

# Release Notes for RISAFoundation 2.1.0

## Version 2.1.0 Enhancements/Corrections

### *Enhancements*

- Added a Circular Slab Generator
- Added full pedestal design for both rectangular and circular pedestals.
- Added a customizable graphic toolbar with new Plot Options button for easier graphical review of results.
- Added CSA A23.3-2004 Canadian concrete code.
- Added NTC-DF 2004 Mexican concrete code.
- Added CSA G30.18 Canadian concrete reinforcement.
- Added double-click functionality for points that allow you to modify the point location and the boundary conditions for the point.
- Organized Global Parameters, Design Rules and Footing Definitions to be more in sync with different elements in the program.
- Grade beam spring meshing now tied to Global parameter mesh size.
- Added Redesign Rules and material to various Modify and Selection dialogs
- Soil Pressure spreadsheet sheet results now show controlling pressure for footing joints rather than forcing user to review individual footing detail reports.
- Improved ability to recognize instabilities for overloaded slabs.

### *Corrections*

- Changed the equivalent square pedestal used for punching shear calculations of round pedestals. Previously this was based on equivalent area. This is now based on a square of equivalent perimeter.
- Corrected an issue where the program could not calculate punching shear for pedestals with unusual edge geometry.
- Corrected an issue in pedestal design that could result in an incorrect capacity for pedestals in tension when they have a low, but non-zero moment.
- Removed some over conservative loading that was included in the pedestal bearing calculation for footings.
- Corrected multiple problems associated with models with more than 100 area loads.

## Version 2.1.1 Enhancements/Corrections

- Corrected a graphics issue in which the direction of the Design Cuts was being displayed incorrectly.
- Corrected an issue where entering into RISAFoundation could clear RISA-3D Detail Reports.
- Corrected a case where the program could produce a false warning message about soil bearing values being exceeded.
- Corrected a problem which caused the Modify Slabs dialog to stop functioning.
- Enhanced design strip reinforcement spacing by expanding the optimization routine to work for strength considerations.
- Added output to the design strip reinforcement spreadsheet by adding the code checks for each strip and also giving shear values.
- Enhanced design strip reinforcement optimization by requiring a second iteration of the top and bottom bars, thus allowing the program to minimize the reinforcement per Asmin requirements.

## Version 2.1.2 Enhancements/Corrections

- Added the ability to report soil pressure at joints that are not part of the FEM mesh.
- Corrected issue which could result in duplicate nodes being created in the RISA-3D/RISAFoundation interaction.
- Corrected an issue with the pedestal punching shear calculations that could cause a crash for concave slab and/or pedestals whose punching shear perimeter could be within multiple slabs.
- Corrected an issue where models with ONLY grade beams could erroneously report an instability.

## Version 2.1.3 Enhancements/Corrections

- Added the 2007 edition of the Saudi concrete code (*SBC 304*).
- Added footing soil pressures to the **Soil Pressure** results spreadsheet.
- Added deflection reporting (based on interpolation) for joints which are not located directly on plate corners.
- Modified the legend range for wireframe plate contours to more closely match the range shown for color coded contours.
- Improved the auto update detection sequence so that it cannot falsely report the presence of an update
- Corrected an issue where temperature/shrinkage failures could be erroneously reported for design cuts with a rho required very close to the temperature/shrinkage limit.
- Corrected an issue where the **Footing Results** spreadsheet could report pedestal reinforcement that was not consistent with the correct detail report results.
- Corrected an issue that prevented the program from updating the f'c or self weight of a footing unless the file was saved and re-opened.