



# MLCO TRADING LIMITED ®

TPIN: 2061889389

Service Re-Invented

P.O Box 28050, Parklands, Kitwe, Zambia.

Tel + 260-966-849978 / +260 966 512070, Email admin@mlcotrading.com

## TECHNICAL DATA SHEET CABLE ANCHOR GROUT HIGH FLOW G5

### Description

Cable Anchor Grout is a OPC mixture high flow and is non-shrink and designed for cables and long anchors. A selection of chemicals ensures that this product is highly pumpable in all conditions.

### Data

- Working temperature: +20°C
  - Bag contains: 10KG
  - Yield per bag: 6.4 litre
  - Water per bag: 3.0 litre
  - Initial set: 60 minutes
  - Final set: 90 minutes
  - Setting time: 24 hours
- Required load: 4 tons/40kN

### Typical Results

The bond pull-out (kN) using a 16mm diameter ripple bar grouted in a 250mm x 50mm internal diameter pipe is actually a measure of the shear strength of the Grout. The following are typical laboratory results at a room temperature of 25°C

Age	Bond Strength	Compressive Strength
4 hours		-
8 hours	10 kN/1Ton	-
24 hours	40 kN/4Ton	8 Mpa
7 days	80 kN/8Ton	20 Mpa
28 days	100 kN/10Ton	30 Mpa

### Packaging

Supplied in woven polypropylene bags with a waterproof inner liner. Packed in bulk 100 bags in a bulk bag.

### Quality Assurance

MLCO Trading Ltd suppliers' production and testing programs comply with all local (SANS 1745: 2003) and international testing standards.





# MLCO TRADING LIMITED ®

TPIN: 2061889389

Service Re-Invented

P.O Box 28050, Parklands, Kitwe, Zambia.

Tel + 260-966-849978 / +260 966 512070, Email admin@mlcotrading.com



**Beton-Lab cc**

Tel: 011-979-1422 | Fax: 011-979-1430

e-mail: betonlab@betonlab.co.za

32a Third Road, Bedford

PO Box 10583, Aston Manor, 1630

## COMPRESSION STRENGTH TEST REPORT

SANS 5863:2006 Concrete Tests - Compressive Strength of hardened Concrete

CONTRACT: ROCK SUPPLY SYSTEMS RSS

REPORT NO: BTG 18576

TRUCK NO:

DELIVERY ADDRESS:

CONCRETE SUPPLIER:

LOAD NO:

SPECIFIED STRENGTH:

PLANT:

DATE CAST: 30/07/2019

TIME SAMPLED:

ORDER NO:

DELIVERY NOTE:

CONCRETE LOCATION: PUMPABLE ANCHOR GROUT

MEASURED SLUMP:

WEATHER CONDITIONS:

TESTING - COLLECTOR/DUMPER: Cubes Delivered

SAMPLED/TESTED BY: RETON LAB DM NO:

DATE RECEIVED: 23/08/2019

TEST RESULTS

Cube ID	Customer Ref	Date Cast	Date Tested	Age	Size (mm)	Surface Area (mm²)	Condition	Mass (kg)	Density (kg/m³)	Load (kN)	Strength (MPa)	Fail Mode
RSS 3.4		22-Aug-19	23-Aug-19	1	100x100x100	10000	1	2530	2530	81	8.1	2
RSS 35		22-Aug-19	23-Aug-19	1	100x100x100	10000	1	2505	2505	82	8.2	2
RSS 36		22-Aug-19	23-Aug-19	1	100x100x100	10000	1	2520	2520	80	8.0	2
RSS 37		22-Aug-19	23-Aug-19	1	100x100x100	10000	1	2526	2526	82	8.2	2
Press: EQ 003								Average	2520	2520	81	8.1
Scale: EQ 008								Standard Deviation	11.0	11.0	1.0	0.1

### CUBES MADE BY CONTRACTOR

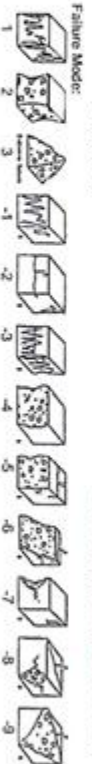
DEVIATIONS, EXTENSIONS OR EXCLUSIONS  
 \* Average compressive strength is recorded to the nearest 0.1MPa and not 0.5MPa as specified

- Normative references:**
- EN 12390-4
  - SANS 5860
  - SANS 5861-2
  - SANS 5861-3
  - SANS 5862-1

W/ 1.5 1043 691 Rev 06 FR Date: 23-08-2019

*A.D.R. de Kock*  
 Member  
**A foundation of precision**  
 Reg No: CG9910079/23  
 Member, A.D.R. de Kock

*C. Mpofo*  
 Compiled by



- CUBE CONDITION**
1. Complies with requirements
  2. Cube not square
  3. Honeycombing present
  4. Excess voids
  5. Cast surface not even
  6. Flatness >0.03mm
  7. Broken corners on cubes

This report may not be reproduced except in full, without written permission from Beton-Lab cc. Whilst every care is taken to ensure the correctness of all tests and reports, neither Beton-Lab cc or its employees shall be liable in any way whatever for any error made in the execution or reporting of tests or any erroneous conclusions drawn therefrom or any consequences thereof. This report relates only to the sample/s tested and in no way guarantees the performance of similar products that has not been tested. If a statement of conformity is required, this will be based on the decision made in the relevant specification unless agreed otherwise. Data provided by the customer will be typed GREEN and may affect the validity of the results.





# MLCO TRADING LIMITED ®

TPIN: 2061889389

Service Re-Invented

P.O Box 28050, Parklands, Kitwe, Zambia.

Tel + 260-966-849978 / +260 966 512070, Email admin@mlcotrading.com



**Beton-Lab cc**

Tel: 011-979-1422 | Fax: 011-979-1430  
 e-mail: betonlab@betonlab.co.za  
 32a Third Road, Breda  
 PO Box 10583, Anton Mwan: 1630

## COMPRESSIVE STRENGTH TEST REPORT

SANS 5863:2006 Concrete Tests - Compressive Strength of hardened Concrete

CONTRACT: ROCK SURFERT SYSTEMS R55  
 DELIVERY ADDRESS:  
 SPECIFIED STRENGTH:  
 CONCRETE CODE:  
 TIME SAMPLED:  
 CONCRETE LOCATION: PUMPABLE ANCHOR GROUT  
 HIS FOR TESTING - COLLECTION/REQUIREMENT: Cubes Delivered

REPORT NO: RTG.18578  
 CONCRETE SUPPLIER:  
 PLANT:  
 ORDER NO:  
 MEASURED SLUMP:  
 SPECIFIED SLUMP:  
 SAMPLED/TESTED BY:  
 BETONLAB DN NO:

TRUCK NO:  
 LOAD NO:  
 DATE CAST: 30/07/2019  
 DELIVERY NOTE:  
 WEATHER CONDITIONS:  
 DATE RECEIVED: 23/08/2019  
 TIME RECEIVED:

Cube ID (Our Ref)	Customer Ref	Date Cast	Date Tested	Age	Site (mm)	Surface Area mm <sup>2</sup>	Condition	Mass (kg)	Density (kg/m <sup>3</sup> )	Load (kN)	Strength (MPa)	Fail Mode		
R55 38		20-Aug-19	27-Aug-19	7	100x100x100	10000	1	2.428	2.428	2.46	2.46	2		
R55 39		20-Aug-19	27-Aug-19	7	100x100x100	10000	1	2.436	2.436	238	23.8	2		
R55 40		20-Aug-19	27-Aug-19	7	100x100x100	10000	1	2.420	2.420	236	23.6	2		
R55 41		20-Aug-19	27-Aug-19	7	100x100x100	10000	1	2.426	2.426	235	23.5	2		
Average											2.429	2.429	239	23.9
Standard Deviation											6,6	6,6	5,0	0,5

Press: EQ 003  
 Scale: EQ 008  
 Tested by: DKETSO

### CUBES MADE BY CONTRACTOR

DEVIATIONS, EXTENSIONS, OR EXCLUSIONS:  
 \*Average compressive strength is recorded to the nearest 0.1MPa and not 0.5MPa as specified

### Normative references:

- EN 12390-4
- SANS 5860
- SANS 5861-2
- SANS 5861-3
- SANS 5862-1

- CUBE CONDITION**
1. Complies with requirements
  2. Cube not square
  3. Honeycombing present
  4. Excess voids
  5. Cast surface not even
  6. Flatness >0.03mm
  7. Broken corners on cubes

This report may not be reproduced except in full, without written permission from Beton-Lab cc. Whilst every care is taken to ensure the correctness of all tests and reports, neither Beton-Lab cc or its employees shall be liable in any way whatever for any error made in the execution of reporting of tests or any erroneous conclusions drawn there from or any consequence thereof. This report relates only to the sample/s tested and in no way guarantees the performance of similar products that has not been tested. If a statement of conformity is required, this will be based on the decision rule in the relevant specification unless agreed otherwise. Data provided by the customer will be typed GRTEN and may affect the validity of the results.

A.D.R de Kock  
 Member  
**A foundation of precision**  
 Reg No: CS09/16079/23  
 Member: A.D.R. de Kock



C. Mporfu  
 Completed by

WT 1.3 100 1 (4) Rev: 06 ERF Date: 23-03-2017





# MLCO TRADING LIMITED ®

TPIN: 2061889389

Service Re-Invented

P.O Box 28050, Parklands, Kitwe, Zambia.

Tel + 260-966-849978 / +260 966 512070, Email admin@mlcotrading.com



**Beton-Lab cc**

Tel: 011-979-1422 | Fax: 011-979-1430  
 e-mail: betonlab@betonlab.co.za  
 32A Third Road, Breda  
 PO Box 105833, Assun Manor, 1630

## COMPRESSION STRENGTH TEST REPORT

SANS 5863:2006 Concrete Tests - Compressive Strength of hardened Concrete

CONTRACT: ROCK SUPERT SYSTEMS R55  
 DELIVERY ADDRESS: ROCK SUPERT SYSTEMS R55  
 REPORT NO: RTG 18576  
 CONCRETE SUPPLIER:  
 PLANT:  
 ORDER NO:  
 MEASURED SLUMP:  
 SPECIFIED SLUMP:  
 SAMPLED/TESTED BY:  
 BETONLAB DN NO:  
 TRUCK NO:  
 LOAD NO:  
 DATE CAST: 30/07/2019  
 DELIVERY NOTE:  
 WEATHER CONDITIONS:  
 DATE RECEIVED: 23/08/2019  
 TIME RECEIVED:

Cube ID	Customer Ref	Date Cast	Date Tested	Age	Site (mm)	Surface Area mm²	Condition	Mass (g)	Density (kg/m³)	Load (kN)	Strength (MPa)	Fail Mode
R55 42		30-Jul-19	27-Aug-19	28	100x100x100	10000	1	2 438	2 438	316	31.5	2
R55 43		30-Jul-19	27-Aug-19	28	100x100x100	10000	1	2 440	2 440	328	32.8	2
R55 44		30-Jul-19	27-Aug-19	28	100x100x100	10000	1	2 412	2 412	320	32.0	2
R55 45		30-Jul-19	27-Aug-19	28	100x100x100	10000	1	2 422	2 422	325	32.5	2
Average								2 428	2 428	322.3	32.2	
Standard Deviation								13.4	13.4	5.3	0.5	

**CUBES MADE BY CONTRACTOR**  
 OBSERVATIONS, EXTENSIONS OR EXCLUSIONS:  
 Average compressive strength is recorded to the nearest 0.1MPa and not 0.5MPa as specified

- CUBE CONDITION**
1. Complies with requirements
  2. Cube not square
  3. Honeycombing present
  4. Excess voids
  5. Cast surface not even
  6. Flatness >0.03mm
  7. Broken corners on cubes

This report may not be reproduced except in full, without written permission from Beton-Lab cc. Whilst every care is taken to ensure the correctness of all tests and reports, neither Beton-Lab cc or its employees shall be liable in any way whatever for any error made in the execution of reporting of tests or any erroneous conclusions drawn there from or any consequence thereof. This report relates only to the sample/s tested and in no way guarantees the performance of similar products that has not been tested. If a statement of conformity is required, this will be based on the decision rule in the relevant specification unless agreed otherwise. Data provided by the customer will be typed GUTEN and may affect the validity of the results.

- Normative references:**
- EN 12390-4
  - SANS 5460
  - SANS 5851-2
  - SANS 5851-3
  - SANS 5863-1

A.D.R de Kock  
 Member  
**A foundation of precision**  
 Reg No: CPD/10073/13  
 Member: A.D.R. de Kock

