

# HDF HOMADUR® RAW

## Flame Retardant B1

### TYPES OF APPLICATION

These boards are used in the following branches, for example:

- Door industry
- Automotive industry
- Interior fitting
- Exhibition stand construction



### PRODUCT

HDF HOMADUR® Raw Flame Retardant B1 is a wood fibreboard made from fine wood fibres produced by a continuous dry process.

### STRENGTHS

- Dense, smooth and hard surface
- Excellent dimensional stability
- Exceptionally flat
- Certified quality: class B1

### SPECIFICATIONS

HDF HOMADUR® Raw Flame Retardant B1 boards are tested in accordance with DIN EN 622 part 1 and 5 as well as DIN 4102-1 and have the following data at dispatch:

<b>Thickness:</b>	2.5–4.0 mm
<b>Dimensions:</b>	2800 x 2070 mm (Cut to sized measures and special formats on request)
<b>Density HDF:</b>	960 ± 30 kg/m <sup>3</sup>
<b>Transverse tensile strength at a residual moisture:</b>	≥ 1.1 N/mm <sup>2</sup>
<b>Thickness tolerance:</b>	5 ± 1% ± 0.10 mm sanded (only available in sanded version)
<b>Bending strength:</b>	≥ 45 N/mm <sup>2</sup>
<b>Bending E-modulus:</b>	≥ 4300 N/mm <sup>2</sup>

### PROCESSING

HDF HOMADUR® Raw Flame Retardant B1 fibreboards can be finished in various ways using suitable techniques. Further processing can be carried out using standard woodworking machinery and tools. You must carry out your own trials and tests in advance.

### SAFETY

Checks on physical technical values are carried out regularly in accordance with DIN EN 622-5. Formaldehyde measurements are carried out several times a day in accordance with DIN EN ISO 12460-5 – perforator method. The test results produced are checked at regular intervals by independent institutes. The fire behaviour is similarly monitored by independent testing institutes in accordance with DIN 4102-1. In the framework of external monitoring of our product, authorised people have the right to take samples from HOMANIT B1 deliveries on building sites or retailer warehouses for monitoring at no cost.

### ENVIRONMENT

The environmental compatibility of the HDF HOMADUR® Raw Flame Retardant B1 fibreboards begins with the environmentally- friendly materials used, such as untreated timber and low-formaldehyde binding agents, and ends with our innovatively ecological and gentle manufacturing process.

### PLEASE NOTE

For further information please see the general specifications of HDF HOMADUR®. The information above is provided to the best of our knowledge, but no liability can be inferred.

# HDF HOMADUR® Laminated

## 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 for furniture
- Partition walls
- Standard interior doors
- Interior cladding for automotives



## PRODUCT

HDF HOMADUR® Laminated boards are HDF HOMADUR® fibreboards that are laminated on one side (or on both sides if required) with paper, foil or CPL. The various types of foil and paper have different surface qualities and satisfy different requirements with regard to scratch resistance, wear, light-fastness and stain resistance. With certain surfacing materials, the laminated boards can also be folded directly in the laminating line.

## STRENGTHS

- Laminating with finish foil, PP foil or CPL is possible
- Folding can be carried out in the laminating line (provided the surfacing material is foldable)
- No joints spoil the uniform appearance when folded

## SURFACE MATERIALS

- Finish foils  
(printed papers with lacquered surfaces)  
Weight:  $\geq 30 \text{ g/m}^2$
- Painting grades and decor foils  
(papers, uni, printed, unlacquered)  
Weight:  $60\text{--}220 \text{ g/m}^2$
- PP foils  
Weight: approx.  $93 \text{ g/m}^2$
- CPL laminate  
(thickness  $< \text{max. } 0.3 \text{ mm}$ )

## TYPES OF GLUE

- Urea glue
- Dispersion glue for foils (based on PVAc)

## DIMENSIONS

- Width:** 650–1280 mm  
**Length:** 800–2600 mm  
**Thickness:** 1.5–6.0 mm (other thicknesses upon request)

## PROCESSING

Further processing can be carried out using standard woodworking machinery and tools. You must carry out your own trials and tests in advance.

## ENVIRONMENT

The environmental compatibility of the HDF HOMADUR® Laminated boards begins with the environmentally-friendly materials used, such as untreated timber and low-formaldehyde binding agents, and ends with our innovatively ecological and gentle manufacturing process.

# HDF HOMADUR®

## Primed for door skins

### TYPES OF APPLICATION

These boards are used in the door industry for the following:

- Standard interior doors



### PRODUCT

HDF HOMADUR® Primed are specially lacquered HDF HOMADUR® boards, which, for example, after pressing, are particularly suitable for doors, which can then be finally lacquered with different lacquers.

### STRENGTHS

- Final lacquering with different lacquers
- Particularly homogenous surface
- Available in standard colour tones white and beige

### SPECIFICATIONS

HDF HOMADUR® Primed is tested in accordance with DIN EN 622 part 1 and 5 and has the following data at dispatch:

<b>Thickness:</b>	1.5–6.0 mm
<b>Dimensions:</b>	Cut to sized measures
<b>Density HDF:</b>	870 ± 30 kg/m <sup>3</sup>
<b>Transverse tensile strength at a residual moisture:</b>	≥ 1.1 N/mm <sup>2</sup>
<b>moisture:</b>	5 ± 1 %
<b>Thickness tolerance:</b>	± 0.15 mm

### PROCESSING

During pressing with honeycomb inserts the spec. pressure should be adjusted to the frame structure. The final varnishing can be carried out using any commonly used lacquering system. Smooth the primed door skins using an abrasive belt before lacquering.

**CAUTION:** Do not sand through to the subsurface. However, a test lacquering with subsequent adhesion tests should be carried out in advance.

### PROCESSING PARAMETERS

<b>Processing temperature:</b>	max. 110 °C
<b>Spec. pressure:</b>	max. 2.5 kg/cm <sup>2</sup>
<b>Press time:</b>	max. 3 minutes

### STORING

The primed door skins should be stored in closed, well-ventilated, temperature-controlled rooms.

### ENVIRONMENT

The environmental compatibility of the HDF HOMADUR® door skins begins with the environmentally-friendly materials used, such as untreated timber and low-formaldehyde binding agents, and ends with our innovatively ecological and gentle manufacturing process. Lacquering is carried out in an eco-friendly process, using water-based emulsions only.

### PLEASE NOTE

For further information please see the general specifications of HDF HOMADUR®. The information above is provided to the best of our knowledge, but no liability can be inferred.

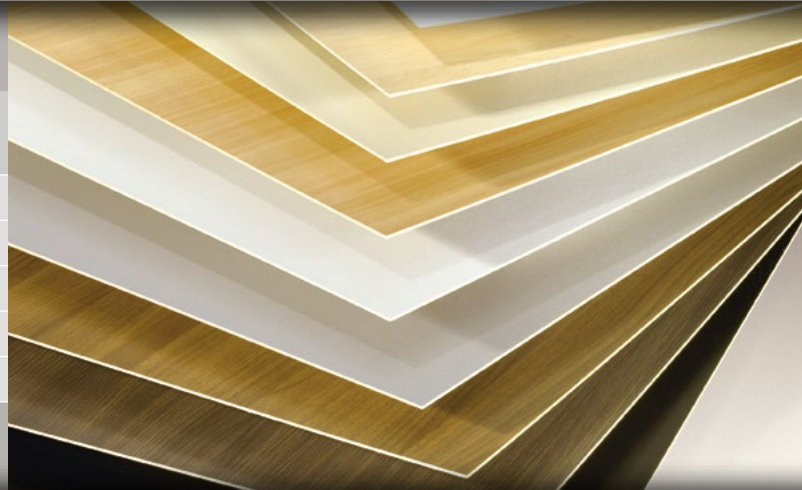
# HDF HOMADUR®

## Decor Plus and Uni Plus

### TYPES OF APPLICATION

These boards are used in the following branches, for example:

- Furniture industry
- Door industry
- Automotive industry
- Interior fitting
- Exhibition stand construction



### PRODUCT

HDF HOMADUR® Decor Plus and Uni Plus are finished lacquered wood fibreboards for different applications. HDF HOMADUR® Uni Plus and Decor Plus boards are lacquered with "water-based-emulsions" and "special UV lacquers".

### STRENGTHS

- improved scratch resistance
- One or both sides lacquered
- Tailor-made service: Our technical centre is equipped with a laboratory facility that enables us to create almost any pattern the customer desires.

### SPECIFICATIONS

HDF HOMADUR® Plus is tested in accordance with DIN EN 622 part 1 and 5 and has the following data at dispatch:

<b>Thickness:</b>	1.5–6.0 mm
<b>Dimensions:</b>	Formats on request
<b>Thickness tolerance:</b>	± 0.15 mm
<b>Abrasion behaviour:</b>	2 E
<b>Behaviour under scratching:</b>	4 D

### PROCESSING

During pressing with honeycomb inserts the specific pressure should be adjusted to the frame structure. Further processing can be carried out using standard woodworking machinery and tools. You must carry out your own trials and tests in advance.

### PROCESSING PARAMETERS

<b>Processing temperature:</b>	max. 100 °C
<b>Spec. pressure:</b>	max. 2.5 kg/cm <sup>2</sup>
<b>Press time:</b>	max. 3 minutes

### CARE

The lacquered surfaces of the HDF HOMADUR® Plus boards should be cleaned with a soft cloth and mild cleaning agent in common household use.

### ENVIRONMENT

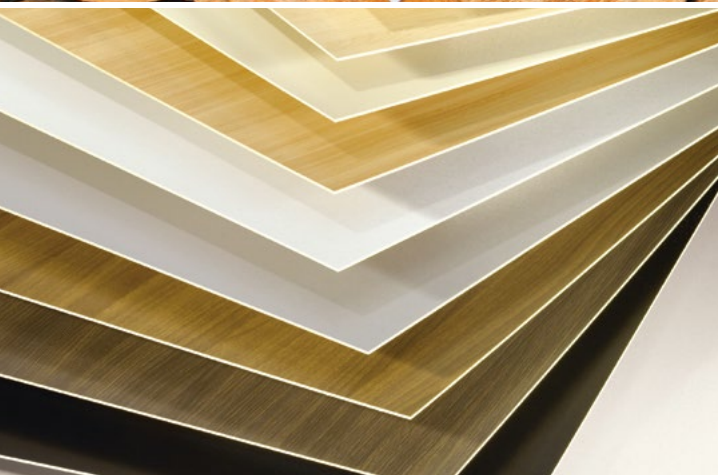
The environmental compatibility of HDF HOMADUR® Decor Plus and Uni Plus begins with the environmentally-friendly materials used, such as untreated timber and low-formaldehyde binding agents, and ends with our innovatively ecological and gentle manufacturing process. Lacquering is carried out in an eco-friendly process, using water-based emulsions only. These are protected with an AC-UV lacquer.

### PLEASE NOTE

For further information please see the general specifications of HDF HOMADUR®. The information above is provided to the best of our knowledge, but no liability can be inferred.

# HDF HOMADUR<sup>®</sup>

wood fibreboards



# HDF HOMADUR®

## wood fibreboards

### 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 primarily 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 thermally 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 thermally 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 ISO 12460-5 – 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 ΔE 1.0. The printed wood grain decors are also checked within a specified framework throughout the whole production. The degree of gloss is 25 +/- 6, corresponding to 60° 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:

- **Thickness tolerance, unsanded:** ± 0.15 mm
- **Thickness tolerance, sanded:** ± 0.10 mm
- **Format tolerances standard boards:** ± 2 mm/1000 mm
- **Format tolerances, cut to size:** ± 1 mm/cut to size
- **Angular tolerances, standard boards:** ± 2 mm/1000 mm (side length)
- **Angular tolerances, cut to size:** ± 1 mm/1000 mm (side length)
- **Flatness / max. waviness:** 7 mm/1000 mm (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 9001:2015.



### PLEASE NOTE

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