

Release Notes for RISA-2D Version 9.0

Version 9.0 Enhancements /Corrections

Wall Panels Enhancement

- Added Wall Panels, giving users the ability to model entire portions of walls without using plates.
 - Ability to create Masonry walls with openings to get reinforcement design for in plane forces and the ability to design lintels.
 - Ability to create Wood walls (currently without openings) and get design results for in plane loads.
 - Ability to create General walls with uniform properties and openings for analysis. A way for analysis of concrete walls.

Interface and Graphics Enhancements /Corrections

- Changed notation for "projected" global axes from L and V to PX and PY.
- 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 added in the INI file.

Steel Design Enhancements /Corrections

- Added changes to the AISC database based on the 13th Edition Manual.
- Added a Roll Back On Cancel action to the Global Parameters – Code settings to properly account for cases where users changed from 13th Edition ASD to 13th Edition LRFD and cancelled the change before exiting.
- Changed logic for using R value for cold formed steel.
- Added Slenderness checks for Indian code IS 800
- Corrected the calculation of rz (radius of gyration about principal axis) of user defined single angles created in RISA-2D.
- Corrected the dimensions in the Euro Steel database for HD360x147, HE1000A and HE1000AA.
- Corrected a units conversion issue with the Canadian Code which could result in the moment capacity being reported as a negative number.

Concrete Design Enhancements /Corrections

- Added ACI 2005 code.
- 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 an issue which could cause the display of incorrect stress block selection in the detail reports.
- Fixed bugs related to rebar optimization for extremely wide beams.
- Fixed Unity Check for columns under the Mexican code that need reinforcement close to the maximum specified .
- Corrected a bug where the program was not properly re-assigning a rebar layout for naming conflicts.
- Corrected an issue where crack control requirements for concrete members could produce a tight rebar spacing.
- Corrected a units conversion issue with the y1 and z values in custom rebar layouts.
- Identified a compatibility issue in the concrete code settings between the current version and RISA-2D version 8.0. Issue only applies to version 9.0 (or newer) files being opened in RISA-2D version 8.0 or older.

These older versions may incorrectly identify which concrete design code was chosen when they try to open a file saved by a newer version.

Loading Enhancements /Corrections

- Increased Load Combination limit to 5000.

Miscellaneous Enhancements /Corrections

- Added CIS/2 Detailing.
- Added the ability to turn off the time / date stamp.
- Added a 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".
- KeyID added to input file.
- Enhanced the status bar display to work better with multi-monitor or odd resolution screens.
- Improved the Truss Generator to allow user to specify "segment" for the unbraced lengths.
- Improved the Truss Generator to better recognize triangular trusses and eliminate creation of duplicate end joints.
- Enabled users to delete point loads using graphical Delete Load feature.
- Changed the Emin calculation for SCL members.
- Removed the potential for "padded spaces" from dialog boxes. When these fields were being padded this would prevent the user from entering data in those fields.
- Corrected a member orientation issue associated with opening a RISA-2D file in RISA-3D.
- Corrected the display of saved Cold Formed code checks in the Design Results spreadsheet. Program was improperly reading in the Phi factors from the saved results file.
- Corrected an issue in the Load Combinations spreadsheet, where adding a line in the spreadsheet would confuse nested load combinations.
- Fixed a bug that could cause distributed loads to be cut off if a model merge were performed on non-physical members.
- Corrected a K factor issue where Nodes with blank lines in the Boundary Conditions spreadsheet were being interpreted as restrained joints for the K approximation.
- Corrected an issue where the R_b calculation for wood members was computed as if the bottom of the beam were in compression when the top flange was actually in compression. Generally resulting in a conservative error.
- Corrected corruption to the Report Name database.
- 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.
- Corrected a bug where a model with the ALL boundary condition could not be appended.
- CF correction for SCL lumber in 2005 NDS.
- 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.