

PROCESSING INSTRUCTIONS

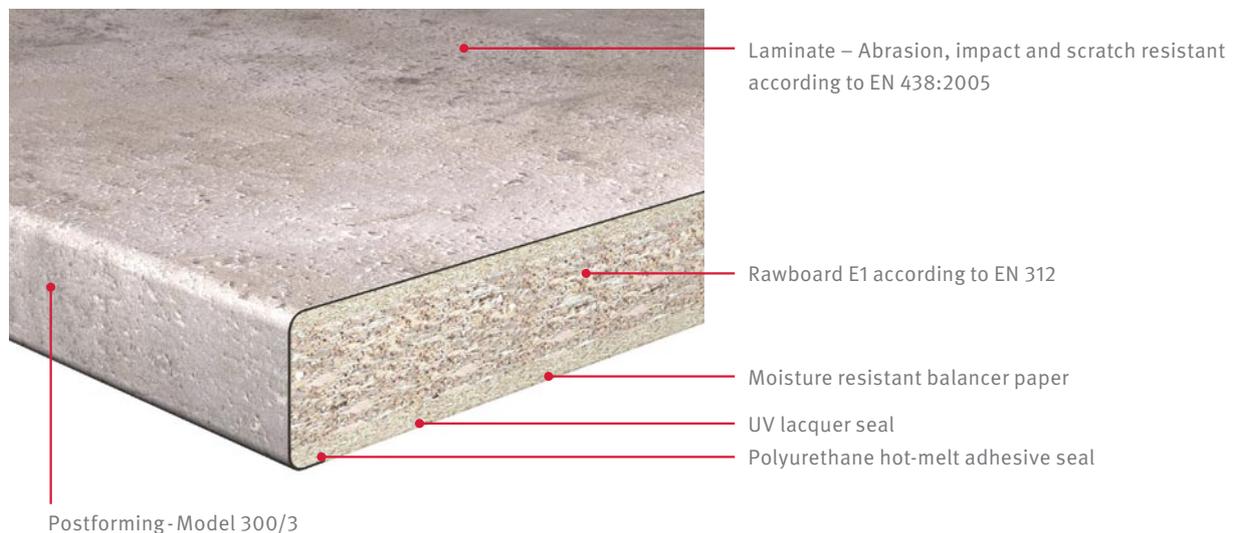
EGGER EUROSPAN® WORKTOPS



Due to their functionality EUROSPAN® worktops are used in kitchens, bathrooms and offices, but also for shopfitting solutions and domestic furniture. Whatever they encounter on a daily basis, the surfaces will retain their high performance characteristics providing that you follow our recommendations on processing and assembly very closely. The following instructions are for a kitchen work surface.

Description of the material

EGGER EUROSPAN® worktops are composite elements consisting of EUROSPAN® E1 rawboards, bonded seamlessly on surface and profile areas with decorative EGGER laminate. The utilisation rate of a worktop is basically determined by the laminate properties, such as abrasion resistance, impact resistance and scratch resistance. The reverse side of the worktop is finished as standard with a moisture-resistant balancer paper (GZP). To protect against moisture, the front edge of the worktop is coated on the underside with a UV lacquer seal and, depending on the profile model – for example Model 300/3, an additional PU hot-melt adhesive seal.



For more detailed information please refer to the “EGGER EUROSPAN® worktops” technical data sheet.

Processing

HANDLING

Check the EUROSPAN® worktop for obvious damage after removing the packaging. Anyone involved in transporting the worktops should wear personal safety equipment (safety shoes, gloves, suitable work wear, etc.). **Please bear in mind the weight of the worktop!**

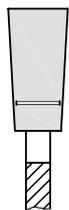
Model	Length	Width	Thickness	Weight
300/3	4,100 mm	600 mm	38 mm	~ 58 kg
300/3	4,100 mm	920 mm	38 mm	~ 87 kg

CUTTING

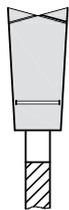
The worktops can be cut to size using standard woodworking equipment, e.g. panel saws, bench circular saws, hand-held circular saws or jigsaws and also CNC routers. Panel saws or bench circular saws are generally used to cut the worktops to size. A good cutting result depends on different factors including whether the decor side is facing upwards, saw blade projection, feed rate, tooth shape, tooth spacing, motor speed and cutting speed. **Example: Circular saw**

- Cutting speed: approximately 40 to 60 m/sec.
- Rotational speed: approximately 3,000 to 4,000 rpm.
- Feed rate: approximately 10 m/min (manual feed)

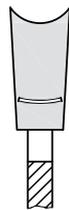
With the exception of panel saws and CNC routers, all cutting involves manual feed. Due to the high-quality melamine resins used for the surface of the EGGER laminate, the tool wear is considerably greater than with conventional wood-based materials. We recommend that you use carbide metal-tipped or even diamond-tipped saws cutters or router bits. Use the following tooth shapes depending on the standard of finish you require (coarse or fine cut):



Flat tooth



Alternate bevel tooth



Duplovit tooth
Hollow tooth face



Duplovit tooth
with bevel



Pointed duplovit
tooth



Trapezoidal
flat tooth

Use a cutting guide when working with a hand-held circular saw or jigsaw. Cutting must be from the underside of the board.

Saw type	Decor side	Application
<p>Panel or bench circular saws The worktop lies on the guide carriage and is guided towards the bench circular saw.</p> <p>Postformed edge towards the guide rail.</p>	above	<p>Postformed edge</p> <p>Feed direction</p>
<p>Hand-held circular saws or jigsaws The hand-held circular saw is guided against the worktop.</p> <p>Postformed edge towards the operator.</p>	underside	<p>Postformed edge</p> <p>Feed direction</p>

EDGING

The exposed edges of the EUROSPAN® worktop can be edged with thermoplastic EGGER ABS edge banding or EGGER melamine edging tape. For the manual application of melamine edging, normally PVAc glues or contact adhesives are used. The PVAc glue is evenly applied to the clean and dust-free chipboard edge using a paint brush. Then the melamine edging is pressed on with an edge press, glue press clamp or screw clamp using a stiff block of wood for protection and ensuring that there is sufficient overhang of edging on both the face and the underside of the worktop. The setting time can be substantially decreased by using heating bars.

Please follow the instructions provided by the machine manufacturer and adhesive supplier.

Edge milling cutters, files, chisels or sharp block planes are used for the finishing of melamine edging. The cutting should always be with light pressure at an oblique angle against the edge (shear action). EGGER melamine edging and EGGER edging ABS for worktops are decorative edges, which have a protective and a design function for the finishing of worktops. Exposure to moisture in unprotected areas of the edges and well as in the hob and sink cut outs will lead to swelling. This is also the case with worktops which have a so-called P3 (V100) chipboard core, which is misleadingly described as ‘moisture resistant’.

For more detailed information please refer to the “EGGER Edging ABS” processing information.

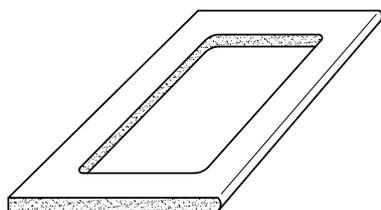
CUT-OUTS

Before processing, ensure that the worktop is supported securely so that the sawing, routing or drilling work is not likely to cause any damage. In particular, narrow board areas surrounding apertures can break or crack if the board is inappropriately handled during processing. The board cut-outs should also be secured so that they cannot break or fall out in an uncontrolled way and thereby cause injury to individuals or damage property.

Oven and sink cut-out edges should be radiused (minimum radius $\geq 5\text{ mm}$) as sharp edges have an adverse effect on the material and can lead to crack formation (see illustration). This applies particularly to the hob area where the frequent exposure to heat causes the laminate to dry out, thereby increasing shrinkage tension.

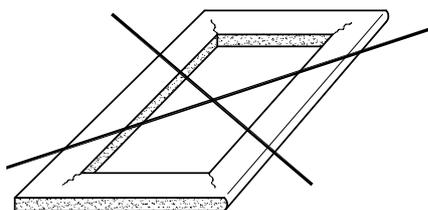
Please specifically observe the instructions and installation templates supplied by the respective manufacturer!

The cut-outs should preferably be made using a portable hand router or CNC milling machine. When using jigsaws, the cut-out corners should be pre-drilled with an appropriate radius – see illustration above – and the cut-out sawn out from radius to radius. You should cut from the underside of the board to prevent the laminate coating from ripping off. The edges should be finished by means of sandpaper, filing or manual top milling to eliminate cracks due to chipping.

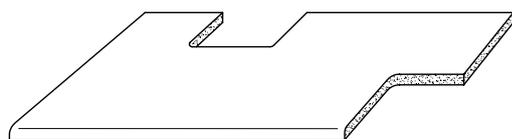


Correct!

Illustration 1

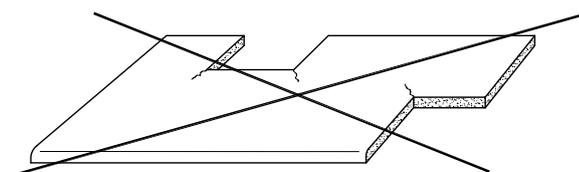


Incorrect!



Correct!

Illustration 2



Incorrect!

SEALING EDGES, CUT-OUTS AND DRILLED HOLES

EUROSPAN® worktops are effectively protected from moisture penetration by the laminate surface. Moisture and damp can still reach the substrate, however, via unprotected edges such as cut-outs, corner joints, mitres, long back edges, drill holes, screw holes and fixtures. **This means that the necessary sealing work must be carried out in the final installation.**

The best products for sealing worktops have been found to be sealing profiles and self-curing sealants such as silicon rubber, polyurethane and acrylic. When using sealants, you must also use a primer; either one that forms a film or a cleaning primer depending on the material.

You must follow the manufacturer's instructions carefully when using these materials.

It is absolutely essential that you clean the areas you are sealing and to allow the manufacturer's specified venting time when using primer. Apply the sealant leaving no gaps or holes and then smooth over with water and detergent. Mask off areas near joints to prevent the surface from becoming dirty. Any pipes or leads that are to be brought up through the worktop should be centred with a minimum distance of 2 to 3 mm on either side and carefully sealed (see illustration 3).

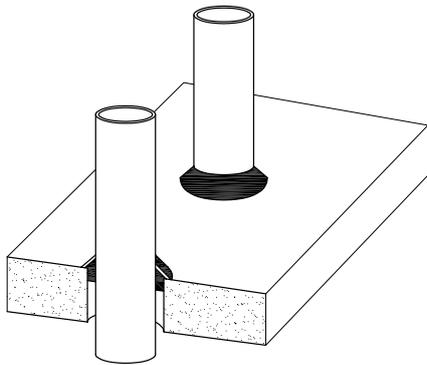


Illustration 3

Cut edges can also be sealed using a two-part lacquer or two-part adhesive. Manufacturers supply sealing rings, profiles or collars with attachments such as mixer taps, sinks and hobs. Always follow the manufacturer's instructions when fitting these items.

POSITIONING AND FITTING SINKS AND HOBS

Cut-outs for hobs or sinks must be produced according to the measurements and positioning details and/or using templates supplied by the manufacturer. The cut-out edges must be carefully protected against moisture according to topic „Sealing edges, cut-outs and drilled holes“. Accompanying or integrated dry seals and fastening screws provided by the manufacturer must be used according to their assembly instructions (see illustration 4 and 5).

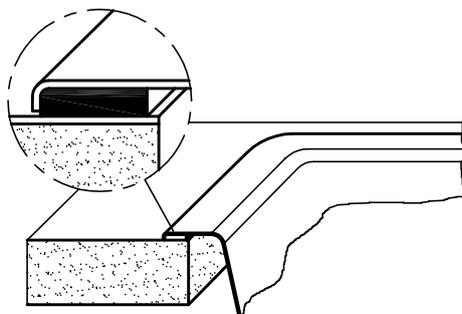


Illustration 4

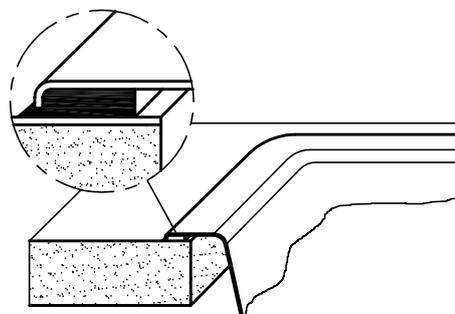


Illustration 5

For any type of hob – stainless steel, glass ceramics – the cut-outs should in all cases be made according to the instructions and installation templates supplied by the manufacturer. Ensure correct centring and an adequate safety margin to the cut edge, particularly for hobs. As additional protection against heat absorption we recommend also fitting self adhesive aluminium tape or a metal profile around the edges. Follow the manufacturer’s instructions. The hob must not abut against the surface for safety reasons, as elevated temperatures of up to 150 K are possible in the event of a malfunction. The worktop should not measure less than 50 mm at any one place. For ergonomic reasons, the distance between the hob area and an upright cupboard should not be less than 300 mm. Allow for the hob manufacturer’s specified safety margin. The same distance is recommended for the gap between the sink and the hob (see illustration 6).

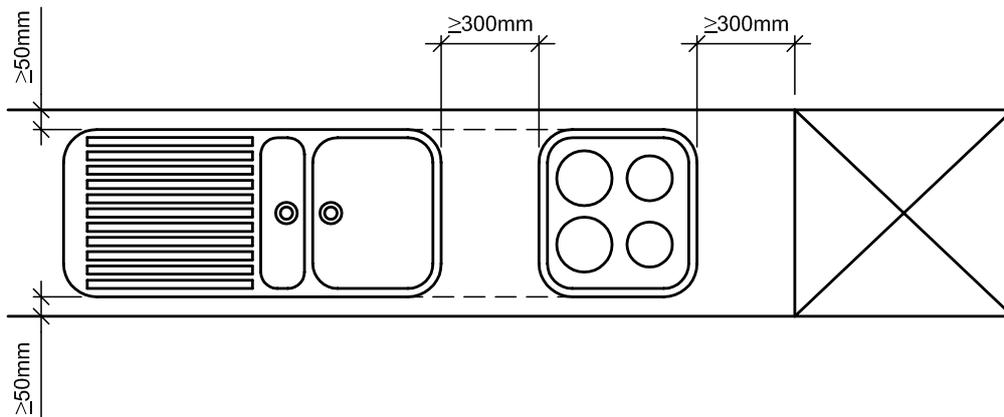
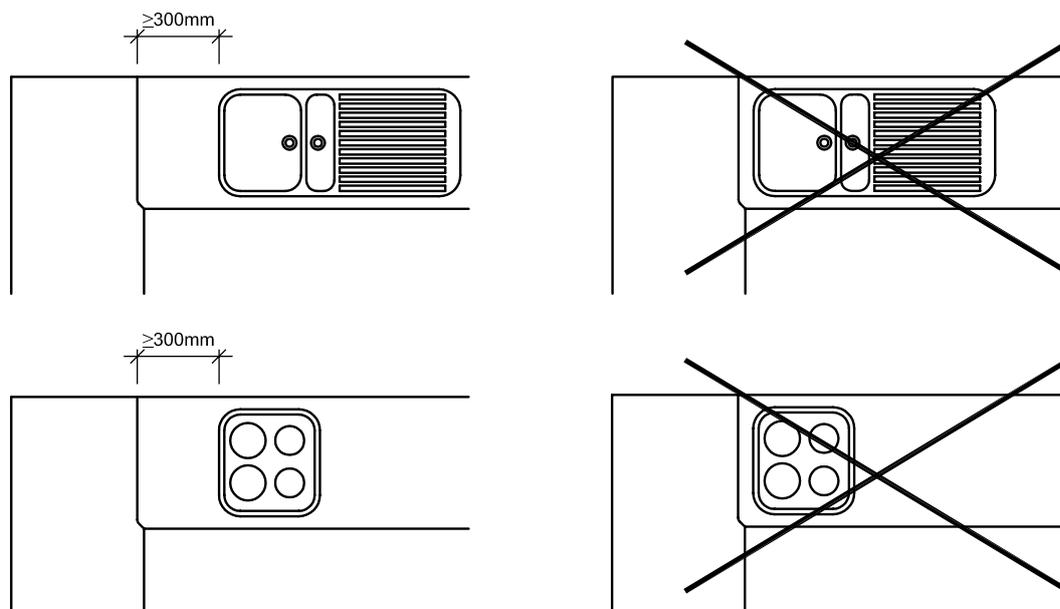


Illustration 6

For safety reasons as much as for ergonomic reasons, kitchen designs should be discussed with a kitchen specialist and fitting carried out by an authorised professional. Particularly electricity, gas and water supply connections must be carried out by trained specialists. In the region of corner connections, a minimum distance of 300 mm must be taken into account during planning (see illustration 7).



Correct!

Incorrect!

Illustration 7

Once the cut-out sections have been implemented in the worktops, any further transportation must be carried out while observing the utmost caution as to prevent “snapping at thin points”. Worktops should be carried upright because cut-outs and worktop can be damaged more easily if the boards are carried horizontally.

WORKTOP JOINTS AND CORNER JOINTS

In general EUROSPAN® worktops can span distances of 3,050 mm to 5,600 mm without joints, and tops need rarely be joined end to end. However, they are frequently joined at corners. These should not be weakened by internal apertures or cut-outs such as for hobs or sinks (see illustration 7). Corner joints on worktops are made by mitring on circular saws or routing using CNC routers and / or using special hand-held routers with the aid of templates (see illustrations 8 and 9).

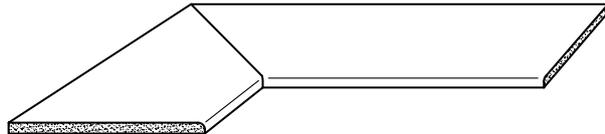


Illustration 8

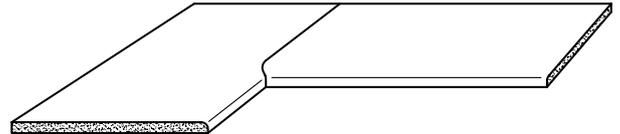


Illustration 9

Since January 2009 we offer the EGGER Template (see illustration 10). Worktop corner connections can be easily made using the EGGER milling template and commercial hand-held router bits and end milling cutters. The milling template may either be used for EUROSPAN® worktops (solid chipboard core) or EUROLIGHT® worktops (lightweight cardboard honeycomb core). In addition to milling corner connections (contour milling) you can also use the template to make the required millings for the worktop connectors.

Please find more detailed information regarding the operation of the EGGER milling template in the operating instructions of “EGGER milling template”.



Illustration 10

Alternatively, metal connection profiles can be fitted. These profiles are easy to install but can have a negative impact on the overall appearance of the work surface, as it breaks up the decor and can also be difficult to keep clean (see illustration 11).

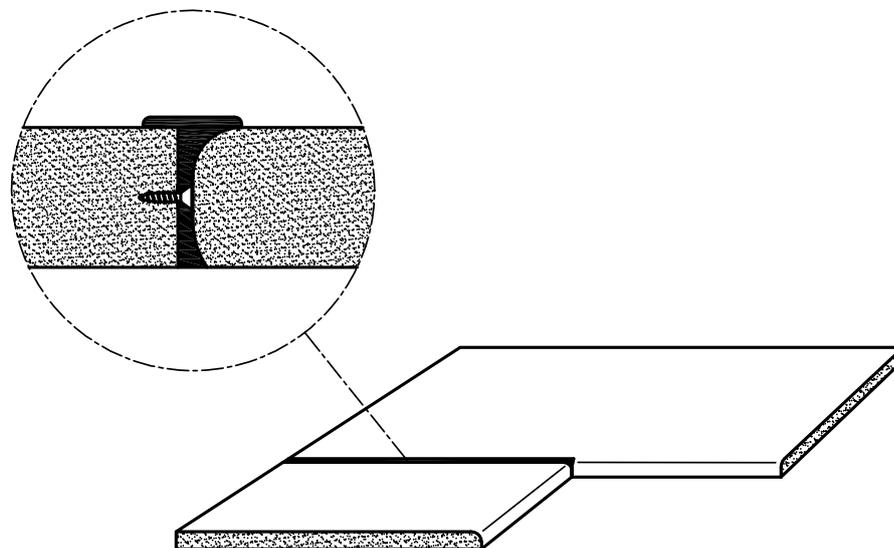


Illustration 11

Worktop joints and corner connections need to fit perfectly and be completely sealed, and not just for aesthetic reasons. They need to repel any moisture which can cause swelling of the chipboard. The individual worktops are attached using worktop connectors (see illustration 12) as well as fixing aides, so-called biscuits, and additional glue to strengthen the bond. The number of worktop connectors is dependant upon the width of the worktop. In general 2 worktop connectors are used for widths up to ≤ 600 mm and 3 worktop connectors are used for worktops with a width of ≥ 600 mm.

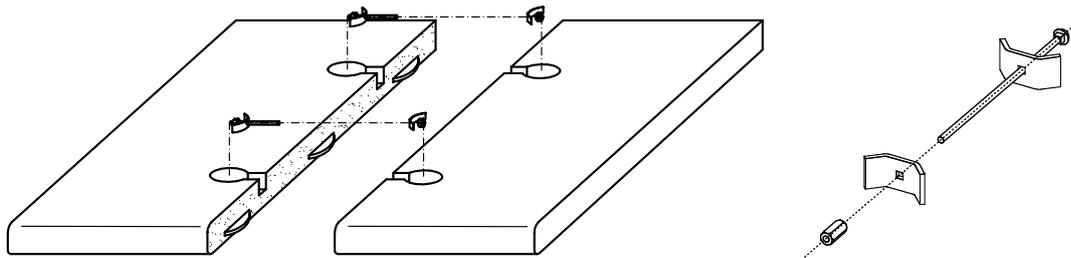


Illustration 12

The 2 worktops would then be butted together using adhesive and biscuits joints (slots are milled out along the joint and flat wooden plate inserted approximately 20mm in diameter), then tightened up using worktop connector bolts located in slots made to the underside of the worktop giving you a seamless joint. Flush fitting worktop surfaces are achieved by always measuring the locations of the crescent shaped biscuit slots from the top of the worktop surfaces and by ensuring a tight fit of the biscuits themselves.

The following work stages should be observed when executing worktop corner joints:

- a.] Remove any raised wood chips near the cut or milled edges with sand paper (grit 120).
- b.] Bevel the laminate slightly along the butt joint with a sanding sponge or sandpaper (grit 360).
- c.] Lay the worktops on the aligned cupboard framework and check the joints and fitting holes for correct fit.
- d.] Apply glue, D3 quality, to the central and lower area of the joint.
- e.] Apply sealant (e.g. Helmipur SH 100) evenly and continuously to the top routed or cut edge as well as to the profile and long back edge. You should do this just before screwing the worktop connectors in place.
- f.] Join worktops, insert fittings and tighten screws slightly. Align worktops horizontally (wedge or lever) and vertically (rubber mallet or clamps – protect with cushion blocks). Tighten worktop connectors fingertight after aligning. When tightening, you must check that the two worktop surfaces remain aligned and the sealant emerges on all sides. Do not place any stress on the worktops while the sealant is hardening (see illustrations 13 and 14).
- g.] Remove excess sealant immediately. Clean the worktop surface using a suitable cleaning agent such as citrus cleaner or acetone. **Caution: Acetone can affect the surface if left for a long period.** We therefore recommend masking off the joint area with masking tape.

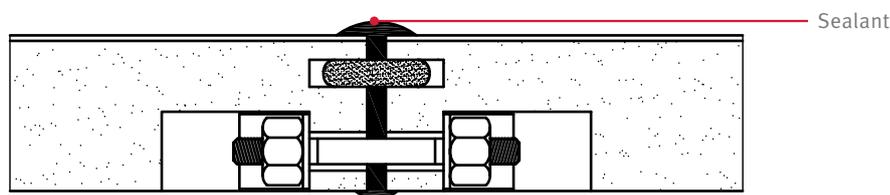


Illustration 13

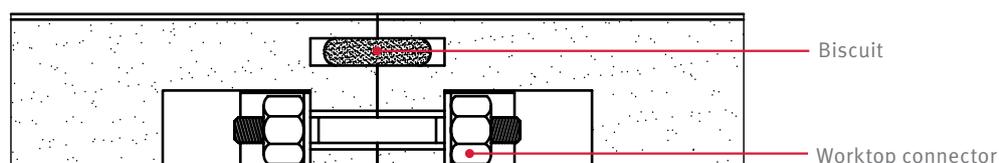


Illustration 14

Wall connection and anchoring

Before sealing the long edge of the worktop against a wall, make sure that it is not just adequately supported, but is also joined to the sub-frame. Stresses can otherwise occur that will interfere with the sealing joint. When fitting, make sure that the worktop is not tilted towards the wall. This will result in water collecting at the joint area. Clean and degrease around the sealant area on both the worktop as well as the wall joint and pre-treat with a bonding agent depending on the sealant used.

Even if using worktop upstands, you need to seal the long back edge and all transverse edges which abut to a wall with sealant (see illustration 15). When attaching the fixing rails provided with complete wall seal profile systems, ensure that the laminate is predrilled in the screw fastening area. The holes must be at least 1 mm larger than the screw diameter to prevent tension building up in the material (see illustration 16). We also recommend protecting the inside of the screw hole with sealant before fixing the screw.

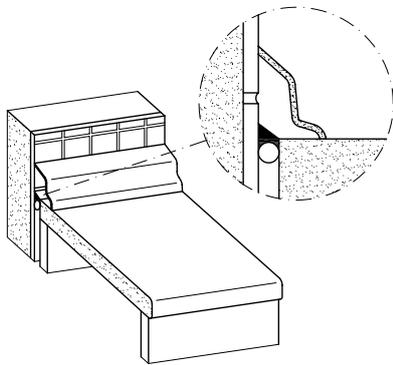


Illustration 15

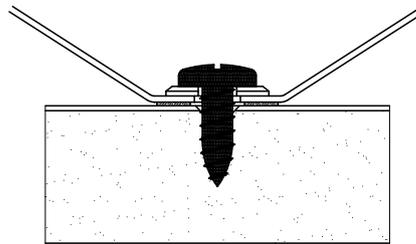


Illustration 16

Structural water-repelling measures

Worktops are particularly subject to steam and heat exposure near dishwashers and ovens. In addition to the lacquer coating and the PU hot-melt adhesive seal you should also protect the underside of the worktop by structural means. Appliance manufacturers supply aluminium repellent strips or protective cover plates, which you must use. This moisture-repellent strip or cover plate deflects and repels steam and heat (see illustrations 17 and 18).

Refer to the manufacturer's instructions carefully before assembling.

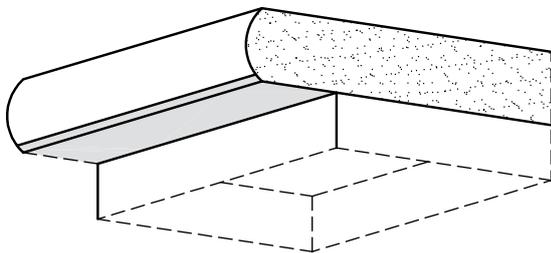


Illustration 17

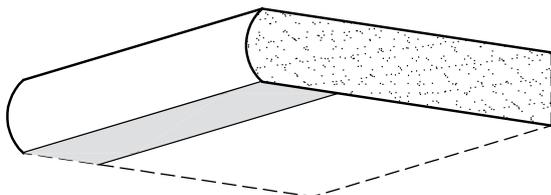


Illustration 18

Maintenance and cleaning recommendations

Thanks to their resistant, hygienic and waterproof laminate surfaces, EUROSPAN® worktops do not need special care. As a general rule, dirt and spilled substances such as tea, coffee, wine etc. should be cleaned immediately as the cleaning effort increases if they are left to dry. When necessary, cleaning should be done with non-aggressive agents. Cleaning agents must in particular not contain any abrasive components, as they may adversely affect the gloss level or scratch the surface. Due to everything from light and fresh to severe and stubborn stains being possible in daily use, which are caused by the most varied substances, correct cleaning is an important matter.

The following instructions should be observed in daily use:



Placing burning cigarettes on the worktop surface leads to surface damage.
Always use an ashtray.



Laminate surfaces should not be used as a cutting surface as this can also leave cutting marks on highly resistant laminate surfaces. **Always use a chopping board.**



Placing hot cooking utensils such as saucepans and frying pans directly from the hob or oven onto the worktop surface should be avoided, as, depending on the heat exposure, a change in the gloss appearance or damage to the surface can arise.
Always use heat resistant mats.



Spilled liquids should always be cleaned up immediately, especially in the areas around cut-outs and joints as prolonged exposure to some substances may cause a change in the gloss appearance of the laminate surface.

These recommendations apply especially to matt and gloss laminate surfaces. These have a distinctive look and feel, but have a greater tendency to show wear and tear.

More detailed information can be found in our leaflets:

- EGGER Laminate Structure ST9 Perfect Matt
- EGGER Products Structure STHG High Gloss
- EGGER Laminate Cleaning and Maintenance instructions

These processing instructions have been prepared to the best of our knowledge and with all due care. The information contained within this document is based on practical experience as well as in-house tests and reflects our current state of knowledge. It is intended for information only and does not constitute a guarantee in terms of product properties or their suitability for specific applications. We are unable to accept any responsibility neither for printing errors, errors in relation to Standards nor for any mistakes or omissions that may have otherwise occurred. It should also be noted that changes may be implemented as a result of the ongoing development process of EGGER EUROSPAN® or as a result of changes to Standards and/or in legislation. The contents may therefore not serve as an instruction manual nor does it constitute a legally binding basis. Unless otherwise stated, our General Terms and Conditions apply.