

Call for Applications for the

13th European Professional Competition for Carpenters

Responsible Body: Timber Construction Europe (TCE)

Host country: Luxembourg

Venue: Luxembourg-Kirchberg

Hosting organization:

Holzbau Luxembourg Asbl
2, Circuit de la Foire Internationale
L-1347 Luxembourg-Kirchberg
Tel.: +352 424511-33

Date: 18 to 21 October 2018

A) Rules of the Competition

1. Objectives

- 1.1. Taking place in the year in between the International Professional Competitions, the 13th European Professional Competition for Carpenters is designed to raise awareness among the public for the importance of carpentry and the achievements in the vocational training of carpenters.
- 1.2. In addition to the European Professional Competition, a “Competition by Invitation” will be held. Countries that are interested in the objectives of the European Professional Competition, but first want to find out more about performance standards are invited to participate in this competition. For more information, see §A 8.
- 1.3. The professional competition offers the opportunity to present the benefits of vocational training and provides an overview of the state of vocational training in the carpentry trade in the participating countries. The competition intends to contribute to a cross-national exchange of experience.
- 1.4. The European Professional Competition will be carried out both as an individual contest and as a contest of nations. The Competition by Invitation is an individual contest only.

2. Eligibility

- 2.1. Carpentry-related associations, societies and organizations from European Community countries are eligible to appoint candidates. Only one organization per country is allowed to register participants; member organizations of TCE take priority.
- 2.2. Skilled workers who have completed their vocational training as a carpenter or are still in training and are no older than 23 years of age by 1 January of the year in which the competition takes place (date of birth 1 January 1995 and younger) are entitled to participate in the competition.
- 2.3. All participating countries can send up to three participants to the competition. These participants are required to have been trained in a company of the respective country. Proof thereof needs to be provided! At least one of the participants should be a national of the sending country.

The Chief Expert will check the dates of birth when participants register at the venue.

For that purpose, participants will be asked to provide their ID card or their passport.

- 2.4. Carpenters who have participated in the International Professional Competition or who have participated in the European Professional Competition before are not entitled to participate. Those who have competed in the TCE Competition by Invitation (see §A 8) and those who have participated in the European Professional Competition EuroSkills are still eligible for participation in the European Professional Competition of TCE. Exemptions can be discussed on a case-by-case basis with the expert commission and Chief Expert.
- 2.5. The participants must be registered with the hosting organization (see §A 10.2) by 1 August 2018. Furthermore, a photograph of every candidate including a list of his/her hobbies shall be provided.

The countries are required to register whether they will participate in the European Competition Professional of TCE or the Competition by Invitation and, if so, how many competitors will participate by 1 April 2018. A security deposit in the amount of EUR 1,000 per country shall be deposited with the organiser upon registration.

3. Competition work

- 3.1. Competition tasks only include practical work.
- 3.2. Theoretical knowledge required is limited to knowledge about the practical workflow, the realization of drawings, sketches and details, knowledge of geometry to determine accurate lengths and angles and knowledge about material and working techniques used.
- 3.3. Tasks:

Competitors must be able to perform the following tasks on their own:

- Elevation, development and assembly of roof constructions
- Development of angle and valley rafters on polygonal, rectangular or square ground plans with even and uneven roof slopes
- Construction of tower roofs including adjustment to the general roof construction.

During working periods, participants are not permitted to bring and carry any documents that were prepared outside their workstation at the competition area. Sketches and drawings made during working time must not be removed from the competition area.

3.4. The following working techniques are possible:

- Elevation of a roof construction in ground plan and profile
- Developing a construction in which each piece of wood can be found in its true shape
- Determining all measurements, dimensions, lengths, cuts, angles and bevels required to perform the work
- Drawing and transferring of real lengths and cuts to the pieces of wood (scribing)
- Processing the work pieces (assembly)
- Mounting and fixing all wooden parts of the structure (erection)

3.5. Working material

- Dry coniferous wood (wood humidity $15\% \pm 3\%$), planed and sharp-edged
- Screws and bolts

3.6. Working time

The day before competition day, competitors will have 2 hours to prepare their workplaces, to inspect the material and to test machines and tools.

Before the competition starts, competitors will have 60 minutes to study the workshop drawing.

Working time is 22 hours

within a period of three working days. Participants will be credited for the time they have to wait while assessments are performed.

4. Technical equipment

4.1. Competitors will be provided with a workstation of approx. 4 x 5 m (width: min. 3.65 m, length: min. 5.50 m).

4.2. Competitors are provided with the following machines and equipment:

- Complete work bench/joiner's bench
- Medium density fibreboard with a light, smoothly ground surface for elevation work; minimum dimensions 18 mm x 2050 mm x 2400 mm
- Aluminum straight edge, 2 m long
- Broom, hand brush and shovel
- Plywood panel, approx. 700 x 1000 mm, as plan pad

In addition, each participant is provided with the following

- 1 grinding machine
- 2 to 3 circular saw benches
- Extra screw clamps in different sizes (should be brought by the participants)
- Screws (cross-head particle board screws or Torx screws and matching bits)
- 1 sharpening machine with whetstone and safety goggles

4.3. Competitors are required to bring their own tools including a complete carpenter's tool set. Drilling, screwing and handheld planing machines are the only portable machines permitted.

- | | |
|---|--|
| <input type="radio"/> Hammer | <input type="radio"/> Pair of pliers |
| <input type="radio"/> Screwdriver | <input type="radio"/> Ripping chisel |
| <input type="radio"/> Chisel | <input type="radio"/> Plane |
| <input type="radio"/> Hand saws, crosscut saws | <input type="radio"/> Sinker |
| <input type="radio"/> Square | <input type="radio"/> Level square |
| <input type="radio"/> Cross rod | <input type="radio"/> Whetstone |
| <input type="radio"/> Compasses | <input type="radio"/> Measuring tape, meter rule |
| <input type="radio"/> Pencils/colour pencils/rubber | <input type="radio"/> Calculator |
| <input type="radio"/> Spirit level | <input type="radio"/> Marking gauges |
| <input type="radio"/> Cordless screwdrivers (3 recommended) | <input type="radio"/> Knife |
| <input type="radio"/> Adhesive tape | <input type="radio"/> Awl |
| <input type="radio"/> Countersink bit | <input type="radio"/> Knee pads, ear protection |
| <input type="radio"/> Screw clamps | <input type="radio"/> Triple sockets (2 pcs) |
| <input type="radio"/> Visibly marked floor battens (bearers) for processed pieces of wood (pieces of timber from scrap material of the individual candidates may also be used). | |

The organizer will provide substitute cordless screwdrivers.

4.4. Possession of mobile phones and communication devices within the competition area during the competition shall not be permitted. Photos by tutors / participants / accompanying persons / experts before 3 p.m. on the first day of competition shall not be permitted.

In the event of violations experts shall determine sanctions in individual cases for the entire team. Sanctions may include the deduction of points or complete exclusion.

5. Jury, Experts, Tutors

5.1. Each participating country registering a competitor to participate in the competition can appoint an expert to the jury. The expert must be able to provide a skilled assessment of the practical work and should have previous experience in competitions.

5.2. Participating countries can send a tutor. This tutor, however, will not have any influence on the choice of tasks or the assessments.

6.1. The assessment commission will stipulate assessment criteria and measuring tolerances according to the respective task.

6.2. Assessment will be based on the following criteria and factors:

• Elevation and development	factor 1.0
• Measurements on the elevation	factor 0.7
• Markings on wood	factor 0.5
• Processing, interior joints	factor 0.7
• Main measurements, accuracy and completeness of pieces of wood	factor 2.6
• Secondary measurements	factor 1.0
• Processing, exterior joints	factor 1.5
• Cleanness, general impression	factor 2.0
• <u>Use of material, reworking cuts</u>	factor 0.0
Total	10.0

6.3. Individual assessments will be done following a ten-point system. 10 points will be awarded for perfect work; 1 point will be given for completely insufficient work. The total number of points will be divided by the number of experts and multiplied by the factor; the highest and the lowest number of points are excluded.

6.4. Concerning use of material, each participant is allowed to replace pieces of wood or perform reworking cuts/carvings.

- Carving, removal of markings and lines on the wood
- Reworking cuts and reworkings
- Chamfers of the edges
- Replacement of pieces of wood

If the candidate wishes to carry out the aforementioned undesirable activities, they can be carried out after consultation with the Chief Expert / Shop Master and his/her approval by deducting a defined number of points.

If these activities are carried out without prior consultation, the number of deducted points is multiplied by 3.

6.5. Evaluation in the Competition of Nations is done by assessing the two best competitors of each nation.

7. Competition by Invitation, additional stipulations

7.1. Participating countries are permitted to register up to 3 competitors for the European Professional Competition of TCE (see § 2.3). It is the decision of each country to register one to three of these competitors for the Competition by Invitation. Countries which have achieved 1st – 4th place in the previous Individual Competition or Competition of Nations are not permitted to participate in the Competition by Invitation.

7.2. Apprentices in vocational training in carpentry and skilled workers as stipulated in §A 2.2 are entitled to participate. For further stipulations see §A 2.

7.3. Competitors must be able to perform the following tasks on their own:

- Elevation, development and assembly of roof constructions
- Development of angle and valley rafters on polygonal, rectangular or square ground plans with even and uneven roof slopes (canted pieces of wood should not be joined to inclined ridge- or fascia-boards).

Working time is **17 hours**

within a period of two working days (approx. 15 pieces of wood). For further stipulations see §A 3.

- 7.4. With regard to technical equipment, stipulations set out in §A 4 shall apply.
- 7.5. On request the task proposal can also consist of 2 single modules which can be assembled to form a single model. The level of difficulty of the individual modules should be different to allow an optimum entry into the competition. The overall level of difficulty shall be based on the level of training of the approved groups of candidates.
- 7.6. Each participating country is allowed to appoint one expert to the jury. The jury is responsible for the assessment of the competition tasks of both the European Professional Competition and the TCE Competition by Invitation; for further stipulations see §A 5.
- 7.7. With regard to assessment rules and procedures, stipulations set out in §A 6 shall apply.
- 7.8. The Competition by Invitation is designed to be an individuals' contest only.

8. Costs

- 8.1. The hosting organization (national association/society) will provide workplaces, technical equipment and material free of charge.
- 8.2. The sending countries or institutions will bear the traveling costs of participants, tutors and experts.
- 8.3. The hosting organization (national association/society) will bear the costs for accommodation and board for a maximum of three participants, one expert and one tutor.

9. Responsible body, organization and execution

- 9.1. The official authority for the "13th European Professional Competition for Carpenters" is

"Timber Construction Europe (TCE)"
located in Luxembourg

- 9.2. The national alliance is responsible for organization and execution

Holzbau Luxembourg Asbl
2, Circuit de la Foire Internationale
L-1347 Luxembourg-Kirchberg
Tel.: +352 424511-33

B) Information on the preparation of task proposals and instructions

1. Competition task

- 1.1. The task for the competition will be chosen by the jury immediately before the start of the competition. Proposals for tasks that are identical and can be put together and form one single model per country will take preference.
- 1.2. The task being closely related to practice is of particular importance.
- 1.3. The choice of wood is limited to a maximum of 28 pieces of wood for symmetrical and 20 pieces of wood for asymmetrical projects.
- 1.4. The working material is dry coniferous wood; wood humidity $15\% \pm 3\%$. The pieces of wood are planed and sharp-edged. The maximum length of wood is 2000 mm. The dimensions of the planed wood can be chosen at will, but should range from 30 x 50 mm to 70 x 120 mm.
- 1.5. Screws are to be used to assemble the model. The use of glue is prohibited.
- 1.6. Proposal for tasks:

A proposal for a task should be clear and comprehensible. Minimum information to be included:

- Information required for execution of work (details, joining of wood, etc.)
- Wood list including numbering of individual parts
- It should be possible for 3 individual models to be placed next to each other to form an overall model.

No more than one non-vertical construction wood may be included in the model. This does not apply to rafters and trimmers.

Admissible plan sizes: A4; A3; A2; A1

Ground plan and details minimum scale 1:5; views 1:10

Translations required will be done by the experts at the venue.

It is necessary to bring along two copies of the task proposal.

The competition task should furthermore be handed in as a photograph or 3D display, since the competition task will be posted on a board.

Copies of the chosen task will be made at the venue. For that purpose, data storage devices (CD-ROM or USB-sticks) are to be used and must be brought into the experts' meeting.

Software available:

- dxf file format
- CAD-work
- dwg file format

2. Choosing the competition task

- 2.1 The task will be chosen by the expert jury at the venue.

3. Assessment

- 3.1 Assessment will be done according to the assessment rules stipulated in §A 6.
- 3.2 Assessment can be done in groups with one group assessing the same criteria for all models.
- 3.3 The maximum number of points to be awarded is 100. Each individual assessment will be done according to a ten-point system.
- 3.4 The difference in assessments given by the individual judges must not exceed two points.
- 3.5 Experts are not allowed to provide assessments for participants from their home country.

4. Chief Expert

- 4.1. The Chief Expert will be appointed or elected for the next competition by the experts on the evening of the jury session. Only persons who verifiably have served as experts may be appointed as Chief Expert.
- 4.2. Due to his leading position, the Chief Expert will play a decisive role in planning the course of events, in supervising and managing the experts' work and will be responsible for:
 - Stipulating assessment criteria and factors
 - Drawing of lots for the workstations
 - Preventing inadmissible contact between the competitors
 - Supervising the competition schedule
 - Stipulating experts for partial assessments
 - Keeping the records of assessment sheets
 - Stating the results of the competition

5. Experts

An expert needs to have corresponding professional experience and must be able to provide skilled assessment of the practical work. Previous experience in national competitions or as an examiner is required.

Each expert should submit a task proposal fulfilling the criteria described above.

Impartiality, fairness and willingness to cooperate are fundamental prerequisites for performing as an expert at the competition. During the competition, experts are not allowed to pass on any information about the competition task or to contact any competitors from their home country.

6. Tutors

The tutors' role is to motivate the competitors and help them with personal problems.

Throughout the competition, tutors are not allowed to enter the competition stations. In order to get in touch with the participants they are responsible for, tutors need to seek permission from the Chief Expert, see Subclauses 4.1 to 4.4.

7. Instructions for the competitors

- 7.1. Before practical work starts, participants need to be given the opportunity to read the drawing thoroughly, to compare the drawing and the list of materials and to check if all material required has been provided.
- 7.2. Elevation for all components must be performed on the board in their true size including all cuttings required. The completion of elevation must be reported to the assessment commission. The elevation shall be in accordance with the ground plan of the specified layout and shall be clearly recognizable.
- 7.3. Marking of the pieces of wood must not be performed before the elevation has been assessed. Participants are not allowed to start work at the pieces of wood before the marked pieces have been assessed.
- 7.4. All partial task elements must be made accurate to dimensions and according to the stipulations, including all interior joints such as tenons, scarf joints etc.
- 7.5. Partial task components are to be assembled using bolts and screws. Screw clamps and similar tools may be used for assembly.
- 7.6. The candidate is allowed to keep the currently processed pieces of wood together with a LEFTOVER PIECE in order to check cuts, bevels, etc. The effectively matching two pieces of wood shall NOT be assembled for trial purposes.
- 7.7. All pieces of wood shall be numbered in accordance with the specifications in the plan. The candidate can choose the method of attaching the numbers and their locations. The numbers need not be visible on the finished model.
- 7.8. Saw cuts must not be reworked. Any reworking using planers, chisels, sand paper or files as well as the application of water, a 'lubricant' or similar substances will result in a deduction of points. The markings on the pieces of wood must not be erased! It is also not permitted to round off the longitudinal edges!
- 7.9. Planning documents (task documents) and sheets made available are to be handed in at the end of each working day.
- 7.10. All tools must be stowed away before erection may begin. Permission from the Chief Expert or designated personnel must be obtained before starting finishing work.
- 8.1. The hosting organization will prepare a proposal for the Competition by Invitation which is to be discussed and approved by the jury.
- 8.2. Beyond that, stipulations according to §B 1 through 7 are to be applied accordingly.

Luxembourg, October 2017