

REPORT ON LOAD RESISTANCE CHARACTERISTICS OF GULLY TOPS AND MANHOLE TOPS FOR VEHICULAR AND PEDESTRIAN AREAS

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Contractor	: Emrates Link Nitco LLC	Report No. :	ISTL-280421-059 /01
Client	: Abu Dhabi City municipality	Lab. Project No. :	ISTL-C-856
Consultant	: Parsons International Limited	Sample No. :	ISTL-280421-059
Project Name	: Miscellaneous Works of Storm Water Networks Development in Abu Dhabi	Date of sampling :	22/04/2021
Project No.	: 119/2018	Sample Ref. No. :	ISTL-280421-059
Project Location	: Abu Dhabi	Date Sample Received :	28/04/2021
Sample Name	: Cover & Frame	Testing Temperature :	23 °C
Sample Description	: GRP Cover and Frame	Sender`s Reference No. :	NP
Sample Size	: 655x705 mm C250 GRP Cover & Frame	Grade of sample :	C250
Client Reference No.	: NP	Sample Brought in by :	Contractor Rep Consultant & Client Representative
Supplier	: NP	Sampled by :	
Source of sample	: Smithline Reinforced Composites / Smithline Reinforced Fiber Glass Products	Lot No. :	NP
Sampling Location	: Site		
Date test started	: 20/05/2021	Diameter of plate loader used :	250 mm
Date test completed	: 20/05/2021	Specified max. load to be applied :	250 kN
Report Date	: 21/05/2021	Tested by :	SKS

RESULTS

Specimen No.	Sample Reference	Applied Load (kN)	No. of Cycles	Duration of applying load (sec)	Maximum Permanent Set (mm)	Observation
1	GRP Cover and Frame	170	5	-	0.18	-
		250	1	30	-	No crack or any sign of damage was observed on the sample

Test method	: BS EN 124 Part 1 :2015
Conditioning of sample	: NA
Method variation	: Nil
Remarks	: This test is accderited by ENAS.

Signed for and on behalf of Independent Soil Testing Laboratories LLC.


Rajakumar. T
Technical Manager



Results relate only to the item tested.
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Load Resistance Characteristics
Reference No. 00ISTL-280421-059-1_Load Test
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REPORT ON DETERMINATION OF AXIAL TENSILE STRENGTH

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Client	: Abu Dhabi City municipality	Report No	: ISTL-280421-059 /02
Consultant	: Parsons International Limited	Date Reported	: 05/05/2021
Contractor	: Emrates Link Nitco LLC	Lab Reference No.	: ISTL-280421-059
Project Name	: Miscellaneous Works of Storm Water Networks Development in Abu Dhabi	Lab Project No.	: ISTL-C-856
Project No.	: 119/2018	Lab Sample No.	: ISTL-280421-059
Project Location	: Abu Dhabi	Sampled by	: Contractor & Consultant
Sample Description	: GRP Cover and Frame	Sample Brought by	: Contractor Rep
Source of Sample	: Smithline Reinforced Composites / Smithline Reinforced Fiber Glass Products	Date of Sampling	: 22/04/2021
Sampling Location	: Site	Date of Sample Received	: 28/04/2021
Client Reference No.	: NP	Date Test Started	: 04/05/2021
Sender Reference No.	: NP	Date Test Completed	: 05/05/2021
Lot No. / Lot Size	: NP	Size of Sample	: 250 x 250 mm
Sampling Method	: Random	Ambient Temperature (°C)	: 23
Sample Prep. Method	: ASTM D 638 - 14	Relative Humidity (%)	: 50
Test Method	: ASTM D 638 - 14	Tested by	: SKS

Specimen No.	Width (mm)	Length (mm)	Maximum Load (KN)	Axial Tensile Strength (N/mm ²)
1	19.2	50.0	211	219
2	19.1	50.0	209	219
3	19.2	50.0	227	236
4	19.0	50.0	230	242
5	19.1	50.0	223	234
Axial Tensile Strength (N/mm ²)				230

Method variation : Nil

Remarks : Nil

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Rajakumar.T
Technical Manager



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REPORT ON DETERMINATION OF COMPRESSIVE STRENGTH

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Client	: Abu Dhabi City municipality	Report No	: ISTL-280421-059 /03
Consultant	: Parsons International Limited	Date Reported	: 05/05/2021
Contractor	: Emrates Link Nitco LLC	Lab Reference No.	: ISTL-280421-059
Project Name	: Miscellaneous Works of Storm Water Networks Development in Abu Dhabi	Lab Project No.	: ISTL-C-856
Project No.	: 119/2018	Lab Sample No.	: ISTL-280421-059
Project Location	: Abu Dhabi	Sampled by	: Contractor & Consultant
Sample Description	: GRP Cover and Frame	Sample Brought by	: Contractor Rep
Source of Sample	: Smithline Reinforced Composites / Smithline Reinforced Fiber Glass Products	Date of Sampling	: 22/04/2021
Sampling Location	: Site	Date of Sample Received	: 28/04/2021
Client Reference No.	: NP	Date Test Started	: 04/05/2021
Sender Reference No.	: NP	Date Test Completed	: 05/05/2021
Lot No. / Lot Size	: NP	Size of Sample	: 150 X 150 mm
Sampling Method	: Random	Ambient Temperature (°C)	: 23
Sample Prep. Method	: ASTM D 695 - 15	Relative Humidity (%)	: 50
Test Method	: ASTM D 695 - 15	Tested by	: SKS

Specimen No.	Dimensions (mm) (LxWxT)	Maximum Load (KN)	Compressive Strength (MPa)
1	12.7x12.7x26.5	30	186
2	12.7x12.8x26.3	34	210
3	12.6x12.7x26.6	29	181
4	12.7x12.7x26.4	36	223
5	12.7x12.7x26.1	35	217
Copressive Strength (MPa)			203

Method variation : Nil

Remarks : Nil

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Rajakumar.T
Technical Manager



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Issue No. 01

REPORT ON DETERMINATION OF FLEXURAL STRENGTH

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Client	: Abu Dhabi City municipality	Report No	: ISTL-280421-059 /04
Consultant	: Parsons International Limited	Date Reported	: 05/05/2021
Contractor	: Emrates Link Nitco LLC	Lab Reference No.	: ISTL-280421-059
Project Name	: Miscellaneous Works of Storm Water Networks Development in Abu Dhabi	Lab Project No.	: ISTL-C-856
Project No.	: 119/2018	Lab Sample No.	: ISTL-280421-059
Project Location	: Abu Dhabi	Sampled by	: Contractor & Consultant
Sample Description	: GRP Cover and Frame	Sample Brought by	: Contractor Rep
Source of Sample	: Smithline Reinforced Composites / Smithline Reinforced Fiber Glass Products	Date of Sampling	: 22/04/2021
Sampling Location	: Site	Date of Sample Received	: 28/04/2021
Client Reference No.	: NP	Date Test Started	: 04/05/2021
Sender Reference No.	: NP	Date Test Completed	: 05/05/2021
Lot No. / Lot Size	: NP	Size of Sample	: 250 X 250 mm
Sampling Method	: Random	Ambient Temperature (°C)	: 23
Sample Prep. Method	: ASTM D 790 - 17	Relative Humidity (%)	: 50
Test Method	: ASTM D 790 - 17	Tested by	: SKS

Specimen No.	Span Length (mm)	Width (mm)	Thickness (mm)	Maximum Applied Load (KN)	Modulus Of Rupture (MPa)
1	250	100	15.2	19.5	314
2	250	100	15.4	20.4	322
3	250	100	15.6	18.9	293
4	250	100	15.6	19.5	302
5	250	100	15.5	20.9	327
Average					312

Method variation : Nil

Remarks : Nil

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Technical Manager



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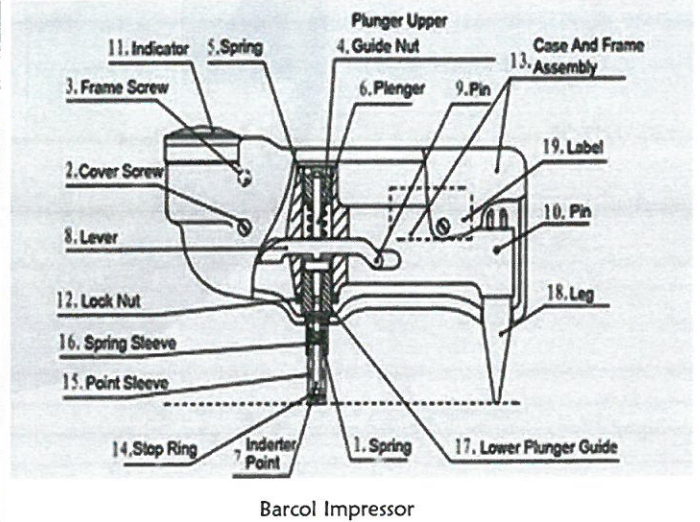
REPORT ON DETERMINATION OF INDENTATION HARDNESS OF GRP BY MEANS OF BARCOL IMPRESSOR

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Client	: Abu Dhabi City municipality	Report No	: ISTL-280421-059 /05
Consultant	: Parsons International Limited	Date Reported	: 05/05/2021
Contractor	: Emrates Link Nitco LLC	Lab Reference No.	: ISTL-280421-059
Project Name	: Miscellaneous Works of Storm Water Networks Development in Abu Dhabi	Lab Project No.	: ISTL-C-856
Project No.	: 119/2018	Lab Sample No.	: ISTL-280421-059
Project Location	: Abu Dhabi	Sampled by	: Contractor & Consultant
Sample Description	: GRP Cover and Frame	Sample Brought by	: Contractor Rep
Source of Sample	: Smithline Reinforced Composites / Smithline Reinforced Fiber Glass Products	Date of Sampling	: 22/04/2021
Sampling Location	: Site	Date of Sample Received	: 28/04/2021
Client Reference No.	: NP	Date Test Started	: 04/05/2021
Sender Reference No.	: NP	Date Test Completed	: 05/05/2021
Lot No. / Lot Size	: NP	Size of Sample	: 250 x 250 mm
Sampling Method	: Random	Ambient Temperature (°C)	: 23
Sample Prep. Method	: ASTM D 2583 - 13a	Relative Humidity (%)	: 50
Test Method	: ASTM D 2583 - 13a	Tested by	: SKS

RESULTS

No.Of Measurements	Barcol Hardness Value
1	37
2	40
3	39
4	38
5	41
Average Barcol Hardness Value	39



Method variation : Nil
Remarks : Nil

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Technical Manager

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