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# IPS Vanity Unit and Toilet Cubicles (Total Laminate Systems)

Contents

## **Total Laminate Systems**

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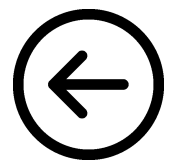


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# Scope of Works



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# TOTAL LAMINATE SYSTEMS

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## **Operation & Maintenance Manual**

Contractor

**Winvic Construction Ltd**

Site Reference

**Plot 4000 – The Range – P23-027**

**Site Offices,  
Gateway 14,  
Stowmarket,  
Suffolk,  
IP14 5BP**

Doc ref: OM-F6302

Date: 22/05/2024.

TOTAL LAMINATE SYSTEMS LTD.

11 Nimrod Way, East Dorset Trade Park, Wimborne, Dorset BH21 7SH

Tel: 01202 877 600 Fax: 01202 861638 email: [sales@total-laminate.co.uk](mailto:sales@total-laminate.co.uk) url: [www.total-laminate.co.uk](http://www.total-laminate.co.uk)

REGISTERED HEAD OFFICE AS ABOVE  
Registered in England and Wales No: 2793768

## **Scope of Works:**

Manufacture, supply, and installation of washroom furniture including cubicles, duct access panelling and vanities.

### **Cubicles:**

#### **Range – EC3**

**Partitions:** Manufactured from Polyrey 12mm Solid Grade Laminate.

**Pilasters:** Manufactured from Polyrey 12mm Solid Grade Laminate.

**Doors:** Manufactured from Polyrey 12mm Solid Grade Laminate.

**Hardware:** Enhanced Stainless Steel.

### **Duct Access Panels:**

#### **Range – DAPS1 – Dry Spec**

**Panels:** Manufactured from Polyrey 12mm Solid Grade Laminate.

**Flash-gaps:** TLS – General Specification – Manufactured from Polyrey High Pressure Laminate bonded to 18mm Moisture Resistant MDF core.

#### **Range – DAPS1 – Wet Spec**

**Panels:** Manufactured from Polyrey 12mm Solid Grade Laminate.

**Flash-gaps:** Manufactured from Polyrey 12mm Solid Grade Laminate.

All panels have been mounted onto a par softwood system, cloaked in factory bonded flash-gaps which include headers for ceiling trades and plinths for floor finishes.

## **Vanities:**

### **Type – TLS Profile**

**Top:** Manufactured from Polyrey 12mm Solid Grade Laminate.

**Under Panels:** Manufactured from Polyrey 12mm Solid Grade Laminate.

**Flash-gaps:** TLS – General Specification – Manufactured from Polyrey High Pressure Laminate bonded to 18mm Moisture Resistant MDF core.

### **Type – Combination Unit – Drawings 13 & 16**

**Top:** Manufactured from Polyrey 12mm Solid Grade Laminate.

**Under Panels:** Manufactured from Polyrey 12mm Solid Grade Laminate with 2mm Impact Edging.

**Flash-gaps:** Manufactured from Polyrey 12mm Solid Grade Laminate Formers.

### **Type – Vanity Unit - Wet Spec – Drawings 02 & 03**

**Top:** Manufactured from Polyrey 12mm Solid Grade Laminate.

**Under Panels:** Manufactured from Polyrey 12mm Solid Grade Laminate.

**Flash-gaps:** Manufactured from Polyrey 12mm Solid Grade Laminate.

## **Guarantee & Warranty Statement:**

TLS products come with back-to-back 12-month defects under your contract.

The product is a bonded product that Total Laminate Systems buys core materials in and manufactures from them. We will replace any product on site during your 12 months defects if the product was to be found to be faulty in manufacture or installation. We do not cover for any water penetration into the products from a 3<sup>rd</sup> party service or pipe work running through our panels, or wanton acts of vandalism or general wear and tear damage by others.

There is only a certified warranty for compact grade laminate. Our standard bonded products do not have any certs or official warranties. This is the same for all sites we work on and is the same statement we would put out for all our manufactured products, excluding compact grade laminate.

## **Drawings:**

TLS-F6302-01 to 20 – As Built Issue (See attached)

**Replacements:**

Please note that all spares/replacement component parts can be purchased from us. Our phone number and email address to use are below.

Phone number: 01202 877 600.

Email address: [sales@total-laminate.co.uk](mailto:sales@total-laminate.co.uk)

Please ensure to use our doc ref of F6302 in any correspondence for this project.

# Maintenance & Cleaning Instructions

## Laminate Partitions, Duct Panels & Doors, and Vanity Units

Laminate surfaces are best kept clean by using water and mild detergent. Persistent marks can be removed by using a mild abrasive cleaner. On no account, however, should scouring pads or harsh abrasive cleaning agents be used. Non-scratch liquids, creams, or pastes, such as “CIF”, “FLASH” or “AJAX” are recommended, as they will not alter the surface appearance. In a more industrial context where the surface has become discoloured by long term exposure to tobacco smoke or industrial grime, cream cleaners containing mild abrasives are very effective, but should be carefully used.

The above cleaners will also be found useful in removal of ball pen marks and indelible felt pen inks. A few drops of methylated spirits on a clean cloth will also assist greatly in the removal of ink markings.

## Cubicles, Partitions, Pilasters & Doors.

The recommended method for everyday cleaning of compact panels in vertical applications is warm water with a mild universal cleaning agent applied with a sponge or soft nylon brush. Rinse with clean water removing any cleaning residue and dry with an absorbent cloth.

Lime scale can be removed with acidic cleaning agents containing approximately 10% acetic acid or citric acid. The manufactures instructions must be followed. Rinse with clean water removing any cleaning residue and dry with an absorbent cloth.

Paint, Varnish, Ink, Shoe Polish, Lipstick, Tar and other soluble but strong stains can be removed with organic solvents such as acetone or white spirit.

NB. The use of concentrated acid caustic or abrasive cleaning agents is not recommended. Using a combination of these products may cause unwanted chemical reactions which could produce harmful fumes.

## Door Handles, Legs, Metal Trims and Headrails

Use only damp soft cloth. To remove heavy stains, use only organic solvents e.g., recommended bathroom cleaners. **DO NOT USE STRONG ACIDS, ALKALIS or DESCALING PRODUCTS.**

## Lubrication

Lightly lubricate the indicator bolt assembly every 3-4 months to ensure trouble free movement. It is also recommended that the hinges are lightly lubricated at the same time, use light clear lubricating oils, **DO NOT USE WD40**

## Care and Maintenance of Stainless Steel

Stainless steel is well known for its intrinsic corrosion resistance. The corrosion resistance of stainless steel is due to a passive film of chromium-rich oxide (caused by a reaction between the chromium in the stainless steel with the oxygen in the air). If the surface is not regularly cleaned, surface deposits will prevent the passivation process. Therefore, to retain the highest corrosion resistance and aesthetic appeal it is necessary to keep the surface of stainless steel clean.



## Cleaning methods

Stainless steel is easy to clean and should be cleaned on a regular basis to attain the best corrosion resistance. This can be done by wiping surfaces with a warm clean cloth using either a mild detergent or soap, and then rinsing with warm clean water and drying with a towel.

When there are more stubborn spots or stains a mild non-scratching cream or polish can be used, these must be compatible with stainless steel. These can be applied with a soft cloth or soft sponge and cleaned off with clean warm water then dried with a towel.

Carbon steel brushes or carbon steel wire wool should **NOT** be used on stainless steel as they leave deposits which will rust on the surface.

It is recommended that stainless steel is cleaned at least once a month. In areas where the products are used more frequently or exposed to more extreme atmospheric conditions the cleaning routine should be increased to at least once a week. If the stainless steel begins to discolour, either the cleaning regime is inadequate or in the case of swimming pool areas the environment could have deteriorated.

NB. Neither grade 304 nor grade 316 stainless steels should be cleaned with products containing chlorine.

Where stainless steel has become extremely dirty with signs of surface discolouration (perhaps following periods of neglect, or misuse) alternative methods of cleaning can be used, as outlined below.

Requirement	Suggested Method	Comments
Routine cleaning of light soiling	Soap, detergent or dilute (1%) ammonia solution in warm clean water. Apply with a clean sponge, soft cloth or soft-fibre brush then rinse in clean water and dry <sup>6</sup>	Satisfactory on most surfaces
Fingerprints	Detergent and warm water, alternatively, hydrocarbon solvent	Proprietary spray-applied polishes available to clean and minimise remarking
Oil and grease marks	Hydrocarbon solvents (methylated spirit, isopropyl alcohol, or acetone) <sup>2</sup>	Alkaline formulations are also available with surfactant additions e.g., 'D7' Polish <sup>1</sup>
Stubborn spots, stains, and light discolouration. Water marking. Light rust staining	Mild, non-scratching creams and polishes. Apply with soft cloth or soft sponge and rinse off residues with clean water and dry <sup>6,7</sup> .	Avoid cleaning pastes with abrasive additions <sup>3</sup> . Suitable cream cleansers are available with soft calcium carbonate additions, e.g., 'Jif', or with the addition of citric acid, e.g., Shiny Sinks <sup>1</sup> . Do not use chloride solutions <sup>8,9</sup> .
Localised rust stains	Proprietary gels, or 10%	Small areas may be treated with a

caused by carbon steel contamination	phosphoric acid solution (followed by ammonia and water rinses), or oxalic acid solution (followed by water rinse). <sup>6</sup>	rubbing block comprising fine abrasive in a hard rubber or plastic filler. Carbon steel wool should not be used, nor should pads that have previously been used on carbon steel. A test should be carried out to ensure that the original surface finish is not damaged.
Burnt on food or carbon deposits	Pre-soak in hot water with detergent or ammonia solution. Remove deposits with nylon brush and fine scouring powder if necessary. Repeat if necessary and finish with 'routine cleaning'.	Abrasive scouring powder can leave scratch marks on polished surfaces.
Tannin (tea) stains and oily deposits in coffee urns	Tannin stains - soak in a hot solution of washing soda i.e., sodium carbonate. Coffee deposits - soak in a hot solution of baking soda (sodium bicarbonate).	These solutions can also be applied with a soft cloth or sponge. Rinse with clean water. Satisfactory on most surfaces.
Adherent hard water scales and mortar/cement splashes	10-15 volume % solution of phosphoric acid. Use warm, neutralise with dilute ammonia solution, rinse with clean water and dry <sup>6</sup> . Alternatively soak in a 25% vinegar solution and use a nylon brush to remove deposits.	Proprietary formulations available with surfactant additions. Take special care when using hydrochloric acid-based mortar removers <sup>8,9</sup> .
Heating or heavy discolouration	a) Non-scratching cream or polish e.g., Solvol Auto Chrome Metal Polish <sup>1,9</sup> b) Nylon-type pad, e.g., 'Scotchbrite' <sup>3,4,5</sup>	a) Creams are suitable for most finishes, but only use 'Solvol' on bright polished surfaces. Some slight scratching can be left. b) Use on brushed and polished finishes along the grain.
Badly neglected surfaces with accumulated grime deposits	A fine, abrasive paste as used for car body refinishing, e.g., 'T-cut' rinsed clean to remove all paste material and dried <sup>1</sup> .	May brighten dull finishes. To avoid a patchy appearance, the whole surface may need to be treated.
Paint, graffiti	Proprietary alkaline or solvent paint strippers, depending upon paint type. Use soft nylon or bristle brush on patterned surfaces.	Apply as directed by manufacturer.
Notes		
1. The products referenced in this information sheet are understood to be suitable for stainless steels. However, no endorsement of the products or their manufacturers is implied, and it is		

acknowledged that other manufacturing companies may provide products of equal or better quality. The following companies manufacture proprietary names mentioned: - 'Jif' - Lever Brothers Ltd, 'Shiny Sinks' - Home Products Ltd, 'Ajax' - Colgate Palmolive Ltd, 'D7 Stainless Steel Polish' - Diversey Ltd, 'T-Cut' - Automotive Chemicals Ltd and 'Solvol Auto Chrome Metal Polish' - Hammerite Products Ltd

2. Cleaning agents should be approved for use under the relevant national environmental regulations and, in addition, prepared and used in accordance with the manufacturers or suppliers' health & safety instructions. Solvents should not be used in enclosed areas.

3. Nylon abrasive pads should be adequate for dealing with most deposits. If a more severe treatment is needed to mask coarse scratches or physical damage on a surface, use the finest abrasive medium consistent with covering the damage marks. With directional brushed and polished finishes, align and blend the new "scratch pattern" with the original finish, checking that the resulting finish is aesthetically acceptable. Silicon carbide media may be used, especially for the final stages of finishing. Avoid using hard objects such as knife blades and certain abrasive/souring agents as it is possible to introduce surface scuffs and scratches. Scratching is particularly noticeable on sink drainer areas. These are usually superficial and can be removed with proprietary stainless-steel cleaners or, alternatively, with a car paint restorer, such as 'T-cut'.

4. If wire brushes are used, these should be made of a similar or better grade of stainless steel. Ensure that all abrasive media used are free from sources of contamination, especially iron and chlorides.

5. When cleaning a surface with any chemical preparation or abrasive medium, a trial should be done on a small, unobtrusive hidden or non-critical area of the surface, to check that the resulting finish matches with the original.

6. To avoid water marks, use clean rinsing water, such as reasonable quality potable (tap) water. Drying marks may be avoided using an air blower or wiping with clean disposable wipes.

7. Rust marks or staining on stainless steels is unlikely to be the result of corrosion to the stainless steel itself (similar marks may also be found on porcelain and plastic sinks). These marks are likely to result from small particles of carbon steel from wire wool or scouring pads becoming attached or embedded in the surface. In the damp environment of a sink, these iron particles rust and cause staining. Rust marks may be removed using non-scratching creams or alternatively using an oxalic acid solution, where iron particles have been embedded in the surface. Special precautions are necessary with oxalic acid, as, although it may not 'burn' unprotected skin, it is poisonous, if ingested.

8. Chloride-containing solutions, including hydrochloric acid-based cleaning agents and hypochlorite bleaches can cause unacceptable surface staining and pitting, and should not be used in contact with stainless steels. Under no circumstances should concentrated bleaches contact decorative stainless-steel surfaces. Hydrochloric acid-based solutions, such as silver cleaners, or building mortar removal solutions must not be used in contact with stainless steels. Hypochlorite containing bleaches must be used in the dilutions suggested in the manufacturers' instructions and contact times kept to a minimum. Thorough rinsing after use is very important. A frequent cause of staining and micropitting of stainless steels is splashing with undiluted bleach

solutions and mortar cleaners. Soaking stainless-steel sinks or cookware in dilute bleach solutions for long periods e.g., overnight is not advisable. Similarly, common salt added during cooking or concentrated salt/vinegar mixtures may cause pitting over time. It is good practice to wash stainless steel surfaces after food preparation and cooking.

9. Heavy heat tinting (oxidation) of stainless-steel surfaces is unlikely to be encountered in normal use. Normally repeated cleaning with non-scratching creams should remove burn marks from stainless steel cookware, but in exceptional cases, (e.g., after a repair requiring welding or after fire damage) it may be necessary to clean these areas using nitric acid-hydrofluoric acid pickling pastes or a nitric acid passivation solution. Changes in surface appearance usually result when cleaning with these acids. Strong acids should only be used for on-site cleaning when all other methods have been proved unsatisfactory. Nitric and phosphoric acids can be used with care for cleaning and maintenance on stainless steels, but sulphuric and hydrochloric acids can be very corrosive and should not be used for cleaning and maintenance of stainless-steel items. Citric acid cleaners are less potentially hazardous. Rubber gloves should be used when handling strong acids and care taken to avoid spillage over adjacent areas (see note 2).

10. If all the suggestions and actions in the table have been attempted unsuccessfully, it is worth bearing in mind that stainless steel can be mechanically polished or electropolished by specialists on site. Stainless steel is homogeneous and does not rely on surface plating for its corrosion resistance. If in difficulty, contact your supplier or the BSSA.

### **Safe Removal of Panels for maintenance**

Total Laminate Systems Ltd will ensure that all our panels are securely installed at initial installation.

We cannot accept liability for any claims for damage caused by duct/wall panels subsequently moving and/or falling, where other trades have removed and reattached our panels during or after our scheduled works on site.

Should any other trades need to remove duct/wall panels after final installation they should have included our recommended procedure for removing panels into their Safe System of Work prior to carrying out the activity.

Where other trades have removed our panels, for any reason, it will be the responsibility of them to ensure that the panels have been securely and properly reinstalled on all clips.

## **Recommended Procedure for Removing Duct/Wall Panels:**

- Ensure the floor area around where the ducts are to be removed is clear of tripping hazards.
- Ensure there is suitable lighting around the work area.
- Wear appropriate PPE.
- Consult with the as built drawings and establish which panels have been secured as 'lift off' (L), 'Push on' (P), and or 'Fixed' (F).
- Use 2 sets of heavy-duty glazing suction pads per panel.
- Where there is more than one panel (e.g., 3 or 4 panel duct set) the top panel should be removed first and continue to remove lower panels one at a time working downwards.
- 'Lift Off' – Apply the glazing suckers securely, push the panel vertically upwards approx. 60mm, using both hands, until it clears the clips and then carefully remove and store horizontally off the ground. Do not lean panels against walls.
- 'Fixed' – Remove the retaining screws that will go through the middle of the lift of clips on the rear of the panel before following the 'lift off' instruction above.
- 'Push On' – Apply the glazing suckers securely, pull the panel towards you until the panel comes free of the clips.
- DO NOT use screwdriver or any other tools to try to lever off panels as you may break the clips.
- DO NOT remove the middle or lower panel without first removing any panels above it, as this could cause occasion for higher panels to become dislodged, break free of the clip, and fall from height.
- To refit the panels, follow the above in reverse order starting with the lower panels moving upwards and check panels have engaged clips properly before moving onto the next panel.

The panels will vary in weight and size and TLS recommend any panel over 800mm wide is always advised to have 2 people in attendance to ensure safe removal and to spot the person removing the panel. Please adhere to good manual handling practices when removing and refitting panels. (Position, assess, lift, and move).

### **\*\*\*Emergency Access Procedure\*\*\***

## **For persons collapsed behind inward opening doors to TLS Full height and Standard Height EC3 Cubicles**

1. Locate the emergency release indicator bolt and turn using a coin/screwdriver until the lock disengages.
2. Locate the bottom through fixed bolts, (see photo). With the Allen Key provided, turn anti clockwise and remove the bolts – Important to remove the bottom hinge bolts first, set bolts to one side.
- 3.



Bottom first



Top second

4. Once bottom bolts are removed then repeat the same process to the 2-top hinge through bolts.
5. When all bolts removed, you will be able to push the door on the hinge side and with a suitable use of force the hinges with release from the position screw and the door will be free to be removed.

This is a standard detail for the EC3 range of washroom cubicles. By using this technique, it is possible to remove the door for anyone wishing to gain access to a person in distress behind the inward opening door.

If you have any questions relating to the above, please call our office on 01202 877 600.

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# Certificates/Warranties/Guarantees



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# Cleaning and Maintenance Regimes







## Cleaning and Maintenance Regimes

This maintenance schedule for **P23-027 The Range, Stowmarket** is to be followed from PC date **24/10/2024** year on year to ensure all plant and equipment is kept within warranty.

Please keep a log of these inspections so that records can be checked should an issue arise.

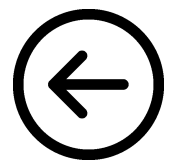
Code; ✓ **Blue – Recommended** ✓ **Red – To Maintain Warranty**

Item	Daily	Weekly	Monthly	3 Months	6 Months	9 Months	Annually	5 Yearly	Certificates	Regime
Cubicles	✓									<p>The recommended method for everyday cleaning of compact panels in vertical applications is warm water with a mild universal cleaning agent applied with a sponge or soft nylon brush. Rinse with clean water removing any cleaning residue and dry with an absorbent cloth.</p> <p>Lime scale can be removed with acidic cleaning agents containing approximately 10% acetic acid or citric acid. The manufacturer's instructions must be followed. Rinse with clean water removing any cleaning residue and dry with an absorbent cloth.</p> <p>Paint, Varnish, Ink, Shoe Polish, Lipstick, Tar and other soluble but strong stains can be removed with organic solvents such as acetone or white spirit.</p> <p>NB. The use of concentrated acid caustic or abrasive cleaning agents is not recommended. Using a combination of these products may cause unwanted chemical reactions which could produce harmful fumes.</p>

Item	Daily	Weekly	Monthly	3 Months	6 Months	9 Months	Annually	5 Yearly	Certificates	Regime
DAPS1 and Vanities	✓									<p>Laminate surfaces are best kept clean by using water and mild detergent. Persistent marks can be removed by using a mild abrasive cleaner. On no account, however, should scouring pads or harsh abrasive cleaning agents be used. Non-scratch liquids, creams, or pastes, such as "CIF", "FLASH" or "AJAX" are recommended, as they will not alter the surface appearance. In a more industrial context where the surface has become discoloured by long term exposure to tobacco smoke or industrial grime, cream cleaners containing mild abrasives are very effective, but should be carefully used.</p> <p>The above cleaners will also be found useful in removal of ball pen marks and indelible felt pen inks. A few drops of methylated spirits on a clean cloth will also assist greatly in the removal of ink markings.</p>

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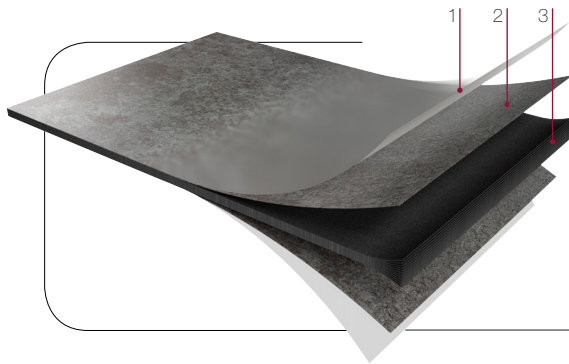
# Data Sheets



**winvic**

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### REYSITOP® Compact Solid Grade Laminate



- 1/ High-resistance overlay
- 2/ Decorative sheet impregnated with melamine resin, identical on both sides
- 3/ Extra-black core composed of layers of kraft paper impregnated with phenolic resin



#### Properties

- Self-supporting ( $\geq 8$  mm)
- Machinable throughout its thickness
- High resistance PROTECT+
- Sanitized® anti-bacterial. Contains biocidal substance (silver phosphate glass).
- PEFC™ & GREENGUARD GOLD eco-certification
- Suitable for food contact



Abrasion resistant



Impact-resistant



Heat-resistant



Moisture-resistant



Suitable for food contact



Easy to maintain



Easy to fabricate

#### Applications

- Kitchen fitting: worktops, table tops, splashbacks, legs, cabinet door/drawer...
- Furnishing of reception areas (reception desk, counter) and bar counter.
- Creation of table tops, with base or on a pedestal.
- Wall coverings, in public spaces lounges, sales areas.
- Creation of designer furniture with clean and elegant lines.

- 6 and 8 mm : wall covering, furniture on supporting structures (frame, pedestal).
- 10 and 12,5 mm : work surface / table top, self-supporting structures.

#### Product Offer

SIZE	307 × 132 cm	
FINISH	ROCHE – GRANIT – ALLIAGE – LINIMAT	
GRADE	Standard	6 - 8 - 10 - 12,5 mm

\* Contains biocidal substance (silver phosphate glass).

## REYSITOP® Compact Solid Grade Laminate



QUALITY	Standard
FINISHES	ROCHE – GRANIT – ALLIAGE – LINIMAT
THICKNESS	6 - 8 - 10 - 12,5 mm
CLASSIFICATION	CGS

CHARACTERISTICS	STANDARD	UNITS	
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### Physical and dimensional properties

Density	EN ISO 1183-1	g/cm <sup>3</sup>	≥ 1,35
Thickness tolerance	EN 438-2-5	mm	6 mm : ± 0,40 / 8-10 mm : ± 0,50 / 12,5 mm : ± 0,60
Length and width tolerance	EN 438-2-6	mm	- 0 / + 10
Straightness tolerance	EN 438-2-7	mm/m	≤ 1,5
Squareness tolerance	EN 438-2-8	mm/m	≤ 1,5
Flatness tolerance	EN 438-2-9	mm/m	6-8 mm : ≤ 5,0 10-12,5 mm : ≤ 3,0
Dimensional stability at high temperature • Longitudinal • Transverse	EN 438-2-17	%	6-8-10-12,5 mm : ≤ 0,30 6-8-10-12,5 mm : ≤ 0,60

### Mechanical properties

Modulus of elasticity	ISO 178	MPa	≥ 9000
Bending strength	ISO 178	MPa	≥ 80
Surface cohesion	ISO R527	MPa	≥ 60
Resistance to boiling water • Mass increase • Thickness increase • Appearance	EN 438-2-12	% % Class <sup>(a)</sup>	≤ 2 ≤ 2 4
Impact resistance of a 324 g ball (drop height for ≤ 10 mm diameter imprint)	EN 438-2-21	mm	6-8-10-12,5 mm ≥ 2000
Resistance to surface cracking	EN 438-2-24	Class <sup>(c)</sup>	4

### Surface properties

Surface defects • Spots • Linear	EN 438-2-4	mm <sup>2</sup> /m <sup>2</sup> mm <sup>2</sup> /m <sup>2</sup>	≤ 1 ≤ 10
Abrasion resistance (initial point)	EN 438-2-10	Nb or rev.	≥ 400
Martindale test resistance - 160 random abrasion (Scotch Brite™ pad)	not standardised	Class <sup>(a)</sup>	4 to 5
Abrasimetre resistance - 3000 linear abrasion (steel wool)	not standardised	Class <sup>(a)</sup>	4
Resistance to steam	EN 438-2-14	Class <sup>(a)</sup>	4
Dry heat resistance 220 °C (for 10 min)	EN 438-2-16	Class <sup>(a)</sup>	4
Resistance to humidity	EN 12721	Class <sup>(a)</sup>	4
Scratch resistance	EN 438-2-25	Grad <sup>(b)</sup>	3
Stain Resistance • Groups 1 & 2 • Group 3	EN 438-2-26	Class <sup>(a)</sup>	5 4
Colour fastness under artificial light	EN 438-2-27	Greyscale	4 to 5
Resistance to cigarette burns	EN 438-2-30	Class <sup>(a)</sup>	3

### Fire performance

Fire rating	EN 13501-1	Euroclass	< 8 mm : D, s2 - d0 / ≥ 8 mm : C, s1 - d0
Calorific value	EN ISO 1716	MJ/kg	18 - 20

### Health and environmental characteristics

Food safe	EN 13130-1	-	Yes
Formaldehyde emission	EN 717-2	Classification	E1
Volatile organic compounds (VOC) emission	ISO 16000-9	Classification	A
	UL 2818		GREENGUARD GOLD
Antibacterial properties	JIS Z 2801	Reduction in %	> 99,9

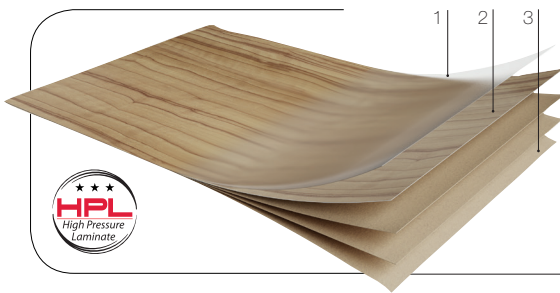
CGS: Standard Grade Compact.

<sup>(a)</sup> Class: 1 = Surface damage. 2 = Severe appearance alteration. 3 = Moderate change. 4 = Slight change visible from certain angles. 5 = No change.

<sup>(b)</sup> Grade: 2 = Continuous scratches at 2N. 3 = Continuous scratches at 4N. 5 = Continuous scratches at 6N.

<sup>(c)</sup> Surface unchanged, with slight hairline edge cracks visible to the naked eye.

### POLYREY HPL® High Pressure Laminate



- 1/ Protective overlay for printed decors.
- 2/ Decorative paper impregnated with melamine resin\*.
- 3/ Layers of kraft paper impregnated with phenolic resin.



### Properties

- A versatile, robust and hygienic surface.
- High resistance to external stress (abrasion, impacts, stains, etc.).
- Silver ion-treated, antibacterial Sanitized®\* grade.
- Non porous, waterproof surface.
- Food safe (IANESCO approved).
- TOUCH Finish (anti-finger print): superficial scratches are repairable with a sponge eraser or a wet cloth with an iron. \*\*



crack resistant



impact resistant



abrasion resistant



moisture resistant



colour fastness under artificial light



scratch resistant



heat resistant



ease of maintenance



resistant to cigarette burns



resistant to chemical and household products

### Applications

- Suitable for high-traffic public environments: retail, hotel, office, education, health, etc.
- Suitable for covering vertical surfaces (doors, wall panels) as well as horizontal surfaces (worktops, furniture).
- Suitable for bonding to all type of substrate (wood, metal, mineral, honeycomb, etc).
- Can be cold bent or postformed for curved surfaces.

82 decors available for door applications in 215 x 97cm and 245 x 124cm.

MED certified for marine applications. Other transport certificates: upon request.

PROTECT+ GRANIT finish recommended for intensive horizontal uses.

### Product Offer

SIZE		215 x 97 cm	245 x 124 cm	307 x 124 cm	307 x 132 cm		305 x 132 cm	
FINISH		FA - EXM	FA	FA	BRIHG	FA - GRAIN - GRANIT - ROC SURF - SOFT - EXM - LEG - ALG	EPM - BRIHG	TOUCH
GRADE	Standard	■	-	-	■	-	■	■
	Postforming	-	■	■	-	■	-	-
	Fire retardant	■	■	■	■	■	■	-

All finishes are available in 0.8 mm thickness, except BRIHG finish which is offered in 1 mm thickness for superior shine.

HPL larger sheet sizes (412x151 cm and 432x166 cm) are available upon request, please contact us.

\*Excluding Touch (TCH).

\*\*If the damages are significant we can't guarantee a complete refurbishment but defects will be mitigated. The sponge eraser must be occasionally used.

### POLYREY HPL® High Pressure Laminate

CHARACTERISTICS	DECOR / FINISH		All except Pearlescent decors, EPM and BUBBLES	Pearlescent decors, EPM and BUBBLES	Digital Signature
	THICKNESS		0.8 mm (except BRIHG 1 mm)		
	GRADE		Standard - Postforming - Fire retardant		Standard - Fire retardant
	CLASSIFICATION		HGP - HGS - HGF	VGP - VGS - VGF	HGS - HGF - VGS - VGF
Conforms EN 438-3		STANDARD	UNITS		

#### Physical and dimensional properties

CHARACTERISTICS	STANDARD	UNITS	HGP - HGS - HGF	VGP - VGS - VGF	HGS - HGF - VGS - VGF
Density	EN ISO 1183-1	g/cm <sup>3</sup>	≥ 1.35	≥ 1.35	≥ 1.35
Thickness tolerance	EN 438-2-5	mm	± 0.1	± 0.1	± 0.1
Length and width tolerance	EN 438-2-6	mm	- 0 / + 10	- 0 / + 10	- 0 / + 10
Straightness tolerance	EN 438-2-7	mm/m	≤ 1.5	≤ 1.5	≤ 1.5
Squareness tolerance	EN 438-2-8	mm/m	≤ 1.5	≤ 1.5	≤ 1.5
Flatness tolerance	EN 438-2-9	mm/m	60	60	60
Dimensional stability at high temperature - Longitudinal - Transverse	EN 438-2-17	%	≤ 0.55 ≤ 1.05	≤ 0.75 ≤ 1.25	≤ 0.55 ≤ 1.05

#### Mechanical properties

CHARACTERISTICS	STANDARD	UNITS	HGP : 10 / HGS - HGF : 20	VGP : 10 / VGS - VGF : 20	HGS : 10 / HGF - VGS - VGF : 20
Resistance to boiling water	EN 438-2-12	Class <sup>(a)</sup>	BRIHG : 3 / Others : 4	BRI : 3 / Others : 4	1
Impact resistance (small diameter ball)	EN 438-2-20	N	≥ 20	≥ 15	≥ 20
Impact resistance (large diameter ball) (drop height for ≤ 10mm diameter imprint)	EN 438-2-21	mm	≥ 800	≥ 600	≥ 800
Resistance to cracking	EN 438-2-23	Class <sup>(a)</sup>	4	4	4
Minimum bending radius (convex and concave)		cm	HGP : 10 / HGS - HGF : 20	VGP : 10 / VGS - VGF : 20	20

#### Surface properties

CHARACTERISTICS	STANDARD	UNITS	HGP : 10 / HGS - HGF : 20	VGP : 10 / VGS - VGF : 20	HGS : 10 / HGF - VGS - VGF : 20
Surface defects - Spots - Linear	EN 438-2-4	mm <sup>2</sup> /m <sup>2</sup> mm/m <sup>2</sup>	≤ 1 ≤ 10	≤ 1 ≤ 10	≤ 1 ≤ 10
Abrasion resistance (initial point)	EN 438-2-10	No. of revolutions	GRANIT : ≥ 450 / Others : ≥ 150	EPM : ≥ 100 / Others : ≥ 50	≥ 150
Resistance to steam	EN 438-2-14	Class <sup>(a)</sup>	BRIHG : 3 / Others : 4 / TCH : 5	BRI : 3 / Others : 4	1 to 4 depending on DECOR
Dry heat resistance 180 °C	EN 438-2-16	Class <sup>(a)</sup>	BRIHG : 3 / Others : 4 / TCH : 5	BRI : 3 / Others : 4	BRI : 3 / Others : 4
Resistance to humidity	EN 12721	Class <sup>(a)</sup>	BRIHG : 3 / Others : 4 / TCH : 5	BRI : 3 / Others : 4	BRI : 3 / Others : 4
Scratch resistance	EN 438-2-25	Grade <sup>(b)</sup>	BRIHG : 2 / Others : 3 / TCH : 4	BRI : 2 / Others : 3	BRI : 2 / Others : 3
Stain Resistance - Groups 1 & 2 - Group 3	EN 438-2-26	Class <sup>(a)</sup>	5*** 4	5 4	5 4
Colour fastness under artificial light	EN 438-2-27	Grayscale	4 to 5	4 to 5	4 to 5
Resistance to cigarette burns	EN 438-2-30	Class <sup>(a)</sup>	3	3	3

#### Postforming properties (Postforming HPL only)

CHARACTERISTICS	STANDARD	UNITS	HGP : 10 / HGS - HGF : 20	VGP : 10 / VGS - VGF : 20	HGS : 10 / HGF - VGS - VGF : 20
Minimum Postforming radius	EN 438-2-31 or 32	mm	Th. 0.8 mm ≥ 8 mm*	Th. 0.8 mm ≥ 8 mm	-
Blister resistance	EN 438-2-33 or 34	second	≥ 15	≥ 15	-

#### Fire performance

CHARACTERISTICS	STANDARD	UNITS	HGP : 10 / HGS - HGF : 20	VGP : 10 / VGS - VGF : 20	HGS : 10 / HGF - VGS - VGF : 20
Fire rating	NFP 92-501	M Classification	Fire retardant: M1 Others: M3	Fire retardant: M1 Others: M3	Fire retardant: M1 Standard : M3
	EN 13501-1	Euroclasse	Fire retardant: B-s2,d0 / Others : D-s1,d0 / TCH : D-s2,d1	Fire retardant: B-s2,d0 / Others : D-s1,d0	Fire retardant: B-s2,d0 / Others : D-s1,d0
Calorific value	EN ISO 1716	MJ/kg	18 - 20*	18 - 20	18 - 20

#### Health and environmental characteristics

CHARACTERISTICS	STANDARD	UNITS	HGP : 10 / HGS - HGF : 20	VGP : 10 / VGS - VGF : 20	HGS : 10 / HGF - VGS - VGF : 20
Food safe	EN 13130-1		Yes	Yes	Yes
Formaldehyde emission	EN 717-2	Class	E1	E1	E1
Volatile organic compounds (VOC) emission	ISO 16000-9	Class	Others: A / TCH: A+	A	A
Antibacterial properties	JIS Z 2801	Reduction in %	> 99.9*	> 99.9	> 99.9

HGP : Horizontal Grade Postforming  
HGS : Horizontal Grade Standard  
HGF : Horizontal Grade Fire retardant grade

VGP : Vertical Grade Postforming  
VGS : Vertical Grade Standard  
VGF : Vertical Grade Fire retardant grade

<sup>(a)</sup> Class : 1- Surface damage. 2- Severe appearance alteration. 3- Moderate change. 4- Slight change visible from certain angles. 5- No change.

<sup>(b)</sup> Grade: 2= Continuous scratches at 2N. 3= Continuous scratches at 4N.

\* Excluding Touch (TCH).

\*\*\* An exposure to hot liquids such as coffee or tea of more than 2H can cause slight stains on light surfaces.