

## REPORT ON DETERMINATION OF FLEXURAL STRENGTH

Page No. 1/3

<b>Client</b>	TOUGH BUILD BUILDING PREFECTION	<b>Report No.</b>	DIIMMR24004119
<b>Contractor</b>	NO SPECIFIC CONTRACTOR	<b>Date Reported</b>	30/01/24
<b>Consultant</b>	NO SPECIFIC CONSULTANT	<b>Sample No.</b>	DIIMMS24000797
<b>Project No.</b>	N.P.	<b>Request No.</b>	DIIMMO24000805
<b>Project Name</b>	Internal Testing	<b>Client Ref.</b>	N.P.
<b>Sample Desc.</b>	CONCRETE BEAMS (150x300 mm)	<b>Sampled By</b>	CLIENT'S REP
<b>Source</b>	SITE	<b>Sampling Date</b>	09/12/24
<b>Sample Location</b>	CONTROL SAMPLES & TOUGHPLAST-150	<b>Sampling Cert.</b>	N.P.
<b>Lot No.</b>	N.P.	<b>Sampling Method</b>	N.P.
<b>Lot Size</b>	N.P.	<b>Sample Size</b>	6 Nos
<b>Test Method</b>	ASTM C 78/C 78M-15b	<b>Sample Brt. In By</b>	Client's Rep
<b>Method Var.</b>	None	<b>Date Received</b>	10/12/24
<b>Test Location</b>	ACES Dubai Lab	<b>Date Tested</b>	12/12/24
<b>Remarks</b>	None	<b>Tested By</b>	Majbel

**Casting Date** : 09/12/23  
**Age at Test** : 3 Days  
**Test Condition** : Wet-3 Days in water @ 22°C  
**Span Length** : 250 mm

Specimen No.	Width (mm)	Thickness (mm)	Maximum Load (N)	Flexural Strength (N/mm <sup>2</sup> )	Average Flexural Strength (N/mm <sup>2</sup> )
Control - 1	150	150	70000	5.19	5.94
Control - 2	150	150	82250	6.09	
Control - 3	150	150	88188	6.53	
TOUGHPLAST-150	150	150	96162	7.12	6.97
TOUGHPLAST-150	150	150	95324	7.06	
TOUGHPLAST-150	150	150	91025	6.74	



  
**Eng. Harces Sulaiman**  
**Material Department Manager**

**Notes:** 1.The test results in this report relate only to the test sample as received and tested by the laboratory. 2.Unless otherwise stated in Remarks, all samples were received in acceptable condition. 3.This report shall not be reproduced except in full, without written approval of ACES.

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Form: RT-2272-398

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Page No. 2/3

<b>Client</b>	TOUGH BUILD BUILDING PREFECTION	<b>Report No.</b>	DLMMR24004119
<b>Contractor</b>	NO SPECIFIC CONTRACTOR	<b>Date Reported</b>	30/01/24
<b>Consultant</b>	NO SPECIFIC CONSULTANT	<b>Sample No.</b>	DLMMS24000797
<b>Project No.</b>	N.P.	<b>Request No.</b>	DLMMO24000805
<b>Project Name</b>	Internal Testing	<b>Client Ref.</b>	N.P.
<b>Sample Desc.</b>	CONCRETE BEAMS (150x300 mm)	<b>Sampled By</b>	CLIENT'S REP
<b>Source</b>	SITE	<b>Sampling Date</b>	09/12/24
<b>Sample Location</b>	CONTROL SAMPLES & TOUGHPLAST-150	<b>Sampling Cert.</b>	N.P.
<b>Lot No.</b>	N.P.	<b>Sampling Method</b>	N.P.
<b>Lot Size</b>	N.P.	<b>Sample Size</b>	6 Nos
<b>Test Method</b>	ASTM C 78/C 78M-15b	<b>Sample Brt. In By</b>	Client's Rep
<b>Method Var.</b>	None	<b>Date Received</b>	10/12/24
<b>Test Location</b>	ACES Dubai Lab	<b>Date Tested</b>	12/12/24
<b>Remarks</b>	None	<b>Tested By</b>	Majbel

**Casting Date** : 09/12/23  
**Age at Test** : 7 Days  
**Test Condition** : Wet-7 Days in water @ 22°C  
**Span Length** : 250mm

Specimen No.	Width (mm)	Thickness (mm)	Maximum Load (N)	Flexural Strength (N/mm <sup>2</sup> )	Average Flexural Strength (N/mm <sup>2</sup> )
Control - 4	150	150	99594	7.38	6.47
Control - 5	150	150	84156	6.23	
Control - 6	150	150	78188	5.79	
TOUGHPLAST-150	150	150	98820	7.32	7.55
TOUGHPLAST-150	150	150	106245	7.87	
TOUGHPLAST-150	150	150	100845	7.47	



  
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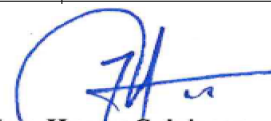
Page No. 3/3

Client	TOUGH BUILD BUILDING PREFECTION	Report No.	DI.MMR24004119
Contractor	NO SPECIFIC CONTRACTOR	Date Reported	30/01/24
Consultant	NO SPECIFIC CONSULTANT	Sample No.	DI.MMS24000797
Project No.	N.P.	Request No.	DI.MMO24000805
Project Name	Internal Testing	Client Ref.	N.P.
Sample Desc.	CONCRETE BEAMS (150x300 mm)	Sampled By	CLIENT'S REP
Source	SITE	Sampling Date	09/12/24
Sample Location	CONTROL SAMPLES & TOUGHPLAST-150	Sampling Cert.	N.P.
Lot No.	N.P.	Sampling Method	N.P.
Lot Size	N.P.	Sample Size	6 Nos
Test Method	ASTM C 78/C 78M-15b	Sample Brt. In By	Client's Rep
Method Var.	None	Date Received	10/12/24
Test Location	ACES Dubai Lab	Date Tested	12/12/24
Remarks	None	Tested By	Majbel

Casting Date : 09/12/23  
 Age at Test : 28 Days  
 Test Condition : Wet-28 Days in water @ 22°C  
 Span Length : 250mm

Specimen No.	Width (mm)	Thickness (mm)	Maximum Load (N)	Flexural Strength (N/mm <sup>2</sup> )	Average Flexural Strength (N/mm <sup>2</sup> )
Control - 7	150	150	94095	6.97	7.40
Control - 8	150	150	105570	7.82	
Control - 9	150	150	100035	7.41	
TOUGHPLAST-150	150	150	124740	9.24	9.18
TOUGHPLAST-150	150	150	123969	9.18	
TOUGHPLAST-150	150	150	123255	9.13	



  
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