ALFA WOOD GROUP

Technical Data Sheet

ALFA COMPACT

ALFA COMPACT is compact laminate which is manufactured in the same process of HPL.

ALFA COMPACT laminates are the most practical materials for use in special areas; particularly in wet areas, areas seeking high impact resistancy, areas having high humidity like toilet cubicles and changing rooms, wall covering in schools, sports centers, public transportation vehicles, hospitals, airports and hotels.
It has high resistance to impacts, scratches, fire, water and humidity due to its advanced technology. Furthermore, it does not decompose, is resistant to bacterias and can be cleaned easily.
It presents a great variety of design alternatives thanks to the wide range of colours available and different surface and size options.

EN Classification		CGS, CGF
EN 438-4	Thickness Range	12mm
	Dimensions	4200 x 1400mm

WATER REPELLANT | DRY HEAT RESISTANCE | SCRATCH & ABRASION RESISTANCE | LOW LIGHT REFLECTIVITY | HEAT & COLD RESISTANCE | EASY TO CLEAN | ULTRA COLOR INTENSITY | SAFE FOOD CONTACT | IMPACT RESISTANCE | RESISTANCE TO HOUSEHOLD CHEMICAL

Characteristics	Test Method	Test Value	Required Value
Thickness	EN 438-2 section 5	According to the required thickness	2.0 ≤ t < 3.0 mm : ± 0.20 mm 3.0 ≤ t < 5.0 mm : ± 0.3 mm 5.0 ≤ t < 8.0 mm : ± 0.4 mm 8.0 ≤ t < 12.0 mm : ± 0.5 mm 12.0 ≤ t < 16.0 mm : ± 0.6 mm 16.0 ≤ t < 20.0 mm : ± 0.7 mm 20.0 ≤ t < 25.0 mm : ± 0.8 mm 25.0 ≤ t : According To Agreement customer / producer
Density	ISO 1183 - 1	1.4 gr/cm^3	Min. 1.35 gr/cm^3
Wear Resistance	EN 438-2 section 10 CGS	IP = 185 Rev. Wear Value = 485 Rev.	Initial Point ≥ 150 Rev. Wear Value ≥ 350 Rev.
Scratch Resistance	EN 438-2 section 25 CGS	3 N 4 N	Flat Surface Min. 2 N Textured Surface Min. 3 N
Impact Resistance	EN 438-2 Big Ball section 21 CGS 2.0 ≤ t < 6.0 mm t ≥ 6.0 mm	 No Crack , 4.5 mm No Crack , 3.5 mm	 1400 mm height: no crack, 10 mm Max. 1800 mm height: no crack, 10 mm Max.
Resistance To Crazing (20 Hours @ 80°c)	EN 438-2 section 24 CGS	Level 4	Min. level 4
Resistance to Dry Heat at 180°c	EN 438-2 section 16 CGS Glossy Surface Finish Other Surface Finish	 Level 4 Level 5	 Min. level 3 Min. level 4
Resistance to Water Vapor	EN 438-2 section 14 CGS Glossy Surface Finish Other Surface Finish	 Level 4 Level 5	 Min. Level 3 Min. Level 4
Resistance to Boiling Water	EN 438-2 section 12 CGS 2.0 ≤ t < 5.0 mm t ≥ 5.0 mm Glossy Surface Finish Other Surface Finish	 2.2% 3.1% 0.55% 0.65% Level 4 Level 5	 Max. 5% in weight Max. 6% in thickness Max. 2% in weight Max. 2% in thickness Min. Level 3 Min. Level 4

Characteristics	Test Method	Test Value	Required Value
Resistance to Cigarette Burn	EN 438-2 section 30 CGS	Level 4	Min. Level 3
Resistance to Staining	EN 438-2 section 26 CGS		
	Group 1 + 2	Level 5	Min. level 5
	Group 3	Level 5	Min. level 4
Durability of surface finish and adhesion of surfacing and edging materials	BS 6222 : 1999	Level 5 Pass	Min. rating 4
Flatness	EN 438-2 section 9 CGS		
	2.0 ≤ t < 6.0 mm	1.23 mm	Max. 8 mm / 1 M length
	6.0 ≤ t < 10.0 mm	1.46 mm	Max. 5 mm / 1 M length
	t ≥ 10.0 mm	1.87 mm	Max. 3 mm / 1 M length
Light fastness	EN 438-2 section 27 CGS		
	Grey Scale	Level 5	Min. level 4
High Temp. stability 70°c	EN 438-2 section 17 CGS		
	2.0 ≤ t ≤ 5.0 mm	L : 0.22 mm W : 0.35 mm	L : Max. 0.4 mm W : Max. 0.8 mm
	t ≥ 5.0 mm	L : 0.18 mm W : 0.23 mm	L : Max. 0.3 mm W : Max. 0.6 mm
Fire Classification	EN 13501-1		
	3.0 ≤ t < 6.0 mm CGS	D s1 d0 ERA 14-000268	D s2 d0 or better
	6.0 ≤ t < 8 mm CGS	D s1 D0 ERA 16 115	D s2 d0 or better
	8 ≤ t < 10 mm CGS	C s1 d0	D s2 d0 or better
	12 ≤ t < 25 mm CGS	B s1 d0 ERA 19 036	D s2 d0 or better
Burning Behavior and / or the capability to repel fuel or lubricant of materials used in the interior construction	Horizontal Burning rate Test acc. To ECE-R 118.02 Annex 6		
With regard to directive / regulation (EC/EU) / Regulation No. ECE-R118 Part II	FMVSS 302 (USA) CMVSS 302 (Canada)	Horizontal burning rate 0 mm/min	Horizontal burning rate Max. 100 mm/min
Taking into consideration amendment No. 02 , Supplement 03	6 mm		

Characteristics	Test Method	Test Value	Required Value
Burning Behavior and / or the capability to repel fuel or lubricant of materials used in the interior construction With regard to directive / regulation (EC/EU) / Regulation No. ECE-R118 Part II Taking into consideration amendment No. 02 , Supplement 03	Melting Behavior Test acc. To ECE-R 118.02 Annex 7 6 mm	Material has not dropped and cotton wool is not inflamed	Material will not drop and cotton wool will not inflamed
Burning Behavior and / or the capability to repel fuel or lubricant of materials used in the interior construction With regard to directive / regulation (EC/EU) / Regulation No. ECE-R118 Part II Taking into consideration amendment No. 02 , Supplement 03			
Tensile Strength	EN ISO 527 – 2 CGS	\ 85 MPa	Min. 60 MPa
Flexural Strength	EN ISO 178 CGS	114 MPa	Min. 80 MPa
Flexural Modulus	EN ISO 178 CGS	16,522 Mpa	Min. 9000 Mpa
Coefficient Of Linear Thermal Expansion (COTE)	ASTM D696-08[(3)]	6.0 x 10^{-6} mm / mm °c	—
Total Volatile Organic Compound Emission	ASTM D5116	< 0.010 mg/m^2/hr	< 0.5 mg/m^2/hr
Contact With Food Overall Migration	EN 1186-3 Acetic Acid 3% w/w EN 1186-14 Ethanol 10% w/w EN 1186-14 Ethanol 95% w/w	9.6 mg/dm^2 4.3 mg/dm^2 < 2 mg/dm^2	< 10 mg/dm^2 < 10 mg/dm^2 < 10 mg/dm^2

Remarks :
@ CGS = Compact Grade Standard Laminate
@ Required Values Based on 438-4

Characteristics	Test Method	Test Value	Required Value
Chlorine Surface Resistance	Gentas Internal test Method	See Table below	---
Hydrogen Peroxide Surface Resistance	Gentas Internal test Method	See Table below	---
Antiseptics & Sanitizers Surface Resistance	Gentas Internal test Method	See Table below	---

Remarks :
@ CGS = Compact Grade Standard Laminate
@ Required Values Based on 438-4

Chlorine Surface Resistance Test(6):

3096(1) / 4596(2); 8 mm(3); Velur 1400x3600; 1000 ppm concentration(4)

Duration(5) / Decor	1 Hour	2 Hours	4 Hours	8 Hours	12 Hours	24 Hours
3096(1) Rating Scale(7)	0	0	0	0	0	0
4596(2) Rating Scale(7)	0	0	0	0	0	0

3096(1) / 4596(2); 8 mm(3); Velur 1400x3600; 10.000 ppm concentration(4)

Duration(5) / Decor	1 Hour	2 Hours	4 Hours	8 Hours	12 Hours	24 Hours
3096(1) Rating Scale(7)	0	0	0	0	0	0
4596(2) Rating Scale(7)	0	0	0	0	0	0

Remarks :
(1) 3096 Plain décor CGS
(2) 4596 Printed décor CGS
(3) 8 mm pressed in Velur finish in size 1400 x 3600
(4) 1000 and 10,000 ppm water base solutions
(5) Duration according to Tables ; Test method according to the below instructions ; Rating Scale according to the below instructions
(6) Test method :
- With a pipette drop 5 drops from the tested concentration and cover with a laboratory glass cover
- After the required duration , remove the glass cover , rains with water and wiper with a dry cotton cloth
- Examine the tested samples according to the below rating scale and advice with a test report
(7) Rating Scale : Level 0 – No Detectable Change for naked eye
Level 1 – Slight Change in Color or Gloss or surface structure
Level 2 – Slight Surface Etching or Severe Staining
Level 3 – Pitting / Cracking / Swelling / Erosion of the surface
Level 4 - Obvious & Significant Deterioration of the surface

Hydrogen Peroxide Surface Resistance Test[1,5]:

3103[2]; 4 mm Matt 1300x3050[3]

Duration[4] / Decor	12 Hours	24 Hours
3103[2] Rating Scale[6]	0	0

Remarks :
1) Hydrogen Peroxide 30% (H2O2 30%)
2) 3103 Plain décor CGS
3) 4 mm pressed in Matt finish in size 1300 x 3050
4) Exposure Duration according to Tables.
5) Test method:
- With a pipette place 5 drops from the tested H2O2 30% and cover with a laboratory glass cover
- After the required duration , remove the glass cover, rains with water and wiper with a dry cotton cloth
- Examine the tested samples according to the below rating scale and advice with a test report
6) Rating Scale: Level 0 – No Detectable Change for naked eye
Level 1 – Slight Change in Color or Gloss or surface structure
Level 2 – Slight Surface Etching or Severe Staining
Level 3 – Pitting / Cracking / Swelling / Erosion of the surface
Level 4 - Obvious & Significant Deterioration of the surface

Antiseptics & Sanitizers Surface Resistance Test[1,8]:

3103[2]; 4 mm Matt 1300x3050[3]

Duration[4] / Reagent	12 Hours Rating[9]	24 Hours Rating[9]
Benzethonium Chloride 2%[5]	0	0
Domiphen Bromide 4%[6]	0	0
Benzalkonium Chloride 4%[7]	0	0

Remarks :

1) The surface resistance is tested against common Antiseptics and Sanitizers available and common in the market
2) 3103 Plain décor CGS
3) 4 mm pressed in Matt finish in size 1300 x 3050
4) Exposure Duration according to Tables.
5) Benzethonium Chloride 2% (Antiseptic & Disinfectant)
6) Domiphen Bromide 4% (Antiseptic)
7) Benzalkonium Chloride 4% (Antiseptic)
8) Test method:
- With a pipette place 5 drops from the tested reagent and cover with a laboratory glass cover
- After the required duration, remove the glass cover, rains with water and wiper with a dry cotton cloth
- Examine the tested samples according to the below rating scale and advice with a test report
9) Rating Scale: Level 0 – No Detectable Change for naked eye
Level 1 – Slight Change in Color or Gloss or surface structure
Level 2 – Slight Surface Etching or Severe Staining
Level 3 – Pitting / Cracking / Swelling / Erosion of the surface
Level 4 - Obvious & Significant Deterioration of the surface

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