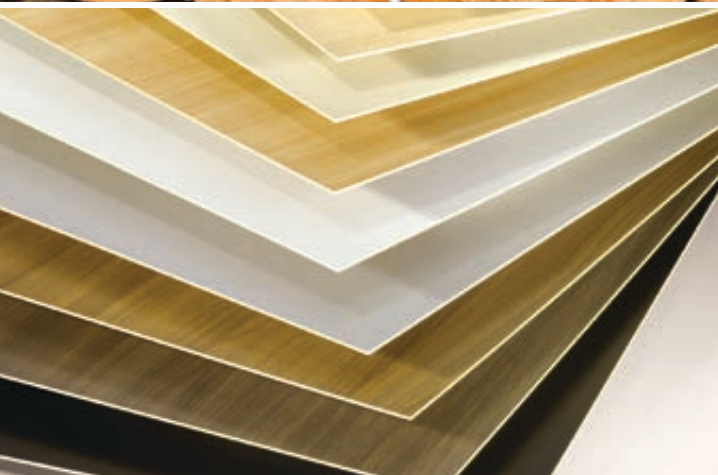


# HDF HOMADUR<sup>®</sup>

## wood fibreboards



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### TYPES OF APPLICATION

These boards are used, for example, in the furniture industry, door industry, automotive industry, exhibition stand construction and interior fitting for the following:

- Back panels, drawer buttons, fitting for furniture doors
- Door skins for almost all types of doors
- Interior cladding for motor vehicles
- flexible wall and separator elements
- coreboard for parquet, laminate, PVC & HPL floors
- Picture frames & decoration elements



### TECHNICAL INFORMATION

HDF HOMADUR® is a wood fibreboard consisting of finely refined woodfibres, produced continuously in the dry process. The following table compares the technical data of HDF and MDF boards. The HDF/MDF boards are tested in accordance with the physical/technical specifications of DIN EN 622 Part 1 and 5 and have following data at dispatch.

	DENSITY kg/m <sup>3</sup>	BENDING STRENGTH Ø N/mm <sup>2</sup>	TRANSVERSE TENSILE STRENGTH Ø N/mm <sup>2</sup>	BENDING E-MODULUS Ø N/mm <sup>2</sup>
HDF 1.5–8 mm	800–1000	45	0.7	4300
MDF 2.5–10 mm	730–800	35	0.5	2600
HDF Floor coreboard sanded, 6–10 mm	840–900	45	1.1	4300

### PRODUCT

HDF HOMADUR® is a wood fibreboard, which is produced from mainly wood thinnings and sawmill byproducts. The binding and hydrophobising agents used are low in formaldehyde and guarantee to keep or to remain below the limits of emission class E1 in accordance with the restriction ordinance on chemicals respectively with CARB, table 1 § 93120.2 phase 2. The pH value of our raw board is 4.5 ±0.5. We can produce FSC® and PEFC certified wood fibreboards for our customers, on request.

### MANUFACTURING

HDF HOMADUR® boards are produced using a clean dry process. After heating the wood chips under pressure and at temperature with subsequent defibration, the damp fibres, to which binding agent has been added, are dried gently in a hot airstream. The further processing, pressing in the heat press, is also carried out dry. The exhaust vapours from drying and pressing go into a scrubber designed for this purpose. The water used for washing is then processed and re-used. The waste, resulting from this manufacturing process, is mainly materially or thermically re-used.

### ENVIRONMENT

The products are environmental-friendly from the safe materials that are used, such as natural woods and low-formaldehyde glues, through to a low-impact, ecologically pioneering manufacturing process.

**WOOD:** Domestic woods are used to produce HDF HOMADUR® boards. These are primarily wood thinnings and sawmill byproducts.

**BINDING AGENTS:** The glues used should be classed as duroplastic adhesives, which means that they are reactive adhesives, such as urea-formaldehyde condensates or mixed condensates, based on urea, melamine and formaldehyde. All glues used meet the demands of emissions class E1.

**LACQUERS:** The lacquers used for lacquering in uni or printed wood grain decor are "water-based-emulsions", which are protected with "AC-UV varnish".

Our HDF products can be used thermically or composted without any problem, as they have not been treated with PVC and/or halogen-organic substances.

## FINISHING

**IN-HOUSE LACQUERING AT HOMANIT:** The uni and printed decor lacquering is carried out by roll coating with water-based-emulsions, which are protected with "AC-UV-varnish". The raw boards are coated with a primer and several layers of base coat as they pass through. They are allowed to dry after every coat. The uni and printed decor lacquering processes are basically similar, except that for the printed decor lacquering, after the last base coat, a multi-colour print is carried out, which can show almost any type of wood species or one of many imaginative decorative designs.

**CHEMICAL AND PHYSICAL PROPERTIES OF THE LACQUERED HDF HOMADUR® BOARDS:** The lacquered fibreboards (HDF HOMADUR® Uni and HDF HOMADUR® Decor) are constantly tested in our own laboratories as well as in recognised testing institutes. The lacquered boards are tested according to the DIN standards listed below:

- **DIN EN 12720** "Assesment of surface resistance to cold liquids"
- **DIN 68861, Part 1** "Behaviour at chemical influence"
- **DIN 68861, Part 2** "Behavior at abraision"
- **DIN EN 12722** "Assessment of surface resistance to dry heat"
- **DIN 68861, Part 7** "Behaviour under dry heat"
- **DIN EN ISO 2409**, "Cross-cut test"

Further properties, such as surface performance with various adhesive media, such as adhesive tape, hotmelt adhesives or elastic sealants, require consultation and technical clarification.

**VENEERING:** HDF HOMADUR® boards are easy to veneer, even if they are unsanded. Sanded boards are also available on request.

**LAMINATING:** Laminating with PVC and sodium kraft paper will be possible without any difficulties.

**COATING:** Coating with HPL, CPL and LPL laminates as well as melamine resin-impregnated paper will be possible without any difficulties.

**VARNISHING:** HDF HOMADUR® boards can be finished with almost all common types of lacquers and lacquer systems.

## SAFTEY

**CHECKS ON PHYSICAL TECHNICAL VALUES:** Tests are carried out in accordance with DIN EN 622 Part 1 and Part 5. The values are checked and documented several times per shift.

**FORMALDEHYDE TESTINGS:** Formaldehyde testings are carried out several times a day. The testings are carried out in accordance with DIN EN 120 – the perforator method.

**EXTERNAL TESTS:** The test results that are obtained are checked by independent instituts at regular intervals.

## QUALITY CONTROL OF THE FINISHED HDF HOMADUR® BOARDS:

The uni surfaces are checked in accordance with DIN 6174 by the colour distance testings before, during and after completion of the lacquering. The maximum colour distance should not exceed  $\Delta E$  1.0. The printed wood grain decors are also checked within a specified framework throughout the whole production. The degree of gloss is  $25 \pm 6$ , corresponding to  $60^\circ$  reflectometre value in accordance with DIN 67530. Other degrees of gloss are possible on request. As previously described under "Chemical and physical properties", the lacquered surfaces are checked several times each day. The precision of cutting and of angles as well as all other relevant measures and specifications are checked regularly at the cut to size saw. Throughout production the quality is monitored and documented through each shift.

## TOLERANCES:

- |   |                                     |
|---|-------------------------------------|
| ■ <b>Thickness tolerance, unsanded:</b>       | $\pm 0.15$ mm                       |
| ■ <b>Thickness tolerance, sanded:</b>         | $\pm 0.10$ mm                       |
| ■ <b>Format tolerances standard boards:</b>   | $\pm 2$ mm/1000 mm                  |
| ■ <b>Format tolerances, cut to size:</b>      | $\pm 1$ mm/cut to size              |
| ■ <b>Angular tolerances, standard boards:</b> | $\pm 2$ mm/1000 mm<br>(side length) |
| ■ <b>Angular tolerances, cut to size:</b>     | $\pm 1$ mm/1000 mm<br>(side length) |
| ■ <b>Flatness / max. waviness:</b>            | 7 mm/1000 mm<br>(side length)       |

**QUALITY MANAGEMENT:** Ensuring a constantly high quality standard is a fundamental part of our corporate philosophy. HOMANIT has been certified in accordance with the quality management standard EN ISO 9001 since 1995. It goes without saying that our production plants are now certified in accordance with the current version of this standard: ISO 9001:2008.



## PLEASE NOTE

The information above is provided to the best of our knowledge, but no liability can be inferred.



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