

ETABS v20.3.0 Release Notes

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Notice Date: 22-July-2022

This document lists changes made to ETABS since v20.2.0, released 01-July-2022. Items marked with an asterisk (*) in the first column are more significant.

Data Files

Enhancements Implemented

| * | Ticket | Description |
|---|--------|--|
| | 8756 | The Chinese frame-section database has been updated where section properties for some of the frame sections have been corrected and several new frame sections have been added for I/Wide Flange, Tee, Angle, and Pipe shapes. |

Design – Shear Wall

Enhancements Implemented

| * | Ticket | Description |
|---|--------|--|
| | 8765 | An enhancement was made for Eurocode 2-2004 shear wall design where the enforcement of stricter limits on the axial load in ductile walls, as implemented under Ticket 8632 in ETABS v20.2.0, is now limited to only those design load combinations involving seismic load. The affected limits imposed under Ticket 8632 were: The axial load cannot exceed $0.4 \cdot f_{cd} \cdot A_g$ for DCM walls (EC8 section 5.4.3.4.1(2)) and cannot exceed $0.35 \cdot f_{cd} \cdot A_g$ for DCH walls (EC8 section 5.5.3.4.1(2)). |

Installation and Licensing

Enhancements Implemented

| * | Ticket | Description |
|---|--------|---|
| * | 8701 | The version number has been changed to 20.3.0 for a new intermediate release. |

Analysis

Incidents Resolved

| * | Ticket | Description |
|---|--------|--|
| * | 8711 | An incident was resolved where the presence of a concrete-type parametric PMM hinge assigned to a frame object may cause the model to be unable to run analyses. This issue only affected ETABS v20.1.0 and v20.2.0. |

Database Tables

Incidents Resolved

| * | Ticket | Description |
|---|--------|--|
| | 8726 | An incident was resolved where under certain conditions general pier section definitions would not import into section designer sections through the database. The problem occurred when there were a greater number of general pier sections defined than frame section properties. |

Design – Steel Frame

Incidents Resolved

| * | Ticket | Description |
|---|--------|--|
| | 4076 | An incident has been resolved in steel frame design codes Eurocode 3-2005, Italian NTC 2008, and Italian NTC 2018 in which the program now calculates the design end shear for connections in dissipative zones in DCH and DCM moment-resisting frames based on $R_d \geq 1,1 \cdot \gamma_{ov} \cdot R_{fy}$ where R_d is the resistance of the connection and R_{fy} is the plastic resistance of the connected dissipative member based on the design yield stress ($F_{yd} = F_{yk}/\gamma_{M0}$) of the material as defined in EN 1993 (EC8 6.5.5(3), Eq 6.1, EC3 6.2.5(2), EC3 6.1.(1), NTC 7.5.3.3). Previously, R_{fy} was based on F_{yk} instead of F_{yk}/γ_{M0} and was conservative. |
| | 8708 | An incident was resolved for IS 800:2007 steel frame design code where the K factor was not set to one when 'Consider P-Delta Done' was set to 'Yes' in the steel frame design preferences. |

Documentation

Incidents Resolved

| * | Ticket | Description |
|---|--------|---|
| | 8723 | An incident was resolved for the AISC 360-16 steel frame design manual where the section compactness in Table 4-1 was referring to code clauses for AISC 360-10 instead of 360-16. This was a documentation error only and design was not affected. |

Drafting and Editing

Incidents Resolved

| * | Ticket | Description |
|---|--------|---|
| * | 8747 | An incident has been resolved in which drawing new frame elements resulted in termination of the program when model consist section designer section(s) and no concrete frame design was performed. |

External Import and Export
Incidents Resolved

| * | Ticket | Description |
|---|--------|---|
| | 8748 | An incident was resolved where the type and thickness of slab properties were not getting exported to the E2K/\$ET text file if the slab type was Mat or Footing. Consequently, the type and thickness for affected slab properties were set to default values when the model data was imported from E2K/\$ET text file. Also, importing ribbed- or waffle-slab properties from E2K/\$ET files was setting the overall depth incorrectly to slab thickness. |

Results Display and Output
Incidents Resolved

| * | Ticket | Description |
|---|--------|---|
| * | 8721 | An incident was resolved for ACI 318-19 concrete frame design code where requesting the design report for the last station of a column was causing an abnormal termination for models with seismic design. This was a reporting issue only and did not affect design results. |