

Competitors in the SENIOR Section can be 3rd, 4th year and master students at a university in the AEC field (architecture - master is equivalent to the 5th and 6th year, engineering, construction).

Competitors must respect calendar dates, procedures and registrations. All Phase 1 entries must be received by <u>July 2nd, 12:00pm EEST.</u>

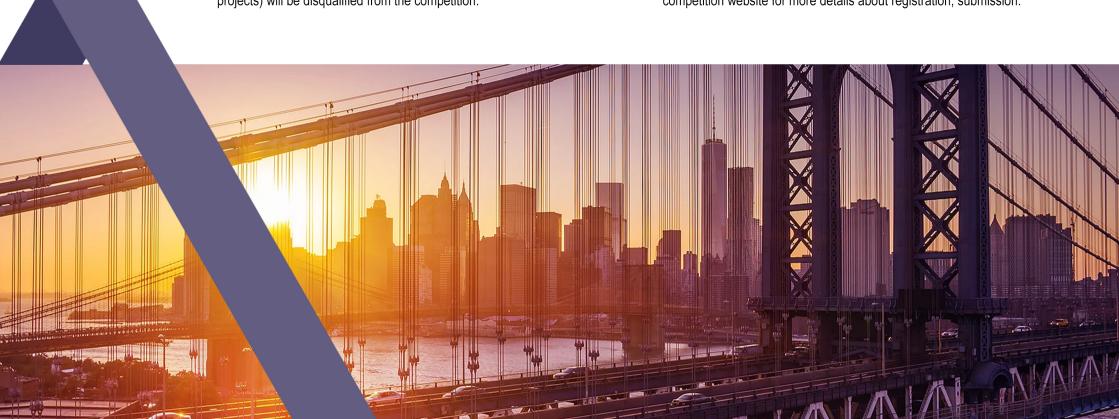
The project must be submitted in a PDF format (upload directly on the competition site) and in Allplan format (zip+inf - upload to Dropbox, Google Drive, wetransfer or a similar service and send us the link* in the Submit your Project form). Competitors will use the layout and label provided by the organizer which can be downloaded on the competition website.

All the submitted material must belong to the participant. Competitors not respecting <u>copyright</u> (using images, texts or drawn elements from other projects) will be disqualified from the competition.

Each entry in the section <u>SENIORS - Building facilities</u> will consist of two vertical layouts which will include the following:

- Short technical brief of the building facilities project (max. 500 words)
- Dimensioned plan for every installation heating, sanitary, waste water, recirculation (hot water), ventilation, electrical (scale 1:50 or 1:100)
- Isometrical view of every installation heating, sanitary, waste water, recirculation (hot water), ventilation, electrical (scale 1:50 or 1:100)
- Hidden line isometry of the ventilation system (scale 1:50 or 1:100)
- Isometrical view of all the building facilities the separate systems will be overlaid for a general overview (scale 1:50 or 1:100)

Additional information is welcome but not mandatory. See RULES on the competition website for more details about registration, submission.





EVALUATION CRITERIA

- the corectness and efficiency of the routes <
- the correct placement of the users (sanitary objects, < diffusers, etc.)
 - the correct definition of the users (see above) <
- the organization of the project (especially in the Derived < from the building structure section)
 - the appearance and the level of detail < of the presentation layouts

BUILDING FACILITIES

Build a 3D model of a residential building with a total area of maximum 300 sq.m. or download the provided architectural model and create the building facilities following the criteria listed below:

BIM CRITERIA

- a building structure with at least 2 levels;
- architectural elements: straight walls, window and door openings, columns, slabs, roof plane and roof covering, rooms;

HEATING SYSTEM

- heating demand calculation;
- the selection and placement of the radiators;
- drawing the route for the heating system;
- connecting the radiators to the route;
- automatically dimensioning of the heating system;
- labeling pipes and elements;
- lists of miscarriages;
- bill of quantities.





BUILDING FACILITIES

SANITARY INSTALLATION

- the selection, placement and definition of the 3D sanitary objects;
- drawing the route for the hot and the cold water;
- connecting the sanitary objects to the appropriate routes;
- automatically dimensioning the hot and the cold water systems;
- labeling pipes and elements; lists of miscarriages, bill of quantities;
 WASTE WATER
- drawing the route for the waste water system;
- connecting the sanitary objects to the drainage route;
- automatically dimensioning the waste water system;
- labeling pipes and elements; lists of miscarriages, bill of quantities;

VENTILATION SYSTEM

- the selection and placement of diffusers;
- drawing the route for the ventilation system;
- connecting the diffusers to the route;
- automatically dimensioning the ventilation system;
- labeling pipes and elements; lists of miscarriages, bill of quantities.

ELECTRICAL SYSTEM

- the selection and placement of the eletrical elements and lighting fixtures;
- the definition, connection and administration of the dispenser;
- drawing of the cable beds
- bill of quantities.