

2019 Design Competition **Frequently Asked Questions**

Q: Are teams allowed to register in more than one category of the competition?

A: Yes

Q: How many students can participate in a team?

A: There is no max for ISBD teams but there is a max of six students per team for the other categories. ASHRAE recommends that the project groups consist of at least two members from an undergraduate engineering or architecture curriculum for the HVAC Design Calculations or HVAC System Selection and at least three members (architecture or construction, mechanical & electrical) for the ISBD competition. Team members can be from multiple colleges. All team members must be enrolled during the semester/term in which they contribute to the design. The Applied Engineering Challenge is for a team of 1 to 6 engineering students.

Q: Are graduate students allowed to participate in the competition?

A: Projects can be submitted by graduate students in the Integrated Sustainable Building Design category only. For the other categories, entries should originate from an undergraduate engineering or architecture curriculum and all team members must be enrolled in an undergraduate program during the semester/term they contribute to the design.

Q: Is a university permitted to register more than one team into the competition as a whole? For example, if I were to be a member of a registered team for one of the three team categories, but I'm also interested in the Applied Engineering Challenge while my other teams members aren't, can I partake in both?

A: Yes

Q: Do the page limits include appendices?

A: No.

Q: Can we change the orientation of the building to see how it would affect our load calculations?

A: For the Design Calculation the building is set in its orientation and will not be judged if the building is rotated. However for your own benefit the team can rotate the building to see how Solar effects the building.

Q: Is it possible to get the actual location of the building? We would like to explore the use of nearby waste heat opportunities to supplement our HVAC system.

A: The building location is Budapest, Hungary and the ground information can be obtained through research.

Q: Are we allowed to add features to the building? Such as overhanging shades above the windows to control the amount of sun that enters the building?

A: For the Design Calculation the building is set in its features and will not be judged if the building has additional features. However for your own benefit the team can add those feature to the building to see how they effects the building loads.

Q: In the drawings included with the competition information there is no site plan or information about the terrain. Would it be possible to know any information regarding the building site?

A: For the Design Calculations competition the site plan is not needed. The HVAC competition the site is a general site in Budapest, Hungary and ground information can be obtained through

research. For the ISBD competition the design team is required to pick a site location in Budapest, Hungary and provide documentation why that site was considered.

Q: Where can we get the dimensions of the building?

A: Teams can get the full dimensions of the building from the provided CAD drawings.

Q: In the drawings included with the competition information there is no site plan or information about the terrain. Would it be possible to know any information regarding the building site?

A: No site plans will be provided for this competition. For the design calculation part of the competition, the only information they need about the site is the direction the building is facing.

Q: Can we put HVAC units on the roof of building?

A: Mechanical equipment can be located per the designer's discretion. Please provide justification.

Q: Do we build a new building on an empty field or we can use existing building field?

A: The building is a new building on an empty site.

Q: Can we change the layout, i mean the interior layout of design at ISBD?

A: Yes

Q: Do we get the weather data of Budapest, Hungary?

A: Yes ASHRAE provides the IWEC2 Weather Data File for Budapest, Hungary on the Design Competition website. You can also utilize the ASHRAE Climate Data Center and ASHRAE Fundamentals.

Q: Do we need to consider about ducting design?

A: Yes

Q: Do we get the baseline model to compare our design?

A: The base line is the building you see in the drawings plus ASHRAE 90.1

Q: I would like to use revit for the design calculations competition, however only AutoCAD drawings are posted. Are there revit drawings I can use?

A: No

Q: Should we consider the embodied energy of the HVAC equipment as well as the monetary life cycle cost? Or should we just focus on the monetary cost of the equipment?

A: Provide the monetary cost of the equipment.

Q: In rearranging the floor plan, does the same square footage associated with the rooms in the given floor plan need to be maintained? Or can we adjust the size of the rooms with justification? Also, can we add more rooms or remove some rooms?

A: Teams are not encouraged to rearrange spaces or modify the floor plans for System Selection and Design Calcs but if your team does decide to do this for ISBD, state your assumptions and justify them in the final report.

Q: I noticed that the baseline requirements for the calculation competition are from the ASHRAE 90.1 Standard. I also know that the Standards are expensive. Will I have access to the Standards at a discounted price?

A: If you or any member of your team are an ASHRAE student member you can receive discounted rates on publications. We also advise teams to get in touch with a faculty or industry mentor who may have copies of the standards and may be able to provide you with access to them.

Q: What is the current use of the existing building?

A: The existing building is a hospital.

Q: Level 2nd has no shaded areas, can we assume that it is all new construction? Similarly for the 3rd level there is only 1 shaded area, can you clarify what that is?

A: All walls and areas shown light line weights on Level 2 and 3 is part of the existing building. The hatching is the extent of the new building space for level 3 and matches the hatched areas on the other drawings.

Q: Are the plans facing true north/south or are they facing north based on the project?

A: North has already been indicated on the drawings.

Q: Is it necessary to find actual location of the existing building to co-locate the site based on the existing attached structure in the provided AutoCAD files?

A: No.

Q: Is it required that we build on the existing structure or can we build on a new site?

A: The new facility is connected to the existing facility. Refer to the Owner's Project Requirements. A stand-alone building on a new site is not acceptable.

Q: We think a possible site is the location of the new Semmelweis Hospital, are we correct in this assumption?

A: The subcommittee declines to respond.

Q: One of our potential sites is the location of the addition to the Semmelweiss University Hospital (the Korányi project). It meets a lot of the design parameters in terms of orientation, footprint, scale, and site access; however the new addition is in place of where our ISBD design would be. Are we allowed to use this site for our design, and if so, can we treat the site as it was before the addition was constructed in 2017?

A: You may use this site.