IPS Vanity Unit and Toilet Cubicles (Total Laminate Systems)

Contents

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winvic
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Contents

Scope of Works

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Scope of Works:
Manufacture, supply and installation of washroom furniture including cubicles, duct access panelling, vanities, and cleaner's units.

Cubicles:

Range – *Winvic Enhanced 2100mm Standard HT*

Doors: Manufactured from Polyrey 19mm Melamine Faced Chipboard, edged with 2mm High Impact Edging.
Pilasters: Manufactured from Polyrey 19mm Melamine Faced Chipboard, edged with 2mm High Impact Edging.
Divisions: Manufactured from Polyrey 19mm Melamine Faced Chipboard, edged with 2mm High Impact Edging.
Hardware: Enhanced Stainless Steel

Duct Access Panels:

Range – *DAPS1*

Panels: Manufactured from Polyrey 19mm Melamine Faced Chipboard, edged with 2mm High Impact Edging.

Vanities:

Semi Recessed Vanity
Top: Manufactured from Polyrey High Pressure Laminate bonded to 18mm Moisture Resistant core and balanced with white liner.
Under Panels: Manufactured from Polyrey 12mm Solid Grade Laminate.
Flash-gaps: TLS – General Specification – High pressure laminate bonded to 18mm Moisture Resistant core.

Cleaners Unit

Panel: Manufactured from Polyrey 12mm Solid Grade Laminate.

Subpanel: Manufactured from Polyrey 12mm Solid Grade Laminate.

Shelf: Manufactured from Polyrey 12mm Solid Grade Laminate.

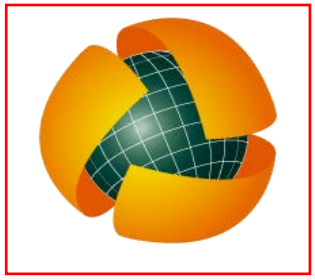
Replacements:
Please note that any spares or replacement component parts can be purchased from:

Total Laminate Systems – Sales Office: 01202 877600

Certificates/Warranties/Guarantees

N/A

Cleaning and Maintenance Regimes



Cleaning and Maintenance Regimes

This maintenance schedule for P21-024 – Calder Park Wakefield is to be followed from PC date 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
Laminate Partitions, Duct Panels & Doors, 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.

Item	Daily	Weekly	Monthly	3 Months	6 Months	9 Months	Annually	5 Yearly	Certificates	Regime
Shower 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, Headrails & Bench Framing (And Lubrication n)				✓						***Door Handles, Legs, Metal Trims, Headrails & Bench Framing*** Use only a 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**

Maintenance & Cleaning Instructions
Washrooms

Laminate Partitions, Duct Panels & Doors, Vanity Units

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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, Headrails & Bench Framing

Use only a 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 steel 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[6]	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) [2]	Alkaline formulations are also available with surfactant additions e.g.'D7' Polish[1]
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[6,7].	Avoid cleaning pastes with abrasive additions[3]. Suitable cream cleansers are available with soft calcium carbonate additions, e.g. 'Jif', or with the addition of citric acid, e.g. Shiny Sinks[1]. Do not use chloride solutions[8,9].
Localised rust stains caused by carbon	Proprietary gels, or 10% phosphoric acid solution	Small areas may be treated with a rubbing block comprising fine abrasive in

steel contamination	(followed by ammonia and water rinses), or oxalic acid solution (followed by water rinse).[6]	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 souring 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[6]. 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 [8,9].
Heating or heavy discolouration	a) Non-scratching cream or polish e.g. Solvol Auto Chrome Metal Polish [1,9] b) Nylon-type pad, e.g. 'Scotchbrite' [3,4,5]	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[1].	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

Data Sheets

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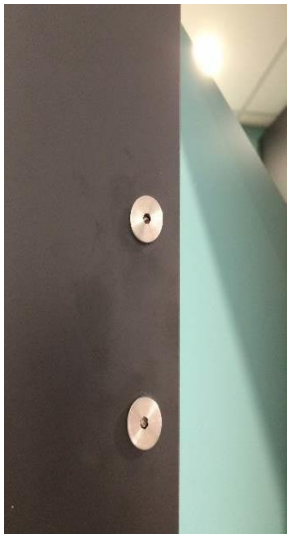
from the frame. Again TLS recommend a 2nd person to be present and to assist in removal on all panels over 800mm wide.

Emergency Access Procedure
For persons collapsed behind inward opening doors to TLS Full height and Standard Height EC3, EC2 and EC1 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.

Bottom first



Top second

3. Once bottom bolts are removed then repeat the same process to the 2-top hinge through bolts.
4. 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 – EC2 and EC1 full height range of washroom cubicles. By using this technique, it is possible to remove the door for anyone wishing to gain access to s a person in distress behind the inward opening door.

If you have any questions relating to the above, please call our office on 01202 877600

HEALTH & SAFETY INFORMATION
POLYREY DECORATIVE LAMINATES

This information outlines the precautions which should be taken in the handling, processing, and fabrication of decorative laminates. It has been prepared in accordance with the format developed by the British Plastics Federation to comply with Section 6 of the Health & Safety at Work Act, and with reference to Guidance Note G.S.8. -"Articles and Substances for use at Work".

1. Products

The materials referred to are melamine surfaced high pressure decorative laminates. They are supplied in sheet form in a variety of sizes, thicknesses, and surface finishes. Laminates basically consist of paper and thermo-hardening synthetic resins. Irreversible chemical bonds are formed between resin molecules in the constituent layers of paper during the curing process which occurs under conditions of high pressure and temperature. The resins used are the reaction products of phenol and formaldehyde, urea and formaldehyde, and melamine and formaldehyde, and are controlled to impart the required characteristics of wear, stain, impact, and fire resistance, and mechanical strength and formability in the finished laminate.

Decorative laminates are essentially for surfacing and may be bonded to almost any substrate, the most common being chipboard, plywood, hardboard, aluminium, and mineral based.

Polyrey laminates do not contain asbestos.

2. Handling and Storage

Laminates are chemically stable at normal temperatures and are no hazard under normal storage conditions. They are usually delivered banded on pallets which are suitable for transporting the load to and from stores by fork lift truck. Normal precautions should be taken to avoid injuries in transport and handling from unstable stacks and loads, incorrect lifting methods, and driving practices. The weight of a pallet depends on the size, number of sheets, and grade, but a useful guide in the calculation of a load is half a lb. per sq. ft. for a 1.3 mm laminate.

All laminates have a hard surface, (some may be smooth), and precautions (e.g. strapping) should be taken to avoid accidental slippage of stacked material in storage or transport.

Precautions should be taken to avoid cut injuries caused by sharp and burred edges. Broken laminates are particularly dangerous in this respect, and the danger can be lessened by taping the break. Gloves should always be worn when handling laminates. Displaced sheets in a stack are also hazardous, particularly at face level, and they should be picked up as they are very slippery when face down on a concrete floor.

3. Fire Precautions

Laminates are difficult to ignite and are not hazardous as a potential source of ignition, but in a conflagration, they will contribute to the fire. The hazard relating to smoke obscuration and noxious gases from a fire derives mainly from the items in the room which will ignite first and burn vigorously. Items which are difficult to ignite and which have a low surface spread of flame will contribute much less to the smoke obscuration and noxious gas hazard. All organic products, whether synthetically produced - like plastics, or naturally occurring - such as wood or wool, will produce gases of varying composition, depending on the conditions under which burning takes place. The toxic gas most commonly found in fire gases from organic materials is carbon monoxide. The presence of elements other than carbon, hydrogen and oxygen in plastics can result in the production of other toxic gases. In the case of high pressure decorative laminates, if any other gases are released, the amounts will be extremely small, and the effects of carbon monoxide and oxygen depletion will far outweigh the dangers from such trace quantities.

Normal fire fighting procedures should be followed, including the wearing of breathing apparatus. Water and dry powder extinguishants are particularly suitable but CO_2 and Halon can also be used, the choice depending on the circumstances.

Finely divided dust arising from the fabrication of laminates (i.e. sanding or sawing) are a potential source of explosion and combustion, and the propagation of flame in dust clouds and accumulations is very rapid.

Care must be taken in the design and servicing of pneumatic handling and extraction systems to avoid explosive conditions. Explosion relief and isolation should be provided and potential ignition sources eliminated.

In all cases, expert advice should be obtained. A very useful reference on this subject is booklet No.22 in the Health & Safety at Work series - "Dust Explosions in Factories" obtainable from HM Stationary Office.

4. Machining and Fabrication

Machining of laminates by sawing or grinding may generate dust and noise. Local exhaust ventilation should be provided at points where excessive dust occurs and the comments made in paragraph 3 noted in the design of such systems. The properties of substrates to which the laminate may be bonded must also be taken into consideration when assessing machining hazards. The working of aluminium/laminate composite board requires particular care, as any fine dust generated is highly explosive and requires special precautions. It should not be fed into central dust collecting systems with other materials.

Care should be taken to protect the eyes from splinters and dust and cuts, and the "Protection of Eyes Regulations" must be met.

Excessive noise is likely to occur during grinding and sawing and suitable precautions (i.e. screens and ear protection) should be taken. Reference should be made to the publication "Code of Practice for reducing the exposure of Employed Persons to Noise", which is available from HM Stationary Office.

5. Health & Environmental Aspects

Decorative laminates are fully cured and chemically inert. They are not classified as toxic or harmful. If finely ground during fabrication, the accidental inhalation of small quantities of dust need not be cause for concern, but in all cases where the machining generates large scale airborne dust particles, dust masks and local exhaust ventilation should be provided to ensure dust is directed away from the breathing zone of the operator.

Most powders can cause irritation with persistent direct contact with the skin. The sensitivity of individuals varies considerably, but a few may develop non-infective industrial dermatitis. Problems of this nature can invariably be avoided by simple basic precautions, such as the use of dust masks, gloves, overalls, and care with personal hygiene. Properly dispensed pre-work barrier creams, soaps, washing facilities, and after-work conditioning creams will prove effective. In the exceptional case of a person with an allergic sensitivity to the dust, the only remedy is to avoid all contact at any level of exposure. Professional medical advice should be obtained in such cases.

There is no measurable fume or reactive constituent in the laminate.

6. Product Information

Technical literature is available describing the properties and characteristics of each grade of laminate and the applications and recommended fabrication methods. Users should be familiar with the contents of this literature. If there is any doubt, further information and advice should be requested.

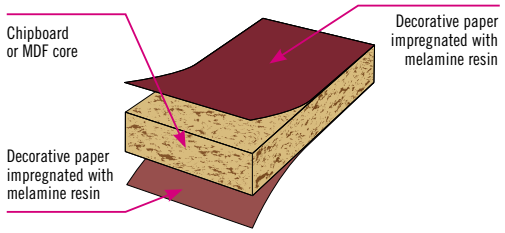
7. Waste Disposal

Much of the content and recommendations in sections 3 to 6 apply equally to waste disposal.

In general, waste may be disposed of by controlled incineration or burial, but the requirements of the "Control of Pollution Act" should be observed.

The material is not classified as a "notifiable" waste.

panoprey, melamine faced board



Economical and practical

- The “all-round” basic product.
- Good price/quality ratio for interior fitting and furniture.
- PEFC grade available on request.

PEFC
PEFC/10-1-1
PROMOTING SUSTAINABLE FOREST MANAGEMENT

Get more from Polyrey

- Available in 120 decors, of which 94 are the most popular today and 26 are future best-sellers.
- 2 new surface finishes:
  - MAT: non-reflective matt effect. Enhances wood decors and false plain colours.
  - GRAIN: reproduces the natural texture of wood. Enhances woodgrains in particular by giving them a contemporary look.

Product offer

Products available on request subject to short lead time (identical decor on both sides):

Sheet size in cm		280 x 207	
Finish		FA - MAT - GRAIN	
Core		Chipboard	MDF
Thickness in mm	Standard grade	8 - 12 - 16 - 19 - 22 - 25 - 30	8 - 12 - 16 - 19 - 25 - 30
	Moisture resistant grade	12 - 19	
	Fire retardant grade	12 - 16 - 19	19

Product offer on request

Products available on request subject to minimum order quantity and lead time:

- HR: “Higher resistance” grade.
- 1 side decor / 1 side white.
- Other sheet sizes or thicknesses.
- Larger sheet size 322 x 207 cm.

Sheet size in cm		322 x 207
Finish		FA - MAT - GRAIN
Core		Chipboard
Thickness in mm	Standard grade	19 - 25 - 28

Focus on…the exclusive 322 x 207 cm sheet size

- Polyrey also offers a larger sheet size to optimise cutting and to accommodate interior fitting spaces of greater height.
- Contact us for minimum order quantities.

Fire classification

- Standard grade ≥ 9mm: **D-s2,d0.**
- Moisture resistant grade ≥ 9mm: **D-s2,d0.**
- Fire retardant grade **B-s2,d0.**

Please refer to the availability table to check sheet size and surface finish availability in the chosen decor and grade.

Technical characteristics

panoprey

scratch resistance · ease of maintenance · resistance to chemicals and household cleaning products · resistance to cracking · impact resistance · abrasion resistance · hygienic surface · colour fastness under artificial light

	Grade		Standard	Fire retardant	Moisture resistant	Standard
	Core		Chipboard EN 312 type P2	Chipboard EN 312 type P2	Chipboard EN 312 type P3	MDF EN 622-5
Characteristics	**Standard**	**Unit of measure**				
Density	EN 323	Kg/m³	650 +/- 10 %	700 +/- 10 %	670 +/- 10 %	760 +/- 10 %
Thickness tolerance	EN 324-1	mm	nominal thickness ± 0.3	nominal thickness ± 0.3	nominal thickness ± 0.3	nominal thickness ± 0.3
Length/width tolerance On length and width Squareness Straightness	EN 324-1 & 2	 mm mm/m mm/m	 ± 5 2 1.5	 ± 5 2 1.5	 ± 5 2 1.5	 ± 5 2 1.5
Appearance defects Sporadic Linear	EN 14323	 mm²/m² mm/m	 ≤ 2 ≤ 20	 ≤ 2 ≤ 20	 ≤ 2 ≤ 20	 ≤ 2 ≤ 20
Moisture Content (ex factory)	EN 322	%	5 to 13	5 to 13	5 to 13	4 to 11
Dry perpendicular traction 8mm 12mm 16mm 19mm 22mm 25mm 30mm	EN 319	Mpa	 ≥ 0.40 ≥ 0.40 ≥ 0.35 ≥ 0.35 ≥ 0.30 ≥ 0.30 ≥ 0.25	 ≥ 0.40 ≥ 0.40 ≥ 0.35	 ≥ 0.45 ≥ 0.45	 ≥ 0.65 ≥ 0.60 ≥ 0.55 ≥ 0.55 ≥ 0.55 ≥ 0.55 ≥ 0.55
Bending strength for all directions 8mm 12mm 16mm 19mm 22mm 25mm 30mm	EN 310	Mpa	 ≥ 13 ≥ 13 ≥ 13 ≥ 13 ≥ 11.5 ≥ 11.5 ≥ 10	 ≥ 13 ≥ 13 	 ≥ 15 ≥ 14 	 ≥ 23 ≥ 22 ≥ 20 ≥ 20 ≥ 18 ≥ 18 ≥ 18
Elasticity for all directions 8mm 12mm 16mm 19mm 22mm 25mm 30mm	EN 310	Mpa	 ≥ 1800 ≥ 1800 ≥ 1600 ≥ 1600 ≥ 1500 ≥ 1500 ≥ 1350	 ≥ 1800 ≥ 1600 ≥ 1600 	 ≥ 2050 ≥ 1950 	 ≥ 2700 ≥ 2500 ≥ 2200 ≥ 2200 ≥ 2100 ≥ 2100 ≥ 2100
Surface cohesion	EN 311	Mpa	≥ 1.0	≥ 1.0	≥ 1.0	≥ 1.0
Flatness (Thickness ≥ 15mm)	EN 14323	mm/m	≤ 2	≤ 2	≤ 2	≤ 2
Egding cohesion	EN 14323	mm	≤ 10	≤ 10	≤ 10	≤ 10
Formaldehyde class	EN 120	Class	E1	E1	E1	E1
Formaldehyde level	EN 120	mg/100g	≤ 8	≤ 8	≤ 8	≤ 8
Swelling in thickness after 24hrs 12mm - 19mm	EN 317	%			≤ 14	
Internal cohesion under cyclic test conditions 12mm 19mm	EN 321	N/nm²			 ≥ 0.15 ≥ 0.13	
Swelling in thickness under cyclic test conditions 12mm 19mm	EN 321	%			 ≥ 14 ≥ 13	
Resistance to cracking	EN 14323	Class	3 (1)	3 (1)	3 (1)	3 (1)
Stain resistance	EN 14323	Class	3 (2)	3 (2)	3 (2)	3 (2)
Abrasion resistance Plain colours Patterns	EN 14323	Class	 3A (3) 1 (4)	 3A (3) 1 (4)	 3A (3) 1 (4)	 3A (3) 1 (4)
Colour fastness under artificial light	EN 14323	Grey scale	4 to 5	4 to 5	4 to 5	4 to 5
Impact resistance (324g ball) Height of fall Diameter of imprint	EN 14323	 cm mm	 50 ≤ 10	 50 ≤ 10	 50 ≤ 10	 50 ≤ 10
Scratch resistance	EN 14323	N/nm²	Average 1.5	Average 1.5	Average 1.5	Average 1.5
Fire rating (Euroclass) 8mm 12 - 16 - 19mm 22 - 25 - 30mm			 No rating D-s2,d0 D-s2,d0	 B-s2,d0	 D-s2,d0	 D-s2,d0 D-s2,d0
Calorific value		kcal/kg	Approx. 4000	Approx. 4000	Approx. 4000	Approx. 4000

(1) Hairline cracking spread randomly across the surface (2) Moderate change in aspect and/or colour (3) ≥ 350 revolutions (4) < 150 revolutions.

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.

Care and Maintenance of Satin Anodised Ironmongery

Anodising is an electrolytic passivation process used to increase the thickness of the natural oxide layer on the surface of metal parts. Anodizing increases corrosion resistance and wear resistance. This makes them less likely to crack and peel from aging and wear.

This type of ironmongery needs to be dusted regularly. Every so often it should be cleaned using a **WEAK** detergent solution and then dried and buffed up. An occasional wipe with wax polish will keep your furniture in tip-top condition.

NOTE: Metal polish should **NEVER** be used to clean Anodised Aluminium ironmongery as these polishes contain chemicals that are damaging to the surface of the metal.

Safe Removal of Panels for maintenance

When removing panels on Hook and Peg mountings for maintenance, panels should be removed using either rubber gloves so good contact is made with the panel to allow the panel to be moved up vertically to release the panel from the holding clips or a panel sucker can also work well.

The panels will vary in weight and size and TLS recommend any panel over 800mm wide is always advised to have two people in attendance to ensure safe removal and to spot the person removing the panel.

Panels need to be pushed vertically by 60mm to release them from the mounting clips. Once the panel is released from the mounting clips then care should be used to removed the panel away