CSiXCAD v19.0.0 Release Notes
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Notice Date: 31-March-2021

This document lists changes made to CSiXCAD since v18.1.1, released 28-July-2020. Items marked with an asterisk (*) in the first column are more significant.

Detailing
Enhancements Implemented

*	Ticket	Description
	5889	An enhancement was made so that now the reinforcement of circular columns can be displayed in plan view.
	6132	The Elevation Snapshot command for exporting exploded drawings has been expanded and renamed to Create Exploded Snapshot. The enhanced command now exports any wall, column or beam reinforcement shown on elevations. In addition to working with elevation drawings, it now also works with concrete beam elevations and wall reinforcement plans.
	6206	The plan-view depiction of column reinforcement and wall reinforcement has been improved. When column-reinforcement objects and wall-reinforcement objects contain intermediate ties along their longitudinal rebars, the ties are now drawn with a 90-degree bend at alternating ends, instead of 135-degree hooks at both ends as was the case previously. The new graphics are displayed whenever a drawing prepared in an earlier release of CSiXCAD is opened in this release.

External Import and Export
Enhancements Implemented

*	Ticket	Description
	5417	An enhancement has been implemented such that curved steel beams can now be imported from ETABS or SAP2000 into CSiXCAD along with their curvature.
	5706	An enhancement has been made so that frame objects with a non-prismatic section can now be imported from SAP2000. Some restrictions apply, such as the type of section must be the same at both ends of the member, and the section dimensions must vary linearly from the start to the end of member.
*	5781	CSiXCAD is now compatible with Bricsys® BricsCAD® Version 21.1.05 (x64), Pro or higher level.
	5964	An enhancement has been implemented such that it is now possible to install CSiXCAD on computers where neither ETABS or SAP2000 has been installed and then be able to work on existing CSiXCAD drawings. When ETABS or SAP2000 are not present, the New Project from ETABS, New Project from SAP2000, Re-Import Design Model, and Compare to Design Model menu items are disabled as appropriate in the CSiXCAD portion of the pull-down menu of the host CAD system. Later installing ETABS or SAP2000 on the computer where CSiXCAD is present will then enable these features next time CSiXCAD is run.
	5997	An enhancement was made which affects the import of ETABS models in which some walls have both a pier assignment and a spandrel assignment. Models in which some walls have both a pier assignment and a spandrel assignment can now be imported into CSiXCAD. The imported reinforcement is computed based on the spandrel reinforcement requirements.

Installation and Licensing
Enhancements Implemented

*	Ticket	Description
*	5015	The version number has been changed to v19.0.0 for a new major release.

*	Ticket	Description
*	5707	CSiXCAD now utilizes cloud licensing by default, allowing access to the license by multiple users and/or from multiple machines. The number of simultaneous users corresponds to the number of licenses owned. Cloud licensing requires connection to the internet while using the software, either directly or through a proxy. Connection to a company network or VPN is not necessary. Licenses can be checked out for a limited time period to allow use while disconnected from the internet. Legacy licensing options (Standalone and Network) are still available upon request.

Detailing
Incidents Resolved

*	Ticket	Description
	5782	An incident affecting the duplication of CSiXCAD beams in BricsCAD with the BricsCAD Offset command was resolved. When the BricsCAD Offset was command was used to duplicate a CSiXCAD beam, the newly created beam did not have any material or section assigned to it, and a material and section had to be explicitly assigned with the CSiXCAD Change-Design command. This occurred in all previous versions of CSiXCAD running in BricsCAD and when this occurred, the omission was obvious. The duplication of CSiXCAD beams in AutoCAD with the AutoCAD Offset command worked as expected.
	5783	An incident affecting the Steel_Column, Steel_Beam, Steel_Cantilever and Brace commands was resolved. None of the forms displayed by these commands listed any choices for the grade of steel field, and as a result, the newly drawn members did not have any material assigned to them. To complete the definition of these members, the user need to assign to them a grade of steel with the CSiXCAD Change-Design command. This omission, which occurred in all versions of CSiXCAD prior to v19.0.0, created ambiguity only when the structure combined different grades of steel. The Steel_Column, Steel_Beam, Steel_Cantilever and Brace commands now display the grades of steel defined in the parent ETABS or SAP2000 model and assign the selected grade of steel to the newly drawn members.
	5880	Two incidents were resolved which affected the graphics generated for the column reinforcement of columns: (1.) The reinforcement of columns from ETABS with a cardinal point other than 5 was drawn slightly outside the column. (2.) The spacing of the rebar ties along the width of the rectangular columns was shown incorrectly in plan view. When either of these two incidents occurred, the problem was visually obvious. These affected all previous versions of CSiXCAD.
	5894	An incident was resolved which affected object snap to project grid lines. The mid-point and end-point object snaps to navigation grid lines have been removed since these are undefined for navigation grid lines, which are unlimited in length. It is still possible to snap to the end-points of trimmed project grid lines and to the mid-points and end-points of grid lines that are shown in grid and elevation grid callouts, since those do have limited extents.
	6030	An incident affecting the display of end-zone wall reinforcement on elevations was resolved. End-zone wall reinforcement of thick walls was labeled but not drawn in elevation views. This affected walls more than 1 ft thick when working in US customary units, or more than 40 centimeters thick when working in metric units. This problem could be avoided by using the Edit Elevation Grid command to increase the backside clipping depth of the elevation to a value at least half the thickness of the thickest walls. In addition, the labels calling out the end-zone wall reinforcement on elevations were not properly centered: they were horizontally away from the middle of the end zones and vertically they were at the base of the walls, instead of at mid-height. End-zone vertical wall reinforcement is now properly displayed irrespective of the wall thickness or elevation back-clip depth, and the labels calling it out are now properly centered.
	6067	An incident was resolved which affected the display of concrete girders in projects in which the AutoCAD drawing unit was the millimeter. The graphics generated in isometric view for concrete girder supporting more than one intermediate beam on either side were missing some edges in the vicinity of the supported beams. This was a display problem only. It affected all released versions of CSiXCAD. The graphics generated for these girders now include the edges that had been missing.

*	Ticket	Description
	6077	An incident was resolved which affected the display of concrete beams in plans defined in metric units. The drawing template file CSiXCAD_A1.dwt used for metric units set defaults such that concrete beams were drawn in plans as solid lines instead of dashed lines. This problem did not occur in plans defined in US customary units, nor did it typically occur with user-specified drawing templates. The linetypes have been redefined in CSiXCAD_A1.dwt so that concrete beams are now drawn as dashed lines in plans for newly imported CSiXCAD projects defined in metric units. The linetype of concrete beams in plans for existing drawings can be redefined by selecting the AutoCAD or BricsCAD linetype command, selecting the HIDDEN2 linetype, and then reloading the linetype from the acad.lin file instead of the from the default acadiso.lin file.
	6153	An incident affecting the display of rebar-spacing dimensions on plans and elevations drawn in U.S. customary units was resolved. When the rebar spacing included a fractional part, CSiXCAD did not leave a space between the integral and fractional parts of the distance, making the numbers hard to interpret. This displayed values were correct but could be ambiguous.
	6545	An incident was resolved which affected the display in 3D view of concrete beam longitudinal reinforcement. When the top or bottom reinforcement contained two or more layers of rebars, some of the rebars were drawn in 3D view outside the extents of their host beams. This was a display problem only. The affected reinforcement is now displayed within the extents of the beam whenever an affected drawing is open.

External Import and Export
Incidents Resolved

*	Ticket	Description
	5418	An incident was resolved where diagonal spandrel reinforcement was not being imported into CSiXCAD from ETABS. When this occurred, the error was obvious. This is now corrected for ETABS v19.0.0 and later.
	5738	An incident was resolved where SAP2000 frame objects with joint offsets specified in local coordinates or in any alternate coordinate system other than the global coordinate system were not imported at their correct location. Frame objects with joint offsets specified in global coordinates were correctly imported. When this occurred, the error was obvious. ETABS line objects with joint offsets were correctly imported.
*	5870	An incident was resolved which affected the import of column reinforcement as computed by ETABS for columns in column stacks for which the bottom column had a base elevation other than zero. The transverse reinforcement of such columns was shifted and was missing at some of the lower levels or top levels in the concrete column schedule. In addition, attempting to visualize the column reinforcement on the Columns and Lateral drawing in CSiXCAD projects that featured such columns would cause AutoCAD to terminate unexpectedly. Longitudinal reinforcement was properly imported. This affected all released versions of CSiXCAD. Transverse reinforcement is now properly imported for columns in column stacks for which the bottom column has a base elevation other than zero. Re-importing the ETABS model will correct this problem in affected existing CSiXCAD projects.
	5890	An incident was resolved which affected the retrieval of concrete beam reinforcement when the tie zones were not symmetrical in one of the beams because the extents of the beams in the ETABS model did not coincide with the spans in the line of reinforced concrete beams. CSiXCAD mirrored the tie zones from the first half of the beam into its second half. When this occurred, the error was conservative and obvious. Modeling beams spanning from one column or intermediate girder to the next column or intermediate girder prevented the problem from happening in the first place. This affected all previous versions of CSiXCAD. The problem can be corrected in projects where it occurs by re-importing the ETABS model.
	5899	An incident was resolved which affected the comparison of CSiXCAD floor plans with concrete beams to the ETABS design model. The ETABS Compare form erroneously stated that the concrete beams were not at the same z-elevation in the drawing and the ETABS model. When this occurred, the error was obvious and the drawings were not affected. This incident affected CSiXCAD Version 18.1.0.

*	Ticket	Description
*	5901	An incident was resolved which affected the comparison of drawings containing concrete columns in projects imported from SAP2000 models to the originating SAP2000 model. Attempting to compare the two caused AutoCAD to terminate abnormally. This affected CSiXCAD version 18.