Ministry of Works



MED/BML/L-229/22

Tuesday, September 20, 2022

AL MANARTAIN COMPANY AND ALI ALSHEAB GROUP WLL P.O Box 926, Flat 1, Bldg 221, Road 389, Block 357, Al Burhama, Kingdom of Bahrain

Dear Sirs.

CONCRETE MIX COMPLIANCE CERTIFICATE NO. 646 MIX REFERENCE NO. 45/OPC/PWA

Thank you for your letter dated Tuesday, 06 September 2022, enclosing production results of your mix reference **45/OPC/PWA** of Grade 45 N/mm² OPC. I enclose herewith the renewal certificate of this mix.

Yours faithfully,

Amal A.Nabi Abdulla Khalaf

Director.

cc:

Materials Engineering Directorate

cir, 180, 1100-5 MTR

Building Materials and Chemical Analysis Laboratory Section, MED

QMS – H.P.C&M.D., Ministry of Housing



Certificate No: 646 Control No: 20220907-00531

RENEWAL OF COMPLIANCE CERTIFICATE READY MIXED CONCRETE

Company : AL MANARTAIN COMPANY AND ALI ALSHEAB GROUP WLL

MOWMAUP Mix designation : 45/20/OPC
Ministry of Housing designation : 45/20 OPC
Suppliers Mix reference No. : 45/OPC/PWA

Test results from the normal production of this mix are been examined and assessed. These results demonstrate continued compliance with specified requirements.

The analysis details and current margin are as given below.

Sampling period	21/05/2022 t	21/05/2022 to 29/06/2022		
No. of test results	80	80		
Mean Strength	66.3	N/mm ²		
Standard Deviation	3.0	N/mm ²		
Current Margin	3.0	N/mm ²		

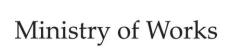
The supplier code for this mix is **45/OPC/PWA**. This reference code must be quoted on each delivery ticket.

Compliance Certificate **No. 646** is valid for a period of one year from the date of issue or as the date stated below.

Date of issue : 20/09/2022

Date of expire : 07/05/2023

Ahmed Yusuf Al-Hadi Head, Building Materials Laboratory





Certificate No: 646 Control No: 20220907-00531

COMPLIANCE CERTIFICATE READY MIXED CONCRETE

Company: AL MANARTAIN COMPANY AND ALI ALSHEAB GROUP WLL

MOWMAUP Mix designation : 45/20/OPC
Ministry of Housing designation : 45/20 OPC
Suppliers Mix reference No : 45/OPC/PWA

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MIX DESIGN DETAILS						
Materials	Type	Source	Quantity	Units		
20 mm Aggregate	Limestone U.A.E.	UCO Marine	800	Kg/m³		
10 mm Aggregate	Limestone U.A.E.	UCO Marine	400	Kg/m³		
0-5mm Aggregates	Limestone U.A.E.	UCO Marine	200	Kg/m³		
Marine Sand	Washed Marine Sand	Sand Washing	490	Kg/m³		
		Plant				
Cement	OPC	Saudi Cement Co.	380	Kg/m³		
Water	Deionized	R.O Plant	140	l/m³		
Admixture	ISOLA BT 65	ISOLA	3.76	Kg/m³		
Admixture	ISOLA PS 9	ISOLA	4.5	Kg/m³		

Date of first issue : 08/05/2019
Date of expire : 07/05/2023

"The Contractor shall forward full details of the mix to the S.O. for approval. When the mix has been approved, no variations shall be made in the proportions, the original source of the cement and aggregates or in the type, size and grading zone of the latter without the consent of the S.O. who may require further tests to be made."

This concrete mix certificate is been considered withdrawn if the approval of cement, PFA and micro silica sources are not renewed and/or removed from the current MED, list of approved manufacturers of cement, PFA and micro silica. Likewise, it is at suspension if the aggregates materials are not compliance with present MOW Standard Specification, the status is in the issued up to date status summary.

MED APPROVED

Ahmed Yusuf Al-Hadi Head, Building Materials Laboratory

Ministry of Works





Certificate No: 646 Control No: 20220907-00531

COMPLIANCE CERTIFICATE READY MIXED CONCRETE

Company: AL MANARTAIN COMPANY AND ALI ALSHEAB GROUP WLL

MOWMAUP Mix designation : 45/20/OPC
Ministry of Housing designation : 45/20 OPC
Suppliers Mix reference No. : 45/OPC/PWA

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QUALITY CONTROL TEAM					
POSITION	NAME	TELEPHONE			
Technical Manager	ADEL ABBAS EBRAHIM	<u>17590097</u> - C/P <u>36055350</u>			
Quality Control Engineer	Ahmed Husham	<u>36895369</u>			
Plant Operator 1	Vinod Sivadasan	<u>17701205</u>			
Plant Operator 2	Pradee <mark>pa K</mark> umar	<u>17701205</u>			
Mat. Technician	Ammar Jaafer Salman	<u>17701205</u>			
Mat. Technician	Husain Ali Marzooq	<u>17701205</u>			
Mat. Technician	Ahmed Abdulla	<u>36895534</u>			
Mat. Technician	Sumesh Pullayikkodi	<u>36895515</u>			
Mat. Technician	Aswin Raj Ganesan	<u>17701205</u>			
Mat. Technician	Narayanan Melaparambath	<u>17701205</u>			
Mat. Technician	Sarin Chandran Pullaikodi	<u>17701205</u>			
Mat. Technician	Abdulhameed Jawad	<u>36055374</u>			

Your attention is drawn to Clause B. Stage 2 of The Materials Engineering Directorate quality assurance procedures for suppliers.

"Random inspection and sampling including reviews of production controls and engineering support."

MED APPROVED

Ahmed Yusuf Al-Hadi Head, Building Materials Laboratory