

# Release Notes for RISA-3D Version 7.1

## Version 7.1 Enhancements / Corrections

### *Interface and Graphics Enhancements / Corrections*

- Improved dialog behavior by highlighting the Use? Checkboxes and added in a Clear Use Boxes button
- Fixed a bug with the rendering of deflection diagrams for pipe shapes
- Dynamic\_graphics in the INI file

### *Steel Design Enhancements / Corrections*

- Added changes to the AISC database based on the 13th Edition Manual. Including round HSS design thickness.
- Added a Roll Back On Cancel action to the Global Parameters – Code settings to properly account for cases where users change from 13th Edition ASD to 13th Edition LRFD and cancel the change before exiting
- Changed logic for using R value for cold formed / light gage steel
- Slenderness checks for Indian code IS 800
- Updated P-Delta error messages for AISC 13th Edition Manual
- Corrected K value calculation for Indian code. Only affects cantilever type end conditions.
- Corrected K calculation issue that could cause a crash

### *Concrete Design Enhancements / Corrections*

- Added ACI 2005
- Changed Fy in the rebar layout dialog so that it is tied to stress units to be consistent with definition of Fy in the Design Rules
- Corrected warnings in shear rebar layouts for Floor
- Concrete T-beams modified in RISAFloor (negative reinforcement over L/10)
- Fixed bugs related to rebar optimization for extremely, extremely wide beams
- Corrected bug where user defined layouts may not be correctly interpreted at the exact end of the member. Only occurred when support had a width of zero (i.e. boundary condition support).
- Corrected bar callouts for custom column rebar arrangements. Only affected bars defined from left and right side of columns. Bar layers defined based on the bottom or top of section were not affected.

### *Solution & Analysis Enhancements / Corrections*

- Added routine to clear stiffness matrix for cases where Design parameters (member type or sway flag) could result in a required change to the stiffness matrix. Should only affect AISC 13th Edition.
- Internal Force Summation tool adjusted to ALWAYS be defined Left to Right or Top to Bottom

### *Loading Enhancements / Corrections*

- Increased Load Combination limit to 5000
- Added check box for copying loads when using translational, rotational, or mirror copy options
- Added torque Point Loads into the program
- Changed Seismic Use Group to Occupancy Category for ASCE7-2005.

## ***Miscellaneous Enhancements / Corrections***

- Corrected bug with the Mirror command that could create poorly defined solid elements.
- Corrected a bug where the program was incorrectly handling duplicate shapes. This bug only occurred when a file was opened which contained a shape that matched the name (but not the properties) of an existing database shape. Program would incorrectly re-assign the member to the database shape.
- CIS/2 Detailing
- CF correction for SCL lumber in 2005 NDS
- Added in better status bar support for Dual Monitors
- Added restrictions on spreadsheet printing for Demo versions. Now limited to a maximum of 5 rows for each spreadsheet.
- Corrected report printing to re-adjust report widths to allow for wider / Landscape pages
- Corrected a bug where copying and pasting from results browsers could result in a memory error based on an "out of range" spreadsheet setting
- KeyID added to input file
- Demo Versions will now run out of HKEY\_Current\_User if Local\_Machine is unavailable
- Ability to turn off the time / date stamp
- Log of members that had invalid or missing design lists
- Added a warning log that will tell you which entries were not read properly or caused the file to be considered "corrupted"
- Corrected a bug where dynamic solutions could cause some "hot keys" to stop functioning in combined 3D / Floor models
- Corrected an error with reading default program settings created by an older version (pre-7.0)
- Corrected bug where Plates Spreadsheet would not open properly from the Main Menu toolbar
- Corrected bug in the truss generator that mis-calculated chord centroids when the 'Maintain Out-to-Out' distance option was selected
- Added code to prevent infinite iteration issues for footings and One-Way elements
- Added dialog to calculate detailing offsets for CIS/2 translator

## **Version 7.1.1 Corrections**

- Corrected a bug where the use of the Automatic Response Spectra Scaling Factor in a solution could cause a crash.
- Corrected a bug in the single angle code that did not allow for single angles to bend about their Geometric axes even when this was specifically requested by the user.

## **Version 7.1.3 Corrections**

- Corrected a bug that could result in a crash while using the embedded version of RISAFoot 3.0. The problem only occurred when one of the Load Combinations used for footing design included an AISC 13th Edition code check with the "adjust stiffness" option of the Direct Analysis method.
- Corrected a serious bug that could result in the deleting of embedded RISAFoundation data. If a RISA-3D file with embedded RISAFoundation were saved without having first viewed the Footing data during that session, then the Foundation information would NOT be embedded in the 3D file.
- Corrected a bug related to the validation of RISAFoot version 3.0 licensing. Previously the network version of RISAFoot was not correctly authorizing.
- Corrected a 2nd bug related to RISAFoot authorization that related to launching RISA-3D from within a RISAFloor session.
- Corrected a bug related to the reading of the results file. There were instances where saved results were being discarded even when they were present and valid.

- Corrected a crash on the re-use of eigen solution results for the accelerated dynamic solver.
- Corrected a bug with the optimization of concrete reinforcement. The bug would have prevented the program from adding steel that is above the min flexural steel requirements.
- Corrected a Steel Database error in AISCDB32.FIL associated with HSS6.625x0.375.