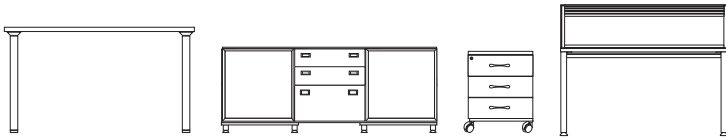


FINISHES



Melamine	02
High pressure laminate.....	04
Compac laminate	06
HDF laminated.....	08
Plywood	10
Glass	11
Polymers.....	12
Metal	13





■ BOARD DESCRIPTION

Actiu use high density board 590-680 kg/m³ providing optimum strenght and stability for our products.

■ MELAMINE DESCRIPTION

90 and 120 grs./m² density Melamine faced board available in 16, 19, 25 and 30 mm thick. 2mm ABS thermobonded edging radiused 2 mm.

■ MELAMINE DENSITY

Exclusive High density melamine face (120 grs./m² density) for the wooden finishes and 90 gr/m² for the plain colours. Due to the high density our tops provide high resistance to humidity and scratch too.

■ TACT AND BRIGHTNESS

Due to the special grain included in Actiu surfaces, you can feel a real wood effect at the same time that is not bright finish so it is healthy to work with.

■ HIGHER DENSITY NEXT TO THE EDGES OF THE BOARD

The parts next to the top and bottom of the board has a higher density provising stronger ressisstance to metal inserts and other mechanical actions over the product.

■ EXCLUSIVE DESIGNED ABS EDGING

The edging is exclusively designed and manufactured by Actiu providing a high quality finish to the product. The edge is 2 mm thick radiused 2 mm.

■ TECHNICAL DATA-AVERAGE VALUES (MELAMINE)

TOLERANCE ON NOMINAL DIMENSIONS (MELAMINE)					
TEST METHOD	PROPERTIES	UNITS	THICKNESSES mm		
			<15	15-20	>20
UNE-EN-14323	Thickness on nominal Dimensions	mm	+/-0,3 (AI,AV) +0,5/-0,3 (AH)	+/-0,3 (AI,AV) +0,5/-0,3 (AH)	+/-0,5
UNE-EN-14323	Thickness within the board	mm	max-min <0,6	max-min <0,6	max-min <0,6
UNE-EN-14323	Lenght & width	mm	+/-5	+/-5	+/-5
UNE-EN-14323	Flatness	mm/m	—	≤2	≤2

COATING PROPERTIES (MELAMINE)			
UNE-EN-14323	Resistance to scratching	N	≥15
UNE-EN-14323	Resistance to cracking	rating	≥3
UNE-EN-14323	Surface aspect	rating	4
UNE-EN-14323	Resistance to staining	rating	≥3
VISUAL DEFECTS			
UNE-EN-14323	Edges damaged	mm	≤10
UNE-EN-14323	Surface defects. Points	mm ² /m ²	≤2
UNE-EN-14323	Surface defects. Lenght	mm/m ²	≤20

	Resistance to abrasion	CLASS	IP NUMBER OF TURNS	WR NUMBER OF TURNS
UNE-EN-14323	Resistance to abrasion. Designs (general applications)	1	<50	<150
UNE-EN-14323	Resistance to abrasion. Unicolors and horizontal Applications AH	3A	≤150	≥350

■ Melamine fulfill the standard **UNE-EN-14322** as regards the low content on formaldehyde as per the **CLASS E1**



■ BOARD DESCRIPTION

High Pressure laminate (HPL) with 25 mm particle board core. 3 mm ABS thermobonded edging, radiused R=2 mm. It is high resistance to scratches, impact and easy to clean and maintenance. Its best selling features are:

- Special surface treatment for higher wear resistance.
- Resistance to impact and punching.
- Surface resistance to chemical agents, domestic and matches.

■ TECHNICAL FEATURES (HPL)

Material consisting of layers of Kraft paper impregnated with thermosetting resins and a surface layer of decorative paper impregnated with aminoplastic resins, all bonded together by means of high pressure (9 Mpa) and high temperature (150°C). It is also available in flame retardant version, where fire retardant additives are mixed to phenolic resins. This material is produced in conformity to **EN 438-3:2005**.

TECHNICAL FEATURES (HPL)					
PROPERTY	TEST METHOD (EN 438:2005)	PROPERTY OR ATTRIBUTE	UNIT	VALUES HGS-HGF	VALUES VGS-VGF
Thickness ± tolerance	EN 438 - 2.5	Thickness (t)	mm	0,5 ≤ t ≤ 1,0 ±0,10 1,0 < t < 2,0 ±0,15	0,5 ≤ t ≤ 1,0 ±0,10 1,0 < t < 2,0 ±0,15
Flatness	EN 438 - 2.9	Maximum deviation	mm/mtl	60	60
Resistance to surface wear	EN 438 - 2.10	Wear resistance	revs	IP ≥ 150 A ≥ 350	IP ≥ 50 A ≥ 150
Resistance to immersion in boiling water	EN 438 - 2.12	Appearance gloss finish Appearance other finishes	rating	≥ 3 ≥ 4	≥ 3 ≥ 4
Resistance to dry heat 180° C	EN 438 - 2.16	Appearance gloss finish Appearance other finishes	rating	≥ 3 ≥ 4	≥ 3 ≥ 4
Resistance to wet heat 100° C	EN 12721	Appearance gloss finish Appearance other finishes	rating	≥ 3 ≥ 4	≥ 3 ≥ 4
Dimensional stability at elevated temperature	EN 438 - 2.17	Cumulative Dimensional change	% long. % trasv.	≤ 0,55 ≤ 1,05	≤ 0,75 ≤ 1,25
Resistance to impact by small diameter ball	EN 438 - 2.20	Spring force	N	≥ 20	≥ 15
Resistance to cracking	EN 438 - 2.23	Appearance	rating	≥ 4	≥ 4
⁽¹⁾ Resistance to scratching	EN 438 - 2.25	Force	rating	≥ 3	≥ 2
Resistance to staining	EN 438 - 2.26	App. groups 1-2 Appear. groups 3	rating	5 ≥ 4	5 ≥ 4
Lightfastness	EN 438 - 2.27	Contrast	grey scale rating	≥ 4	≥ 4
Resistance to cigarette burns	EN 438 - 2.30	Appearance	rating	≥ 3	≥ 3
Resistance to water vapour	EN 438 - 2.14	Appearance gloss finish Appearance other finishes	rating	≥ 3 ≥ 4	≥ 3 ≥ 4
Electrical resistance	NF PA 99	-	Ohm	10 ⁸ - 10 ¹¹	10 ⁸ - 10 ¹¹
Volume electrical resistance	EN 61340 - 4-1	Rv (23°C /50% RH)	Ohm	10 ⁹ - 10 ¹¹	10 ⁹ - 10 ¹¹
Density	ISO 1183	Density	g/cm ³	≥ 1,40	≥ 1,40

⁽¹⁾ Resistance to scratching is depending from finish and colour. Note: The colour of individual lots may vary as a result of the technology and type of pigment used. Pay attention to the direction of the texture.

FIRE PERFORMANCE (HPL)			
TEST METHOD	STANDARD	CLASSIFICATION	
		HGF/VGF	HGS/VGS
Small flame and radiant panel	UNE-8457 UNE-9174 UNE-9177	class 1	class 2
Spread of flame	BS 476-7	class 1	class 2
Shaft Brand	DIN4102-1	B1	B2
Epiradiator	NF P 92-501	M1	min. M3
Smoke density and toxicity	NF F 16-101	min F2	min F2
Heat release	IMO Res. A 653(16)	pass	pass

Note: Fire test performance will depend on laminate thickness and construction, substrate type and thickness, and adhesive used.



■ BOARD DESCRIPTION

Compact Laminate board 13 mm thickness, manufactured by high pressure laminated phenolic resins. Black core, and white (a kind of grey touch), wengue, black or dark orange top. High pressure Laminate support the pressure 90kg/cm² and 150°C temperature in special presser which provides the resins polycondensation.

■ TECHNICAL FEATURES (HPL)

2 mm thickness Material or thicker (maximum 30 mm). It is formed by kraft paper layers impregnate by resins and one or two decorative paper layers are impregnated with aminoplastic resin pressed 9MPa and 150°C. HPL layer is available at any thickness with decorative papers in both sides. From 2 to 4 mm thickness is also available in one face only. This material is manufactured according to the Standard **EN 438-4:2005**.

TECHNICAL FEATURES (HPL)					
PROPERTY	TEST METHOD (EN 438:2005)	PROPERTY OR ATTRIBUTE	UNIT	VALUES CGS	VALUES CGF
Thickness ± tolerance	EN 438 - 2.5	Thickness (t)	mm	2,0 ≤ t < 3,0	± 0,20
				3,0 ≤ t < 5,0	± 0,30
				5,0 ≤ t < 8,0	± 0,40
				8,0 ≤ t < 12,0	± 0,50
				12,0 ≤ t < 16,0	± 0,60
				16,0 ≤ t < 20,0	± 0,70
				20,0 ≤ t < 25,0	± 0,80
Flatness	EN 438 - 2.9	Maximum deviation	mm/mtl (1 side dec.)	50 (2,0 ≤ t ≤ 4,0)	50 (2,0 ≤ t ≤ 4,0)
			mm/mtl (2 side dec.)	8,0 (2,0 ≤ t ≤ 6,0)	8,0 (2,0 ≤ t ≤ 6,0)
				5,0 (6,0 ≤ t ≤ 10,0)	5,0 (6,0 ≤ t ≤ 10,0)
Resistance to surface wear	EN 438 - 2.10	Wear resistance	rvs	IP ≥ 150	IP ≥ 150
				A ≥ 350	A ≥ 350
Resistance to immersion in boiling water	EN 438 - 2.12	Mass increase	%	≤ 5 (2 ≤ v t < 5) ≤ 2 (5 ≤ t)	≤ 7 (2 ≤ v t < 5) ≤ 3 (5 ≤ t)
		Thickness increase	%	≤ 6 (2 ≤ v t < 5) ≤ 2 (5 ≤ t)	≤ 9 (2 ≤ v t < 5) ≤ 6 (5 ≤ t)
		Appear. gloss finish Appear. other finish	rating	≥ 3 ≥ 4	≥ 3 ≥ 4
Resistance to dry heat 180° C	EN 438 - 2.16	Appear. gloss finish Appear. other finish	rating	≥ 3 ≥ 4	≥ 3 ≥ 4
		Resistance to wet heat 100° C	EN 12721	Appear. gloss finish Appear. other finish	rating
Dimensional stability at elevated temperature	EN 438 - 2.17	Cumulative dimensional change	% long.	(2 ≤ t ≤ 5)	(2 ≤ t ≤ 5)
			% trasv.	0,40	0,40
			% long.	0,80	0,80
			% trasv.	(5 ≤ t)	(5 ≤ t)
				0,30	0,30
				0,60	0,60

PROPERTY	TEST METHOD (EN 438:2005)	PROPERTY OR ATTRIBUTE	UNIT	VALUES CGS	VALUES CGF
Res. to impact by large diameter ball	EN 438 - 2.21	Drop height Indentation diameter	mm (min)	1400 ($2 \leq t < 6$) 1800 ($6 \leq t$)	1400 ($2 \leq t < 6$) 1800 ($6 \leq t$)
			mm (max)	10	10
Resistance to crazing	EN 438 - 2.24	Appearance	rating	≥ 4	≥ 4
⁽¹⁾ Resistance to scratching	EN 438 - 2.25	Smooth finishes Texture finishes	rating	≥ 2 ≥ 3	≥ 2 ≥ 3
Resistance to staining	EN 438 - 2.26	Appear. groups 1-2 Appear. groups 3	rating	5 ≥ 4	5 ≥ 4
Lightfastness	EN 438 - 2.27	Contrast	grey scale rating	≥ 4	≥ 4
Resistance to cigarette burns	EN 438 - 2.30	Appearance	rating	≥ 3	≥ 3
Resistance to water vapour	EN 438 - 2.14	Appear. gloss finish Appear. other finish	rating	≥ 3 ≥ 4	≥ 3 ≥ 4
Electrical resistance	NF PA 99	-	Ohm	$10^8 - 10^{11}$	$10^8 - 10^{11}$
Thermal conductivity	DIN 52 612	-	W/m. °K	0,25	0,25
Coefficient of linear thermal expansion	ASTM D 696	-	°C-1	L = $1,6 \times 10^{-5}$ ca. T = $3,5 \times 10^{-5}$ ca.	L = $1,6 \times 10^{-5}$ ca. T = $3,5 \times 10^{-5}$ ca.
Tensile strenght	EN ISO 527-2	Stress	Mpa	L ≥ 100 T ≥ 70	L ≥ 100 T ≥ 70
Flexural strenght	EN ISO 178	Stress	Mpa	L ≥ 100 T ≥ 90	L ≥ 100 T ≥ 90
Flexural modulus (E)	EN ISO 178	Stress	Mpa	L ≥ 10.000 T ≥ 9.000	L ≥ 10.000 T ≥ 9.000
Density	ISO 1183	Density	g/cm ³	$\geq 1,40$	$\geq 1,40$

⁽¹⁾ Resistance to scratching is depending from finish and colour. Note: The colour of individual lots may vary as a result of the technology and tyte of pigment used. Pay attention to the direction of the texture.

FIRE PERFORMANCE (HPL)

TEST METHOD	STANDARD	CLASSIFICATION	
		CGF	CGS
Small flame and radiant panel	UNE-8457 UNE-9174 UNE-9177	class 1	class 1
	UNI CEI 11170-3	class 1A	/
Spread of flame	BS 476-7	class 1	class 1
Brandschacht	DIN4102-1	B1	B2
Epiradiateur	NF P 92-501	M1	M2
Smoke dendity and toxicity	NF F 16-101	min F2	min F2
Reaction to fire	EN 13501-1	($t \geq 3$) B-s2,d0 ⁽²⁾	($t \geq 6$) C-s2,d0 ⁽²⁾

⁽²⁾ The laminate manufacturer should be contacted for details of fire test reports and certifications held, and for information on fire test methods and specifications.



■ BOARD DESCRIPTION (MDF)

Compact Wood fiber board ideal for interior appliances where exposure to high humidity conditions and persistence in time are required. Density higher than 1000 kg/m³. Excellent physics-mechanical properties such as traction, inflection resistance, elasticity modulus and impact resistance.

E1 Classification: Low formaldehyde content

On interior environments without water contact

Support: MDF

Use: High Density

■ TECHNICAL FEATURES (HPL)

Material consisting of layers of Kraft paper impregnated with thermosetting resins and a surface layer of decorative paper impregnated with aminoplastic resins, all bonded together by means of high pressure (9 Mpa) and high temperature (150°C). It is also available in flame retardant version, where fire retardant additives are mixed to phenolic resins. This material is produced in conformity to **EN 438-3:2005**.

TECHNICAL FEATURES (HPL)

PROPERTY	TEST METHOD (EN 438:2005)	PROPERTY OR ATTRIBUTE	UNIT	VALUES HGS-HGF	VALUES VGS-VGF
Thickness ± tolerance	EN 438 - 2.5	Thickness (t)	mm	0,5 ≤ t ≤ 1,0 ±0,10 1,0 < t < 2,0 ±0,15	0,5 ≤ t ≤ 1,0 ±0,10 1,0 < t < 2,0 ±0,15
Flatness	EN 438 - 2.9	Maximum deviation	mm/mtl	60	60
Resistance to surface wear	EN 438 - 2.10	Wear resistance	revs	IP ≥ 150 A ≥ 350	IP ≥ 50 A ≥ 150
Resistance to immersion in boiling water	EN 438 - 2.12	Appearance gloss finish Appearance other finishes	rating	≥ 3 ≥ 4	≥ 3 ≥ 4
Resistance to dry heat 180° C	EN 438 - 2.16	Appearance gloss finish Appearance other finishes	rating	≥ 3 ≥ 4	≥ 3 ≥ 4
Resistance to wet heat 100° C	EN 12721	Appearance gloss finish Appearance other finishes	rating	≥ 3 ≥ 4	≥ 3 ≥ 4
Dimensional stability at elevated temperature	EN 438 - 2.17	Cumulative Dimensional change	% long. % trasv.	≤ 0,55 ≤ 1,05	≤ 0,75 ≤ 1,25
Resistance to impact by small diameter ball	EN 438 - 2.20	Spring force	N	≥ 20	≥ 15
Resistance to cracking	EN 438 - 2.23	Appearance	rating	≥ 4	≥ 4
⁽¹⁾ Resistance to scratching	EN 438 - 2.25	Force	rating	≥ 3	≥ 2
Resistance to staining	EN 438 - 2.26	App. groups 1-2 Appear. groups 3	rating	5 ≥ 4	5 ≥ 4
Lightfastness	EN 438 - 2.27	Contrast	grey scale rating	≥ 4	≥ 4
Resistance to cigarette burns	EN 438 - 2.30	Appearance	rating	≥ 3	≥ 3
Resistance to water vapour	EN 438 - 2.14	Appearance gloss finish Appearance other finishes	rating	≥ 3 ≥ 4	≥ 3 ≥ 4
Electrical resistance	NF PA 99	-	Ohm	10 ⁸ - 10 ¹¹	10 ⁸ - 10 ¹¹
Volume electrical resistance	EN 61340 - 4-1	Rv (23°C /50% RH)	Ohm	10 ⁹ - 10 ¹¹	10 ⁹ - 10 ¹¹
Density	ISO 1183	Density	g/cm ³	≥ 1,40	≥ 1,40

⁽¹⁾ Resistance to scratching is depending from finish and colour. Note: The colour of individual lots may vary as a result of the technology and type of pigment used. Pay attention to the direction of the texture.

FIRE PERFORMANCE (HPL)			
TEST METHOD	STANDARD	CLASSIFICATION	
		HGF/VGF	HGS/VGS
Small flame and radiant panel	UNE-8457 UNE-9174 UNE-9177	class 1	class 2
Spread of flame	BS 476-7	class 1	class 2
Brandschacht	DIN4102-1	B1	B2
Epiradiateur	NF P 92-501	M1	min. M3
Smoke density and toxicity	NF F 16-101	min F2	min F2
Heat release	IMO Res. A 653(16)	pass	pass

Note: Fire test performance will depend on laminate thickness and construction, substrate type and thickness, and adhesive used.

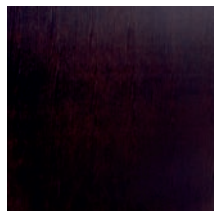


■ PLYWOOD BOARD

Plywood board made of natural beech or Oak. Boards are 10 mm thickness. Fibers are placed in a perpendicular and transversal way to provide dimensional stability as well as long lasting and resistant. Recyclable.



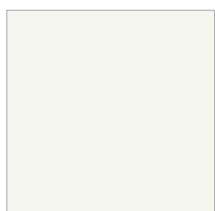
26 NATURAL OAK



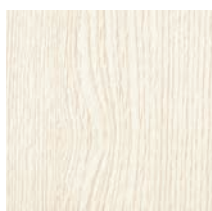
29 WENGUE LAQUERED OAK

■ MELAMINE / HIGH PRESSURE LAMINATE (HPL) / COMPAC LAMINATE / HDF Laminated (Finishes)

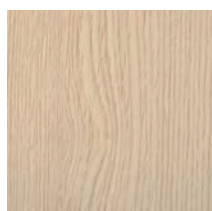
	WHITE	MAPLE	LIGHT OAK	ELM	WALNUT	WENGUE	SILVER	DARK ORANGE	BLACK
Melamine	00	18	16	12	13	19	02		
High pressure laminate	20	28		22					
Compac laminate	30					39		37	38
HDF Laminated	60	68				69			



WHITE



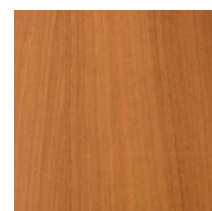
MAPLE



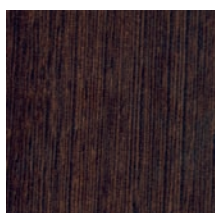
LIGHT OAK



ELM



WALNUT



WENGUE



SILVER



DARK ORANGE



DARK ORANGE

■ DESCRIPTION

Laminated Security glass with internal translucent layer. Thickness available in 5+5 and 6+6 mm for desk surfaces. 4+4 mm for Screens, reception counter front panels and glass doors.

The laminated glass is the result of linking two or more glass sections, linked by PVB layers (butiral polivinil). This material combines the specific glass properties such as transparency and durability, and the proper PVB features such as adhesion to the glass, elasticity and impact resistance, acoustic and UV protection, as well as providing different colour ranges.

The high elasticity of the PVB provides a high impact resistance, so before an impact on the glass, the PVB layer absorbs the impact energy and due to the adhesion, keeps linked to the glass

Extra clear tempered glass

Low level of iron oxide, it offers colourless luminosity (with not green tones) 10 mm thickness. The tempered glass has maximum high scratch and impact resistance. 100% Recyclable.

■ TECHNICAL FEATURES:

TECHNICAL FEATURES				
FEATURES	COMPOSITION	LEVEL HOMOLOGATION	UNIT	STANDARDS
Impact resistant	4+4 (0,38-PVB) 5+5 (0,38-PVB) 6+6 (0,38-PVB)	Level A Level A Level A		EN 12 600 EN 12 600 EN 12 600
Acoustic properties	4+4 (0,38-PVB) 5+5 (0,38-PVB) 6+6 (0,38-PVB)		34 Rw (DB) 35 Rw (DB) 38 Rw (DB)	

■ GLASS (Finishes)

	FROSTED	CLEAR	TEMPERED WHITE	BLUE	BLACK
Laminated Security glass 5+5 or 6+6	50	51		56	59
Extra clear tempered glass 10 mm			52		



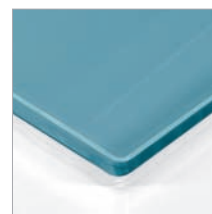
50 FROSTED



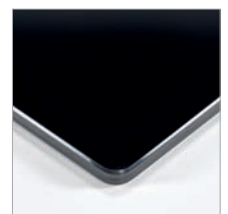
51 CLEAR



52 TEMPERED WHITE



56 BLUE



59 BLACK

The Plastic term is used for substances with different structure that by means of polymerization processes acquire elasticity and flexibility properties which allow them to be moulded to different shapes and applications. Polymers used in Actiu products:

■ METHACRYLATE P.M.M.A. (finishes for Informa and Level front panels)



97 STRAWBERRY



98 LIME GREEN

■ POLYCARBONATE (finishes for screens)



FROSTED

■ PS Acrylic (finishes for screens and Level)

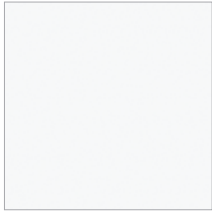


FROSTED

■ METAL (FEATURES)

All metal components, aluminum or steel, have epoxy-polyester finish. No toxic or solvent elements. Chromed finished is done over treated steel.

■ METAL (Informa and Storages / Metal Pedestals)



WHITE



SILVER



BURGUNDY



BLACK



DARK BLUE



ORANGE



PISTACHE

	WHITE	SILVER	BURGUNDY	BLACK	BLUE	ORANGE	PISTACHE
Steel	70	72	77				
Storages/Metal Pedestals	00	02		10	05	14	15

■ PAINTING (Features)

1 – Electrostatic coat, epoxy bonding 2nd generation. Polymerized 200°C with nano-ceramics and non-grease treatments to improve better covering and provide then better resistance and lasting.

2 – Coating 80-90 micron thickness (it could be different as per the project requirements).

This covering guarantees the finish and maintenance of metal structures.

3 – Painting process:

Actiu painting plant has minimum environmental impact against the traditional industry processes.

Treatment is done by polarized coating and compacted with temperature. We get homogeneous and regular application with 98% of painting and the remaining 2% is used to produce other paints. Paints used are COVs free (Volatile Organic Components) which are very dangerous for the environment. All water used in the process is re-used, so we get zero dump.

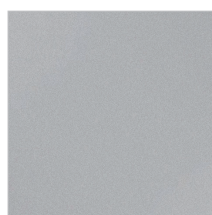
4 – Antibacterial finish (Optional)

■ OTHER PROCESSES

Moulded Aluminium pieces could be chromed or polished



CHOME



POLISHED

