

The Tower of Woodhouse Estonia Competition Guide

1. Time and Place

- 1.1. The competition will be taking place on the **30th of March 2023** from **13.45 to 16.45**.
- 1.2. The competition will be held at assembly hall of Tallinn University of Technology (Ehitajate tee 5, Tallinn, Estonia).

2. Goals of the Competition

- 2.1. To popularize the profession of construction engineering.
- 2.2. To offer the students, who have chosen the construction field a practical experience, let them test their theoretical knowledge, therefore giving their field extra value.

3. Competition base information and system

- 3.1. Create a 3D model of a 10-story tower block capable of receiving horizontal loads. The model must be rigidly attached to the base and must contain floor chain levels.
A wire loop must be attached to the top of the building, where the horizontal load is applied.
Horizontal deformations will be measured.
- 3.2. Materials:
 - 3.2.1. Wooden sticks (10x10x250 mm and 10x10x1000 mm);
 - 3.2.2. Cardboard;
 - 3.2.3. Base plate (OBS, PLP).
- 3.3. Tools used:
 - 3.3.1. Hacksaw;
 - 3.3.2. Knife;
 - 3.3.3. Screwdriver and screws;
 - 3.3.4. Stapler and staples;
 - 3.3.5. Wire;
 - 3.3.6. Hole tape;
 - 3.3.6. Tape.
- 3.4. Construction
 - 3.4.1. The time allotted to build the model is **2 astronomical hours**.
 - 3.4.2. The height of the model is **1 meter**.
 - 3.4.3. Only materials and tools obtained from the competition organizer may be used to build the model (listed in points 3.2 and 3.3).

4. Competitors

- 4.1. Competition will be held in **teams of two to four**.
- 4.2. Participation in the competition is free of charge.
- 4.3. The competition will have no age restrictions.
- 4.4. Competitors are reliable for their own safety and well being. The organizers will not be liable for any injuries or the consequences afterwards.

5. Registration

- 5.1. Registration can be found on BuildIT 2023's homepage.
- 5.2. In case of free spots, it will be possible to register to the competition on the spot before the start of the competition.
- 5.3. By signing up, all participants voluntarily give their consent for the use of all information gathered during the event including pictures and videos made of the participants for marketing purposes by BuildIT.

6. Evaluation

- 6.1. The stiffness and deformations of the model are evaluated, as well as engineering skills and logic. The appearance of the model and the originality of the solutions are also important.

7. Awards

- 7.1. Places I, II and III will receive a reward.

8. Organizers and Judges

- 8.1. Patron of the tower building competition is Estonian Wooden House Cluster.
- 8.2. Hosting the event: Student Council of the School of Engineering at Tallinn University of Technology, Estonian Wooden House Cluster, Woodhouse Estonia.
- 8.3. The jury: Elar Vilt (Woodhouse Estonia), Villu Leppik (Estonian University of Life Sciences)

*The hosts reserve the right to make changes in the competition rules should there be a need to.