





**TEST REPORTS**  
**(PAVING BLOCKS & RAW MATERIALS)**



**TEST REPORTS**  
**PAVING BLOCKS**

 GOVERNMENT OF DUBAI	<b>Organization/Unit:</b> إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:	 بلدية دبي DUBAI MUNICIPALITY
	<b>Document Title:</b> <b>TEST REPORT</b> MEASUREMENT OF ABRASION RESISTANCE ( WIDE WHEEL TEST)	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	336814	<b>Request No:</b>	EMTX-2021-1072371
<b>Project No:</b>	BA-28	<b>Report Date:</b>	06/09/2021 12:29PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location: *</b>	FACTORY YARD		
<b>Source: *</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description: *</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Product Name: *</b>	RECT- COLOR- GREY		
<b>Sampling Date/Time: *</b>	16/08/2021 11:11AM	<b>Lot Number: *</b>	21410190
<b>Receiving Date/Time:</b>	02/09/2021 01:05PM	<b>Lot Size: *</b>	31680 pieces
<b>Sample Size:</b>	18.00 pieces	<b>Sender No:</b>	NP2885
<b>Material/Mix Type: *</b>		<b>Laying Date/Production Date: *</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 200X100X60</b>			

**TEST RESULTS**

PARAMETER	RESULTS		
PRODUCTION DATE *	NA		
NOMINAL SIZE (mm) *	200x100x60		
TEST SIZE (mm)	150x100x60		
COLOUR OF SAMPLE *	GREY		
RATE OF WHEEL REVOLUTION	75		
CALIBRATION VALUE	20.0		
SPECIMEN	1	2	3
LENGTH OF GROOVE (mm)	12.5	13.0	12.0
AVERAGE LENGTH OF GROOVES (mm)	12.5		

<b>Sampled By:</b>	HUSSAIN	<b>Tested By:</b>	MAABDULRAHMAN
<b>Sampled Brought By:</b>	HUSSAIN	<b>Testing Date:</b>	02/09/2021 01:05PM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	BS EN 1338 : 2003 (E) ANNEX G AMD 16470 : 2006	<b>Test Method Variation:</b>	NIL

**Remarks:** - THIS REPORT REPRESENTS THE SUBMITTED SAMPLE ONLY / SAMPLING IS PERFORMED BY THE CUSTOMER

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	<b>Document Title:</b> TEST REPORT DIMENSION OF PAVING BLOCKS-RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**



<b>Report No:</b>	336535	<b>Request No:</b>	EMTX-2021-1072371
<b>Project No:</b>	BA-28	<b>Report Date:</b>	06/09/2021 08:51AM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location: *</b>	FACTORY YARD		
<b>Source: *</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description: *</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Product Name: *</b>	RECT- COLOR- GREY		
<b>Sampling Date/Time: *</b>	16/08/2021 11:11AM	<b>Lot Number: *</b>	21410190
<b>Receiving Date/Time:</b>	02/09/2021 01:05PM	<b>Lot Size: *</b>	31680 pieces
<b>Sample Size:</b>	18.00 pieces	<b>Sender No:</b>	NP2885
<b>Material/Mix Type: *</b>		<b>Laying Date/Production Date: *</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 200X100X60</b>			

**TEST RESULTS**

PARAMETER	RESULTS
BUNDLE NO *	NG
PRODUCTION NO *	NG
PRODUCTION DATE *	NG
DATE TESTED	02-09-2021
TYPE OF PAVING BLOCK *	PAVING BLOCK RECTANGULAR SHAPE
NOMINAL SIZE (mm) *	200 X 100 X 60
COLOUR *	GREY

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	<b>Document Title:</b> TEST REPORT DIMENSION OF PAVING BLOCKS-RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	336535	<b>Request No:</b> EMTX-2021-1072371
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SPECIMEN	1	2	3	4	5
LENGTH 1 (mm)	198	198	198	198	198
LENGTH 2 (mm)	198	198	198	198	198
LENGTH 3 (mm)	199	198	199	199	199
LENGTH 4 (mm)	199	198	199	199	199
WIDTH 1 (mm)	98	98	98	98	98
WIDTH 2 (mm)	98	98	98	98	98
WIDTH 3 (mm)	98	98	98	98	98
WIDTH 4 (mm)	99	98	98	99	99
WIDTH 5 (mm)	99	98	98	99	99
WIDTH 6 (mm)	99	98	98	99	99
THICKNESS 1 (mm)	59	59	61	60	58
THICKNESS 2 (mm)	58	59	60	61	58
THICKNESS 3 (mm)	58	60	60	60	59
THICKNESS 4 (mm)	59	60	60	60	58

SPECIMEN	6	7	8	9	10
LENGTH 1 (mm)	198	198	198	198	198
LENGTH 2 (mm)	198	198	198	198	198
LENGTH 3 (mm)	199	199	199	199	199
LENGTH 4 (mm)	199	199	199	199	199
WIDTH 1 (mm)	98	98	98	98	98
WIDTH 2 (mm)	98	98	98	98	98
WIDTH 3 (mm)	98	98	98	98	98
WIDTH 4 (mm)	99	98	99	99	98
WIDTH 5 (mm)	99	98	99	99	98
WIDTH 6 (mm)	99	98	99	99	98
THICKNESS 1 (mm)	59	61	59	60	59
THICKNESS 2 (mm)	60	60	58	61	59
THICKNESS 3 (mm)	60	60	58	60	60
THICKNESS 4 (mm)	59	60	58	60	59

<b>Sampled By:</b>	HUSSAIN	<b>Tested By:</b>	JVBRIONES
<b>Sampled Brought By:</b>	HUSSAIN	<b>Testing Date:</b>	02/09/2021 01:05PM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	DMS 001 PART 4 : 2020 ANNEX A.1.2.1	<b>Test Method Variation:</b>	NIL

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	<b>Document Title:</b> TEST REPORT COMPRESSIVE STRENGTH OF PAVING BLOCKS- RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**



<b>Report No:</b>	336536	<b>Request No:</b>	EMTX-2021-1072371
<b>Project No:</b>	BA-28	<b>Report Date:</b>	06/09/2021 08:51AM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location: *</b>	FACTORY YARD		
<b>Source: *</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description: *</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Product Name: *</b>	RECT- COLOR- GREY		
<b>Sampling Date/Time: *</b>	16/08/2021 11:11AM	<b>Lot Number: *</b>	21410190
<b>Receiving Date/Time:</b>	02/09/2021 01:05PM	<b>Lot Size: *</b>	31680 pieces
<b>Sample Size:</b>	18.00 pieces	<b>Sender No:</b>	NP2885
<b>Material/Mix Type: *</b>		<b>Laying Date/Production Date: *</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 200X100X60</b>			

**TEST RESULTS**

PARAMETER	RESULTS				
PRODUCTION DATE *	NG				
DATE CRUSHED *	05-09-2021				
NOMINAL SIZE (mm) *	200 X 100 X 60				
COLOUR *	GREY				
SPECIMEN NO.	1	2	3	4	5
Failure Load (kN)	1082	1094	1023	1081	1180
Compressive Strength ( N/mm <sup>2</sup> )	58.2	59.8	55.6	58.2	63.5
SPECIMEN NO.	6	7	8	9	10
Failure Load (kN)	1084	1147	1047	1180	1021
Compressive Strength ( N/mm <sup>2</sup> )	58.3	62.3	56.3	63.5	55.5
Average Compressive Strength ( N/mm <sup>2</sup> )	59				
<b>Sampled By:</b>	HUSSAIN		<b>Tested By:</b>	AKKUNNATH	
<b>Sampled Brought By:</b>	HUSSAIN		<b>Testing Date:</b>	02/09/2021 01:05PM	
<b>Sampling Method:</b>	DCL-IC-99		<b>Sampling Report No:</b>		
<b>Test Method:</b>	DMS 001 PART 4 : 2020 ANNEX A.2.1 & B		<b>Test Method Variation:</b>	NIL	
<b>Remarks:</b>	- THIS REPORT REPRESENTS THE SUBMITTED SAMPLE ONLY / SAMPLING IS PERFORMED BY THE CUSTOMER				

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	<b>Document Title:</b> <b>TEST REPORT</b> DETERMINATION OF WATER ABSORPTION OF PAVING BLOCKS.	عنوان الوثيقة:	
	<b>Doc Ref.</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION**  
**STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	337698	<b>Request No:</b>	EMTX-2021-1072371
<b>Project No:</b>	BA-28	<b>Report Date:</b>	08/09/2021 10:15AM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location: *</b>	FACTORY YARD		
<b>Source: *</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description: *</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Product Name: *</b>	RECT- COLOR- GREY		
<b>Sampling Date/Time: *</b>	16/08/2021 11:11AM	<b>Lot Number: *</b>	21410190
<b>Receiving Date/Time:</b>	02/09/2021 01:05PM	<b>Lot Size: *</b>	31680 pieces
<b>Sample Size:</b>	18.00 pieces	<b>Sender No:</b>	NP2885
<b>Material/Mix Type: *</b>		<b>Laying Date/Production Date: *</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 200X100X60

**TEST RESULTS**

PARAMETER	RESULTS		
PRODUCTION DATE *	NG		
AGE AT TEST (DAYS) *	NG		
NOMINAL SIZE (mm) *	200*100*60		
COLOUR OF THE SPECIMEN *	GREY		
SPECIMEN	11	12	13
WATER ABSORPTION (%)	3.7	3.3	3.4
AVERAGE WATER ABSORPTION (%)	3.5		

<b>Sampled By:</b>	HUSSAIN	<b>Tested By:</b>	JVBRIONES
<b>Sampled Brought By:</b>	HUSSAIN	<b>Testing Date:</b>	02/09/2021 01:05PM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	DMS 001 PART 4 : 2020 ANNEX C	<b>Test Method Variation:</b>	NIL

**Remarks:** - THIS REPORT REPRESENTS THE SUBMITTED SAMPLE ONLY ; SAMPLING IS PERFORMED BY THE CUSTOMER

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	<b>Document Title:</b> <b>TEST REPORT</b> CHLORIDE CONTENT OF CONCRETE BLOCKS	عنوان الوثيقة:	
	<b>Doc Ref.</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION**  
**CHEMICAL ANALYSIS IN CONSTRUCTION MATERIAL UNIT**

<b>Report No:</b>	338711	<b>Request No:</b>	EMTX-2021-1072371
<b>Project No:</b>	BA-28	<b>Report Date:</b>	12/09/2021 09:43AM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location: *</b>	FACTORY YARD		
<b>Source: *</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description: *</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Product Name: *</b>	RECT- COLOR- GREY		
<b>Sampling Date/Time: *</b>	16/08/2021 11:11AM	<b>Lot Number: *</b>	21410190
<b>Receiving Date/Time:</b>	05/09/2021 01:58PM	<b>Lot Size: *</b>	31680 pieces
<b>Sample Size:</b>	18.00 pieces	<b>Sender No:</b>	NP2885
<b>Material/Mix Type: *</b>		<b>Laying Date/Production Date: *</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 200X100X60</b>			

**TEST RESULTS**

PARAMETER	RESULTS		
AVERAGE CHLORIDE % BY MASS OF HARDENED CONCRETE (Auto Titrator)	0.01		
<b>Sampled By:</b>	HUSSAIN	<b>Tested By:</b>	REDASH
<b>Sampled Brought By:</b>	HUSSAIN	<b>Testing Date:</b>	05/09/2021 01:58PM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	BS 1881-124 : 2015	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- RESULTS APPLY ONLY TO THE SAMPLE AS RECEIVED, RESULTS RELATE ONLY TO THE SAMPLE TESTED,SAMPLING IS PERFORMED BY THE CUSTOMER.		

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LB-TEST-014

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	<b>Document Title:</b> <b>TEST REPORT</b> SULPHATE CONTENT OF HARDENED CONCRETE	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
CHEMICAL ANALYSIS IN CONSTRUCTION MATERIAL UNIT**

<b>Report No:</b>	338712	<b>Request No:</b>	EMTX-2021-1072371
<b>Project No:</b>	BA-28	<b>Report Date:</b>	12/09/2021 09:43AM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location: *</b>	FACTORY YARD		
<b>Source: *</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description: *</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Product Name: *</b>	RECT- COLOR- GREY		
<b>Sampling Date/Time: *</b>	16/08/2021 11:11AM	<b>Lot Number: *</b>	21410190
<b>Receiving Date/Time:</b>	05/09/2021 01:59PM	<b>Lot Size: *</b>	31680 pieces
<b>Sample Size:</b>	18.00 pieces	<b>Sender No:</b>	NP2885
<b>Material/Mix Type: *</b>		<b>Laying Date/Production Date: *</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 200X100X60</b>			

**TEST RESULTS**

PARAMETER	RESULTS		
CEMENT CONTENT AS GIVEN BY CLIENT (%)	100		
AVERAGE SULPHATE AS SO <sub>3</sub> (%) BY MASS OF HARDENED CONCRETE (CONC. BLOCK)	0.4		
<b>Sampled By:</b>	HUSSAIN	<b>Tested By:</b>	REDASH
<b>Sampled Brought By:</b>	HUSSAIN	<b>Testing Date:</b>	05/09/2021 01:59PM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	BS 1881-124 : 2015 cl. 12.2 ADD-06(2002)	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- RESULTS APPLY ONLY TO THE SAMPLE AS RECEIVED, RESULTS RELATE ONLY TO THE SAMPLE TESTED,SAMPLING IS PERFORMED BY THE CUSTOMER		

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LB-TEST-014

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	<b>Document Title:</b> TEST REPORT DIMENSION OF PAVING BLOCKS-RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	196640	<b>Request No:</b>	EMTX-2020-1006195
<b>Project No:</b>	BA-28	<b>Report Date:</b>	19/10/2020 01:39PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410209
<b>Receiving Date/Time:</b>	18/10/2020 03:42PM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0494
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 200X100X60



**TEST RESULTS**

PARAMETER	RESULTS				
BUNDLE NO	NG				
PRODUCTION NO	NG				
DATE TESTED	18-10-2020				
TYPE OF PAVING BLOCK	RECTANGULAR SHAPE				
NOMINAL SIZE (mm)	200 X 100 X 60				
COLOUR	RED				
SPECIMEN	1	2	3	4	5
LENGTH 1 (mm)	198	198	198	198	198
LENGTH 2 (mm)	198	198	198	198	198
LENGTH 3 (mm)	198	198	198	198	198
LENGTH 4 (mm)	198	198	198	198	198
WIDTH 1 (mm)	98	98	98	98	98
WIDTH 2 (mm)	98	98	98	98	98
WIDTH 3 (mm)	98	98	98	98	98
WIDTH 4 (mm)	98	98	98	98	98
WIDTH 5 (mm)	98	98	98	98	98
WIDTH 6 (mm)	98	98	98	98	98
THICKNESS 1 (mm)	61	61	61	61	62
THICKNESS 2 (mm)	61	61	61	61	62
THICKNESS 3 (mm)	61	61	61	61	62
THICKNESS 4 (mm)	61	61	61	61	62
AVERAGE THICKNESS	61	61	61	61	62

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	<b>Document Title:</b> TEST REPORT DIMENSION OF PAVING BLOCKS-RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	196640	<b>Request No:</b> EMTX-2020-1006195
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SPECIMEN	6	7	8	9	10
LENGTH 1 (mm)	198	198	198	198	198
LENGTH 2 (mm)	198	198	198	198	198
LENGTH 3 (mm)	198	198	198	198	198
LENGTH 4 (mm)	198	198	198	198	198
WIDTH 1 (mm)	98	98	98	98	98
WIDTH 2 (mm)	98	98	98	98	98
WIDTH 3 (mm)	98	98	98	98	98
WIDTH 4 (mm)	98	98	98	98	98
WIDTH 5 (mm)	98	98	98	98	98
WIDTH 6 (mm)	98	98	98	98	98
THICKNESS 1 (mm)	62	61	61	61	62
THICKNESS 2 (mm)	62	61	61	61	62
THICKNESS 3 (mm)	62	61	61	61	62
THICKNESS 4 (mm)	62	61	61	61	62
AVERAGE THICKNESS	62	61	61	61	62

<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	DQCONAHAP
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	18/10/2020 03:42PM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	DMS 001 PART 4 : 2016 ANNEX A.1.2.1	<b>Test Method Variation:</b>	NIL

<b>Remarks:</b>	- SAMPLING IS PERFORMED BY THE COSTUMER / Production Date: 19-09-2020
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	<b>Document Title:</b> <b>TEST REPORT</b> COMPRESSIVE STRENGTH OF PAVING BLOCKS- RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION**  
**STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	198207	<b>Request No:</b>	EMTX-2020-1006195
<b>Project No:</b>	BA-28	<b>Report Date:</b>	22/10/2020 12:23PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410209
<b>Receiving Date/Time:</b>	21/10/2020 03:50PM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0494
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 200X100X60

**TEST RESULTS**

PARAMETER	RESULTS				
PRODUCTION DATE	19/09/2020				
DATE CRUSHED	21-10-2020				
NOMINAL SIZE (mm)	200 X 100 X 60				
COLOUR	NG				
SPECIMEN NO.	1	2	3	4	5
Failure Load (kN)	1095	1150	949	983	925
Compressive Strength ( N/mm <sup>2</sup> )	59.8	62.8	51.8	53.7	50.5
SPECIMEN NO.	6	7	8	9	10
Failure Load (kN)	858	979	1188	1409	1156
Compressive Strength ( N/mm <sup>2</sup> )	46.9	53.5	64.9	77.0	63.2
AVE COMP STRENGTH	58				

<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	EJMILLANA
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	21/10/2020 03:50PM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	DMS 001 PART 4 : 2016 ANNEX A.2.1 & B	<b>Test Method Variation:</b>	NIL

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	<b>Document Title:</b> <b>TEST REPORT</b> CHLORIDE CONTENT OF CONCRETE BLOCKS	عنوان الوثيقة:	
	<b>Doc Ref.</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION**

**CHEMICAL ANALYSIS IN CONSTRUCTIONA MATERIAL UNIT**

<b>Report No:</b>	198744	<b>Request No:</b>	EMTX-2020-1006195
<b>Project No:</b>	BA-28	<b>Report Date:</b>	25/10/2020 10:06AM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410209
<b>Receiving Date/Time:</b>	19/10/2020 09:26AM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0494
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 200X100X60

**TEST RESULTS**

PARAMETER	RESULTS
AVERAGE CHLORIDE % BY MASS OF HARDENED CONCRETE	0.01
Colour	NA
Production date	19-09-2020

<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	REDASH
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	19/10/2020 09:26AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	BS 1881-124 : 2015	<b>Test Method Variation:</b>	NIL

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	<b>Document Title:</b> TEST REPORT SULPHATE CONTENT OF HARDENED CONCRETE	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION**

**CHEMICAL ANALYSIS IN CONSTRUCTIONA MATERIAL UNIT**

<b>Report No:</b>	198745	<b>Request No:</b>	EMTX-2020-1006195
<b>Project No:</b>	BA-28	<b>Report Date:</b>	25/10/2020 10:07AM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410209
<b>Receiving Date/Time:</b>	19/10/2020 09:26AM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0494
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 200X100X60</b>			

**TEST RESULTS**

PARAMETER	RESULTS		
AVERAGE SULPHATE AS SO3 (%) BY MASS OF HARDENED CONCRETE (CONC. BLOCK)	0.6		
Colour	NA		
Production date	19-09-2020 10:55:13 AM		
<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	REDASH
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	19/10/2020 09:26AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	BS 1881-124 : 2015 cl. 12.2 ADD-06(2002)	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- SAMPLING IS PERFORMED BY THE CUSTOMER		

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	<b>Document Title:</b> <b>TEST REPORT</b> MEASUREMENT OF ABRASION RESISTANCE ( WIDE WHEEL TEST)	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	200567	<b>Request No:</b>	EMTX-2020-1006195
<b>Project No:</b>	BA-28	<b>Report Date:</b>	27/10/2020 01:44PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410209
<b>Receiving Date/Time:</b>	22/10/2020 12:35PM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0494
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 200X100X60

**TEST RESULTS**

PARAMETER	RESULTS		
PRODUCTION DATE	19/09/2020		
NOMINAL SIZE (mm)	200X100X60		
TEST SIZE (mm)	150X100X60		
COLOUR OF SAMPLE	NG		
RATE OF WHEEL REVOLUTION	75		
CALIBRATION VALUE	20.0		
SPECIMEN	1	2	3
LENGTH OF GROOVE (mm)	12.5	12.0	12.0
AVERAGE LENGTH OF GROOVES (mm)	12.0		

<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	MAABDULRAHMAN
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	22/10/2020 12:35PM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	BS EN 1338 : 2003 (E) ANNEX G AMD 16470 : 2006	<b>Test Method Variation:</b>	NIL

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	<b>Document Title:</b> <b>TEST REPORT</b> DETERMINATION OF WATER ABSORPTION OF PAVING BLOCKS.	عنوان الوثيقة:	
	<b>Doc Ref.</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	198210	<b>Request No:</b>	EMTX-2020-1006195
<b>Project No:</b>	BA-28	<b>Report Date:</b>	22/10/2020 12:23PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410209
<b>Receiving Date/Time:</b>	20/10/2020 08:48AM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0494
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 200X100X60

**TEST RESULTS**

PARAMETER	RESULTS		
PRODUCTION DATE	19/09/2020		
AGE AT TEST (DAYS)	29		
NOMINAL SIZE (mm)	200X100X60		
COLOUR OF THE SPECIMEN	RED		
SPECIMEN	11	12	13
WATER ABSORPTION (%)	4.0	3.5	3.7
AVERAGE WATER ABSORPTION (%)	3.7		

<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	EJMILLANA
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	20/10/2020 08:48AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	DMS 001 PART 4 : 2016 ANNEX C	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- SAMPLING PERFORMED BY THE CUSTOMER		

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GEOSCIENCE TESTING LABORATORY

REPORT ON ACID SOLUBLE CHLORIDE AND SULPHATE IN HARDENED CONCRETE

REPORT NO.	: R1DX21-132264 - 132265	DATE :	09/12/2021
REQUEST NO.	: Q1DX21-078769	SAMPLE NO. :	S1DX21-078769
SENDER'S REF.	: NOT GIVEN	PROJECT NO. :	IQC
PROJECT NAME	: INTERNAL QUALITY CHECKING		
CLIENT NAME	: MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
CONSULTANT	: NO SPECIFIC CONSULTANT		
CONTRACTOR	: NO SPECIFIC CONTRACTOR		
ADDRESS	: DUBAI, UAE		
SAMPLED BY	: NAHAS REPRESENTATIVE		
SAMPLE BROUGHT BY	: GTL'S REPRESENTATIVE		
LOCATION	: MACON	SAMPLE SIZE :	NOT GIVEN
LAYER	: DOUBLE	LOT SIZE :	NOT GIVEN
SOURCE	: MACON	LOT NO. :	NOT GIVEN
SAMPLE DESCRIPTION	: PAVING BLOCK RECTANGULAR SHAPE	BUNDLE NO. :	NOT APPLICABLE
COLOR/CLASS	: NOT GIVEN	TESTING DATE :	05/12/2021
WORK SIZE (mm)	: 200 x 100 x 60	SAMPLING DATE / TIME :	30/11/2021 / NOT GIVEN
UNIT SAMPLE FROM	: NOT GIVEN	RECEIVING DATE :	05/12/2021

RESULT

PARAMETER	UNIT	CLIENT'S SPECIFICATION	RESULT
ACID SOLUBLE CHLORIDE as Cl <sup>-</sup>	% weight of dried material	< 0.05	0.02
ACID SOLUBLE SULPHATE as SO <sub>3</sub>		< 0.7	0.64

TESTED ON	: 05/12/2021 - 08/12/2021
SAMPLING REPORT NO	: NOT GIVEN
SAMPLING METHOD	: RANDOM
SAMPLE PREPARATION	: BS 1881 PART 124 : 2015 CLS. 5.5.2
TEST METHOD	: ACID SOLUBLE CHLORIDE : BS 1881 PART 124 : 2015 CLS. 12.1 : ACID SOLUBLE SULPHATE : BS 1881 PART 124 : 2015 CLS. 12.2
TEST METHOD VARIATION	: REPORTED VALUES ARE BASED ON PERCENTAGE (%) WEIGHT OF DRIED SAMPLE INSTEAD OF PERCENTAGE (%) WEIGHT OF CEMENT.
TESTED BY	: HNK
REMARKS	: THE TESTED SAMPLE MEETS THE SPECIFICATION LIMITS SUBMITTED BY THE CLIENT WITH RESPECT TO THE ABOVE PARAMETERS.



  
Sethupathi Shanmugavel  
Technical Supervisor (Chemical)  
Dubai

For GEOSCIENCE TESTING LABORATORY

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## REPORT ON ACID SOLUBLE CHLORIDE AND SULPHATE IN HARDENED CONCRETE

Report No. : R1DX21-115492 - 115493  
Request No. : Q1DX21-068708  
Sender's Ref. No : NOT GIVEN  
Project Name : INTERNAL QUALITY CHECKING  
Client Name : MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)  
Consultant : NO SPECIFIC CONSULTANT  
Contractor : NO SPECIFIC CONTRACTOR  
Address : DUBAI, U.A.E  
Sampled By : NAHAS  
Sampling Brought By : GTL'S REPRESENTATIVE



Date : 25/10/2021

Sample No : S1DX21-068708

Project No : IQC

Location : MACON  
Layer : DOUBLE LAYER  
Source : MACON  
Sample Description : PAVING BLOCK RECTANGULAR SHAPE  
Color / Class : NOT GIVEN  
Work Size (mm) : 200 x 100 x 60  
Unit Sampled From : NOT GIVEN  
Sample Size : NOT GIVEN  
Lot Size : NOT GIVEN  
Lot No : 21410244  
Bundle No : NOT GIVEN  
Testing Date : 19/10/2021  
Sampling Date / Time : 07/10/2021/ NOT GIVEN  
Receiving Date : 19/10/2021

### RESULT

PARAMETER	UNIT	RESULT
ACID SOLUBLE CHLORIDE as Cl <sup>-</sup>	% weight of dried material	0.01
ACID SOLUBLE SULPHATE as SO <sub>3</sub>	% weight of dried material	0.45

Tested On : 19/10/2021 - 24/10/2021  
Sampling Report No : NOT GIVEN  
Sampling Method : RANDOM  
Sample Preparation : BS 1881 PART 124 : 2015 CLS. 5.5.2  
Test Method : ACID SOLUBLE CHLORIDE : BS 1881 PART 124 2015 CLS. 12.1  
ACID SOLUBLE SULPHATE : BS 1881 PART 124 2015 CLS. 12.2  
Test Method variation : REPORTED VALUES ARE BASED ON PERCENTAGE (%) WEIGHT OF DRIED SAMPLE  
INSTEAD OF PERCENTAGE (%) WEIGHT OF CEMENT.  
Tested By : JET / PGN  
Remarks : NONE



Sethupathi Shanmugavel  
Technical Supervisor (Chemical)  
Dubai

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## REPORT ON ACID SOLUBLE CHLORIDE AND SULPHATE IN HARDENED CONCRET

Report No. : R1DX21-090291 - 090292  
Request No. : Q1DX21-053183  
Sender's Ref. No : NOT GIVEN  
Project Name : IQC  
Client Name : MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)  
Consultant : NO SPECIFIC CONSULTANT  
Contractor : MACON LLC  
Address : DUBAI, UAE  
Sampled By : NAHAS  
Sampling Brought By : GTL'S REPRESENTATIVE



Date : 10/08/2021

Sample No : S1DX21-053183  
Project No : NOT GIVEN

Location : MACON  
Layer : DOUBLE (FIM)  
Source : MACON LLC  
Sample Description : PAVING BLOCK RECTANGULAR SHAPE (GREY)  
Color / Class : NOT GIVEN  
Work Size (mm) : 200 x 100 x 60  
Unit Sampled From : NOT GIVEN  
Sample Size : NOT GIVEN  
Lot Size : 21410244  
Lot No : 21410244  
Bundle No : NOT APPLICABLE  
Testing Date : 05/08/2021  
Sampling Date / Time : 04/08/2021/ NOT GIVEN  
Receiving Date : 05/08/2021

### RESULT

PARAMETER	UNIT	RESULT
ACID SOLUBLE CHLORIDE as Cl	% weight of dried material	0.02
ACID SOLUBLE SULPHATE as SO <sub>3</sub>	% weight of dried material	0.66



Tested On : 05/08/2021 - 09/08/2021  
Sampling Report No : NOT GIVEN  
Sampling Method : RANDOM  
Sample Preparation : BS 1881 PART 124 : 2015 CLS. 5.5.2  
Test Method : ACID SOLUBLE CHLORIDE : BS 1881 PART 124 2015 CLS. 12.1  
ACID SOLUBLE SULPHATE : BS 1881 PART 124 2015 CLS. 12.2  
Test Method variation : REPORTED VALUES ARE BASED ON PERCENTAGE (%) WEIGHT OF DRIED SAMPLE  
INSTEAD OF PERCENTAGE (%) WEIGHT OF CEMENT.  
Tested By : HNK  
Remarks : NONE



Sethupathi Shanmugavel  
Technical Supervisor (Chemical)  
Dubai

Results relates only to the items tested  
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For GEOSCIENCE TESTING LABORATORY

 GOVERNMENT OF DUBAI	<b>Organization/Unit:</b> إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:	 بلدية دبي DUBAI MUNICIPALITY
	<b>Document Title:</b> TEST REPORT DIMENSION OF PAVING BLOCKS-RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**



<b>Report No:</b>	287912	<b>Request No:</b>	EMTX-2021-1048113
<b>Project No:</b>	BA-28	<b>Report Date:</b>	06/05/2021 10:09AM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location: *</b>	FACTORY YARD		
<b>Source: *</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description: *</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Product Name: *</b>	RECT- COLOR- GREY		
<b>Sampling Date/Time: *</b>	01/04/2021 12:36AM	<b>Lot Number: *</b>	21410058
<b>Receiving Date/Time:</b>	04/05/2021 08:20AM	<b>Lot Size: *</b>	35000 pieces
<b>Sample Size:</b>	14.00 pieces	<b>Sender No:</b>	AJ3911
<b>Material/Mix Type: *</b>		<b>Laying Date/Production Date: *</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 200X100X80</b>			

**TEST RESULTS**

PARAMETER	RESULTS
BUNDLE NO	NG
PRODUCTION NO	NG
PRODUCTION DATE	NG
DATE TESTED	05-05-2021
TYPE OF PAVING BLOCK	RECTANGULAR
COLOUR	GREY

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 GOVERNMENT OF DUBAI	<b>Organization/Unit:</b> إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:	 بلدية دبي DUBAI MUNICIPALITY
	<b>Document Title:</b> TEST REPORT DIMENSION OF PAVING BLOCKS-RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	287912	<b>Request No:</b> EMTX-2021-1048113
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SPECIMEN	1	2	3	4	5
LENGTH 1 (mm)	198	198	198	198	198
LENGTH 2 (mm)	198	198	198	198	198
LENGTH 3 (mm)	198	198	198	198	199
LENGTH 4 (mm)	198	198	198	198	199
WIDTH 1 (mm)	98	98	98	98	98
WIDTH 2 (mm)	98	98	98	98	98
WIDTH 3 (mm)	98	98	98	98	98
WIDTH 4 (mm)	98	98	98	98	99
WIDTH 5 (mm)	98	98	98	98	99
WIDTH 6 (mm)	98	98	98	98	99
THICKNESS 1 (mm)	81	81	81	80	80
THICKNESS 2 (mm)	81	81	81	80	80
THICKNESS 3 (mm)	81	81	81	80	80
THICKNESS 4 (mm)	81	81	81	80	80
SPECIMEN	6	7	8	9	10
LENGTH 1 (mm)	198	198	198	198	198
LENGTH 2 (mm)	198	198	198	198	198
LENGTH 3 (mm)	199	198	198	198	198
LENGTH 4 (mm)	199	198	198	198	198
WIDTH 1 (mm)	98	98	98	98	98
WIDTH 2 (mm)	98	98	98	98	98
WIDTH 3 (mm)	98	98	98	98	98
WIDTH 4 (mm)	99	98	98	98	98
WIDTH 5 (mm)	99	98	98	98	98
WIDTH 6 (mm)	99	98	98	98	98
THICKNESS 1 (mm)	80	80	81	80	81
THICKNESS 2 (mm)	80	80	81	80	81
THICKNESS 3 (mm)	80	80	81	80	81
THICKNESS 4 (mm)	80	80	81	80	81
NOMINAL SIZE (mm) *	200 X 100 X 80				

<b>Sampled By:</b>	AMKUTTY	<b>Tested By:</b>	EJMILLANA
<b>Sampled Brought By:</b>	AMKUTTY	<b>Testing Date:</b>	04/05/2021 08:20AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	DMS 001 PART 4 : 2016 ANNEX A.1.2.1	<b>Test Method Variation:</b>	NIL



**Remarks:** - THIS REPORT REPRESENTS THE SUBMITTED SAMPLE ONLY ; SAMPLING IS PERFORMED BY THE CUSTOMER

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	<b>Document Title:</b> TEST REPORT COMPRESSIVE STRENGTH OF PAVING BLOCKS- RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	



**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	288651	<b>Request No:</b>	EMTX-2021-1048113
<b>Project No:</b>	BA-28	<b>Report Date:</b>	09/05/2021 10:46AM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location: *</b>	FACTORY YARD		
<b>Source: *</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description: *</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Product Name: *</b>	RECT- COLOR- GREY		
<b>Sampling Date/Time: *</b>	01/04/2021 12:36AM	<b>Lot Number: *</b>	21410058
<b>Receiving Date/Time:</b>	20/04/2021 10:30AM	<b>Lot Size: *</b>	35000 pieces
<b>Sample Size:</b>	14.00 pieces	<b>Sender No:</b>	AJ3911
<b>Material/Mix Type: *</b>		<b>Laying Date/Production Date: *</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 200X100X80</b>			

**TEST RESULTS**

PARAMETER	RESULTS				
PRODUCTION DATE	NG				
DATE CRUSHED	06-05-2021				
COLOUR	GREY				
SPECIMEN NO.	1	2	3	4	5
Failure Load (kN)	990	1003	904	906	944
Compressive Strength ( N/mm <sup>2</sup> )	60.2	61.0	55.0	55.1	56.5
SPECIMEN NO.	6	7	8	9	10
Failure Load (kN)	975	993	912	960	916
Compressive Strength ( N/mm <sup>2</sup> )	58.4	60.4	55.5	58.4	55.7
Average Compressive Strength ( N/mm <sup>2</sup> )	58				
<b>Sampled By:</b>	AMKUTTY		<b>Tested By:</b>	EJMILLANA	
<b>Sampled Brought By:</b>	AMKUTTY		<b>Testing Date:</b>	20/04/2021 10:30AM	
<b>Sampling Method:</b>	DCL-IC-99		<b>Sampling Report No:</b>		
<b>Test Method:</b>	DMS 001 PART 4 : 2016 ANNEX A.2.1 & B		<b>Test Method Variation:</b>	NIL	
<b>Remarks:</b>	- THIS REPORT REPRESENTS THE SUBMITTED SAMPLE ONLY ; SAMPLING IS PERFORMED BY THE CUSTOMER				

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	<b>Document Title:</b> <b>TEST REPORT</b> DETERMINATION OF WATER ABSORPTION OF PAVING BLOCKS.	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION**  
**STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	288652	<b>Request No:</b>	EMTX-2021-1048113
<b>Project No:</b>	BA-28	<b>Report Date:</b>	09/05/2021 10:46AM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location: *</b>	FACTORY YARD		
<b>Source: *</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description: *</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Product Name: *</b>	RECT- COLOR- GREY		
<b>Sampling Date/Time: *</b>	01/04/2021 12:36AM	<b>Lot Number: *</b>	21410058
<b>Receiving Date/Time:</b>	04/05/2021 10:33AM	<b>Lot Size: *</b>	35000 pieces
<b>Sample Size:</b>	14.00 pieces	<b>Sender No:</b>	AJ3911
<b>Material/Mix Type: *</b>		<b>Laying Date/Production Date: *</b>	
Nominal Size / Working Block Size L * T * H (mm) : 200X100X80			

**TEST RESULTS**

PARAMETER	RESULTS
PRODUCTION DATE	NG
AGE AT TEST (DAYS)	NG
NOMINAL SIZE (mm)	200 X 100 X 80
COLOUR OF THE SPECIMEN	GREY
SPECIMEN	11                      12                      13
WATER ABSORPTION (%)	3.3                      3.6                      3.5
AVERAGE WATER ABSORPTION (%)	3.5

<b>Sampled By:</b>	AMKUTTY	<b>Tested By:</b>	EJMILLANA
<b>Sampled Brought By:</b>	AMKUTTY	<b>Testing Date:</b>	04/05/2021 10:33AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	DMS 001 PART 4 : 2016 ANNEX C	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- THIS REPORT REPRESENTS THE SUBMITTED SAMPLE ONLY ; SAMPLING IS PERFORMED BY THE CUSTOMER		

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	<b>Document Title:</b> TEST REPORT DIMENSION OF PAVING BLOCKS-RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	196635	<b>Request No:</b>	EMTX-2020-1006431
<b>Project No:</b>	BA-28	<b>Report Date:</b>	19/10/2020 01:36PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410173
<b>Receiving Date/Time:</b>	18/10/2020 03:44PM	<b>Lot Size:</b>	
<b>Sample Size:</b>	30.00 pieces	<b>Sender No:</b>	LL0495
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 200X100X80



**TEST RESULTS**

PARAMETER	RESULTS				
BUNDLE NO	NG				
PRODUCTION NO	NG				
DATE TESTED	18-10-2020				
TYPE OF PAVING BLOCK	RECTANGULAR SHAPE				
NOMINAL SIZE (mm)	200 X 100 X 80				
COLOUR	GREY				
SPECIMEN	1	2	3	4	5
LENGTH 1 (mm)	198	198	198	198	198
LENGTH 2 (mm)	198	198	198	198	198
LENGTH 3 (mm)	198	198	198	198	198
LENGTH 4 (mm)	198	198	198	198	198
WIDTH 1 (mm)	98	98	98	98	98
WIDTH 2 (mm)	98	98	98	98	98
WIDTH 3 (mm)	98	98	98	98	98
WIDTH 4 (mm)	98	98	98	98	98
WIDTH 5 (mm)	98	98	98	98	98
WIDTH 6 (mm)	98	98	98	98	98
THICKNESS 1 (mm)	81	81	82	81	81
THICKNESS 2 (mm)	81	81	82	81	81
THICKNESS 3 (mm)	81	81	82	81	81
THICKNESS 4 (mm)	81	81	82	81	81
AVERAGE THICKNESS	81	81	82	81	81

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	<b>Document Title:</b> TEST REPORT DIMENSION OF PAVING BLOCKS-RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	196635	<b>Request No:</b> EMTX-2020-1006431
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SPECIMEN	6	7	8	9	10
LENGTH 1 (mm)	198	198	198	198	198
LENGTH 2 (mm)	198	198	198	198	198
LENGTH 3 (mm)	198	198	198	198	198
LENGTH 4 (mm)	198	198	198	198	198
WIDTH 1 (mm)	98	98	98	98	98
WIDTH 2 (mm)	98	98	98	98	98
WIDTH 3 (mm)	98	98	98	98	98
WIDTH 4 (mm)	98	98	98	98	98
WIDTH 5 (mm)	98	98	98	98	98
WIDTH 6 (mm)	98	98	98	98	98
THICKNESS 1 (mm)	82	81	82	81	81
THICKNESS 2 (mm)	82	81	82	81	81
THICKNESS 3 (mm)	82	81	82	81	81
THICKNESS 4 (mm)	82	81	82	81	81
AVERAGE THICKNESS	82	81	82	81	81

<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	DQCONAHAP
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	18/10/2020 03:44PM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	DMS 001 PART 4 : 2016 ANNEX A.1.2.1	<b>Test Method Variation:</b>	NIL

<b>Remarks:</b>	- SAMPLING IS PERFORMED BY THE COSTUMER / Production Date: 28.07.2020
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	<b>Document Title:</b> <b>TEST REPORT</b> COMPRESSIVE STRENGTH OF PAVING BLOCKS- RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION**  
**STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	198188	<b>Request No:</b>	EMTX-2020-1006431
<b>Project No:</b>	BA-28	<b>Report Date:</b>	22/10/2020 12:20PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410173
<b>Receiving Date/Time:</b>	20/10/2020 02:21PM	<b>Lot Size:</b>	
<b>Sample Size:</b>	30.00 pieces	<b>Sender No:</b>	LL0495
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 200X100X80

**TEST RESULTS**

PARAMETER	RESULTS				
PRODUCTION DATE	28/07/2020				
DATE CRUSHED	20-10-2020				
NOMINAL SIZE (mm)	200 X 100 X 80				
COLOUR	NG				
SPECIMEN NO.	1	2	3	4	5
Failure Load (kN)	977	1053	856	1166	1101
Compressive Strength ( N/mm <sup>2</sup> )	59.4	64.0	52.0	70.9	67.0
SPECIMEN NO.	6	7	8	9	10
Failure Load (kN)	1021	1000	1093	787	971
Compressive Strength ( N/mm <sup>2</sup> )	62.1	60.8	66.5	47.9	59.0
AVE COMP STRENGTH	61				

<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	JVBRIONES
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	20/10/2020 02:21PM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	DMS 001 PART 4 : 2016 ANNEX A.2.1 & B	<b>Test Method Variation:</b>	NIL

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	<b>Document Title:</b> <b>TEST REPORT</b> CHLORIDE CONTENT OF CONCRETE BLOCKS	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION**

**CHEMICAL ANALYSIS IN CONSTRUCTIONA MATERIAL UNIT**

<b>Report No:</b>	198201	<b>Request No:</b>	EMTX-2020-1006431
<b>Project No:</b>	BA-28	<b>Report Date:</b>	22/10/2020 12:22PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410173
<b>Receiving Date/Time:</b>	19/10/2020 09:25AM	<b>Lot Size:</b>	
<b>Sample Size:</b>	30.00 pieces	<b>Sender No:</b>	LL0495
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 200X100X80</b>			

**TEST RESULTS**

PARAMETER	RESULTS		
AVERAGE CHLORIDE % BY MASS OF HARDENED CONCRETE	0.01		
Production date	28-07-2020		
<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	REDASH
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	19/10/2020 09:25AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	BS 1881-124 : 2015	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- SAMPLING IS PERFORMED BY THE CUSTOMER		

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	<b>Document Title:</b> TEST REPORT SULPHATE CONTENT OF HARDENED CONCRETE	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION**

**CHEMICAL ANALYSIS IN CONSTRUCTIONA MATERIAL UNIT**

<b>Report No:</b>	198204	<b>Request No:</b>	EMTX-2020-1006431
<b>Project No:</b>	BA-28	<b>Report Date:</b>	22/10/2020 12:22PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410173
<b>Receiving Date/Time:</b>	19/10/2020 09:25AM	<b>Lot Size:</b>	
<b>Sample Size:</b>	30.00 pieces	<b>Sender No:</b>	LL0495
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 200X100X80

**TEST RESULTS**

PARAMETER	RESULTS
AVERAGE SULPHATE AS SO3 (%) BY MASS OF HARDENED CONCRETE (CONC. BLOCK)	0.6
Production date	28-07-2020 12:00:00 AM
<b>Sampled By:</b>	LINO M. LINGAO
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE
<b>Sampling Method:</b>	DCL-IC-99
<b>Test Method:</b>	BS 1881-124 : 2015 cl. 12.2 ADD-06(2002)
<b>Tested By:</b>	REDASH
<b>Testing Date:</b>	19/10/2020 09:25AM
<b>Sampling Report No:</b>	
<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- SAMPLING IS PERFORMED BY THE CUSTOMER

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**\*\*\* END OF REPORT \*\*\***

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LB-TEST-014

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	<b>Document Title:</b> <b>TEST REPORT</b> MEASUREMENT OF ABRASION RESISTANCE ( WIDE WHEEL TEST)	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	201846	<b>Request No:</b>	EMTX-2020-1006431
<b>Project No:</b>	BA-28	<b>Report Date:</b>	30/10/2020 04:48PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410173
<b>Receiving Date/Time:</b>	25/10/2020 07:11AM	<b>Lot Size:</b>	
<b>Sample Size:</b>	30.00 pieces	<b>Sender No:</b>	LL0495
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 200X100X80</b>			



**TEST RESULTS**

PARAMETER	RESULTS		
PRODUCTION DATE	28/07/2020		
NOMINAL SIZE (mm)	200X100X80		
TEST SIZE (mm)	150X100X80		
COLOUR OF SAMPLE	NG		
RATE OF WHEEL REVOLUTION	75		
CALIBRATION VALUE	20.0		
SPECIMEN	1	2	3
LENGTH OF GROOVE (mm)	13.5	14.0	14.0
AVERAGE LENGTH OF GROOVES (mm)	14.0		

<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	MAABDULRAHMAN
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	25/10/2020 07:11AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	BS EN 1338 : 2003 (E) ANNEX G AMD 16470 : 2006	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- SAMPLING IS PERFORMED BY THE CUSTOMER		

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	<b>Document Title:</b> <b>TEST REPORT</b> DETERMINATION OF WATER ABSORPTION OF PAVING BLOCKS.	عنوان الوثيقة:	
	<b>Doc Ref.</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	197803	<b>Request No:</b>	EMTX-2020-1006431
<b>Project No:</b>	BA-28	<b>Report Date:</b>	21/10/2020 07:47PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410173
<b>Receiving Date/Time:</b>	20/10/2020 08:49AM	<b>Lot Size:</b>	
<b>Sample Size:</b>	30.00 pieces	<b>Sender No:</b>	LL0495
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 200X100X80

**TEST RESULTS**

PARAMETER	RESULTS		
PRODUCTION DATE	28/07/2020		
AGE AT TEST (DAYS)	82		
NOMINAL SIZE (mm)	200X100X80		
COLOUR OF THE SPECIMEN	GREY		
SPECIMEN	11	12	13
WATER ABSORPTION (%)	3.2	3.3	3.3
AVERAGE WATER ABSORPTION (%)	3.3		

<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	EJMILLANA
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	20/10/2020 08:49AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	DMS 001 PART 4 : 2016 ANNEX C	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- SAMPLING PERFORMED BY THE CUSTOMER		

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	<b>Document Title:</b> TEST REPORT SOLAR REFLECTANCE INDEX (SRI) OF MATERIALS	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
GREEN BUILDING PRODUCT UNIT**

<b>Report No:</b>	210543	<b>Request No:</b>	EMTX-2020-1014534
<b>Project No:</b>	BA-28	<b>Report Date:</b>	16/11/2020 03:59PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410173
<b>Receiving Date/Time:</b>	11/11/2020 09:37AM	<b>Lot Size:</b>	
<b>Sample Size:</b>	3.00 pieces	<b>Sender No:</b>	LL0495
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 200X100X80</b>			

**TEST RESULTS**

PARAMETER	RESULTS
SAMPLE TYPE	NG
SURFACE TEXTURE	ROUGH
SPECIMEN THICKNESS (mm)	80
TEST CONDITION	23+/-2Degree, 50+/-5% RH
SPECIMEN NO.	1, 2, 3
Solar Reflectance (%) as per ASTM C 1549 - 09	31.4
Emittance (e) As Per ASTM C1371-04a	0.96
Standard Deviation of Reflectance	0.0278
Standard Deviation of Emittance	0.0015
Solar Reflectance Index (SRI) for Low Wind (0 to 2 m/s)	37.27
Solar Reflectance Index (SRI) for Medium Wind (2 to 6 m/s)	36.56
Solar Reflectance Index (SRI) for High Wind (6 to 10 m/s)	35.90

<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	NIMIAH
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	11/11/2020 09:37AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	ASTM E1980-11 (R2019)	<b>Test Method Variation:</b>	NIL

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## REPORT ON ACID SOLUBLE CHLORIDE AND SULPHATE IN HARDENED CONCRETE

REPORT NO.	: R1DX21-132266 - 132267	DATE :	09/12/2021
REQUEST NO.	: Q1DX21-078770	SAMPLE NO. :	S1DX21-078770
SENDER'S REF.	: NOT GIVEN	PROJECT NO. :	IQC
PROJECT NAME	: INTERNAL QUALITY CHECKING		
CLIENT NAME	: MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
CONSULTANT	: NO SPECIFIC CONSULTANT		
CONTRACTOR	: NO SPECIFIC CONTRACTOR		
ADDRESS	: DUBAI, UAE		
SAMPLED BY	: NAHAS REPRESENTATIVE		
SAMPLE BROUGHT BY	: GTL'S REPRESENTATIVE		
LOCATION	: MACON	SAMPLE SIZE :	NOT GIVEN
LAYER	: DOUBLE	LOT SIZE :	NOT GIVEN
SOURCE	: MACON	LOT NO. :	NOT GIVEN
SAMPLE DESCRIPTION	: PAVING BLOCK	BUNDLE NO. :	NOT APPLICABLE
COLOR/CLASS	: NOT GIVEN	TESTING DATE :	05/12/2021
WORK SIZE (mm)	: 200 x 100 x 80	SAMPLING DATE / TIME :	30/11/2021 / NOT GIVEN
UNIT SAMPLE FROM	: NOT GIVEN	RECEIVING DATE :	05/12/2021

### RESULT

PARAMETER	UNIT	CLIENT'S SPECIFICATION	RESULT
ACID SOLUBLE CHLORIDE as Cl <sup>-</sup>	% weight of dried material	< 0.05	0.02
ACID SOLUBLE SULPHATE as SO <sub>3</sub>		< 0.7	0.63

TESTED ON	: 05/12/2021 - 08/12/2021
SAMPLING REPORT NO	: NOT GIVEN
SAMPLING METHOD	: RANDOM
SAMPLE PREPARATION	: BS 1881 PART 124 : 2015 CLS. 5.5.2
TEST METHOD	: ACID SOLUBLE CHLORIDE : BS 1881 PART 124 : 2015 CLS. 12.1 : ACID SOLUBLE SULPHATE : BS 1881 PART 124 : 2015 CLS. 12.2
TEST METHOD VARIATION	: REPORTED VALUES ARE BASED ON PERCENTAGE (%) WEIGHT OF DRIED SAMPLE INSTEAD OF PERCENTAGE (%) WEIGHT OF CEMENT.
TESTED BY	: HNK
REMARKS	: THE TESTED SAMPLE MEETS THE SPECIFICATION LIMITS SUBMITTED BY THE CLIENT WITH RESPECT TO THE ABOVE PARAMETERS.



  
Sethupathi Shanmugavel  
Technical Supervisor (Chemical)  
Dubai

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GEOSCIENCE TESTING LABORATORY

REPORT ON ACID SOLUBLE CHLORIDE AND SULPHATE IN HARDENED CONCRETE

Report No. : R1DX21-115495 - 115496  
Request No. : Q1DX21-068710  
Sender's Ref. No : NOT GIVEN  
Project Name : INTERNAL QUALITY CHECKING  
Client Name : MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)  
Consultant : NO SPECIFIC CONSULTANT  
Contractor : NO SPECIFIC CONTRACTOR  
Address : DUBAI, U.A.E  
Sampled By : NAHAS  
Sampling Brought By : GTL'S REPRESENTATIVE



Date : 25/10/2021

Sample No : S1DX21-068710

Project No : IQC

Location : MACON  
Layer : DOUBLE LAYER  
Source : MACON  
Sample Description : PAVING BLOCK RECTANGULAR SHAPE  
Color / Class : NOT GIVEN  
Work Size (mm) : 200 x 100 x 80  
Unit Sampled From : NOT GIVEN  
Sample Size : NOT GIVEN  
Lot Size : NOT GIVEN  
Lot No : 21410297  
Bundle No : NOT GIVEN  
Testing Date : 19/10/2021  
Sampling Date / Time : 07/10/2021/ NOT GIVEN  
Receiving Date : 19/10/2021

**RESULT**

PARAMETER	UNIT	RESULT
ACID SOLUBLE CHLORIDE as Cl <sup>-</sup>	% weight of dried material	0.01
ACID SOLUBLE SULPHATE as SO <sub>3</sub>	% weight of dried material	0.45

Tested On : 19/10/2021 - 24/10/2021  
Sampling Report No : NOT GIVEN  
Sampling Method : RANDOM  
Sample Preparation : BS 1881 PART 124 : 2015 CLS. 5.5.2  
Test Method : ACID SOLUBLE CHLORIDE : BS 1881 PART 124 2015 CLS. 12.1  
ACID SOLUBLE SULPHATE : BS 1881 PART 124 2015 CLS. 12.2  
Test Method variation : REPORTED VALUES ARE BASED ON PERCENTAGE (%) WEIGHT OF DRIED SAMPLE  
INSTEAD OF PERCENTAGE (%) WEIGHT OF CEMENT.  
Tested By : JET / PGN  
Remarks : NONE



Sethupathi Shanmugavel  
Technical Supervisor (Chemical)  
Dubai

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## REPORT ON ACID SOLUBLE CHLORIDE AND SULPHATE IN HARDENED CONCRET

Report No. : R1DX21-090295 - 090296  
Request No. : Q1DX21-053185  
Sender's Ref. No : NOT GIVEN  
Project Name : IQC  
Client Name : MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)  
Consultant : NO SPECIFIC CONSULTANT  
Contractor : MACON LLC  
Address : DUBAI, U.A.E  
Sampled By : NAHAS  
Sampling Brought By : GTL'S REPRESENTATIVE



Date : 10/08/2021

Sample No : S1DX21-053185  
Project No : NOT GIVEN

Location : MACON  
Layer : DOUBLE (FIM)  
Source : MACON LLC  
Sample Description : PAVING BLOCK RECTANGULAR SHAPE  
Color / Class : NOT GIVEN  
Work Size (mm) : 200 x 100 x 80  
Unit Sampled From : NOT GIVEN  
Sample Size : NOT GIVEN  
Lot Size : 21410231  
Lot No : 21410231  
Bundle No : NOT APPLICABLE  
Testing Date : 05/08/2021  
Sampling Date / Time : 04/08/2021/ NOT GIVEN  
Receiving Date : 05/08/2021

### RESULT

PARAMETER	UNIT	RESULT
ACID SOLUBLE CHLORIDE as Cl	% weight of dried material	0.01
ACID SOLUBLE SULPHATE as SO <sub>3</sub>	% weight of dried material	0.64

Tested On : 05/08/2021 - 09/08/2021  
Sampling Report No : NOT GIVEN  
Sampling Method : RANDOM  
Sample Preparation : BS 1881 PART 124 : 2015 CLS. 5.5.2  
Test Method : ACID SOLUBLE CHLORIDE : BS 1881 PART 124 2015 CLS. 12.1  
ACID SOLUBLE SULPHATE : BS 1881 PART 124 2015 CLS. 12.2  
Test Method variation : REPORTED VALUES ARE BASED ON PERCENTAGE (%) WEIGHT OF DRIED SAMPLE  
INSTEAD OF PERCENTAGE (%) WEIGHT OF CEMENT.  
Tested By : HNK  
Remarks : NONE



Sethupathi Shanmugavel  
Technical Supervisor (Chemical)  
Dubai

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	<b>Document Title:</b> <b>TEST REPORT</b> DIMENSION OF PAVING BLOCKS - NON RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	196638	<b>Request No:</b>	EMTX-2020-1006212
<b>Project No:</b>	BA-28	<b>Report Date:</b>	19/10/2020 01:38PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK UNISHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 12:00PM	<b>Lot Number:</b>	20410223
<b>Receiving Date/Time:</b>	18/10/2020 03:43PM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0497
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 222X109.5X80</b>			

**TEST RESULTS**

PARAMETER	RESULTS				
PRODUCTION DATE	24/09/2020				
DATE TESTED	18-10-2020				
TYPE OF PAVING BLOCK	UNISHAPE				
NOMINAL THICKNESS (mm)	80				
COLOUR	GREY				
BUNDLE NO	NG				
PRODUCTION NO	NG				
SPECIMEN NO.	1	2	3	4	5
Thickness 1 ( mm )	80	80	81	80	80
Thickness 2 ( mm )	80	80	81	80	80
Thickness 3 ( mm )	80	80	81	80	80
Thickness 4 ( mm )	80	80	81	80	80
AVERAGE THICKNESS mm	80	80	81	80	80
SPECIMEN NO.	6	7	8	9	10
Thickness 1 ( mm )	80	81	81	80	80
Thickness 2 ( mm )	80	81	81	80	80
Thickness 3 ( mm )	80	81	81	80	80
Thickness 4 ( mm )	80	81	81	80	80
AVERAGE THICKNESS mm	80	81	81	80	80

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	<b>Document Title:</b> TEST REPORT COMPRESSIVE STRENGTH OF PAVING BLOCKS - NON RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	198197	<b>Request No:</b>	EMTX-2020-1006212
<b>Project No:</b>	BA-28	<b>Report Date:</b>	22/10/2020 12:21PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK UNISHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 12:00PM	<b>Lot Number:</b>	20410223
<b>Receiving Date/Time:</b>	20/10/2020 02:21PM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0497
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 222X109.5X80

**TEST RESULTS**

PARAMETER	RESULTS				
BUNDLE NO	NG				
PRODUCTION NO	NG				
PRODUCTION DATE	24/09/2020				
DATE CRUSHED	20-10-2020				
TYPE OF PAVING BLOCK	UNISHAPE				
NOMINAL THICKNESS (mm)	80				
COLOUR	GREY				
SPECIMEN NO.	1	2	3	4	5
Failure Load ( kN )	1156	1189	1070	1129	951
Compressive Strength (N/mm <sup>2</sup> )	53.2	54.8	49.2	51.9	43.8
SPECIMEN NO.	6	7	8	9	10
Failure Load ( kN )	1124	1070	1207	1163	1174
Compressive Strength (N/mm <sup>2</sup> )	51.8	49.2	55.6	53.6	54.0
AVERAGE COMPRESSIVE STRENGTH	52				



<b>Sampled By:</b>	LINO M, LINGAO	<b>Tested By:</b>	JVBRIONES
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	20/10/2020 02:21PM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	DMS 001 PART 4 : 2016 ANNEX A.2.2 & B	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- SAMPLING IS PERFORMED BY THE COSTUMER		

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	<b>Document Title:</b> <b>TEST REPORT</b> CHLORIDE CONTENT OF CONCRETE BLOCKS	عنوان الوثيقة:	
	<b>Doc Ref.</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION**

**CHEMICAL ANALYSIS IN CONSTRUCTIONA MATERIAL UNIT**

<b>Report No:</b>	198224	<b>Request No:</b>	EMTX-2020-1006212
<b>Project No:</b>	BA-28	<b>Report Date:</b>	22/10/2020 12:26PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK UNISHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 12:00PM	<b>Lot Number:</b>	20410223
<b>Receiving Date/Time:</b>	19/10/2020 09:25AM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0497
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 222X109.5X80

**TEST RESULTS**

PARAMETER	RESULTS
AVERAGE CHLORIDE % BY MASS OF HARDENED CONCRETE	0.01
Colour	GREY
Production date	24-09-2020

<b>Sampled By:</b>	LINO M, LINGAO	<b>Tested By:</b>	REDASH
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	19/10/2020 09:25AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	BS 1881-124 : 2015	<b>Test Method Variation:</b>	NIL

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	<b>Document Title:</b> TEST REPORT SULPHATE CONTENT OF HARDENED CONCRETE	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION**

**CHEMICAL ANALYSIS IN CONSTRUCTIONA MATERIAL UNIT**

<b>Report No:</b>	198738	<b>Request No:</b>	EMTX-2020-1006212
<b>Project No:</b>	BA-28	<b>Report Date:</b>	25/10/2020 10:03AM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK UNISHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 12:00PM	<b>Lot Number:</b>	20410223
<b>Receiving Date/Time:</b>	19/10/2020 09:25AM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0497
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 222X109.5X80

**TEST RESULTS**

PARAMETER	RESULTS
AVERAGE SULPHATE AS SO3 (%) BY MASS OF HARDENED CONCRETE (CONC. BLOCK)	0.4
Colour	GREY
Production date	24-09-2020 10:33:41 AM

<b>Sampled By:</b>	LINO M, LINGAO	<b>Tested By:</b>	REDASH
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	19/10/2020 09:25AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	BS 1881-124 : 2015 cl. 12.2 ADD-06(2002)	<b>Test Method Variation:</b>	NIL

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	<b>Document Title:</b> <b>TEST REPORT</b> MEASUREMENT OF ABRASION RESISTANCE ( WIDE WHEEL TEST)	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	201847	<b>Request No:</b>	EMTX-2020-1006212
<b>Project No:</b>	BA-28	<b>Report Date:</b>	30/10/2020 04:48PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK UNISHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 12:00PM	<b>Lot Number:</b>	20410223
<b>Receiving Date/Time:</b>	25/10/2020 07:10AM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0497
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 222X109.5X80</b>			

**TEST RESULTS**

PARAMETER	RESULTS		
PRODUCTION DATE	24/09/2020		
NOMINAL SIZE (mm)	80		
TEST SIZE (mm)	150X80		
COLOUR OF SAMPLE	NG		
RATE OF WHEEL REVOLUTION	75		
CALIBRATION VALUE	20.0		
SPECIMEN	1	2	3
LENGTH OF GROOVE (mm)	10.0	10.5	11.0
AVERAGE LENGTH OF GROOVES (mm)	10.5		

<b>Sampled By:</b>	LINO M, LINGAO	<b>Tested By:</b>	MAABDULRAHMAN
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	25/10/2020 07:10AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	BS EN 1338 : 2003 (E) ANNEX G AMD 16470 : 2006	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- SAMPLING IS PERFORMED BY THE CUSTOMER		

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	<b>Document Title:</b> <b>TEST REPORT</b> DETERMINATION OF WATER ABSORPTION OF PAVING BLOCKS.	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	198199	<b>Request No:</b>	EMTX-2020-1006212
<b>Project No:</b>	BA-28	<b>Report Date:</b>	22/10/2020 12:22PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK UNISHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 12:00PM	<b>Lot Number:</b>	20410223
<b>Receiving Date/Time:</b>	20/10/2020 08:49AM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0497
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 222X109.5X80

**TEST RESULTS**

PARAMETER	RESULTS		
PRODUCTION DATE	24/09/2020		
AGE AT TEST (DAYS)	24		
NOMINAL SIZE (mm)	80		
COLOUR OF THE SPECIMEN	GREY		
SPECIMEN	11	12	13
WATER ABSORPTION (%)	3.4	3.6	3.5
AVERAGE WATER ABSORPTION (%)	3.5		

<b>Sampled By:</b>	LINO M, LINGAO	<b>Tested By:</b>	EJMILLANA
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	20/10/2020 08:49AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	DMS 001 PART 4 : 2016 ANNEX C	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- SAMPLING PERFORMED BY THE CUSTOMER		

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GEOSCIENCE TESTING LABORATORY

REPORT ON ACID SOLUBLE CHLORIDE AND SULPHATE IN HARDENED CONCRETE

REPORT NO.	: R1DX21-132262 - 132263	DATE	: 09/12/2021
REQUEST NO.	: Q1DX21-078768	SAMPLE NO.	: S1DX21-078768
SENDER'S REF.	: NOT GIVEN	PROJECT NO.	: IQC
PROJECT NAME	: INTERNAL QUALITY CHECKING		
CLIENT NAME	: MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
CONSULTANT	: NO SPECIFIC CONSULTANT		
CONTRACTOR	: NO SPECIFIC CONTRACTOR		
ADDRESS	: DUBAI, UAE		
SAMPLED BY	: NAHAS REPRESENTATIVE		
SAMPLE BROUGHT BY	: GTL'S REPRESENTATIVE		
LOCATION	: MACON	SAMPLE SIZE	: NOT GIVEN
LAYER	: DOUBLE	LOT SIZE	: NOT GIVEN
SOURCE	: MACON	LOT NO.	: NOT GIVEN
SAMPLE DESCRIPTION	: UNI PAVING BLOCK	BUNDLE NO.	: NOT APPLICABLE
COLOR/CLASS	: NOT GIVEN	TESTING DATE	: 05/12/2021
WORK SIZE (mm)	: 222.5 x 112.5 x 80	SAMPLING DATE / TIME	: 30/11/2021 / NOT GIVEN
UNIT SAMPLE FROM	: NOT GIVEN	RECEIVING DATE	: 05/12/2021

RESULT

PARAMETER	UNIT	CLIENT'S SPECIFICATION	RESULT
ACID SOLUBLE CHLORIDE as Cl <sup>-</sup>	% weight of dried material	< 0.05	0.02
ACID SOLUBLE SULPHATE as SO <sub>3</sub>		< 0.7	0.63

TESTED ON	: 05/12/2021 - 08/12/2021
SAMPLING REPORT NO	: NOT GIVEN
SAMPLING METHOD	: RANDOM
SAMPLE PREPARATION	: BS 1881 PART 124 : 2015 CLS. 5.5.2
TEST METHOD	: ACID SOLUBLE CHLORIDE : BS 1881 PART 124 : 2015 CLS. 12.1 : ACID SOLUBLE SULPHATE : BS 1881 PART 124 : 2015 CLS. 12.2
TEST METHOD VARIATION	: REPORTED VALUES ARE BASED ON PERCENTAGE (%) WEIGHT OF DRIED SAMPLE INSTEAD OF PERCENTAGE (%) WEIGHT OF CEMENT.
TESTED BY	: HNK
REMARKS	: THE TESTED SAMPLE MEETS THE SPECIFICATION LIMITS SUBMITTED BY THE CLIENT WITH RESPECT TO THE ABOVE PARAMETERS.



Sethupathi Shanmugavel  
Technical Supervisor (Chemical)  
Dubai

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REPORT ON ACID SOLUBLE CHLORIDE AND SULPHATE IN HARDENED CONCRETE

Report No. : R1DX21-115499 - 115500  
Request No. : Q1DX21-068712  
Sender's Ref. No : NOT GIVEN  
Project Name : INTERNAL QUALITY CHECKING  
Client Name : MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)  
Consultant : NO SPECIFIC CONSULTANT  
Contractor : NO SPECIFIC CONTRACTOR  
Address : DUBAI, U.A.E  
Sampled By : NAHAS  
Sampling Brought By : GTL'S REPRESENTATIVE



Date : 25/10/2021

Sample No : S1DX21-068712

Project No : IQC

Location : MACON  
Layer : DOUBLE LAYER  
Source : MACON  
Sample Description : PAVING BLOCK UNISHAPE (GREY)  
Color / Class : NOT GIVEN  
Work Size (mm) : 80 mm  
Unit Sampled From : NOT GIVEN

Sample Size : NOT GIVEN

Lot Size : NOT GIVEN

Lot No : 21410292

Bundle No : NOT GIVEN

Testing Date : 19/10/2021

Sampling Date / Time : 07/10/2021/ NOT GIVEN

Receiving Date : 19/10/2021

**RESULT**

PARAMETER	UNIT	RESULT
ACID SOLUBLE CHLORIDE as Cl <sup>-</sup>	% weight of dried material	0.01
ACID SOLUBLE SULPHATE as SO <sub>3</sub>	% weight of dried material	0.63

Tested On : 19/10/2021 - 24/10/2021  
Sampling Report No : NOT GIVEN  
Sampling Method : RANDOM  
Sample Preparation : BS 1881 PART 124 : 2015 CLS. 5.5.2  
Test Method : ACID SOLUBLE CHLORIDE : BS 1881 PART 124 2015 CLS. 12.1  
ACID SOLUBLE SULPHATE : BS 1881 PART 124 2015 CLS. 12.2  
Test Method variation : REPORTED VALUES ARE BASED ON PERCENTAGE (%) WEIGHT OF DRIED SAMPLE  
INSTEAD OF PERCENTAGE (%) WEIGHT OF CEMENT.  
Tested By : HNK  
Remarks : NONE



*Sethupathi Shanmugavel*  
Sethupathi Shanmugavel  
Technical Supervisor (Chemical)  
Dubai

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## REPORT ON ACID SOLUBLE CHLORIDE AND SULPHATE IN HARDENED CONCRETE

Report No. : R1DX21-090297 - 090298  
Request No. : Q1DX21-053186  
Sender's Ref. No : NOT GIVEN  
Project Name : IQC  
Client Name : MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)  
Consultant : NO SPECIFIC CONSULTANT  
Contractor : MACON LLC  
Address : DUBAI, UAE  
Sampled By : NAHAS  
Sampling Brought By : GTL'S REPRESENTATIVE



Date : 10/08/2021

Sample No : S1DX21-053186

Project No : NOT GIVEN

Location : MACON  
Layer : DOUBLE (FIM)  
Source : MACON LLC  
Sample Description : 8 cm PAVING BLOCK UNISHAPE (GREY)  
Color / Class : NOT GIVEN  
Work Size (mm) : 222 x 112.5 x 80 mm  
Unit Sampled From : NOT GIVEN  
Sample Size : NOT GIVEN  
Lot Size : 21410167  
Lot No : 21410167  
Bundle No : NOT APPLICABLE  
Testing Date : 05/08/2021  
Sampling Date / Time : 04/08/2021/ NOT GIVEN  
Receiving Date : 05/08/2021

### RESULT

PARAMETER	UNIT	RESULT
ACID SOLUBLE CHLORIDE as Cl	% weight of dried material	0.01
ACID SOLUBLE SULPHATE as SO <sub>3</sub>	% weight of dried material	0.63



Tested On : 05/08/2021 - 09/08/2021  
Sampling Report No : NOT GIVEN  
Sampling Method : RANDOM  
Sample Preparation : BS 1881 PART 124 : 2015 CLS. 5.5.2  
Test Method : ACID SOLUBLE CHLORIDE : BS 1881 PART 124 2015 CLS. 12.1  
ACID SOLUBLE SULPHATE : BS 1881 PART 124 2015 CLS. 12.2  
Test Method variation : REPORTED VALUES ARE BASED ON PERCENTAGE (%) WEIGHT OF DRIED SAMPLE  
INSTEAD OF PERCENTAGE (%) WEIGHT OF CEMENT.  
Tested By : HNK  
Remarks : NONE



Sethupathi Shanmugavel  
Technical Supervisor (Chemical)  
Dubai

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	<b>Document Title:</b> DIMENSION OF PAVING BLOCKS-RECTANGULAR	<b>TEST REPORT</b> عنوان الوثيقة:	
	<b>Doc Ref.</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	196639	<b>Request No:</b>	EMTX-2020-1006208
<b>Project No:</b>	BA-28	<b>Report Date:</b>	19/10/2020 01:38PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410224
<b>Receiving Date/Time:</b>	18/10/2020 03:43PM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0496
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 200X100X100

**TEST RESULTS**



PARAMETER	RESULTS				
BUNDLE NO	NG				
PRODUCTION NO	NG				
DATE TESTED	18-10-2020				
TYPE OF PAVING BLOCK	RECTANGULAR SHAPE				
NOMINAL SIZE (mm)	200 X 100 X 100				
COLOUR	GREY				
SPECIMEN	1	2	3	4	5
LENGTH 1 (mm)	198	198	198	198	198
LENGTH 2 (mm)	198	198	198	198	198
LENGTH 3 (mm)	198	198	198	198	198
LENGTH 4 (mm)	198	198	198	198	198
WIDTH 1 (mm)	98	98	98	98	98
WIDTH 2 (mm)	98	98	98	98	98
WIDTH 3 (mm)	98	98	98	98	98
WIDTH 4 (mm)	98	98	98	98	98
WIDTH 5 (mm)	98	98	98	98	98
WIDTH 6 (mm)	98	98	98	98	98
THICKNESS 1 (mm)	101	101	102	101	102
THICKNESS 2 (mm)	101	101	102	101	102
THICKNESS 3 (mm)	101	101	102	101	102
THICKNESS 4 (mm)	101	101	102	101	102
AVERAGE THICKNESS	101	101	102	101	102

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	<b>Document Title:</b> DIMENSION OF PAVING BLOCKS-RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	196639	<b>Request No:</b> EMTX-2020-1006208
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SPECIMEN	6	7	8	9	10
LENGTH 1 (mm)	198	198	198	198	198
LENGTH 2 (mm)	198	198	198	198	198
LENGTH 3 (mm)	198	198	198	198	198
LENGTH 4 (mm)	198	198	198	198	198
WIDTH 1 (mm)	98	98	98	98	98
WIDTH 2 (mm)	98	98	98	98	98
WIDTH 3 (mm)	98	98	98	98	98
WIDTH 4 (mm)	98	98	98	98	98
WIDTH 5 (mm)	98	98	98	98	98
WIDTH 6 (mm)	98	98	98	98	98
THICKNESS 1 (mm)	102	101	101	101	102
THICKNESS 2 (mm)	102	101	101	101	102
THICKNESS 3 (mm)	102	101	101	101	102
THICKNESS 4 (mm)	102	101	101	101	102
AVERAGE THICKNESS	102	101	101	101	102

<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	DQCONAHAP
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	18/10/2020 03:43PM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	DMS 001 PART 4 : 2016 ANNEX A.1.2.1	<b>Test Method Variation:</b>	NIL

<b>Remarks:</b>	- SAMPLING IS PERFORMED BY THE COSTUMER
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	<b>Document Title:</b> <b>TEST REPORT</b> COMPRESSIVE STRENGTH OF PAVING BLOCKS- RECTANGULAR	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	198202	<b>Request No:</b>	EMTX-2020-1006208
<b>Project No:</b>	BA-28	<b>Report Date:</b>	22/10/2020 12:22PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410224
<b>Receiving Date/Time:</b>	21/10/2020 03:50PM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0496
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 200X100X100

**TEST RESULTS**

PARAMETER	RESULTS				
DATE CRUSHED	21-10-2020				
NOMINAL SIZE (mm)	200 X 100 X 100				
COLOUR	NG				
SPECIMEN NO.	1	2	3	4	5
Failure Load (kN)	894	873	937	879	984
Compressive Strength ( N/mm <sup>2</sup> )	57.1	55.8	59.9	56.2	62.9
SPECIMEN NO.	6	7	8	9	10
Failure Load (kN)	916	884	924	990	974
Compressive Strength ( N/mm <sup>2</sup> )	58.5	56.5	59.0	63.3	62.2
AVE COMP STRENGTH	59				

<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	EJMILLANA
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	21/10/2020 03:50PM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	DMS 001 PART 4 : 2016 ANNEX A.2.1 & B	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- SAMPLING IS PERFORMED BY THE CUSTOMER		

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	<b>Document Title:</b> <b>TEST REPORT</b> CHLORIDE CONTENT OF CONCRETE BLOCKS	عنوان الوثيقة:	
	<b>Doc Ref.</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION**

**CHEMICAL ANALYSIS IN CONSTRUCTIONA MATERIAL UNIT**

<b>Report No:</b>	198740	<b>Request No:</b>	EMTX-2020-1006208
<b>Project No:</b>	BA-28	<b>Report Date:</b>	25/10/2020 10:04AM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410224
<b>Receiving Date/Time:</b>	19/10/2020 09:26AM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0496
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 200X100X100</b>			

**TEST RESULTS**

PARAMETER	RESULTS		
AVERAGE CHLORIDE % BY MASS OF HARDENED CONCRETE	0.01		
Production date	NA		
<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	REDASH
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	19/10/2020 09:26AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	BS 1881-124 : 2015	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- SAMPLING IS PERFORMED BY THE CUSTOMER		

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	<b>Document Title:</b> TEST REPORT SULPHATE CONTENT OF HARDENED CONCRETE	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
CHEMICAL ANALYSIS IN CONSTRUCTIONA MATERIAL UNIT**

<b>Report No:</b>	198742	<b>Request No:</b>	EMTX-2020-1006208
<b>Project No:</b>	BA-28	<b>Report Date:</b>	25/10/2020 10:05AM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410224
<b>Receiving Date/Time:</b>	19/10/2020 09:26AM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0496
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 200X100X100</b>			

**TEST RESULTS**

PARAMETER	RESULTS		
AVERAGE SULPHATE AS SO3 (%) BY MASS OF HARDENED CONCRETE (CONC. BLOCK)	0.5		
Colour	NA		
<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	REDASH
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	19/10/2020 09:26AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	BS 1881-124 : 2015 cl. 12.2 ADD-06(2002)	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- SAMPLING IS PERFORMED BY THE CUSTOMER		

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	<b>Document Title:</b> <b>TEST REPORT</b> MEASUREMENT OF ABRASION RESISTANCE ( WIDE WHEEL TEST)	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	200546	<b>Request No:</b>	EMTX-2020-1006208
<b>Project No:</b>	BA-28	<b>Report Date:</b>	27/10/2020 01:29PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410224
<b>Receiving Date/Time:</b>	22/10/2020 12:34PM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0496
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	

Nominal Size / Working Block Size L \* T \* H (mm) : 200X100X100

**TEST RESULTS**

PARAMETER	RESULTS		
PRODUCTION DATE	NG		
NOMINAL SIZE (mm)	200X100X100		
TEST SIZE (mm)	150X100X100		
COLOUR OF SAMPLE	NG		
RATE OF WHEEL REVOLUTION	75		
CALIBRATION VALUE	20.0		
SPECIMEN	1	2	3
LENGTH OF GROOVE (mm)	10.0	10.0	10.5
AVERAGE LENGTH OF GROOVES (mm)	10.0		

<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	MAABDULRAHMAN
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	22/10/2020 12:34PM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	BS EN 1338 : 2003 (E) ANNEX G AMD 16470 : 2006	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- SAMPLING IS PERFORMED BY THE CUSTOMER		

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	<b>Document Title:</b> <b>TEST REPORT</b> DETERMINATION OF WATER ABSORPTION OF PAVING BLOCKS.	عنوان الوثيقة:	
	<b>Doc Ref.:</b> DM-DCLD-F-CM-0100	رقم الوثيقة:	

**CONSTRUCTION MATERIAL LABORATORY SECTION  
STRUCTURAL PRODUCT UNIT**

<b>Report No:</b>	198205	<b>Request No:</b>	EMTX-2020-1006208
<b>Project No:</b>	BA-28	<b>Report Date:</b>	22/10/2020 12:23PM
<b>Project Name:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Consultant:</b>	DUBAI MUNICIPALITY		
<b>Contractor:</b>	MANSOOR CONCRETE BLOCK INDUSTRY (L.L.C.)		
<b>Location:</b>	FACTORY YARD		
<b>Source:</b>	MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
<b>Sample Description:</b>	PAVING BLOCK RECTANGULAR SHAPE		
<b>Sampling Date/Time:</b>	05/10/2020 11:00AM	<b>Lot Number:</b>	20410224
<b>Receiving Date/Time:</b>	20/10/2020 08:48AM	<b>Lot Size:</b>	
<b>Sample Size:</b>	25.00 pieces	<b>Sender No:</b>	LL0496
<b>Material/Mix Type:</b>	Double Mix	<b>Laying Date/Production Date:</b>	
<b>Nominal Size / Working Block Size L * T * H (mm) : 200X100X100</b>			

**TEST RESULTS**

PARAMETER	RESULTS		
PRODUCTION DATE	N.G		
AGE AT TEST (DAYS)	N.A		
NOMINAL SIZE (mm)	200X100X100		
COLOUR OF THE SPECIMEN	GREY		
SPECIMEN	11	12	13
WATER ABSORPTION (%)	3.2	3.0	2.9
AVERAGE WATER ABSORPTION (%)	3.0		

<b>Sampled By:</b>	LINO M. LINGAO	<b>Tested By:</b>	EJMILLANA
<b>Sampled Brought By:</b>	CLIENT REPRESENTATIVE	<b>Testing Date:</b>	20/10/2020 08:48AM
<b>Sampling Method:</b>	DCL-IC-99	<b>Sampling Report No:</b>	
<b>Test Method:</b>	DMS 001 PART 4 : 2016 ANNEX C	<b>Test Method Variation:</b>	NIL
<b>Remarks:</b>	- SAMPLING PERFORMED BY THE CUSTOMER		

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GEOSCIENCE TESTING LABORATORY

REPORT ON ACID SOLUBLE CHLORIDE AND SULPHATE IN HARDENED CONCRETE

REPORT NO.	: R1DX21-132268 - 132269	DATE	: 09/12/2021
REQUEST NO.	: Q1DX21-078771	SAMPLE NO.	: S1DX21-078771
SENDER'S REF.	: NOT GIVEN	PROJECT NO.	: IQC
PROJECT NAME	: INTERNAL QUALITY CHECKING		
CLIENT NAME	: MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)		
CONSULTANT	: NO SPECIFIC CONSULTANT		
CONTRACTOR	: NO SPECIFIC CONTRACTOR		
ADDRESS	: DUBAI, UAE		
SAMPLED BY	: NAHAS REPRESENTATIVE		
SAMPLE BROUGHT BY	: GTL'S REPRESENTATIVE		
LOCATION	: MACON	SAMPLE SIZE	: NOT GIVEN
LAYER	: DOUBLE	LOT SIZE	: NOT GIVEN
SOURCE	: MACON	LOT NO.	: NOT GIVEN
SAMPLE DESCRIPTION	: PAVING BLOCK	BUNDLE NO.	: NOT APPLICABLE
COLOR/CLASS	: NOT GIVEN	TESTING DATE	: 05/12/2021
WORK SIZE (mm)	: 200 x 100 x 100	SAMPLING DATE / TIME	: 30/11/2021 / NOT GIVEN
UNIT SAMPLE FROM	: NOT GIVEN	RECEIVING DATE	: 05/12/2021

RESULT

PARAMETER	UNIT	CLIENT'S SPECIFICATION	RESULT
ACID SOLUBLE CHLORIDE as Cl <sup>-</sup>	% weight of dried material	< 0.05	0.02
ACID SOLUBLE SULPHATE as SO <sub>3</sub>		< 0.7	0.66

TESTED ON	: 05/12/2021 - 08/12/2021
SAMPLING REPORT NO	: NOT GIVEN
SAMPLING METHOD	: RANDOM
SAMPLE PREPARATION	: BS 1881 PART 124 : 2015 CLS. 5.5.2
TEST METHOD	: ACID SOLUBLE CHLORIDE : BS 1881 PART 124 : 2015 CLS. 12.1 : ACID SOLUBLE SULPHATE : BS 1881 PART 124 : 2015 CLS. 12.2
TEST METHOD VARIATION	: REPORTED VALUES ARE BASED ON PERCENTAGE (%) WEIGHT OF DRIED SAMPLE INSTEAD OF PERCENTAGE (%) WEIGHT OF CEMENT.
TESTED BY	: HNK
REMARKS	: THE TESTED SAMPLE MEETS THE SPECIFICATION LIMITS SUBMITTED BY THE CLIENT WITH RESPECT TO THE ABOVE PARAMETERS.



Sethupathi Shanmugavel  
Technical Supervisor (Chemical)  
Dubai

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For GEOSCIENCE TESTING LABORATORY



# مختبر علوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

## REPORT ON ACID SOLUBLE CHLORIDE AND SULPHATE IN HARDENED CONCRETE

Report No. : R1DX21-115497 - 115498  
Request No. : Q1DX21-068711  
Sender's Ref. No : NOT GIVEN  
Project Name : INTERNAL QUALITY CHECKING  
Client Name : MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)  
Consultant : NO SPECIFIC CONSULTANT  
Contractor : NO SPECIFIC CONTRACTOR  
Address : DUBAI, U.A.E  
Sampled By : NAHAS  
Sampling Brought By : GTL'S REPRESENTATIVE



Date : 25/10/2021

Sample No : S1DX21-068711

Project No : IQC

Location : MACON  
Layer : DOUBLE LAYER  
Source : MACON  
Sample Description : PAVING BLOCK RECTANGULAR SHAPE  
Color / Class : NOT GIVEN  
Work Size (mm) : 200 x 100 x 100  
Unit Sampled From : NOT GIVEN  
Sample Size : NOT GIVEN  
Lot Size : NOT GIVEN  
Lot No : NOT GIVEN  
Bundle No : NOT GIVEN  
Testing Date : 19/10/2021  
Sampling Date / Time : 07/10/2021/ NOT GIVEN  
Receiving Date : 19/10/2021

### RESULT

PARAMETER	UNIT	RESULT
ACID SOLUBLE CHLORIDE as Cl <sup>-</sup>	% weight of dried material	0.01
ACID SOLUBLE SULPHATE as SO <sub>3</sub>	% weight of dried material	0.48

Tested On : 19/10/2021 - 24/10/2021  
Sampling Report No : NOT GIVEN  
Sampling Method : RANDOM  
Sample Preparation : BS 1881 PART 124 : 2015 CLS. 5.5.2  
Test Method : ACID SOLUBLE CHLORIDE : BS 1881 PART 124 2015 CLS. 12.1  
ACID SOLUBLE SULPHATE : BS 1881 PART 124 2015 CLS. 12.2  
Test Method variation : REPORTED VALUES ARE BASED ON PERCENTAGE (%) WEIGHT OF DRIED SAMPLE  
INSTEAD OF PERCENTAGE (%) WEIGHT OF CEMENT.  
Tested By : JET / PGN  
Remarks : NONE



Sethupathi Shanmugavel  
Technical Supervisor (Chemical)  
Dubai

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Form No: CH - 45

Issue: 01/01.08.2001

Rev.: 04/13.09.2006

For GEOSCIENCE TESTING LABORATORY

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REPORT ON COMPRESSIVE STRENGTH OF RECTANGULAR PAVING BLOCKS

Page 01 of 02

Client : Mansoor Concrete Industry LLC (Macon)  
Address : Dubai, UAE  
Contractor : Not Provided  
Consultant : Not Provided  
Project Name : Quality Control Testing  
Project No. : Not Provided  
Location : Jabel Ali  
Sender's No. : Not Provided  
Lot No. : Not Provided  
Lot Size (Blocks) : Not Provided  
Production date : Not Provided  
Date of Sampling : 17/11/2019  
Time of Sampling : 10:00 am  
Sampled by : Nahas  
Sampling Method : Not Provided  
Source of sample : MACON Factory  
Sampling Certificate No. : Not Provided  
Sample brought in by : Client

Report No : CR-1911/10855  
Lab Project No : P-5162  
Lab Sample No. : CQ-1911/5802/1-10  
Date Sample Received : 30/11/2019  
Time Sample Received : 12:17 pm  
Date of Test : 01/12/2019  
Reporting Date : 04/12/2019  
Strength Cr. Factor : 1.18  
Sample Description : Rectangular Paving Blocks  
Work Size (LxWxT) mm : 200x100x80  
Tested by : QI  
Chamfer : Not Provided  
Colour of Block : Grey

TEST RESULTS :

Lab Specimen No.	Max. Load (kN)	Crushing Strength N/mm <sup>2</sup>	Corrected Crushing Strength N/mm <sup>2</sup>
CQ-1911/5802/1	888.0	45.8	54.0
CQ-1911/5802/2	952.0	49.1	57.9
CQ-1911/5802/3	961.0	49.5	58.4
CQ-1911/5802/4	887.0	45.7	53.9
CQ-1911/5802/5	916.0	47.2	55.7
CQ-1911/5802/6	955.0	49.2	58.1
CQ-1911/5802/7	881.0	45.4	53.6
CQ-1911/5802/8	911.0	46.9	55.3
CQ-1911/5802/9	938.0	48.3	57.0
CQ-1911/5802/10	903.0	46.5	54.9
Compressive Strength (N/mm <sup>2</sup> ) :			56.0

Compressive Strength method : BS 6717: Part 1: 1993: Annex B  
Test Method Variation : Plywood used <4.00mm thickness  
Remarks : None



Authorized Signatory



R-CRP-B-01  
issue No.1

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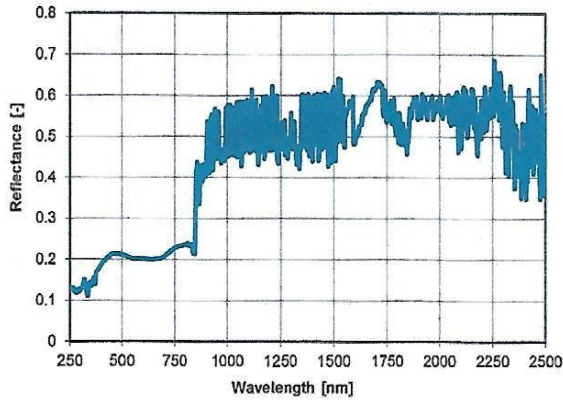


REPORT ON DETERMINATION OF SOLAR REFLECTIVE INDEX OF PAVING BLOCK

Page 1 of 1

Client : Mansoor Concrete Block Industry LLC  
Address : P O Box No:34369, Jebel Ali, Dubai, UAE.  
Consultant : NP  
Contractor : NP  
Project Name : Quality Control Testing  
Color Code : Grey  
Sample Description : Rectangular Paving Block  
Sample Identificatuon : C - 42  
No. of Specimen : 1 nos.  
Source of Specimen : Client  
Thickness : 80 mm  
Sampled by : Nahas

Report No : CR-1911/10860  
Lab Project No : P - 5162  
Lab Ref No : CQ-1911/5803  
Nominal Size(LXW) : (200X100)mm  
Date sample received : 30/11/2019  
Date test started : 04/12/2019  
Date test completed : 04/12/2019  
Report Date : 05/12/2019  
Testing temperature : 23 C  
Relative Humidity : 55%  
Tested by : LF



80 Rectangular Grey Paving Block

Test Name	Unit	Test Method	Results
Solar Direct Reflectance	%	ASTM E 903:12	31.3
Corrected Normal Emissivity		EN 673:2011	0.92
*SRI for low wind condition		ASTM E 1980:11	33.32
*SRI for medium wind condition		ASTM E 1980:11	32.39
*SRI for high wind condition		ASTM E 1980:11	31.36

Test method variation : None  
Remarks : None

  
Authorized Signatory



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R-SRI-001  
Issue:01  
Issued on 28/2/2016





**TEST REPORT**

**DETERMINATION OF SOLAR REFLECTIVE INDEX**

Client

**MANSOOR CONCRETE BLOCK INDUSTRY (MACON LLC)**

Report Date : 17-12-2019

Sample Number	: SSP19-77842	Report Number	: RSP19-77842/1
Project Number	: IQC	Sample Source	: MACON
Project Name	: Internal Quality Checking	Sample Location	: MACON Yard
Project Location	: Jabal Ali, Dubai	Sampled By	: Client
Consultant	: NA	Sampling Date/Time	: 16-12-2019/10:00 Hrs.
Contractor	: Mansoor Concrete Block Industry (MACON LLC)	Sample Delivered By	: Client
Sample Description	: Paving Block Rectangular	Sample Received Date/Time	: 16-12-2019/12:00 Hrs
Product Name	: Paving Block - 200x100x60	Testing Date	: 17-12-2019
Testing Temperature	: 23°C	Colour Code	: Red
Relative Humidity	: 50%		

**Test Results :**

Test Name	Unit	Test Method	Result
Solar Reflectance	%	ASTM C 1549	32
Emissivity	-	ASTM E 408	0.92
SRI for low wind condition	-	ASTM E 1980	29 ✓
SRI for medium wind condition	-	ASTM E 1980	31
SRI for high wind condition	-	ASTM E 1980	33

Test method variation : None

Remarks : Solar reflectance & Emissivity was measured by using SRI1000 manufactured by AZ technology, USA

For Advanced Laboratory Center

This report relates only to the sample tested and shall not be reproduced except in full, without written approval of ALC. The sample will be retained for a period of one month, unless otherwise requested.

Issue No./Dt 01/01,11.16 Form No.: CH-70  
Revision No./Dt Page No.: 1 of 1  
/SMH/

**ALC**  
Rajakumar Thangavel  
Speciality Technical Manager  
مركز المختبر المتقدم  
ADVANCED LABORATORY  
CENTER LLC





## REPORT ON DETERMINATION OF WATER ABSORPTION OF MASONRY BLOCKS

Page 01 of 01

Client : Mansoor Concrete Block Industry LLC (Macon) Report No. : CR-1911/10858  
Address : Dubai, UAE Lab Project no. : P-5162  
Consultant : Not Provided Lab Sample No. : CQ-1911/5803  
Contractor : Not Provided Sample received on : 30/11/2019  
Project Name : Quality Control Testing Sample brought in by : Client  
Project Number : Not Provided Sample size (mm) : 200x100x80  
Source : MACON Factory Work size (mm) : 200x100x80  
Sender No. : NP Date of Test Started : 02/12/2019  
Lot Size (No.) : Not Provided Date of Test Completed : 04/12/2019  
Sample Description : Rectangular Paving Block Reporting Date : 04/12/2019  
Sampled by : Nahas Tested by : SUB  
Date of sampling : 17/11/2019  
Sampling method : Random  
Production Date : Not Provided

### Test Result

Client ID	Lab Specimen No.	Water Absorption (%)
11	CQ-1911/5803/11	3.6
12	CQ-1911/5803/12	3.3
13	CQ-1911/5803/13	3.5
Average		3.5

Test Method : ASTM C 140-03  
Method Variation : None  
Remarks : None

  
Authorized Signatory



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ماتيريال لاب لخدمات الفحص ذ.م.م. - دي. أي. بي - دبي، ص.ب: 114717، هاتف: 3405678، فاكس: 971 4 3339562  
ماتيريال لاب لخدمات الفحص ذ.م.م.، أبو ظبي، ص.ب: 61831، هاتف: 971 2 5503040، فاكس: 971 2 5503041

Material Lab - Al Quoz - Dubai - P.O. Box: 114717, Tel: +971 4 3405678, Fax: + 971 4 3405677  
Material Lab Testing Services L.L.C. - DIP - Dubai - P.O. Box: 114717, Tel: +971 4 3339562  
Material Lab Testing Services L.L.C. - Abu Dhabi - P.O. Box - 61831, Tel: +971 2 5503040 Fax: +971 2 5503041, Email: mlab@mlab.ae, Website: www.mlab.ae



## REPORT ON CHLORIDE & SULPHATE CONTENT OF PAVING BLOCKS

Client : Mansoor Concrete Block Industry LLC (Macon) Report No. : CR-1911/10857,10859  
Address : Dubai, U.A.E. Lab. Ref No. : CQ-1911/5803  
Consultant : Not Provided Lab. Project No : P-5162  
Contractor : Not Provided Sample Size (mm) : 200x100x80  
Project Name : Quality Control Testing Lot No. : Not Provided  
Project No. : Not Provided Lot Size : Not Provided  
Project Location : Dubai, U.A.E. Color : Grey  
Sample Description : 80mm Rectangular Paving Block Sample Brought by : Client  
Structure Reference : Jabel Ali Production Date : Not Provided  
Source : Macon Factory Date Sample Received : 30/11/2019  
Place of Sampling : Factory Date Test Started : 04/12/2019  
Sample Identification : C-42 Date Test Completed : 07/12/2019  
Sampling Date : 17/11/2019 Report Date : 08/12/2019  
Sampled by : Nahas Tested by : IKN

### Test Data

Item No.	Test Name	Test Method	Test Results
1	Chloride (Cl) (% by mass of dry Concrete)	BS 1881 : Part 124 : 2015: Cl. 12.1	0.01
2	Sulphate (SO <sub>3</sub> ) (% by mass of dry Concrete)	BS 1881 : Part 124 : 2015: Cl. 12.2	0.68

Preparation Method : BS 1881: Part 124: 2015 Clause 5.5  
Test Method Chloride : BS 1881: Part 124: 2015 Clause 12.1  
Test Method Sulphate : BS 1881: Part 124: 2015 Clause 12.2  
Test Method Variation : Nil  
Remarks : Chloride & Sulphate content are reported as % by mass of dry concrete.



  
Authorized Signatory



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R-SOCL-01  
Issued on 19/01/2009  
Issue No 01



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ماتيريال لاب لخدمات الفحص ذ.م.م. أبو ظبي، ص.ب: 61831، هاتف: +971 2 5503040، فاكس: +971 2 5503041

Material Lab - Al Quoz - Dubai:- P.O. Box: 114717, Tel: +971 4 3405678, Fax: + 971 4 3405677  
Material Lab Testing Services L.L.C. - DIP - Dubai:- P.O. Box: 114717, Tel: +971 4 3339562

Material Lab Testing Services L.L.C. - Abu Dhabi:- P.O. Box: 81924, Tel: +971 2 5503040, Fax: +971 2 5503041, Email: mlab@mlab.ae, Website: www.mlh.ae





REPORT ON DIMENSIONS OF RECTANGULAR PAVING BLOCKS

Page 02 of 02

Client : Mansoor Concrete Industry LLC (Macon)  
Address : Dubai, UAE  
Contractor : Not Provided  
Consultant : Not Provided  
Project Name : Quality Control Testing  
Project No. : Not Provided  
Location : Jabel Ali  
Sender's No. : Not Provided  
Lot No. : Not Provided  
Lot Size (Blocks) : Not Provided  
Production date : Not Provided  
Date of Sampling : 17/11/2019  
Time of Sampling : 10:00 am  
Sampled by : Nahas  
Sampling Method : Not Provided  
Source of sample : MACON Factory  
Sampling Certificate No. : Not Provided  
Sample brought in by : Client

Report No. : CR-1911/10856  
Lab Project No. : P-5162  
Lab Sample No. : CQ-1911/5803/1-10  
Date Sample Received : 30/11/2019  
Time Sample Received : 12:17 pm  
Date of Test : 30/11/2019  
Reporting Date : 04/12/2019  
Sample Description : Rectangular Paving Blocks  
Work Size (L x W x T) mm : 200x100x80  
Tested by : QI  
Chamfer : NP  
Colour of Block : Grey

TEST RESULTS :

Specimen No.	Dimensions													
	Length				Width				Thickness					
CQ-1911/5803/1	198	198	198	198	98	98	98	98	98	98	80	80	80	80
CQ-1911/5803/2	198	198	198	198	98	98	98	98	98	98	81	81	81	81
CQ-1911/5803/3	198	198	198	198	98	98	98	98	98	98	81	81	81	81
CQ-1911/5803/4	198	198	198	198	98	98	98	98	98	98	80	80	80	80
CQ-1911/5803/5	198	198	198	198	98	98	98	98	98	98	80	80	80	80
CQ-1911/5803/6	198	198	198	198	98	98	98	98	98	98	80	80	80	80
CQ-1911/5803/7	198	198	198	198	98	98	98	98	98	98	80	80	80	80
CQ-1911/5803/8	198	198	198	198	98	98	98	98	98	98	81	81	81	81
CQ-1911/5803/9	198	198	198	198	98	98	98	98	98	98	80	80	80	80
CQ-1911/5803/10	198	198	198	198	98	98	98	98	98	98	81	81	81	81

Test Method for Dimensions : BS 6717: Part 1: 1993: Annex A  
Test Method Variation : Nil  
Remarks : None



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R-DRP-B-01  
issued on 15/11/2014  
Issue No.1





## REPORT ON COMPRESSIVE STRENGTH OF RECTANGULAR PAVING BLOCKS

Page 01 of 02

Client : Mansoor Concrete Industry LLC (Macon)  
Address : Dubai, UAE  
Contractor : Not Provided  
Consultant : Not Provided  
Project Name : Quality Control Testing  
Project No. : Not Provided  
Location : Jabel Ali  
Sender's No. : Not Provided  
Lot No. : Not Provided  
Lot Size (Blocks) : Not Provided  
Production date : Not Provided  
Date of Sampling : 17/11/2019  
Time of Sampling : 10:00 am  
Sampled by : Nahas  
Sampling Method : Not Provided  
Source of sample : MACON Factory  
Sampling Certificate No. : Not Provided  
Sample brought in by : Client

Report No : CR-1911/10856  
Lab Project No : P-5162  
Lab Sample No. : CQ-1911/5803/1-10  
Date Sample Received : 30/11/2019  
Time Sample Received : 12:17 pm  
Date of Test : 01/12/2019  
Reporting Date : 04/12/2019  
Strength Cr. Factor : 1.18  
Sample Description : Rectangular Paving Blocks  
Work Size (LxWxT) mm : 200x100x80  
Tested by : QI  
Chamfer : Not Provided  
Colour of Block : Grey

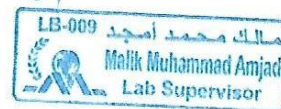
### TEST RESULTS :

Lab Specimen No.	Max. Load (kN)	Crushing Strength N/mm <sup>2</sup>	Corrected Crushing Strength N/mm <sup>2</sup>
CQ-1911/5803/1	922.0	47.5	56.1
CQ-1911/5803/2	864.0	44.5	52.5
CQ-1911/5803/3	882.0	45.5	53.7
CQ-1911/5803/4	899.0	46.3	54.6
CQ-1911/5803/5	916.0	47.2	55.7
CQ-1911/5803/6	865.0	44.6	52.6
CQ-1911/5803/7	857.0	44.2	52.2
CQ-1911/5803/8	887.0	45.7	53.9
CQ-1911/5803/9	923.0	47.6	56.2
CQ-1911/5803/10	866.0	44.6	52.6
Compressive Strength (N/mm <sup>2</sup> ) :			54.0

Compressive Strength method : BS 6717: Part 1: 1993: Annex B  
Test Method Variation : Plywood used <4.00mm thickness  
Remarks : None



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R-CRP-B-01  
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Issue No.1





**TEST REPORTS**  
**RAW MATERIALS**





# مختبر علوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

## REPORT ON PARTICLE SIZE DISTRIBUTION

Report No.	: R1DX21-131561	Date	: 08/12/2021
Request No.	: Q1DX21-078368	Sample No.	: S1DX21-078368
Sender's Ref.	: Not Given	Project No.	: IQC
Project Name	: Internal Quality Checking		
Client Name	: Mansoor Concrete Block Industry - LLC		
Consultant	: IQC		
Contractor	: No Specific Contractor		
Address	: Dubai, U.A.E		
Sampled by	: Nahas	Date of Sampling	: 30/11/2021
Sample Brought by	: GTL Rep	Sample Received Date	: 05/12/2021
Location	: Macon Yard		
Layer	: Not Applicable	Sample Size (kg)	: 10
Source	: Steven Rock	Lot Size (m <sup>3</sup> )	: Not Given
Sample Description	: 0-5mm Aggregate	Lot No.	: Not Given

### Results

Test Sieve Size (mm)	Percentage Passing
10.0	100
5.0	94
2.36	63
1.18	31
0.600	15
0.300	9
0.150	6
0.075	4

Testing Date	: 05/12/2021 - 07/12/2021
Sampling Report No.	: Not Given
Sampling Method	: Random
Initial Sample Preparation	: *BS 812 Part 102 : 1989 Cls 6
Test Specimen Preparation	: BS 812 Part 103 : Sec 103.1: 1985 cls 6 AMD 6003 -1989
Test Method	: BS 812 Part 103 : Sec 103.1: 1985 cls 7.2 AMD 6003 -1989
Test Method Variation	: None
Tested by	: SSQ/RRS
Remarks	: *These tests are not included in the scope of accreditation by EIAC LB-TEST-003.

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For GEOSCIENCE TESTING LABORATORY

**Suresh S Nair**  
Technical Supervisor  
Nahas



مختبر علوم التربة لفحص المواد  
GEOSCIENCE TESTING LABORATORY

REPORT ON  
RELATIVE DENSITY (SPECIFIC GRAVITY) & ABSORPTION OF FINE AGGREGATE

Report No.	: R1DX21-131562	Date	: 08/12/2021
Request No.	: Q1DX21-078368	Sample No.	: S1DX21-078368
Sender's Ref.	: Not Given	Project No.	: IQC
Project Name	: Internal Quality Checking		
Client Name	: Mansoor Concrete Block Industry - LLC		
Consultant	: IQC		
Contractor	: No Specific Contractor		
Address	: Dubai, U.A.E		
Sampled by	: Nahas	Date of Sampling	: 30/11/2021
Sample Brought by	: GTL Rep	Sample Received Date	: 05/12/2021
Location	: Macon Yard		
Layer	: Not Applicable	Sample Size (kg)	: 10
Source	: Steven Rock	Lot Size (Kg)	: Not Given
Sample Description	: 0-5mm Aggregate	Lot No.	: Not Given

**Results**

	Relative Density (Specific Gravity)
Oven Dry Basis	2.73
Saturated Surface Dry Basis	2.76
Apparent	2.82
Absorption (%)	1.2

Date of Testing	: 05/12/2021 - 08/12/2021
Sampling Report No.	: Not Given
Sampling Method	: Random
Initial Sample Preparation	: *ASTM C702/C702M - 18
Test Specimen Preparation	: ASTM C 128 - 15 Cls. 8
Test Method	: ASTM C 128 - 15 Cls. 9
Test Method Variation	: None
Tested by	: SES
Remarks	: *These tests are not included in the scope of accreditation by EIAC LB-TEST-003.

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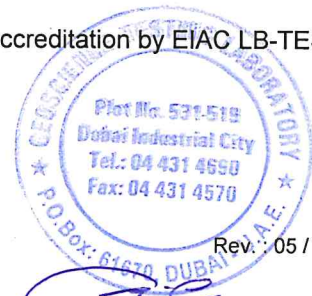
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Rev.: 05 / 26.08.2018



For GEOSCIENCE TESTING LABORATORY  
Suresh S Nair  
Technical Supervisor



مختبر علوم التربة لفحص المواد  
GEOSCIENCE TESTING LABORATORY

REPORT ON  
MATERIAL FINER THAN 75 µm (No. 200) IN MINERAL AGGREGATES BY WASHING

Report No.	: R1DX21-131563	Date	: 08/12/2021
Request No.	: Q1DX21-078368	Sample No.	: S1DX21-078368
Sender's Ref.	: Not Given	Project No.	: IQC
Project Name	: Internal Quality Checking		
Client Name	: Mansoor Concrete Block Industry - LLC		
Consultant	: IQC		
Contractor	: No Specific Contractor		
Address	: Dubai, U.A.E		
Sampled by	: Nahas	Date of Sampling	: 30/11/2021
Sample Brought by	: GTL Rep	Sample Received Date	: 05/12/2021
Location	: Macon Yard		
Layer	: Not Applicable	Sample Size (kg)	: 10
Source	: Steven Rock	Lot Size (m <sup>3</sup> )	: Not Given
Sample Description	: 0-5mm Aggregate	Lot No.	: Not Given

**Results**

Material Finer Than 75 µm (No. 200) Test Sieve by Washing (%)	3.6
--	-----

Testing Date	: 05/12/2021 - 07/12/2021
Sampling Report No.	: Not Given
Sampling Method	: Random
Initial Sample Preparation	: *ASTM C 702 / C702 M-18
Test Specimen Preparation	: ASTM C117 - 17 Cls 6
Test Method	: ASTM C117 - 17 Cls 8
Test Method Variation	: None
Tested by	: SSQ/RRS
Remarks	: *These tests are not included in the scope of accreditation by EIAC LB-TEST-003.

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Rev.: 04 / 31.10.2018

For GEOSCIENCE TESTING LABORATORY

Suresh S Nair  
Technical Supervisor





# مختبر علوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

## REPORT ON ACID SOLUBLE SULPHATE AND ACID SOLUBLE CHLORIDE

Report No. : R1DX21-090262 - 090263  
Request No. : Q1DX21-053169  
Sender's Ref. : MAC-01  
Project Name : IQC  
Client Name : MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)  
Consultant : IQC  
Contractor : MACON LLC  
Address : DUBAI, UAE  
Sampled by : NAHAS SALIM  
Sample Brought in by : GTL'S REPRESENTATIVE



Date: 12/08/2021  
Sample No. : S1DX21-053169  
Project No. : NOT GIVEN

Location : MACON YARD  
Layer : NOT GIVEN  
Source : STEVIN ROCK  
Sample Description : 0 - 5 mm LIMESTONE

Sampled on : 04/08/2021  
Received on : 05/08/2021

Sample Size : 50 Kg  
Lot Size : NOT GIVEN  
Lot No. : NOT GIVEN

### RESULT

PARAMETER	UNIT	RESULT
ACID SOLUBLE SULPHATE as SO <sub>3</sub>	% by mass	0.03
ACID SOLUBLE CHLORIDE as Cl <sup>-</sup>	% by mass	0.01

Tested on : 05/08/2021 - 11/08/2021  
Sampling Report No. : NOT GIVEN  
Sampling Method : RANDOM  
Initial Sample Preparation : BS EN 932-2 : 1999  
Test Specimen Preparation : ACID SOLUBLE SULPHATE: BS EN 1744-1 : 2009 + A1 : 2012, CLS. 12.3  
ACID SOLUBLE CHLORIDE: BS EN 1744-1 : 2009 + A1 : 2012, CLS. 12.3  
Test Method : ACID SOLUBLE SULPHATE: BS EN 1744-1 : 2009 + A1 : 2012, CLS. 12.4  
ACID SOLUBLE CHLORIDE: BS EN 1744-5 : 2006 CLS. 9  
Test Method Variation : NONE  
Tested by : PGN  
Remarks : NONE



*SJ*  
Sethupathi Shanmugavel  
Technical Supervisor (Chemical)  
Dubai

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Form No : CH-41 Issue : 01/01.10.2001 Rev : 02/11.09.2008  
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For GEOSCIENCE TESTING LABORATORY



# مختبر علوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

## REPORT ON PARTICLE SIZE DISTRIBUTION

Report No. : R1DX21-090259 Date : 12/08/2021  
Request No. : Q1DX21-053169 Sample No. : S1DX21-053169  
Sender's Ref. : MAC-01 Project No. : Nil  
Project Name : Internal Quality Checking  
Client Name : Mansoor Concrete Block Industry LLC (Macon)  
Consultant : IQC  
Contractor : Macon LLC  
Address : Dubai, U.A.E  
Sampled by : Nahas Salim Date of Sampling : 04/08/2021  
Sample Brought by : GTL Rep Sample Received Date : 05/08/2021  
Location : Macon Yard  
Layer : Not Applicable Sample Size (kg) : Not Given  
Source : Steven Rock Lot Size (m<sup>3</sup>) : Not Given  
Sample Description : 0-5mm Limestone Lot No. : Not Given

### Results

Test Sieve Size (mm)	Percentage Passing
10.0	100
5.0	95
2.36	69
1.18	41
0.600	25
0.300	16
0.150	10
0.075	7

Testing Date : 07/08/2021 - 09/08/2021  
Sampling Report No. : Not Given  
Sampling Method : Random  
Initial Sample Preparation : \*BS 812 Part 102 : 1989 Cls 6  
Test Specimen Preparation : BS 812 Part 103 : Sec 103.1: 1985 cls 6 AMD 6003 -1989  
Test Method : BS 812 Part 103 : Sec 103.1: 1985 cls 7.2 AMD 6003 -1989  
Test Method Variation : None  
Tested by : SLM/RRS  
Remarks : \*This test is not included in the scope of accreditation by EIAC LB-TEST-003.



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Issue : 02 / 05.08.2007

**Suroch & Nair**  
Technical Supervisor  
Dubai  
Rev 01 / 19.08.2015  
For GEOSCIENCE TESTING LABORATORY



مختبر علوم التربة لفحص المواد  
GEOSCIENCE TESTING LABORATORY

REPORT ON

MATERIAL FINER THAN 75 µm (No. 200) IN MINERAL AGGREGATES BY WASHING

Report No.	: R1DX21-090260	Date	: 12/08/2021
Request No.	: Q1DX21-053169	Sample No.	: S1DX21-053169
Sender's Ref.	: MAC-01	Project No.	: Nil
Project Name	: Internal Quality Checking		
Client Name	: Mansoor Concrete Block Industry LLC (Macon)		
Consultant	: IQC		
Contractor	: Macon LLC		
Address	: Dubai, U.A.E	Date of Sampling	: 04/08/2021
Sampled by	: Nahas Salim	Sample Received Date	: 05/08/2021
Sample Brought by	: GTL Rep	Procedure Used	: A
Location	: Macon Yard		
Layer	: Not Applicable	Sample Size (kg)	: Not Given
Source	: Steven Rock	Lot Size (Kg)	: Not Given
Sample Description	: 0-5mm Limestone	Lot No.	: Not Given

**Results**

Material Finer Than 75 µm (No. 200) Test Sieve by Washing (%)	6.6
--	-----

Testing Date	: 07/08/2021 - 09/08/2021
Sampling Report No.	: Not Given
Sampling Method	: Random
Initial Sample Preparation	: *ASTM C 702 / C702 M-18
Test Specimen Preparation	: ASTM C117 - 17 Cls 6
Test Method	: ASTM C117 - 17 Cls 8
Test Method Variation	: None
Tested by	: SLM/RRS
Remarks	: *This test is not included in the scope of accreditation by EIAC LB-TEST-003.



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Suresh S Nair  
Technical Supervisor  
Dubai

Rev : 04 / 31.10.2018

For GEOSCIENCE TESTING LABORATORY





# مختبر علوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

## REPORT ON RELATIVE DENSITY (SPECIFIC GRAVITY) & ABSORPTION OF FINE AGGREGATE

Report No.	: R1DX21-090261	Date	: 12/08/2021
Request No.	: Q1DX21-053169	Sample No.	: S1DX21-053169
Sender's Ref.	: MAC-01	Project No.	: Nil
Project Name	: Internal Quality Checking		
Client Name	: Mansoor Concrete Block Industry LLC (Macon)		
Consultant	: IQC		
Contractor	: Macon LLC		
Address	: Dubai, U.A.E		
Sampled by	: Nahas Salim	Date of Sampling	: 04/08/2021
Sample Brought by	: GTL Rep	Sample Received Date	: 05/08/2021
Location	: Macon Yard		
Layer	: Not Applicable	Sample Size (kg)	: Not Given
Source	: Steven Rock	Lot Size (Kg)	: Not Given
Sample Description	: 0-5mm Limestone	Lot No.	: Not Given

### Results

	Relative Density (Specific Gravity)
Oven Dry Basis	2.73
Saturated Surface Dry Basis	2.76
Apparent	2.81
Absorption (%)	1.0

Date of Testing	: 07/08/2021-10/08/2021
Sampling Report No.	: Not Given
Sampling Method	: Random
Initial Sample Preparation	: *ASTM C702/C702M - 18
Test Specimen Preparation	: ASTM C 128 - 15 Cls. 8
Test Method	: ASTM C 128 - 15 Cls. 9
Test Method Variation	: None
Tested by	: SLM/RRS
Remarks	: *This test is not included in the scope of accreditation by EIAC.LB-TEST-003.



\* Results relates only to the samples tested.

\* Test Reports shall not be reproduced (except in full) with out the written approval of the laboratory.

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**Supesh Nair**  
Technical Supervisor  
Dubai  
Rev. : 05 / 26.08.2018  
For GEOSCIENCE TESTING LABORATORY



# مختبر علوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

## REPORT ON PARTICLE SIZE DISTRIBUTION

Report No. : R1DX21-131565 Date : 08/12/2021  
Request No. : Q1DX21-078370 Sample No. : S1DX21-078370  
Sender's Ref. : Not Given Project No. : IQC  
Project Name : Internal Quality Checking  
Client Name : Mansoor Concrete Block Industry - LLC  
Consultant : IQC  
Contractor : No Specific Contractor  
Address : Dubai, U.A.E  
Sampled by : Nahas Date of Sampling : 30/11/2021  
Sample Brought by : GTL Rep Sample Received Date : 05/12/2021  
Location : Macon Yard  
Layer : Not Applicable Sample Size (kg) : 50  
Source : Steven Rock Lot Size (m<sup>3</sup>) : Not Given  
Sample Description : 5-10mm Aggregate Lot No. : Not Given

### Results

Test Sieve Size (mm)	Percentage Passing
14.0	100
10.0	87
5.0	14
2.36	1
0.075	0

Testing Date : 05/12/2021 - 07/12/2021  
Sampling Report No. : Not Given  
Sampling Method : Random  
Initial Sample Preparation : \*BS 812 Part 102 : 1989 Cls 6  
Test Specimen Preparation : BS 812 Part 103 : Sec 103.1: 1985 cls 6 AMD 6003 -1989  
Test Method : BS 812 Part 103 : Sec 103.1: 1985 cls 7.2 AMD 6003 -1989  
Test Method Variation : None  
Tested by : SSQ/RRS  
Remarks : \*These tests are not included in the scope of accreditation by EIAC LB-TEST-003.

\* Results relates only to the items tested.

\* Reports shall not be reproduced (except in full) without written approval of the laboratory.

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For GEOSCIENCE TESTING LABORATORY

Technical Supervisor  
Dubai





# مختبر علوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

## REPORT ON RELATIVE DENSITY (SPECIFIC GRAVITY) & ABSORPTION OF COARSE AGGREGATE

Report No.	: R1DX21-131566	Date	: 08/12/2021
Request No.	: Q1DX21-078370	Sample No.	: S1DX21-078370
Sender's Ref.	: Not Given	Project No.	: IQC
Project Name	: Internal Quality Checking		
Client Name	: Mansoor Concrete Block Industry - LLC		
Consultant	: IQC		
Contractor	: No Specific Contractor		
Address	: Dubai, U.A.E		
Sampled by	: Nahas	Date of Sampling	: 30/11/2021
Sample Brought by	: GTL Rep	Sample Received Date	: 05/12/2021
Location	: Macon Yard		
Layer	: Not Applicable	Sample Size (kg)	: 50
Source	: Steven Rock	Lot Size (M <sup>3</sup> )	: Not Given
Sample Description	: 5-10mm Aggregate	Lot No.	: Not Given

### Results

	Relative Density (Specific Gravity)
Oven Dry Basis	2.80
Saturated Surface Dry Basis	2.81
Apparent	2.83
Absorption (%)	0.4

Date of Testing	: 05/12/2021 - 08/12/2021
Sampling Report No.	: Not Given
Sampling Method	: Random
Initial Sample Preparation	: *ASTM C 702/C702M - 18
Test Specimen Preparation	: ASTM C 127 - 15 Cls. 7
Test Method	: ASTM C 127 - 15 Cls. 8
Test Method Variation	: None
Tested by	: SSQ/RRS
Remarks	: *These tests are not included in the scope of accreditation by EIAC 003-LB-TEST

\* Results relates only to the samples tested.

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For GEOSCIENCE TESTING LABORATORY

Suresh S Nair  
Technical Supervisor

Dubai : P.O. Box : 61670, Tel.: +971-4-431 4690, Fax: +971-4-431 4570  
Website : www.geoscience.ae E-mail : info@gtl.ae



مختبر علوم التربة لفحص المواد  
GEOSCIENCE TESTING LABORATORY

REPORT ON  
MATERIAL FINER THAN 75 µm (No. 200) IN MINERAL AGGREGATES BY WASHING

Report No.	: R1DX21-131567	Date :	08/12/2021
Request No.	: Q1DX21-078370	Sample No. :	S1DX21-078370
Sender's Ref.	: Not Given	Project No. :	IQC
Project Name	: Internal Quality Checking		
Client Name	: Mansoor Concrete Block Industry - LLC		
Consultant	: IQC		
Contractor	: No Specific Contractor		
Address	: Dubai, U.A.E		
Sampled by	: Nahas	Date of Sampling :	30/11/2021
Sample Brought by	: GTL Rep	Sample Received Date :	05/12/2021
Location	: Macon Yard		
Layer	: Not Applicable	Sample Size (kg) :	50
Source	: Steven Rock	Lot Size (m <sup>3</sup> ) :	Not Given
Sample Description	: 5-10mm Aggregate	Lot No. :	Not Given

**Results**

Material Finer Than 75 µm (No. 200) Test Sieve by Washing (%)	0.4
--	-----

Testing Date	: 05/12/2021 - 07/12/2021
Sampling Report No.	: Not Given
Sampling Method	: Random
Initial Sample Preparation	: *ASTM C 702 / C702 M-18
Test Specimen Preparation	: ASTM C117 - 17 Cls 6
Test Method	: ASTM C117 - 17 Cls 8
Test Method Variation	: None
Tested by	: SSQ/RRS
Remarks	: *These tests are not included in the scope of accreditation by EIAC LB-TEST-003.

\* Results relates only to the samples tested.

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For GEOSCIENCE TESTING LABORATORY

**Technical Supervisor**

Dubai : P.O. Box : 61670, Tel.: +971-4-431 4690, Fax : +971-4-431 4570  
Website : www.geoscience.ae E-mail : info@gtl.ae



# مختبر علوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

## REPORT ON PARTICLE SIZE DISTRIBUTION

Report No. : R1DX21-131565 Date : 08/12/2021  
Request No. : Q1DX21-078370 Sample No. : S1DX21-078370  
Sender's Ref. : Not Given Project No. : IQC  
Project Name : Internal Quality Checking  
Client Name : Mansoor Concrete Block Industry - LLC  
Consultant : IQC  
Contractor : No Specific Contractor  
Address : Dubai, U.A.E  
Sampled by : Nahas Date of Sampling : 30/11/2021  
Sample Brought by : GTL Rep Sample Received Date : 05/12/2021  
Location : Macon Yard  
Layer : Not Applicable Sample Size (kg) : 50  
Source : Steven Rock Lot Size (m<sup>3</sup>) : Not Given  
Sample Description : 5-10mm Aggregate Lot No. : Not Given

### Results

Test Sieve Size (mm)	Percentage Passing
14.0	100
10.0	87
5.0	14
2.36	1
0.075	0

Testing Date : 05/12/2021 - 07/12/2021  
Sampling Report No. : Not Given  
Sampling Method : Random  
Initial Sample Preparation : \*BS 812 Part 102 : 1989 Cls 6  
Test Specimen Preparation : BS 812 Part 103 : Sec 103.1: 1985 cls 6 AMD 6003 -1989  
Test Method : BS 812 Part 103 : Sec 103.1: 1985 cls 7.2 AMD 6003 -1989  
Test Method Variation : None  
Tested by : SSQ/RRS  
Remarks : \*These tests are not included in the scope of accreditation by EIAC LB-TEST-003.

\* Results relates only to the items tested.

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For GEOSCIENCE TESTING LABORATORY

Technical Supervisor  
Dubai





# مختبر علوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

## REPORT ON RELATIVE DENSITY (SPECIFIC GRAVITY) & ABSORPTION OF COARSE AGGREGATE

Report No.	: R1DX21-131566	Date	: 08/12/2021
Request No.	: Q1DX21-078370	Sample No.	: S1DX21-078370
Sender's Ref.	: Not Given	Project No.	: IQC
Project Name	: Internal Quality Checking		
Client Name	: Mansoor Concrete Block Industry - LLC		
Consultant	: IQC		
Contractor	: No Specific Contractor		
Address	: Dubai, U.A.E		
Sampled by	: Nahas	Date of Sampling	: 30/11/2021
Sample Brought by	: GTL Rep	Sample Received Date	: 05/12/2021
Location	: Macon Yard		
Layer	: Not Applicable	Sample Size (kg)	: 50
Source	: Steven Rock	Lot Size (M <sup>3</sup> )	: Not Given
Sample Description	: 5-10mm Aggregate	Lot No.	: Not Given

### Results

	Relative Density (Specific Gravity)
Oven Dry Basis	2.80
Saturated Surface Dry Basis	2.81
Apparent	2.83
Absorption (%)	0.4

Date of Testing	: 05/12/2021 - 08/12/2021
Sampling Report No.	: Not Given
Sampling Method	: Random
Initial Sample Preparation	: *ASTM C 702/C702M - 18
Test Specimen Preparation	: ASTM C 127 - 15 Cls. 7
Test Method	: ASTM C 127 - 15 Cls. 8
Test Method Variation	: None
Tested by	: SSQ/RRS
Remarks	: *These tests are not included in the scope of accreditation by EIAC 003-LB-TEST

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For GEOSCIENCE TESTING LABORATORY

Suresh S Nair  
Technical Supervisor

Dubai : P.O. Box : 61670, Tel.: +971-4-431 4690, Fax: +971-4-431 4570  
Website : www.geoscience.ae E-mail : info@gtl.ae



مختبر علوم التربة لفحص المواد  
GEOSCIENCE TESTING LABORATORY

REPORT ON  
MATERIAL FINER THAN 75 µm (No. 200) IN MINERAL AGGREGATES BY WASHING

Report No.	: R1DX21-131567	Date	: 08/12/2021
Request No.	: Q1DX21-078370	Sample No.	: S1DX21-078370
Sender's Ref.	: Not Given	Project No.	: IQC
Project Name	: Internal Quality Checking		
Client Name	: Mansoor Concrete Block Industry - LLC		
Consultant	: IQC		
Contractor	: No Specific Contractor		
Address	: Dubai, U.A.E		
Sampled by	: Nahas	Date of Sampling	: 30/11/2021
Sample Brought by	: GTL Rep	Sample Received Date	: 05/12/2021
Location	: Macon Yard		
Layer	: Not Applicable	Sample Size (kg)	: 50
Source	: Steven Rock	Lot Size (m <sup>3</sup> )	: Not Given
Sample Description	: 5-10mm Aggregate	Lot No.	: Not Given

**Results**

Material Finer Than 75 µm (No. 200) Test Sieve by Washing (%)	0.4
--	-----

Testing Date	: 05/12/2021 - 07/12/2021
Sampling Report No.	: Not Given
Sampling Method	: Random
Initial Sample Preparation	: *ASTM C 702 / C702 M-18
Test Specimen Preparation	: ASTM C117 - 17 Cls 6
Test Method	: ASTM C117 - 17 Cls 8
Test Method Variation	: None
Tested by	: SSQ/RRS
Remarks	: *These tests are not included in the scope of accreditation by EIAC LB-TEST-003.

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For GEOSCIENCE TESTING LABORATORY

**Technical Supervisor**

Dubai : P.O. Box : 61670, Tel.: +971-4-431 4690, Fax : +971-4-431 4570  
Website : www.geoscience.ae E-mail : info@gtl.ae





# مختبر علوم التربة لفحص المواد

## GEOSCIENCE TESTING LABORATORY

### REPORT ON PARTICLE SIZE DISTRIBUTION

Report No.	: R1DX21-115481	Date :	14/10/2021
Request No.	: Q1DX21-068703	Sample No. :	S1DX21-068703
Sender's Ref.	: Not Given	Project No. :	IQC
Project Name	: Internal Quality Checking		
Client Name	: Mansoor Concrete Block Industry LLC (MACON)		
Consultant	: Internal Quality Checking		
Contractor	: Macon LLC		
Address	: Dubai, U.A.E		
Sampled by	: Nahas	Date of Sampling :	07/10/2021
Sample Brought by	: GTL Rep	Sample Received Date :	07/10/2021
Location	: Macon Yard		
Layer	: Not Applicable	Sample Size (kg) :	50
Source	: Stevin Rock	Lot Size (m <sup>3</sup> ) :	Not Applicable
Sample Description	: 5 - 10 mm Limestone	Lot No. :	Not Applicable

#### Results

Test Sieve Size (mm)	Percentage Passing
14.0	100
10.0	86
5.00	8
2.36	1
0.075	0

Testing Date	: 10/10/2021 - 12/10/2021
Sampling Report No.	: Not Given
Sampling Method	: *Random
Initial Sample Preparation	: *BS 812 Part 102 : 1989 Cls 6
Test Specimen Preparation	: BS 812 Part 103 : Sec 103.1: 1985 cls 6 AMD 6003 -1989
Test Method	: BS 812 Part 103 : Sec 103.1: 1985 cls 7.2 AMD 6003 -1989
Test Method Variation	: None
Tested by	: DP/RRS
Remarks	: *These tests are not included in the scope of accreditation by EIAC LB-TEST-003

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**Suresh S Nair**  
Technical Supervisor  
Dubai

For GEOSCIENCE TESTING LABORATORY



مختبر علوم التربة لفحص المواد  
GEOSCIENCE TESTING LABORATORY

REPORT ON  
MATERIAL FINER THAN 75 µm (No. 200) IN MINERAL AGGREGATES BY WASHING

Report No.	: R1DX21-115482	Date	: 14/10/2021
Request No.	: Q1DX21-068703	Sample No.	: S1DX21-068703
Sender's Ref.	: Not Given	Project No.	: IQC
Project Name	: Internal Quality Checking		
Client Name	: Mansoor Concrete Block Industry LLC (MACON)		
Consultant	: Internal Quality Checking		
Contractor	: Macon LLC		
Address	: Dubai, U.A.E		
Sampled by	: Nahas	Date of Sampling	: 07/10/2021
Sample Brought by	: GTL Rep	Sample Received Date	: 07/10/2021
Location	: Macon Yard	Procedure Used	: A
Layer	: Not Applicable	Sample Size (kg)	: 50
Source	: Stevin Rock	Lot Size (Kg)	: Not Applicable
Sample Description	: 5 - 10 mm Limestone	Lot No.	: Not Applicable

**Results**

Material Finer Than 75 µm (No. 200) Test Sieve by Washing (%)	0.5
--	-----

Testing Date	: 10/10/2021 - 12/10/2021
Sampling Report No.	: Not Given
Sampling Method	: *Random
Initial Sample Preparation	: *ASTM C 702 / C702 M-18
Test Specimen Preparation	: ASTM C117 - 17 Cls 6
Test Method	: ASTM C117 - 17 Cls 8
Test Method Variation	: None
Tested by	: DP/RRS
Remarks	: *These tests are not included in the scope of accreditation by EIAC LB-TEST-003.

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Suresh S Nair  
Technical Supervisor  
Dubai  
Rev. : 04 / 31.10.2018

For GEOSCIENCE TESTING LABORATORY



# مختبر علوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

## REPORT ON

### RELATIVE DENSITY (SPECIFIC GRAVITY) & ABSORPTION OF COARSE AGGREGATE

Report No.	: R1DX21-115483	Date	: 14/10/2021
Request No.	: Q1DX21-068703	Sample No	: S1DX21-068703
Sender's Ref.	: Not Given	Project No	: IQC
Project Name	: Internal Quality Checking		
Client Name	: Mansoor Concrete Block Industry LLC (MACON)		
Consultant	: Internal Quality Checking		
Contractor	: Macon LLC		
Address	: Dubai, U.A.E		
Sampled by	: Nahas	Date of Sampling	: 07/10/2021
Sample Brought by	: GTL Rep	Sample Received Date	: 07/10/2021
Location	: Macon Yard		
Layer	: Not Applicable	Sample Size (kg)	: 50
Source	: Stevin Rock	Lot Size (Kg)	: Not Applicable
Sample Description	: 5 - 10 mm Limestone	Lot No.	: Not Applicable

### Results

	Relative Density (Specific Gravity)
Oven Dry Basis	2.78
Saturated Surface Dry Basis	2.80
Apparent	2.83
Absorption (%)	0.6

Date of Testing	: 09/10/2021 - 12/10/2021
Sampling Report No.	: Not Given
Sampling Method	: *Random
Initial Sample Preparation	: *ASTM C 702/C702M - 18
Test Specimen Preparation	: ASTM C 127 - 15 Cls. 7
Test Method	: ASTM C 127 - 15 Cls. 8
Test Method Variation	: None
Tested by	: DP/RRS
Remarks	: *These tests are not Included in the scope of accreditation by EIAC LB-TEST-003.



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\* Test Reports shall not be reproduced (except in full) with out the written approval of the laboratory.





# مختبر علوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

## REPORT ON ACID SOLUBLE SULPHATE AND ACID SOLUBLE CHLORIDE

Report No. : R1DX21-090267 - 090268

Request No. : Q1DX21-053170

Sender's Ref. : MAC-02

Project Name : IQC

Client Name : MANSOOR CONCRETE BLOCK INDUSTRY LLC (MACON)

Consultant : NO SPECIFIC CONSULTANT

Contractor : MACON LLC

Address : DUBAI, UAE

Sampled by : NAHAS SALIM

Sample Brought in by : GTL'S REPRESENTATIVE

Date: 12/08/2021

Sample No. : S1DX21-053170

Project No. : NOT GIVEN

Sampled on : 04/08/2021

Received on : 05/08/2021

Location : MACON YARD

Layer : NOT GIVEN

Source : STEVIN ROCK

Sample Description : 5 - 10 mm LIMESTONE

Sample Size : 50 Kg

Lot Size : NOT GIVEN

Lot No. : NOT GIVEN

### RESULT

PARAMETER	UNIT	RESULT
ACID SOLUBLE SULPHATE as SO <sub>3</sub>	% by mass	0.04
ACID SOLUBLE CHLORIDE as Cl <sup>-</sup>	% by mass	0.02

Tested on : 05/08/2021 - 11/08/2021

Sampling Report No. : NOT GIVEN

Sampling Method : RANDOM

Initial Sample Preparation : BS EN 932-2 : 1999

Test Specimen Preparation : ACID SOLUBLE SULPHATE: BS EN 1744-1 : 2009 + A1 : 2012, CLS. 12.3  
ACID SOLUBLE CHLORIDE: BS EN 1744-1 : 2009 + A1 : 2012, CLS. 12.3

Test Method : ACID SOLUBLE SULPHATE: BS EN 1744-1 : 2009 + A1 : 2012, CLS. 12.4  
ACID SOLUBLE CHLORIDE: BS EN 1744-5 : 2006 CLS. 9

Test Method Variation : NONE

Tested by : PGN

Remarks : NONE



*Sethupathi Shanmugavel*  
Sethupathi Shanmugavel  
Technical Supervisor (Chemical)  
Dubai

\* Results relates only to the samples tested.

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Iss'ie : 01/01.10.2001

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For GEOSCIENCE TESTING LABORATORY





مختبر علوم التربة لفحص المواد  
GEOSCIENCE TESTING LABORATORY

REPORT ON  
MATERIAL FINER THAN 75 µm (No. 200) IN MINERAL AGGREGATES BY WASHING

Report No.	: R1DX21-090265	Date	: 12/08/2021
Request No.	: Q1DX21-053170	Sample No	: S1DX21-053170
Sender's Ref.	: MAC-02	Project No	: Nil
Project Name	: Internal Quality Checking		
Client Name	: Mansoor Concrete Block Industry LLC (Macon)		
Consultant	: IQC		
Contractor	: Macon LLC		
Address	: Dubai, U.A.E	Date of Sampling	: 04/08/2021
Sampled by	: Nahas Salim	Sample Received Date	: 05/08/2021
Sample Brought by	: GTL Rep	Procedure Used	: A
Location	: Macon Yard		
Layer	: Not Applicable	Sample Size (kg)	: Not Given
Source	: Steven Rock	Lot Size (Kg)	: Not Given
Sample Description	: 5-10mm Limestone	Lot No.	: Not Given

**Results**

Material Finer Than 75 µm (No. 200) Test Sieve by Washing (%)	0.4
--	-----

Testing Date	: 07/08/2021 - 09/08/2021
Sampling Report No.	: Not Given
Sampling Method	: Random
Initial Sample Preparation	: *ASTM C 702 / C702 M-18
Test Specimen Preparation	: ASTM C117 - 17 Cls 6
Test Method	: ASTM C117 - 17 Cls 8
Test Method Variation	: None
Tested by	: SSQ/RRS
Remarks	: *This test is not included in the scope of accreditation by EIAC LB-TEST-003.



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\* Test Reports shall not be reproduced (except in full) without the written approval of the laboratory.

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Suresh S Nair  
Technical Supervisor  
Dubai  
Rev. : 04 / 31.10.2018

For GEOSCIENCE TESTING LABORATORY



# مختبر علوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

## REPORT ON PARTICLE SIZE DISTRIBUTION

Report No.	: R1DX21-090264	Date	: 12/08/2021
Request No.	: Q1DX21-053170	Sample No.	: S1DX21-053170
Sender's Ref.	: MAC-02	Project No.	: Nil
Project Name	: Internal Quality Checking		
Client Name	: Mansoor Concrete Block Industry LLC (Macon)		
Consultant	: IQC		
Contractor	: Macon LLC		
Address	: Dubai, U.A.E		
Sampled by	: Nahas Salim	Date of Sampling	: 04/08/2021
Sample Brought by	: GTL Rep	Sample Received Date	: 05/08/2021
Location	: Macon Yard		
Layer	: Not Applicable	Sample Size (kg)	: Not Given
Source	: Steven Rock	Lot Size (m <sup>3</sup> )	: Not Given
Sample Description	: 5-10mm Limestone	Lot No.	: Not Given

### Results

Test Sieve Size (mm)	Percentage Passing
14.0	100
0.0	91
5.0	4
2.36	1
0.075	1

Testing Date	: 07/08/2021 - 09/08/2021
Sampling Report No.	: Not Given
Sampling Method	: Random
Initial Sample Preparation	: *BS 812 Part 102 : 1989 Cls 6
Test Specimen Preparation	: BS 812 Part 103 : Sec 103.1: 1985 cls 6 AMD 6003 -1989
Test Method	: BS 812 Part 103 : Sec 103.1: 1985 cls 7.2 AMD 6003 -1989
Test Method Variation	: None
Tested by	: SSQ/RRS
Remarks	: *This test is not included in the scope of accreditation by EIAC LB-TEST-003



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**Suresh S Nair**  
Technical Supervisor  
Dubai

For GEOSCIENCE TESTING LABORATORY



مختبر علوم التربة لفحص المواد  
GEOSCIENCE TESTING LABORATORY

REPORT ON

RELATIVE DENSITY (SPECIFIC GRAVITY) & ABSORPTION OF COARSE AGGREGATE

Report No.	: R1DX21-090266	Date	: 12/08/2021
Request No.	: Q1DX21-053170	Sample No	: S1DX21-053170
Sender's Ref.	: MAC-02	Project No	: Nil
Project Name	: Internal Quality Checking		
Client Name	: Mansoor Concrete Block Industry LLC (Macon)		
Consultant	: IQC		
Contractor	: Macon LLC		
Address	: Dubai, U.A.E		
Sampled by	: Nahas Salim	Date of Sampling	: 04/08/2021
Sample Brought by	: GTL Rep	Sample Received Date	: 05/08/2021
Location	: Macon Yard		
Layer	: Not Applicable	Sample Size (kg)	: Not Given
Source	: Steven Rock	Lot Size (Kg)	: Not Given
Sample Description	: 5-10mm Limestone	Lot No.	: Not Given

**Results**

	Relative Density (Specific Gravity)
Oven Dry Basis	2.79
Saturated Surface Dry Basis	2.80
Apparent	2.82
Absorption (%)	0.5

Date of Testing	: 07/08/2021 - 10/08/2021
Sampling Report No.	: Not Given
Sampling Method	: Random
Initial Sample Preparation	: *ASTM C 702/C702M - 18
Test Specimen Preparation	: ASTM C 127 - 15 Cls. 7
Test Method	: ASTM C 127 - 15 Cls. 8
Test Method Variation	: None
Tested by	: SSQ/RRS
Remarks	: *This test is not Included in the scope of accreditation by EIAC LB-TEST-003.

\* Results relates only to the samples tested.

\* Test Reports shall not be reproduced (except in full) with out the written approval of the laboratory.







# مختبر علوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

## REPORT ON SOUNDNESS OF AGGREGATES BY USING SODIUM SULFATE / MAGNESIUM SULFATE

Report No. : RIDX21-057830 Date : 05/04/2021  
Request No. : Q1DX21-033001 Sample No. : SIDX20-033001  
Sender's Ref. : Not Provided Project No. : IQC  
Project Name : Internal Quality Checking  
Client Name : Mansoor Concrete Block Industry LLC (MACON) Sampled by : Nahas Salim  
Consultant : No Specific Consultant Sample brought by : GTL  
Contractor : No Specific Contractor Sampling Date : 13/04/2021  
Address : Dubai, U.A.E. Sample received date : 13/04/2021  
Location : Jebel Ali  
Layer : Not Applicable Sample Size (kg) : 50  
Source : Macon-Yard (Steven Rock) Lot Size (m<sup>3</sup>) : Not Given  
Sample Description : 5-10mm Aggregate Lot No. : Not Given  
Solution Used : MgSO<sub>4</sub> Age of Solution : Fresh  
Specific Gravity of Solution : 1.297 % passing 4.75 mm test sieve : 1  
% retained 9.50 mm test sieve : 15

### RESULTS

% material retained 4.75 mm test sieve in the initial grading : 99

Coarse Fraction	Test Sieve (mm)	Original Grading (%)	Mass of Test Fraction (g)	% Passing Designated Sieve	Percentage Mass Loss
	19.0 - 9.50	15	333.4	2.1	0.3
9.50 - 4.75	84	302.7	2.0	1.7	
4.75 - 2.36	1	-	2.0	0.1	
Total	100	-	-	2	

% material passing 4.75 mm test sieve in the initial grading : 1

Fine Fraction	Test Sieve (mm)	Original Grading (%)	Mass of Test Fraction (g)	% Passing Designated Sieve	Percentage Mass Loss
	9.50 - 4.75	N/A	N/A	N/A	N/A
4.75 - 2.36	N/A	N/A	N/A	N/A	N/A
2.36 - 1.18	N/A	N/A	N/A	N/A	N/A
1.18 - 0.600	N/A	N/A	N/A	N/A	N/A
0.600 - 0.300	N/A	N/A	N/A	N/A	N/A
Minus 0.300	N/A	N/A	N/A	N/A	N/A
Total	N/A	N/A	N/A	N/A	N/A

### Qualitative Examination of Coarse Aggregates

Test Fraction	No. of particles before test	Splitting		Crumbling		Cracking		Flaking	
		No.	%	No.	%	No.	%	No.	%
37.5 - 19.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
63.0 - 37.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Sampling Report No. : Not Given Testing Date : 23/03/2021-02/04/2021  
Sampling Method : Not Given Tested by : SSQ/SES  
Initial Sample Preparation : \*ASTM C 702 -18  
Test Method : ASTM C 88 : 2018 Cls. 8  
Test Method Variation : None  
Remarks : \*This test is not Included in the scope of accreditation by EIAC LB-TEST-003.

\* Results relates only to the samples tested.  
\* Test reports shall not be reproduced (except in full) without the written approval of the laboratory.

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**Suresh S Nair**  
Technical Supervisor  
Dubai  
Rev. : 04 / 11.04.2017

For GEOSCIENCE TESTING LABORATORY