

RIOLAM	Noble Laminates Pvt. Ltd.		TECHNICAL DATA SHEET FOR LAMINATE	
PROTOCOL : BS EN 438 2 & 3 : 2016				
Date :	2 ND April, 2021		Material type:	STD HPL
Design No :	Any		Thickness :	0.60 mm
Test Property	Property or Attribute	Unit, (Max or Min.)	Laminate Grade	Noble Laminates Test Results
Classification :	Dimensional Properties	NA	VGS/ VGF/	VGS Grade
Thickness		Mm		.+ 0.05
Length and Width		Mm(Max)	(+ 10mm/ - 0mm)	(+5.0mm)
Edges Straightness		Mm/m Max. Deviation	1.5mm	< 1.5
Edges Squareness		Mm/m Max. Deviation	1.5mm	< 1.5
Flatness		Mm/m Max. Deviation	60.0mm	< 20
Resistance to Surface Wear		Wear Resistance	Resolutions (Mm) Initial Point	50
Resistance to Immersion in Boiling Water	Appearance	Rating (Min.)		
		Other Finishes	4	5
Resistance to Water Wapour	Appearance	Rating (Min.)		
		Other Finishes	4	5
Resistance to Dry heat (160°C)	Appearance	Rating (Min)		
		Other Finishes	4	5
Dimensional Stability at Elevated Temperature	Cumulative Dimensional Change	L (%Max.)	0.75	0.29
		T (%Max.)	1.25	0.57
Resistance to Wet Heat (100°C)	Appearance	Rating (Min.)		
		Other finishes	4	5
Resistance to Impact by small diameter ball	Spring Force	N (Min.)	15	>15
Resistance to cracking under Stress (optional)	Appearance	Rating (Min.)	4	5
Resistance To scratching	Force	Rating (Min) Textured Finishes	2	3
Resistance to Staining	Appearance	Rating (Min.) Group 1 & 2	5	5
		Group 3	4	5
Light Fastness (Xenon Arc)	Contrast	Grey Scale Rating	4 to 5	≥ 4 to 5
Density	Density	g/cm3 (Min.)	1.35	1.38

Tested By:
QA/QC [Signature]
Noble Laminates Pvt Ltd

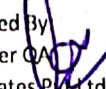
Approved By:
Manager Q [Signature]
Noble Laminates Pvt Ltd

RIOLAM	Noble Laminates Pvt. Ltd.	TECHNICAL DATA SHEET FOR COMPACT LAMINATE (CGS GRADE)
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PROTOCOL : BS EN 438 2 & 3 : 2016

Date/BATCH No.	2 ND April, 2021	MATERIAL TYPE:	Standard Compact Laminate	
Design No :	Any	NOMINAL THICKNESS:	3.0mm	
Test Properties	Property or Attribute	Unit, (Max or Min.)	Specified Value	Noble Laminates Testing Results
Classification :	Dimensional Properties	NA	CGS	CGS
Thickness		Mm	+ 0.20	+0.12 mm
Length and Width		Mm(Max)	(+ 10mm/ - 0mm)	(+5.0mm)
Edges Straightness		Mm/m Max. Deviation	1.5mm	< 1.5
Edges Squareness		Mm/m Max. Deviation	1.5mm	< 1.5
Flatness		Mm/m Max. Deviation	8.0 mm	< 8.0
Resistance to Surface Wear		Wear Resistance	Resolutions (Mm) Initial Point	150
Resistance to Immersion in Boiling Water	Mass increase Thickness Increase	%(Max) 2mm <t<	5	2.85
		%(Max) 2mm <t<	6	3.75
	Appearance	Surface Rating (Min)	4	5
		Other Finishes Edge Rating (Min)	3	4
Resistance to Water Wapour	Appearance	Rating (Min.) Other Finishes	4	5
Resistance to Dry heat (160°C)	Appearance	Rating (Min) Other Finishes % (Max.)	4	5
Dimensional Stability at Elevated Temperature	Cumulative Dimensional Change	2.0mm <t<5 mm t.	0.4	0.19
			0.8	0.52
		2.00 mm < t < 5mm T.		
Resistance to Wet Heat (100°C)	Appearance	Rating (Min.) Other finishes	4	5
Resistance to Impact by Large diameter ball	Drop Height	Mm (Min.) 2<t<6	1400	1600
Resistance to crazing	Appearance	Grade (Min)	4	4
Resistance To scratching	Force	Rating (Min) Textured Finishes	3	4
Resistance to Staining	Appearance	Rating (Min.) Group 1 & 2	5	5
		Group 3	4	5
Light Fastness (Xenon Arc)	Contrast	Grey Scale Rating	4 to 5	4
Flexural Modulues	Stress	Mpa (Min.) L & T	9000	9142
Flexural Strength	Stress	Mpa (Min.) L & T	80	84
Density	Density	g/cm3 (Min.)	1.35	1.38

Tested By: 
QA/QC LAB
Noble Laminates Pvt Ltd

Approved By: 
Manager QA
Noble Laminates Pvt Ltd

RIOLAM		Noble Laminates Pvt. Ltd.		TECHNICAL DATA SHEET FOR PHENOLIC COMPACT LAMINATE		
PROTOCOL : BS EN 438 2 & 3 : 2016						
Date/ Batch. No.		2ND April 2021	MATERIAL TYPE	Standard Compact Laminate		
Design No :		Any	STD THICKNESS	13.0mm		
S. No.	Test Properties	Test Method (EN 438-2: 2016, Clause No.)	Property or Attribute	Unit, (Max or Min.)	Laminate Grade	Noble Laminates Test Results
1	Classification :		Dimensional Properties	NA	CG5	CG5
2	Thickness	EN 438-2-5		Mm	+ 0.6	+ 0.40mm
3	Length and Width	EN 438-2-6		Mm(Max)	(+ 10mm/ -0mm)	(+3.0mm)
4	Edges Straightness	EN 438-2-7		Mm/m	1.5mm	< 1.5
5	Edges Squareness	EN 438-2-8		Mm/m	1.5mm	< 1.5
6	Flatness	EN 438-2-9		Mm/m	3.0(max.)	< 3.0
7	Resistance to Surface Wear	EN 438-2-10	Wear Resistance	Resolutions Initial point	150 (Min)	> 380
8	Resistance to Immersion in Boiling Water	EN 438-2-12	Mass Increase	%	2.00 (Max)	0.34
			Thickness Increase	%	2.00 (Max)	0.75
			Appearance	Surface Rating	4 (Min.)	5
				Edge Rating	3 (Min.)	4
9	Resistance to Water Wapour	EN 438-2-14	Appearance	Rating	4 (Min)	5
10	Resistance to Dry heat	s	Appearance	Rating	4 (Min)	5
11	Dimensional Stability at Elevated Temperature	EN 438-2-17	Cumulative Dimensional Change	% (Max)		
				Longitudinal	0.30 (Max)	0.04
			Transverse	0.60 (Max)	0.09	
12	Resistance to Wet Heat (100°C)	EN 438-2-18	Appearance	Rating	4 (Min)	5
13	Resistance to Impact by Large diameter ball	EN 438-2-21	Drop Height	mm	1800 (Min.)	2000
14	Resistance to crazing	EN 438-2-24	Appearance	Grade	4 (Min.)	4
15	Resistance To scratching	EN 438-2-25	Force	Rating	3 (Min)	4
16	Resistance to Staining	EN 438-2-26	Appearance	Rating (Min.)	5 (Min)	5
				Group 1 & 2	4	5
			Group 3		4	
17	Resistance to Water Soak at 65°C for 48 Hours	IS 2046:1995 Annexure Y	Appearance	Rating	4 (Min)	4
18	Light Fastness (Xenon Arc)	EN 438-2-27	Contrast	Grey Scale Rating	4 to 5	4
19	Flexural Modulus	EN ISO 178: 203	Stress	MPA L & T	9000 (Min.)	10985
20	Flexural Strength	EN ISO 178: 203	Stress	MPA L & T	80 (Min.)	96
21	Density	EN ISO 1183: 1:2004	Density	g/cm3	1.35 (Min.)	1.37

Tested By:
QA/QC LAB
Noble Laminates Pvt Ltd

Approved By:
Manager QA
Noble Laminates Pvt Ltd



GUJARAT TEST HOUSE

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TEST REPORT

Format No.:GTH/QR/24/1

Issued to:
NOBLE LAMINATES (P)LTD.
Block No.451/452,Nr.Palav Hotel,N.H.No.8,
Ahmedabad-Himmatnagar Highway,
Vill:Chnadralla (Gujarat)

TEST REPORT AS PER IS : 2046-1995 [WITH AMENDMENT NO(S)]

Page : 1 of 2

Your Ref.: letter
Ref.Dt. : -

Report No.: **73/21/PLY/GTH/NLPL**
Report Dt.: 25.09.2021

Dt.of Receipt: 17.09.2021
Dt.of Test Start: 18.09.2021
Dt.of Test End: 20.09.2021

PART-A : PARTICULARS OF SAMPLE SUBMITTED:

- a) Nature of Sample : Decorative Thermosetting Synthetic Resin Bonded Laminated Sheet.
- b) Grade/Variety/Type/Class : HGS
- c) Brand Name,if any : -
- d) Declared Value,if any : 1X1 ft.(Apprx),Thickness:1mm.
- e) Code No. : -
- f) Batch No.& Date of Mfg. : 10.09.2021
- g) Quantity : 1
- h) Mode of Packing : Packed with kraft paper
- i) Manner of Seal : -
- j) Manner of Signature : -
- k) Any other information : Design No.5002 SF – 1mm

PART-B: SUPPLIMENTRY INFORMATIONS:

A)Reference to the sampling procedure,wherever applicable :N-A-

B) Supporting to the documents for the measurement taken and result derived like graph,tables,sketches,and/or photographs as appropriate to test report,if any [To be attached] : N-A-

C)Deviation from the test methods as prescribed in relevant ISS/work instruction,if any : N-A-



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REPORT NO.: 73/21/PLY/GTH/NLPL

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IS:2046-1995

PART C. TEST RESULTS

Sr..	Test	CL.No.	Test Method	Required Value	Result
01	OTHER PROPERTIES: Resistance to color change in xenon arc light	5.5 Table.7 Sr.No. (xi)	IS:2046 Anex: N	Wool std. 6 min.	Greater than Blue Wool Std.6

PART-D :REMARKS :

- (1) This Report, except in full, shall not be published, advertised, used for any legal action, unless prior permission has been secured.
- (2) This Test Report is ONLY FOR THE SAMPLE TESTED.

SEAL:



Authorised signatory
Name : A.N.Barua (CEO)

...End of test report...

Gujarat
Testing & Calibration
House

GTH