

Release Notes for RISA-2D Version 7.0

Enhanced Wood Design Features

- Added Glu-Lam design per 2001 NDS

Enhanced Concrete Design Features

- Added user defined reinforcement layouts for flexure and shear for both beams and columns
- Added New Zealand Concrete Design NZS3101 -1995
- Added Australian Concrete Design AS 3600 -2001
- Changed the code to allow a yield stress of 415MPa for Shear Steel. The previous limit was 413 MPa.

Enhanced Steel Design Features

- Added New Zealand HR Steel Design NZS 3404-1:1997
- Added Australian HR Steel Design AS 4100-1998
- Added US Cold Formed Steel Design AISI 2001
- Added Mexican Cold Formed Steel Design AISI 2001/CANACERO
- Added Canadian Cold Formed Steel Design AISI 2001/CSA S136-01
- Added New HR Steel shapes per the LRFD 3rd manual.
- Added New AISI and SSMA shapes per AISI 2001 manual
- Updated detail report to show B value for tapered members (AISC codes).

Enhanced Analysis Features

- Added an Accelerated (Lanczos) Dynamics Solver, up to 100x faster than previous solver
- Added Automatic Generation of Response Spectra Scaling Factors
- Added Plate Thermal Loading
- Added Linear Acceleration vs. Period plots to response spectra dialog
- Modified Plate Corner Force reporting to also include the equivalent corner forces due to applied surface loads

Enhanced Loading Features

- Greatly Expanded Load Combination Generation Options (International Codes, Directional Wind/Seismic, Torsional Offsets)

Enhanced Graphics and Drawing Features

- Added Dynamic Zoom, Pan, and Rotate to all Model View Windows.
- Updated Double Click Dialogs for all new data, including new Meshing options to the Plates Dialog.
- Enhanced Line Tool to now Report all Forces and Moments for Members and Plates.
- Enhanced AutoMesher with new Dimension Limit to produce more regular meshes.
- Added Expanded Font Control in Tools - Preferences
- Up to 5x faster model rendering
- Added Translucent plate and member rendering and member diagram graphics
- We now graphically color code axial and moment diagrams to distinguish between Tension / Compression or Positive / Negative bending.
- Added ability to graphically rotate or flip plates to align their local axes

Features Specific to the Indian Region

- IS 456 : 2000 — Plain and reinforced Concrete Code of Practice
- IS 800 : 1998 — Code of Practice for General Construction in Steel
- IS 875 (Part 3) : 1987 — Code of Practice for Design Loads (Wind Loads)
- IS 1893 : 2002 — Criteria for Earthquake Resistance Design of Structure
- Load Combinations can be automatically generated from the following codes:
 - IS 456 : 2000 — LSD (Collapse)
 - IS 456 : 2000 — LSD (Serviceability)
 - IS 1893 : 2002 — LSD
 - IS 875 (Part 5) : 1987 — WSD
- Added pre-generated Indian Materials and Response Spectra:
 - Standard Indian Concrete Materials (M15, M20, etc.)
 - Standard Indian Steel Materials (Fe-410, Fe-570, etc.)
 - Indian Response Spectra as per IS 1893 : 2002

Enhanced Interaction with other software

- Expanded DXF Import/Export to Handle Shapes AND Section Set Mapping to AutoCAD Layer Names.

Miscellaneous Enhancements / Corrections

- Added a Default Region to the Tools – Preferences
- Corrected problem with the Help File Index and various Help File links
- Added registry entry for user to specify a server list for license management
- Modified network versions to check licensing less frequently than the stand-alone versions
- Corrected issue with units conversions for footing design results