

EXTRAORDINARY ICE BUILDING

Harbin International Ice and Snow Construction Festival task book

Organization: Songbei District Government
Harbin Institute of Technology
Maple Leaf Village Outlet(Harbin) Plaza CO., Ltd
IASS Working Group 21

1. Construction section of the title:

Extraordinary ice building - ice and snow building innovation design competition

2. Design background:

- Explore the international field of innovation and development of ice structure, collecting outstanding creative works, leading a new trend of innovative ice and snow building.
- Strengthen the participation and interactive experience of the snow and ice construction; improve the worldwide attention ice and snow structure.

3. Design goals:

- Inspired by the innovation and development of ice and snow building, experiment the material characteristics, structural characteristics and spatial quality of ice and snow building.
- Create a unique experience of ice and snow building, reflecting the essence of ice and snow culture.

4. Base location:

Location: 45°49'08.6"N 126°27'35.2"E (only show in satellite version in Google map)

Address: No. 16999, Zhongyuan Avenue, Songbei District, Harbin



China's Heilongjiang Province, Songbei District, Songjiang District, north of the source of the road, south of the giant Po Road, Zhicheng Street to the west, namely: Harbin Outlets Maple Town.

5. Design Requirements:

- Measurements of Ice structure: The size of the structure should be no larger than a hemisphere with the diameter of 10 meters. Architectural design should be novel and beautiful, reflecting the charm of snow and ice architecture, reflecting the current trend.
- Spatial quality: interior space can enter and be experienced. Specific functions can be arranged according to their own design.
- Structure: pay attention to architectural and structural design, pay attention to the rational expression of architectural concept, considering the safety and rationality.
- Materials: ice and snow or fiber reinforced ice, (ice composite)
- Construction: There is no limit of the construction method of the ice structure, the suggested method for the mold could be an inflatable, rope net, pre-stressed membrane or other structure. On the mold you can spray water, snow and fibers. The basic equipment water, snow and fibers will be provided by the organization. The ice structure has to stand by itself. But the choice of construction method is open to the group.

At 5 November a container will be transported from Eindhoven (NL) to the building site in Harbin. It is possible to transport material for the construction of the ice structure with this container. The budget for the construction is limited.

6. Participation

- Participants:

Colleges and universities: domestic and international architecture and structure-related college teachers and students.

- How to participate:

Interested teams, please download the application from our website:

<http://structural-ice.com/competition.html>

Please fill in the application form and send it to the organization email:

Ice_Organization@163.com

Note: You will receive a serial number after successfully registered.

If you have any questions, please contact Ms. Yuan: Tel: +32485222107 or send emails to our public email address: Ice_Organization@163.com

Please follow our website to get updated information

7. Entry requirements:

- Registration in the form of teams, each team shall not be more 7 people. Please mark one team leader for communication.
- Each participating team or individual can submit 1-2 design works.
- All works must meet the construction topic and construction requirements
- According to the situation there might be changes in the time schedule and construction plan
- The organization will provide 50,000 yuan (6400 euros) to support the construction of selected works. (The budget of making mode structure like inflatable, rope net, pre-stressed membrane will be informed before the publication of the selected works) Part of the cost beyond the budget will be paid by each team.

After the publication of the selected works, the relevant team or individual must contact the organization in time to communicate the detailing.

- The organization will provide electric power on the building site. (230V)

8. Submission of work

- Drawings: Each participating team must submit the relevant technical drawings to express the

design results; the organizers can conduct the audit of the possibility of construction.

- Information Submission: Individual information of each participant must be submitted.
- Submission: the above results to form a compressed file (.rar or .zip) The file name should be the serial number which you received after the registration and send to the organization mailbox: lce_organization@163.com

9. Construction section time and place

- Phase 1 (Registration and Design Phase)
 - a. Time: October 15th, 2017 – October 30th
 - b. Note: The deadline for submission of the team members is - October 30th, 2017
- Phase 2 (Submission phase)
 - a. Time: November 1th, 2017 – November 15th
 - b. Note: The deadline for submission is - November 15th, 2017
- Phase 3 (Technical detailing and construction preparation phase)
 - a. Time: The deadline for submission is – December 14th
 - b. Note: The results of the competition will be announced on November 20th, After the publication of the selected works, the relevant team must contact the organization in time to communicate about the detailing.
 - c. Remark: Each team needs to consider safety of the structure and construction.
- Phase 4 (construction phase)
 - a. Time: December 15th, 2017 – December 23th
 - b. Location: Harbin Outlets Maple Leaf Township outdoor parking lot open space
 - c. Note: The participants need to work with the construction unit on-site
- Phase 5 (Results Exhibition and Opening Ceremony)
 - a. Time: December 22th, 2017
 - b. Location: Harbin Outlets Maple Leaf Township outdoor parking lot open space
 - c. Note: during the opening ceremony the certificate of outstanding works will be awarded
 - d. Exhibition period: December 24th, 2017 – February, 2018