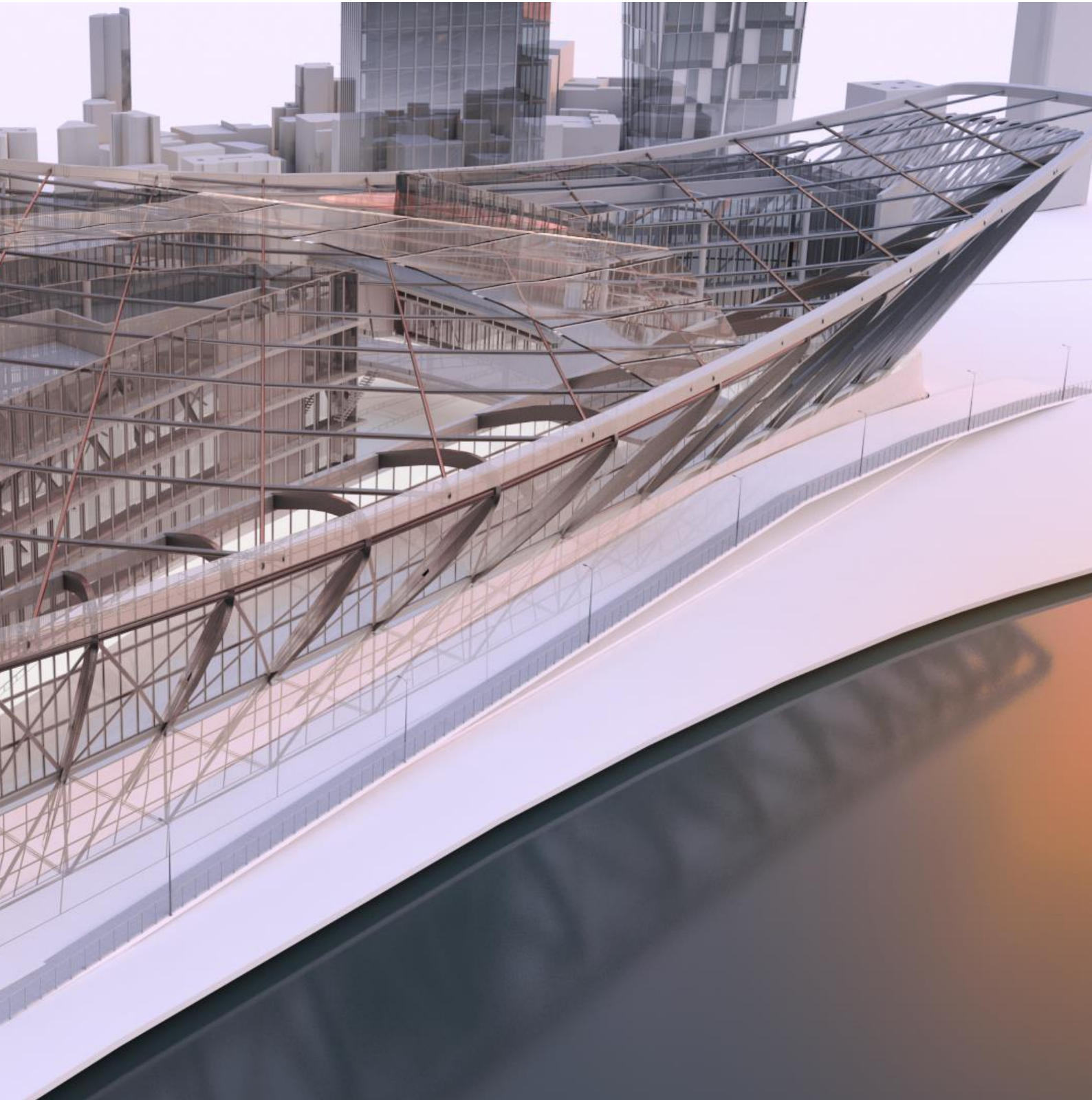


What's New



Improvements and corrections

The Hotfix 1 to Advance Design 2022 includes the following corrections:

Performance

- **Fix:** Correction of the problem of increased computer memory consumption during design calculations of reinforced concrete elements, especially with a large number of load cases. In specific cases, this led to the stopping of the application. [21869; Support 19630]
- **Fix:** Correction of the problem of increased calculation time compared to previous versions of the program in the case of analysis using cable elements. [21825; Support 19669]
- **Fix:** Correction of the problem of increased calculation time of the FEM analysis compared to previous versions of the program in the case of models with large planar elements. The results for Advance Design Slab module are no longer saved at the end of each FEM analysis, they are saved when opening the first planar element in the Advance Design module. [21887]

Steel Design

- **Fix:** Correction of the problem where it was not possible to create a group for selected steel connections using the grouping command from the context menu. [21843; Support 19721]
- **Improvement:** A warning message '*Element has no check (buckling, lateral buckling, advanced stability) set in order to compute stability*' is no longer displayed for linear elements working only in tension (as tie elements) and for elements for which imperfection analysis has been activated (Global sway or Local bow or both). Additionally, this warning may be displayed during steel design analysis and not during FEM calculations. [21358]
- **Fix:** Correction of the problem of incorrect list of available graphical results for strength for steel elements in case when the given project has been opened using a different project location (set to a different steel standard in the project configuration window) than during calculations. The problem occurred only when changing the configuration between European and American standards. [21809]
- **Fix:** Correction of the problem in the model with Italian localization consisting in inadequate refreshing of results from steel design calculations after repeated running of calculations. [21859; Support 19738]
- **Fix:** Correction of the problem regarding the lack of torsion verification for open sections according to Italian NTC codes (NTC 2008, NTC 2018) and Italian NA to EC3 code. Currently the check is performed using St. Venant torsion component. [21903; Support 19415]

Reinforcement Design

- **Fix:** Correction of the problem with unexpected termination of the application when running the design calculation for reinforced concrete elements if user profiles have been defined in the model. [21787; Support 19627]
- **Fix:** Correction of the problem of not transferring the force values at the top of a reinforced concrete column from the model to the RC column design module when the height of the column was not a multiple of an integer. [21842]
- **Fix:** Correction of the problem of unexpected program termination when running design calculations for concrete slabs with the '*Real deflection*' option enabled while the option to save non-smoothed results for planar elements is disabled. [21846; Support 19689]

Other

- **Fix:** Correction of the problem which occurred during the automatic generation of the master-slave connection for the connection of a rectangular column to a plate, whereby for columns with a defined angle of rotation about an axis, the master-slave connection nodes were generated as for a non-rotated column. [21796; Support 19638]
- **Fix:** Improvement of problems with generation of climatic loads on vaulted roofs according to Eurocode 1. For the snow load, unsuitable cases of snow drifting in the direction parallel to the longitudinal axis of the roof were generated. For wind load in direction parallel to the longitudinal axis, a part of zones was generated incorrectly. [21272]

- **Improvement:** On the property list of the snow load family according to EC1, it is now possible to check and impose values of the ground snow load with a return period on 'n' years (S_n) and the exceptional snow load on the ground with a return period on 'n' years ($S_{Ad,n}$). [20836]

Parameters	
Snow load (50 years) $s_{k,50}$	0.45 kN/m ²
Exceptional snow load (50 years) $s_{k,50}$	0.00 kN/m ²
Exposure factor C_e	Location swept by the winds
Value of C_e	1
Thermal factor C_t	1
Return period (n) in years	50
Coefficient of variation V	0.6
Adjustment factor options	Auto
Adjustment factor	1.00
Computing snow loads S_n and $S_{Ad,n}$	Auto
Snow load (n years) S_n	0.45 kN/m ²
Exceptional snow load (n years) $S_{Ad,n}$	0.00 kN/m ²