Installation Directions

Transportation

OSB/3 SWISS KRONO LLC boards should be transported and placed in the vehicle in a way that allows avoiding their damage.

Storage of OSB packs at a storehouse

Boards should be stored in a closed storehouse with good ventilation. They can also be stored under covering that allows avoiding the risk of precipitation influence.

Storage of OSB on a construction site

If it is impossible to store boards under the covering, an even horizontal surface should be prepared, for example in the form of a platform, and insulated from the ground with a layer of film. Pallets should also be wrapped up in a film and covered with tarpaulin or with any other material for the purpose of protection from moisture, however with a simultaneous possibility of access of air to the boards.

Prior to the use of boards on a construction site, it is recommended to carry out 24-hour acclimatization of boards in new conditions. According to the rules of protection of wooden materials, board humidity in the process of installation should not exceed 15%; this level of humidity excludes the possibility of appearance of fungus and mold.

Board storage conditions

OSB/3 SWISS KRONO LLC boards should be necessarily protected from direct moisture both in the process of storage and in the process of construction works. Immediately after completion of external
installation works (on roofs and walls), a corresponding insulation from negative influence of atmospheric precipitation should be carried out. OSB/3 boards that are affected by moisture for a long period of time can have swelling edges – up to 15% according to the standard. Prior to mounting of facing materials, for example bituminous tile on roofs, board edges may require additional polishing in order to achieve evenness of the surface.

Specifics of wall cladding with OSB/3  SWISS KRONO LLC boards

OSB/3  SWISS KRONO LLC boards can be mounted on walls both in horizontal and in vertical positions. A gap of not less than 3 mm should be necessarily left between boards and around door and window holes.
The recommended board thickness for wall cladding of a frame house constitutes 12 mm in case of distance between columns from 400 mm to 600 mm. For additional thermal protection of walls it is recommended to use mineral cotton with facing in a form of mineral plaster.

Wood screws, spirally grooved nails or ring nails with the length not less than 2.5 board thickness are used for fastening of boards.
Black screw nails for gypsum-cardboard sheets are not suitable for fastening of wooden boards.
Nails should be hammered in at a distance of 30 cm on intermediate supports and at a distance of 15 cm on board joints. On external board edges, nails are hammered in at a distance of 10 cm. The distance from a nail to a board edge should not be less than 1 cm.

Specifics of OSB/3 SWISS KRONO LLC boards mounting on the floor

In case of mounting of boards on boarding joists, at least 3 mm gap should be left along the board perimeter. In case of mounting of boards between walls or in case of “floating floor”, a gap of 12 mm should be left between a board and a wall. Board’s principal axis should be mounted perpendicularly to boarding joists. Junctions of short board edges should be placed on boarding joists.
In case there is timber flooring on the ground floor of a building having contact with the ground, the bottom side of flooring construction should be protected from wind and additional waterproofing should be carried out directly on the ground. Mounting of OSB boards on the floor is carried out with the help of wood screws, spirally grooved nails or ring nails with the length not less than 2.5 board thickness. Black screw nails for gypsum-cardboard sheets are not suitable for fastening of wooden boards, since they have other technical specifications.

Nails should be hammered in at a distance of 30 cm on intermediate supports and at a distance of 15 cm on board joints. In order to increase firmness of the floor, boards can be glued to boarding joists with the help of adhesive based on chemical substances.

Preliminary estimate of the dependence of distance between boarding joists and board thickness in residential construction

<table>
<thead>
<tr>
<th>Distance between boarding joists, mm</th>
<th>400</th>
<th>500</th>
<th>600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended OSB board thickness, mm</td>
<td>15-18</td>
<td>18-22</td>
<td>22</td>
</tr>
</tbody>
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*this table does not replace engineering design, it serves exclusively for preliminary estimate

Specifics of roof covering with OSB SWISS KRONO LLC boards
Prior to mounting of covering, one should ensure that rafters or battens placed on one axis are straight and even. Curving or unevenness of rafters can negatively influence the roof appearance in the long run. Boards that were soaked in the rain should be fully dried and protected from biocorrosion prior to laying of coating. Premises without heating, like attic or cellar, should have good ventilation. Vent holes should occupy not less than 1/150 of the whole horizontal surface. Taking into consideration board dimensions, its long size should be placed perpendicularly to the rafter or batten. Junctions of short edges should always be placed on roof supports. Long board edges should be supported or joined by “H” cramps where necessary. At least 3 mm gap should be left between boards. Board should be mounted minimum on two supports, and its junction should be placed on the support. In the process of board fastening, workers should stand on rafters or battens, observing safety requirements.

If there is a chimney flue in the roof construction, roof covering should be moved away from the chimney in accordance with the accepted construction standards.
In the process of installation works on the roof, workers should observe safety rules for working at height. Fastening of OSB boards on the roof should be carried out with help of wood screws, spirally grooved nails or ring nails with the length not less than 2.5 board thickness. ATTENTION: black screw nails for gypsum-cardboard sheets are not suitable for fastening of wooden boards. Nails should be hammered in at a distance of 30 cm on rafters or battens and at a distance of 15 cm on board joints. The distance from a nail to a board edge should not be less than 1 cm.

*Preliminary estimate of the dependence of distance between rafters or battens and board thickness for roofs with tilt over 14°*

<table>
<thead>
<tr>
<th>Distance between rafters or battens, mm</th>
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**General installation rules for OSB/3  SWISS KRONO LLC boards**
OSB/3 SWISS KRONO LLC boards can be mounted on walls both in horizontal and in vertical positions, on the floor and used for the roof covering.

Mounting of OSB boards is carried out with the help of wood screws, spirally grooved nails or ring nails with the length not less than 2.5 board thickness. Black screw nails for gypsum-cardboard sheets are not suitable for fastening of wooden boards.

At least 3 mm gap should be left between boards. Board should be mounted minimum on two supports, and its junction should be placed on the support.

Nails should be hammered in at a distance of 30 cm on supports and at a distance of 15 cm on board joints. On external board edges, nails are hammered in at a distance of 10 cm. The distance from a nail to a board edge should not be less than 1 cm.
**Preliminary estimate of the dependence of distance between supports and board thickness**

<table>
<thead>
<tr>
<th>Distance between supports, mm</th>
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<th>600</th>
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**wall cladding can be done using OSB with the board thickness of 12 mm