for Alternative :

Material Description: Wet Area Waterproofing (Cold applied water based Black Bituminous Emulsion)

List of Enclosures

(Tick the related Box)

- ☐ Vendor's Technical Literature
- ☐ Compliance Statement
- ☐ Test Results
- ☐ Copy of Related Specs.
- ☐ Samples
- ☐ List of Previous Projects done
- ☒ Others (Specify)

Contractor's PM: (Signature & Date)

Engr. Vipul Hathi

Received by BEAD: (Signature & Date)

Contractor's Statement: We certify that the material(s) submitted herewith has/have been reviewed in detail and in compliance with the Contract drawings and specifications except as otherwise stated here above.

Review Status

- ☐ A. Approved
- ☒ B. Approved As Noted
- ☐ C. Revise and Resubmit
- ☐ D. Not Approved, Resubmit
- ☐ E. Returned Unchecked
- ☐ F. Incomplete, Resubmit

Engineer's Representative Comments:

1. Strictly subject to follow manufacturer's recommendation for substrate preparation, product mixing, application, interval between each coat etc.
2. As per product technical data sheet, the rate of application shall be 1-1.5m²/liter/coat to have DFT of 500 microns per coat and total 3 coats shall be applied to have the specified thickness of 1.5mm (contractor to confirm).

- ☐ A. Approved
- ☐ B. Approved As Noted
- ☐ C. Revise and Resubmit
- ☐ D. Not Approved, Resubmit

Employer's Representative Comments:

3. The Contractor to verify the WFT during application and required WF gauge shall be provided at site.
4. Applicator shall be an approved/authorized applicator (Contractor to specify & confirm).



The Engineer's Representative review, comments and approval to the submitted material is for general conformance with the design concept and specifications and shall not relieve the Contractor from responsibility for any deviations from, or errors or omissions in respect of the requirements of the Contract Documents, unless the Contractor has informed the Project Manager in writing of specific deviations and the Project Manager has given written approval thereto and no time and/or cost implication shall be granted due to the Engineer's /PM instruction.

5. Draft copy of warranty certificate for a period 10 years (joint warranty by manufacturer + installer) shall be submitted for final approval.



مهندسون استشاريون
BEAD
ARCHITECTS & ENGINEERS



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CONTRACTING**

Project : Construction, Completion & Maintenance of Extreme Marine - Abu Dhabi Branch Workshop and Related Services, Plot No. 101NR26, ICAD III, Abu Dhabi

Material Submittal

Ref. No. : A20-16-J235-MS-118- Rev.00

Date : 28/12/2022

Originator of Submittal : UAE

**Required
By :**

Material Division / Section : Civil

List of Enclosures

(Tick the related Box)

Specs./BOQ/Drg. Ref. :

Material Specified : Wet Area Waterproofing

Material Proposed : Envirocon Eco Products

Manufacturer / Local Supplier : UAE

Reason for Alternative :

Material Description: Wet Area Waterproofing (Cold applied water based Black Bituminous Emulsion)

☐ Vendor's Technical Literature

☐ Compliance Statement

☐ Test Results

☐ Copy of Related Specs.

☐ Samples

☐ List of Previous Projects Done

☒ Others (Specify)

Contractor's PM: (Signature & Date)

Engr. Vipul Hathi

Received by BEAD: (Signature & Date)

Contractor's Statement: We certify that the material(s) submitted herewith has/have been reviewed in detail and in compliance with the Contract drawings and specifications except as otherwise stated here above.

Review Status

☐ A. Approved

☐ B. Approved As Noted

☐ C. Revise and Resubmit

☐ D. Not Approved, Resubmit

☐ E. Returned Unchecked

☐ F. Incomplete, Resubmit

Engineer's Representative Comments:

Engineer's Representative: (Signature & Date)

☐ A. Approved

☐ B. Approved As Noted

☐ C. Revise and Resubmit

☐ D. Not Approved, Resubmit

Employer's Representative Comments:

Employer's Representative: (Signature & Date)

The Engineer's Representative review, comments and approval to the submitted material is for general conformance with the design concept and specifications and shall not relieve the Contractor from responsibility for any deviations from, or errors or omissions in respect of the requirements of the Contract Documents, unless the Contractor has informed the Project Manager in writing of specific deviations and the Project Manager has given written approval thereto and no time and/or cost implication shall be granted due to the Engineer's /PM instruction.

Bureau of Excellence in Architecture Design

NASS

KEO

SITE TRANSMITTAL of Shop Drawings, Materials, etc.

TRANSMITTAL NO : 110253-MAR / G.1.1.2 / 32

REV : 00

To: KEO International Consultants

PROJECT	DIV/PACKAGE	OWNER	CONTRACTOR
NAJMAT MARINA PEDESTRIAN BRIDGE	12-7660	REEM DEVELOPERS	NASS CONTRACTING

WE ARE SENDING HERewith THE DRAWINGS / DOCUMENTS / SAMPLES LISTED BELOW
FOR YOUR REVIEW.

ITEM NO.	DRW., SPEC. OR BOQ. REF	GENERAL DESCRIPTION AND REVISION DETAILS	TYPE (i)	COPIES	ACTION CODE (ii)
01	7660-SD-G-RPT- Material Sample Submittal of Repair Material for 010-REV3	Precast Beams : 110253-MAR/G.1.4.1/010 Rev. 00	SM	01	B

We certify that the items submitted herewith have been reviewed in detail and are in strict conformance with the Contract Drawings and Specifications except as otherwise stated.

CONTRACTOR :

DATE:

29-Mar-2016

RECEIVED BY KEO :

DATE:

KEO'S REMARKS :

- 1) All affected areas (either honey combed or damaged) to be inspected by the Engineer prior to start any repair works.
- 2) Method Statement to be submitted for approval.
- 3) Conc. repair works should match with the other concrete.
- 4) Strict compliance to the manufacturer's instructions should be taken while application and curing operations.

Corrections or comments made relative to submittals during this review does not relieve the contractor from compliance with the requirements of his Contract, drawings and specifications. This review is only in respect of general conformance with the design intent of the project and general compliance with the information given in the Contract documents. The contractor remains responsible, among other things, for the design of the project or such parts of the project he has design responsibility for (if design forms part of the Contract), 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, all in accordance with the Contract.

23 MAY 2016

KEO CM / RE

M. Suleman Talwar

RECEIVED BY CONTRACTOR :

DATE:

29.05.2016

DATE:

(i) TYPE: SD: Shop Drawings

SM: Sample

GT: Guarantee

MD: Manufacturer's Data

CT: Certificates

OT: Others

(ii) ACTION CODE:

A: No objection

☒ B: No objection subject to incorporation of all comments as noted

C: Rejected, to be resubmitted

13.2.2017

To Whom It May Concern

Subject: Company Registration

We inform you that the “Envirocon” company for construction products is listed in our company “Firas Engineering Consultant”.

Regards,



Firas Engineering Consultant

15 JAN 2020

Your Reference
CGC-C037-AS-397/20

Our Reference
60609052-ACM-AK-LT-KK-100387-
AAN

Project Manager,
Combined Group Contracting Co.
P.O.Box: 112364
Tel: +971 26121999
Fax: +971 26121900

Attn.Mr.Amjad Salameh-Project
Manager,

Project : Extension of Al Wathba Fish Production Farm-Stage 1
Subject : Material Submittal for Epoxy Flooring and Tanking - Rev.1.

Dear Sir,

We refer to your letter ref. CGC-C037-AS-397/20 Dated 06 January 2020 regarding the Material Submittal for Epoxy Flooring and Tanking - Rev.1 we have reviewed the above subject and found acceptable subject to the following comment.

1. Based on the latest results the proposed material found acceptable to be used for the floor slabs and upstands at Fish and Prawn facilities.
2. Seal coat (4-6 mm thick) may not require since the poly carbonate roof replaced by sandwich panel, Engineer reserve the right of cost saving pertaining to subject item.
3. Approved subject to conformance with Contract Document and local authority regulation.
4. For the internal surface of the tanks, the Contractor to propose GRP lining system as per the Fish Farm specialist requirements.

Hence we return the above subject Material Submittal for Epoxy Flooring and Tanking - Rev.1 with "Code B" subject to the above comment.

Yours faithfully,



Khalid Khan
Resident Engineer
AECOM Middle East Limited
E: Khalid.Khan@aecom.com

Material Submittal

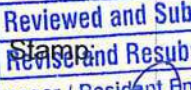
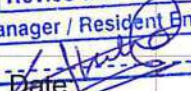
Project Name: Extension of Al Wathba Fish Production Farm (Phase I)		Subject: Material Submittal for epoxy flooring and tanking	
Client: Emirates Fish Farm Company	Contractor: Combined Group Contracting Co.	Project No.: C-037	
Consultant: AECOM Middle East Ltd	Manufacturer & Supplier :M/s Envirocon construction products llc	Ref. No.: C037/MAR/63 <i>Rev. 1</i>	
Location: Fish facility and prawn facility buildings			Date: 5/01/2020

References					Attachments
Drwg.	B.O.Q.	Specs	List of Manuf.	Others *	
	Attached	Attached			- - -

Material Submittal:
Material Submittal for epoxy flooring and tanking

Contractor	
Name:	
Signature:	
Stamp:	
Date:	

Manufacturer / Supplier: M/s Envirocon construction products llc

Consultant's Approval / Comments: <i>Ref to attached letter for comments.</i>	Consultant	
	AECOM Middle East Ltd. Project No. 60609052 Signature:  ☐ A Reviewed ☒ B Reviewed and Subject to Condition ☐ C Stamp and Resubmit Project Manager / Resident Engineer Signature:  Date: 15/01/20	

(Approval does not relieve the Contractor of his contractual obligations and responsibilities)

RECEIVED	Contractor's Signature: 			Stamp
	Hour:	Day:	Date: 15/1/2020	

*: Addendum, General Conditions, Contract

CONCRETE MIX DESIGN

Project	CMW 15119-C012 - VARIOUS CONSTRUCTIONS FOR AIR FORCE & AIR DEFENSE IN REMAH	Date	6/11/2021
Client	M/s. CMW	Mix Code	RMC/146/2021
Consultant	M/s. CMW	Rev.	0
Contractor	M/s. Nael General Contracting L.L.C.		
Mix Description	OPC C40/20N/mm ² (Superstructure)		
Characteristic Strength 150mm cube at 28days)	40 N/mm2	Target Slump on arrival at site	125 ± 25mm
W/C ratio	0.375	Estimated Density (kg/m3)	2493
Total Cementitious Material (kg/m3)	400	Maximum Concrete Temperature	32°C (28°C)
Total Aggregate (kg/m3)	1930		

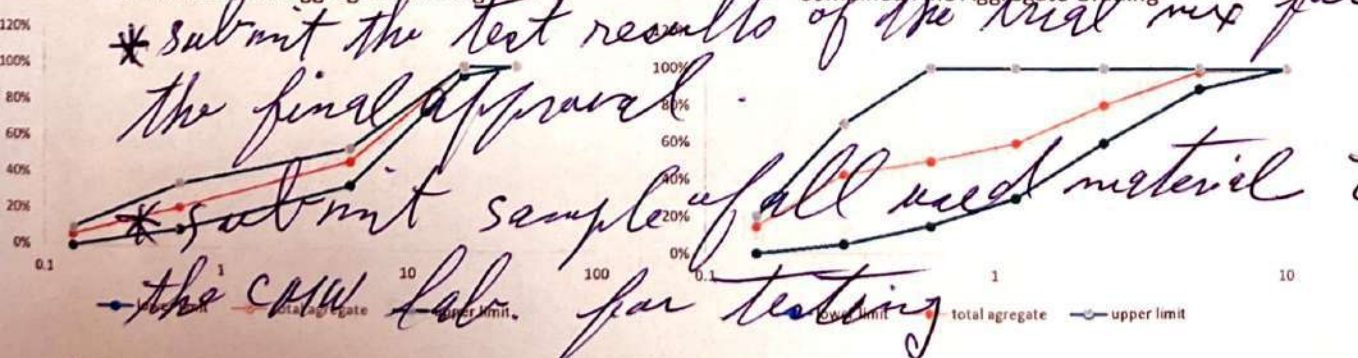
Material	Weight (kg/m3)	SG	Volume Ltr	Absorption %	Break Down %	Source	Durability Parameters	
Cement OPC	400	3.15	127		100	NCF	RCPT (Coulombs)	NA
							Water Absorption	NA
							Water Permeability	NA
Free Water	160	1.00	160			ADWEA	ISAT	NA
10mm Crushed	670	2.87	233	0.5	35	Al Buraimi Crusher		
20mm Crushed	400	2.85	140	0.7	21	Al Buraimi Crusher		
5mm Crushed wash	520	2.75	189	0.8	27	Stevin Rock	Chloride Content (% by wt of Cement)	0.104
une Sand Natural	340	2.64	129	1	18	Al Ain	Sulphate Content (% by wt of Cement)	2.861
Spectra 250N	2.16 to 8.64	1.08	2.0			Envirocon		
D 10	0.6 to 3	1.15	0.5			BASF		
ir			19					
total	2493		1000					

Sieve Analysis and Combined Grading

Sieve (mm)	Coarse		Fine		Combined Grading					
	20mm	10mm	5mm	DS	Total Aggregates	Lower Limit	Upper limit	Fines	Lower Limit	Upper limit
37.5	100%	100%	100%	100%	100%	100%	100%	100.0%		
20	98%	100%	100%	100%	99%	95%	100%	100.0%		
14	44%	100%	100%	100%	80.6%			100.0%		
10	23%	91%	100%	100%	71.4%			100.0%		
5	4%	14%	97%	100%	48.0%	35%	55%	98.2%	89%	100%
2.36	1%	1%	67%	100%	36.2%			80.0%	60%	100%
1.18			33%	100%	26.5%			59.5%	30%	100%
0.6			17%	100%	22.2%	10%	35%	45.8%	15%	100%
0.3			11%	91%	19.0%			42.6%	5%	70%
0.15			5%	29%	6.5%	0%	10%	14.5%	0%	20%
Fines B.down			60%	40%						
total B.Down	35%	21%	27%	18%						
	55%		45%							

Combined Total Aggregate Grading

Combined Fine Aggregate Grading



Note: Any unauthorised changes made to the concrete mix by a third party will render our guarantee null & void. Admixture may be added at site in order to maintain workability critical for placing. Admixture will be used in accordance with the manufacturers recommendations. Ice will be added to the mix as a part of total free water in order to control temperature of the mix, if required. Making, curing and testing of specimens shall be accordance with BS/BSEN/ASTM standards.



4465

QA/QC Department

NCP - A one stop shop for all Concrete Requirements

All Types of Masonry Blocks • Interlocking Pavers • Kerb Stones • Pre-stressed Hollow Core Slabs
st Wall Panels & Facades • Boundary Walls • Ready Mix Concrete • GRC/GRP/GRG Products • Cement



CONCRETE MIX DESIGN

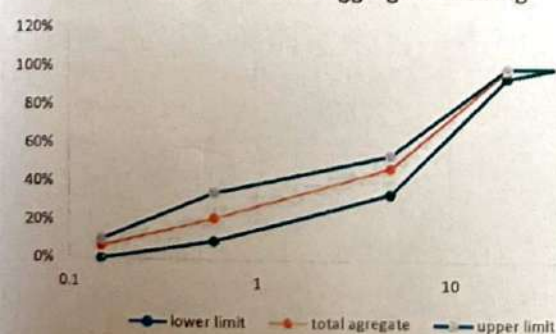
Project	CMW 15119-C012 - VARIOUS CONSTRUCTIONS FOR AIR FORCE & AIR DEFENSE IN REMAH	Date	6/11/2021
Client	M/s. CMW	Mix Code	RMC/145/2021
Consultant	M/s. CMW	Rev.	0
Contractor	M/s. Nael General Contracting L.L.C.		
Mix Description	MSRC +GGBS(50%) C40/20N/mm ² (Reinforced Concrete)		
Characteristic Strength (150mm cube at 28days)	40 N/mm ²	Target Slump on arrival at site	150 ± 25 200 ± 40mm
W/C ratio	0.38	Estimated Density (kg/m ³)	2495
Total Cementitious Material (kg/m ³)	410	Maximum Concrete Temperature	32°C (28°C)
Total Aggregate (kg/m ³)	1940		

Material	Weight (kg/m ³)	SG	Volume Ltr	Absorption %	Break Down %	Source	Durability Parameters	
Cement MSRC	205	3.15	63		50	Star Cement	RCPT (Coulombs)	NA
GGBS	205	2.82	71		50	Super Cement	Water Absorption	NA
							Water Permeability	NA
Free Water	152	1.00	152			ADWEA	ISAT	NA
20mm Crushed	670	2.87	233	0.5	35	Al Buraimi Crusher		
10mm Crushed	400	2.85	140	0.7	21	Al Buraimi Crusher		
0-5mm Crushed wash	540	2.75	196	0.8	28	Stevin Rock	Chloride Content (% by wt of Cement)	0.075
Dune Sand Natural	330	2.64	125	1	17	Al Ain		
Spectra 250N	2.16 to 8.64	1.08	2.0			Envirocon	Sulphate Content (% by wt of Cement)	1.808
L D 10	0.6 to 3	1.15	0.5			BASF		
Air			16					
Total	2495		1000					

Sieve Analysis and Combined Grading

Sieve (mm)	Coarse		Fine		Combined Grading					
	20mm	10mm	5mm	DS	Total Aggregates	Lower Limit	Upper limit	Fines	Lower Limit	Upper limit
37.5	100%	100%	100%	100%	100%	100%	100%	100.0%		
20	98%	100%	100%	100%	99%	95%	100%	100.0%		
14	44%	100%	100%	100%	80.7%			100.0%		
10	23%	91%	100%	100%	71.6%			100.0%	100%	100%
5	4%	14%	97%	100%	48.3%	35%	55%	98.1%	89%	100%
2.36	1%	1%	67%	100%	36.2%			79.5%	60%	100%
1.18			33%	100%	26.2%			58.4%	30%	100%
0.6			17%	100%	21.7%	10%	35%	48.5%	15%	100%
0.3			11%	91%	18.5%			41.3%	5%	70%
0.15			5%	29%	6.3%	0%	10%	14.1%	0%	20%
Fines B.down			62%	38%						
Total B.Down	35%	21%	28%	17%						
	55%		45%							

Combined Total Aggregate Grading



Combined Fine Aggregate Grading



Note: Any unauthorised changes made to the concrete mix by a third party will render our guarantee null & void. Admixture may be added at site in order to maintain workability critical for placing. Admixture will be used in accordance with the manufacturers recommendations. Ice will be added to the mix as a part of total free water in order to control temperature of the mix, if required. Making, curing and testing of specimens shall be accordance with BS/BSEN/ASTM standards.

4464

QA/QC Department

QA/QC Manager
Nael Cement Products

NCP - A one stop shop for all Concrete Requirements

• All Types of Masonry Blocks • Interlocking Pavers • Kerb Stones • Pre-stressed Hollow Core Slabs
• Pre-cast Wall Panels & Facades • Boundary Walls • Ready Mix Concrete • GRC/GRP/GRG Products • Cement



CONCRETE MIX DESIGN

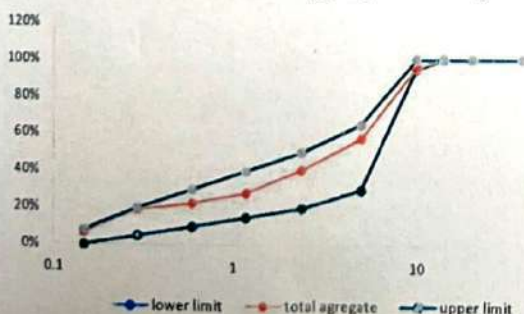
Project	CMW 15119-C012 - VARIOUS CONSTRUCTIONS FOR AIR FORCE & AIR DEFENSE IN REMAH	Date	6/11/2021
Client	M/s. CMW	Mix Code	RMC/147/2021
Consultant	M/s. CMW	Rev.	0
Contractor	M/s. Nael General Contracting L.L.C.		
Mix Description	OPC C40/10N/mm ² (Roof Sced)		
Characteristic Strength (150mm cube at 28days)	40 N/mm ²	Target Slump on arrival at site	125 ± 25mm
W/C ratio	0.4	Estimated Density (kg/m ³)	2493
Total Cementitious Material (kg/m ³)	400	Maximum Concrete Temperature	32°C
Total Aggregate (kg/m ³)	1930		

Material	Weight (kg/m ³)	SG	Volume Ltr	Absorption %	Break Down %	Source	Durability Parameters	
Cement OPC	400	3.15	127		100	NCF	RCPT	NA
							Water Absorption	NA
							Water Permeability	NA
Free Water	160	1.00	160			ADWEA	ISAT	NA
10mm Crushed	988	2.85	326	0.7	48	Al Buraimi Crusher		
0-5mm Crushed wash	686	2.75	247	0.8	35	Stevin Rock	Chloride Content (% by wt of Cement)	0.108
Dune Sand Natural	320	2.64	121	1	17	Al Ain	Sulphate Content (% by wt of Cement)	2.838
Spectra 250	2.16 to 8.64	1.08	2.0			Envirocon		
LD 10	0.6 to 2.4	1.20	0.5			BASF		
Air			16					
Total	2493		1000					

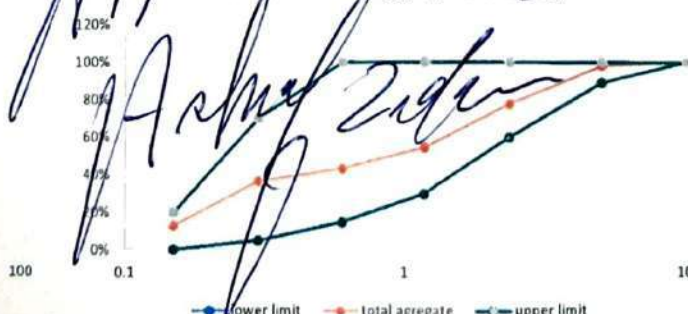
Sieve Analysis and Combined Grading

Sieve (mm)	Coarse	Fine		Combined Grading					
	10mm	5mm	DS	Total Aggregates	Lower Limit	Upper limit	Fines	Lower Limit	Upper limit
37.5	100%	100%	100%	100%	100%	100%	100%		
20	100%	100%	100%	100%	100%	100%	100%		
14	100%	100%	100%	100%	100%	100%	100%		
10	91%	100%	100%	96%	95%	100%	100%	100%	100%
5	14%	97%	100%	58%	30%	65%	98%	89%	100%
2.36	1.0%	67%	100%	41%	20%	50%	78%	60%	100%
1.18	0.0%	33%	100%	28%	15%	40%	54%	30%	100%
0.6	0.0%	17%	100%	23%	10%	30%	44%	15%	100%
0.3	0.0%	11%	91%	19%	5%	20%	37%	5%	70%
0.15	0.0%	5%	29%	7%	0%	8%	13%	0%	20%
Fines B.down		68%	32%						
Total B.Down	48%	35%	17%						
	48%	52%							

Combined Total Aggregate Grading



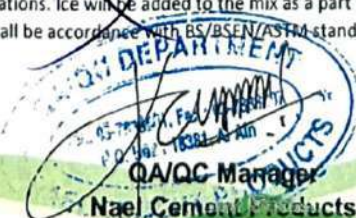
Combined Fine Aggregate Grading



Note: Any unauthorised changes made to the concrete mix by a third party will render our guarantee null & void. Admixture may be added at site in order to maintain workability critical for placing. Admixture will be used in accordance with the manufacturers recommendations. Ice will be added to the mix as a part of total free water in order to control temperature of the mix, if required. Making, curing and testing of specimens shall be accordance with BS/BSEN/ASTM standards.

4468

QA/QC Department



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CONCRETE MIX DESIGN

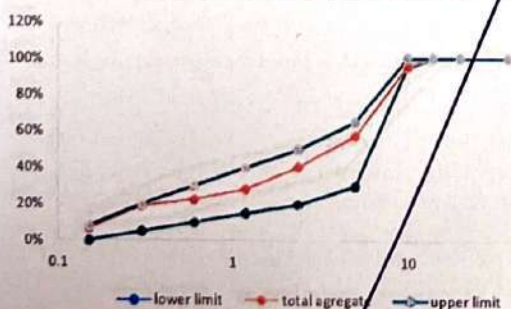
Project	CMW 15119-C012 - VARIOUS CONSTRUCTIONS FOR AIR FORCE & AIR DEFENSE IN REMAH	Date	6/11/2021
Client	M/s. CMW	Mix Code	RMC/148/2021
Consultant	M/s. CMW	Rev.	0
Contractor	M/s. Nael General Contracting L.L.C.		
Mix Description	MSRC C40/10N/mm ² (Screed)		
Characteristic Strength (150mm cube at 28days)	40 N/mm ²	Target Slump on arrival at site	125 ± 25mm
W/C ratio	0.4	Estimated Density (kg/m ³)	2494
Total Cementitious Material (kg/m ³)	400	Maximum Concrete Temperature	32°C
Total Aggregate (kg/m ³)	1930		

Material	Weight (kg/m ³)	SG	Volume (Ltr)	Absorption (%)	Break Down (%)	Source	Durability Parameters	
Cement MSRC	400	3.15	127		100	Star Cement	RCPT	NA
							Water Absorption	NA
							Water Permeability	NA
Free Water	160	1.00	160			ADWEA	ISAT	NA
10mm Crushed	930	2.85	326	0.7	48	Al Buraimi Crusher		
0-5mm Crushed wash	680	2.75	247	0.8	35	Stevin Rock	Chloride Content (% by wt of Cement)	0.078
Dune Sand Natural	320	2.64	121	1	17	Al Ain		
Spectra 250	3.24 to 7.02	1.08	3.0			Envirocon	Sulphate Content (% by wt of Cement)	2.908
L D 10	0.6 to 2.4	1.20	0.5			BASF		
Air			15					
Total	2494		1000					

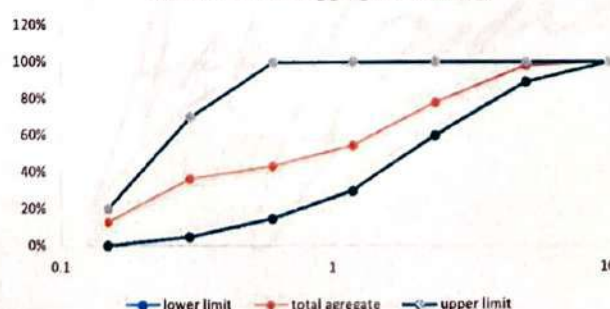
Sieve Analysis and Combined Grading

Sieve (mm)	Coarse	Fine	Total Aggregates	Lower Limit	Upper limit	Fines	Lower Limit	Upper limit
	10mm	5mm	DS					
37.5	100%	100%	100%	100%	100%	100%		
20	100%	100%	100%	100%	100%	100%		
14	100%	100%	100%	100%	100%	100%		
10	91%	100%	96%	95%	100%	100%	100%	100%
5	14%	97%	58%	30%	65%	98%	89%	100%
2.36	1.0%	67%	41%	20%	50%	78%	60%	100%
1.18	0.0%	33%	28%	15%	40%	54%	30%	100%
0.6	0.0%	17%	23%	10%	30%	44%	15%	100%
0.3	0.0%	11%	19%	5%	20%	37%	5%	70%
0.15	0.0%	5%	29%	0%	8%	13%	0%	20%
Fines B.down		68%	32%					
Total B.Down	48%	35%	17%					
	48%	52%						

Combined Total Aggregate Grading



Combined Fine Aggregate Grading



Note: Any unauthorised changes made to the concrete mix by a third party will render our guarantee null & void. Admixture may be added at site in order to maintain workability critical for placing. Admixture will be used in accordance with the manufacturer's recommendations. Ice will be added to the mix as a part of total free water in order to control temperature of the mix, if required. Making, curing and testing of specimens shall be accordance with BS EN 12390 standards.

A/ 4467

QA/QC Department

QA/QC Manager
Nael Cement Products

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QA/QC/001



CONCRETE MIX DESIGN

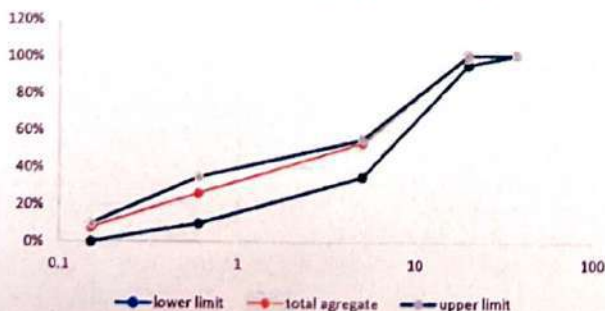
Project	CMW 15119-C012 - VARIOUS CONSTRUCTIONS FOR AIR FORCE & AIR DEFENSE IN REMAH	Date	6/11/2021
Client	M/s. CMW	Mix Code	RMC/144/2021
Consultant	M/s. CMW	Rev.	0
Contractor	M/s. Nael General Contracting L.L.C.		
Mix Description	MSRC C21/20N/mm ² (Blinding)		
Characteristic Strength (150mm cube at 28days)	21 N/mm ²	Target Slump on arrival at site	125 ± 25mm
W/C ratio	0.45	Estimated Density (kg/m ³)	2527
Total Cementitious Material (kg/m ³)	300	Maximum Concrete Temperature	22°C
Total Aggregate (kg/m ³)	2090		

Material	Weight (kg/m ³)	SG	Volume Ltr	Absorption %	Break Down %	Source	Durability Parameters	
Cement MSRC	300	3.15	95		100	Star Cement Factory	RCPT	NA
							Water Absorption	NA
							Water Permeability	NA
Free Water	135	1.00	135			ADWEA	ISAT	NA
20mm Crushed	620	2.87	216	0.5	30	Al Buraimi Crusher		
10mm Crushed	430	2.85	151	0.7	21	Al Buraimi Crusher		
0-5mm Crushed wash	590	2.75	215	0.8	28	Stevin Rock		
Dune Sand Natural	450	2.64	170	1	22	Al Ain	Chloride Content (% by wt of Cement)	0.103
Spectra 250N	1.62 to 6.48	1.08	1.5			Envirocon	Sulphate Content (% by wt of Cement)	3.122
						BASF		
Air			16					
Total	2527		1000					

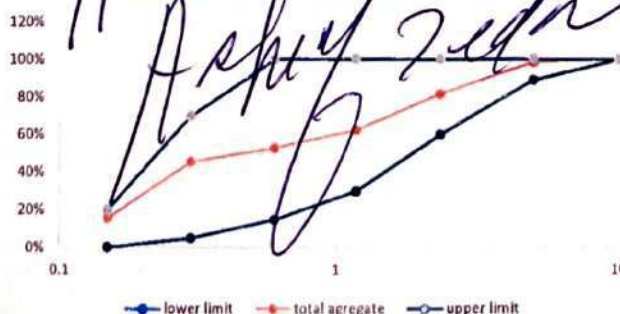
Sieve Analysis and Combined Grading

Sieve (mm)	Coarse		Fine		Combined Grading					
	20mm	10mm	5mm	DS	Total Aggregates	Lower Limit	Upper limit	Fines	Lower Limit	Upper limit
37.5	100%	100%	100%	100%	100%	100%	100%	100.0%		
20	98%	100%	100%	100%	99.4%	95%	100%	100.0%		
14	44%	100%	100%	100%	83.4%			100.0%		
10	23%	91%	100%	100%	75.3%			100.0%	100%	100%
5	4%	14%	97%	100%	53.0%	35%	55%	98.3%	89%	100%
2.36	1%	1%	67%	100%	40.9%			81.3%	60%	100%
1.18			33%	100%	30.8%			62.0%	30%	100%
0.6			17%	100%	26.3%	10%	35%	52.9%	15%	100%
0.3			11%	91%	22.7%			45.6%	5%	70%
0.15			5%	29%	7.7%	0%	10%	15.4%	0%	20%
Fines B.down			57%	43%						
Total B.Down	30%	21%	28%	22%						
	50%		50%							

Combined Total Aggregate Grading



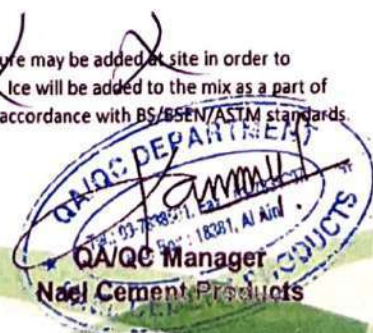
Combined Fine Aggregate Grading



Note: Any unauthorised changes made to the concrete mix by a third party will render our guarantee null & void. Admixture may be added at site in order to maintain workability critical for placing. Admixture will be used in accordance with the manufacturers recommendations. Ice will be added to the mix as a part of total free water in order to control temperature of the mix, if required. Making, curing and testing of specimens shall be accordance with BS/BSEN/ASTM standards.

4466

QA/QC Department



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The Contractor certifies that all information issued under this Submittal have been reviewed and verified and found to be in compliance with the Contract documents unless ticked as "Alternative" above with explaining the reason of replacing the contractual Materials. * To be filled by the FINAL Reviewer ONLY using the key Code below

NC-912
W-15119-C012

SUBMITTAL R
Site Engineer

- لا مانع من إعطاء توصيات الخيارات حسب الملاحظات المذكورة وبما لا يتعارض مع (1) الالتزام بجميع المبادئ والسياسة العامة (2) بدون أي إغلاقات زمنية أو مكانية (3) قمع عن جميع أفراد الشركة إلى صفحة الاستقبال، التفكير للتأكد من عدم مخالفة حالة العراجعة (من خلال آخر الملاحظات المذكورة)

موافق مع الملاحظات موافق مع الملاحظات موافق مع الملاحظات موافق مع الملاحظات

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C. C.

ختم الإسلام
Receiver
31-MTS-REV 02-130
2008 STAMP
RC 912
MW-15119-C012

UNITED ARAB EMIRATES
MINISTRY OF DEFENCE



الإمارات العربية المتحدة
وزارة الدفاع

شهادة تسجيل مورد



إسم الشركة / المؤسسة	مصنع انفيروكون لمواد البناء ذ م م
رقم المنشأة	أبوظبي/155675
رقم التسجيل	2023/1389
التصنيف	• صناعة الاضافات المحضرة للأسمنت • خدمات حقول ومنشآت النفط و الغاز البرية و البحرية
تاريخ نهاية الصلاحية	2024/03/20

Any later alteration to this certificate will render it **invalid**

تعتبر هذه الشهادة **لاغية** في حال وجود شطب أو تغيير

	Reference No رقم المرجع DDS Z 006	UAE ARMED FORCES COMMAND OF MILITARY WORKS		القوات المسلحة لدولة الإمارات العربية المتحدة قيادة الأشغال العسكرية	
	Rev الطبعة 00	Date التاريخ 26-Dec-19	طلب اعتماد وثائق DOCUMENTS SUBMITTAL		
CMW-2019-N019-DDS-Z-006		Full	مرجع الوثيقة الكامل Document Reference	N019 - 2019	رقم العقد Contract No
Construction of Food Storage Building in Al Ain					إسم العقد Contract Name
Command of Military Works		To إلى	ULTRAMAX GEN. CONTRACTING		من
Mix Design		SUBMITTAL TITLE عنوان التقديم			
All	منطقة Zone	All	مستوى الطابق F. Level	All	المنشأة Facility
بوابة Gateway	CSI ID		WBS ID	Document	التخصص Discipline
الحالة Status	Document Description	وصف الوثيقة	Rev الطبعة	Document Number	رقم الوثيقة Ser رقم
	Mix Design		0	Nael Ready Mix	1
					2
					3
					4
مرفق: يوجد قرص مدمج ☐ لا ☐ نعم ☐ وصف المحتوى: يجب على المصير أن يشهد بأن كل المعلومات التي أصدرت تحت هذا التقديم قد تم التحقق منها ووجدت مطابقة مع وثائق العقد. The Issuer certifies that all information issued under this Submittal have been verified and found to be in compliance with the Contract documents. * To be filled by the FINAL Reviewer ONLY using the key Code below تم مراجعة وموافقة المصدر ☐ REVIEWED & APPROVED BY CONTRACTOR التاريخ DATE Engr. Alhendhi Mosa 26-Dec-19					
SUBMITTAL REVIEW & COMMENTS Site Engineer / Consultant Site Engineer forward to CMW structured reissue 8 Appr 19-12-2019 التوقيع Signature الاسم Name Engr. Rym					
INFORMATION TECHNOLOGY (I.T.) SECTION تم إدخال القرص من قبل الحاسب الآلي: قسم الحاسب الآلي الاسم Name التوقيع Signature Date					
Specialist Engineer / Specialist Committee المهندس المختص / اللجنة المختصة لا مانع من العمل بموجب الخطط الخرسانية المصممة بالرفقة بعد عمل الملاحظات والتعديلات الموضحة عليها وعند خلوها من ملاحظات واعتمادها من قبل الأشغال العسكرية. اعتماد السيد العام 002 بتاريخ 19/11/19 = D ☐ مرفوض REJECTED = B ☐ تراجع وبعاد تقديم C = REVISED & RESUBMIT = A ☐ موافق مع الملاحظات NO OBJECTION - AS NOTED = = ☐ موافق NO OBJECTION = التاريخ Date التوقيع Signature الاسم Name Engr. Mosa					
RECEIVED BY THE ISSUER ختم الإصدار Receiver STAMP التاريخ Date 13-01-20 التوقيع Signature الاسم Name Engr. Mosa					

NAEEL CEMENT PRODUCT FACTORY

P. O. Box : 18381

Al Ain, United Arab Emirates

Tel. : +971 3 7838501 / 7838031

Fax : +971 3 7838007 / 7838907

E-mail : ncp@eim.ae



www.ncpuae.com

مصنع نابل للمنتجات الاسمنتية

ص.ب : 18381

العين - الامارات العربية المتحدة

تلفون : +971 3 7838501 / 7838031

فكس : +971 3 7838007 / 7838907

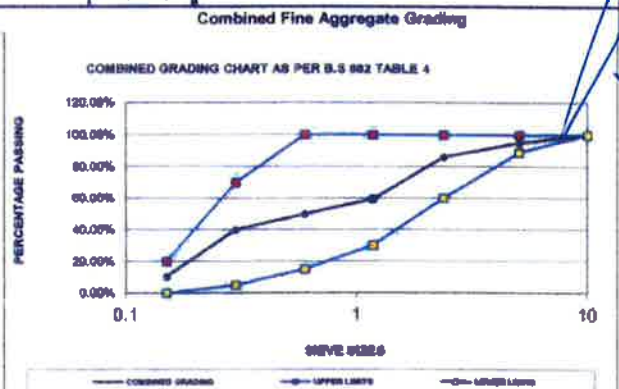
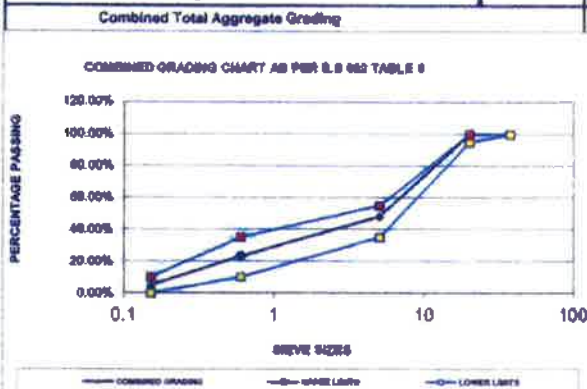
البريد الإلكتروني: ncp@eim.ae

Date : 24-Dec-19

Sub struct

Project	CMW-2019-N 019 Food Storage Building, Al Ain
Client	M/s. CMW
Contractor	M/s. Ultra Max General Contracting

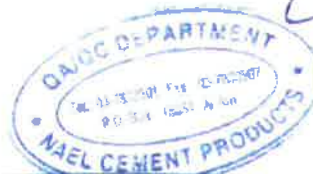
Concrete Mix Design (Piling)		Characteristic Cube Compressive Strength Req'd. @ 28 Days, 40N/mm ²					
Mix Ingredients	Source	Weight ³ Kg	Sp.Qty. SSD	Volum ³ Litres	Mix Breakdown		Ratio
MSRC	Sharjah Cement Factory	200	3.15	63.5	20mm	29.4%	Free Wat./Cem. 0.38 App./Cem. 4.6
GGPS	Super Cement	280	2.87	89.7	10mm	33.3%	
					0-8mm	28.8%	
Free Water	AADC (Potable Water)	152	1	152.0	Dune	16.8%	
Absorption		15					
Total Water in the Mix		167			Coarse		Dust Content
20mm Cr. Aggregate	Al Buraimi Crusher - Oman	400	2.93	138.6	20mm	36.1%	Coarse
10mm Cr. Aggregate	Al Buraimi Crusher - Oman	650	2.89	234.9	10mm	61.8%	
0-6mm Cr. Washed Sand	Al Buraimi Crusher - Oman	580	2.83	204.9			Fine agg.
Dune Sand	Al Ain	390	2.64	125.2			
Admixture - Pozzolith LD 18	BASF - Dubai	1.20	1.20	1.8	0-8mm	63.7%	
Admixture - Spectro-350N / Equivalent	BASF / Emvirocon	6.5	1.88	6.9	Dune	36.3%	
Air Voids				19.4			
Fresh Concrete Density		2518		1008.0	Slump on arrival @ site : 200 ± 40mm		



SIEVE	Coarse		Fine		Combined Grading		All in Limits		Fine Limits	
SIZE	20mm	10mm	0-6mm	D.SAND	Total	Fine	Upper	Lower	Upper	Lower
37.5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.00%	100.00%		
20	99.0%	100.0%	100.0%	100.0%	99.0%	100.0%	100.00%	95.00%		
14	88.0%	100.0%	100.0%	100.0%	91.4%	100.0%				
10	1.0%	87.0%	100.0%	100.0%	78.0%	100.0%			100.00%	100.00%
5	0.0%	12.0%	82.0%	100.0%	48.0%	94.9%	88.00%	35.00%	100.00%	89.00%
2.36	0.0%	1.0%	78.0%	100.0%	40.3%	86.0%			100.00%	80.00%
1.18	0.0%	0.0%	38.0%	100.0%	27.5%	59.2%			100.00%	30.00%
0.6	0.0%	0.0%	21.0%	100.0%	23.1%	49.6%	35.00%	10.00%	100.00%	15.00%
0.3	0.0%	0.0%	10.0%	88.0%	18.0%	39.7%			76.00%	5.00%
0.15	0.0%	0.0%	4.0%	21.0%	4.7%	10.2%	18.00%	0.00%	28.00%	0.00%
	54%		60%				SS 882-92 Table 5		SS 882-92 Table 4	

Note: The dosage of Admixture will be adjusted to meet the site workability requirements, but strictly within the manufacturer's limit.

QA/QC Manager
Nael Cement Products



NCP/QA/ 1446

QA/QC Department

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 E-mail : ncp@alm.ae



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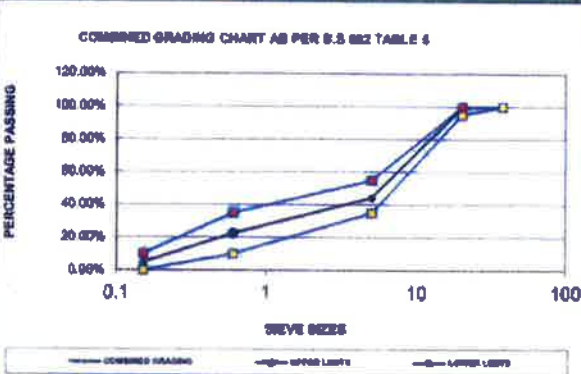
ص.ب : ١٨٣٨١
 العين - الإمارات العربية المتحدة
 تليفون : +٩٧١ ٣ ٧٨٣٨٥٠١ / ٧٨٣٨٠٣١
 فاكس : +٩٧١ ٣ ٧٨٣٨٠٩٧ / ٧٨٣٨٩٠٧
 البريد الإلكتروني : ncp@alm.ae

Date : 24-Dec-19

Super concrete

Project	CMW-2019-N 019 Food Storage Building, Al Ain
Client	M/s. CMW
Contractor	M/s. Ultra Max General Contracting

CONCRETE GRADE : OPC C40/20N/mm ²							
Concrete Mix Design		Characteristic Cube Compressive Strength Read. @ 28 Days, 40%mm ³					
Mix Ingredients	Source	Weight/m ³ kg / m ³	Sp.Qty. SSD	Volume/m ³ L / m ³	Mix Breakdown		Ratios
OPC	Nael Cement Factory	400	3.18	127.0	20mm	35.4%	Free
					10mm	28.7%	Wat./Cem.
					0-5mm	27.3%	Agg./Cem.
					Dune	18.7%	0.38
Free Water	AADC (Potable Water)	152	1	152.0			5.8
Absorption		14					
Total Water in the Mix		166					
20mm Gr. Aggregate	Al Buraimi Crusher - Oman	788	2.93	238.9	Coarse		Dust Content
10mm Gr. Aggregate	Al Buraimi Crusher - Oman	478	2.89	141.9	20mm	63.1%	Coarse
0-5mm Gr. Washed Sand	Al Buraimi Crusher - Oman	848	2.83	198.8	10mm	38.9%	0.1%
Dune Sand	Al Ain	330	2.84	228.8			Fine agg.
Admixture - Pozzolith LD 10	BASF - Dubai	1.26	1.20	1.0	Fine		0.7%
Admixture - Spectra 250N / Equivalent	BASF / Envirocon	6.5	1.88	6.8	0-5mm	88.1%	
					Dune	37.8%	
Air Voids				18.4			
Fresh Concrete Density		2638		1000.0			Slump on arrival @ site : 125 ± 25 mm
Combined Total Aggregate Grading				Combined Fine Aggregate Grading			



SIZE	Coarse	10mm	0-5mm	D.SAND	Total	Fine	Upper	Lower	Upper	Lower
37.5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.00%	100.00%		
20	98.0%	100.0%	100.0%	100.0%	98.0%	100.0%	100.00%	95.00%		
14	88.0%	100.0%	100.0%	100.0%	88.0%	100.0%				
10	1.0%	97.0%	100.0%	100.0%	84.0%	100.0%			100.00%	100.00%
5	0.0%	12.0%	88.0%	100.0%	64.0%	95.0%	55.00%	35.00%	100.00%	89.00%
2.36	0.0%	1.0%	78.0%	100.0%	38.1%	86.3%			100.00%	80.00%
1.18	0.0%	0.0%	36.0%	100.0%	28.0%	60.3%			100.00%	30.00%
0.6	0.0%	0.0%	21.0%	100.0%	22.4%	51.0%	35.00%	10.00%	100.00%	10.00%
0.3	0.0%	0.0%	18.0%	100.0%	18.1%	41.1%			70.00%	5.00%
0.15	0.0%	0.0%	4.0%	21.0%	4.0%	10.4%	10.00%	0.00%	20.00%	0.00%
	56%		44%				BS 882-82 Table 5		BS 882-82 Table 4	

Note : The dosage of Admixture will be adjusted to meet the site workability requirements, but strictly within the manufacturer's limit.



QA/QC Manager
 Nael Cement Products

NCP/QA/ 1371

QA/QC Department

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 PAF/NC/QC/001



NAYEL CEMENT PRODUCT FACTORY

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www.ncpuae.com

مصنع نائل للمنتجات الاسمنتية

ص.ب : ١٨٣٨١

لعين - الإمارات العربية المتحدة

تلفون : +٩٧١ ٣ ٧٨٣٨٥٠١ / ٧٨٣٨٠٣١

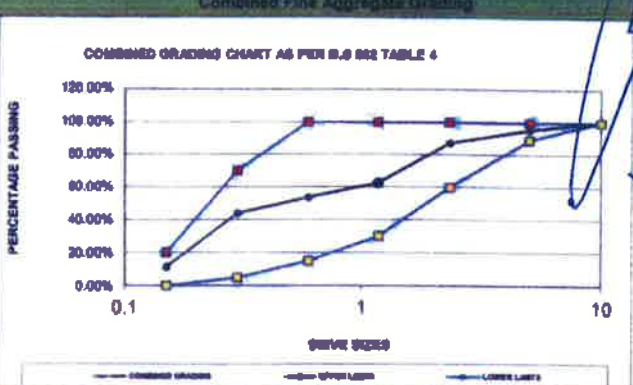
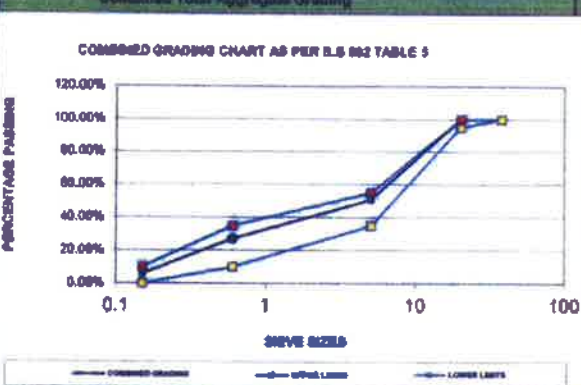
فاكس : +٩٧١ ٣ ٧٨٣٨٠٩٧ / ٧٨٣٨٩٠٧

البريد الإلكتروني : ncp@elm.ae

Date : 24-Dec-19

Project	CMW-2019-N 019 Food Storage Building, Al Ain
Client	M/s. CMW
Contractor	M/s. Ultra Max General Contracting

CONCRETE GRADE : SRC C21/20N/mm ²						
Concrete Mix Design		Characteristic Cube Compressive Strength Req'd. @ 28 Days, 21N/mm ²				
Mix Ingredients	Source	Weight/m ³ kg / m ³	Sp.Gty. SSD	Volume/m ³ L / m ³	Mix Breakdown	Ratios
SPC	Nael Cement Factory	280	3.15	88.9	20mm 28.7%	Free
				10mm 20.2%	Wat./Cem.	0.45
				0-5mm 20.0%	Agg./Cem.	7.7
				Dune 20.5%		
Free Water	AADC (Potable Water)	126	1	126.8		
Absorption		16				
Total Water in the Mix		142				
20mm Cr. Aggregate	Al Buraimi Crusher - Oman	820	2.93	211.5	Coarse	Dust Content
10mm Cr. Aggregate	Al Buraimi Crusher - Oman	450	2.89	155.7	20mm 87.0%	Coarse 0.9%
0-5mm Cr. Washed Sand	Al Buraimi Crusher - Oman	640	2.83	226.1	10mm 42.1%	
Dune Sand	Al Ain	450	2.84	170.5	Fine	Fine agg. 0.3%
Admixture - Pozzolith LD 10	BASF - Dubai	1.8	1.20	1.5	0-5mm 88.7%	
				Dune 41.3%		
Air Voids				19.7		
Fresh Concrete Density		2500		1000.0		Slump on arrival @ site : 125 ± 25 mm



Sieve	Coarse	Fine	Combined Grading	All in Limits	Upper	Lower	Upper	Lower
SIZE	20mm	10mm	0-5mm	D.SAND	Total	Fine	Upper	Lower
37.5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.00%	100.00%
20	88.0%	100.0%	100.0%	100.0%	99.7%	100.0%	100.00%	95.00%
14	85.0%	100.0%	100.0%	100.0%	87.3%	100.0%		
10	1.0%	87.0%	100.0%	100.0%	71.0%	100.0%		100.00%
5	0.0%	12.0%	88.0%	100.0%	50.6%	95.3%	55.00%	35.00%
2.36	0.0%	1.0%	78.0%	100.0%	44.2%	87.1%		100.00%
1.18	0.0%	0.0%	36.0%	100.0%	31.5%	82.4%		100.00%
0.85	0.0%	0.0%	21.0%	100.0%	27.1%	53.6%	35.00%	10.00%
0.3	0.0%	0.0%	16.0%	88.0%	22.1%	43.9%		70.00%
0.15	0.0%	0.0%	4.0%	21.0%	5.0%	11.0%	10.00%	0.00%

Note : The dosage of Admixture will be adjusted to meet the site workability requirements, but strictly within the manufacturer's limit.



QA/QC Manager
Nael Cement Products

NCP/QA/ 1373

QA/QC Department

NCP - A one stop shop for all Concrete Requirements

• All Types of Masonry Blocks • Interlocking Pavers • Kerb Stones • Pre-stressed Hollow Core Slabs
• Pre-cast Wall Panels & Facades • Boundary Walls • Ready Mix Concrete • GRC/GRP/GRG Products • Cement
PM/PMAC/QC001



NAYEL CEMENT PRODUCT FACTORY

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Fax : +971 3 7838097 / 7838907

E-mail : ncp@alm.ae



www.ncpuae.com

مصنع نابل للمنتجات الاسمنتية

ص.ب : 18381

لعين - الامارات العربية المتحدة

تلفون : +971 3 7838501 / 7838031

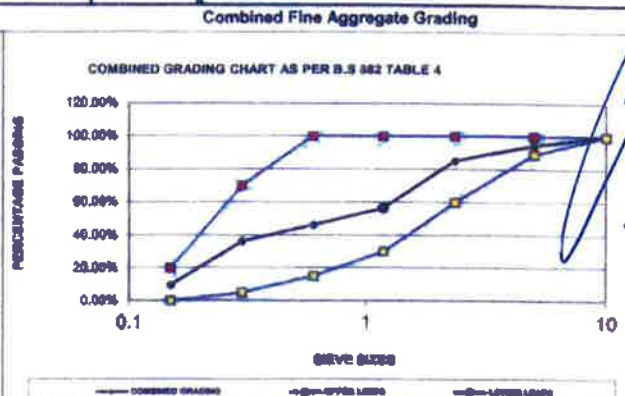
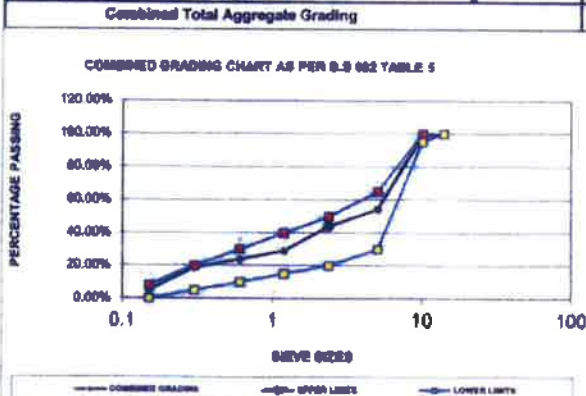
فاكس : +971 3 7838097 / 7838907

البريد الإلكتروني: ncp@alm.ae

Date : 24-Dec-19

Project	CMW-2019-N 019 Food Storage Building, Al Ain
Client	M/s. CMW
Contractor	M/s. Ultra Max General Contracting

CONCRETE GRADE : OPC C40/10N/mm ²							
Concrete Mix Design		Characteristic Cube Compressive Strength Req'd. @ 28 Days, 40N/mm ²					
Mix Ingredients	Source	Weight/m ³ Kg	Sp.Gty. SSD	Volume/m ³ Litres	Mix Breakdown		Ratios
OPC	Nael Cement Factory	400	3.15	127.9	10mm	48.7%	Free Wat./Cem. 0.4
					0-5mm	34.5%	Agg./Cem. 4.0
					Dune	16.4%	
Free Water	AADC (Potable Water)	188	1	188.8			
Absorption		16					
Total Water in the Mix		178					
10mm Cr. Aggregate	Al Buraimi Crusher - Oman	860	2.59	328.7	10mm	100.0%	Coarse 10.0%
0-5mm Cr. Washed Sand	Al Buraimi Crusher - Oman	680	2.83	240.3			
Dune Sand	Al Ain	328	2.64	124.2			
Admixture - Pozzolith LD 10	BASF - Dubai	1.20	1.20	1.0	0-5mm	88.0%	Fine agg. 10.0%
Admixture - Spectra 250N / Equivalent	BASF / Envirocon	6.5	1.08	6.0	Dune	32.0%	
Air Voids				17.8			
Fresh Concrete Density [kg/m ³]		2516		1800.0			Slump on arrival @ site : 125 ± 25mm



SIEVE	Coarse	Fine		Combined Grading		All in Limits		Fine Limits	
SIZE	Whose	0-5mm	D.SAND	Total	Fine	Upper	Lower	Upper	Lower
37.5	100.0%	100.0%	100.0%	100%	100%	100%	100%		
20	100.0%	100.0%	100.0%	100%	100%	100%	100%		
14	100.0%	100.0%	100.0%	100%	100%	100%	100%		
10	97.6%	100.0%	100.0%	100%	100%	100%	95%	100%	100%
5	92.4%	88.0%	100.0%	88%	88%	88%	30%	100%	88%
2.36	1.0%	76.0%	100.0%	44%	88%	88%	20%	100%	88%
1.18	0.0%	35.0%	100.0%	23%	88%	40%	10%	100%	88%
0.85	0.0%	21.0%	100.0%	20%	48%	30%	10%	100%	10%
0.3	0.0%	10.0%	82.0%	19%	30%	20%	5%	70%	5%
0.15	0.0%	4.0%	21.5%	5%	0%	5%	0%	20%	0%
	40%		54%					BS 882-92 Table 3	BS 882-92 Table 4

Note : The dosage of Admixture will be adjusted to meet the min workability requirements, but strictly within the manufacturer's limit.



NCP/QA 1445

QA/QC Department

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- Pre-cast Wall Panels & Facades • Boundary Walls • Ready Mix Concrete • GRC/GRP/GRG Products • Cement



1

SUB CONTRACTORS APPROVAL FORM

Project Name: Commercial Building for Mr. Ahmed Rashed Al Murar File No. ADCE 923
 Location: Sector E-11, Plot C-23, Abu Dhabi, UAE
 Consultant: Heberger Engineering Consultancy Ref No. 923-PQ-023-R00
 Contractor: Hashim Contracting & Gen. Maintenance Co. LLC Date 10-May-23

Type of Work: **Repair Material**

Sub Contractor Name: **Envirocon**

Company Profile Contents:

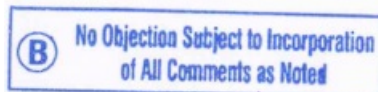
☒ Prequalification

☒ Valid Trade License

☒ Organization Chart

☒ Previous Approvals

CONTRACTOR : HASHIM CONTRACTING & GEN. MAINTENANCE CO. LLC


 No Objection Subject to Incorporation
 of All Comments as Noted


RECEIVED
11 MAY 2023
 HEBERGER ENGINEERING

Originator of the submittal/ Eng: Samer Ataallah Al Ali Mob. No: 0559966852

Contractor Authorized signature: _____ Date: 10-May-23

CONSULTANT COMMENTS:

Please refer comments on the attached comments sheet

19-06-2023


 Heberger Engineering
 مبرج للهندسة

Approval Status: ☐ A: Approved ☒ B: Approved as noted ☐ C: Revise & Resubmit ☐ D: Not Approved

Reviewer of the submittal/ Eng :

Mob. No:

Consultant Authorized signature:

Date:

ADCE (Abu Dhabi Commercial Engineering) Received

☐ A: Approved

☐ B: Approved as noted

☐ C: Revise & Resubmit

☐ D: Not Approved

Date: _____

All the supportive documents must be presented and filed at project site.

* (Approval does not relieve the Contractor from his contractual obligations and responsibilities)

COMMENTS SHEET

PROJECT: Commercial Building for Mr. Ahmed Rashed Al Murar, Sector E-11, Plot C-23, Abu Dhabi, UAE			
Consultant: 	Client: 	Main Contractor:	
PRE-QUALIFICATION SUBMITTAL		File No. ADCE 923	
		Transmittal Ref:	
		Rev No.	
		Date:	
Subject:			
☐ A. No Objection ☒ B. No Objection Subject to incorporation of all comments as noted ☐ C. Rejected to be resubmitted ☐ D. Rejected			
The attached Pre-qualification of M/s ENVIROCON is approved subjected to as follows:			
1) The repair material is not allowed to use for all structural repair cases unless the contractor should submit the specific use of repair material along with detailed shop drawings and method statement for the required repair.			
2) Repair material to be used strictly as per the manufacturer's recommendation			
3) The contractor should submit the requirement of the structural repair prior to commencement work on site.			
4) The contractor is responsible to maintain the quality of work as per the project specs, standard procedures and authorities regulations.			
		19-06-2023	
			
Consultant Confirmation :		Date:	