



CADS UK DESIGN DVD 2020.1

ANALYSIS AND DESIGN RELEASE NOTES



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CADS UK Design DVD 2020.1

Thank you for upgrading to the latest Design DVD 2020.1.

These release notes summarise the enhancements and corrections made across all software.

CADS UK Design DVD 2020.1 can be installed on Windows 7, Windows 8.1 and Windows 10.

CADS Wall Panel Designer Max

Corrections made:

1. In v2.23 build 234 (only) for the Eurocode design option, the default values for partial safety factor on wind loads as leading and accompanying variable were interchanged. This has been corrected.
2. Previously the optional limitation of horizontal span resistance moment by cracking at serviceability limit state was not applied to support moments. This has now been corrected so that, where applicable, the limit is applied to both support and span resistance moments.

CADS UK Design DVD 2020

DVD Installer

General enhancements:

1. Updated all the products except SMART Engineer to use latest cloud licensing modules

General corrections:

1. Fixed the issue of cloud licensing not getting applied for a few products on some machines.
2. Fixed the issue of cloud licensing cache getting corrupted when a PC wakes up from sleep mode.
3. The HASP Dongle device driver is no longer installed by default. It needs to be installed separately when required.

CADS Analyse 3D

Enhancements:

1. An option to merge collinear members has been added.
2. The graphical results option has been extended to support the display of support reactions and moments.
3. Deflection labels can be selectively switched on/off for X, Y and Z directions.
4. When a partial view is activated, the application now displays the maximum value only from the active (selected) members in the partial view.
5. The Partial view option has been extended to show or hide the inactive members (not selected) in view.
6. Tools for creating on-screen dimensions has been added.
7. Diagrams can be placed at any location on the output report.
8. The File menu has been condensed by moving some of the individual items into relevant groups.
9. A keyboard shortcut has been added for rotating the view.
10. A Paste command has been added to the right mouse click menu.
11. Members can be copied from one model to another.
12. The export of a 3D model to a 3D PDF, HTML and DWG format is now supported.
13. The report layout (print order) can now be saved in a template and reused in other projects.
14. Supports and ground beams can now be optionally generated in 3D building and portal frame generators.
15. The option of creating new member types has been added to the frame generators.

Corrections made:

1. Various issues in integrated design of steel members to Eurocode 3 have been fixed.
2. A couple of issues while importing loads from CSV files are now fixed.

3. There was a crash on exporting the model using "Send to Mail Recipient". This is now fixed.
4. In some cases, there was a crash while performing the Plastic analysis when automatic self-weight option was checked. This issue is now fixed.
5. While generating the report, the application crashed in some instances, this issue is now fixed.
6. The application crashed while trying to print the results for steel members, when the model had more than 1 simple collection group. This issue is now fixed.
7. In some instances, the results window was unresponsive. This issue is now fixed.
8. The application crashed while trying to undo a copy/paste command and this issue is now fixed.
9. The file back-up limit in the configuration preferences was not working. This has now been fixed.
10. The capture view option was not capturing the loads and moment labels. This is now fixed.
11. The limiting value of joint deflection could not be set correctly when it was in proportion to specified joints. This is now fixed.
12. The export to designer icon is now disabled when analysis results are not available.
13. Captured views were not added to the preset view list if the preset view window was open. This has now been fixed.
14. Grids were always shown when opening a job, even if the Grids option was switched off. This has now been fixed.
15. In certain cases, max/min moments were reported incorrectly in tabular results. This has now been fixed.
16. The option "Use selected joints/members only" was not working while printing the "Maximum effects for member types". This has now been fixed.
17. The application crashed when opening in high DPI screen settings. This has now been fixed.
18. The normal deflection value for cantilever members reported in design of steel members to Eurocode 3 was wrong. This has now been fixed.

CADS A3D MAX

Enhancements:

1. An option to merge collinear members has been added.
2. The graphical results option has been extended to support the display of support reactions and moments.
3. Deflection labels can be selectively switched on/off for X, Y and Z directions.
4. When a partial view is activated, the application now displays the maximum value only from the active (selected) members in the partial view.
5. The Partial view option has been extended to show or hide the inactive members (not selected) in view.
6. Tools for creating on-screen dimensions has been added.
7. Diagrams can be placed at any location on the output report.
8. The File menu has been condensed by moving some of the individual items into relevant groups.
9. A keyboard shortcut has been added for rotating the view.
10. A Paste command has been added to the right mouse click menu.
11. Members can be copied from one model to another.
12. The export of a 3D model to a 3D PDF, HTML and DWG format is now supported.
13. The report layout (print order) can now be saved in a template and reused in other projects.
14. Supports and ground beams can now be optionally generated in 3D building and portal frame generators.
15. The option of creating new member types has been added to the frame generators.

16. The Self-weight of panels can be automatically calculated and applied. This has been done by integrating the CADS Dead load library into the panel properties dialog.

Corrections made:

1. Various issues in integrated design of steel members to Eurocode 3 have been fixed.
2. A couple of issues while importing loads from CSV files are now fixed.
3. There was a crash on exporting the model using "Send to Mail Recipient". This is now fixed.
4. In some cases, there was a crash while performing the Plastic analysis when automatic self-weight option was checked. This issue is now fixed.
5. While generating the report, the application crashed in some instances, this issue is now fixed.
6. The application crashed while trying to print the results for steel members, when the model had more than 1 simple collection group. This issue is now fixed.
7. In some instances, the results window was unresponsive. This issue is now fixed.
8. The application crashed while trying to undo a copy/paste command and this issue is now fixed.
9. The file back-up limit in the configuration preferences was not working. This has now been fixed.
10. The capture view option was not capturing the loads and moment labels. This is now fixed.
11. The limiting value of joint deflection could not be set correctly when it was in proportion to specified joints. This is now fixed.
12. The export to designer icon is now disabled when analysis results are not available.
13. Captured views were not added to the preset view list if the preset view window was open. This has now been fixed.
14. Grids were always shown when opening a job, even if the Grids option was switched off. This has now been fixed.
15. In certain cases, max/min moments were reported incorrectly in tabular results. This has now been fixed.
16. The option "Use selected joints/members only" was not working while printing the "Maximum effects for member types". This has now been fixed.
17. The application crashed when opening in high DPI screen settings. This has now been fixed.
18. When creating load panels, if the panel attributes were changed, the load panel input direction was not correct. This has now been fixed.
19. The normal deflection value for cantilever members reported in design of steel members to Eurocode 3 was wrong. This has now been fixed.
20. The application crashed in certain cases when distributing area loads in triangular panels. This has now been fixed.
21. Load panels were incorrectly displayed in full rendered view in certain cases. This has now been fixed.

CADS Smart Portal 2D

Corrections made:

1. Fire collapse load combination was not considered for the Eurocode design option. This has now been fixed.
2. The application crashed when opening in high DPI screen settings. This has now been fixed.

CADS SMART Portal 3D

Enhancements:

1. An option to export the whole 3D model to CADS A3D MAX has been added.
2. The application crashed when opening in high DPI screen settings. This has now been fixed.

CADS Steelwork Moment Connections

Corrections made:

1. The Close button at the top of any window behaved the same as the Apply button. This has now been fixed.
2. Summary and detailed results were varying in certain cases. This has now been fixed.
3. Exporting the connection as DXF file was not working in some cases. This is now fixed.
4. When importing a joint from CADS A3D MAX/SMART Portal, if the flanges of the connected members did not align within a limited tolerance range, the import was not successful. It is now possible to import the connection to CADS SWMC, but the user must adjust the inputs to get a valid calculation.
5. CADS SWMC now displays the current filename in the title bar.

CADS Steelwork Member Designer

Corrections made:

1. In certain circumstances, steel member check/design was not working when invoked from Analyse 3D/A3D MAX. This is now fixed.
2. In certain circumstances, Analyse 3D/A3D MAX was crashing when steel member check/design was performed. This is now fixed.
3. User defined deflection limits set in the SWMD template files were not sent to SWMD from Analyse 3D/A3D MAX during check/design. This is now fixed.
4. The Close button at the top of any window behaved the same as the Apply button. This has now been fixed.

CADS SMART Engineer

Enhancements:

1. New Softwood timber sections for Ireland are now added to the UK timbers sections library.



Corrections made:

1. RC Masonry retaining wall – if the passive water level was left as default (zero), any active side water level was ignored during stability calculation. This is now fixed.
2. Wind Loading to EC1 – added sketches to show the building dimensions in the report.
3. Industrial ground floors – for edge loading condition, the load transfer to the slab edge was incorrectly calculated if the “load transfer joint” input was set as “Proprietary” and “specify transfer as” input is set as “value”. This is now fixed.
4. Timber BS5268:2002 Checks (Columns –axial compression only) – under certain circumstances the restriction on minimum width and depth of the section were not considered during the calculation. This is now fixed.

CADS RC Pad Base Designer

Corrections made:

1. Shear span was calculated incorrectly in certain cases leading to incorrect shear resistance. This has now been fixed.
2. Shear resistance of reinforced concrete pad bases in the EC option was calculated incorrectly. This has now been fixed.
3. Exporting the pad base as a DXF file was not working in some cases. This has now been fixed.
4. The Close button at the top of any window behaved the same as the Apply button. This has now been fixed.

CADS RC Pile Cap Designer

Correction made:

1. Exporting the pile cap as a DXF file was not working in some cases. This has now been fixed.

CADS RC Beam Designer

Corrections made:

1. Minimum lap length set by the user was not considered correctly in the calculation for bottom bars if the design code was set as Eurocode. This is now fixed.
2. Reinforcement bar data was truncated at the column edges in the printout. This is now fixed.
3. The application would become unresponsive in certain circumstances, when the maximum, minimum and preferred bar sizes were set to the same value. This is now fixed.

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4. In certain circumstances, the "start of link from support" input set in CADS A3D MAX was not carried over to CADS RC Beam Designer during check/design. This is now fixed.
5. Exporting the beam as a DXF file was not working in some cases. This has now been fixed.

CADS RC Column Designer

Corrections made:

1. Exporting the column as a DXF file was not working in some cases. This has now been fixed.
2. A proper solution was not provided if the concrete grade is greater than C50/60 in some cases. This has now been fixed.

CADS RC Slab Designer

Correction made:

1. Upgraded the application to the latest stingray version.

CADS Wall Panel Designer

Enhancements:

1. Upgraded the installer to use latest cloud licensing modules.

CADS Wall Panel Designer Max

Corrections made:

1. The application crashed on opening in high DPI mode. This has now been fixed.
2. Support representation was wrong when bottom, left and right edges were fixed. This has now been fixed.

CADS Composite Beam Designer

Enhancements:

1. An option to display un-factored vertical reactions on members has been added.

Corrections made:

1. The Close button at the top of any window behaved the same as the Apply button. This has now been fixed.
2. Some of the text was clipped in the notes of the results. This has now been fixed.

CADS VelVenti

Enhancements:

1. CADS VelVenti now supports wind and snow calculations for sites in the Channel Islands and the Isles of Scilly;
2. Cloud licensing is now supported;
3. Improved performance in the calculation of snow loads and report generation.

Correction made:

1. Snow load was calculated incorrectly for some sites. This has now been fixed.