## ELEX Compact Fiberboard Maintenance

ELEX Compact Fiberboard is an innovative, robust, and high density (>1200 kg/m ${ }^{3}$ ) wood based fiberboard.
The raw core is black colored and made up of wood fibers impregnated with thermosetting resin. The surface layer(s) on both sides are decor papers, having decorative colors or designs that are impregnated with melamine based resin. These two components are bonded together under high pressure and temperature to obtain an integrated decorative material.

Structure


## Technical data of ELEX Compact Fiberboard (raw core)

(acc. to EN622-5: Fiberboards-requirements for boards after drying process MDF)

| Testing Parameter | Test Result | Unit | Requirement | Standard |
| :---: | :---: | :---: | :---: | :---: |
| Panel thickness | 8/9/10/12/13 | mm | 1 | EN 324 |
| Thickness tolerance | $\pm 0.2$ | mm | $\pm 0.2$ | EN 324 |
| Raw Density | > 1200 | $\mathrm{kg} / \mathrm{m}^{3}$ | > 800 | EN 323 |
| Internal bond strength | > 4.0 | $\mathrm{N} / \mathrm{mm} 2$ | $>0.6$ | EN 319 |
| Flexural strength | $>70$ | $\mathrm{N} / \mathrm{mm} 2$ | >22 | EN 310 |
| Flexural elasticity module | > 6500 | N/mm2 | $>2500$ | EN 310 |
| Surface soundness | $>3.5$ | $\mathrm{N} / \mathrm{mm} 2$ | $>1.0$ | EN 311 |
| Thermal conductivity | 0.182 | $\mathrm{W} /(\mathrm{m} \cdot \mathrm{K})$ | 0.14 | EN 13986 |
| Moisture content | 8 | \% | 4-11 | EN 322 |
| Swelling in thickness 24H | $<3.6$ | \% | <15 | EN 317 |
| Formaldehyde Emission | E1 |  | E1 | EN 13986 |
| Fire classification | B-s1, do |  | B2 | EN 13501 |

## Technical data of ELEXCompact Fiberboard (decor panel)

(acc. to EN 14323: Melamine-coated boards for indoor applications)

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| Testing Parameter | Test Result \| | Scale | Evaluation | 1 Standard |
| :---: | :---: | :---: | :---: | :---: |
| Surface Abrasion | 900 | Revolution | High | EN 14323 |
| Ressistance to water vapour | 5 | $1-5$ (5 is the best) | Very high | EN 14323 |
| Resistance to scratching | No visible marks after scratching with 4 N | Visual | High | EN 14323 |
| Resistance to cracking | 5 | $1-5$ (5 is the best) | Veryhigh | EN 14323 |
| Resistance to impact by large diameter steel ball | No visible cracking after impact with height of 200 cm | Visual | High | EN 14323 |
| Resistance to staining | 5 | $1-5$ (5 is the best) | Very high | EN 438-2 |
| Light fastness | 4.5 | - | High (grey scale) | ) EN 14323 |
| Formaldehyde emission | E1 | - | E1 | EN 13986 |
| REACH | < 0.1\% | (W/W) | Pass | REACH Regulation(EC) No. 1907/2006 173 (SVHC) |

## Maintenance Guide

ELEX Compact Fiberboard are designed for beauty and durability structure material. However, it can be damaged by abuse and carelessness. When used as recommended with proper use and care, it will keep its high performance for years.

## Transportation of Material

## Key Points

- Always keep the panels clean.
- Never drag the panels when moving.
- Use angle bead during transportation.
Fork Lift
Carrying


## Storage of Material

## Key points

- Storage place must be clean, ventilation and dry. Wet area is not good to storage the panels.
- Keep temperature between $10^{\circ} \mathrm{C}$ and $30^{\circ} \mathrm{C}$ and $40-65 \% \mathrm{RH}$.
- Don't overload each pallet (Maximum 2000kgs).
- Make the pallets straight in Longitudinal \& Transversal when pile up. (Maximum 6m height)
- Cover the surface of the panel once the package opened. (In order to avoid the humidity)
- Avoid the panel from sunshine.
- Never drag the panels. When carrying, it's easy to cause small scratches.
- Never lean the panels in storage or on site, since it's easy to cause bending.



## Processing of Material

-To maintain the smooth holes edges, it's the best to put some soft under-layer ( like MDF, Solid wood etc) under the drilling position in order to make sure the driller will not stop by anything after through hole. Otherwise the bottom surface might be damaged by the driller shaking.
-Never cut the long side from the short side of the panels. The paper's fibers will come along with the long side, the panel may easy to bend if you cut the long side from the panel's short side, it will damage the stress balance of the panel.
Drilling

## Cleaning of Material

## Key Points

- To maintain the laminate's lasting beauty, you only need to use a clean, damp, non-abrasive cotton cloth and a liquid detergent or household cleaner in most cases. Light scrubbing with a soft bristled brush may be necessary to remove stains from the depth of structure on some textured surfaces. But too much force may damage the decorative surface.
- Never use cleaners containing acid, alkali, or hypochlorite. These cleaner will mar, etch, corroder and permanently discolor the laminate surface. Also, make sure those bottles, rages and other materials contaminated with these cleaners never contact the laminate surface.


## Clean by soft brush



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## Attention

As for the cleaner, many commercially available cleaners contain substances that may damage the laminate surface. Particular care should be used with any products labeled CATION or WARNING. Examples of these are as follows:

- Do not use following cleaners:
- Toilet bowel cleaners
- Hydrogen Peroxide
- Oven cleaners
- Drain cleaners
- Metal cleaners and polish
- Chlorine Bleach
- Tub and tile cleaners


## Scratch and Impact Protection

All ELEX Compact Fiberboard are resistant to scratches and impacts under normal use conditions as below:

- Do not chop, slice, pound, or hammer on any surface.
- Knives other sharp utensils may slice or scratch the surface.
- Heavy blows from a hammer or meat tenderizer may crack or gouge the surface.
- Ceramics and abrasive objects can cause scratching and premature wear - do not slide these items across surface.


## Heat Objects

Sustained release to temperatures of $60^{\circ} \mathrm{C}\left(140^{\circ} \mathrm{F}\right)$ or higher may cause the laminate to separate from the core material. Never expose to heat exceeding $60^{\circ} \mathrm{C}\left(140^{\circ} \mathrm{F}\right)$ on the ELEX Compact Fiberboard. Never ironing or placing a hot iron or lighted cigarettes directly on laminate surface.

## Chemical Damage

Never use cleaners containing acid, alkali, or sodium hypochlorite. These cleaners will mar, etch, corrode, and permanently discolor the laminate surface. Also, make sure that bottles, rags, and other materials contaminated with these cleaners never contact with the laminate surface.

## Health and Safety

-Inhalation of dust generated from processing ELEX decorative compact fiberboard may cause irritation and sensitization by inhalation (asthma) and by skin contact (dermatitis).
-Repeated inhalation of dust may cause irreversible health effects including asthma, chronic nose or throat irritation or lung scarring. Do not breathe the dust. Wear a respirator when using power tools.

