



# What's New

## in Advance Design 2024.0.1



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## 1. Installation

The **Hotfix 1** is compatible with existing versions (2024 or older) and provides updates for Advance Design and Advance Design Modules. To install the hotfix on the main version (Advance Design 2024), follow these steps:

1. Launch the Online Setup Advance Design 2024.0.1.exe.
2. Click on the "**Manage Products**" button.
3. The hotfix will be installed, overwriting Advance Design 2024 and Advance Design Modules 2024 with the latest versions (Advance Design 2024.0.1 and Advance Design Modules 2024.0.1).

## 2. Improvements and corrections

The **Hotfix 1** to Advance Design 2024 includes the following corrections:

### 2.1 General

- [**Construction stages**] Correction of the problem occurring during model creation for construction stages by not assigning automatically generated rigid nodes (connections in the slab over columns used for smoothing results) to any stage. (#149665)
- [**Climatic load generator – Eurocode**] Correction of the problem with the lack of wind load generation (according to Eurocode) on some load areas, in the case of load areas, had the option of the percentage of openings set. (#157816, #154591)
- [**Timber design – Eurocode**] Correction of the sometimes occurring problem of unit conversion (from cm to mm) for the section of wood profiles optimized for deflection. (#158502)
- [**User interface – Mapping section dialog**] Corrected the problem of not displaying correctly all components of the 'Assign a cross section' dialog that could be shown when importing gtcx files. (#158514)
- [**User interface – Live Update dialog**] Correction of the problem of missing texts on the Live Update dialog in case the program work in Portuguese. (#159212)
- [**User interface – Unit prices and Carbon factors managers**] Correction of the problem of displaying incorrect text translation in table headers for several language versions. (#159704)
- [**Sample model – Canada**] Correction of the problem of unexpected program termination as well as the inability to conduct timber verification calculations when analyzing RC and timber samples available from the startup window when the location was set as US or Canada. (#159103)
- [**Reports – Lateral drift verification – Canada**] Correction of the problem of not being able to display the Lateral drift verification report table when the location was set as US or Canada. (#159983)

### 2.2 Steel design

- [**Steel design – Cold-formed sections – Eurocode**] Correction of the problem of swapping  $M_{zED}$  and  $M_{yED}$  moment values in Bending and Axial tension verification (acc. EN 1993-1-3, 6.3). (#158929)
- [**Steel design – Cold-formed sections – Eurocode**] Correction of the problem of the lack of consideration of the condition for the symmetry of the cold-formed section during the determination of elastic critical forces for torsional-flexural buckling, which resulted in the same values for  $N_{cr,T}$  and  $N_{cr,TF}$  being obtained for symmetrical profiles. (#156262)
- [**Steel design – Eurocode**] Correction of the problem regarding the visibility in the Polish version of the report with the results of calculations for shear of webs in class 4 (acc. EC3), which consisted of an incorrect display of the indexes for relative coefficients. (#156053)
- [**Steel design – Eurocode**] Correction of the problem that sometimes resulted in the display of INF as a working ratio value for verification of an element including lateral-torsional buckling, and which was caused by the failure to determine the default value of the C1 coefficient in the case of zero value of the moment. (#160474)
- [**Steel design – Local Bow Imperfections – Eurocode**] Correction of the problem of missing inversion of sign of the local bow imperfections, generated along two super elements modeling an arche geometry. (#154439)
- [**Steel design – Shear Buckling – Eurocode**] Correction of a problem that can sometimes occur during the analysis of Shear buckling according to Eurocode, which can result in unexpected program termination or the appearance of the message 'Error 7'. (#159823)

## 2.3 Steel Connection Module

- [**Transfer connections**] Correction of the problem of changing the material for the connection elements to the default if it came from a different standard than the default EN 10025-2. (#159855)
- [**Welded truss connections**] Correction of problems occurring with overlapping diagonals, which caused the direction of forces in the weld between these elements were not taken correctly, as well as the weld length displayed in the report was too small. (#160611, #160460)
- [**Welded truss connections**] Correction of problems with incorrect stress signs in welds of X-type joints with perpendicular diagonals. (#159918, #158646)
- [**Welded truss connections**] Corrected a problem with incorrect results for K and KT connections when the connection was defined in the top chord of the truss and the angles between the diagonals were not equal. (#158859)
- [**Welded truss connections**] Corrected a problem with the inability to select and run calculations using the directional weld design method for welded truss connections. Now the design of the welds on welded truss connections can be done using two methods: Simplified and Directional. (#159572, #158859)
- [**Base plate connections**] Corrected a problem with using the equivalent anchor length for the anchor bond resistance instead of the real anchor length, in case the real length is bigger than the minimum required. (#151862)

## 2.4 RC Modules

- [**RC Slab module**] Correction of the problem which caused that in some examples a reinforced concrete slab defined as a super element could not be opened in the RC Slab module. (#160203)
- [**RC Footing module**] Correction of the problem which caused that in some cases the theoretical reinforcement area after running Verification differed slightly from the result of the Calculation. (#160621)
- [**RC Footing module**] Correction of the problem which failure to determine the work ratio for the sliding verification for some examples if the consideration of ground pressure on the sliding was activated. (#160855)
- [**RC modules - Spanish localization**] Correction of the problem of not assigning default styles for drawing elements, if the module was run in the Advance Design environment and the Spanish localization was set. (#159239)
- [**RC Beam**] Correction of the problem of the lack of generation of transverse reinforcement for the beam span which could appear in the particular case of the combination of settings for the distribution of reinforcement. (#153362)
- [**RC Beam**] Correction of the problem of showing the 'Bad assessment of effective height' error message and incorrect bar generation in the case of a notched cantilever span. (#154851)
- [**RC Column**] Correction of the problem with the unexpected program termination for a specific scenario of rerunning calculations after small geometry changes. (#160766)