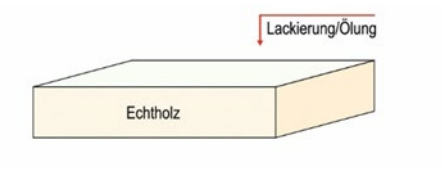
A SHORT MATERIAL COMPENDIUM.

▪▪▪ Solid wood fronts

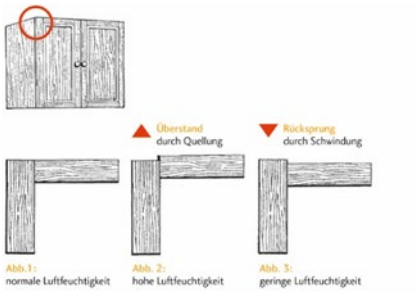


BENEFITS: Solid wood fronts - the ultimate in naturalness.
Wood is a naturally growing raw material. It retains its natural beauty and individuality when provided with a resistant paint finish or an oil coating.
Each front is unique and incomparable.

FIELD OF USE: Front and surrounding materials.

PRODUCTION PROCESS: Frame sections mainly consist of glued solid wood (glulam). The filling and the drawer front sections are veneered over. To ensure that the frame and filling look roughly the same, the frames at the front and back are veneered over. The basic material is very expensive and, as such, is in the top price category in the model groups.

▪▪▪ Sold wood and/or wood-based materials

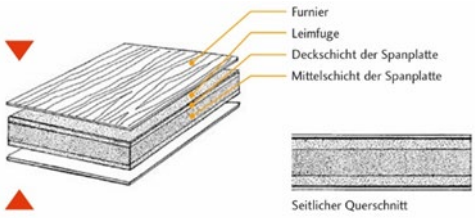


Solid wood is a "living" material which reacts, in particular, to air humidity.
Wood is said to "work" (to naturally contract and expand). Whilst these material specific properties can be slowed down by surface treatment, they cannot be completely stopped. Therefore ensure that the air humidity in your kitchen is ideally between 40% and 60% (relative air humidity).

If it is above or below this limit for only two or three days, there will be no adverse effects. And as regards your own wellbeing, this is the relative air humidity that most people feel most comfortable in.

As a result of the different regions in which it grows, wood - as a pure natural product - is subject to slight colour and structure variations. This is a quality trait that solid wood enthusiasts treasure.

▪▪▪ Veneer



Veneer is thinly cut "solid wood" with a thickness of up to 8 mm.
When glued onto wood-based materials, a similar appearance to solid wood is obtained as well as a reduction in susceptibility to air humidity variations.

▪▪▪ Wood-based materials (e.g. particleboard, HDF and MDF)

Wood-based material is the overall term for board material made of wood fibre, wood chips and veneer. Particleboard (also known as chipboard) is made of wood chips glued together under high pressure and at temperatures of approx. 100° C. The intermediate layer consists of coarse chips and the top layer of fine chips. This produces a "planking effect" ensuring that the shape of the board stays stable. Particleboards are always coated on both sides with veneer or plastic. HDF (HDF = high-density fibreboard) and MDF (MDF = medium density fibreboard) are made in a similar way to particleboard. In contrast to particleboards, fine wood fibres are used here. This results in a greater weight. HDF and MDF panels have an almost closed-pore surface and are particularly suitable for substrates made of 3-D film-coated fronts and coloured lacquered fronts.

▪▪▪ Plastics

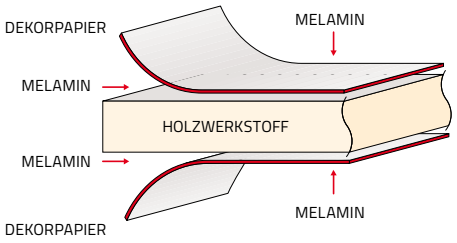
Plastics are mainly used as surfaces of fronts and carcases. A distinction is made between duroplastics and thermoplastics. Melamine resin is used as duroplastic. Melamine resin can be used in numerous ways. The decor can be patterned or of a plain colour. Usually having a smooth and non-porous surface, it is particularly easy to clean. Melamine resin-based laminates fulfil the particular requirements of worktops and, as such, are used in their production. Thermoplastic is used as the surface for fronts. Its advantage is that even flat profiles can be designed without joints.

▪▪▪ Melamine fronts (direct coating)

BENEFITS: Melamine fronts make possible a wide variety of decors either of a plain colour or printed in wood decors. The resultant materials are relatively low in price, easy to clean and extremely robust and thus represent the optimum kitchen furniture material.

FIELD OF USE: Front and carcase material.

PRODUCTION PROCESS: "Melamine fronts" involve resin-soaked decor papers being attached under pressure and temperature at the top and botto onto wood composite boards (chipboards or MDFs) in a single production process. Hot pressing causes the melamine resin coat between the pape and board to melt, thus creating an irreversible connection. Structuring agents in the press affect the surface. This may contain fine structures for excellent wood reproduction that also replicates the tactile qualities of wood.

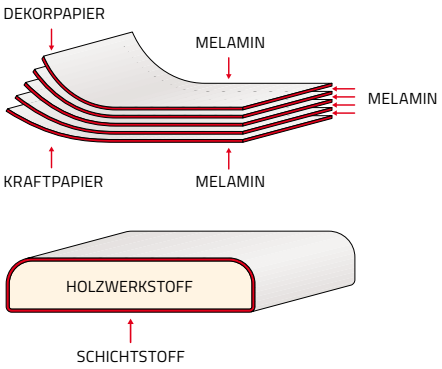


▪▪▪ Laminate fronts (two-part process)

BENEFITS: Laminate fronts are extremely robust, easy to care for and of the post-forming type and thus jointless both vertically (front) and horizontally (N-edge of the worktop). The surface is multi-layered and thus thicker than melamine fronts. As a result, the material is harder, with no pores and even more robust than melamine or directly coated material. There is also the scope to shape edges in a joint-free manner - referred to as "post forming". This involves applying compression moulding and thermal radiation to shape the laminate around the rounded or profiled edge.

FIELD OF USE: Front and worktop material.

PRODUCTION PROCESS: In a dual production process, several melamine resin-soaked decor and kraft papers are compressed into laminate and fitted onto wood composite boards (chipboards or MDFs). The laminate thickness is up to one millimetre. Here again, structuring agents in the pressing plate ensure that surface effects (from high-gloss to structured) are realised.

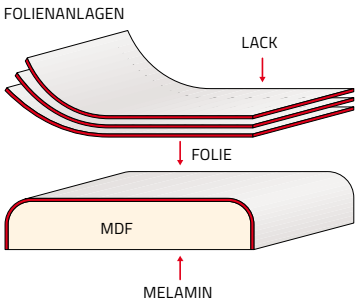


▪▪▪ Foil fronts

(smooth or profiled, e.g. paint laminate)
BENEFITS: Foil fronts are resistant to conditions prevailing in the kitchen. They cannot be beaten as regards price/performance. They are thus an attractive visual alternative to wood and paint fronts.

FIELD OF USE: Front material.

PRODUCTION PROCESS: Here, a number of polymer material layers are hot-pressed and then painted and stamped. A wood composite board – usually an MDF – is covered with this polymer foil with the exclusion of any restoring forces (no „"orange-peel"" effect) across its whole area and at the edges. The rear of the front is usually made of plastic.

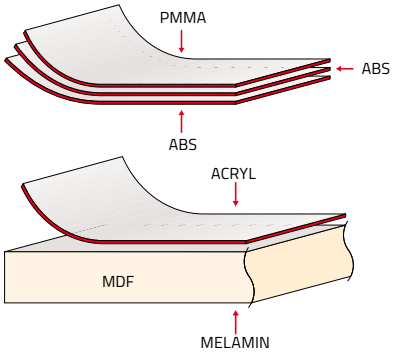


▪▪▪ Acrylic fronts

BENEFITS: Acrylic fronts have a very high gloss level and a considerable gloss depth. They resemble real glass but are nevertheless lighter, lower-priced and re-workable with normal wood tools. Excellent metallic effects can be created with acrylic fronts. Ease in caring for them is shown by the fact that minor scratches can be easily touched up with polish.

FIELD OF USE: Front material.

PRODUCTION PROCESS: Several layers of polymer plastics produce a material with a thickness of up to a millimetre. The top layer is made of either acrylic, PMMA or plexiglass. The material is bonded onto a melamine-coated MDF across the whole of its surface.



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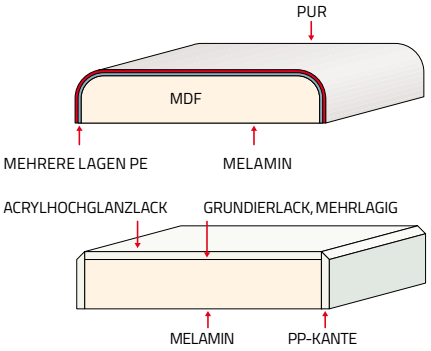
▪▪▪ Painted fronts

BENEFITS: Painted fronts can be manufactured in a great variety of colours - either in matt or in gloss. They are vibrant from a material aesthetics point of view, hard-wearing and easy to clean.

FIELD OF USE: Front and surrounding materials.

PRODUCTION PROCESS: In the case of painted fronts, the MDF as the base material with a melamine backing is firstly cut to size and shaped.
Several layers of priming or polyester paints are applied as filler, and then smoothed and hardened.

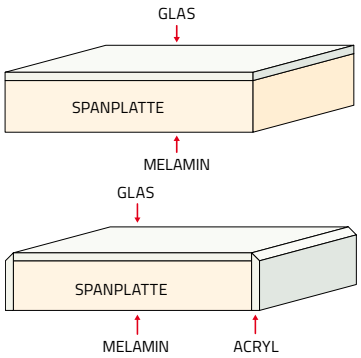


▪▪▪ Glass fronts

BENEFITS: Glass fronts really catch the eye, have a high-grade gloss and are extremely robust. The glass panel can also be painted on the back or digitally printed beforehand and provided with a blocking primer.

FIELD OF USE: Front, recess and worktop material.

PRODUCTION PROCESS: The base material is a wood composite board on which a safety glass panel is usually bonded. Often a surrounding acrylic edge (PMMA or plexiglass) is fitted for lateral edge protection. Production and processing entail very high costs.



▪▪▪ Metals (stainless steel and aluminium)

Metals used in the kitchen are either necessary for technical reasons or serve to enhance appearance. Their use is not only confined to electrical appliances, sinks, worktops, recesses, handles and plinths. Stainless steel and aluminium are most frequently used.

▪▪▪ Paints

Environmentally compatible paint systems are used. They protect furniture surfaces and are applied as clear coat or coloured (lake) paint from matt through to high gloss or as textured paint. Metallic support materials (fittings) are also powder-coated. This entails dry paint powder being “burned onto” the support.

▪▪▪ Oils and waxes

Oils and/or waxes are used with solid wood and veneer to produce special surface types. Emphasis is given to the natural wood structure with no sign of a surface coating. However, this surface type is susceptible to stains given the lack of a protective coating.

▪▪▪ Glass worktops

Glass is used to enhance appearance. It is also heat-resistant and easy to clean.

▪▪▪ Natural stone

A hard stone (such as granite) is mainly used as the natural stone for worktops. As each natural stone worktop is an individual entity, there are colour and structure differences between them. The capillaries that always arise to some degree and the minute and fine cracks and joints in the various hard rocks make factory waterproofing a necessity. Whilst waterproofing delays liquid absorption, it does not prevent it. The vapour diffusion capacity remains largely intact.
Any waterproofing undertaken on a natural stone should be renewed over time and depends on the natural stone used and the degree of utilisation. A slow process of patination (signs of wear) can be expected. Specific information on this can be obtained from the worktop manufacturer.

▪▪▪ Quartz Composite

Quartz composite for worktops is a high-tech material. Quartz composite is made up of various materials (around 93% quartz and 7% binder, mineral flour and other additives). It is available in many variants. Each top is cast as an individual item. As a rule, quartz composite worktops are produced and certificated for direct contact with foodstuffs in accordance with VO (EC) No. 1935/2004 and VO (EU) No. 10/2011. A typical property of quartz composite materials is the presence of dots and/or pigments and pore spaces. Thanks to the effective surface density, no upkeep of quartz composite is necessary - cleaning will suffice. However, „"maintenance-free"" does not mean that it is self-cleaning.

▪▪▪ Ceramics

Ceramics are made of natural, carefully selected raw materials (clay, feldspar, quartz sand and minerals). Thermal sintering (over 1200° C) turns ceramics into products with a very high physical and mechanical scratch resistance. Their degree of absorption is practically zero and thus water-impermeable and non-susceptible to liquids. The material does not release any pollutants and is ideally suited for direct contact with foodstuffs. Another benefit for their use in the kitchen is the fact that ceramics are temperature-proof and easy to clean. Ceramics require no upkeep /care. However, „"maintenance-free"" does not mean that they are self-cleaning. They are resistant to practically all the usual chemicals found in homes. Ceramics are permanently colour-fast and relatively resistant to abrasion. Typical is the presence of dots and/or pigments.