

# What's New Advance Design 2025.0.1



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### 1. Improvements and corrections

The **Hotfix 1** to Advance Design 2025 includes the following corrections.

#### 1.1 DEFINING SUPPORTS

- **[Footings geometry**] Correction of the problem with Tension/Compression and Advanced supports, related to the supporting element type assignment in the Footing Dimensions parameters. The issue was that this setting was reset to the default (no support element) when switching from the descriptive model to the analysis model. (#188161)
- **[Planar supports]** Correction of the problem of displaying on the property list of planar supports the option for activating footing settings. (#187734)

#### 1.2 STEEL DESIGN

• **[LTB for steel cold-formed]** Correction of the problem of wrong calculation of the length of cantilever part of the steel linear element made of cold-formed section during performing the lateral-buckling verification according to Eurocode 3. (#187538)

#### 1.3 POSTPROCESSING AND REPORTING

- **[Punching report tables]** Correction of the problem of displaying the same rows more than once in the report tables with results related to the concrete punching analysis. (#186895)
- **[Exporting points from diagrams to Excel]** Correction of the problem that the export to Excel worksheet from the table with chart point values from the Result Curves window does not work. (#186916)

#### 1.4 ANALYTICAL MODEL

- **[Load transfer]** Correction of the problem that could occur when converting a variable load applied to a Load area using the Failure lines method, which in special cases could apply a higher load than defined. (#187253)
- [Converting cracked section inertias] Correction of the problem of converting the value of the imposed cracked section inertia coefficient for planar elements to the value of stiffness modifiers when loading models saved in previous versions of Advance Design. (#187379, 187494) The conversion of this value is performed once when opening the model for the first time in Advance Design 2025. This process replaces the cracked section inertia coefficient values imposed by the user with the corresponding stiffness matrix modifiers introduced in version 2025. Before this update, the conversion modified only the stiffness matrix components for bending and shear. As the imposed cracked section inertia coefficient modified all element stiffnesses for calculation, the conversion now also includes the membrane stiffness to maintain consistency with the model saved in the previous version. As a result, the elements where membrane stiffness is relevant (e.g. walls) will have the same displacements and internal forces after conversion as in the model saved in the previous version.



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- **NOTE 1**: This fix only applies during the model conversion process, which occurs when opening the model for the first time in the latest version of Advance Design. If a model with user-entered cracked section inertia coefficients has already been opened in Advance Design 2025, to keep the results consistent with the previous version of the file, the values of the reduction coefficients for the membrane stiffness matrix must be filled in manually.
- **NOTE 2**: The problem is only related to manually defined (imposed) cracked section inertia values, which modify the stiffness of the entire element and do not affect the automatically determined cracked section inertia. Automatically determined cracked section inertia is still determined for the individual finite elements during the analysis of the real deflection for a planar reinforced concrete element and is included in the FEM calculations during the automatic additional model calculation, according to the settings in the RC Calculation Setting/ Calculation sequence window). Please also note that starting with Advance Design 2025, if you manually edit element stiffnesses using stiffeners modifiers, then no additional model calculation should be set in the Calculation sequence settings to update the element.