Release Notes for RISAFloor v6

Version 6.0.1 Enhancements/Corrections

Enhancements

- Enhanced performance on 64-bit operating systems to allow use of up to 4 GB of memory.
- Added spacing and minimum steel reinforcement area checks for concrete walls.
- Updated the Draw Wall Panels dialog to remember a previous action.
- Updated saving results behavior when working in linked programs so that clicking the Save Results button once will save the results for all linked programs.
- Added validation to confirm that all Design Rules are valid upon opening a model.
- Updated seismic weight calculations so the self weight of wall panels which fall partially outside of a diaphragm are now clipped instead of ignored.
- Enhanced spreadsheet behavior so that column widths will be remembered when they are updated.
- Updated steel joist girder behavior so that if the point loads applied to the girder are non-uniform, the program will call out the largest point load on the girder and add an "SP" designation.
- Renamed AISI NAS-07 to S100-07 based on code naming conventions.
- Added additional licensing information to Help - About screen for commuted licenses.
- Simplified database shape comparisons to reduce program start-up time.
- Updated wood wall header output to state whether the header is controlled by bending or shear.
- Added restriction on single angles such that "depth" leg cannot be shorter than "width" leg.
- Changed default orientation for single angles so that vertical legs point downward.
- Updated Chilean Steel database per Acero Diseño Estructural Manual – Segunda Edicion.
- Made the calculation of the total seismic weight consistent between the Spectra Scaling Dialog and the Insert Seismic Loads dialog. Both now compute any load between the diaphragms (or base and 1st floor diaphragm) based on the distance of the load to the floor or base.
- Added the calculation of Cv for shear capacity of single angles for the AISC 14th Edition.
- Changed the value of Rp (upper limit of stud capacity) for composite beam design without metal deck for the AISC 14th Edition.
- Removed the upper limit of 3.0 on Cb for bending capacity for the AISC 14th Edition.
- Added new RedBuilt I-Joist database per 2011 ICC report.

Corrections

- Corrected an issue with network license validation that could cause a slow down with the user interface.
- Corrected an issue where network client computers could not find databases when launching in demonstration mode.
- Deck Corrections
    - Updated deck databases to correct the self-weight value. Previously program was using full depth slabs rather than using deck manufacturer values.
    - Updated the reading of decks when opening files. If a deck saved in an input file has the same name but different information than what is in the RISA Decks database, the program will use the values stored in the database.
    - Corrected the slab thickness to be the total slab thickness. This is defined in the deck catalogs as the bottom of the rib to the top of concrete.
    - Update the deck .def file to correct composite design issues.
    - Corrected all warning messages for stud heights checked against the total depth of the slab and rib height.
    - Corrected incorrect stud height usage. Stud height was incorrectly displayed, stored and used in design and assumed the stud was taken from the bottom of the rib instead of above the rib.
    - Fixed an erroneous warning log for decks in RISAFloor which wrongly warned about the concrete weight for non-composite decks.
- Fixed a unit conversion issue with the Material Take Off output so that the volume of concrete is only based on the density unit.
- Fixed a problem with the load meshing for flexible diaphragms that would produce error code 2136.
- Fixed a problem that prevented the graphical deletion of slab edges in certain instances.
- Corrected Bending Results spreadsheet headers for the Canadian steel code.
- Fixed the flexible area load attribution in RISA-3D so that inactivated members do not have load attributed to them.
- Corrected an issue with the copy command where lateral RISAFloor columns did not get copied in the corresponding RISA-3D model.

- Fixed an issue with the steel joist capacity for a 12K3 joist. The program was conservatively using a smaller capacity than actual, assuming the joist was 1' longer than it actually is.

Version 6.0 Enhancements/Corrections

Enhancements

- Added AISC 360-10 (14th Edition) ASD and LRFD code checks for hot rolled steel members.
- The AISC Database has been updated to include new shapes in the 14th Edition AISC Manual.
- Added ACI 318-2011 concrete design code.
- Added the ability to assign openings to concrete wall panels.
- Added ASCE 7-10 to the Load Combination Generator.
- Added IBC 2012 and ASCE 7-10 Live Load Reduction.
- Added NBC-05 (Canadian) Live Load Reduction.
- Added single angle code checks for AISC 360-05 (13th Edition).
- Added a user defined torque length to the design properties for AISC 360-05 (13th Edition) and the AISC 360-10 (14th Edition).
- Added Load Combination Generation files for the Saudi SBC 301-2007 code.
- Added CSA S136-04 code checks for cold formed steel members.
- Added CSA S136-07 code checks for cold formed steel members.
- Added automatic skip-loading of column forces.
- Added new deck databases with customizable databases.
- Added Copy tools to RISAFloor.
- Added a Copy Offset tool.
- Added the ability to print section properties from the Shape Database dialogs.
- Added optional ability to copy headers with spreadsheet data. (Optional based on a Tools-Preference setting.)
- Added the ability to print section properties from the Shape Database dialogs.
- Added a RedBuilt wood I-Joist database per 2011 ICC report.
- Added a warning message when Live Load exceeds 100 psf which alerts the user to switch the category to Live Load Special (LLS).
- Expanded the Torsional Buckling / Flexural Torsional Buckling code checks for AISC 360-05 (13th Edition) and AISC 360-10 (14th Edition) to apply to shapes other than WT's and LL's.
- Improved the RISA-3D/RISAFloor interaction to automatically account for the leaning column / leaning wall effect.
- Improved masonry Wall Panel definitions to be based on Wall Design Rules so that it will be easier to change multiple walls at the same time.
- Automated the consideration of connection eccentricity on column moments.
- Revised the AISC Design Guide 11 Floor Vibration calculations to consider the 0.7*adjacent span restriction on the Wj and Wg liberalization.
- Improved the Infill Beam Generator by giving an exact spacing option where beams are centered in the bay.
- Updated properties in the Cold Formed Steel Database (based on bend radius changes).
- Removed the obsolete Trade Arbed database from the installation routines.
- Improved flexible diaphragm load attribution to include Notional Loads.
- Improved the warning / error messaging system between RISAFloor and RISAConnection.

Corrections

- Corrected an issue with the AISC Design Guide 11 Floor Vibration calculations where edge girders were not using the correct Wg value.
- Corrected an issue with the calculation of As_max for the IS456 Indian concrete design code.
- Corrected an issue related to moment distribution for multi-story column stacks which went through multiple iterations during optimization.
- Corrected a problem with beam end forces in non-orthogonal moment frames when "Use Column Stiffness" was selected.
- Corrected an issue with RISA-Revit link which could result in loads being deleted during a round trip.
- Corrected an issue where RISAFloor could delete user-created RISA-3D loading without notification or warning. (This only occurred when loads were assigned to Basic Load Cases 24 through 27.)
- Corrected an issue where several Global Parameters values were omitted from printed output or were printed incorrectly.
- Corrected an issue where wall panel input data was printed multiple times.
- Corrected an issue where wall regions may not auto-generate for RISAFloor models while running in RISA-3D.