

Handling wellboard

Storage

wellboard is in equilibrium with the humidity of the surrounding air. As described in the technical data, wellboard changes its dimensions when it absorbs moisture or gives it off again. In order to avoid changes of this kind, wellboard is packed in a cardboard cover coated to make it moisture-proof. The cardboard covers are closed with plastic lids. The undamaged original packaging offers adequate protection against variations in the humidity of the surroundings. However, direct contact with water should be avoided. The rolls should preferably be stored in a vertical position.

We recommend storing wellboard in the packaging supplied with the material only. If it is necessary to unpack wellboard for handling purposes and it is not to be installed until later or if wellboard has to be transported again after handling, we recommend repacking it in the cardboard cover supplied with it. It is at least necessary to pack it in foil impervious to water vapour.

Attention: the dimensions of wellboard can change when it becomes acclimatized on location.

Preparation

wellboard should be unpacked and placed in the room where it is to be used about 2 days before installation. This ensures that wellboard becomes acclimatized to the atmospheric humidity and virtually does not change any more afterwards. Ideally, the atmospheric humidity should be as stable as possible and lie between 40 and 60 %.

Cutting wellboard to size

wellboard can be cut to size using various different methods:

Laser beam or **water jet:** cutting stacked wellboard panels with laser beams causes an increased occurrence of burn marks and the use of water jets leads to untidy cutting edges. Individual panels can be cut to size without restrictions.

Circular or **plate saw:** trapezoid saw blades with a diameter of up to 450 mm are suitable. The ideal cutting speed is between 3300 und 3900 m/min. The saw blade should protrude beyond the surface of the panel by no more than 5 mm. The saw table should ideally be of hardwood.

Band saw: the ideal cutting speed is between 1500 und 1800 m/min. The saw band has a thickness of 0.8 to 0.9 mm and a width of between 20 and 25 mm and has 4 teeth per inch.

Fret saw: wellboard can be cut using metal saw blades or toothless special blades.

Cutting: some types of wellboard – especially those with a raw panel thickness of 1.0 mm – can be cut too. Pneumatically or electrically driven shears or knives are suitable here.

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Sanding: wellboard can be sanded like wood. Belt and cylinder sanding machines (please note direction of insertion). Oscillation, belt, excenter and plate sanding machines can be used. Brush sanding machines or sandpaper, sanding sponges or abrasive web are suitable for sanding the surface, for example after grounding.

Drilling: holes with a diameter of up to 15 mm can be cut directly using spiral drills. Larger diameters must be pre-drilled and reworked using a spigot chamfer.

Gluing

wellboard can be glued using the usual wood adhesives. Good results have been achieved using contact adhesives as well as one- or two-component PUR adhesives. wellboard can be assembled using assembly adhesives based on PUR but also assembly foam. Good results have also been achieved using two-component PUR adhesives for gluing wellboard to carrier materials in presses.

Attention: the compression behaviour of wellboard must be taken into account. Gluing must be carried out at low pressure. We recommend applying pressures of less than 0.1 n/mm². As a result of the sensitivity of wellboard to moisture, adhesives with a low water content or water-free adhesives are preferable. We recommend carrying out tests on pieces or samples. We will gladly provide samples for gluing tests.

Coating

All coatings used for wood can be applied to wellboard. We recommend applying the products by spraying. For details on the handling of the products selected, please see the data sheets issued by the manufacturers.

As a result of the sensitivity of wellboard to moisture, water-based coatings should have as high a filler content as possible.

As wellboard is extremely flexible, the products used must form an expansion-proof coating. Products which form a hard coating cause fissures when wellboard is moved – the coating flakes off. However, if no more changes in shape are to be expected, less flexible coatings can be used.

The following product categories have been used successfully and with good results:

- Water-dilutable, coating-forming **glazes** and **stains**.
- **One-component synthetic resin varnishes** in particular for clear varnishing with various different shines.
- Combination varnishes based on **polyurethanes** and **acrylic resins**. These products have achieved the best results up to now.
- **Two-component polyurethane resin** varnishes.
- Products based on **polyurethane** and **acrylic resins** for sealing floor coverings.

Attention: the use of spray fillers allows the surface structure of wellboard to be balanced, but the resulting coating can split when bent.

Attention: in order to avoid uneven absorption of moisture after coating, wellboard must always be varnished on both sides. Moisture is absorbed particularly quickly on the edges. It is necessary to ensure that the edges are varnished adequately.

Fire protection

Commercially available chemicals can be used to improve fire protection. When used correctly, products of this kind allow classification according to DIN 4102 B1 to be achieved. If the intended application requires it, we recommend treatment with the flame retardant "fax" (available via well gmbh). For instructions on applying products of this kind, please see the data sheets provided by the manufacturers. Please make sure that flame-retardant impregnation agents are only aqueous solutions of flame-retardant substances. In order to achieve an adequate effect, large quantities of these products must be sprayed on. It is necessary to apply them as evenly as possible before installing wellboard. After treatment, wellboard should be dried again and become acclimatized to the atmospheric humidity of the room before installing.

Source: excerpt from the wellboard manual version 1.0