

XIV Competition for Handcrafted Log House Builders

Place: Rāpina (South Estonia)

Time: 25th MAY 2024 @11:00, registration starts @10:00

Organizers: Woodhouse Estonia (Estonian Woodhouse Association); partners Hiiumaa Vocational School and Hobbiton OÜ

Purpose: to introduce and populize the profession of log house builder, as well as to promote log construction and its traditions.

Participation: FREE

Registration form: <https://forms.office.com/e/KmeixFpXhR>

Additional information: info@woodhouse.ee

Deadline for the submission of registration: 10 MAY 2024



Competition for handcrafted log house builders 2023. Photo: Karl Markus Antson

Rules of the Competition

1. Organization of the Competition

- 1.1. Competition is held in three categories:
 - 1.1.1. Professionals;
 - 1.1.2. Students;
 - 1.1.3. Axemen;
- 1.2. Sample corners with four different corner types are prepared for the competition;
- 1.3. Every contestant must choose between four different corner types: Estonian dovetail corner with wind-lock, Estonian square notch with wind-lock, Scandinavian notch and Saddle notch (quality requirements are specified in the figures below);
 - 1.1.1. Upon registration, contestants choose the corner type they wish to build in the competition;
- 1.4. If the competitor wants to build any other corner type in addition to the tenons described in section 1.3, the competitor should provide the organizers at least 3 weeks prior to the beginning of the contest specifications taking into account that it is only possible to make a tenon with a wind lock;
- 1.5. Every contestant must fix a 1.5 m log to a prepared base – incl. building of one corner joint and 1.2 m long groove, and cut straight the log ends, following the lower logs;
- 1.6. In building the corner, the contestant creates the upper joint of the lower log and the lower joint of the upper log (also for Scandinavian notch);
- 1.7. Levelling is performed from both ends of the log, installed according to the internal side of the built corner;
- 1.8. The maximum permitted difference in the height of the ends of the installed log is 40 mm;
- 1.9. All logs in the competition are with a diameter of about 30 cm (+/- 1.5 cm) and cut from two sides (20 cm);
- 1.10. Competitors install the third log to a levelled and raised base (each competitor will have their own base);
- 1.11. The order of competing, logs and bases are drawn by lot (every log is given a number in the order they are installed);
- 1.12. Every competitor has 5 minutes for preparations, during which the competitor prepares their work site and, if necessary, adjusts the base onto which the log is placed;
- 1.13. During the preparation, the competitor is not allowed to make any marks on the logs, to fix any support means, fixtures etc.
- 1.14. Every competitor has a time limit to complete the task. If the time limit is not met, the competitor will be disqualified:
 - 1.1.1. Professionals – 40 min
 - 1.1.2. Students – 1 hour 20 min
 - 1.1.3. Axemen – 3 hours 30 min
- 1.15. Competitors are required to meet all safety requirements and confirm compliance with the requirements by signature prior to the competition, by which the competitor retains responsibility for any injury during the competition;

2. Assessment criteria

- 2.1. The speed and accuracy of fixing a log will be assessed;
- 2.2. The competition will start on the judge's signal and ends at the moment the competitor has finished his or her work and given indication thereof (raising hand);
- 2.3. A competitor gives indication of completion of the task and the time will be determined, after which the work cannot be corrected in any way;
- 2.4. In case the task was not completed properly (the work was not completed or was completed incorrectly), the judges can disqualify the contestant;

- 2.5. The speed and quality of completing the competition task are evaluated by judges convened by the organizer, who are specialists in the field of timber construction, possess extensive experience in the field, and/or have received specific training for assessing the competition.
- 2.6. With any inaccuracy, penalty seconds will be assigned as follows:
- a) Gap length between groove edges and lower log:**
 - i. to be measured from 1 mm
 - ii. width x length
 - iii. 1 mm = 1 sec
 - b) Gap length in corner joint:**
 - i. width x length
 - ii. 1 mm² = 4 sec; Estonian dovetail corner with wind-lock 1 mm² = 4 sec
 - c) Compliance of the corner joint to the requirements (see figures in the Annex to the rules)**
 - i. 1 mm = 4 sec
 - d) Curvature of log ends compared to the levelled vertical surface**
 - i. tolerance 3 mm
 - ii. 1 mm = 30 sec
 - e) Off-leveling of the side of the log**
 - i. tolerance 2 mm
 - ii. Measured from the inside face of the log; the measuring points: from the side of the tenon and 10 cm from the outer end of the log.
 - iii. 1 mm = 30 sec
 - f) Difference in the height of log ends of more than 40 mm**
 - i. The contestant will be disqualified if the limit is exceeded;
 - g) Length of the longer side of saw mark on the visible surface of the log**
 - i. 1 mm = 30 sec
 - h) Saw marks/cuts in groove – length of the saw cut**
 - i. In the corner, from 3 mm deep cuts
 - ii. In groove, from 5 mm deep cuts
 - iii. the deepest point x length
 - iv. 1 mm = 1 sec
 - i) Improper groove depth – length of the groove**
 - i. 1 mm = 4 sec
 - j) Length of the keyhole saw trace on the exposed surface of the log**
 - i. 1 mm = 10 sec
 - k) Length of the area scratched by the keyhole saw blade**
 - i. 1 mm = 1 sec
 - l) Safety equipment**
 - i. in case of a failure to meet safety requirements, the judges have the right to disallow a competitor from participating in the competition or to disqualify the competitor during the performance of the competition task;
 - ii. in case of an injury, judges have the right to disqualify a contestant;
- 2.7. Judges have the right to assign penalty minutes for any other activity that does not comply with good building practices;
- 2.8. The competitor who has completed the task with the shortest time, penalty seconds included, will be the winner. In case of equal times, the competitor with the lowest number of penalty seconds will be declared the winner of the competition;

2.9. The competitors have the right to submit a protest within 5 minutes after the results are revealed;

2.8.1 An amount of 10€ must accompany a protest;

2.8.2 After the examination of a protest the judgement of referees and secretariat of the competition will be final and is not subject to appeal;

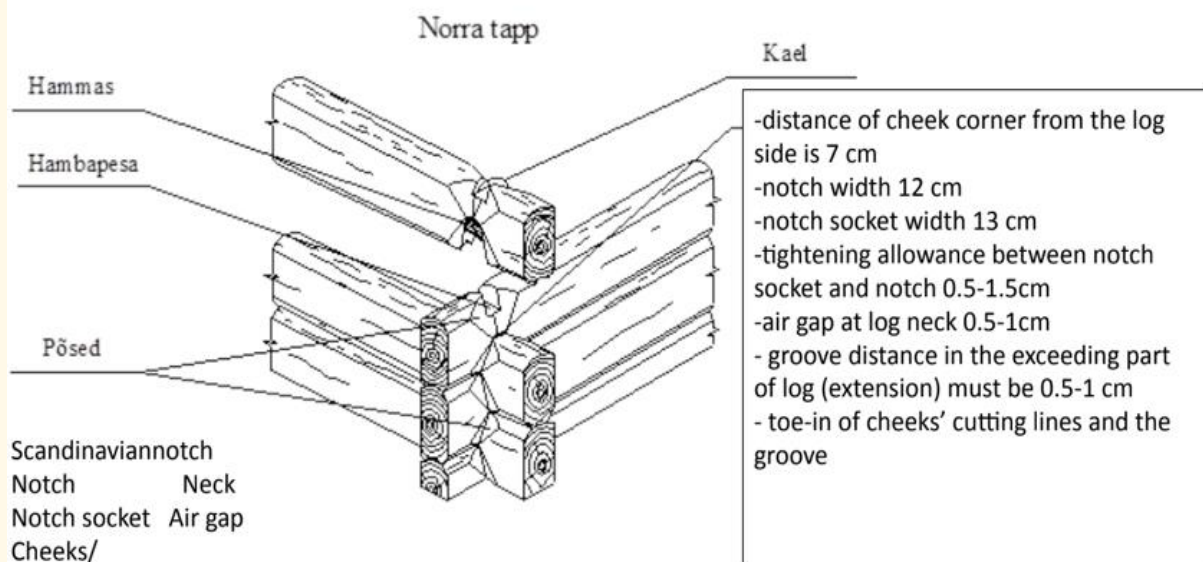
Allowed tools and needed safety equipment:

- Professionals and students: all hand tools and electric power tools, all other work equipment
- Axemen: only manual hand tools and work equipment
- **Safety equipment:** all participants are required to use protective goggles, earphones (or ear plugs), gloves, safety boots, protective clothing (incl. long work trousers).

!!! The competitors must use the tools safely for themselves, their fellow-competitors and the spectators. If necessary, the referees shall check the safety of tools.

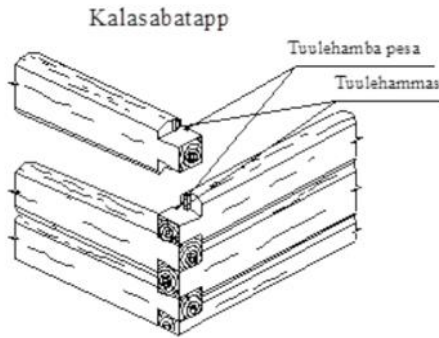
Corner types and groove for the competition – QUALITY REQUIREMENTS

SCANDINAVIAN NOTCH



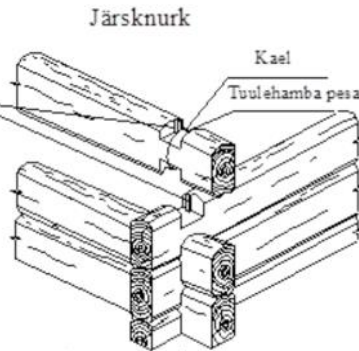
ESTONIAN DOVETAIL CORNER WITH WIND-LOCK

ESTONIAN SQUARE NOTCH WITH WIND_LOCK



Dovetail

notch surface level inclined 2cm per notch
 -(inner and outer corner at the same height)
 -centre of wind-lock notch 8 cm from inner side of log
 -wind-lock notch 2x2cm
 -wind-lock notch socket 3x3cm
 - permitted gaps between wind tooth and wind socket +/- 2mm

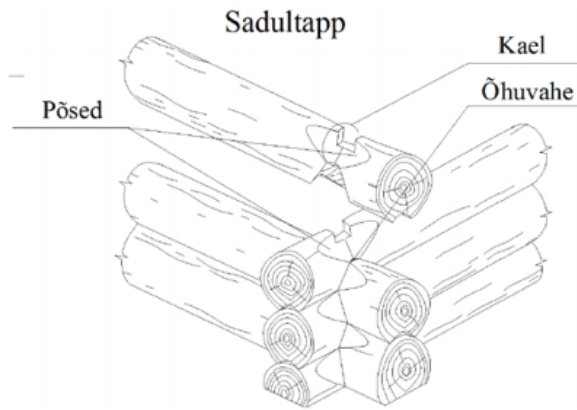


Square notch

tightening gap between horizontal surfaces of 0.5-1.5 cm
 -wind-lock notch centre 8 cm from the inner side
 -wind-lock notch 2x2cm
 -wind-lock notch socket 3x3cm
 - permitted gaps between wind tooth and wind-lock notch socket +/- 2mm
 - groove distance in the exceeding part of log (extension) must be 0.5-1 cm

EST	ENG	EST	ENG
Kalasabatapp	Dovetail	Järsknurk	Square notch
Tuulehamba pesa	wind-lock socket	Kael	neck
Tuulehammas	wind lock notch	Tuulehamba pesa	wind-lock notch socket

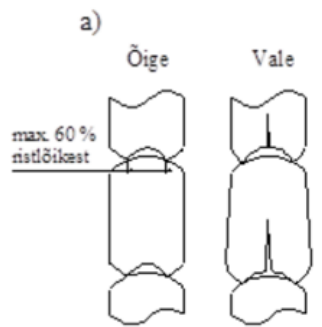
SADDLE NOTCH



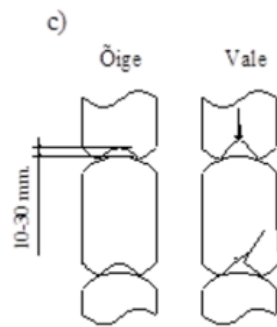
- Width of the wind tenon tooth 12 cm
- Width of the tooth seat 13 cm
- Space for compaction between the tooth seat and the tooth 0.5-1.5 cm
- Air cap at the log neck 0.5-1 cm
- At the end of the log extending outward from the corner tenon joint (log end), the reserve gap must be 0.5-1 cm
- groove depth 1-3 cm
- Gap minimum width 8 cm

EST	ENG
SADULTAPP	SADDLE NOTCH
PÕSED	TENON REVEALS
KAEL	TENON NECK
ÕHUVÄHE	AIR GAP

GROOVES



/a) correct incorrect



c) correct incorrect

Max 60% of cross-section/

- Groove minimum width is 8 cm.