

LAMINTEX WORKTOPS DATA SHEET 2021 ver5

LAMINTEX worktops are composite elements consisting of raw chipboard, bonded seamlessly on surface and profile areas with CPL, HPL laminate or ABS edge glued to profile or just sanded. Different profiles, sizes, chipboard qualities, laminate thicknesses, surfaces and decors are available.

AREAS OF APPLICATION

Due to their modern design and functionality worktops are used for interior applications in kitchens, bathrooms, offices and for domestic furnishing. Before installation, worktops should be acclimatized 96 hours in the place where they will be installed.

STORAGE

Horizontal, even storage in closed dry areas [approx. 20°C and 50% to 60% relative humidity] to exclude warping or dimensional changes due to climatic conditions. Vertical storage is forbidden. Worktops should be handled and transported with due care.

Numerous factors, including changes in temperature and relative humidity, such as occurring at construction sites, storage rooms with various atmospheric conditions can cause irreversible twisting of boards and panels. Therefore, the following parameters responsible for the twisting of boards and panels are therefore only applicable at the time of delivery.

PROCESSING

Lamintex worktops can be processed with conventional woodworking machines. For best quality/results of worktops, use of cutting/saw device with milling cutter is needed.

QUALITY CHARACTERISTICS / TECHNICAL DATA

The quality characteristics of worktops are dictated by the application of laminate conforming to the norm EN-438 and chipboard according to norm EN-312. For standard postformed worktops, the laminate is classified as HGP (Horizontal-General purpose Postforming). That means, it is suitable for horizontal applications with postforming or square edge requirements. The quality characteristics such as surface abrasion, impact resistance and scratch resistance, require a high performance which is classified as below.

For standard postformed worktops, the chipboard is classified as P2 (furniture use). That means that it is suitable for applications with furniture requirements as kitchen, office etc.

The chipboard P3 or Hydro (higher humidity resistance) is suitable for spaces with higher humidity requirements. Chipboard type P3 or Hydro is made on special customer's request. The chipboard P2 Stop Fire (hardly flammable) is suitable for spaces with higher fireproof requirements. Chipboard type P2 Stop Fire is made on special customer's request.

FSC CERTIFICATE

Worktops with FSC Certificate are available on special customer's request.

FORMALDEHYDE

Lamintex worktops are manufactured in accordance with the requirements that apply from January 1, 2020 and are recorded in the standard ChemVerbotsV DIN EN 16516 also EN 717-1 as a reference method in terms of reducing formaldehyde emissions.

LAMINATE CPL

Property	Test method	Property or attribute	Unit	Values
Thickness tolerance	EN 438-2.5	thickness (t)	mm	0,4 ±0,08 0,5 ≤ t ≤ 0,8 ±0,10 where t: is nominal
Resistance to surface wear	EN 438-2.10	wear resistance	revs	IP ≥ 150 A ≥ 350
Resistance to impact stress with a small ball bearing	EN 438-2.20	Spring force	N	≥ 15
Resistance to dry heat (180 °C)	EN 438-2.16	appearance	rating	≥ 4
Resistance to scratching	EN 438-2.25	force	rating	≥ 3
Resistance to staining	EN 438-2.26	app.groups 1-2 appear.groups 3	rating	5 ≥ 4
Resistance to steam	EN 438-2.14	appearance	rating	≥ 4
Density	ISO 1183	density	g/cm ³	600-720
Lightfastness (Xenon arc lamp)	EN 438-2.27	Contrast	Gray scale	4-5
Swelling behaviour	DIN EN 317	appearance	-	24h max. 1% 2h max. 4%
Bending strength	DIN EN 310	-	N/mm ²	>9,0
Internal bond	DIN EN 319	-	N/mm ²	> 0,2
Surface soundness*	DIN EN 311	-	N/mm ²	≥ 1,0

*- values might be lower for full pearlescent decors and therefore these decors are not recommended for horizontal applications.

LAMINATE HPL

Property	Test method	Property or attribute	Unit	Values
Thickness tolerance	EN 438-2.5	thickness (t)	mm	0,5 ≤ t ≤ 1,0 ±0,10 1,0 ≤ t ≤ 2,0 ±0,15 where t: is nominal
Flatness	EN 438-2.9	maximum deviation	mm/lm	60
Resistance to surface wear	EN 438-2.10	wear resistance	revs	IP ≥ 150 A ≥ 350
Resistance to immersion in boiling water	EN 438-2.12	appearance gloss finish appearance other finishes	rating	≥ 3 ≥ 4

Resistance to dry heat (180 °C)	EN 438-2.16	Appearance gloss finish appearance other finishes	rating	≥ 3 ≥ 4
Resistance to wet heat (100 °C)	EN 12721	Appearance gloss finish appearance other finishes	rating	≥ 3 ≥ 4
Dimensional stability at elevated temperature	EN 438-2.17	cumulative dimensional change	% long. % transv.	≤ 0,55 ≤ 1,05
Resistance to impact by small diameter ball	EN 438-2.20	Spring force	N	≥ 20
Resistance to cracking	EN 438-2.23	appearance	rating	≥ 4
Resistance to scratching *	EN 438-2.25	force	rating	≥ 3
Resistance to staining	EN 438-2.26	app.groups 1-2 appear.groups 3	rating	5 ≥ 4
Resistance to steam	EN 438-2.14	appearance gloss finish appearance other finishes	rating	≥ 3 ≥ 4
Resistance to blistering	EN 438-2.34	Time	sec.	t < 0.8 mm: ≥ 10 t ≥ 0.8 mm: ≥ 15
Density	ISO 1183	density	g/cm ³	≥ 1.40
Lightfastness	EN 438-2.27	contrast	grey scale rating	≥ 4

* HPL glossy structure with protective foil

LAMINATE AFX

Property	Test method	Property or attribute	Unit	Values
Thickness tolerance	EN 438-3.6,3	thickness (t)	mm	0,65-0,70
Flatness	EN 438-3.6,3	maximum deviation	mm/lm	50-60
Resistance to surface wear	EN 438-2.10	wear resistance	Revs (min)	350
Resistance to immersion in boiling water	EN 438-2.12	appearance	rating	≥ 4
Resistance to dry heat (160 °C)	EN 438-2.16	appearance	rating	≥ 4
Resistance to wet heat (100 °C)	EN 438-2.18	appearance	rating	≥ 4
Dimensional stability at elevated temperature	EN 438-2.17	Machine direction Cross direction	% (max) % (max)	≤ 0,32 ≤ 0,50
Resistance to impact by small diameter ball	EN 438-2.20	Spring force	N	≥ 25
Resistance to scratching	EN 438-2.25	force	rating	≥ 3
Resistance to staining	EN 438-2.26	app.groups 1-2 appear.groups 3	rating	5 ≥ 4
Resistance to steam	EN 438-2.14	appearance	rating	≥ 4
Density	ISO 1183-1	density	g/cm ³	≥ 1.40
Lightfastness (Resistant to color change in Xenon-arc)	EN 438-2.27	contrast	grey scale rating	≥ 5

* AFX structure with protective foil

* AFX laminates only for square edge uses (no postforming possibility)

CHIPBOARD

P2 according to EN-312 standard

Property	Requirement	Unit	Test Method
Thickness tolerance	+/- 0,3	mm	EN 324-1
Length and width	±5	mm	EN 324-1
Tolerance on the mean density within a board	±10	%	EN 323
Internal bond	0,20 - 0,45	N/mm ²	EN 319
Bending strength	7 - 13	N/mm ²	EN 310
Modulus of elasticity in bending	1050 - 1950	N/mm ²	EN 310
Formaldehyde content	E1	mg/100g	EN 120
Formaldehyde release	E1	mg/m ³	EN 717-1
Adhesion	>0,8	N/mm ²	EN 311
Rectilinearity	maximum 1,5	mm/m	EN 324-2
Right angle	≤ 2	mm/m	EN 324

* The values are characterized by a moisture content in the material corresponding to a relative humidity of 65% and a temperature of 20°C

P3 according to EN-312 standard

Property	Requirement	Unit	Test Method
Thickness tolerance	+/- 0,3	mm	EN 324-1
Length and width	±5	mm	EN 324-1
Tolerance on the mean density within a board	±10	%	EN 323
Internal bond	0,25 - 0,50	N/mm ²	EN 319
Bending strength	7,5 - 15	N/mm ²	EN 310
Modulus of elasticity in bending	1350 - 2050	N/mm ²	EN 310
Formaldehyde content	E1	mg/100g	EN 120
Formaldehyde release	E1	mg/m ³	EN 717-1
Swelling in thickness, 24h	12 - 25	%	EN 317
Rectilinearity	maximum 1,5	mm/m	EN 324-2
Right angle	≤ 2	mm/m	EN 324

* The values for bending properties, internal bond and swelling in thickness are characterized by a moisture content in the material (before treatment in the case of swelling in thickness) and other parameters in the table corresponding to a relative humidity of 65% and a temperature of 20°C

WORKTOPS POSTFORMING

TECHNICAL DATA / TOLERANCES / DIMENSIONS

Substrate:	raw chipboard E1 according to EN 312
Substrate type:	P2,P3 according to EN 312; hydro according to manufacturer norms.
Lamination:	laminate CPL [overlay]/HPL according to EN 438
Laminate thicknesses:	CPL standard thickness 0,4-0,8 mm; HPL standard thickness 0,6-0,8 mm
Reverse side:	covered by moisture resistant paper balancer or phenolic balancer in thickness 0,3 - 0,5 mm or laminate
Nose:	for model WATERSTOP 9500 is made by MDF board
Nose tolerance [mm]:	width/length/thickness +/- 0,5 mm
Standard lengths [mm]:	3020 and 4100 mm for matt decors; 3050 and 4150 mm for glossy structure depend on decor/thickness
Other lengths [mm]	from 1750 - 4200 mm depending on decor/ profile/ thickness
Length tolerance [mm]	+10 mm; -50 mm
Standard widths [mm]	600, 610, 620, 635, 1200 mm one side postformed
Other widths [mm]	from 600 - 1250 mm one or both sides postformed (max.1220 mm).
Width tolerance:	≤ 600 mm +/- 1,5 mm > 600 mm for each additional 100 mm plus ± 0.5 mm
Standard thicknesses:	19, 22, 28 and 38 mm
Other thicknesses [mm]	18, 25 mm
Thickness tolerance:	± 0.50 mm
Angular accuracy:	2.0 mm for every 1,000 mm in length per side
Straightness of cut:	0.5 mm for every 1,000 mm in length per side
Radius tolerance:	± 0.50 mm
Surface bonding:	D3 according to DIN EN 204
Postforming bonding:	D2 or D3 according to DIN EN 204
Back long edge:	impregnated paper edge min. 205 g/m ² or melamine, CPL, HPL, ABS edges.
Side short edges:	sanded or not sanded /ABS, laminate edge as option
Sealing:	by PUR – hot adhesive melt

WORKTOPS SQUARE EDGE

Substrate:	raw chipboard E1 according to EN 312
Substrate type:	P2,P3 according to EN 312; hydro according to manufacturer norms.
Lamination:	laminate CPL [overlay]/HPL, AFX according to EN 438
Laminate thicknesses:	CPL standard thickness 0,4-0,8 mm; HPL standard thickness 0,6-0,8 mm, AFX thickness 0,7 mm
Front long edge:	ABS edge glued to profile; thickness 0,8-2 mm or just sanded or not sanded
Reverse side:	covered by moisture resistant paper balancer or phenolic balancer in thickness 0,3 - 0,5 mm or laminate
Standard lengths [mm]:	3020 and 4100 mm for matt decors; 3050 and 4150 mm for glossy structure depend on decor/thickness
Other lengths [mm]	from 1750 - 4200 mm depending on decor/ profile/ thickness
Length tolerance [mm]	+10 mm; -50 mm

Standard widths [mm]	600, 610, 620, 635, 1200 mm
Other widths [mm]	from 600 – 1300 mm
Width tolerance:	≤ 600 mm +/- 1,5 mm > 600 mm for each additional 100 mm plus ± 0.5 mm
Standard thicknesses:	22, 28 and 38 mm
Other thicknesses [mm]	16, 18, 19 mm, (58 mm as an option confirmed case by case)
Thickness tolerance:	± 0.50 mm
Angular accuracy:	2.0 mm for every 1,000 mm in length per side
Straightness of cut:	0.5 mm for every 1,000 mm in length per side
Surface bonding:	D3 according to DIN EN 204
Postforming bonding:	D2 or D3 according to DIN EN 204
Back long edge:	impregnated paper edge min. 205 g/m ² or melamine, CPL, HPL, ABS edges.
Side short edges:	sanded or not sanded /ABS, laminate edge as option

STANDARD DIMENSIONS

Worktops are available in standard lengths and widths, in dimensions specified by the customer or tailor-made, finished elements. Lamintex is able to cut and edge the worktops to size required by customer.

Size range of blanks:

Width:	150-1250 mm (square edge up to 1300 mm)
Length:	1750 mm to 4200 mm
Thickness:	16 mm to 50 mm (square edge 58 mm as option)

Size range of finished elements:

Width:	150 mm to 1250 mm (square edge up to 1300 mm)
Length:	400 mm to 4150 mm
Thickness:	16 mm to 50 mm (square edge 58 mm as option)

Worktops may be edged on short sides by paper, melamine, CPL, HPL, ABS edges – except the Water Stop profiles.

Flatness

Maximum permissible deviation from flatness of composite elements of thickness > 22 [mm] but < 40 [mm]		
Length or width of element, x [mm]	* Maximum concave/convex deviation viewed from face side.	
	HPDL on one side	HPDL on both sides
x ≤ 600	0,9 mm	0,7 mm
600 < x ≤ 700 mm	1,1 mm	0,8 mm
700 < x ≤ 800 mm	1,3 mm	1,0 mm
800 < x ≤ 900 mm	1,6 mm	1,2 mm
900 < x ≤ 1000 mm	2,0 mm	1,5 mm
1000 < x ≤ 5000 mm	2,0 mm/metre	2,0 mm/metre

* Numerous factors, including changes in temperature and relative humidity such as are encountered on building sites, may cause boards and panels to bow and twist irreversibly. This requirement is therefore only applicable at the time of delivery.

ADDITIONAL NOTES

Small corrugations, irregularities on the profile's surface or radius surface are not production defect. The damages, scratches, defects on both endings of worktop in length

no more than 50 mm are not production defect. The dirties, grimes on the bottom and profiled surface of worktops are not production defect. The damages, scratches, dirties, spots on the reverse side surface of worktops are not production defect. The damages, scratches, dirties, spots on the upper surface with an area less than 2 mm² on the area of 1 lm of products are not production defect. Fibres, hair and scratches up to 10 mm long on the surface on the area of 1 m² of products are not production defect. The quality control always must be done under natural daylight.

Lamintex responsibility for product does not cover defects or damages caused by normal wear and tear as well as brakes/cracks/etc. that could be the result of improper use, faulty installation or assembly, improper storage, neglect, accident modification of the product, etc. Also does not involve mechanical damages, damages resulting from inappropriate installation or improper use of this product. Lamintex is not responsible for defects that arose immediately before installation.

CARE AND CLEANING RECOMMENDATIONS

Due to their resistant and hygienic, dense surfaces Lamintex worktops do not require any special maintenance.

CPL and HPL surfaces are generally easy to clean. Probable dirties emerging from production process can be removed by rubbing a surface with a cloth and acetone. This also applies to textured surfaces.

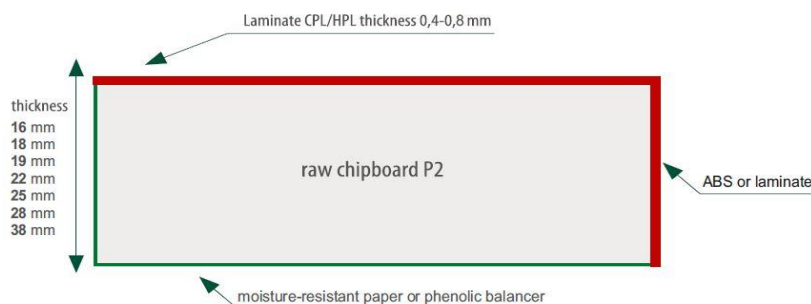
It is very important to care for and clean the AFX surface. For this purpose, we have created a manual and a short instructional video, which can be seen on our website <https://www.lamintex.pl/worktops.php?body=article&name=workotop-cleaning-instructions&lang=pl>

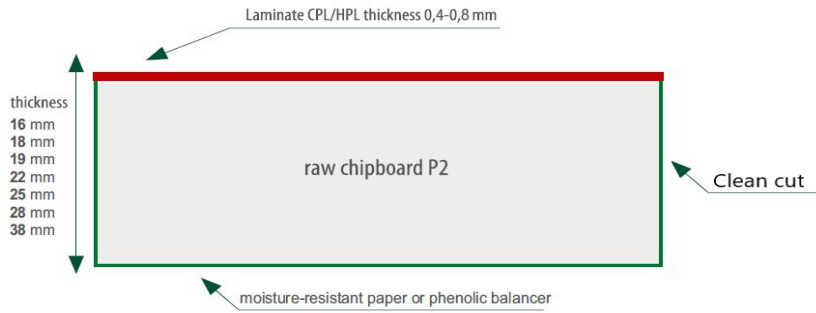
The details given in this data sheet are based on practical experience and in-door tests and reflect our current state of knowledge. They are for information only and do not constitute a guarantee with regard to product properties or suitability for individual application.

PACKING

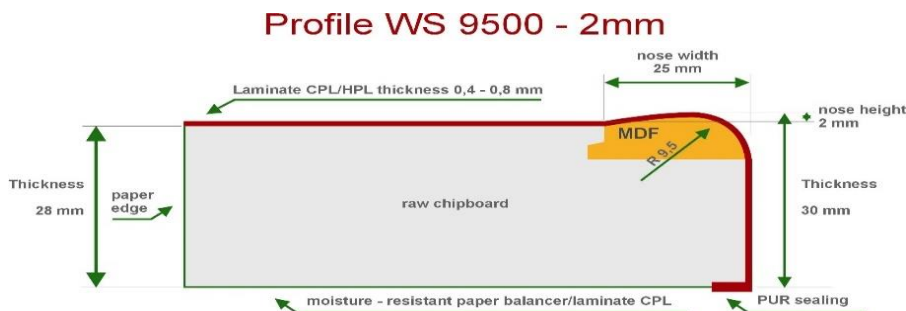
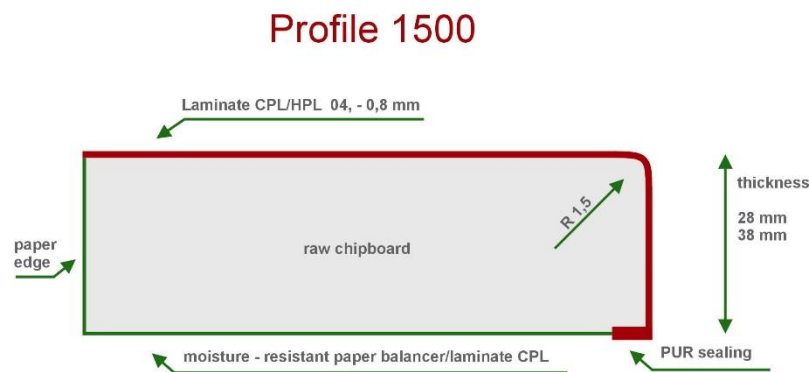
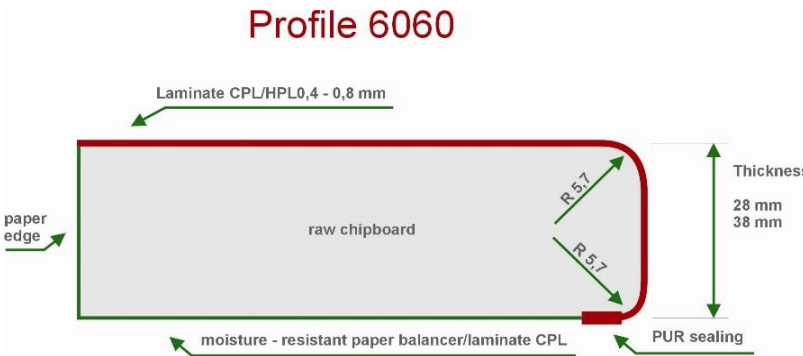
Company shall, at its expense, pack all Products in accordance with Company's standard packing system. However, if BUYER requests a modification of that packing system, SELLER shall make the requested modification and BUYER shall bear any reasonable expenses. Shrink foil/carton packing is possible, additionally edge strips, labels, EAN codes (with surcharges).

STANDARD PROFILE MODEL SQUARE EDGE

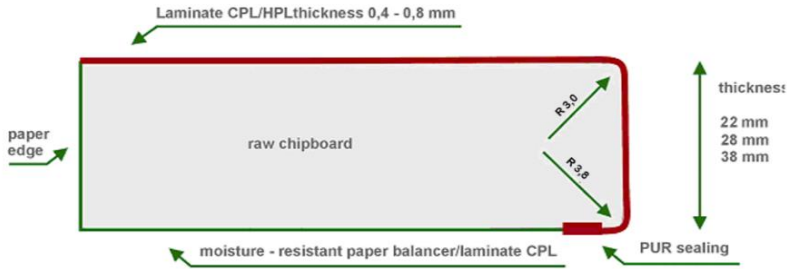




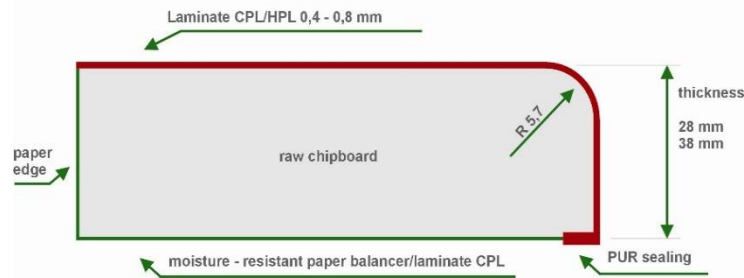
STANDARD PROFILE MODEL OPTION POSTFORMING



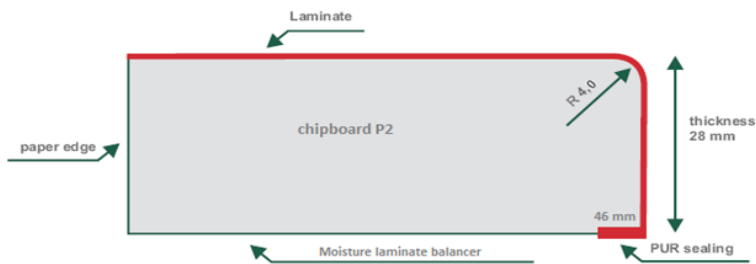
Profile 3030



Profile 6000



Profile 4000



OTHER PROFILES MODELS POSSIBLE FOR SPECIAL REQUEST.