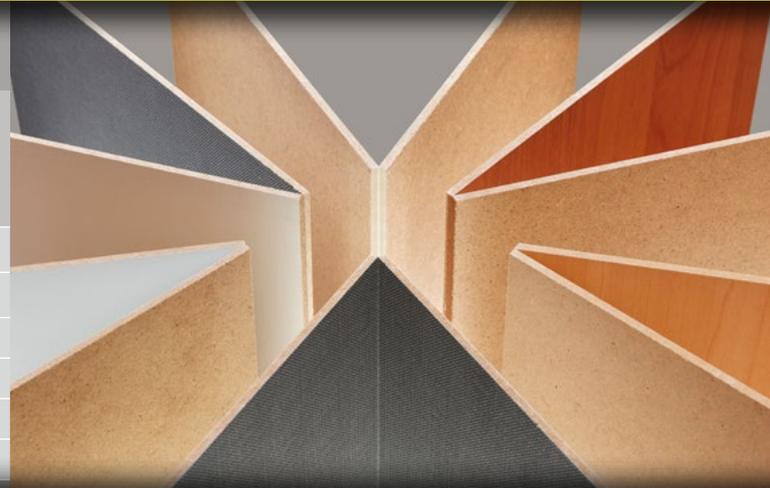


# HDF HOMADUR® WOOD-BASED PANELS

## APPLICATION

HDF HOMADUR® boards are used in a broad range of industries, including the furniture industry, door industry, vehicle/caravan industry and in booth construction and interior fittings for the following purposes:

- Back panels for cabinets, drawer bottoms, door panels
- Door skins for almost all door types
- Automotive/caravan interior panelling
- Flexible wall and partition elements
- Carrier boards for parquet, laminate, PVC and HPL floors
- Picture frame back panels and decorative elements



## PRODUCT

HDF HOMADUR® is a wood fibre board made of finely processed fibres produced in a continuous dry-process. It is mainly produced from domestic thinning wood and sawmill residues.

HDF HOMADUR® is available as a large-format raw board, as well as in a sanded, cut to size, machined and/or surface-finished version.

HDF HOMADUR® boards are also available as flame-retardant variants or as composite boards with central cores of aluminum or lead.

HDF HOMADUR® boards are available in thicknesses between 1.5 mm and 10 mm. The large number of board types covers a variety of requirements.

## PRODUCTION

HDF HOMADUR® boards are produced using a dry process. After heating the wood chips under pressure and temperature with subsequent defibration, the moist fibres treated with binding agents are gently dried in the hot air stream. The fibres dried in this way are scattered into a continuous fibre mat and pressed continuously in a hot press. The continuous board string is then cut to the desired lengths, cooled and stacked.

## FINISHING

HDF HOMADUR® boards are sanded on both sides if required. The sanding level and symmetry of the top and bottom are determined in consultation with the customer.

Cutting of all sheet types is possible up to a dimension in DIN A3 format and smaller.

Drill holes and millings are customized at the factory as required.

Foldings are also used in different technologies, e.g. for back panels of furniture.

Coating and lamination are offered for surface finishing of HDF HOMADUR® boards.

Painting at HOMANIT can be done as a uni-colour coating or a print decor coating. In the roller application process, several layers of water-based paints are applied and each is dried with warm air.

A radiation-cured, transparent UV coating finishes the composition as a final protective layer. Print decors in wood and fantasy textures can also be offered. HOMANIT owns a large number of printing cylinders. Alternatively new cylinders will be created in accordance with customer requirements. The individual samples are developed in an own separate testing facility and confirmed with the customer, including an elaborated procedure for reference samples.

HDF HOMADUR® boards can be laminated on one or two sides with finish films, PP films or CPL materials. The standard range offers a large number of decors. Alternatively, the coating materials can be selected individually with the customer.

For technical information on the further processed HDF HOMADUR® boards, please refer to the separate product information.

## PROCESSING

HDF HOMADUR® boards can be processed with all common tools and woodworking machines. Dimensions and tolerances of the supplied boards are regularly monitored. Details can be found in the separate TOLERANCE DATA SHEET.

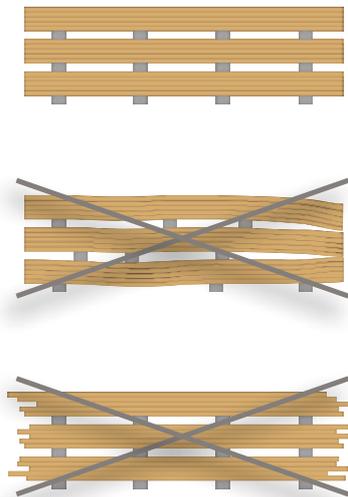
Suitable board types can be provided for customer painting, lamination or other coating with standard covering materials such as veneers, films, melamine papers, CPL or HPL. During further processing, information from the material suppliers must be considered (paint suppliers, adhesive suppliers, etc.) and confirmed beforehand by individual trials. Further properties, such as the surface behaviour of various adhesive media such as adhesive tapes, hot-melt adhesives or single-component sealants, require consultation and technical clarification.

# HDF HOMADUR® WOOD-BASED PANELS

As a general rule: HDF HOMADUR® products are wood fibre-based products. Do not expose the boards to direct moisture. Before processing, they should be given sufficient time to adapt to the climate of the processing area. A sheet temperature of at least 15 °C is required for processing

## STORAGE

HDF HOMADUR® boards should be stored in closed, well-ventilated and temperature-controlled areas. In order to avoid ripples, the boards should be stored evenly on flat surfaces or pallets. In the case of stacked pallets, the pallet feet must be positioned directly on top of each other and not offset. Storage in the immediate vicinity of heating sources or open doors must be avoided.



## SUSTAINABILITY

The wood used for the production of HDF HOMADUR® boards comes from sustainably managed forests in the immediate vicinity of the processing sites. Thinning wood from the forests and waste wood of the sawmills are supplied over the shortest possible distance. If required, certifications according to FSC or PEFC can be supplied.

The fibres produced in the preparation process are mixed with binding agents, scattered into a fibre mat and continuously pressed in a heating press. The heat energy required for this is generated on site. Our own biomass power plants complement each location. Wood residue such as dust, milling chips and cuttings that can no longer be used for material purposes are converted into energy.

HOMANIT sets ambitious energy savings targets and is externally monitored: All sites are regularly audited and have certified processes in accordance with the energy management system ISO 50001.

All paints and coatings used are water-based and/or solvent-free. Ingredients and emissions from HDF HOMADUR® raw boards, covered and coated boards are regularly monitored by external institutes and are subject to strict limits: HDF HOMADUR® boards are regularly tested for VOC-, formaldehyde- and odour-emissions and meet the requirements of DE-UZ 38, RAL-GZ 430 and IOS-MAT 0010.

HDF HOMADUR® boards are suitable for the manufacture of children's furniture and toys in accordance with IOS-MAT 0054 and IOS-MAT 0195.

HDF HOMADUR® boards meet the requirements of RAL-GZ 430 and are free of biocides. (PCP, lindane, tetrachlorophenols, trichlorophenols, dimethyl fumarate are not detectable.)

The binders used to manufacture HDF HOMADUR® boards are the latest generation of thermosetting resins. Urea and melamine resins cross-link under the influence of temperature with the smallest amounts of formaldehyde to form solid networks. Self-monitoring, which takes place several times a day, and regular checks by external institutes ensure that only the smallest quantities of the bonding components emit after completion. The latest version of the following formaldehyde emission classes is complied with: E1 according to Chemicals Prohibition Ordinance 2020 (E05), EPA/TSCA Title VI-40 CFR Part 770 & CARB Phase 2, IKEA IOS-MAT 0003, IOS-MAT 0181.

Sustainable quality in the production of HDF HOMADUR® boards is ensured by a close-knit network of internal and external monitoring tests. Regular checks by external auditors ensure the quality of the quality management system. HOMANIT has met the requirements of ISO 9001 since 1995. All sites are certified in accordance with the latest version of the quality standard.

## PLEASE NOTE:

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# HDF/MDF HOMADUR® RAW

## APPLICATION

HDF/MDF HOMADUR® RAW boards are used for the following purposes, among others:

- Door skins for almost all door types
- Back panels for cabinets, drawer bottoms, door panels
- Flexible wall and partition elements
- Carrier boards for parquet, laminate, PVC and HPL floors
- Picture frame back panels and decorative elements
- Automotive/caravan interior panelling



## PRODUCT

HDF/MDF HOMADUR® RAW are continuously produced wood fibre boards made of finely processed wood fibres in a dry process. They are mainly produced from domestic thinning wood and sawmill residues. The density ranges from 700–800 kg/m<sup>2</sup> (MDF HOMADUR® RAW) or from 820–960 kg/m<sup>2</sup> (HDF HOMADUR® RAW).

## PROPERTIES

HDF/MDF HOMADUR® RAW boards are available in thicknesses between 1.5 mm and 10 mm. The large number of board types covers a variety of requirements. For example board types for the door industry, with particularly low thickness tolerances or very good coating capability. Or special board types for the production of lightweight components (BoF/BoS) with exceptionally good paintability. In addition: Floor support boards with optimised swelling properties or simply light board types for simple applications. The key physical data of these different board types can be found in the TECHNICAL DATA SHEETS, which are available upon request.

HDF/MDF HOMADUR® RAW boards are sanded on both sides if required. In consultation with the customer, the sanding level (80–180 grit) and symmetry of the top and bottom are determined. Cutting of all sheet types is possible up to a dimension in DIN A3 format and smaller.

Drill holes and millings are customized at the factory as required. Foldings are also used in different technologies, e.g. for furniture back panels (with various adhesive tapes or PU folds).

## PROCESSING

HDF/MDF HOMADUR® RAW boards can be processed with all common tools and woodworking machines. Dimensions and tolerances of the supplied boards are regularly monitored. Details can be found in the separate TOLERANCE DATA SHEET.

Suitable board types can be provided for customer painting, lamination or other coating with standard covering materials such as veneers, films, melamine papers, CPL or HPL. During further processing, information from the material suppliers must be considered and confirmed in advance by means of individual tests.

Do not expose HDF/MDF HOMADUR® RAW boards to direct moisture. Before processing, the boards should be given sufficient time to adapt to the climate of the processing area. A sheet temperature of at least 15°C is required during processing.

## SUSTAINABILITY

The wood used for the production of HDF/MDF HOMADUR® boards comes from sustainably managed forests in the immediate vicinity of the processing sites. If required, certifications according to FSC or PEFC can be supplied.

The binders used are the latest generation of thermosetting resins. They form a solid network after curing under pressure and temperature. Low remaining emissions are continuously monitored. HDF/MDF HOMADUR® RAW boards are suitable for the manufacture of children's furniture and toys. More detailed information on the relevant test standards can be found in the TECHNICAL DATA SHEETS (available upon request).

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# HDF HOMADUR® RAW-B1

## flame retardant



### APPLICATION

HDF HOMADUR® RAW-B1 boards are used in a range of industries, including:

- Door industry
- Interior fittings
- Booth construction
- Automotive/caravan industry



### PRODUCT

HDF HOMADUR® RAW-B1 are continuously produced wood fibre boards made of finely processed wood fibres in a dry process. They are mainly produced from domestic thinning wood and sawmill residues. Oposit to HDF HOMADUR® boards, HDF HOMADUR® RAW-B1 are also equipped with fire protection salts, which significantly increase the fire resistance of the boards without impairing their usability. HDF HOMADUR® RAW-B1 boards are sanded on both sides and are available as unfinished boards, either in large format or cut to size.

### PROPERTIES

HDF HOMADUR® RAW-B1 boards are available in thicknesses between 1.8 mm and 6.0 mm. The physical key data can be found in the TECHNICAL DATA SHEET, which is available upon request. HDF HOMADUR® RAW-B1 boards comply with DIN 4102-1 building material class "B1 – flame retardant". In accordance with DIN EN 13501-1, tested in the SBI test in accordance with DIN EN 13823, they meet the requirements of class "C-s2,d0".

### PROCESSING

HDF HOMADUR® RAW-B1 boards can be processed with all common tools and woodworking machines. Dimensions and tolerances of the supplied boards are regularly monitored. Details can be found in the separate TOLERANCE DATA SHEET. The customer can easily paint, laminate or otherwise coat with commercially available covering materials such as veneers, foils, melamine papers, CPL or HPL. The material suppliers' instructions must be considered or confirmed in advance by means of individual trials.

Do not expose HDF HOMADUR® RAW-B1 boards to direct moisture. Before processing, they should be given sufficient time to adapt to the climate of the processing area. A sheet temperature of at least 15°C is required for processing.

### SUSTAINABILITY

The wood used for the production of HDF HOMADUR® RAW-B1 boards comes from sustainably managed forests in the immediate vicinity of the processing sites. If required, certifications according to FSC or PEFC can be supplied.

The binders used are the latest generation of thermosetting resins. They form a solid network after curing under pressure and temperature. Self-monitoring, which takes place several times a day, and regular checks by external institutes ensure that only the smallest quantities of the binders components emit after the curing.

The latest version of the following formaldehyde emission classes are complied with: E1 in accordance with Chemicals Prohibition Ordinance 2020 (E05), EPA/TSCA Title VI–40 CFR Part 770 & CARB Phase 2, IKEA IOS-MAT 0003, IOS-MAT 0181. The flame-retardant salts used are halogen-free and firmly incorporated into the sheet matrix.

### PLEASE NOTE:

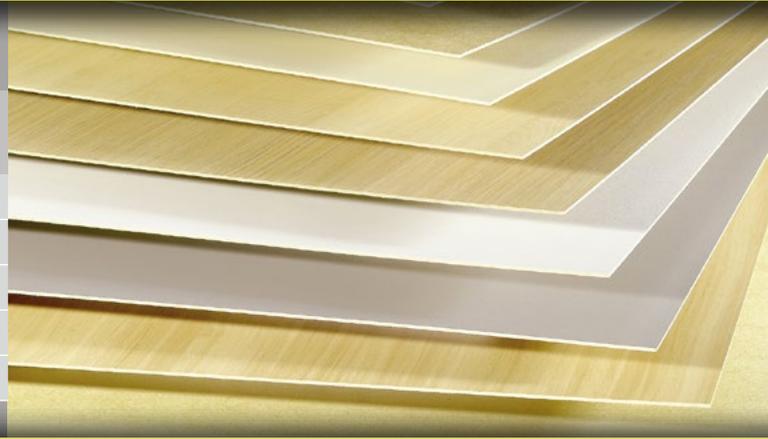
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# HDF HOMADUR® DECOR AND UNI

## APPLICATION

HDF HOMADUR® DECOR and UNI boards are used in a range of industries, including:

- Furniture industry
- Door industry
- Booth construction
- Interior fittings
- Automotive/caravan industry



## PRODUCT

HDF HOMADUR® DECOR and UNI are HDF HOMADUR® boards that have been top-coated on one or both sides. HOMANIT offers a variety of existing colours and decors for this purpose. However, exclusive designs can also be arranged.

## PROPERTIES

HDF HOMADUR® boards are finished in high-performance coating systems with a multi-layered paint structure. A combination of pigmented water-based lacquers and a transparent UV lacquer finish results in high-quality finishes. Almost any uni-colour can be achieved. Decors are produced by indirect gravure printing. Wood decors or fantasy decors: Almost anything is possible. The samples can be prepared in advance on a separate testing facility, or one of the more than 600 existing decors and uni-colours can be used.

The key physical data can be found in the TECHNICAL DATA SHEET of the corresponding HDF HOMADUR® carrier board, which is available upon request. HDF HOMADUR® DECOR and UNI boards are available in three property classes:

### STANDARD

The surfaces of these products are tested for chemical resistance (based on DIN EN 12720), heat resistance (DIN EN 12722), adhesion (DIN EN ISO 2409) as well as scratch resistance (DIN EN 68661-T2) and abrasion (DIN EN 68661-T4), to ensure that a consistently high quality is always supplied.

### PLUS

Compared to the STANDARD property class, optimised paint systems increase scratch and abrasion resistance (in accordance with DIN EN 68861-T4: Class 4D – according to EN 68861-T2: Class 2E).

### R7/R6/R4

This property class meets the high requirements of IKEA IOS-MAT 0066 for classes R7, R6 or R4, tested in accordance with EN 12720 and EN 12722. The resistance times against paraffin, coffee, water and other media are achieved without stains, depending on the test class, even with previous existing scratches.

The maximum colour difference of all UNI surfaces must not exceed  $\Delta E$  1.0 during intensive internal checks (DIN EN ISO 11664-4). The print designs are also strictly controlled using reference samples. The degree of gloss is  $25 \pm 6$  GU (DIN EN ISO 2813, measuring geometry 60°). Other gloss levels are available on request.

## PROCESSING

HDF HOMADUR® DECOR and UNI boards can be processed with all common tools and woodworking machines. Dimensions and tolerances of the supplied boards are regularly monitored. Details can be found in the separate TOLERANCE DATA SHEET. Do not expose the boards to direct moisture. Before processing, they should be given sufficient time to adapt to the climate of the processing area. A sheet temperature of at least 15°C is required for processing.

## SUSTAINABILITY

The wood used for the production of HDF HOMADUR® boards comes from sustainably managed forests in the immediate vicinity of the processing sites. If required, certifications according to FSC or PEFC can be supplied. The binders used are the latest generation of thermosetting resins. They form a solid network after curing under pressure and temperature.

The paint systems used are water-based or UV-curing. HDF HOMADUR® DECOR and UNI boards are suitable for the manufacture of children's furniture and toys. Specific details of the relevant test standards can be found in the TECHNICAL DATA SHEET.

## PLEASE NOTE:

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# HDF HOMADUR® PRIMED

## APPLICATION

HDF HOMADUR® PRIMED boards are used for the following applications and in the following industries:

- Manufacture of standard interior doors
- Manufacture of embossed door leaves
- Furniture industry
- Booth construction
- Interior fittings



## PRODUCT

HDF HOMADUR® PRIMED are pre-coated HDF HOMADUR® boards that are ideal for final painting with various alternative paint systems after further processing, e.g. pressing as a door leaf. This considerably reduces the time and effort required for factory or on-site painting.

## PROPERTIES

HDF HOMADUR® PRIMED are HDF HOMADUR® boards that are preprimed in the factory with a water-based paint system. The particularly consistent finish created in this way makes subsequent final painting easier.

HDF HOMADUR® PRIMED boards are available in standard shades of white and beige.

Two press temperature classes can be selected: up to a maximum processing temperature of 100 °C and 150 °C.

The key physical data can be found in the TECHNICAL DATA SHEET of the corresponding HDF HOMADUR® carrier board, which is available upon request.

## PROCESSING

HDF HOMADUR® PRIMED boards can be processed with all common tools and woodworking machines. Dimensions and tolerances of the supplied boards are regularly monitored. Details can be found in the separate TOLERANCE DATA SHEET.

When pressing the HDF HOMADUR® PRIMED boards with honeycombs, the special pressure should be adapted to the frame surfaces. The maximum pressing temperature, depending on the type, is 100 °C or 150 °C. The specific pressure must not exceed 2.5 kg/cm<sup>2</sup> (0.25 N/mm<sup>2</sup>).

Before final painting, the HDF HOMADUR® PRIMED boards must be sanded with the appropriate grit sandpaper (P180–P240). Care must be taken not to sand through to the bare board. The primer used is optimised for use with a wide variety of paint systems for final painting (NC, PUR, SH, water ...).

Prior to application, the instructions of the paint suppliers must be considered and a test painting with subsequent adhesion test must be carried out.

Please note: Water-based paints must be immediately forced dry, as otherwise the aqueous solutions will roughen the sheet surface. Increased drying time and drying faults may occur when using certain SH paints.

The following must be observed during storage: Do not expose HDF HOMADUR® PRIMED boards to direct moisture. Before processing, they should be given sufficient time to adapt to the climate of the processing area. A sheet temperature of at least 15 °C is required for processing.

## SUSTAINABILITY

The wood used for the production of HDF HOMADUR® boards comes from sustainably managed forests in the immediate vicinity of the processing sites. If required, certifications according to FSC or PEFC can be supplied.

The binders used are the latest generation of thermosetting resins. They form a solid network after curing under pressure and temperature. Low remaining emissions are continuously monitored. For information, see the TECHNICAL DATA SHEET.

The paints used for priming are water-based.

## PLEASE NOTE:

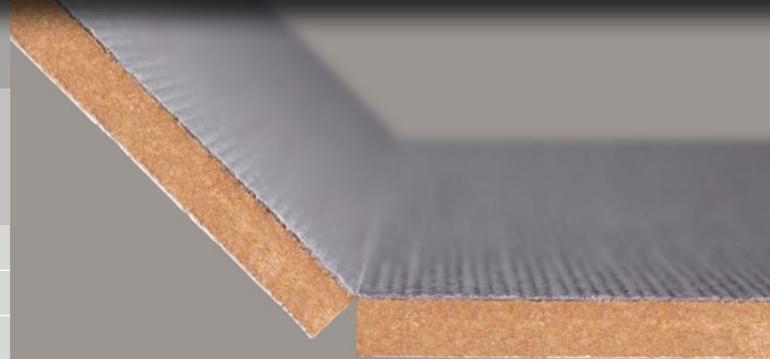
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# HDF HOMADUR® LAMINATED

## APPLICATION

HDF HOMADUR® LAMINATED boards are used in a range of industries, including the furniture industry, door industry, vehicle/caravan industry and in booth construction and interior fittings for the following purposes:

- Furniture back panels
- Door panels
- Standard interior doors
- Flexible wall and separator elements
- Automotive/caravan interior panelling



## PRODUCT

HDF HOMADUR® LAMINATED is a HDF HOMADUR® board, finished on one or both sides with a finish foil, thermoplastic film or CPL. A wide range of existing coating products, colours and decors can be used, or exclusive designs can be arranged.

## PROPERTIES

The following coating materials can be optionally applied:

- Paper-based finish films, painted and unpainted, solid colours or printed, weight per unit area between approx. 45–220 g/m<sup>2</sup>
- PP foils with a thickness between 110–260 µm (surface weight approx. 100–240 g/m<sup>2</sup>)
- CPL laminates with a thickness ≤ 0.3 mm

PVAC-based emulsion film adhesives are used for bonding. **With a suitable surface material, the laminated boards can also be folded directly and without joints on the laminating system.**

## DIMENSIONS

HDF HOMADUR® LAMINATED is available in the following dimensions:

**Width:** 600–1290 mm

**Length:** 800–3200 mm

**Thickness:** 2–10 mm

The key physical data can be found in the TECHNICAL DATA SHEET of the corresponding HDF HOMADUR® carrier board, which is available upon request.

The finishing requirements of IOS-MAT 0066 for classes R7, R4 and R2 are met by suitable painted finish films and PP films. The CPL coatings are tested according to EN 438-2.

## PROCESSING

HDF HOMADUR® LAMINATED boards can be processed with all common tools and woodworking machines. Dimensions and tolerances of the supplied boards are regularly monitored. Details can be found in the separate TOLERANCE DATA SHEET.

Do not expose HDF HOMADUR® LAMINATED boards to direct moisture. Before processing, they should be given sufficient time to adapt to the climate of the processing area. A sheet temperature of at least 15°C is required for processing.

## SUSTAINABILITY

The wood used for the production of HDF HOMADUR® boards comes from sustainably managed forests in the immediate vicinity of the processing sites. If required, certifications according to FSC or PEFC can be supplied.

The binders used are the latest generation of thermosetting resins. They form a solid network after curing under pressure and temperature. The PVAC glues used for lamination are low formaldehyde. The foil materials used meet all relevant emission requirements. The quality of HDF HOMADUR® LAMINATED is regularly monitored by internal and external tests. The following formaldehyde emission classes are complied with: E1 according to Chemicals Prohibition Ordinance 2020 (E05), EPA/TSCA Title VI–40 CFR Part 770 & CARB Phase 2, IKEA IOS-MAT 0003, IOS-MAT 0181.

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