

Release Notes for RISAFoundation

Version 12.0.1 Enhancements/Corrections

- Analysis:
 - Added additional metric bar sizes for the ASTM A615M rebar set.
 - Added the AS/NZS 4671:2001 rebar set.
 - Added a warning message when ACI 318-14 minimum steel requirements are not met.
 - Added deep beam qualification criteria according to ACI 318-14 Section 9.9.1.1(a).
 - Removed an incorrect reporting of '-nan(ind)' in the Soil Pressures spreadsheet for grade beams with deep dimensions.
 - Updated the K factor equations using the Coulomb method in the analysis of retaining walls.
 - Corrected the sliding force for retaining walls with and without a key.
 - Resolved an issue where stem wall properties were not properly converted when switching units.
 - Updated the calculations for the stability of footings to only use Service load combinations.
 - Resolved an issue where the soil bearing unity check reported in the Footing Detail Report was not considering the ABIF factor.
 - Refined slab reinforcement optimization for large spacing increments.
 - Corrected an issue regarding conservative slab reinforcement when the 'Force Top and Bottom rebar' option was selected.
 - Corrected the slab moment capacity when the user input top cover exceeded the slab thickness for a single layer of reinforcement.
- General:
 - Fixed a display issue for the cover in the slab detail report when the cover exceeded 40% of the slab thickness using the Optimize rebar option.
 - Fixed an issue that caused a false warning message stating failure to satisfy minimum reinforcement for slabs using metric units.
 - Corrected the displayed design strip results in the Strip/Cut Results spreadsheet for slabs with a single layer rebar option.
 - Corrected the retaining wall load diagram for at-rest condition.
 - Fixed a spelling mistake in a wall footing failure error message.
 - Fixed a graphical display issue where top rebar was shown in the spread footing detail report when not required.
 - Resolved an erroneous overlapping footings error message.
 - Corrected an issue that prevented the display of results for some service load combinations in the footing detail report.
 - Resolved a graphical display issue where metric bar sizes were shown as non-metric in the pedestal detail report.
 - Resolved an issue with overlapping information in the pedestal detail report.
 - Fixed an issue where exporting footing details to DXF caused the program to close unexpectedly.
- Integration:
 - Resolved an issue where custom detail reports were not retained in the original program after using the Director tool to integrate between multiple programs. (pending future RISA-3D update).
 - Resolved an issue where deleting a wall panel in RISA-3D caused issues during integration.
 - Fixed an issue to retain custom pile information for models integrated with RISA-3D (pending future update).
 - Resolved a metric units issue with custom rebar layouts caused by integration with RISA-3D (pending future update).

Version 12.0 Enhancements/Corrections

- Analysis:
 - Added ability to create nested load combinations.
 - Corrected an issue with the progress bar that increased solution times.
- General:
 - Added single layer reinforcement design for mat slabs.
 - Added support for the Eurocode 2 concrete code. This includes design for mat slabs, pedestals, and grade beams.
 - Added the option to specify the minimum area of steel for longitudinal reinforcement in pedestal design.
 - Improved the slab safety factors spreadsheet to report sliding resistance due to passive pressure.
 - Refined the slab sliding force to properly reflect the direction of the applied lateral load.
 - Resolved an issue where applied vertical uplift was contributing to sliding resistance for slabs.
 - Fixed an issue where slab sliding results were reported for the opposite slab local axis.
 - Resolved an issue where modifying the slab local axis was not affecting sliding results.
 - Corrected an error in considering soil overburden pressure in overturning moment calculation for slabs.
 - Fixed an issue that caused a false warning message stating failure to satisfy minimum reinforcement.
 - Corrected an issue where the provided top and bottom reinforcement for slabs were erroneously combined to meet minimum reinforcement requirements.
 - Corrected the footing setting Force Top bars to require top flexural steel in both directions.
 - Corrected the slab setting Force Top and Bottom bars to require flexural steel at the top and bottom of the slab.
 - Resolved a spreadsheet issue where the pile type and shear UC were reported incorrectly.
 - Resolved an issue where retaining walls with keys reported a higher unity check for sliding.
 - Resolved an issue where the program would show a blank cell when the footing safety factor exceeded 1000 and will not report 'NA' instead.
- Integration:
 - Resolved an issue where the unattached nodes from RISAFloor or RISA-3D were unable to be deleted in RISAFoundation.