

# HDF HOMADUR<sup>®</sup> WOOD-BASED PANELS

# APPLICATION

HDF HOMADUR<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> boards are also available as flame-retardant variants or as composite boards with central cores of aluminum or lead. HDF HOMADUR<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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  ${\rm HOMADUR}^{\circledast}$  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 waterbased 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 referance samples.

HDF HOMADUR<sup>®</sup> 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<sup>®</sup> boards, please refer to the separate product information.

## PROCESSING

HDF HOMADUR<sup>®</sup> 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.

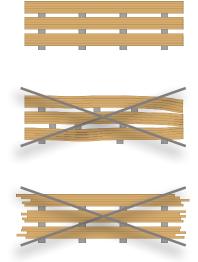


# HDF HOMADUR® WOOD-BASED PANELS

As a general rule: HDF HOMADUR<sup>®</sup> products are wood fibrebased 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> boards are suitable for the manufacture of children's furniture and toys in accordance with IOS-MAT 0054 and IOS-MAT 0195.

HDF HOMADUR<sup>®</sup> 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<sup>®</sup> 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:

These product instructions have been prepared to the best of our knowledge and with great care. No liability can be assumed for printing errors and mistakes. The most recent processing instructions apply. The content cannot be used as a legally binding basis.



# HDF HOMADUR<sup>®</sup> ALU-CLIMATE DOOR SKIN

# APPLICATION

HDF HOMADUR<sup>®</sup> ALU-CLIMATE DOOR SKINS are used in the door industry for the following applications:

- Apartment entrance doors
- Burglar-resistant doors
- Climate-control doors
- Smoke control doors
- Fire doors

#### PRODUCT

HDF HOMADUR® ALU-CLIMATE DOOR SKINS are composite elements featuring specially developed HDF boards and an inner core made of aluminum. With HDF HOMADUR® ALU-CLIMATE DOOR SKINS, door systems of climate class B + C (in accordance with DIN EN 1121 and 12219) or climate class II + III (in accordance with RAL-GZ 426) can be realised.

### STRENGTHS

- High intrinsic stability
- Problem-free surface finishing
- Tension-free composite element, therefore exceptionally flat
- Fire and burglar-resistant

#### TECHNICAL SPECIFICATIONS

Format tolerances can be found in the separate TOLERANCE DATA SHEET. Physical properties can be found in the separate TECHNICAL DATA SHEET. They are available upon request.

3.4–9.0 mm
± 0.2 mm
0.3 mm; 0.5 mm
sanded on both sides with 120 grit
PUR adhesive
PVAC glue (D3) for
oversizes (width > 1.3 m; length > 3.2 m)
AL 99.5 according to EN AW-1050 AH24
DIN EN 485/573

# PROCESSING

After HDF HOMADUR ALU-CLIMATE DOOR SKINS have been stored in an environment with high air humidity and low temperatures, they should be acclimatised before processing in the hall where the pressing takes place. A sheet temperature of at least 15 °C is required for processing. We recommend that the door blank be left to rest for at least 24 hours after pressing before further processing, such as formatting and profiling.

# PROCESSING PARAMETERS DURING PRESSING

Specific pressure:max. 2.5 kg/cm²Pressing temperature:max. 110 °C

#### STORAGE

HDF HOMADUR<sup>®</sup> ALU-CLIMATE DOOR SKINS should be stored in closed, well-ventilated and temperature-controlled areas.

### PLEASE NOTE:

The recommendations stated here must be confirmed in advance by the customer through individual trials.

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# HDF HOMADUR<sup>®</sup> RADIATION PROTECTION DOOR SKIN

# APPLICATION

HDF HOMADUR<sup>®</sup> radiation protection door skins are used in the door industry for the following applications:

Radiation protection doors (with lead insert)

#### PRODUCT

HDF HOMADUR® RADIATION PROTECTION DOOR SKINS are composite elements featuring specially developed HDF boards and an inner core made of lead.

#### STRENGTHS

- High intrinsic stability
- Problem-free surface finishing
- Tension-free composite element, therefore exceptionally flat
- Fire and burglar-resistant
- Radiation-retardant, lead equivalent value in accordance with DIN 6812. The aforementioned standard stipulates that a radiation protection plan must be created and must form the basis for all structural protective measures.

## TECHNICAL SPECIFICATIONS

Format tolerances can be found in the separate TOLERANCE DATA SHEET. Physical properties can be found in the separate TECHNICAL DATA SHEET. They are available upon request.

Thickness:
Thickness tolerance:
Lead thickness:
Finish:
Gluing:
Lead quality:

4.2–7.5 mm ± 0.2 mm 0.5 mm; 1.0 mm; 1.5 mm sanded on both sides with 120 grit PVAC glue (D3) Pb 99.94 Cu in accordance with DIN EN 12588

### PROCESSING

After HDF HOMADUR® RADIATION PROTECTION DOOR SKINS have been stored in an environment with high air humidity and low temperatures, they should be acclimatised before processing in the hall where the pressing takes place. A sheet temperature of at least 15°C is required for processing. We recommend that the door blank be left to rest for at least 24 hours after pressing before further processing, such as formatting and profiling.

# PROCESSING PARAMETERS DURING PRESSING

Specific pressure:max. 2.5 kg/cm²Pressing temperature:max. 70 °C

## STORAGE

HDF HOMADUR<sup>®</sup> RADIATION PROTECTION DOOR SKINS should be stored in closed, well-ventilated and temperature-controlled areas.

#### PLEASE NOTE:

The recommendations stated here must be confirmed in advance by the customer through individual trials.

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