3. TECHNICAL PROJECT

Log houses are designed with quite a unique method, combining log details with possibly different heights, with high level of contrasts between side by side logs, yet avoiding any repetition of those combinations. As the result, their placement is different throughout the walls as well as within each layer of logs.

For example, a log house with wall thickness **200 mm** provides variability of log profiles by using step 10 mm and wide ranges of available detail heights: 20-34 cm for wall details; 21-31 cm for purlins and beams of ceilings frame; 10-30 cm for base log layer; and Ø 22-36 cm for round purlins of roof support. We also offer **150 mm** and **250 mm** thickness of the walls; moreover there is feasibility to interconnect those 3 thicknesses. Only, it will be realized within the slightly narrower frame of mutual combinations.

So called proportionality or height for one side of the log corner joint is strictly controlled by program to not overstep their utmost limits (100-190 mm). However in the case of round roof logs there is need for a wider range of corner joints division (60-280 mm), in such an event, the same program and other complex designing algorithms are used to achieve orderliness of log constructions.

Maximum permissible length of details used in the log house constructions - 8,1 m. Nominal size of rafters 50×200 mm; lathing 50×50 mm; step (distance) for both of materials 600 mm.

The technical drawings are developed solely for manufacturing purposes and their executions shall not comply with requirements of the construction board. However, our design includes actual spatial details of a construction; therefore, it makes you easier to develop a building design.

The production costs include manufacturing - technical design, so you will not be charged additionally in this regard. The manufacturing process is in no way easier due to a possibility to use standardized projects, because machines are operated automatically and manufacturing time remains the same. But precisely in such a case we will deduct designing prime cost from the price of your order.

As a standard we prepare 25 m² of technical design per day, for example, we will prepare a project for a log house of 360 m² in 15 business days, including therein coordination of the design with you and application of all necessary corrections.

Technical project composition:

 Technical drawings. So that we could coordinate the project with you, but also the frame of log house will be assembled in line with set of drawings listed below. More: ASSEMBLY INSTRUCTION.PDF | ROOF CROSS-SECTION.PDF

Walls - wall layouts.

Plans - floors, ceiling beams, purlins and other plans.

3D - spatial view of the log house frame, so that it would be easier to grasp constructions.

Sections - none standard constructions. If necessary, we ensure more detailed developments.

2. Calculations. Summary tables, separately with respect to log area and separately for planed timber included in the log house delivery package. Example: <u>DELIVERY LIST.PDF</u>

Calc_1 - log area; it determines volume of the ordered project and price thereof. It is calculated by summing wall area (page 4 or 9) with areas of purlins, beams and columns (page 10).

Calc_2 - list of materials (starts on page 11). Materials that are used for almost any log house in terms of size, quantity and type of processing. Those are materials you don't have to make a single decision about.

For your information.

Materials included in the package amounts to about 15% of the log volume. These materials are dried and planed; ends for rafters are prepared and slider grooves are cut. However, it is possible to acquire partial or different material packages. Price for additional rafters will be 400 \notin/m^3 and 370 \notin/m^3 for laths. Good price have planks to develop a deck before a membrane (20 mm; T&G also in the ends), just $6 \notin/m^2$.

- **3. Detailing**, solely for manufacturing and designing purposes as well as to control both. **Details**.
 - Gables. Purlins. Beams. Apertures. Planes. Drip-Nose. Transitions of profiles etc., and also: XML - controlling files for machines and data base management. Stat_Operations - accounting on process operations, outgoing data for calculation of wages. Stat_Logs - statistics about logs usage in the project, namely number of % for each height of logs.
- 4. Packing. Lists of packed log details are generated by database program and these lists are also logical end of the bar code controlled manufacturing process. Example: <u>PACKING LIST.PDF</u>

Under section **Examples** we invite you to take a look at different architectural and construction solutions used for log houses; there are exhibited part of projects manufactured before year 2010. We hope that it will be easier to grasp the constructions with the help of spatial views, allowing you to choose a log house type according to your taste and needs. If not, then we hope that at least many interesting ideas will attract you. We will strive to add new content to this resource!