



TEST REPORT ON TENSILE STRENGTH & ELONGATION

Customer Name	Berger Paints Emirates LTD Co LLC PO Box: 27524 Dubai, UAE		
Sample Description	Smartcare Hypertron Hybrid	Lab Report No.	WD-R-230714-0482/1-Rev1
Source	Berger Paints Emirates LTD Co LLC	Request No.	WD-Q-230714-0122
Curing and test condition	Temperature: 23°C Relative Humidity: 50%	Sample No.	WD-S-230714-0482
Sampling Method	ASTM D412-16(2021)	Date Received	14/07/2023
Test Method	ASTM D412-16(2021)	Casting Date	N.G
Specimen Type	Test Method A – Die C	Curing Time	N.G
Rate of Speed	500 mm/minute	Date Tested	18/07/2023
Wimpey Ref No.	23071436	Date Reported	18/07/2023
Tested By	SA		

Test Results

Specimen Number	Width (mm)	Thickness (mm)	Maximum Force (N)	Tensile Strength (N/mm ²)	Elongation (%)
1	6.00	2.64	199.0	12.56	451
2	6.00	1.93	142.8	12.33	391
3	6.00	2.71	205.2	12.62	386
4	6.00	3.08	235.4	12.74	401
5	6.00	2.94	217.5	12.33	425
Average				12.52	411

Remarks: None.

Signed for and on behalf of Wimpey Laboratories L.L.C.

S. Sarath Kumar
Head of Department

Test results relate only to the samples tested

This report shall not be reproduced except in full, without the written approval of the laboratory.





TEST REPORT ON SHORE HARDNESS

Customer Name	Berger Paints Emirates LTD Co LLC PO Box: 27524 Dubai, UAE		
Sample Description	Smartcare Hypertron Hybrid	Lab Report No.	WD-R-230714-0482/2-Rev1
Source	Berger Paints Emirates LTD Co LLC	Request No.	WD-Q-230714-0122
Test Specification	N.G	Sample No.	WD-S-230714-0482
Test Method	ASTM D2240-15(2021)	Wimpey Ref. No.	23071436
Equipment Type	Durometer Shore D	Date Received	14/07/2023
Equipment Model	SHR-D-GOLD	Date Tested	18/07/2023
Serial Number	21717	Date Reported	18/07/2023
Mean of Testing	Manual	No of pieces piled	3 nos.
Indentation Hardness Time	1 second	Tested By	SA

Test Results

Test	Reading	Result
Shore D Hardness	41,39,39,38,39	D/39/1

Remarks: None.

Signed for and on behalf of Wimpey Laboratories L.L.C.


S. Sarath Kumar

Head of Department

Test results relate only to the samples tested

This report shall not be reproduced except in full, without the written approval of the laboratory.

-End of text-





TEST REPORT ON TEAR STRENGTH

Customer Name	Berger Paints Emirates LTD Co LLC PO Box: 27524 Dubai, UAE		
Sample Description	Hybrid Polyurea	Lab Report No.	WD-R-230706-0544
Source	Berger Paints Emirates LTD Co LLC	Request No.	WD-Q-230706-0139
Test Method	ASTM D624-00(2021)	Sample No.	WD-S-230706-0542
Curing Conditioned and Room Atmospheric condition	23±2°C 50%±5%	Date Received	06/07/2023
Type of machine used	UTM Machine H25KT	Date Tested	08/07/2023
Speed of Testing	500 mm/minute	Date Reported	10/07/2023
Wimpey Ref No.	23070624	Tested By	SA

Test Results

Specimen Number	Thickness (mm)	Tear Strength (N/mm)
1	3.25	60.2
2	3.32	53.5
3	3.24	59.9
Average		57.9

Remarks: None

Signed for and on behalf of Wimpey Laboratories L.L.C.


S. Sarath Kumar
Head of Department

Test results relate only to the samples tested

This report shall not be reproduced except in full, without the written approval of the laboratory.

-End of text-





TEST REPORT ON ABRASION RESISTANCE

*Information Provided to the Laboratory			
Customer Name	Berger Paints Emirates LTD Co LLC PO Box: 27524 Dubai, UAE	Sample Description	Hybrid Polyurea
Contractor	N.G	Sample Source	Berger Paints Emirates LTD Co LLC
Consultant	N.G	Sample Identification	N.G
Client	N.G	Location (Structure Ref)	N.G
Project	N.G	Sampling Date/Time	N.G

Laboratory Information			
Test Method	ASTM D4060-19	Lab Report No.	WD-R-230706-0542
Test Method Variation	None	Request No	WD-Q-230706-0139
Wheel Reference	CS-17	Sample No.	WD-S-230706-0542
Mass Applied on each wheel	1000 g	Date Received	06/07/2032
Vacuum Opening Diameter	8 mm	Date Tested	10/07/2023
No. of Revolution	1000	Date Reported	10/07/2023
Vacuum Nozzle Height	6.2 mm	Test Temperature	23°C
Vacuum Suction Force	100 %	Relative Humidity	50 %
Sample Brought in by	N.G	Conditioning Procedure	23°C & 50% RH
Tested By	SA	Wimpey Ref. No.	23070624

Test Results

Specimen Number	Unit	Weight Lost
1	mg	4.2
2		5.0
Average		4.6

Legends: N.G – Information Not Given

Remarks: None.

Method Deviation: None

Signed for and on behalf of Wimpey Laboratories L.L.C.

S/Sarath Kumar
Head of Department

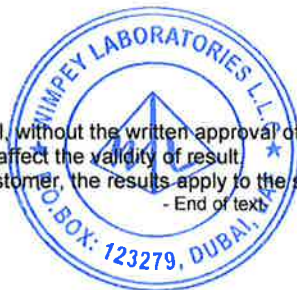
Test results relate only to the samples tested

This report shall not be reproduced except in full, without the written approval of the laboratory.

*The information provided by the customer can affect the validity of result.

When the sample has been provided by the Customer, the results apply to the sample as received.

- End of text -





TEST REPORT ON IMPACT STRENGTH

Customer Name	Berger Paints Emirates LTD Co LLC PO Box: 27524 Dubai, UAE		
Project Name	N.G	Lab Report No.	WD-R-230817-0644/3-Rev1
Sample Description	Hybrid Polyurea	Request No.	WD-Q-230817-0154
Source	Berger Paints Emirates LTD Co LLC	Sample No.	WD-S-230817-0620
Test Method	ASTM D2794-93 (2019)	Wimpey Ref No.	23081703
Thickness of Coating	550mm	Date Received	17/08/2023
Substrate Thickness	5.0 mm	Casting Date	N.G
Type of Substrate	Steel	Date Tested	28/08/2023
Drop Height	1.00m	Date Reported	30/08/2023
Test Temperature	23°C	Relative Humidity	50%
Diameter of Punch Used	12.7 mm	Sample brought in by	Wimpey Lab
Drop Mass	1.80 kg	Tested By	RB

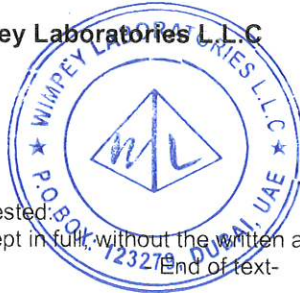
Test Result

Test	Unit	Result
Impact Strength	Kg.m	1.80

Remarks: None.

Signed for and on behalf of Wimpey Laboratories L.L.C


S. Sarath Kumar
Head of Department



Test results relate only to the samples tested.
This report shall not be reproduced except in full, without the written approval of the laboratory.
End of text-



TEST REPORT ON CRACK BRIDGING ABILITY

Client	Berger Paints Emirates LTD CO LLC PO Box: 27524 Dubai, UAE		
Project Name	N.G	Lab Report No.	WD-R-210517-0554/4
Sample Description	SmartCare Hypertron Hybrid	Request No.	WD-Q-210517-0184
Source	Berger Paints Emirates Ltd Co (LLC).	Sample No.	WD-S-210517-0523
Test Method	ASTM C836/C836M-18	Date Received	17/05/2021
Nature of Substrate	Concrete	Casting Date	20/05/2021
Substrate Dimension(mm)	50.8 x 25.4 x 25.4	Date Tested	10/06/2021
Sampling Conditioning	14 Days at room temperature followed by 7 days at 70°C	Date Reported	19/06/2021
Test Condition	Temperature: 23°C Relative Humidity: 50%	Wimpey Ref No.	210517-31
Tested By	SU		

Test Results

Test	Crack width (mm)	Observation
Crack Bridging Ability	4.5	No sign of cracks, loss of adhesion or any other type of failure was observed after completion of the up and down movement.

Remarks: None.

Signed for and on behalf of Wimpey Laboratories

Visakh S Nair
Laboratory Manager

Test results relate only to the samples tested

This report shall not be reproduced except in full, without the written approval of the laboratory.

-End of text-





TEST REPORT ON RESISTANCE TO ROOT PENETRATION

Client	Berger Paints Emirates Ltd Co(LLC) Dubai,UAE		
Project Name	N.G	Lab Report No.	WD-R-230817-0644/4-Rev1
Sample Description	Smartcare Hypertron Hybrid	Request No.	WD-Q-230817-0154
Source	Berger Paints Emirates Ltd Co(LLC)	Date Received	17/08/2023
Test Method	TS 14416	Date Tested	20/08/2023-15/10/2023
Test Condition	Temperature: 23°C Relative Humidity: 50%	Date Reported	15/10/2023
Test age	8 weeks	Seed used	Lupin seed
Sample brought in by	Client	Tested By	RB

Test Results

Specimen No	Observation	Result
Specimen 1	The roots have not penetrated the specimen	The sample has resisted root penetration under the conditions of TS 14416:2014.
Specimen 2		
Specimen 3		

Remarks: None.

Signed for and on behalf of Wimpey Laboratories L.L.C

S.Sarath Kumar
Head of Department

Test results relate only to the samples tested

This report shall not be reproduced except in full, without the written approval of the laboratory.



End of text-



TEST REPORT ON CHEMICAL RESISTANCE

Customer Name	Berger Paints Emirates LTD Co LLC PO Box: 27524 Dubai, UAE		
Project Name	N.G	Lab Report No.	WD-R-230817-0643
Sample Description	Hybrid Polyurea	Request No.	WD-Q-230817-0154
Source	Berger Paints Emirates LTD Co LLC	Sample No.	WD-S-230817-0620
Client's Ref.	N.G	Date Received	17/08/2023
Sampling Method	ASTM D1308-02(2013)	Date Tested	26/08/2023
Sample brought in by	Client	Date Reported	30/08/2023
Temperature & Relative Humidity	23°C & 50%	Tested By	AY

Test Result

Observation Time: 7 days

Chemicals	Observation	Type of effect
anti-freeze	No effects shows after 24 hours immersion	A
motor oil		A
diesel fuel		A
gasoline		A
calcium chloride		A
sodium chloride		A
transmission fluid		A

Remarks: None

Legends: A= No discoloration, No Change in gloss, No Blistering, No Swelling, No Softening, No Loss of adhesion or Special phenomenon.

Signed for and on behalf of Wimpey Laboratories L.L.C.

S. Sarath Kumar
Heads of Department

Test results relate only to the samples tested.

This report shall not be reproduced except in full, without the written approval of the laboratory.

-End of text-





TEST REPORT ON WATER VAPOUR TRANSMISSION

Customer Name	Berger Paints Emirates LTD Co LLC PO Box: 27524 Dubai, UAE		
Project Name	N.G	Lab Report No.	WD-R-230817-0644/2
Sample Description	Hybrid Polyurea	Request No.	WD-Q-230817-0154
Source	Berger Paints Emirates LTD Co LLC	Sample No.	WD-S-230817-0620
Test Method	ASTM E96/E96M-22a	Wimpey Ref No.	23081703
Temperature in Test Chamber	23°C	Date Received	17/08/2023
Relative Humidity in Test Chamber	90%	Date Tested	28/08/2023
Test Area	33.18 cm ²	Date Reported	30/08/2023
Total Cycles	Continuous mode up to constant	Room Temperature	23°C
Sample Reference	N.G	Room Relative Humidity	50%
Specimen Thickness	3251 microns	Tested By	RB

Test Results

Test	Unit	Specimen 1	Specimen 2	Specimen 3	Average
Water Vapor Transmission (WVT)	g/m ² /24hours	1.2287	1.4461	1.3424	1.3391
Water Vapor Permeance (WVP)	Perms	0.1166	0.1373	0.1274	0.1271

Remarks: None.

Signed for and on behalf of Wimpey Laboratories L.L.C


S. Sarath Kumar
Head of Department

Test results relate only to the samples tested.

This report shall not be reproduced except in full, without the written approval of the laboratory.





TEST REPORT ON HEAT RESISTANCE

Customer Name	Berger Paints Emirates Ltd Co (LLC). Dubai, UAE.		
Project Name	Not Applicable	Lab Report No. ..	WD-R-210517-0554/2
Sample Description	SmartCare Hypertron Hybrid	Request No.	WD-Q-210517-0184
Source	Berger Paints Emirates Ltd Co (LLC).	Sample No.	WD-S-210517-0523
Test Method	ASTM D5147- section 13	Date Received	17/05/2021
Room Condition	Temperature: 23°C Relative Humidity: 50%	Date Tested	17/06/2021
Wimpey Ref No.	210517-31	Date Reported	19/06/2021
Sample brought in by	Client	Tested By	PK

Test Results

Test	Result
Heat Resistance@ 60°C	No Flow observed

Remarks: None.

Signed for and on behalf of Wimpey Laboratories

Visakh S Nair
Laboratory Manager

Test results relate only to the samples tested

This report shall not be reproduced except in full, without the written approval of the laboratory.

-End of text-





مختبرات ويمبي ش.ذ.م.م.
WIMPEY LABORATORIES L.L.C.

TEST REPORT ON TEMPERATURE RESISTANCE

Client	Berger Paints Emirates Ltd Co LLC Dubai, UAE		
Sample Description	Hypertron hybrid	Lab Report No.	WD-R-220726-0776
Sample Size	150 x 75 mm	Sample No.	WD-S-220726-0739
Source	Berger Paints Emirates Ltd Co LLC	Request No	WD-Q-220726-0203
Test Method	ASTM D2485-18/IHP	Date Received	26/07/2022
Method of Application	By Brush / Roller	Curing Time	7 days
Test Temperature	160°C	Date Tested	08/08/2022-09/08/2022
Substrate Used	Metal Panels	Date Reported	10/08/2022
Room Temperature	23°C	DFT	606 microns
Relative Humidity	50%	Wimpey Ref No	22072638
Test duration	24 Hours	Tested By	SU

Test Result

Test	Observation	Result
Temperature Resistance at 160°C	No cracking or delamination observed on the test sample.	Pass

Remarks: None.

Signed for and on behalf of Wimpey Laboratories,

S. Sarath Kumar
Head of Department

Test results relate only to the samples tested.

This report shall not be reproduced except in full, without the written approval of the laboratory.

