ETABS® 2013 Version 13.1.3
Release Notes

© Copyright Computers and Structures, Inc., 2013

Notice Date: 2013-11-01

This file lists all changes made to ETABS since the previous version. **Most changes do not affect most users.** Incidents marked with an asterisk (*) in the first column of the tables below are more significant and are included in the ReadMe file.

Changes from v13.1.2 (2013-10-08)

User Interface and Display
Enhancements Implemented

*	Incident	Description
	58450	An enhancement has been implemented on the User Report form (command File > Create Report > Add New User Report) that adds a new button to Select or Deselect All options for the following tabs: Definitions, Assignments, Output and Design.

Frame Design
Enhancements Implemented

*	Incident	Description
*	44089	The Chinese design codes have been added or upgraded as follows: • Live load reductions factors using code GB 50009-2012 • Wind loading using code GB50009-2012 • Seismic Loading using code GB50011-2010 • Response-spectrum functions using code GB50011-2010 • Steel frame design using code GB50017-2003 • Composite beam design using code GB50017-2003 • Concrete frame design using code GB50010-2010 • Shear wall design using code GB50010-2010 • Composite column design using codes JGJ3-2010, CECS159:2004, JGJ138-2001 • Structural system design, including automated static cases that are created for response spectrum analysis so measures required in the Chinese codes can be calculated. *Note that most of these features are available only with a Chinese license for ETABS 2013, which can be obtained through the Chinese dealer.*

Results Display and Output
Enhancements Implemented

*	Incident	Description
	59425	An enhancement has been implemented where point drifts, story drifts and diaphragm drifts are now available for all gravity load cases. Previously, drifts were reported for lateral load cases only.

User Interface and Display
Incidents Resolved

*	Incident	Description
	59196	An incident was resolved for the Assignments tab of the right-click Frame (Beam/Column/Brace) Information form where the End Length Offsets > Rigid Zone Factor could not be specified as a value less than 1.0, but values greater than 1.0 were permitted. Now the correct range (between 0.0 and 1.0, inclusive) is being allowed and enforced.
	59249	An incident was resolved that corrected minor typographical errors on a form used for defining interacting hinges (P-M2, P-M3, P-M2-M3) under the command Define > Section Properties > Frame Nonlinear Hinges. When the Hinge Specification Type was set to Moment-Curvature (instead of Moment-Rotation), the form used to define the Moment Curvature Data was incorrectly labeled Moment Rotation Data, and the table column "Curvature/SF" on that form was incorrectly labeled "Rotation/SF". The data entered in this column was correctly interpreted as being curvature, and no results were affected.

Graphics and Drafting
Incidents Resolved

*	Incident	Description
	59197	An incident was resolved where column labels were not visible in plan views.
	59441	An incident was resolved where the command Edit > Divide Areas using selected points on edges was creating additional wall areas.

Modeling
Incidents Resolved

*	Incident	Description
	59479	An incident was resolved where, for certain rare models, the wall properties assigned to some wall objects were not shown in the Define > Section Properties > Wall Sections command. When this occurred, the correct wall properties for the affected objects may not have been used for analysis.

Section Designer
Incidents Resolved

*	Incident	Description
	59131	An error was corrected where the "Add Copy of Property" button in the Frame Properties form did not always work correctly for Section Designer sections. In particular, information about whether or not the section had already been designed was not being properly copied, which could affect the amount of rebar assumed when displaying the PMM surface.

Loading
Incidents Resolved

*	Incident	Description
	58787	An incident was resolved where the frame open structure wind parameters (command Assign > Frame Loads > Open Structure Wind Parameters) were not being saved in the model file. Analyses that were run immediately after assigning these parameters would correctly include their effect, but default values would be used if the analysis was re-run after opening a saved model.
	59253	An incident was resolved for Eurocode 8-2004 auto seismic load where the parameter "Ground Acceleration" was shown as "ag" instead of "ag/g". This was a typographical error on the form and results were not affected.

*	Incident	Description
*	59277	An incident was resolved where specifying accidental eccentricities in a response-spectrum load case would produce a larger base shear than was correct when there were joints having mass present that were not connected to any diaphragm, whether rigid or semi-rigid. In such a case, additional shear load was being added to the joints not connected to a diaphragm in the load pattern used to represent the eccentricity. This shear load was equal to that from the response-spectrum case without eccentricity, so the effect was limited and conservative. It is recommended to re-run the analysis of such models.
	59744	An incident was resolved where the frame property modifier for weight was being applied twice for the calculation of mass from the self-weight of frame elements if the Mass Source was defined such that the "Mass from Loads" option was on and the self-weight multiplier was non-zero in any of the load patterns selected for mass source.

Analysis
Incidents Resolved

*	Incident	Description
	54543	An incident was resolved in which a nonlinear modal time history analysis was not being performed and the message "Error updating load cases: Internal nonlinear-history-type error" was generated for the unusual case where a linear modal history specified to have a periodic motion type was changed to be a nonlinear modal history. Only the specific load case that was changed was affected by this error.
	59135	An incident was resolved where program was unable to run analysis in rare cases where auto-edge constraints were used and the number of shell sections was more than the number of frame sections.
	59257 59259	An incident was resolved where the analysis could not be run when an Auto Lateral Wind load pattern of type "User Loads" was specified. In such a case the software became unresponsive when trying to run the analysis. Only version 13.1.2 was affected by this error.

Frame Design
Incidents Resolved

*	Incident	Description
	55816	An incident was resolved in which a runtime error could occur in rare cases when opening a model where the frame design procedure for some members had been overwritten after design was performed. This did not occur if the design was re-run before saving and re-opening the model.
	58352	An incident was resolved for composite column design using the AISC 360-10 code where the design was not able to be completed for rectangular encased concrete sections when the number of longitudinal reinforcement bars was more than eight. Circular columns were not affected.
	59154	An incident was resolved for concrete frame design where coefficients Alpha_CC and Alpha_LCC were not taken into account: (1) in concrete column design according to the EC 2-2004 and NTC 2008 codes, and (2) in beam design according to the EC 2-2004 code.
	59200	An incident was resolved for the live-load reduction factor (LLRF) using the AS/NZS 1170.1-2002 code where reduction factor was computed based on the influence area instead of tributary area. (Generally the influence area is computed as four times tributary area.) The LLRF was over-conservative for the case. Models with reducible live load using the code AS/NZS 1170.1-2002 should be redesigned using the new release. No other codes were affected.
	59208	An incident was resolved for steel frame design using the AISC 360-05 and AISC 360-10 codes where the design details for pipe and circular sections showed the form of the PMM interaction equation as being the algebraic sum of the ratios for axial force and the two bending moments, whereas the correct equation sums the axial ratio with the SRSS (square root of the sum of the squares) of the two bending ratios. The reported numerical values of the component ratios and the combined PMM (D/C) ratio were correctly calculated and reported. Only the form of the equation shown for reference was incorrect. No results are affected.

*	Incident	Description
	59461	An incident was resolved where load patterns of type "Super Dead" (SDead) were omitted from the automated design load combinations created for frames and walls for the combinations consisting of minimum dead load plus/minus seismic load and minimum dead load plus/minus wind load. The error was obvious be reviewing the generated load combinations. The results were generally conservative and agreed with the load combinations as generated.
	59502	An incident has been resolved for concrete frame design where reports for "Joint Shear Stress" checks listed the rules in Item (b) as being for "ductile and intermediate moment resisting frame" instead of as for "ductile moment resisting frame". This affected the ACI 318-05, ACI 318-08, ACI 318-11, Mexican RCDF 2004, TS 500-2000 and KCI-1999 codes. This note has been updated for the affected design reports. There is no change in the design results.

Shear Wall Design
Incidents Resolved

*	Incident	Description
*	56449	An incident was resolved where "Rebar Material" and "Rebar Material for Shear" were defaulting for frame sections that had reinforcement and were being set to a non-rebar material for Wall design preferences. This problem was limited to the opening of V9 model files (*.edb) or the importing of V9 text files (*.e2k, *.$et). The frame section results would be incorrect if other than the default rebar material was used. The wall preferences problem manifested as infinite shear reinforcement being required, which was obvious. Files saved from ETABS 2013 were not affected.
	59107	An incident was resolved where generating a report containing pier or spandrel design details could cause the load combinations used for wall design to be changed. Specifically, default design combinations would be generated if they were not previously requested, and then used for the design results reported in the design report, including the design detail sheets. Once these default load combinations were generated for the report, they would be used for further design calculations unless removed. The results presented were always correct based on the currently selected design load combinations.
	59326	An incident was resolved for shear wall design where the "Number of Curves" in the Design Preferences actually changed the "Number of Points" instead after the form was closed. This error was obvious and design results were consistent with the "Number of Curves" and the "Number of Points" actually shown when the Design Preferences form was re-opened.
	59709	An incident was resolved for shear wall design using the the CSA A23.3-2004 code where the designed pier shear rebar could be incorrect when the model default units were other than N-mm units. The maximum shear stress limit was incorrectly applied in other units which could cause the pier to be treated as overstressed.

Results Display and Output
Incidents Resolved

*	Incident	Description
	55942	An incident was resolved where the window title shown when displaying the "Pier Reinforcing Ratios" previously included percentage sign (%) when the numerical values printed on the screen were actually ratios, not percentages. The percentage sign has been removed from the window title and the values printed on the screen are still ratios and have not changed. Note that the value shown next to the cursor when scrolling with the mouse is still a percentage and this is indicated in the displayed value. The design results were correct and have not changed.
	58891	An incident was resolved in which exporting a report to the *.docx Word format would generate a corrupt *.docx file if the regional settings for Windows used a comma for the decimal separator instead of a period. In such a case, opening the *.docx file in Word could generate a series of errors and may produce a blank document.
	59084	An incident was resolved for composite column design using the AISC 360-10 code where columns were not correctly showing the D/C ratio colors according to the legend. This was just a display issue and no design results were affected.

Database Tables
Incidents Resolved

*	Incident	Description
	56408	An incident was resolved in which the database table "Joint Reactions" was not reporting values for auto-generated joints when the option "Show selection only" was on but nothing was selected. Now all joints will be shown in the table regardless of the "Show selection only" option when nothing is selected.
	55069 56781 59286	An incident was resolved in which the database table "Mass Summary by Group" was sometimes unable to be created for certain models. No results were affected.
	59325	An incident was resolved in which tables were sometimes unable to be exported to Microsoft Access after being displayed in the user interface. When this occurred, the affected tables were blank in the Access database. This was a table-export issue only and did not affect results.

Data Files (.EDB, .E2K, .$ET)
Incidents Resolved

*	Incident	Description
	56644	An incident was resolved where assignments made to "User" joints that were not connected to any object were being lost when imported through model text files (*.e2k, *.$et).
	58958	An incident was resolved where exporting model to the text-file (*.e2k or *.$et) format could cause corruption of Section Designer (SD) frame section properties. When this occurred, the SD section properties would be different after re-importing the model from the exported text file. Results agreed with the model as imported.
	59216	An incident was resolved where importing a model text file (*.e2k, *.$et) for a model with area objects in multiple towers was always assigning the areas to be in Tower 1.
	59587	An incident was resolved where certain models created in ETABS v9 that contained Section-Designer sections were not able to be open in ETABS 2013.

Documentation
Incidents Resolved

*	Incident	Description
	59308	A documentation error has been corrected in the "AS 3600-2009 Shear Wall Design Manual" where the sections describing pier and spandrel design for seismic load combinations was using references from the "ACI 318-02M" code instead of from "NZS 3101-06". This was a documentation error only and results were not affected.

Miscellaneous

*	Incident	Description
	59123	The version number was changed to v13.1.3 for a new minor release.