Release Notes for RISA-3D

Version 22.0.1 Enhancements/Corrections

- Interface/Graphics:
  - Corrected an issue with the truss, geodesic dome, circular arc, cone, circular radius, and cylinder templates not allowing decimals for some input values.
  - Fixed an issue where maximum values were not shown in the time history trace plot.
  - Corrected a graphics issue on high-resolution monitors where the reaction elevation dialog for RISAFoundation integration might have an oversized height.
  - Fixed the Point Moving loads Property Panel selection of BLC.
- Detail Report:
  - Fixed an issue where maximum values for deflection were not shown on summary diagrams in detail report.
  - Fixed an issue where opening a detail report for a buckling-restrained brace member with results from capacity-limited load combinations might cause the model to close unexpectedly.
- General:
  - Resolved an issue that prevented STAAD files from being imported successfully.
  - Updated the default seismic design rules to include default concrete wall design rules.
  - Fixed an issue where the coplanar check for tapered member area loads could not be triggered when the first three base nodes for the area load were collinear.
  - Updated the links for the 'Training' and 'Tutorial' buttons in the startup dialog to point to the new RISA training platform site.
- Hot Rolled Steel:
  - Updated warning message to clarify capacity-limited design requires SCBF/BRB braces with VBrace member types.
  - Fixed an issue where the unity check display for buckling-restrained brace members in 3D view might conflict with detail report and spreadsheet output.
- Cold Formed Steel:
  - Updated the default max and min panel thicknesses in Cold Formed Steel (CFS) wall design rules.
- Wood:
  - Fixed an issue in perforated wood wall design where wall regions with aspect ratio exceeding 3.5 were not properly ignored in shear capacity consideration.
  - Fixed an issue in perforated wood wall design where the Co factor could be accounted twice in the final shear unity check.
  - Removed the display of sheathing area ratio (r) in detail reports for perforated wood walls under SDPWS 2021 as it is not needed.
- Performance:
  - Improved solution speed for story drift qualification and calculation in large models.
- Spreadsheet:
  - Fixed an issue where the concrete shear bar spacing input under the Members Design Rules spreadsheet could not hold values in metric units properly.
- Integration:

- Fixed an issue where concrete code ACI 318-19 (22) was transferred to RISAConnection as ACI 318-19.
- Fixed an issue where base plate connections might be shown twice in RISAConnection after integration.
- Added checks to require parallel members for the beam splice connections to prevent integration issues with RISAConnection.

Version 22.0 Enhancements/Corrections

- Concrete:
  - Added ACI 318-19 (22) concrete code for concrete design.
  - Fixed an issue that ASTM A615M concrete rebar list was not displayed in order in the Design Rules spreadsheet
  - Fixed an issue for required rebar number when explicit rebar is used for concrete members
  - Fixed an issue that caused incorrect shear bar spacing when the units changed from imperial to metric.
- Wood:
  - Added options for stud spacings of 12" and less in the design rules of wood walls.
  - Added 'Net Round' as a selectable shape type for Custom wood in the Shape Selection dialog.
  - Resolved an issue that caused an exception message when setting 'Member Type' to 'None' for wood members when adding a section set.
  - Corrected an issue where the 'Shape Type' list was initially empty in the 'Add Member Design List' dialog for wood members.
- Interface/Graphics:
  - Added new hotkeys for most common commands and a hotkey customization tool that allows users to change hotkey settings.
  - Added functionality allowing users to move nodes using the mouse.
  - Added measure distance tool (F5) functionality in wall panel editor view.
  - Added the capability to delete the rotation bin from the 3D view toolbar.
  - Improved Result View Settings with a custom scale factor slider for better visibility of member force diagrams.
  - Corrected a graphical overlay issue where the plate material set legend was obscuring the plate contour result legend.
  - Fixed an issue where undoing changes in the Wall Panel Editor did not reflect the updated display of wall panel openings.
  - Updated URLs in the Subscription Login Dialog to direct users to the revised sections of the customer portal website.
  - Corrected a spelling mistake in the Member Forces button label on the ribbon toolbar.
  - Fixed a graphical display bug where setting the spring stiffness units to kN/cm incorrectly showed as k/in.
  - Corrected an issue where envelope joint reactions were overlapping in the display.
  - Fixed an issue where the Labeling drop-down under the Members tab of the Results View Settings may be inactivated when the deflected shape display is on.
  - Fixed an issue that Select Box, Select Line, and Select Polygon tools do not work for diaphragms.
  - Improved the display of model render view so that labels are not obscured.

- General:
  - Added tapered area load option for member area loads.
  - Added a tooltip description to the 'Match' tool in the Modify tab.
  - Enhanced the detachment functionality for nodes from diaphragms in models integrated from RISAFloor.
  - Corrected an issue that caused an exception message when selecting plates via the select elements by property tool.
  - Fixed a rare issue where clicking on subgrade springs triggered an exception message.
  - Corrected an issue where the slab Internal Force Summation Tool (IFST) failed to detect slab elements in locked view mode.
  - Corrected the error message displayed when a certain value is entered in the Parabolic Arc Template dialog.
  - Updated the minimum wind pressure used in the wind load generator to be 16psf for ASCE 7-10 and 7-16.
- Operations:
  - Enhanced spreadsheet functionality to enable selection of multiple individual lines using the Ctrl-key.
  - Resolved a spreadsheet issue where a blank new row is not created after pressing the Enter key.
  - Fixed an issue where double-clicking on a boundary condition unintentionally altered boundary conditions of other nodes.
  - Resolved an issue where the 'Clear Results' warning incorrectly appeared when using 'Show Selected Lines in Current View' in the results spreadsheet.
  - Fixed a rare issue where models with certain metric units caused the program to become unresponsive during solution.
  - Corrected an issue that Reset All Program Defaults does not apply to Project Grid default.
  - Fixed an issue where adding a new row to the Project Grid spreadsheet in a solved model resulted in the deletion of analysis results.
- Spreadsheet:
  - Improved Warning Log dialog design for better visibility and accessibility across various screen sizes and resolutions.
  - Corrected the functionality of the Find and Replace tool within spreadsheets.
  - Fixed an issue where the drift definition spreadsheet may have inaccurate nodal elevations display temporarily if the node labels were copied into the spreadsheet.
- Detail Report:
  - Resolved an issue where using the Previous and Next buttons in the Detail Report incorrectly reset the Load Combination dropdown to Envelope.
  - Clarified the seismic detailing results for the width-to-thickness ratio check to show either 'Pass' or 'Fail' when using AISC 341/358 - 2010 and 2016 codes.
  - Corrected minor descriptive inaccuracies in the seismic detailing report for CMU wall panels.
  - Resolved an issue that sorting BRB members in Code Check spreadsheet may cause unity check display issues in detailed reports.
- Solution:
  - Fixed a rare issue that caused an exception message running a dynamic solution.
- Masonry:

- Resolved a rare issue that caused an exception message when solving a model with masonry walls.
- Fixed an issue in the 'Masonry Wall Seismic Rule' dialog where 'Special Boundary Conditions' and '1.5x Shear ASD' settings required two attempts to save successfully when altering wall types.
- Corrected a rare issue that prevents the model from being saved when drawing and creating openings in masonry wall panels.
- Updated the default Masonry strength f'm in the Material Spreadsheet to be 2000psi.
- Steel:
    - Resolved an issue causing the program to close unexpectedly when solving seismic load combinations with three or more VBraces in the center quarter length of a beam.
- Printing/Reports:
    - Corrected an issue that caused an exception message when retrieving a 'Saved view' when there are none saved to begin with.
    - Fixed issue where new elements were not included in the print report when selecting the 'All' option in the 'Element Type' dropdown.
- Design:
    - Resolved the exception message issue triggered by renaming Design Rule Label to 'Typical'.
- Integration:
    - Resolved an issue with incorrect load transfer into RISAConnection based on member orientation for continuous beams over column connection.
    - Corrected a problem in preventing the transfer of continuous beam over column connections to RISAConnection with invalid arrangements.
    - Fixed an issue that allowed continuous beam over column connections to integrate when located on a non-top most floor.
    - Resolved an issue where the program pauses when transferring data from RISAConnection to RISA-3D for a second time.
    - Fixed an issue with incorrect unit conversion of user-defined loads in RISAFoundation when switching from imperial to metric units in a RISA-3D.
    - Resolved an integration issue with RISAFoundation where changing units in RISA-3D after initial integration caused discrepancies.