VelVenti integration with SMART Portal
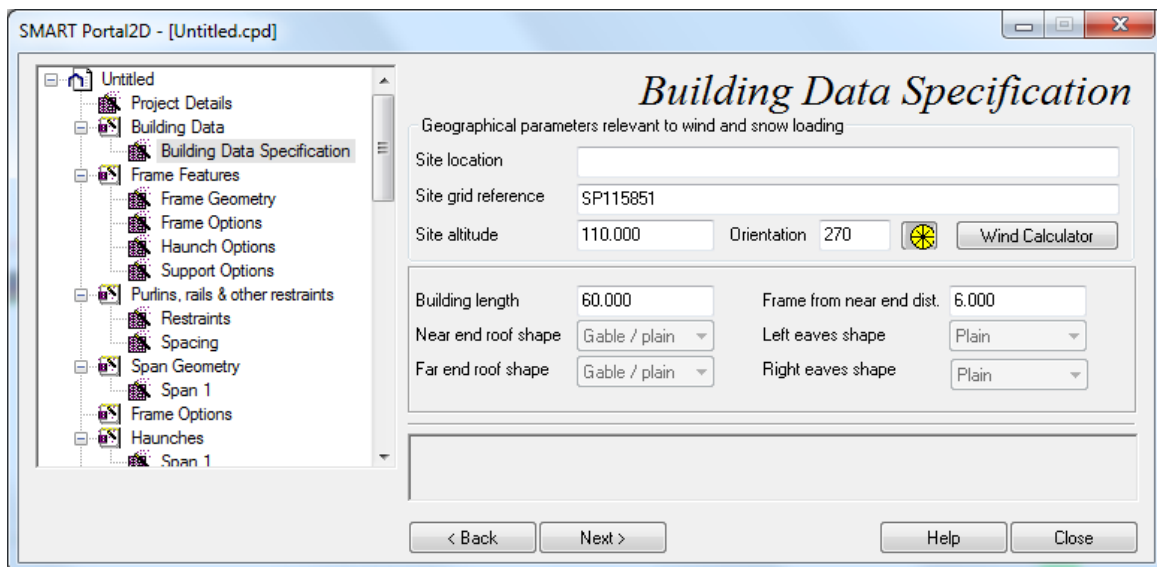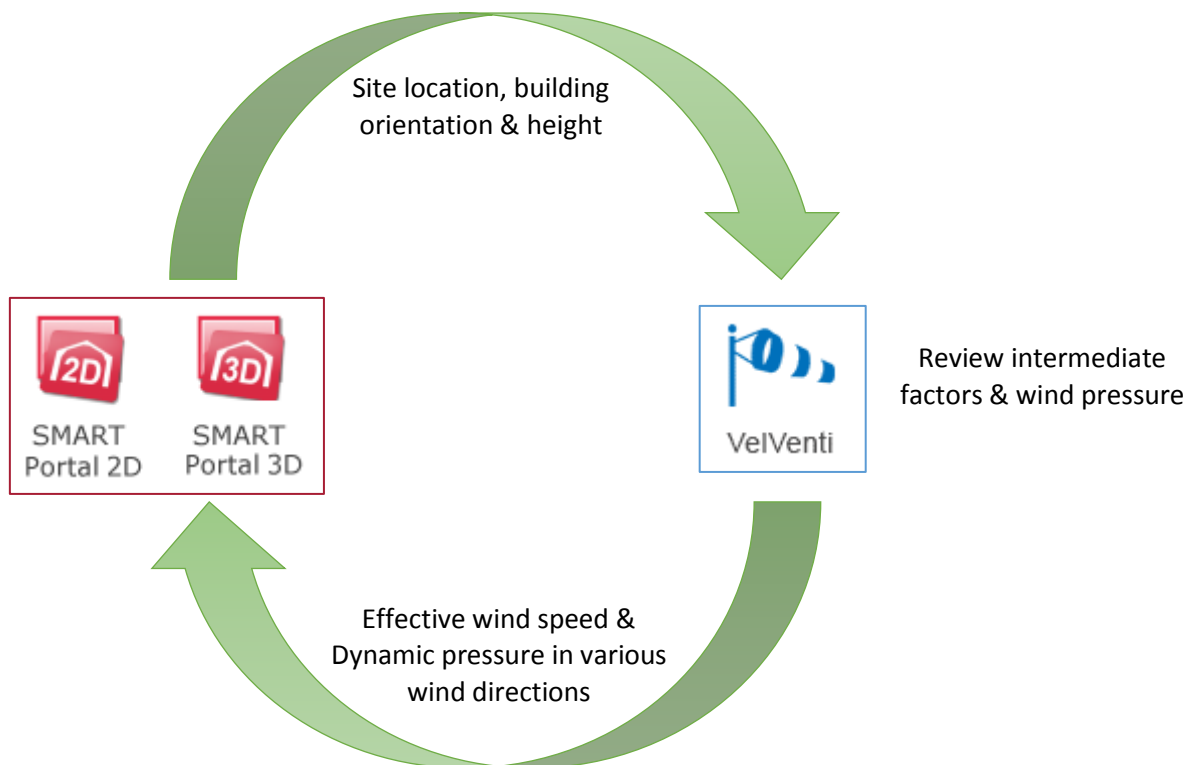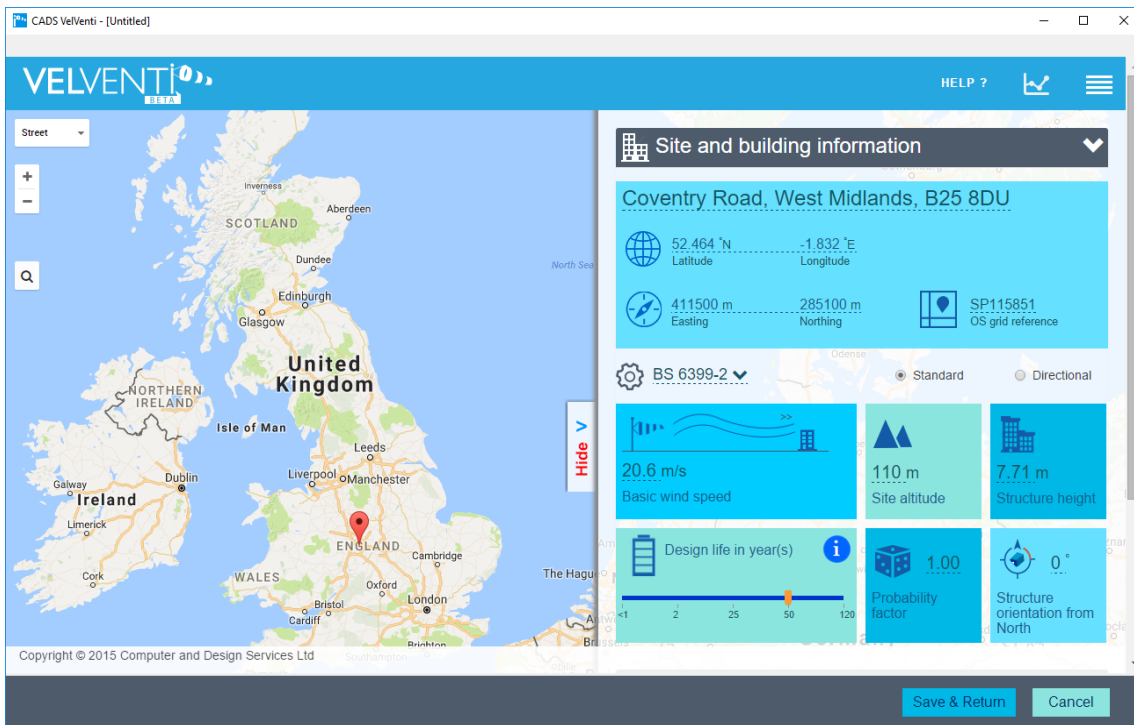
VelVenti is a new software for rapid calculation of wind pressure in accordance with a number of structural design standards. VelVenti is presented as a standalone application but also works integrated with CADS SMART Portal software. The integration eliminates manual errors with significant time saving.
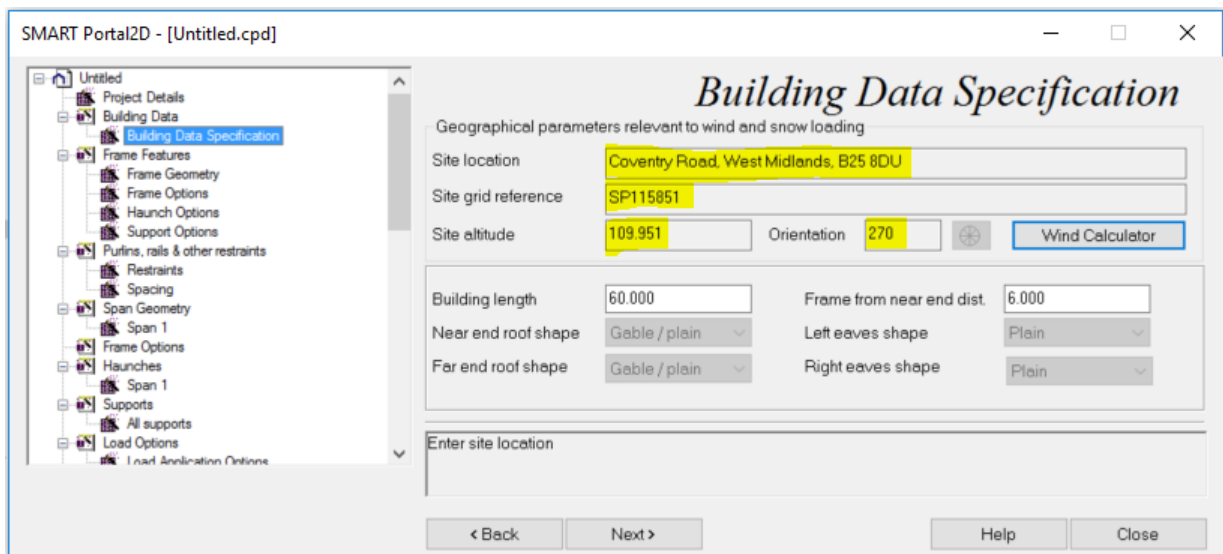
VelVenti is accessed through the wind calculator button in SMART Portal. The site data (grid reference, altitude) building orientation and portal apex height specified in the building data specification page of SMART Portal is automatically transferred to VelVenti. Alternatively, it is possible to specify the inputs directly in VelVenti.

Building data specification page from CADS SMART Portal
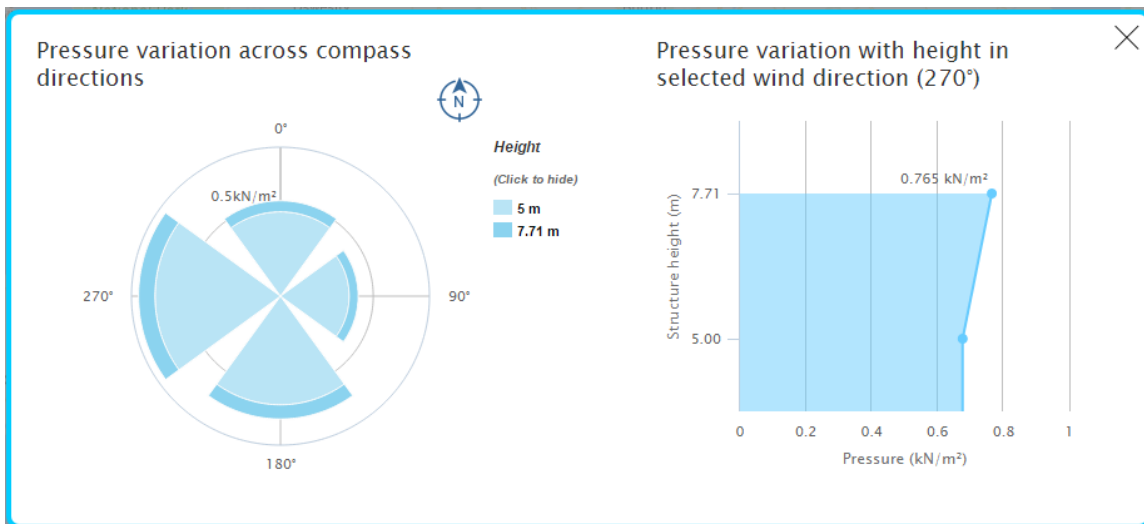
CADS VelVenti launched from SMART Portal

Building data specification page in SMART Portal with data from VelVenti

When VelVenti is launched from SMART Portal, two additional buttons (*Save & Return* and *Cancel*) appear at the bottom of the screen.

You start by reviewing the inputs and the intermediate calculated factors in VelVenti (i.e. orography and terrain factors). In VelVenti the calculations are done for a number of sectors at various heights and results presented in the form of tables and graphs.
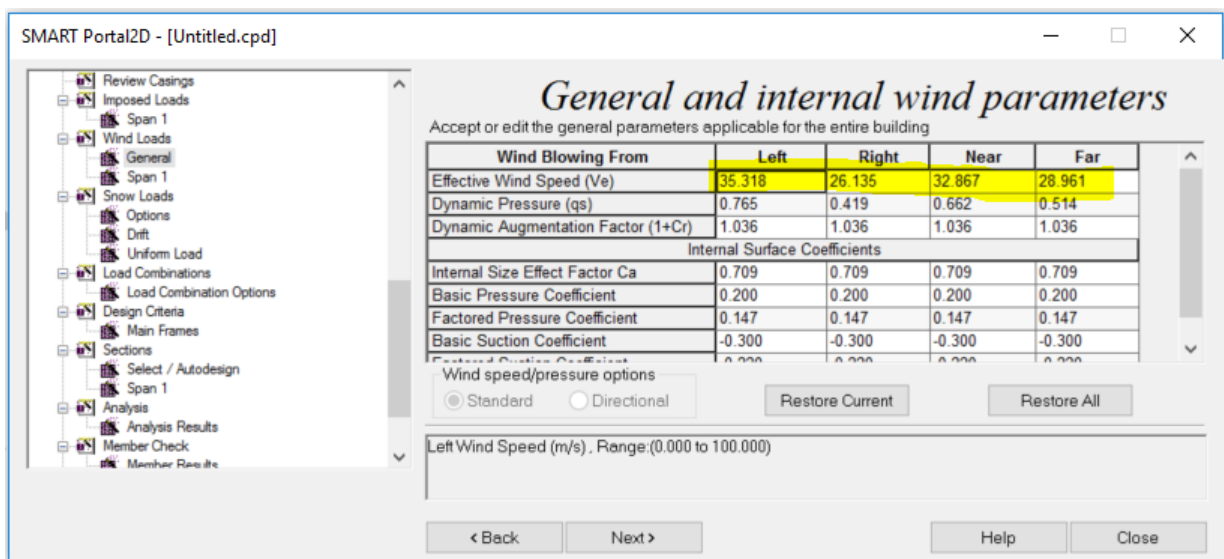
Graphical results in VelVenti

Once you are happy with the calculated effective wind speed return to SMART Portal by clicking on the *Save & Return* button at the bottom of the screen. When you close VelVenti with *Save & Return*, a confirmation message will be displayed to indicate the effective wind speed / peak velocity is updated in the portal job and it can be verified from the *Wind parameters* page.

When SMART Portal job is linked to VelVenti, you will notice that the site data (grid reference, altitude), orientation and portal apex height in the building data specification page in SMART Portal will be displayed as non-editable. The data can be changed any time from within VelVenti.

Wind parameters page in SMART Portal with results from VelVenti

Note that when the height of portal frame changes the effective wind speed in SMART Portal is automatically updated with results from VelVenti without having to reopen VelVenti.

Find out more about *VelVenti*

Find out more about *SMART Portal 2D* and *SMART Portal 3D*