Release Notes for the RISA-Revit Link

Every release of the RISA-Revit Link contains numerous program fixes. These fixes are often related to one specific user's model, and it is not usually possible to explain the exact nature of the problem. Therefore many fixes are omitted from the release notes since they cannot be easily explained. Below is a list of enhancements that were added, as well as problems of a general nature that were fixed.

RISA-Revit 2025 Link (25.0)

- Added compatibility with Revit 2025.
- Added feature to transfer hold down details for wood wall panels from RISA-3D to Revit.
- Added an option in the export dialog box to round off point coordinates to help reduce errors when importing models into Revit.
- Added a warning message in the Summary Report dialog at the end of the transfer to notify users when any program limits of RISA-3D or RISAFloor are reached.
- Improved integration speed to Revit for models with Steel Product shapes assigned in RISAFloor.
- Improved handling of Revit walls tied to a single floor level when exporting to RISAFloor, including warning messages for walls exceeding defined levels.
- Removed the 'Overwrite all Revit Items' option for the import process as it is no longer valid.
- Improved aligning of beams during the first RISA-3D to Revit import in 'Update Geometry and Sizes' mode when physical and analytical models did not align.
- Corrected an issue where wood wall sheathing information was missing after reimporting the model.
- Fixed an issue where the link failed to export outriggers to RISAFloor from Revit, even when modeled correctly.

RISA-Revit 2024 Link (24.0.2)

- Added functionality for the transfer of wall panels with embedded columns to RISAFloor version 18.0.
- Added the ability to accommodate columns and walls to integrate into RISAFloor that have assigned the same base and top floor constraints.
- Improved Roundtrip handling between RISA and Revit by accurately maintaining physical and analytical model integrity.
- Enhanced feature to recognize openings directly from hole geometries in Revit wall panels.
- Improved footing integration from REVIT to RISA without needing an analytical model presence.
- Fixed an issue that caused a 'Command Failure for External Command' when exporting updated wall models into RISA-3D after modifications to wall materials in RISA-3D.
- Corrected an issue with wall properties being incorrectly modified when importing models from RISAFloor to Revit.
- Fixed a rare issue where encountering a 'Command Failure for External Command' and import errors with walls occurred after solving multiple load combinations in RISA-3D.
- Corrected an issue where wood columns originating from RISA-3D failed to export to RISAFloor during the transfer process from Revit.
- Fixed the transfer of triangular uniform area loads onto 2D elements from RISA-3D to Revit.

RISA-Revit 2024 Link (24.0.1)

- Added the ability to update wood walls and their parameters when selecting 'Update Member Sizes Only.'
- Enhanced the accuracy of importing trapezoidal walls into RISA
- Resolved an issue with the analytical model location shifting when using 'Update Member Sizes Only.'

- Ensured consistent maintenance of wood member sizes during multiple roundtrips between RISA and REVIT.
- Corrected a rare issue that would close RISA-3D unexpectedly during import of REVIT Link Exchange file.
- Resolved a problem where tapered walls from REVIT to RISAFloor and from RISA-3D to REVIT were not roundtripping correctly.
- Fixed a rare issue that would send RISAFloor floor levels into REVIT as 'Ceiling Plan' instead of 'Structural Plan'.
- Corrected an issue where multi-ply wood members were not being transferred into REVIT.
- Fixed an issue where column splices set in REVIT were not exporting correctly to RISAFloor when exporting a model from Revit to RISAFloor for the first time.
- Corrected a visual discrepancy in REVIT following adjustments to bolt placement in RISAConnection, while ensuring that the RISAConnection file correctly displays and calculates based on the intended configuration.
- Resolved an issue where certain shapes within AISC 15 and AISC 14.1 subfolders were not recognized in the Revit link mapping file.
- Corrected the problem where columns and walls weren't importing correctly when floors were set to inactive in REVIT.
- Corrected an issue where the silent installer uninstalls any older versions of the RISA-Revit Link.

RISA-Revit 2024 Link (24.0)

- Added compatibility with Revit 2024.
- Added the ability to accommodate columns and walls to integrate into RISA that have assigned the same base and top floor constraints.
- Improved the integration of wall openings from REVIT to RISAFloor.
- Corrected an issue where the mapping file was not being properly used when roundtripping a model.
- Fixed an issue that prevented the area loads on slabs from being retained during a roundtrip integration from RISAFloor ES.
- Corrected a rare issue that would cause a critical error when roundtripping a model with RISAFloor and RISAFoundation elements.
- Fixed the behavior of the 'Check for Updates' button.
- Corrected an issue that prevented the number of 'Braces' being shown in the Export Summary.
- Fixed a rare issue where end releases of column members in REVIT were changed when imported into RISA-3D.
- Corrected a rare issue that would slightly shift the placement of certain elements when roundtripping the model back to REVIT.

RISA-Revit 2023 Link (23.0.1)

- Added additional merge tolerance rules to better determine the number of levels to create in REVIT during integration.
- Added additional checks to verify overlapping elements do not exist during integration.
- Enhanced behavior of the Revit Link to allow transfer of partial analytical models.
- Corrected an issue that prevented boundary conditions from transferring from RISA-3D to REVIT.
- Fixed an issue that prevented integration to REVIT and prompted an ‘Unjoin elements’ error in REVIT.
- Corrected an issue that prevented models with sloped roofs from being integrated into REVIT.
- Fixed an issue that showed ‘No Val’ in the Slab Definition spreadsheet when a model was transferred into RISAFloor ES.

RISA-Revit 2023 Link (23.0)

- Added compatibility with Revit 2023.
- Corrected a rare instance where RISAFloor would close unexpectedly when exporting from REVIT.
- Fixed a rare instance that prevented models to import into REVIT when RISAFloor point loads are present.
- Corrected the behavior of 'Update Member Sizes Only' to update member end forces and end releases when an element changes size.
- Resolved an issue that prevented proper roundtripping from occurring and prompted a 'Command Failure for External Command' error.
- Corrected a roundtripping issue that prevented the thickness of the slab from being updated.
- Fixed an issue where RISA wood wall design parameters (sheathing grade, sheathing, and nailing) were not properly exported to Revit.
- Resolved a rare issue that would prevent RISAFloor models to import into REVIT.
- Corrected a rare issue that prevented columns from being imported from REVIT to RISA.

RISA-Revit 2022 Link (22.0)

- Added compatibility with Revit 2022.
- Added the ability to transfer Cold Formed Steel walls between RISA and REVIT.
- Added the ability to export only selected grids in REVIT to be updated when exporting to RISA-3D.
- Improved round-tripping behavior of project grids between RISA-3D and REVIT.
- Corrected an issue where transferring a model to REVIT was causing slab passive pressure and overburden inputs to become zero.
- Resolved an issue where sloped frames from REVIT may cause RISAFloor to close unexpectedly.
- Corrected an issue where incorrect coordinates were transferring when using Survey Base Point and True North options.
- Corrected an issue where re-importing a model file to REVIT caused duplication of properties in rare cases.
- Corrected an issue where Load Cases for Point, Line and Area Loads were not being mapped correctly from REVIT in some cases.
- Corrected an issue where some REVIT models would cause RISA-3D to close unexpectedly during import.
- Corrected an issue where the shapes and materials for 1D members were not mapping properly in some cases from REVIT.
- Resolved an issue where certain materials used in the REVIT model would stop the transfer to RISA-3D.
- Resolved an issue where changes made in RISAConnection were not updating when the model was sent back to REVIT.

RISA-Revit 2021 Link (21.0)

- Added compatibility with Revit 2021 API.
- Resolved an issue where RISA wood wall design parameters (stud size, stud spacing, and chord size) were not properly exported to Revit.
- Fixed an issue where moment reactions for certain outriggers and beams were not transferred properly from RISAFloor to Revit.
- Resolved an issue when importing from RISA-3D into a Revit model with existing levels where a z-offset value was added to the imported beams.
- Corrected an issue where beam camber values were not properly imported into Revit as beam annotations.

RISA-Revit 2020 Link (20.1)

- Added RISAConnection integration compatibility for Revit 2020
- Added the ability to transfer Revit Beam Systems into RISAFloor
- Added an option to align the floor elevation to either the top of deck or the top of the beam when importing a RISAFloor model into Revit.
- Updated transfer for footings without a pedestal in Revit to use the post option in RISAFoundation
- Corrected a problem where analytically flat beams were being re-imported as sloped when the physical beam was sloped
- Fixed an issue with transferring cantilevers from Revit to RISAFloor

RISA-Revit 2020 Link (20.0)

- Added compatibility with Revit 2020 API

RISA-Revit 2019 Link (19.1)

- Added RISAConnection integration compatibility for Revit 2019
- Improved concrete beam rebar transfer for sloped beams
- Corrected a problem where beam end reactions on composite floors were not transferring

RISA-Revit 2019 Link (19.0)

- Added compatibility with Revit 2019 API
- Added import of Concrete Beam rebar to Revit
- Added the ability to transfer beam reinforcement between RISA and REVIT products
- Disabled RISAConnection integration until update

RISA-Revit 2018 Link (18.1)

- Added linking compatibility for the following connections:
    - Shear Splice Connections (Beam to Beam)
    - Shear Splice Connections (Column to Column)
    - Moment Splice Connections (Beam to Beam)
    - Moment Splice Connections (Column to Column)
    - Moment End Plate Connections (Beam to Column Flange)
- Added round-trip support for K joints
- RISA wood wall design information is now exported to Revit
- Corrected an issue where a custom mapping file was overwritten during export
- Fixed the RISA Parameters On/ Off button to reflect when RISA parameters are available in Revit
- Corrected an issue where a sloped roof in a RISAFloor model transferred over as flat

RISA-Revit 2018 Link (18.0)

- Added compatibility with Revit 2018 API

RISA-Revit 2017 Link (17.2)

- Added a link with RISAConnection

    - Shear Tab Shear Connection (Beam to Column)
    - Shear Tab Shear Connection (Beam to Girder)
    - Clip Angle Shear Connection (Beam to Column)
    - Clip Angle Shear Connection (Beam to Girder)
    - End Plate Shear Connection (Beam to Column)
    - End Plate Shear Connection (Beam to Girder)
- Fixed a bug that prevented the RISA Label from being updated on HBrace members during a "Update Member Sizes Only" import
- Added support for exporting wall openings that are intersected by Floors to RISAFloor
- Increased limits on maximum number of elements to match 64-bit RISA applications
- Added support for "Approximate Curve" analytical curved beams
- Added the ability to import RISA-3D walls into Revit from a combined RISAFloor/RISA-3D model

RISA-Revit 2017 Link (17.1)

- Added support for skewed and curved Project Grid lines (requires RISAFloor v11.0 or higher, RISA-3D v15.0 or higher)
- Added RISAWall Label parameter to bring wall labels into Revit from RISA
- Fixed many miscellaneous bugs

RISA-Revit 2017 Link (17.0)

- Added compatibility with Revit 2017 API
- Revised version number to match Revit year

RISA-Revit 2016 Link v4 (14.3)

- Added an auto-backup folder which backs up all relevant files immediately before an import/export in Revit
- Modified Import/Export dialog box layout to be High DPI friendly
- Corrected an issue that caused Wood walls in Revit to be exported as General walls to RISA
- Added a warning when trying to export from a Revit file that is not a .rvt file
- Added support for file path names with > 100 characters
- Fixed an issue where "Update Member Sizes Only" was also modifying geometry in the Revit model
- Enabled the "Use Only Existing Levels" feature for imports to new (blank) Revit models
- Added support for Revit Level names with > 32 characters
- Added a check for missing "Project Information" in Revit model
- Fixed the "Exchange File Cannot be Edited" bug
- Fixed many miscellaneous bugs

RISA-Revit 2016 Link v3 (14.2)

- Added the option to prevent the Link from creating new Levels in the Revit model when importing from RISA-3D
- Added the import of Member End Forces to Revit for analytical Beams/Columns/Braces
- Removed the limitation on importing to Revit twice in a row
- Corrected a problem where nodes in RISA-3D were being deleted during round-trips
- Added the option to import rebar to Revit for RISAFoundation footings and footing pedestals
- Added support for Foundation Slab Pedestals from RISAFoundation to be linked with Revit
- Added the option to import rebar to Revit for Foundation Slab Pedestals

- RISAFloor ES thickened floor slab regions are now linked with Revit
- RISAFloor ES Drop Panels are now imported to Revit
- Added the option to reset the Revit Merge Tolerances to more reasonable values than the Revit Defaults during import/export
- Fixed a problem where a Batch+Envelope solution in RISA-3D would not import End Reactions to Revit
- Horizontal Brace members in RISA-3D are now linked to Revit as Beam elements of type Horiz Brace as opposed to Brace elements
- Improved the ability of the Link to detect when a RISA model was previously linked with a different Revit model. This fixes many previously unexplainable problems
- Added a warning to close RISA models that are currently open when importing to Revit. This fixed many previously unexplainable problems
- Fixed a problem where exporting to RISAFloor using the Revit Analytical Model option the Link was using the columns' Physical Model regardless
- Fixed many miscellaneous bugs

RISA-Revit 2016 Link v2 (14.1)

- Added compatibility with Windows 10
- Added Check for Update feature
- Added RISA Member Labels for Physical Elements as well as Analytical Elements
- Fixed a problem where Foundation Slabs would always export to Project North orientation
- Fixed several bugs related to round-tripping

RISA-Revit 2016 Link (14.0)

- Added compatibility with Revit 2016 API.
- Added support for Concrete Floor Slabs to be linked to RISAFloor ES.
- Overhauled file/folder structure to install to Program Files and Documents folders.

RISA-Revit 2015 Link v4 (13.3)

- See RISA-Revit 2016 Link v2 (14.2). Same changes

RISA-Revit 2015 Link v3 (13.2)

- Added import of Concrete Column rebar to Revit
- Added RISAFoundation linking for Foundation Slabs and Spread Footings
- Added support for Revit "Stacked Wall" elements.
- Overhauled Import/Export dialogs to make them easier to understand
- Eliminated the mapping of wood materials. Wood members are now always mapped to a Default wood material. This addresses file corruption issues caused by custom wood species.
- Added support for negative floor elevations in RISAFloor
- All import/export settings are now "remembered" in the Exchange File so that they are not reset for each round-trip.

RISA-Revit 2015 Link v2 (13.1)

- Fixed many more bugs than usual, including old bugs that made round-tripping unreliable
- Wall Openings in Revit which span across multiple Levels are now discarded when exporting to RISA

RISA-Revit 2015 Link (13.0)

- Added compatibility with the Revit 2015 API
- Added support for walls with a sloped top. They now import/export to RISAFloor without being squared off.
- Introduced a new INI file to make file location mapping more transparent.

RISA-Revit 2014 Link v2 (12.1)

- Added round-tripping support for curved beams between RISA-3D and Revit
- Wall openings in Revit created using the Edit Profile method now map to RISA as Wall Panel openings
- Shapes imported to Revit that cannot be mapped are now imported as a default shape type. They are color coded purple in the import summary view. Previously nothing was imported for those shapes.
- Added support for exporting portions of the Revit model to multiple RISA models, then recombining those multiple RISA models into the Revit model during import. The "Export Selected Items Only" option must be used for this.
- Added a check for elements which the Revit user does not have permission to edit. Provided a warning during import from RISA regarding these elements.
- Fixed a problem with materials being duplicated in RISA during repeated round-trips with Revit
- Added an option to link RISAFloor model with Revit Analytical model. Previously RISAFloor only linked with Revit Physical Model
- Added an option to round Revit coordinates to the nearest 1/8" during export to RISA
- Added support for Revit languages other than English
- Made the default splice distance "smart" when exporting from Revit to RISAFloor
- Added support for Analytical Links in Revit to map to Rigid Links in RISA-3D
- Added a "RISA Member Label" parameter to Revit so that the RISA label can be viewed in the Revit model.
- Improved the import of Project Grids from RISA to Revit so that they are not deleted and recreated every time.
- Added mapping of many miscellaneous material properties
- The Link will now remember the name of RISA elements during round-trips, and will not overwrite them with each export to RISA.
- Added ability to not export Project Grids from Revit to RISA. Previously they were always exported
- Added support for "disabled" analytical wall openings so that they are now ignored when exporting to RISA
- Added a "RISA Structural Floor" parameter to Revit Levels so that the user can control which Levels in Revit should be exported to RISAFloor as "Floors"
- Corrected a problem with Area Loads being mapped to the wrong Basic Load Case in RISA
- Wall openings which touch a wall edge are now ignored during export to RISA
- Concrete members are now always exported to RISA as non-composite

Compatibility Cutoff

- The RISA-Revit 2014 Link (12.0) and older versions of the RISA-Revit Link will only work on versions of RISA-3D older than v12.0. They will not work on newer versions of RISA-3D
- The RISA-Revit 2014 Link (12.0) and older versions of the RISA-Revit Link will only work on versions of RISAFloor older than v8.0. They will not work on newer versions of RISAFloor
- The RISA-Revit 2014 Link v2 (12.1) and newer versions of the RISA-Revit Link will only work on versions of RISA-3D v12.0 and higher. They will not work on older versions of RISA-3D
- The RISA-Revit 2014 Link v2 (12.1) and newer versions of the RISA-Revit Link will only work on versions of RISAFloor v8.0 and higher. They will not work on older versions of RISA-3D

RISA-Revit 2014 Link (12.0)

- Added compatibility with the Revit 2014 API
- Disabled the Analytical model in the RISA Import Summary view

RISA-Revit 2013 Link v2 (11.1)

- Corrected a problem with Project Grids resetting to elevation zero during each round-trip
- Eliminated the link between RISA-3D Plate Elements and Revit Wall Elements
- Shape types that cannot be mapped are now exported to RISA as a default shape instead of not being exported at all. A warning is provided when opening the RISA model.
- Added option to control the prefix of element names created in RISA. Previously a "REV" prefix was always applied.
- Added a verification routine prior to import/export to warn user of potential problems before an import/export overwrites their model.
- Added support for aluminum members
- Improved the round-tripping behavior of Wall Regions when walls are resized in Revit and then exported back to RISA
- Added support for cold-formed members
- Members set to "Inactive" in RISA no longer import to Revit
- Members with zero camber now populate the Camber parameter in Revit to blank rather than zero.
- Added mapping of wall material and thickness
- Added a "Composite" parameter in Revit so that beams may be exported to RISA as non-composite
- Added support for Shaft Openings in Revit as Diaphragm Openings in RISA.
- Improved progress bar
- Corrected problems with column rotation angles
- Import/Export Summary Reports now report members by type (beams, columns, etc) rather than one broad category (Members)
- Speed improvements during import to Revit
- Extended the "Update only changed elements" behavior to the "update member sizes only" import.
- Added an option to export only changed items from Revit. Only elements that were changed in Revit since the last import from RISA will be exported back to RISA.
- Added aluminum family libraries to install

RISA-Revit 2013 Link (11.0)

- Added compatibility with the Revit 2013 API
- Beams from RISA are now always exported to Revit as type "Other" instead of "Automatic"
- The "Analyze As" parameter for Analytical Floors in Revit is now mapped to the "Two Way" checkbox in the Deck Definitions spreadsheet in RISAFloor
- The "Analyze As" parameter for Analytical Walls in Revit now maps to the Gravity/Lateral flag in RISAFloor. Previously this mapped to the "Bearing/Shear/Combined" setting in Revit.
- The rupture strength of steel (Fu) now maps between the Materials spreadsheet in RISA and the Material properties in Revit.
- Added an import option to update only elements that changed during the round trip, when importing to Revit. Previously all RISA elements would overwrite all Revit elements.
- Added support for Architectural Window/Door openings in Revit to be mapped to RISA as Wall Openings.
- Set the Base File name to always match the Exchange File name by default during Export from Revit to RISA.

- Added color coded view to show what elements have been added/modified since the last import to Revit
- Added dialog after import/export which displays a summary of what was imported/exported and modifed/added/deleted
- Eliminated "Family Instances" checkbox. All beams/columns/braces with an analytical element are always imported/exported now.
- Renamed Coordinate System options to reflect new names in Revit.