

# Release Notes for RISAFloor

## Version 9.0.2 Enhancements/Corrections

- Added compatibility with RISA-Revit 2016 Link.
- Corrected a problem with wood column slenderness reporting in Detail Reports.
- Fixed a problem related to an unbraced length change in V9.0.1 which caused the program to shut down at solution

## Version 9.0.1 Enhancements/Corrections

- Installation & Licensing Updates:
  - Released an update version of Sentinel RMS License Manager to be compatible with Windows Server 2012 R2.
  - Fixed the Network.ini behavior to allow for the file to be placed in the root RISA directory and still be seen by the client installs.
- Miscellaneous Updates:
  - Added the ability to save a video of the animated deflected shape and mode shapes.
  - Added links to all Warning Log messages that take you directly to the relevant section in the help file.
  - Added a new "Select Marked Lines in the Model View" toolbar icon.
  - Added a graphic verification that confirms if you are running in a demonstration version.
  - Changed the name of the Global Parameters dialog to Model Settings. Changed the name of the Plot Options dialog to Model View Options. Changed the name of the Preferences dialog to Application Settings.
  - Improved the calculation of Cb values in RISA-3D where the steel beam bracing is based on RISAFloor data.
  - Moment forces from gravity outrigger members on lateral columns will now be transferred from RISAFloor to RISA-3D.
  - Optimized the solver for line load attribution to greatly increase the solution speed for podium-type structures sitting RISAFloor ES slab floors.
  - Added a non-coplanar warning message to RISAFloor models with roof wind loads where the wind load can't be applied because the roof joints are not coplanar.
  - Corrected an issue where the footer for PDF reports was not included on the last page.
  - Corrected flexible diaphragm load attribution to no longer consider "Column," "VBrace," or "None" member types.
  - Corrected the behavior for drawing outriggers using the trim and extend tools that would cause invalid framing errors in the model.
  - Fixed an issue with the Draw Cantilever tool that would cause the program to shut down.
  - Fixed a problem with the meshing code for area loads that would cause an odd error message.
  - Corrected an issue in column detail reports where the axial diagrams were not considering LL reduction.
  - Corrected an issue where non-continuous column stacks would cause the program to shut down.
  - Corrected an error introduced in RISAFloor v9.0, where KCS joists could inadvertently allow loads greater than 550 plf.
  - Fixed a problem where saved results were not being read in for a model with multiple floors that uses the NBC wind code.
  - Corrected a unit conversion problem for the column forces in the concrete column detail reports.
  - Fixed a problem where the internal PDF writer would print spreadsheet results as images rather than text, causing PDF sizes to be much larger than necessary.

## Version 9.0 Enhancements/Corrections

- Semi-Rigid diaphragms added to RISAFloor ES.
  - Enhanced the LC Generator to create Semi-Rigid Diaphragm load combinations.

- Cold Formed Steel:
  - New Codes
    - AISI S100-12
    - CANACERO-2012
    - CSA S136-12
  - Added code checks for back to back cold formed steel members.
  - Added L-Torque to CFS members. L-Torque applies to compressive capacity computed per C4.1.2.
- Masonry:
  - Added the ACI 530-13 masonry code.
  - Fixed an issue where the masonry wall detail report dead weight was reported incorrectly. The proper value is used in design checks for the wall.
  - Addressed an issue where the default value of 1.0 for masonry wall panels Icr was overriding the user defined entry when closing and reopening a model.
- Hot Rolled Steel:
  - Added the AISC Historic shape database.
  - Updated an error in the Chinese Single Angle Shape Database where the program was previously taking rx as rz.
- Wood:
  - Added wood member design per the Canadian CSA Standard 086-09 design code.
  - Added new glulam material databases per NDS Tables 5B and 5D.
  - Added Canadian wood I-joist databases and updated US wood I-joist databases.
  - Improved error reporting for mismatched wood sizes/species/grades.
  - Corrected a problem with explicit wood header materials unintentionally changing when deleting lines from the Wood Materials spreadsheet.
- Steel Joists:
  - Changed / improved internal LC's used for steel joist design and deflection checks to more intelligently consider roof loading.
  - Added max length to depth consideration for K and KCS joists per SJI specification section 5.2.
- Concrete:
  - Added DXF exporting of concrete slab reinforcement.
  - Updated the dimensioning of column reinforcement in the detail report to account for the presence of stirrups.
  - Updated the shear area of steel output to be on a per foot basis vs a per inch basis in the detail report.
  - Added an information button regarding RISAFloor ES to the Create a New Floor dialog.
  - Added a Help Menu option to launch the RISAFloor ES Demo
  - Corrected an issue with the viewing of detail reports for concrete round columns for the NZS code.
  - Fixed an issue with a slab floor where an opening with unsupported edges could cause the program to shut down.
  - Fixed an issue where multiple one-way slab bays could be drawn on top of one another which caused self-weight and load attribution errors.
  - Fixed an issue where one-way slab bays would not update if the thickness was changed and the old thickness would be used.
  - Fixed a model merging issue that caused an error in the program if nodes along a slab boundary were out of skew by a very, very small amount.
  - Fixed an issue with the Slab Definitions default file being written in the wrong units.
- Improved Install Behavior
  - Improved ability of Network Client versions to find a license server.
  - Reorganized all files (databases, defaults, etc) into new sub-folder locations.
  - Added an option in the installer to install to the Program Files and Documents folders.
- RISAFloor/RISA-3D to RISACONNECTION Integration Improvements.
  - Update to include new end plate moment configurations.
  - Update to allow transfer of channel connections as beams and braces.
  - Update to allow transfer of seismic moment connection parameters per AISC 341-10 and AISC 358-10
  - Added a Connection Type field to the Connection Rules spreadsheet to filter list of connections.

- Loading:
  - Enhanced the Load Combination Generator in order for each RISA program to read its own default settings.
  - Corrected load combination equations for the SBC 301 2007 Saudi Arabia code.
  - Corrected an error where Dyn Load line loads placed around floor openings were ignored for seismic weight.
  - Corrected an error which could cause tapered area loads applied to concave circuits to not be applied.
- Wall Panels:
  - Enhanced the Wall Panel Editor with local dimensions for openings and design regions.
  - Corrected a problem with line loads on walls in RISA-3D that came from RISAFloor that resulted in #Q0 reactions.
- General:
  - Linked the unbraced length and K factors for columns between RISA-3D and RISAFloor. Now the model will use the same values in both 3D and Floor instead of maintaining separate values.
  - Corrected a units conversion error with the rebar detailing diagram in member detail reports.
  - Fixed an issue where project grids were omitted from the creation of a flat file incorrectly.
  - Improved the column behavior to determine whether a given floor supports a column laterally. Previously the program always assumed a floor level was a lateral support.
  - Added the ability to set an end release for the top of columns as Pinned or Fixed.
  - Allow negative Floor Elevations. Note, they cannot be round-tripped to Revit until the RISA-Revit 2016 Link.
  - Updated the column force diagrams in the detail report to consider live load reduction per section rather than by what floor you are viewing results from, for a multi-story column. Previously you would see a different moment in a multi-story column depending on which floors detail report you were looking from.
  - Set a minimum Splice Distance Below value of 1 inch to prevent divide by zero errors when resolving column moments into shears.
  - Updated the Copy tool to include an option for copying unattached points.
  - Fixed a problem where RISAFloor models would forget which metal deck was saved with the model.
  - Fixed a problem with RISAFloor taking metal deck self weight as negative (uplift).
  - Fixed a units issue with non-standard units that would cause a large shear due to a column eccentricity.
  - Corrected a problem where the program would forget which Metal Deck was saved with the model.
  - Fixed an issue with column design unbraced lengths for floor levels with a column splice in them. The program previously used the length from the floor to the splice and now takes the full floor to floor length as the unbraced length.