

CSiXCAD v18.1.0 Release Notes

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This document lists changes made to CSiXCAD since v18.0.0, released 13-February-2020. Items marked with an asterisk (*) in the first column are more significant.

Data Files

Enhancements Implemented

*	Ticket	Description
	4346	An enhancement was made to the various forms where the user is asked to select a steel section. These forms now feature a "Load XML Catalog" option letting the user choose an .XML file listing predefined section properties, from which a single section can be selected.

Detailing

Enhancements Implemented

*	Ticket	Description
*	3826	Models analyzed and designed in SAP2000 can now be imported into CSiXCAD. Steel frame objects and concrete frame objects are both imported, but not area (shell) objects, solid objects, or concrete reinforcement for this initial release. As such, CSiXCAD provides a comprehensive detailing solution for steel structures modeled in SAP2000.
	4116	An enhancement was made to concrete column schedules. The column rebar diagrams schematically depicting concrete column schedule reinforcement layouts are now drawn based on the actual aspect ratios of the reinforced columns.
	4266	An enhancement was made to the comparison of drawings with reinforced concrete elements to the source ETABS model, and also to the re-import of the ETABS model into these drawings. The ETABS Compare form and the Changes during Last Import form no longer list differences or changes when the length or spacing of reinforcement differ by a distance less than the round-off distance of the AutoCAD or BricsCAD dimension style used to label the reinforcement. Previously differences as small as 1/8 inch or 1 millimeter, depending on the choice of project units, were being reported.
	4270	An enhancement was made to the Drawing Scale command. In addition to changing the size of the text and graphics in the CSiXCAD BIM annotation objects, the command now also changes the size of the text and graphics in the AutoCAD or BricsCAD dimension objects that are present in the drawing.
	4290	An enhancement has been made to the labeling of slab reinforcement. CSiXCAD now features an option for calling out bar spacing instead of number of bars on slab reinforcement plans.
	4355	An enhancement was made which affected the import of frame objects with releases from ETABS. The complete set of logical releases defined in ETABS is now imported. The imported releases for any CSiXCAD column, beam, or brace object can be reviewed with the AutoCAD List command. Previously, only the major moment releases were imported. Whether a CSiXCAD beam is drawn with moment connection symbols at its ends still depends solely on the presence or absence of major moment releases at its ends.

Installation and Licensing

Enhancements Implemented

*	Ticket	Description
*	4723	The version number has been changed to v18.1.0 for a new intermediate release.

User Interface

Enhancements Implemented

*	Ticket	Description
	4267	An enhancement was made to so that the user can now resize the ETABS Compare form for better usability.

Detailing
Incidents Resolved

*	Ticket	Description
*	4096	An incident was resolved where wall rebars were occasionally missing from wall-reinforcement partial plans and also were drawn at the wrong Z elevation in 3D. This occurred when the walls had not been meshed by ETABS and the unique IDs of the areas making up the ETABS wall objects were not sequential from bottom to top of wall. When this occurred, the error was obvious.
	4097	An incident was resolved where ETABS concrete beam end offsets were not imported. When this occurred, the error was obvious.
	4098	An incident was resolved where ETABS frame objects with end offsets specified in local coordinates were not imported at their correct location. Frame object with offsets specified in global coordinates were correctly imported. When this occurred, the error was obvious.
	4099	An incident was resolved which affected the editing of beam reinforcement, and the comparison of drawings to the original ETABS model. Editing a beam reinforcement removed the bottom reinforcement. Comparing a drawing with the original displayed a number of spurious differences concerning the beam's bottom reinforcement. This occurred when the bottom reinforcement of some beams in the ETABS model extended beyond the beams for which the reinforcement was provided and into adjacent beams before and after. When this occurred, the error was obvious.
	4100	An incident was resolved which affected the comparison of drawings to the original ETABS model. Comparing a drawing with the original displayed a number of spurious differences related to the length of the wall end confinement zones. This occurred when the required end confinement zones of some walls in the ETABS model were shorter than the width of the transverse walls at their ends, and these transverse walls had a non-zero end confinement zone length but no vertical rebars in that zone. When this occurred, the error was obvious.
	4111	An incident was resolved that corrected three issues that affected the editing of concrete column reinforcement with the Change-Design command: (1.) When the project included columns with a zero top z-elevation, and columns with a zero bottom z-elevation located on top of those, the reinforcement of the column with a zero bottom z-elevation could not be edited. (2.) Changing the number of top longitudinal bars when editing the reinforcement of a column would change its number of side bars. (3.) Changing the number or size of the longitudinal bars when editing the reinforcement of a column would change the reinforcement of the column above it, even when that column did not share longitudinal bars with the column being edited. Additionally, a related enhancement was made: The LIST command now reports concrete column reinforcement when the user invokes it for a concrete column.
	4112	An incident was resolved where which affected the editing of concrete column reinforcement such that the transversal-reinforcement tie spacing could not be edited.
	4113	An incident was resolved which affected slab reinforcement plans. When the reinforcement of a slab consisted of two overlapping sets of rebars, one long and one short, the order of the two sets of rebars in the label documenting the design did not always match the order in which the two sets of rebars were drawn. This has been corrected and the labels now display the two sets of rebars in the order in which they are drawn without any need to change the drawings.
	4114	An incident was resolved was resolved which affected the editing of slab reinforcement. When the reinforcement of a slab consisted of two overlapping sets of rebars, one long and one short, the number and sizes of the rebars could not be edited.
	4115	An incident was resolved which affected the conversion of slab and concrete beam reinforcement BIM objects to AutoCAD or BricsCAD native objects through the Explode command. No native objects were created at all. When this occurred, the problem was obvious.
	4142	An incident was resolved that addressed two issues affecting the editing of wall

* Ticket	Description
	reinforcement with the Change-Design command: (1.) Changing the I- or J-end zone length of the reinforcement in the Edit Wall Reinforcement form had no effect. (2.) There was no way to add flexural reinforcement in the end zones if there was none to begin with.
4143	An incident was resolved which affected the Change-Design command. Changing the bar size when editing column, beam, or wall reinforcement with the Change-Design command updated all labels calling out that rebar size, but it did not update the rebar diameters of the changed bars on sections.
4144	An incident was resolved which affected the Change-Design command. Changing the number of vertical rebars in the end zones when editing wall reinforcement with the Change-Design command set the number of bars to double what was specified.
4190	An incident was resolved which affected concrete column reinforcement. In certain cases, less than one tie per pair of longitudinal bars on opposite sides of the column was specified. Now a minimum of one tie per pair of longitudinal bars is always specified.
4265	An incident was resolved which affected the comparison of drawings with reinforced concrete elements to the source ETABS model. When the lengths of reinforcement were different in the drawings and in ETABS, the reinforcement length differences and changes listed in the ETABS Compare form were incorrectly reported. They read "longer in ETABS" instead of "longer in drawing", and vice-versa.
* 4269	An incident was resolved which affected the import of reinforcement from ETABS. When the number of spans in the reinforcement of a series of ETABS beam objects did not match the number of reinforced beam objects, possibly because some of the beam objects did not span from consecutive support to consecutive support, the reinforcement was not imported. When this occurred, the error was obvious.
4301	An incident was resolved which affected the comparison of CSiXCAD drawings with reinforced concrete columns to the ETABS model. Differences in the number of column shear tie legs in the drawing column reinforcement with the ETABS model column reinforcement were not being reported. These differences are now reported when they occur.
4329	An incident was resolved which affected the import of ETABS model with composite beams into CSiXCAD. The scale factor and minimum value to make for composite beam reactions specified by the user in the Adjustment tabs of the Import Model form were not being processed. The ETABS composite beam reactions were always imported with their actual ETABS values. Reactions are now scaled by the user-specified scale factor and made at least equal to the user-specified value when composite beams are imported from an ETABS model.
4712	An incident was resolved which affected the user's control over the graphics of concrete beams located along grid lines. The Fillet Beam Edges command did not work for such beams. The command always exited after the user selected such a beam and nothing happened. This has been fixed.

Results Display and Output

Incidents Resolved

* Ticket	Description
3795	An incident was resolved where, when some concrete beam reinforcement elevations were too long fit on one sheet and needed to be split across sheets, the splitting of the elevations was unreliable because the concrete beam reinforcement numbering computed when the reinforcement data was first retrieved from ETABS was not necessarily consistent with the numbering used in the drawings.

User Interface

Incidents Resolved

* Ticket	Description
4268	An incident was resolved which affected the selective import of concrete beam

*	Ticket	Description
		reinforcement, column reinforcement or wall reinforcement from the ETABS Compare form. When the number of spans in the reinforcement of a concrete beam had changed in the ETABS model since the last import, the differences between the drawing and ETABS reinforcement were properly listed in the ETABS Compare form, but clicking on the Import Design or Import Both buttons had no effect. Likewise, when the number of columns or walls reinforced by a single column or wall reinforcement BIM object had changed, the differences between the drawing and ETABS reinforcement were properly listed in the ETABS Compare form, but clicking on the Import Design or Import Both buttons had no effect. This has been corrected.