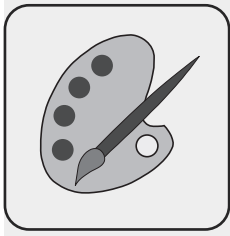


Surfaces

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Surfaces

10.1

General information

Configuration

Appearance of the door set

The appearance of a door set is mainly defined by its surface. Schörghuber special doors meet the various requirements demanded by high-quality heavy-duty doors by offering a variety of different surface configurations. Independent of the door function the requests of the planner can be accounted for. Hereby it is possible to highlight and integrate the door set as creative instrument with its function as a passageway within the building.

The surface is part of the expressiveness of a door set and allows the planner to set architectural emphases in an individual and imaginative way.

Coating of door leaf and frame

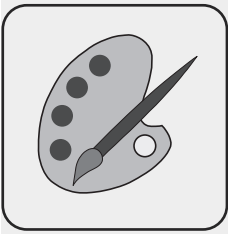
Schörghuber offers high-quality industrially manufactured surfaces for door leaves (top layer) and wooden frames. Available options are:

- Veneer
- HPL
- Colour coatings
- Undercoating foil for on site coating (door leaves/wooden wrap-around frames)
- Untreated solid wood for on site surface treatment (solid wood door sets/steel frames)
- Special surface coatings

Furthermore it is possible that the surface treatment is carried out by the fabricator or interior contractor.

Besides on site colour coating it is also possible to glaze and/or stain the veneer on site. If necessary the coating as well as the surface treatment of the doors (e. g. the staining etc.) can be carried out by the interior contractor/specialist. Hereby the processing directions defined in chapter 10.5 have to be followed.

Steel frames are delivered galvanized and undercoated. On request a powder coating in RAL or special colours is possible as well.



Veneer

Configuration

Wood is a natural product

Depending on the texture of the wood (commonly known as the wood grain) the veneer image is constructed. The wood grain is determined by the natural growth of the wood, growth abnormalities (e.g. pyramid, waler, root, or birds eye growth) and colour differentiations. Colour and grain depend on the single areas of origin of the different wood types. Therefore there are differences from stem to stem and even within the same stem.

One must be aware of the fact that there are natural features within the wood which are sometimes mistaken as faulty parts, but should rather be seen as characteristics.

Features of the natural product wood are for example structure, splint, light walers or irregular flames, irregularities of the grain, colour shadows within the stem, knots, knobs, splatters. Simply everything that belongs to the nature of the wood.

Just like humans, wood is a natural product and in nature no part resembles the other.

Types and configurations of veneer

In veneer construction there are several different possible layouts (horizontal, vertical, tangential) within the stem which determine the image of the grain. Veneers are classified according to their manufacturing process, knife-cut, rotary-cut or saw-cut veneer. Commercial quality veneers of various types of wood have a width of about 0,5 bis 0,7 mm, coniferous woods up to 0,9 mm.

The veneer used to manufacture Schörghuber special doors and wooden frames are usually high-quality knife-cut veneers. Due to the manufacturing process of knife-cut veneers it is possible that shine and colour of the veneer sheets may vary, because different light breaking effects within the wood structure may occur (especially typical for maple).

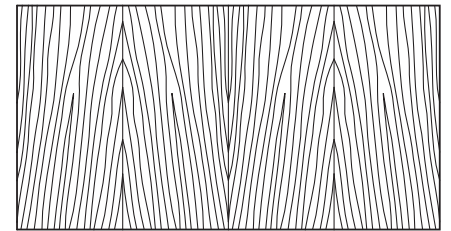
In order to coat large-scale door leafs the single veneer sheets are joint and glued in order to achieve a continuous veneer image.

Usually the single veneer sheets are **book matched**, which results in a pairwise mirrored veneer image.

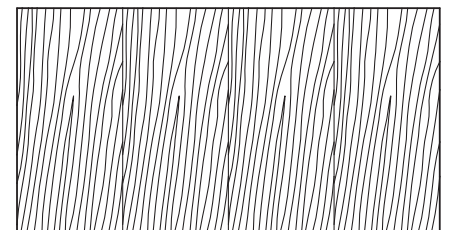
Veneers for door leafs are usually **figured**, whereas veneers for wooden frames and solid wooden frames are usually **striped**.

For stained surfaces the veneer can be **slip matched**, if the following surface treatment highlights the light and dark effects between the veneer sheets.

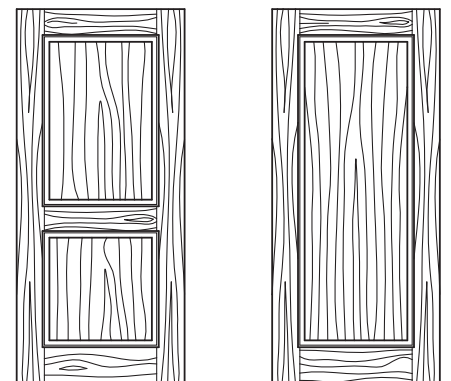
In order to achieve the appearance of a style door (solid wood framed door) the veneer sheets can be arranged **jointed on frames**, while the inner veneer is configured in a bloomy style.



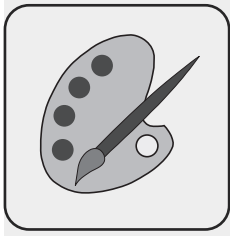
Veneer pattern book matched



Veneer pattern slip matched



Veneer pattern jointed on frames



Surfaces

10.2

Veneer

Configuration

Clear coated surfaces

Veneered surfaces are by default transparently coated at Schörghuber. The used two component finishes produce a highly durable surface coating which is especially necessary in the area of high-quality heavy-duty doors. The finish is usually carried out in an environmentally friendly casting, rolling or spraying process which produces an appealing and homogeneous quality door surface.

Stained surfaces

On request veneered doors and frames can be stained in certain colours and according to sample before being clear coated. Hereby different effects can be achieved, e.g. to increase the natural wooden grain or the more or less covering stain with which a wide equalization can be achieved. Due to the different absorption capacities of the cells wood specific stain tones of particular luminosity and depth effect are achieved without destroying the actual character of the wood.

Colour coated surfaces

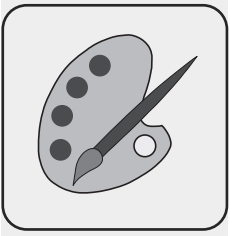
With a colour coating with pigmented polyurethane lacquers (e.g. RAL- or NCS- colours) the pattern and grain of a wooden surface can be accentuated without obtaining the colour of the original wood. Hereby one distinguishes between open porous and partially closed porous coatings. This surface finish is usually used for large-pored wood types, such as for example ash or oak.

Untreated surfaces

If to be finished by a specialist/fabricator the veneered doors and frames can be delivered in untreated state (raw) if necessary. When finished on site the door set has to be finish grinded. Hereby the according processing directions have to be followed.

On site coating

In order to be finished on site, either with veneer respectively HPL (➔ Chapter 10.5) or an on site coating (➔ Chapter 10.4) the door leaf surface is coated with undercoating foil, which just has to be lightly grinded before being processed any further. On request and for additional charge the door leaf can also be veneered horizontally in preparation for further on site processing. On site processings, such as the above mentioned coating or on site surface finishing, e.g. grinding, colour coating, glazing, staining etc., are by basic principle to be carried out by a specialist (carpenter, interior contractor, painter).



Surfaces

Veneer

Configuration

10.2

Wooden special doors



Afrormosia



Maple



Pear



Oak



Alder



Ash



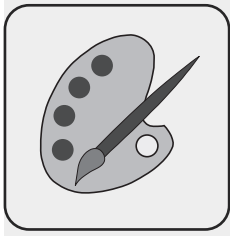
Spruce



Pine



European Cherry



Surfaces
Veneer
Configuration

10.2

Wooden special doors



Larch



Limba



European Walnut



Oregon Pine



Copper Beech



Elm



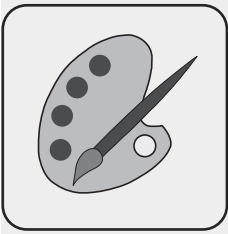
Sapeli



Teak



Wenge



Surfaces

10.3

HPL Configuration

Decorative high pressure laminate

HPL (high pressure laminate) consists of cellulose, phenol and melamine resin and is a decorative high pressure laminate for the interior design. The decorative layer of printed on or coloured paper is covered in melamine resin and forms a solid bond under high pressure and heat.

The HPL surface is characterised by a nonporous, sealed melamine resin surface. This characteristic recommends the use of this material in areas in which a good cleanability is required. It was proved by extensive clinical tests that bacteria and fungus populations have a high die off ratio on HPL surfaces. The good hygienic characteristics of the HPL surface is supplemented by its antistatic effect, by which no dust is attracted or bound. The pigments of the decorative paper used to produce HPL do not include cadmium nor any other heavy metal compounds. The generally good surface characteristics lead to the fact that HPL is categorised as physiologically harmless in contact with food, therefore it is recommended for the use as surface finish of kitchen worktops, tables or frequently used heavy-duty doors.

Approved according to DIN EN 438 and DIN 16926 the surfaces reach a relatively high abrasion, scratch and shock resistance. Colour, design and pattern result in the desired optical effect and need to be chosen very carefully and, according to the manufacturer, be described accurately.

Chosen can be from so called unicolour decors, photographic technically produced wood reproductions and HPL (genuine wood configuration). Additionally special effect surfaces with metallic coating and special patterns have to be mentioned.

Depending on the manufacturer different HPL thicknesses have to be taken into account and have to be stated at the time of the order.

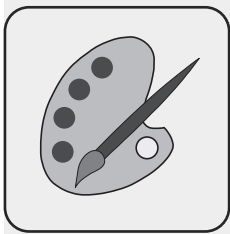
Schörghuber doors, wooden wrap-around, wooden block and on request solid wooden frames can be coated with the collection of leading HPL manufacturers such as Resopal, Perstorp, Duropal, Thermopal, Max-Schichtstoffe, Abet-Laminati, Getalit, etc.

Schörghuber Wet Room Door sets, which are usually exposed to steam and splash water, are generally manufactured on the basis of plastic material and coated with an at least 0,8 mm thick HPL layer.

Due to new processing methods also continuously manufactured high pressure laminates (CPL) can be processed as top layer, whereas the highly stressable characteristics of the 0,8 mm thick HPL surface can not be reached due to the thickness of just 0,4 mm.

The selection and the individual technical details of the HPL required for the building project have to be gathered by the planner from the current collections and technical descriptions of the individual manufacturer. Hereby special attention has to be paid to the availability and especially the required formats of the storage programs and door collections.

Due to the actuality, samples have to be requested from the individual manufacturer.

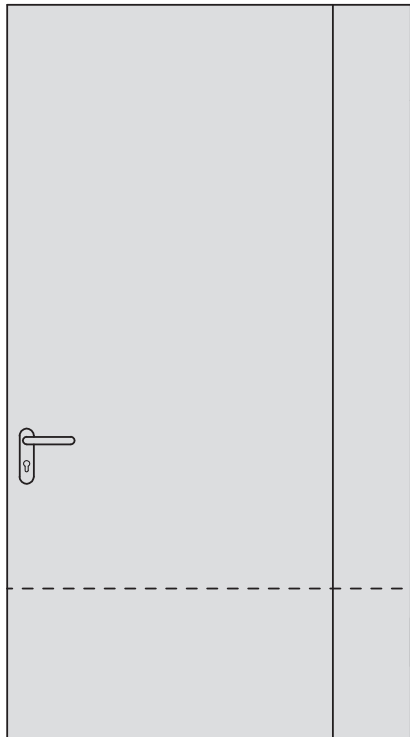


Surfaces

10.3

HPL Configuration

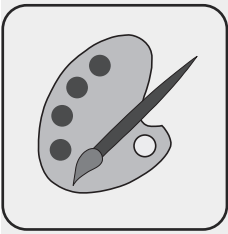
HPL sheets in door format are available in delimited dimensions. Therefore it might be necessary to abut the sheets for large door set surfaces. The butt joint can run vertically or horizontally on the door leaf surface. For high door sets it might even be necessary to abut the surface material in length.



The door leaf formats of leading HPL manufacturers are:

| | |
|---------|--|
| Resopal | 2180 x 915 mm 2180 x 1020 mm 2180 x 1320 mm |
| Formica | 2150 x 950 mm 2150 x 1290 mm 2150 x 1050 mm |
| Duropal | 2150 x 915 mm 2150 x 950 mm 2150 x 1020 mm 2150 x 1300 mm |
| Getalit | 2140 x 1050 mm |

Some HPL manufacturers offer HPL sheets in oversizes which exceed the door formats. Due to the fact that this depends on the manufacturer as well as the surface and its pattern it is recommended to contact the factory. It is especially recommended for questions concerning availability, production times and prices of nonstandard dimensions.



Surfaces

Colour coating

Configuration

10.4

Individual surfaces

Schörghuber special doors can be fully colour-coated due to state-of-the-art technology. Hereby the surface finish covers the whole door set, including optional glazing crossbars, door leaf edges and the wooden frames.

The range of colours is based on the most popular colour schemes RAL or NCS. Due to newest computer-aided processes the surfaces of provided samples can be measured and spectroscopic analysed in order to meet the exact colour tone requested.

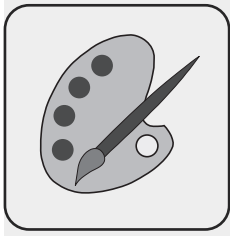
The basis for a smooth surface and fundament for following coating finishes is a undercoating foil made of melamine resin.

On site finishes

In order to provide a good basis for a specialist to carry out the surface finishing, on site coating or the applying of veneer or HPL, the top layer of Schörghuber special doors is by default covered with an undercoating foil .

This enables the specialist/fabricator to complete the finish on site with commercial lacquer systems. For the surface finish only permanent PVC laquer systems are to be used. In any case the factory coating has to be grinded and primed if necessary. Drawdowns have to be carried out on site.

The processing directions in chapter 10.5 have to be followed.



Surfaces

10.5

Processing directions

On site coating of Fire-Protection-Doors

In order to enable an on site treatment of the door leaf surface, Fire-Protection-Doors are finished with either undercoating foil (standard for on site coating) or horizontal veneer. Before the door leaf can be finished with either veneer or any other coating a professional cleaning grinding has to be applied.

The coating can be applied with a commonly used glue mixture.

- Urea resin glue
- Casein glue
- Contact adhesive

Pressure 2,5 to 4,5 kg / cm²

Time about 3,5 minutes

Temperature 80° to 100° C

Attention !

- The door leaf has to be removed from the press as soon as the glue joint is hardened (see pressure time), otherwise the fire protective component can be damaged.
- No liability can be accepted for damages that occur due to departing from the veneer manual or improper storage of the door leaf before and after the veneer was applied, as well as damages due to the improper unmounting or remounting of the fittings.
- Such on site operations are to be carried out exclusively by a specialist (carpenter/interior contractor).

