



CADS SMART PORTAL 2D

RELEASE NOTES



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Release Notes

Thank you for upgrading to the latest version of CADS SMART Portal 2D.
These release notes summarise the enhancements and corrections made.

Version 4.43 (Build 498): April 2018

Corrections made:

1. Application crashed when right clicking on base design objects. This has now been fixed.
2. Application crashed on clicking graphical results when no load combinations were present. This has now been fixed.
3. Application crashed when trying to auto design restraints. This has now been fixed.
4. Slow boot-up problem is now fixed.

Version 4.42 (Build 482): November 2017

Enhancements:

1. Cloud licensing is now supported.
2. Branding and icons have been updated.

Version 4.41 (Build 453): June 2017

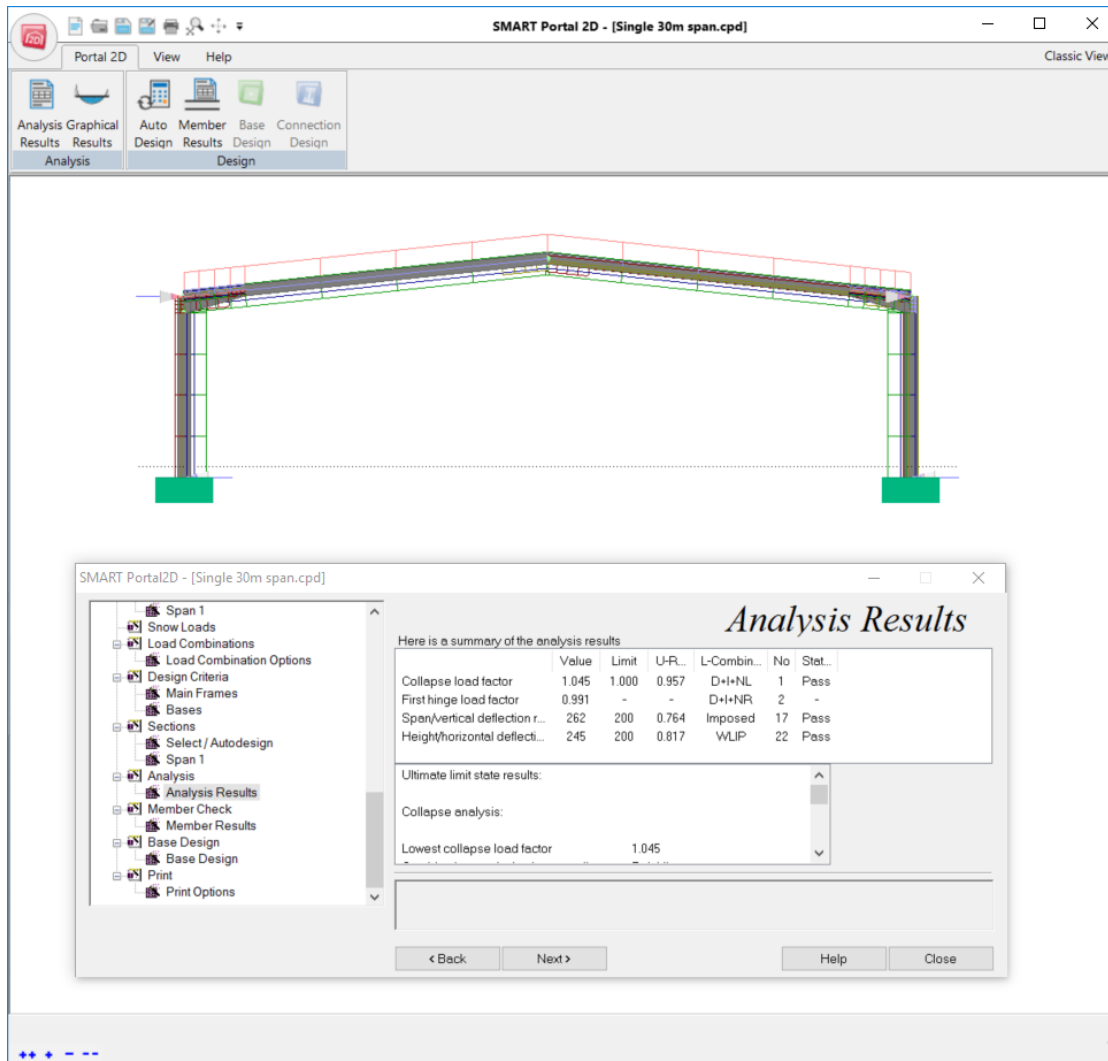
Corrections made:

1. In the last version, when using the ribbon interface, when exporting a joint to CADS SWMC a spurious message appeared. This has now been corrected.

Version 4.40 (Build 446): November 2016

Enhancements:

1. SMART Portal 2D now features a modern task-oriented easy-access ribbon interface of familiar tools and commands with brand new icons and tool tips. The classic menus and toolbars are still optionally available for those who prefer to continue using them.
2. SMART Portal 2D continues to integrate with the full release version of CADs VelVenti, the wind pressure calculation software replacing BREVE.



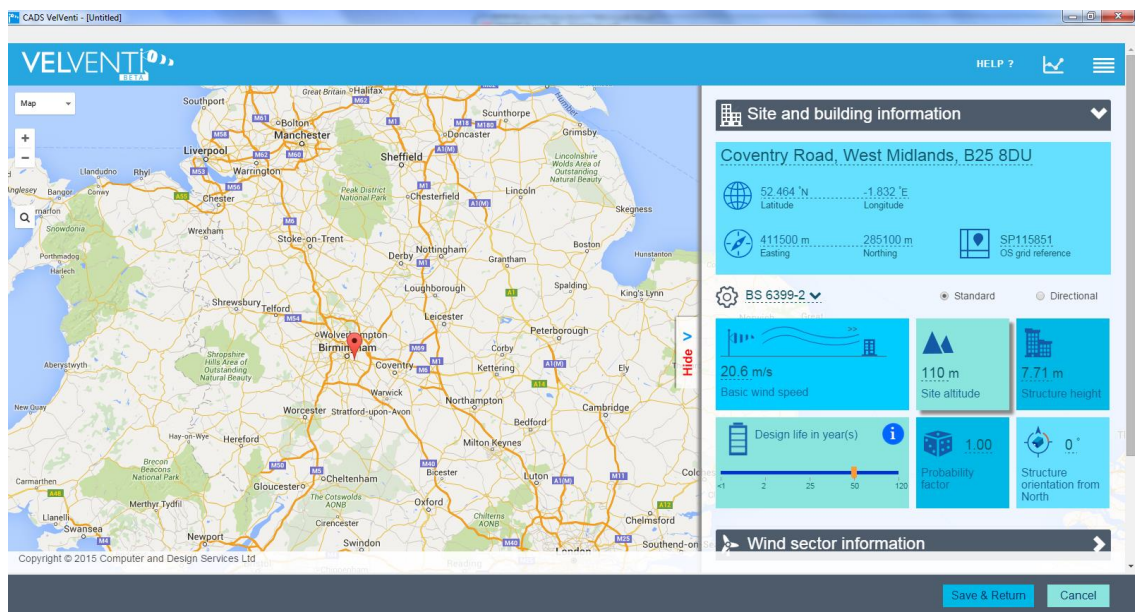
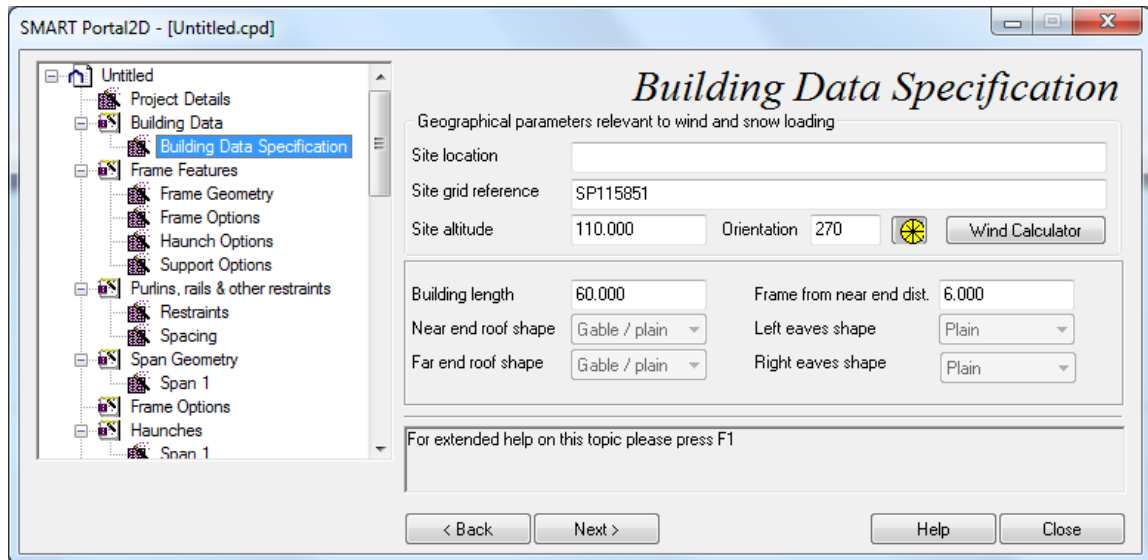
Corrections made:

When notional horizontal forces (NHF) are selected for analysis previously no loads were generated in the base joint. This is now corrected by applying equal and opposite forces at the base as imperfection effects are internal to the frame and should not load the base.

Version 4.30 (Build 421): December 2015

Enhancements:

1. SMART Portal 2D is now integrated to work with **CADS VelVenti** the new wind pressure calculation software replacing BREVe .



2. The printed diagram of portal geometry and sections now includes a note explaining the symbol denoting lateral restraints/stays.
3. The input range for basic external pressure coefficients under wind parameters has been extended to support open sided buildings.
4. CADS SMART Portal 2D is now compatible with Microsoft Windows 10.

Corrections made:

1. An error in which the calculation results were not cleared if the load combinations were set to 'ignore' has been fixed.
2. User defined partial safety factors were not taken into account in some circumstances. This has now been fixed.
3. A crash which occurred on opening some files due to the presence of orphan joints is now fixed.
4. The 'CP3ChVpt2' wind option is no longer supported.
5. Some combination sub-types were displayed as 'error' on export to A3D MAX. This is now fixed.
6. An issue with the distorted dimension line and text in the portal geometry and sections printout for a portal frame with an eaves cantilever with downward slope has been fixed.
7. The SLS base reactions were incorrectly reported in the printout only. This is now fixed.
8. An issue where the edited load combination settings were not saved with the job is now fixed.

Version 4.21 (Build 383): November 2014

Corrections made:

1. An issue relating to the project data folder being lost when exporting to CADS A3D MAX has now been fixed.
2. An error has been fixed whereby in certain circumstances export of joints to CADS SW Moment Connections produced an incorrect configuration or no connection.
3. An error has been fixed whereby changing sections caused edited wind load coefficients to revert to the default values.

Version 4.20 (Build 357): May 2014

Corrections made:

1. In certain sequences, changed load values entered directly in the input fields rather than taken from the library were not updated in all spans for the calculation. This is fixed now.

Version 4.19 (Build 339): December 2013

Corrections made:

1. The version number has been incremented due to changes in supporting software. There are no functional changes.

Version 4.18 (Build 337): June 2012

Corrections made:

1. On selecting the template for a single propped portal, the template for a single span duo pitch portal was generated in error. This is fixed now.

Version 4.17 (Build 317): June 2011

Corrections made:

1. In certain circumstances, print generated an error message "Encountered improper argument". This defect has been fixed now.

Version 4.16 (Build 314): September 2010

Corrections made:

1. Using different support fixities for SLS deflection load combinations was not working as intended in some circumstance. This issue is now resolved.
2. When parapet posts were selected for multi span portals with constant eaves height, the program used to create additional internal parapet posts when the default height was edited. Now corrected.
3. CADS SMART Portal 2D is made compatible with Microsoft Windows 7.

Version 4.15 (Build 303): November 2009

Enhancements:

1. A number of internal enhancements have been implemented for compatibility with other CADS design software.

Version 4.14 (Build 300): April 2009

Enhancements:

1. In the Design criteria dialog, the minimum deflection ratio limit has been modified from 100 to 50 as requested by certain users for special applications.

2. Combination options for RC pad base designer in the Load combinations and categories dialog has been modified by merging wind uplift and wind down to wind and replacing Normal with Non-wind. The up and down loading condition is now detected by the base designer program.

Corrections made:

1. The drawing in printout showed haunches when haunches were not selected. This has been corrected.
2. In the Wind Coefficients dialog the variable "(Ve)" has been added after "Effective wind speed" and "(qs)" after "Dynamic pressure".
3. If the haunch length was changed, the analysis and subsequent results were not getting updated. This has been corrected.
4. Rafter torsional buckling results did not match with SWMD results when exported. The calculation has been updated to agree with SWMD. (to implement the 2008 amendment to BS 5950-1 annex G.4.3)
5. In printout the results for joint forces for the right rafter were reported incorrectly. This has been corrected.
6. Printout has been modified to display joint force results if analysis alone has been done. Previously it was incorrectly dependent on member check being done.
7. Design for wind load deflections has been corrected to serve as an auto design control not an analysis results filter.
8. Sway bracing horizontal restraint was applied incorrectly at mid span for mono pitch spans generating spurious moments in the rafter. This has been corrected so that the restraint is applied at the higher eaves joint.

Version 4.13 (Build 291): July 2008

Corrections made:

1. When a base was exported to SWMC with the 'Fire collapse loads' option selected in the 'Load Type Options' page, the fire collapse load combination was not getting exported. This has been corrected.

Version 4.12 (Build 289): June 2008

Enhancements:

1. The slenderness correction factor (nt) formula in Annex G.4.3 of BS 5950-1:2000 Amendment 1 (2007) is modified in accordance with Corrigendum 2 (2008).

Corrections made:

1. The 'Results Graphs' tool bar icon was incorrectly disabled after analysis had been done. This has been fixed.
2. Sheeting rails with stays were not displayed correctly in the print / preview diagram for the case of rails inside the columns. This has been corrected.

Version 4.11 (Build 288): April 2008

Corrections made:

1. Changing the construction type of bases from Reinforced Concrete to Mass Concrete by setting the top and bottom bar to 'Not required' in the Bar Arrangements page was not properly recognised by the application and caused many error messages. This has been corrected.
2. After completing auto design, any change in the dimension of the base would result in change in the number of bars. The change in the number of rebar was not retained by the application which resulted erroneous results. This has been corrected.
3. Earlier versions of SMART Portal2D permitted base design without a licence of standalone RC Base Designer. This option was not available in the recent version. This has now been reinstated.

Version 4.10 (Build 285): December 2007

Enhancements:

1. CADS SMART Portal 2D is made compatible with Windows Vista.
2. The CADS SMART Portal Launcher has been replaced with the new CADS System – Analysis, Modelling and Design Launcher bringing all CADS structural analysis and design products together.
3. The new range (2006) of steel sections from Corus (Advance sections, Celsius 355, Jumbo 355 and Hybox 355 sections) are now included in the Steel section library.
4. 'Base Design' option is introduced in 'Support Options' dialog. This option can be used to either activate or deactivate base design in a particular job. By default the option will be un-ticked or deactivated.
5. The following new input options have been introduced in Purlins & Rails page:
 - a. Purlins & Rails page is divided into Restraints and Spacing pages. While the actual spacing is defined in the spacing page, the following new options are introduced in the restraints page.
 - b. Options to specify different conditions for left and right walls (earlier commonly called 'side walls')
 - c. Roof: The existing 'Continuous decking restraint' is renamed as 'Roof decking fixed direct to rafters'.

- d. Walls: New restraint types are introduced replacing the 'Continuous cladding restraint' viz. 'Metal cladding fixed direct to column', 'Full height masonry restraint' and 'No intermediate restraints'.
 - e. A new spacing option Equal spacing with rounding increment input is introduced for both purlins and rails. This option will divide the range length into the minimum number of equal intervals which do not exceed the maximum and are rounded to the rounding increment except for the closing dimension.
 - f. For left and right walls a range option 'Underside haunch' is introduced which ensures a restraint within +/- $D_c/2$ of the underside of haunch where D_c is depth of column section.
 - g. An option to specify wall restraints either inside or outside the column is introduced.
6. Design criteria for Bases have been upgraded to support CADS RC Pad Base Designer as per the latest Design and Detailing codes viz. BS 8110-1:1997 Amendment 3 and BS 8666:2005 respectively.
 7. The steel member checking module currently assumes lateral restraints to both flanges of the columns at the underside of the haunch where a plastic hinge commonly occurs. BS 5950 permits the relaxation that a hinge location may be considered restrained if there is a restraint within a distance $D_c/2$ from the hinge position, where D_c is the depth of the section at the hinge. The program is now made to check the left and right column restraints individually and display the following warning message, if required:

"LEFT WALL: An additional rail with stays or equivalent lateral restraint is required between 6057 and 5524 as assumed in the column member stability calculations." [typical wording and dimensions illustrated].

Corrections made:

1. Link to base design from Portal 2D did not show results page in certain cases. This has been corrected.
2. The "Ignore passive resistance" option in Base design criteria was by default 'un-ticked'. Now by default it will be ticked.
3. Analysis, member check and base design results were lost in certain circumstances when a job was saved and reopened. This has been corrected.
4. In Member check->Edit Restraints dialog the results were not invalidated when certain data was changed. This has been corrected.
5. The partial safety factor for every wind load case was erroneously set to 0.000 for SLS Base Load Combinations when the "Include Internal Pressure / Suction in Wind Load Serviceability Combinations" check box was unchecked. This has been corrected.
6. The sign convention for joint forces was not consistent between graphical screen and printout. This has been corrected. A note about the sign convention adopted is also included in the printout.
7. The value 1.000e+020, the rotational stiffness of a fixed support, when exported to Word or printed was displayed in number format with fully expanded digits. This is now made to report as 'Infinite'.

Post-installation notes

Once you have installed CADS SMART Portal 2D, it must still be authorised before it can be used. The procedure is the same for stand-alone and network installations. For network installations, you should ensure you have the necessary permissions to write to and create directories on your server drive before starting.

To start CADS SMART Portal 2D, select the 'CADS System - Analysis, Modelling & Design' icon from the Desktop or 'CADS' program group (Start->Programs) and then click on the 'SMART Portal 2D' button from the 'Portal' tab. If the program is not authorised the licence manager will be invoked automatically, through which the licence can be requested.

At any time, a licence can be requested by pressing the "Licensing Wizard..." button and the application can be licensed by pressing the "Enter/Import Licence Codes..." button of the CADS Licence Manager.

For details refer to the CADS Licence Manager help.

If you have any questions about this procedure, please contact our Technical Support Department who will be happy to help.

Technical support and Authorisation codes:

Telephone: +44 (0)1202 603733

Email (Support): support@cadsworld.co.uk

Other useful addresses are:

Email (Sales): sales@cadsworld.co.uk

Website: <http://www.cadsworld.co.uk>

Fax.: +44 (0)1202 658549

Version history

Version information prior to those versions listed within this document can be found in the file 'readme.txt' within the application folder.