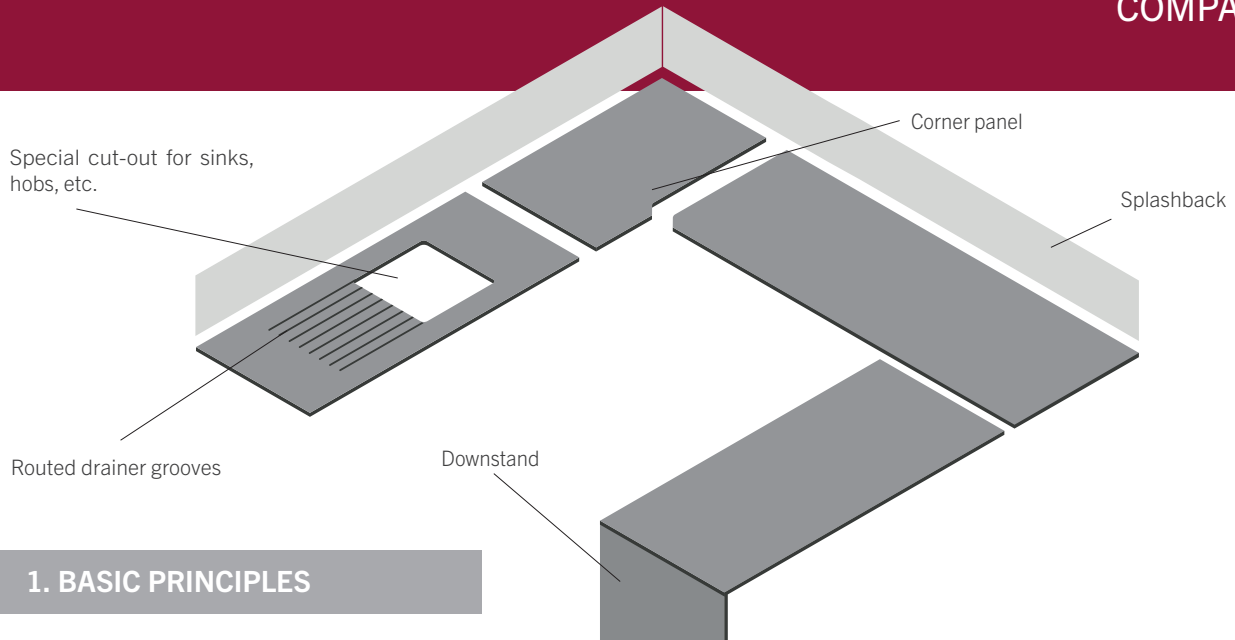


WORKTOPS & SPLASHBACKS MONOCHROM – REYSITOP[®] – REYSIPUR[®] COMPACT HPL



1. BASIC PRINCIPLES

Storage, handling and preparation

Always ensure that Compact HPL panels, worktops and splashbacks are laid flat, fully supported and stored in a dry, well-ventilated location at 10 to 30°C and 40 to 60% relative humidity (RH). Do not stack them vertically except for short periods during transport.

To prevent scratches when handling the panels, pick them up one at a time. Do not slide them.

Acclimatise them for 48 to 72 hours to the environment where they will be installed. Temperature and humidity must be at normal levels (18 to 25°C and 40 to 60% RH).

Before installing

- Ensure that the cabinets and frame are level.
- Leave a space under the worktop to vent condensation and heat from household appliances.
- Leave a gap at least 3 mm wide around the worktop and splashback to compensate for expansion and contraction.
- If working with open cabinets, the maximum distance between supports is 600 mm. Beyond that distance, additional support is required.
- If so, install a batten against the wall to reinforce the upper rear section of the cabinets.
- Bonded 10 and 12.5 mm compact HPL worktops can overhang cabinets by up to 100 mm at the front and around the edges.
- For an island or a table with legs, the overhang can be up to 250 mm if a suitable, stable support structure is in place.
- Install a downstand or strip beneath the worktop to conceal the underside of the hobs. (This is usually hidden by the upper panel of the cabinet.)
- If installing a household appliance like an oven, calculate the vertical space needed to fit it beneath the hobs.

While installing

- Wear appropriate personal protective equipment at all times.
- Always test-fit before installing.
- Mark out all dimensions. Check that angles are square and horizontal surfaces level. Note the position of the sink, hobs, dishwasher and other accessories.

Please note: these guidelines do not replace those provided by the appliance or fixture manufacturer. **Always follow their instructions on the distance to be left between the appliance and other kitchen elements. Also pay careful attention to fastening methods.**

2. TOOLS

Do not use woodworking tools. Only use tools suited to working with high-density composite materials.

Industrial CNC machining:

- Set the feed rate to between 4 and 8 m/min and the minimum rotational speed to between 18,000 and 24,000 rpm.
- For cutting and edge milling, use a carbide-tipped straight cutter or form cutter (minimum diameter 12 mm).
- To machine the jointing grooves, use a carbide-tipped blade of the right diameter for the biscuits.
- To machine the drainer grooves, use a V-shaped cutter with a 6 to 10 mm diameter (depending on the shape).

Manual machining:

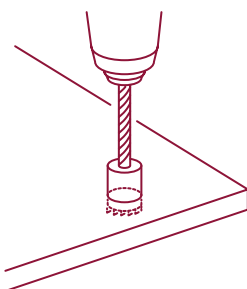
- **Handheld circular saw (plunge saw with guide rail):** at least a 44-tooth trapezoidal carbide-tipped blade.
- **Handheld router:** rotational speed of at least 18,000 rpm and at least a Z2 carbide-tipped bit that is 12 mm in diameter. Carbide-tipped form cutter.
- **Cutting jigs:**
 - Cutting jigs for jointing worktops.
 - Milling jigs for drainers.
- **Biscuit jointer:** carbide-tipped blade of the right thickness for the biscuits.
- **Jigsaw:** metal-cutting blade.
- **Drill:** 8 to 12 mm HSS drill bits and bimetal hole saw of a suitable diameter.
- **Laminate trimmer:** carbide-tipped bit and a rotational speed of at least 14,000 rpm.
- **Double-cup suction lifter, seaming tool, retaining clips, block for retaining clips.**
- **Screws:** metric thread, minimum diameter 3.5 mm, raised head and flat tip.
- **Insert nuts:** PVC, steel or brass. Hammer-in or screw-in.
- **Caulking gun**
- **COMPLETE adhesive (available from Polyrey) or polyurethane adhesive**
- **COMPLETE coloured sealant (available from Polyrey) or silicone sealant**
- **White spirit and lint-free cloths**
- **Spacer and scraper for the sealant and adhesive**

3. INSTALLING THE SYSTEM

1. CUTTING

- Compact HPL panels are hard and dense, and so require special tools. Carbide-tipped blades ensure a professional finish if occasionally used, although diamond-coated blades are required if used daily.
- Compact laminate panels can be milled using a handheld circular saw with at least a 44-tooth carbide-tipped blade.
- A plunge saw with a guide rail is preferred. Make all cuts with the decorative side facing downwards.
- A manual router can also be used. Use at least a Z2 or multi-edge carbide-tipped bit that is 12 mm in diameter. If using a router, do not cut through the panel in one go. Instead, cut it in two or three passes, depending on whether it is 10 or 12.5 mm thick. Use the same method with industrial tools like CNC machines.
- Ensure tools have a rotational speed of $\geq 18,000$ rpm.
- **If machining coloured cores, reduce the feed rate to between 4 and 6 m/min and take care to prevent burn marks on the edges. Increase the rotational speed for better quality machining. The recommended speed is 20,000 rpm.**
- If the tool needs time to reach its maximum speed, wait until it does before cutting the panel. This prevents burn marks (especially with coloured cores).
- If the guide rail is not built into the tool, use clamps to prevent the guide and panel from moving during cutting.
- Use masking tape to ensure a better cut. Doing so also prevents chipping (if the blade has lost some of its edge) and makes markings easier and clearer on the worktop or splashback.
- To cut out holes for sockets, use a bimetal hole saw of the appropriate diameter.

2.1 DRILLING & MACHINING



- To cut holes for pipes or wires, make through holes with a HSS drill bit or a bimetal hole saw of the appropriate diameter.
- To fit an undermount sink, legs or cooking hobs, drill blind holes.
 - ▶ **If using screw fasteners:**
 - Drill a pilot hole that is 0.3 mm smaller in diameter than the screw.
 - Use flat-tip metric screws at least 3.5 mm in diameter.
 - Raised-head flat-tip screws are recommended. Flat-head screws may also be used.
 - ▶ **If using insert nuts:**
 - Use PVC or metal nuts.
 - Drill a pilot hole. If the insert nut is to be hammered in, make the pilot hole the same diameter as the insert nut. If it is to be screwed in, make the pilot hole 0.3 mm smaller in diameter than the insert nut (depends on type of metal).
 - ▶ The depth of the hole must be at least 3 mm less than the total thickness of the compact panel.
- Leave at least 20 mm between holes or between any hole and the edge of the panel.
- Place a sacrificial panel under the compact panel to prevent chipping and damage.

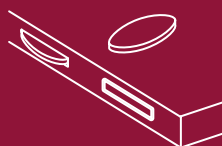
2.2 MACHINING: INSERTING SINKS AND HOBS

- **To make cut-outs for a sink or hobs:**
 - ▶ **Manual machining:**
 - Drill the four corners using a 10 mm diameter drill bit.
 - Begin cutting using a plunge saw with a guide rail and a 44-tooth carbide-tipped blade.
 - Finish the corners using a jigsaw with a metallic blade.
 - ▶ **Industrial machining:**
 - Use a 12 mm diameter carbide-tipped bit.
 - For black cores, set the rotational speed to at least 18,000 rpm and the feed rate to 6 to 8 m/min.
 - For coloured cores, set the rotational speed to at least 20,000 rpm and the feed rate to 4 to 6 m/min.

3. ASSEMBLING THE WORKTOP

- For the best joint, ensure that the edges of the worktops to be joined are straight and perfectly parallel.
- ▶ Take the decorative side of the panel as the reference side for all milling. This will ensure proper assembly.
 - ▶ The panels can be joined using straight, bird's beak or other edges as required.
 - ▶ If a bird's beak is used, fill the gap in the joint with **COMPLETE coloured sealant** (available from Polyrey).
 - ▶ The joint can be either permanent or detachable.
 - **Manual machining:** Use a biscuit joiner to join the panels with biscuits or tongues.
 - **Industrial machining:** Use a CNC milling station with data directly imported from CAD/CAM software.

3.1 JOINTING WITH BISCUITS OR SIMILAR



1- Permanent manual jointing technique for 10 to 12.5 mm Compact HPL:

- a) Apply masking tape and mark out the location of the notches.
- b) Prepare biscuits that are 4 to 7 mm thick and 20 to 27 mm wide.
- c) Use five to six biscuits for every 650 mm of panel width.
- d) Use the biscuit jointer to machine the notches into the centre of the edge of each panel. Leave at least 1.5 mm of substrate on either side of each notch.
- e) Insert the biscuits and test-fit the joint without adhesive.
- f) Pull the panels back apart. Apply a bead of **COMPLETE neutral adhesive** or **COMPLETE coloured sealant** into the notches and along the edge of the panel (both available from Polyrey).
- g) Press the panels together using the double-cup suction lift or any other tool that holds them together while the adhesive cures.
- h) Remove excess adhesive using the scraper and a cloth soaked in white spirit or denatured alcohol.

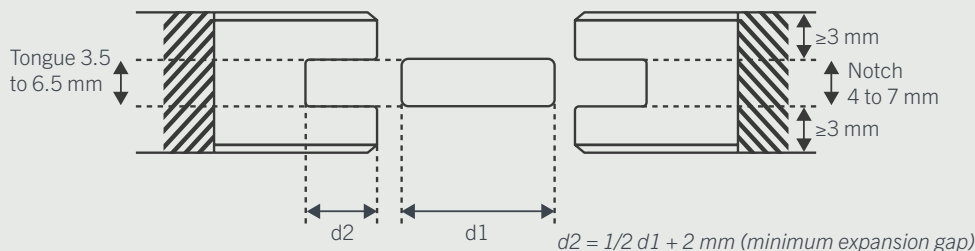
2- Detachable joint. Only for use with 12.5 mm Compact HPL:

- LAMELLO P-System.
- Use the ZETA P2 biscuit jointer.
- CNC machining compatible with P-System.
- Other assembly tools: CLAMEX P + BISCO P10 alignment biscuit for CLAMEX P10.
- Follow the steps outlined under heading 1 above (bullet points a, b and d).
- Insert two CLAMEX P connectors + three BISCO P10 alignment biscuits for CLAMEX P10.
- Join the two panels and press together to ensure proper assembly.

3.2 TONGUE-AND-GROOVE ASSEMBLY

Permanent joint for 10 and 12.5 mm Compact HPL:

- The two panels are joined by cutting notches and gluing the tongues into the notches.
- The notches must be 2 mm deeper and 0.5 mm wider than the tongues.
- Use a biscuit jointer to machine the notches.
- The tongues can be made of plywood, metal or hard PVC.

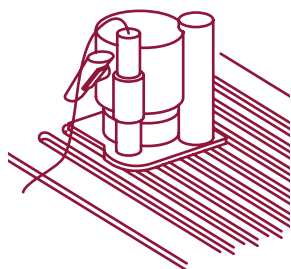


3.3 DOVETAIL JOINT

Detachable joint for 10 and 12.5 mm Compact HPL:

- The panels are assembled by milling the appropriate dovetail joint.
- This technique is less widely used with Compact HPL.

4. MACHINING THE DRAINER GROOVES



There are two ways to rout a drainer:

a) Industrial method using a CAD/CAM system connected to a CNC machining station

- Use a carbide-tipped router bit at least 8 mm in diameter that matches the width of the drainer grooves. A V-shaped bit is recommended.
- Space the grooves between 10 and 15 mm apart.
- Recommended groove depth is 5 to 6 mm.
- Slope the grooves so that the water drains off properly.
- Feed rate for Compact HPL:
 - Black or Extra Black core: 6 to 8 m/min
 - White, Beige, Grey and other cores: 4 to 6 m/min
- Rotational speed:
 - 18,000 to 24,000 rpm (all products).

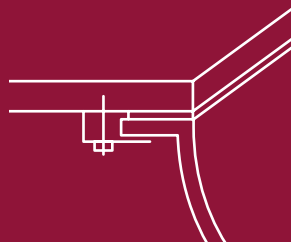
b) Manual method using a handheld router:

- Use a jig suited to the shape of the planned drainer.
- Use a carbide-tipped router bit at least 8 mm in diameter that matches the width of the drainer grooves. A V-shaped bit is recommended.
- Create a slope for the water to run off. The recommended groove depth is 5 to 6 mm.
- Set the rotational speed.
 - For black cores: at least 18,000 rpm.
 - For coloured cores: at least 20,000 rpm.
- Move the router through the panel in a slow, steady fashion. Avoid any jerky movements.

Finishing the drainer:

- Sand the grooves with 180 to 300 g/m² sandpaper or steel wool. Be careful not to damage the surface.
- **With all coloured cores (except white)**, apply linseed oil with a cloth. Be careful not to mark the surface.

5. INSTALLING THE SINK



A resin or metallic sink can be installed with Compact HPL.

Both drop-in and undermount sinks may be used. Follow the manufacturer's instructions.

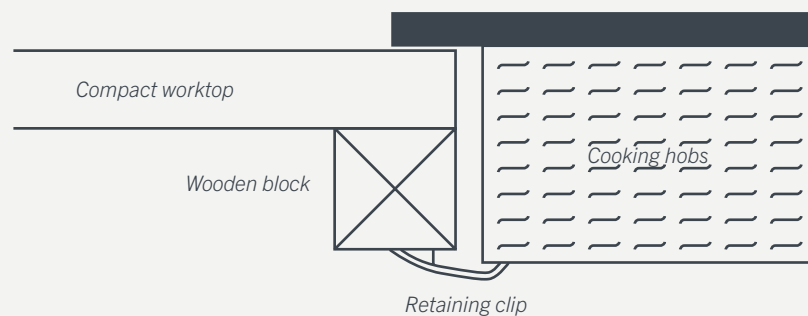
- Place the sink at least 40 mm from the long edges of the worktop and 150 mm from adjacent joints.
- Round the four corners of the cut-out to a radius of at least 5 mm.
- Apply a bead of adhesive between the worktop and sink before final assembly.
- **Always use mechanical fasteners as well as the adhesive.**
- Use blocks and retaining clips to secure the sink in place.
- Seal the edge of the sink with **COMPLETE coloured sealant** (available from Polyrey) or an appropriate silicone sealant.
- To install an undermount sink:
 - Sand the edges of the compact panel with 180 to 300 gr/m² sandpaper or steel wool.
 - Using a cloth, apply linseed oil to the edges of coloured-core panels (except white).

Ceramic sinks are not recommended because of their weight. Please contact Polyrey technical support for help.

6. INSTALLING COOKING HOBS

Gas, electric and induction hobs can be installed with Compact HPL.

- Leave at least 50 mm between the hobs and splashback.
- Leave at least 40 mm between the hobs and the front edge of the worktop.
- Round the four corners of the cut-out to a radius of 5 mm.
- Use a 50 × 50 mm wooden batten to reinforce the worktop between the wall and the cut-out for the hobs.
- **Always secure hobs with mechanical fasteners.**
- Use blocks and retaining clips to secure the hobs in place.
- Protect the worktop edges with a suitable aluminium foil.
- **Always allow air to circulate around the front of the hobs.** Create a space no bigger than 3 mm in the face of the cabinet.
- A pan drawer or false drawer is recommended under the hobs.



7. FINISHING

Whatever your needs, **we can help you choose the right product for your project.**

- Ready-to-use: Worktops and splashbacks. Convenient sizes and pre-bevelled edge profiles.
- Full panels: Maximise the use of each panel across your entire kitchen. Can be used to make a worktop and a splashback at the same time.

Full panels

a) Machine the edges to the desired profile and radius.

► CNC machining:

- Use a carbide-tipped form cutter set to the required angle for the desired radius.
- Set the cutting depth to no more than 2 mm per pass.

► Manual machining:

- Use a laminate trimmer with a rotational speed of at least 18,000 rpm.
- Use a carbide-tipped form cutter set to the required angle for the desired radius.
- If using a router, select the right form cutter to achieve the desired profile.

b) Finishing the edges:

- Use 180 to 300 g/m² sandpaper. Attach to an orbital sander or sand by hand with or without a sanding block.
- Use steel wool.
- Using a cloth, apply linseed oil to the edges of coloured-core panels (except white).

8. SECURING & JOINTING WORKTOPS

Worktops can be secured in two ways:

a) Mechanical fastening:

- **Screws:**

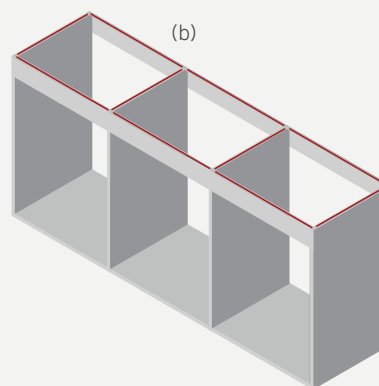
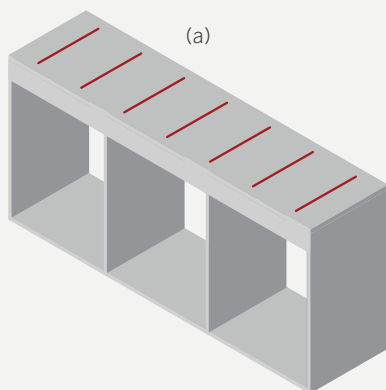
- Always drill a pilot hole with a HSS bit whose diameter is 0.3 to 0.5 mm smaller than the diameter of the screw.
- Depending on the application, use stainless steel or galvanised screws.
- The recommended screw diameter is 3.5 mm. The length from beneath the head to the tip should be 5 to 8 mm.
- The underside of the head should be flat, the screw drive a Phillips or torx, and the tip cylindrical.

- **Insert nuts:**

- Use screw-in or hammer-in metallic or PVC insert nuts for optimal fastening. Insert nuts are recommended for attaching table legs.
- With screw-in insert nuts, drill a pilot hole as above.
- With hammer-in insert nuts, drill a pilot hole to the diameter recommended by the manufacturer.

b) Bonding:

- Compact HPL panels can be bonded in place using **COMPLETE adhesive** (available from Polyrey) or a polyurethane adhesive. Use a caulking gun with an application nozzle.
- **The adhesive is always applied in beads at least 5 mm in diameter.**
- The worktop can be installed on two kinds of frame:
 - Solid chipboard or solid cabinet frame (option a):
 - Place the beads of adhesive no more than 30 cm apart.
 - The chipboard base should be at least 50 mm narrower than the compact panel.
 - Open cabinet frame (option b):
 - Along upper edges.
 - On all four sides.
- **Press down evenly on the worktop when bonding it in place.**



9. ASSEMBLING AND INSTALLING SPLASHBACKS



Check the splashback before assembling:

- Test-fit the splashbacks by placing them against the wall without adhesive or sealant.
- If the Compact HPL panels have a protective film, remove the film from both sides once they have been test-fitted.
- Leave a 3 mm expansion gap between panels, in corners and around accessories.

Begin assembly and installation:

► Prepare the background wall

- Splashbacks can be installed on plasterboard or existing tiling in renovation projects. If the plasterboard is new, it must be painted or a primer must be applied beforehand. If not, build a 3 mm frame onto standard plasterboard. Otherwise, use moisture-resistant plasterboard.

► Apply the adhesive

- Apply the adhesive to the back of the splashback. Use **COMPLETE adhesive** (available from Polyrey) or a polyurethane adhesive and a caulking gun with an application nozzle.
- **Always apply the adhesive in beads at least 5 mm in diameter. Space the beads 300 mm apart and leave a gap of 10 to 15 mm around the edge with no adhesive.**
- **Ensure that the beads are applied perpendicular to the long axis.**
- **Press down evenly on the splashback when bonding it in place.**

► Assembly

- Assemble the splashback panels end-to-end. Leave a 3 mm expansion gap between panels, in corners or around accessories.
- Insert spacers for the expansion gaps.

► Jointing

- Once the adhesive has cured (2 to 4 hours), remove the spacers. Seal the gaps where the splashback meets the worktop or the wall to prevent water ingress. Use **COMPLETE neutral adhesive or coloured sealant** (both available from Polyrey). A silicone sealant may also be used.
- Wipe away excess adhesive or sealant with white spirit. With the Touch, Roche and Touch Roche finishes, use a degreaser or denatured alcohol.

If installing a cooker splashback, leave at least 30 mm between it and the nearest edge of a gas*, electric or induction cooker.

**Avoid any direct contact with flames.*

10. USE OF SURFACES

All our worktops are tested to EN438 for horizontal use. We also carry out additional use and cleaning tests to ensure that our products meet your expectations every day.

Take special care with our matt and textured surfaces like Alliage, Extramat, Touch, Touch Roche, Touch Linimat and Roche (except Reysitop®).

Common damage like micro-scratches and changes in gloss will show up more on these surfaces, particularly against dark decors.

However, superficial micro-scratches on the Touch and Touch Roche finishes can be repaired* using a magic eraser or a damp cloth and an iron.

N005 Noir Roche: Roche is a deep finish. Repeated rubbing of the surface can cause visible changes such as a white, faded appearance. This does not affect the product's technical performance.

** If the surface is badly damaged, we cannot guarantee that the damage will completely disappear, only that it will be less noticeable. Magic erasers should only be used occasionally.*

11. CARE AND MAINTENANCE

The best way to ensure that your worktop lasts is to protect it. Observe the following use and cleaning guidelines.

Protecting your worktop

- **Protect the surface from sources of heat**

Never place hot ovenware directly onto your worktop. Always use table mats. Our Compact HPL splashbacks are suitable for all types of cooker, including gas. Leave 50 mm between the splashback and hobs. Avoid direct contact with flames.

- **Protect the surface from scratches**

Never use abrasive sponges for cleaning.

Do not cut directly on the surface with a knife.

Protect the surface from excessive rubbing. Do not slide abrasive objects like ceramic plates over it. Avoid placing sharp or metallic objects against your splashback.

- **Protect the surface from stains**

Immediately tidy up any spills or messes to prevent permanent staining.

Do not leave splashes or pools of water or other liquids to stand to avoid streaks, marks and limescale.

Place a protective covering between the worktop and coffee machines or kettles when descaling.

Cleaning your worktop

- **Routine cleaning steps**

Clean the surface using a non-abrasive sponge and a mild household detergent. Rinse with clean water then dry with a soft cloth.

Gently clean the entire surface, not just the dirty area, to avoid leaving marks.

Minimise the use of cleaning products that leave smears on the surface. If smears do build up on the surface, clean with a soft brush.

When cleaning surfaces with the Touch finish, use products that contain less than 5% surfactants.

Never use abrasive, acidic or alkaline detergents (scouring cream, black soap, lime scale remover, soda-based cleaners, bicarbonate of soda, bleach, hydrochloric acid, etc.). Do not clean the surface without wetting it.

- **Removing stains**

Remove stubborn stains like ink and varnish with conventional solvents. Some examples are nail varnish remover, acetone, white spirit and denatured alcohol. Then repeat the routine cleaning steps above (lather, rinse, dry).

Test on a small area first. Please refer to the manufacturer's user guide if adapting the method of use.

If removing stains from surfaces with the Touch finish, use a magic eraser and a stain remover. Leave the stain remover to act for 30 minutes then clean gently. Always move the magic eraser in the same direction. Lastly, rinse and dry.

- **Disinfection**

Use conventional household disinfectants.

Test on a small area first. Always refer to the manufacturer's user guide for instructions for use.