

**ADVANCE Design 2010
SP3
What's new**



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This service pack of Advance Design 2010 includes over 140 improvements and corrections. The most significant are:

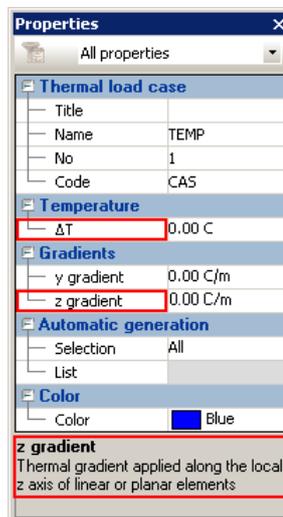
Eurocode

Integration of the Great Britain national annex for the following standards:

- EN 1991-1-3
- EN 1991-1-4
- EN 1992-1-1
- EN 1993-1-1

General application

- The releases of the linear elements are not modified after subdividing, cutting, trimming or extending the elements.
- The improvement of the thermal load case properties window: the user receives supplementary information.



- The features of the user-defined materials are now correctly displayed.

Post processing

- The “Color Map Configuration” function is operational.

Section calculation

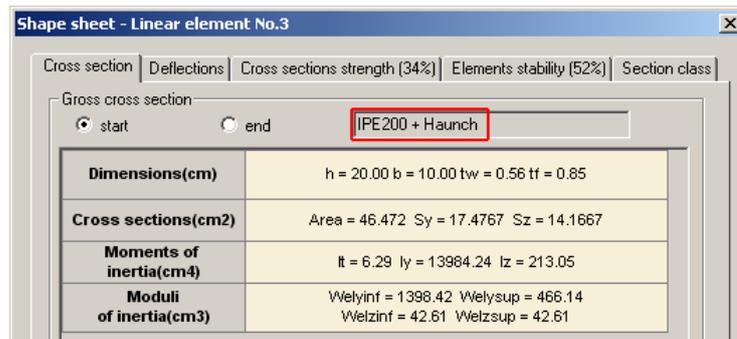
- Correction of a problem at the solicitation of a numerical calculation of the section Ix torsion inertia.

BIM

- Correction of a problem during the BIM import / export: the non-linear traction / compression supports were converted to simple elastic supports.

Documents

- It is possible to define an envelope when creating a user-defined table.
- Correction of a problem that occurred when the user was modifying the "Point support actions" table.
- The software version that appears in the shape sheet header has been updated.
- Correction of a problem when editing a table by systems: sometimes the number of the system displayed at the end of the table was incorrect.
- The presence of a haunch is now mentioned in the shape sheet.

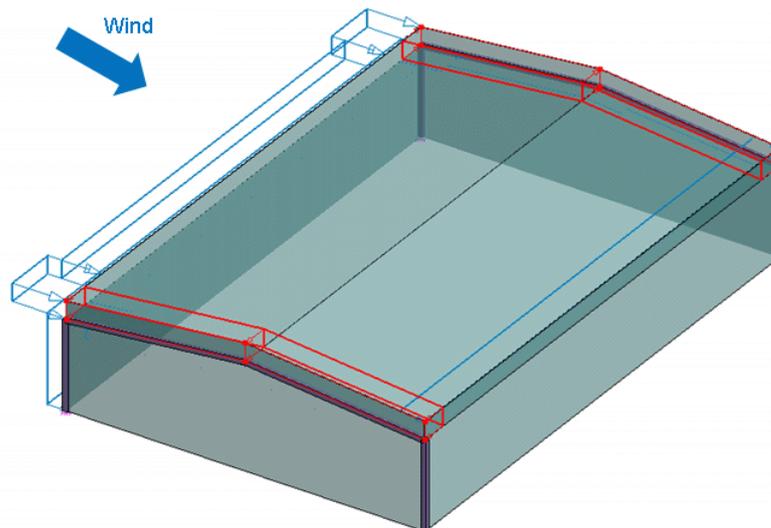


Import / Export

- The orientation of the planar elements local coordinate system was sometimes modified when importing a model from Effel Structure.
- After using the "Import from library" function, the dialog box is automatically closed, avoiding a multiple import.

Eurocode 1

- The Cpe value of the parapets parallel to the wind (left/right) is considered equal to 1.



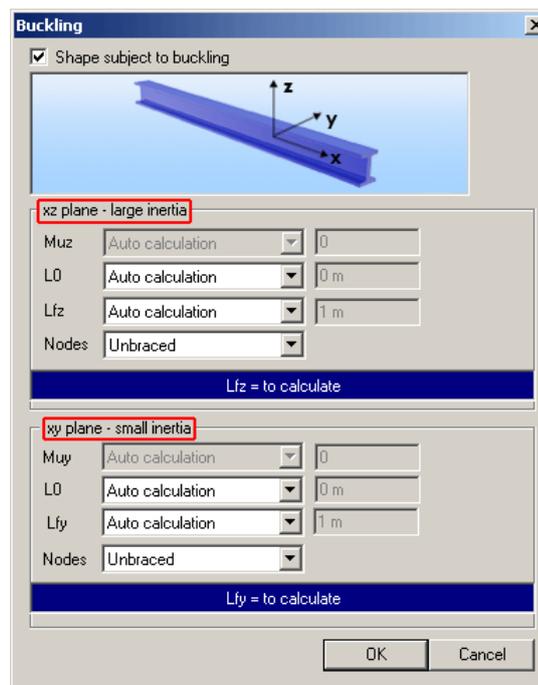
- The shape sheet edited using the Documents menu is easier to follow (previously, the text was aligned to right).
- The lateral-torsional buckling values C1, C2 and C3 are limited between 0 and 10.

Eurocode 2

- Precise calculation of the M_{eqp}/M_{ed} ratio affecting the long-term creep and of the equivalence coefficient.

Eurocode 3

- Improvement of the length definition dialog box: the large inertia and the small inertia are now specified.



- In the “Lateral-torsional buckling dialog box”, the “C3 and "zj" fields are automatically disabled if the current national annex is not considering these parameters.
- When obtaining negative values for k_{yy} , k_{yz} , k_{zy} and k_{zz} coefficients (i.e., an under-dimensioned section), Advance Design displays “INF” and displays “The calculation effort is superior to the buckling critical effort”.
- It is possible to enable / disable the buckling and the lateral-torsional buckling verification of an element.

BAEL

- The concrete calculation can be performed on planar elements even if the distance between the first two vertexes of the planar element is smaller than the CAD tolerance.
- Correction of a problem at the combined bending with tension calculation: the width and the height of the column were inversed.

CM66

- Correction of a malfunction: in the shape sheet, instead of the section forces, the ultimate stress of the material was displayed (the graphical display was correct).
- Improvement of the buckling length definition dialog box: it indicates the large and the small inertia.