This file details all program enhancements and revisions.

For the most recent changes, scroll to the end of the file.

29-11-05

Quikport XP release 6.10 is a completely new program. It has been thoroughly redesigned to incorporate the best of the old Quikport along with a simpler more intuitive user interface. You will also notice that its user interface includes options ready for Eurocodes.

Release 6.10 does not yet have complete on-line help text.

Quikport XP release 6.10 runs under all versions of Windows from '95 onwards and is supplied in a single self extracting file: QP32-610.exe. This self extracting file will automatically guide you through program installation, upgrade, or removal.

If you are installing on a network you should obtain: Quiksoft for Windows Network supplement.

Quikport XP release 6.10 uses a different format for its data files. It will not read files created with the old version. However it will be installed alongside the old Quikport giving you access to both versions for as long as is necessary.

This program is a complete rewrite of the earlier version. The software is improved:-

- 1. Quikport XP is now 32 bit. The program uses new technologies resulting in no limits on the size of structure, number of load cases, combinations, or spans!
- 2. Quikport's analysis engines are now super fast.
- 3. Simpler, faster user interface that builds on the strengths of Quikport XP and the original Quikport.
- **4.** All items (construction lines, points, members, bases, loads, haunches, purlins, deflection limits, and restraints) can be selected, dragged or copied individually or in groups. It is now much simpler and more in keeping with the emerging style of Windows programs.
- **5.** Items now have property forms. These can be used to make instant changes to one or more items.
- **6.** Much simpler and clearer results especially interpretation of directions etc.
- 7. More consistent handling of member results and member numbering. The results are now displayed for the original (un-split) members.
- **8.** Quikport now includes the provision of continuous restraint systems. Portals that include mazanine floors can now be fully designed.
- **9.** Quikport now includes the same very comprehensive list of section shapes as Quikport XP and Merlin, any section shape can be used, however haunched rafters must be I sections. (there is no restriction on haunched columns).
- 10. Quikport now provides for the selection of different nominal base types enabling different percentages of column stiffness to be automatically used for ULS, SLS and calculation of elastic critical load factor.
- 11. Haunches are now modeled in accordance with 'Modelling of Steel Structures for Computer Analysis' a CIMsteel publication published by the SCI. This gives greater stiffeness enhancing both the deflections and calculated value of elastic critical load.
- **12.** These are just a few of the important differences. To discover the rest, Quikport includes on-line video tutorials. Select *Help|View video tutorials* on Quikport's main menu.

06-02-06

This is the first official release of Quikport XP including full help text and tutorials. **Quikport XP release 6.11** will read data files created with **6.10**, but will not read files created with the old version.

You should refer to the notes for release 6.10.

08-03-06

This is the second official release of Quikport XP including full help text and tutorials. Quikport XP release 6.20 will read data files created with 6.10 and 6.11, but will not read files created with the older version.

You should also refer to the notes for release 6.10.

The changes to Quikport are:-

- 1. A new File|Quikport's Wizards|Export option is added. Quikport now has the facility to export to steel-work detailing systems using the CIMSteel CIS/2 standard. QP R6.12-02
- **2.** A fault is repaired in the Nominal base types form. Clicking on the *Return to defaults* button failed to clear the existing bases properly. *QP R6.12-01*

01-06-06

This is the third official release of Quikport XP. Quikport XP release 6.30 will read data files created with all Quikport XP releases (6.10 onwards), it will not read files created with the older Quikport.

If you are only now upgrading from the old Quikport you should refer to the notes for release 6.10 onwards.

Please note: Prior to this release only *Input Wizard* created member self weight loads which were updated with the proper value for the selected section immediately prior to analysis. If members were created using the graphical user interface, the self weight of those members would not be included. Now if desired the self weight of all members can be automatically included. The behaviour is controlled using a new button on the *Loads* toolbar. See program Help.

When reading an old data file Quikport assumes that automatic self weight is ON. This may not be the case, so we would suggest that the designer visit the new *Self weight* option (on the loads toolbar) and turn self weight off, then on. If the frame is sized he will be able to see exactly how Quikport is dealing with member self weight.

The changes to Quikport XP in this release are:-

- 1. A new option is added. The Purlins toolbar now includes a tool button to change a purlin centre. Purlin centres can be changed with a single mouse click without switching out of the stability view. The affect on member stability can therefore be seen instantly. See program Help for detail. *QP R6.21-09*
- 2. All options on the Toolbar's *Purlins* tab now operate without switching away from the Stability view. This looks very impressive since the effects on member stability of adding, changing, deleting purlins and restraints can be viewed immediately. *QP R6.23-26*
- **3.** The default style for restraints (Black thick line) is changed to a thin line. This improves their appearance in both the geometry and stability views. *QP R6.23-26*
- **4.** The *Add purlins/rails* option available from the *Purlins* tool bar tab is modified. The option now deletes all purlins and rails on the member before adding new. *QP R6.23-25*
- **5.** A new *Self weight* button is added under the *Loads* tool bar tab. The button displays a new *Member self weight* form. See program Help for detail. *QP R6.23-17 QP R6.23-18 QP R6.23-23*
- **6.** Rather than just prior to an analysis, self weight loads are now set immediately a section is selected or changed (section assigned a group, sections group table is changed, or design wizard runs). QP R6.22-12
- 7. In the *Input Wizard*, attempting to change the internal wind pressure coefficient for a single span mono pitch frame would cause an access violation. Fixed. *OP R6.23-19*
- 8. Using the Same as button in the Sections groups form caused an access violation. Fixed. QP R6.23-21
- 9. In the *Check Wizard In-plane stability Results* form, clicking on *Cancel* (instead of *Next* >) would cause an access violation message and a corruption of the data file. *QP R6.23-22*
- **10.** In the *Distributed load properties* form the options under the *Misc* tab have changed. The *Destabilising load* and *Description* items are removed and a new *Applied to: Member or Cladding* option is added. *QP R6.22-15*
- 11. Quikport's selection of single items is improved. If there is more than one item in the same position, then leaving the mouse cursor near or on the items and repeatedly clicking will select each item in turn. It is therefore possible to select any single item in a simple and intuitive manner. *QP R6.22-10*
- **12.** When more than one load was in the same position the values for the loads were displayed thus: '1.3; 1.90; 5.03'. If one of these loads was selected, the list would be reduced to just two loads with the selected load's value displayed over the other two. Now the program always displays the same list of values, if any load is selected its value will be red. *QP R6.22-11*

- 13. Pressing the middle button or wheel of a wheeled mouse could display an unwanted message box. This fault was a left over from very early program development when it was realised that this button could not be made to work on our own computers, however on some computer it does work! *QP R6.21-01*
- **14.** The *True view* (selecting *True* on the status bar) contained a fault. When showing non-standard frames the top of the first column could be miscalculated. *QP R6.21-03*
- **15.** The *Edit*|*Copy for Quikjoint* menu option contained three faults, all resulting from the use of Quikport XP source code.
 - a) The eaves haunch did not export the haunch length and depth.
 - b) The moment exported was the moment at the intersection of the column and rafter centre lines. Quikport XP now calculates the moment at the face of the column which is generally much smaller.
 - c) In some cases the horizontal force was not exported. QP R6.21-04
- **16.** When the user clicks the mouse the routine that returns the closest linear object (*Construction line, member etc.*) could under some circumstances fail to find any item causing an access violation. This is fixed. *QP R6.21-05*
- 17. *Input Wizard* now creates vertical and horizontal construction lines forming the basis of an axis system. *QP R6.21-05*
- **18.** Creation of bases could cause a memory leak. Fixed. *QP R6.21-06*
- **19.** The portal frame demo file *Demo1.qp2* contained some legacy data left over from program development that prevented continuous restraints being added. The data file *Demo1.qf2* is now clean. *QP R6.21-07*
- **20.** There was a small problem when dragging loads, purlins, restraints and limits using the mouse. These items all attach to, and lock onto a member. However it was possible for them to belong to a member but be positioned slightly off its end. This is Fixed. *QP R6.21-08*
- **21.** Although the value of a selected load would always be shown in red, if there was more than one load in the same position, the load itself may not have been. Fixed. *QP R6.22-13*
- 22. There is a small change in the operation of the property forms for distributed loads. Now if the first selected load is a trapezoidal load, only selected trapezoidal loads are updated. And conversely if the first selected load is uniform, only uniform loads are updated. This avoids unexpected results. *QP R6.22-14*
- **23.** A fault in the program code that dealt with the manual creation of load cases is fixed. It is doubtful that this fault could ever effect program execution. *QP R6.22-16*
- 24. In the detailed output for the 4.8.3.3.1 buckling check a length with loading applied between restraints uses the formula in the last part of Table 18 to calculate m_{LT}. However the values of M2, M3, M4 shown in the output were not properly set. Note that this did not effect the actual result of the stability check which was in spite of this correct. *OP R6.23-20*
- **25.** Within the *Design Wizard In-plane stability Amplification* form, where Lcr was >10.0 selecting *Change* would display a value of Lcr in *Change* form of zero. Fixed. *QP R6.23-24*
- **26.** Point loads. The code that positions the value of the load is modified. Rather than querying the length of the actual string it now more simply queries the length of a string constant. This is less accurate, but fixes a problem where two loads in the same position had the values displayed on top of one another instead of in a semicolon separated string. Note this fault only showed itself when certain fonts were selected. *QP R6.24-27*

19-06-06

Quikport XP release 6.31 will read data files created with all Quikport XP releases (6.10 onwards), it will not read files created with the older Quikport.

If you are only now upgrading from the old Quikport you should refer to the notes for release 6.10 onwards. The changes to Quikport XP in this release are:-

- 1. Frames consisting of just a single member could cause a 'List index out of bounds(0)' error when selecting True view. Note that this problem also affected the results when the section through was selected. Fixed. QP R6.31-01
- 2. A memory leak in the section groups is fixed. This fault did not affected program operation, output or results. *QP R6.32-02*

30-06-06

Quikport XP release 6.33 will read data files created with all Quikport XP releases (6.10 onwards), it will not read files created with the older Quikport.

If you are only now upgrading from the old Quikport you should refer to the notes for release 6.10 onwards. The changes in this release are:-

- 1. Quikport's *File* menu now sports a *Reopen* option. The *File*|*Reopen* option is used to open recently used files. *QF R7.24-02*
- 2. Selecting the *File*|*DXF* option with the 'True' view tab selected should have produced a DXF file containing the section through the building, instead it produced a line diagram. Fixed. *QP R6.33-01*
- **3.** Whilst examining the DXF output, issues regarding text size, position and the sizing of non-scaled items where discovered. Fixed. *QP R6.33-01*, *QF R6.33-06*
- **4.** The code that produces the semicolon separated annotations for multiple loads in the same position has been reviewed and possible faults removed. The faults manifested themselves during program testing of the print out using specialist software tools. These tools caused the program to operate in a very unusual manner and whilst it is thought unlikely that this would happen in normal use, given the complexities of printing, it was decided to re-code the affected part of the program. *QP R6.33-02*
- 5. A similar problem to item 4 above. This time the access violation occurred when printing the 'True' view on an Epson stylus Photo 890. The problem was again due to recursion in code where it was though to be impossible. The problem is fixed in two ways, firstly the unit is re-code so that it supports recursion and secondly recursion of this type during printing is detected and prevented. *QP R6.33-05*
- **6.** The size of the text showing the program name and release in the printed diagrams (landscape only) is reduced. This prevents a slight text overlap. *QP R6.33-03*
- 7. In the *True* view the dimension for right hand column's underside of base to ffl now has it's text flipped over. This avoids a clash with its purlin dimensions. *QP R6.33-04*

29-08-06

Quikport XP release 6.34 will read data files created with all Quikport XP releases (6.10 onwards), it will not read files created with the older Quikport.

If you are only now upgrading from the old Quikport you should refer to the notes for release 6.10 onwards. The changes in this release are:-

- 1. When using *Input Wizard* if any purlin or rail centre was less than 0.4 metres the program would stop with an error message *IWBuild.pas Error*=9. The fault also caused strange behaviour when selecting and dragging purlins. Fixed. *QP R6.34-01*
- 2. There was a fault in the display for the stability diagram. When zoomed in, the bending moment diagram and hinges may not have been displayed. *QP R6.34-02*
- **3.** Where a frame had complicated haunch arrangements (*stepped valley etc.*) Quikport's table of force discontinuities could be erroneous. This area of the program is redesigned and rewritten. *OP R6.34-03*
- **4.** The following sequence of events could cause *Design Wizard* to crash with the error message: *DesiWiz.pas error 5*.
 - a) Select RHS sections for the columns.
 - b) In Design Wizard set *Try section shapes* to UB for all groups.
 - c) Choose Try the current sections.

This is fixed. QP R6.34-04

- 5. In common with other Quiksoft programs unity checks for calculations are usually published to two decimal places. To avoid strange representations Quikport assumes that all unity values below 1.004 have passed (1.004 displays as 1.00). However the Annex G checks for lengths containing hinges and the S535 checks are carried out on the basis of comparing a limiting and an actual length. This caused a problem in that the calculations could state '1.448 > 1.500 passed' and the stability diagram could state 'lim=1.448' in red indicating a failure. This is now fixed. OP R6.34-05
- **6.** Certain haunch geometries (small stepped valleys where the bottom of the haunches were level) could result in unsymmetrical results. Also elastic plastic analysis could form hinges inside a haunched length. Fixed. *QP R6.34-06*
- 7. The code that identifies hinge positions for the stability checks following an elastic plastic analysis is improved. Where the actual axial load differed from that in Quikport's first estimate by a wide margin hinges could be missed. Quikport XP is now better than old Quikport in this respect. *QP R6.34-07*
- **8.** The stability diagram for plastic minimum weight design could miss the hinges in the columns of centre spans. This was due to the tops of the columns being included in the optimisation tableau even though they were haunched. Fixed. *QP R6.34-08*
- 9. Prior to each analysis Quikport checks the input data and if necessary raises an error. Some situations (overlapping haunches or crossing members) require only a warning, the user then selects either Continue or Show me. This is very good, but the warnings were shown prior to each analysis and could become irritating.
 - Quikport's warning forms now include an option: *Please do not warn me again*. Each type of warning can therefore be individually turned off. Restarting Quikport will turn all warnings back on. *QP R6.34-09*
- **10.** The *Help* button failed to display help text in the following forms:
 - a) Hinges Displayed by clicking on the *Hinges* button in either the *Input Wizard Haunches* form or the *Haunch properties* form.
 - b) Moment Amplification Change Displayed when the user clicks on Lr= on the status bar. Fixed. QPR6.34-10

- 11. In complicated multi-span frames, during elastic plastic analysis Quikport could loop and/or report negative values of lambda. Earlier versions, including *pre-XP Quikport*, checked that the formation of the last hinge would cause increased rotation at each hinge in the mechanism. Fine, but it may be that a hinge could form and there be little or no initial rotation making numerical comparisons difficult and leading to spurious reversed hinges. Quikport XP now uses the direction of the applied moment couple rather than the initial rotation. *QP R6.34-11*
- **12.** The text in Check Wizard's *Finish* form is corrected to reflect the changes in Quikport XP's user interface. *QP R6.34-12*
- 13. Plastic minimum weight design failed to see fixed bases. This is fixed. QP R6.34-13
- **14.** During elastic plastic analysis, on determining a mechanism Quikport checks that the mechanism's action causes increased rotation in each hinge. If hinges were found to counter rotate (reverse) they were removed and the analysis repeated to find the next hinge. However on multi-span frames (*five or more*) it was found that this could cause problems since reversing one hinge caused changes in others. Quikport now reverses only one hinge at a time. *QP R6.34-14*
- **15.** Again elastic plastic analysis. When hinges are detected the program inserts moment couples representing the hinge force. To determine the sense of these couples the program looks at the moment in the member. Unfortunately the program was using the moment stored with the estimate of axial load produced by the plastic minimum weight design. The program now uses the actual moment at that stage of elastic plastic analysis. Generally this fault had no affect, but coupled with the fault detailed in item 9 above, it could cause errors when performing elastic plastic analysis to collapse on fixed base frames. *QP R6.34-15*

09-10-07

Quikport release 6.40 runs under all versions of Windows from '95 to Vista and is supplied in a single self extracting file: QP32-640.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- 1. Quikport XP and its setup program are now fully Microsoft Vista compliant. Under Vista the Setup program will automatically elevate and request an administrator password. Under Windows XP the Setup program should be run with administrator privileges. See: *Program installation, upgrade and removal* in the *Ouikport User's Guide*.
- 2. The Setup program is now used to unlock licensed and demonstration copies.
- **3.** Due to the changes for Vista when upgrading from a single span version to a multi-span it is necessary to first uninstall, then re-run the Setup program.
- **4.** Program logic has been moved from Quikport to its Setup program enabling Quikport to operate under a standard user account in both Windows XP and Vista. {Vista}
- 5. Prior to this release, custom section files created by Merlin were stored in the program directory. This is not permitted under either Microsoft Vista or XP when running with reduced privileges. Quikport is modified so that these custom files are accessed from each user's project in a new folder called 'Quiksoft data'. {Vista}
- **6.** The *Edit*|*Copy for Quikjoint* option is modified so that it operates under Vista. Please note that under Microsoft Vista and Windows XP with reduced privileges this will require a new Quikjoint release. All other situations will operate correctly as before. {Vista}
- 7. The File|DXF options now accepts file names greater than eight characters in length. {Vista}
- **8.** There could be a problem operating Quikport under languages other than English. Most European language settings use a comma instead of a full stop as a decimal separator. This caused the Windows routines that perform decimal conversion to view the decimal point '.' as an error, causing Quikport to crash at start-up. Now Quikport always uses a full stop as a decimal separator overriding the Windows settings. This is not a perfect solution for European users, but at this stage is considered the most robust. Also see next item. *QF R7.40-05*
- 9. Quikport now accepts a ',' as keyboard input for a decimal separator. Internally the program converts this to a decimal point '.'. QF R7.40-08
- **10.** There was a fault in the calculations for elastic critical load. If the frame had an applied moment couple then the calculations would stop with an error: 'AModel.pas Error=6'. Fixed. QP R6.40-02
- 11. When a left hand side margin was selected for the results, the printout for nominal bases went off the right hand side of the paper. Fixed. *QP R6.40-03*
- **12.** The results now include options to print out the input from Input Wizard. These include: roof loads, snow loads, wind speed and wind coefficients. *QP R6.40-04*
- **13.** A fault that could cause the error message: 'ModTools.pas Error=5' is fixed. The fault was triggered when the user made changes using the distributed load properties form and supplied a value with more than two decimal places. Numbers read from the screen are now always formatted to have the required number of decimal places. *QP R6.40-0*
- 14. Problems in elastic plastic analysis are fixed. The problems revolved around a specific geometry of frame, a symmetrical portal with a central prop. The user had added pins to the top of the central prop and to the ends of the joining rafters (at the apex). An interesting mix of unusual geometry and pure symmetry. Two faults emerged which are now fixed:
 - The frame was reported to freeze in Design Wizard. In fact it had issued an error message: 'ElasticPlasticAnalysis.pas: 25' displayed behind the active window. During elastic plastic analysis the

- test for a frame being a mechanism is 'weaker', this ensures that Quikport stops its analysis at first sign of a mechanism. This customer's frame failed this weaker mechanism test at the outset of the analysis. This was unforeseen and triggered the error. Quikport now checks at the outset and issues a proper message to the user.
- The elastic plastic analysis could enter an infinite loop. Interesting since the same fault emerged in the original Quikport (Jan 1996) and from our records was produced by a building with the same basic geometry! When coding Quikport XP it was felt that its superior internal logic would not suffer the same problem, so the 1996 fix was not implemented. Quikport XP now monitors the value of lambda at each hinge formation/reversal. If lambda is not increasing it stops the analysis. Exactly the same solution as was used in the old Quikport. Note that it was highly unlikely that this fault would emerge under normal program operation. *QP R6.40-07*
- **15.** A customer's attempt to model apex haunches in a frame with a very steep rafter pitch fooled Quikport's strict input model checking and produced bad results (gross failure shown on the rafter capacity). The input checking is now improved and a warning raised. The help topic for the warning includes advice on how apex haunches can be correctly modelled. *QP R6.40-08*
- **16.** Quikport's on-line help and manual are updated.

11-06-08

This is a landmark release. Quikport XP release 6.50 includes design in accordance with Eurocode 3.

At the time of writing the UK national annex is not published. Until publication there remain three issues governing the use of Quikport's Eurocode 3 design:

- The steel strength fy is currently based upon the BS5950-1 tables. These should be reviewed by the user and overridden if necessary.
- The combinations of actions used in Eurocode 3 may be changed or clarified by the national annex. The designer should consider and if necessary modify Quikport's table of combinations.
- The national annex values generally and more specifically the Gamma values covered in 6.1(1) are uncertain. Sources suggest that the UK national annex will specify all Gamma values at unity. These values can be reviewed and modified using Quikport's new File|Eurocode 3 National Annex|Change option.

Quikport release 6.50 runs under all versions of Windows from '95 to Vista and is supplied in a single self extracting file: QP32-650.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- 1. Quikport XP's user interface is extended to facilitate design to both BS5950-1 and Eurocode 3. *QP R6.41-01*
- 2. Prior versions of Quikport already had some Eurocode extensions to the user interface. Including the facility to select alternative combination sets (BS5950-1 or Eurocode 3). These are now modified so that Eurocode 3 is placed first. *QP R6.41-03*
- 3. The Check and Design Wizard's are modified to facilitate Eurocode 3. QP R6.41-05
- **4.** The member properties form now includes both Eurocode 3 and BS5950-1 options. Two new branches are added Annex BB and Annex G where the default purlin depth may be modified. *QP R6.41-04*
- **5.** The Nominal base form is simplified. Since both standards have the same rules, the Eurocode 3 and BS5950-1 tabs are combined into one. *QP R6.41-05*
- **6.** The check described in *BS5950-1:2000 Annex I.1 Stocky members* is now implemented. This check provides further economy and is selected when the normal 4.8.3.3.2 check fails. *QP R6.41-08*
- 7. A problem was found and fixed in the program output. Where output was selected that included more than a single combination to be analysed using the elastic plastic method the program could cause an access violation. This was due to a fault in an internal system that reads and writes a cache of the analysis results. Fixed. QP R6.41-02
- 8. The Nominal base form failed to load and restore its size on screen. Fixed. *QP R6.41-05*
- **9.** Fire check: The button that accesses the fire check calculations had help text alongside referring to BS5950-9. Corrected to refer to BS5950-8. *QP R6.41-06*
- **10.** Fire check: Where the overturning moment due to rafter collapse is greater than Mpc/1.2 Quikport issues a warning. The warning now includes a reference to F.2(c) of BS5950-8. *QP R6.41-07*
- 11. Quikport XP's on line help and manual have been modified and extended to cover it's new design to Eurocode 3.

Quikport release 6.51

06-10-08

Quikport release 6.51 runs under all versions of Windows from '95 to Vista and is supplied in a single self extracting file: QP32-651.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- 1. The Addition of the Annex I.1 check (*Release 6.50 item 6*) introduced a fault. It was possible for the Quikport to fail and apparently hang, usually during Design Wizard. *QP R6.50-01*
- 2. The Results Contents form contained two spelling errors. These are fixed. QP R6.50-02

23-03-09

Quikport release 6.60 runs under all versions of Windows from '95 to Vista and is supplied in a single self extracting file: QP32-660.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- 1. The UK national annex is now published. As expected this overrides the simplified table 3.1 in EN 1993-1-1:2005 suggesting instead values from the relevant product standard. Quikport now has options in its national annex to choose values of f_y from either Table 3.1 or the product standards. Note that the situation with f_u is less clear since different values are published for steel types with the same strength designation. The Quiksoft programs always use the lowest value of f_u published in either Table 3.1 or the product standard. Quikport now includes additional steel grades (S235, S275, S355, S420, S450, S460). OEC-R0.97-01
- 2. The UK national annex overrides Table 6.5 of EN 1993-1-1:2005. Quikport's UK national annex options and program logic are modified to suite. Note that as well as overriding Table 6.5, the UK national annex also implies that hollow sections, angles etc. should be treated as 'rolled' sections and formula (6.57) used for the calculation of X_{LT} . QEC-R0.97-02
- 3. There was a slight logic problem in our implementation of EN 1993-1-1:2005's Table B.3. The problem was discovered in QuikEC3 but could have affected Quikport. Fixed. *QEC-R0.97-04*
- **4.** A fault in the calculation of shear area for welded box sections *(minor axis)* is fixed. The fault could have caused Quikport to stop with the error message: *'EC3.pas Error 10'*. Note that all similar calculations have also been checked. *QEC-R0.97-05*
- **5.** A small fault has been corrected. Quikport was claiming memory from Windows and not releasing it. It is highly unlikely that this could have affected program operation. *QP-R6.51-01*
- **6.** Design Wizard's section types form covers the selection of different section types and grades that will be considered during section selection. Unfortunately the steel grade selected for the last section group was applied to all groups. Fixed. *QP-R6.51-02*
- 7. Forms in Design and Check wizard contain a windows control called a check list box. These controls contain a scrollable list of items (*ULS combinations, SLS combinations, Suitable section types*) that can be selected with the mouse by clicking in the check box next to the item. Unfortunately clicking in the check box for the last item in the list could cause an annoying scroll and selection of the wrong item. Fixed. *QP-R6.51-03*
- **8.** The *Input wizard Project* form is modified so that it accepts the '-' character as part of a new project name. *OP-R6.51-04*
- **9.** The table of loading in Quikport's results displays the load direction. Where a triangular load was applied the direction could be false. Fixed. *QP-R6.51-04*
- **10.** A glitch in the input of trapezoidal loads is fixed. Quikport prompts for the start and finish point of the load. Under some circumstances these could be transposed. *QF-R7.60-02*
- 11. Some users encountered difficulty when entering loads. For speed of input the program selects both a point and a member from a single mouse click. When entering loads rapidly this was easily forgotten resulting in unpredictable results. Whilst selecting a member, or member and point, Quikport now highlights the would be selected member. *QF-R7.60-03*
- 12. The section tree in the results contents form contained miss spelt items. Fixed. *QP-R6.51-05*
- **13.** Quikport's delete loads option is modified so that loads automatically generated by Quikport to represent member self weight are no longer deleted. The application of these loads should be controlled using the self weight option on the *Loads* tab. *QP-R6.51-06*

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- **14.** Under the Bases tab, clicking on the *Nominal* button displays the nominal base form. Clicking on the form's *Help* button now properly displays relevant help text. *QP-R6.51-07*
- 15. Continental channel sections UPN and UPE are added.
- 16. The on line help and manual are updated.

Quikport release 6.61 19-06-09

Quikport release 6.61 runs under all versions of Windows from '95 to Vista and is supplied in a single self extracting file: QP32-661.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- 1. Design in accordance with EN 1993-1-1: 2005. The factor ' ψ ' used for the section classification of *Class3* and *Class4* webs was wrongly calculated. Fixed. *QEC-R1.01-01*
- 2. Design in accordance with EN 1993-1-1: 2005. When classifying an 'I' section about it's weak axis it is considered normal to ignore it's web. Quikport's logic did this by detecting that it contained the neutral axis and was therefore in 'part tension'. However this logic alone was problematic in that some sections may contain the **plastic** neutral axis within their top flange (Slim floor beams). To not consider a top flange or top plate as a compression element is plainly wrong. Earlier releases addressed this problem by assuming that elements above the **elastic** neutral axis where in 'Compression', below 'Tension' and containing where 'Part tension'. It then only classified 'Compression' elements. It did not however adjust the elastic neutral axis for axial load and upon reflection this was considered to be less than ideal.
 - Quikport is modified as follows: elements are now flagged as 'Compression', 'Tension' or 'Part tension' based upon the location of the sections **plastic** neutral axis modified for axial load. 'Compression' elements are always classified as such. By default 'Part tension' elements are dealt with as compression elements. However 'Part tension' elements belonging to I sections and tees bending about their weak axis are not classified. QEC-R1.01-02
- 3. Design in accordance with EN 1993-1-1: 2005. A fault in the calculation of the interaction factor k_{yz} used for combined buckling (*Method 1*) is fixed. *QEC-R1.01-03*

25-03-10

Quikport release 6.62 runs under all versions of Windows from '95 to Windows 7 and is supplied in a single self extracting file: QP32-662.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- 1. A fault is fixed in the calculation of reduced elastic modulus for class4 (*slender*) sections. The fault only presented when the routine was used to calculate reduced modulus for a non class4 section where the dimension from the neutral axis to the extreme fibre was not initialised properly. Fixed. *QEC-R1.02-01*
- 2. The calculation for Rho EN1993-1-5:2005 4.4(2) has changed between the final draft and published standard. Upon examination it seems very unlikely that there would be any difference in the calculated value. Quikport is now updated. *QEC-R1.02-01*
- **3.** Combined capacity check for asymmetrical slender sections Although the actual result was correct the presentation of the intermediate results failed to include any additional moment due to the shift in the elastic neutral axis. Fixed. *QEC-R1.02-01*
- **4.** Again combined capacity: where there is high shear Quikport adopts the equation in EN1993-1-1 (6.2). For class4 (*slender*) sections it uses equation (6.44). Quikport is now changed slightly, for the purposes of this capacity check, its definition of a slender section no longer considers its classification under pure axial compression.
 - A UB carrying high shear should be checked using equation (6.2) otherwise the high shear is not accounted for in the combined capacity check. However many UB sections when classified for pure compression have class4 webs causing the old Quikport to apply the combined capacity check for slender sections (6.44). Quikport now applies (6.2). *QEC-R1.02-03*
- **5.** The combined capacity check for class4 sections carrying high shear is modified slightly. In the application of the formula (6.44) the values of reduced elastic modulus will be further reduced to account for the high shear. See: EN1993-1-1 (6.29). Where such a reduction is applied Quikport now produces an explanatory message. *QEC-R1.02-04*
- **6.** The development of Quikjoint for Eurocode required extensions to the National annex form. These are included in this release of Quikport. *QEC-R1.02-06*
- 7. Hot finished circular hollow section the selection of the strut curve (Table 6.2) with regard to the steel grade was the wrong way around. Fixed. *QEC-R1.03-02*
- **8.** Again strut curve Angle sections now use curve 'b' rather than 'c'. *QEC-R1.03-02*
- 9. The *Input Wizard Roof loads Change* form contained a misspelling of the word 'roof'.
- **10.** Changes to the creation of the default table of load combinations for design to Eurocode 3. These default load combinations are created when:
 - a) Opening a new frame.
 - b) At the end of Quikport's input wizard.
 - c) Opening an existing frame, created with an older release of Quikport. OP-R6.61-01

04-06-10

Quikport release 6.63 runs under all versions of Windows from '95 to Windows 7 and is supplied in a single self extracting file: QP32-663.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- 1. Each Quiksoft program now shows the currently selected national annex in its title bar. e.g. 'Quikport National annex: UK [Demo1]'. QS Cap-01
- 2. Under rare circumstances Quikport's *Design Wizard* could stop with an error: *DesigDlg.pas error 1*. Fixed. *QP-R6.61-02*
- **3.** On occasions Quiksoft programs have encountered errors reading sections files. These have been due to poor versioning or user error and usually take the form of a message: *Attempt to load unregistered Clas-sID=????*. The programs are now modified so that the error message contains a path to the offending file. *OB R4.01-01*

16-06-10

Quikport release 6.64 runs under all versions of Windows from '95 to Windows 7 and is supplied in a single self extracting file: QP32-664.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- 1. During an analysis to determine a frames elastic critical load factor, if a member had a moment couple applied at a member end Quikport would apply the couple to the connected joint. It did this to mitigate the restrictions inherent in these analysis engines. However if the member end was also pinned (to model the formation of a plastic hinge) the result was not as intended. Quikport now detects moment couples applied at the pin end of a member and moves them slightly away from the joint. There was a similar problem during Advanced analysis. Also fixed. *OF R7.62-1*
- 2. The Design Wizard and Check Wizard progress forms are modified so that the fail counts are shown in bold red text. *OP R6.63-1*
- 3. Quikport's advanced analysis is modified to avoid looping. QP R6.63-2
- 4. The Design Wizard In-plane stability Amplification form now has a handy 'Reset' button. QP R6.63-3
- 5. Quikport checks that there is adequate restraint within h/2 of all plastic hinges. However the code for continuous restraints was flawed. Fixed. *QP R6.63-4*
- **6.** The 'Change purlin centre' option is improved. Whilst the code that selected the closest purlin centre to the mouse click was correct it could be 'less than intuitive'. Fixed. *QP R6.63-5*
- 7. A new option 'Move purlin' is added. See Quikport's Help. QP R6.63-6
- **8.** BS5950: Clause 4.8.3.3.1 For tapering members, the section properties used in the calculation of LambdaLT should be taken at the point of maximum moment. However following program changes this point was sometimes undefined. Fixed. *OP R6.63-7*
- 9. Eurocode 3: Where a member length contained zero moment, the equation for Cn in BB.3.3.2(1)B (BB.14) could produce a divide by zero error. Fixed. QP R6.63-8
- **10.** Check and Design Wizards The prompts and help text for the Design and Check Wizard ultimate and serviceability limit state forms are redrafted. The caption below the list box now says: 'See Help' unless the mouse cursor is over a combination title in which case it states either 'Factored combination', or 'Unfactored combination'. *QP R6.63-9*

Quikport release 6.65

20-07-10

Quikport release 6.65 runs under all versions of Windows from '95 to Windows 7 and is supplied in a single self extracting file: QP32-665.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

The changes to Quikport are as follows:

1. Unfortunately release 6.64 contained an error. During advanced analysis on most computers Quikport produced an error 'Invalid filename'. Fixed. *QP R6.64-1*

21-10-10

Quikport release 6.66 runs under all versions of Windows from '95 to Windows 7 and is supplied in a single self extracting file: QP32-666.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- 1. A fault is fixed concerning design using slender (class4) Tee sections. When slender these sections wrongly reported that they had failed section classification, and that they could be checked using Annex G and 5.3.5. The fault could also affect the following sections: Channels, ASB and SFB. It is however highly unlikely that these would ever be classed as class4 slender. *OP R6.65-1*
- 2. Slow operation on networked computers is addressed. Identifying the problem was not a simple matter since not all systems were affected. However the problem has been identified and a solution implemented. *QF R8.00-1*
- **3.** Some of the internal routines are re-coded for greater efficiency and more immediate user interaction. *QF R8.00-2*

30-11-10

Quikport release 6.67 runs under all versions of Windows from '95 to Windows 7 and is supplied in a single self extracting file: QP32-667.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- 1. EC3 printed output, combined axial and moment capacity check The unity check described in (6.41) of EN 1993-1-1 raises the unity factors to the power Alpha and Beta. For mono axis bending the printed output displayed the results without raising to the power. Fine. However the value displayed in the capacity diagram was raised. Fixed. *QP R6.67-2*
- 2. Design to EC3 For sections other than I sections there where circumstances where the stability diagram could show incorect stability results. *QP R6.67-3*
- **3.** Non I sections A fault existed in Check Wizard whereby sections could be falsely reported as having passed. Fixed. *QP R6.67-4*
- 4. Check wizard's capacity check now always includes a combined capacity check. QP R6.67-5
- 5. Quikport's True view diagram is modified to reflect member orientation. QP R6.67-6
- **6.** EC3 design, I sections normal orientation The lookup for the strut buckling curve (a, b, c etc) now uses the 'z' axis values. *QP R6.67-7*
- 7. The program code that produces the results preview and printout is improved. QJ R7.31-03
- **8.** There was a small glitch in the results preview whereby on first display the items (typically nominal bases or base reactions) could be displayed with a slightly different font. Fixed. *QP R6.67-8*

18-03-11

Quikport release 7.00 runs under all versions of Windows from '95 to Windows 7 and is supplied in a single self extracting file: QP32-700.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- Quikport's Input wizard now includes the creation of Imposed, snow and wind loads in accordance with EN 1991-1-1:2002, EN 1991-1-3:2003 and EN 1991-1-4:2005.
 R6.68-06 QP R6.68-07 QP R6.68-08
- 2. Quikport XP now includes a *Load case and combinations* Wizard available under the *File*|*Quikport's Wizards* menu option. This new wizard creates combinations for design in accordance with Eurocode and BS 5950. *QP R6.68-01*
- **3.** As part of the above changes a new load case type *Notional snow* is added. *QP R6.68-02*, *QP R6.68-03*, *OP R6.68-04*
- **4.** Design Wizard *Select sections* form. It was possible to cause an access violation by clicking on the form's Update button whilst its progress form had focus. (Clicking behind the top form on the form beneath). Fixed. *OP R6.68-05*
- 5. Input wizard's final form now includes an *Options* button where the user may choose to pre pend the file name with the design method. e.g. enFrame01, bsFrame01 or simply Frame01. This option makes it simple to rerun the wizard and compare Eurocode designs against BS 5950. *QP R6.68-08*
- **6.** When EN 1991 is selected, input wizard provides an additional form containing an *Options* button. The *Options* button provides the following two functions:
 - a) Override for the peak velocity pressure The user may choose to override Quikport's pressure and provide explanatory text.
 - b) Set c_s and c_d to unity as per 6.2 of EN 1991-1-4. *QP R6.68-12*, *QP R6.68-13*
- 7. Producing output of results to pdf could result in a program error: 'UResults.pas=2'. Fixed. QJ R7.33-01
- **8.** Design Wizard The latter part of design wizard automatically adds restraints to purlins and rails. Design to Eurocode can require a greater number of ULS combinations, it was therefore necessary to increase the size of the data structures used for stay optimisation. *QP R6.68-14*
- 9. Routines to enhance the look of the text font in some forms were not called. Purely cosmetic, but fixed. *QP R6.68-14*
- **10.** When deleting members that carry loads, Quikport displays the message: '*This member carries loads*'. Where there is just a single 'self weight' load created by Quikport this message will no longer be displayed. *QP R6.68-15*
- 11. The form displayed when the user selects Help|About now has an enhanced text font. QP R6.68-16
- 12. Quikport's Load combinations form now has a Make current button. QP R6.68-17
- 13. Slight changes to the way the program behaves when the user selects a different combination by clicking on the status bar. If with the new combinations the analysis fails the program now reinstates the previous combination and combination set (Eurocode/BS 5950). *QP R6.68-18*
- **14.** When Quikport is started and a file opened its current analysis type is set to 'Elastic'. However when starting Quikport by double clicking on a Quikport data file this was not the case. Fixed. *QP R6.68-18*
- **15.** Changes to cover Eurocode 3 Corrigenda February 2006 and April 2009 (AC1 and AC2). AC1 has no affect, the changes for AC2 are as follows:
 - a) Table 3.1 (page 26) values for f_u changed. No affect in UK as national annex uses the product standard. No changes made. EC3-AC2-a

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- b) Table 5.2 (page 44) classification of angles. ':' becomes 'and'. Program checked, no changes necessary. EC3-AC2-b
- c) Clause 6.2.6(3)c) (page 51) shear area of Tee sections. Quikport updated. EC3-AC2-c
- d) Clause 6.2.9.1(6) (page 55) CHS sections definition of 'n', $M_{n,y,Rd}$ and $M_{n,z,Rd}$. No changes made, existing method gives very similar results. EC3-AC2-d
- e) Clause 6.3.2.3(2) (page 62) definition of X_{LT,mod} and 'f'. The Quiksoft programs do not use this reduction. *EC3-AC2-e*
- f) Table A.1 (page 76) formula for n_{pl}. Program modified. EC3-AC2-f
- g) Table A.1 (page 76) formula for C_{zz}. Program modified. EC3-AC2-g
- h) Table A.1 (continued) (page 77) definition of C_{mi,0} and C1. Checked no changes required. EC3-AC2-h
- i) Table B.3 (page 80) last formula in table '-' becomes '+'. Program modified. EC3-AC2-i
- j) Formula (BB.5) (page 85) Definition of C1. Checked no changes necessary EC3-AC2-j
- k) Formula (BB.9) and (BB.10) (page 88) Definition of C1. Checked no changes necessary. EC3-AC2-k
- 1) Figure BB.4 (page 90) definition of Betat. Checked no changes necessary. EC3-AC2-1

Where these changes impact on the program's results, the calculations are marked thus: **<AC1**

16. Quikport's On-line help and manual are updated.

07-04-11

Quikport release 7.01 runs under all versions of Windows from '95 to Windows 7 and is supplied in a single self extracting file: QP32-701.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- 1. During design wizard's stay optimisation the program used to assume that if a length passed all shorter lengths would pass and visa versa. However we found an instance where in the column the longer length was plastic and passed whereas the shorter length was elastic and failed. The stay optimisation will run slightly slower but this anomaly is fixed. *QP R7.00-01*
- 2. Load cases and combinations Wizard The final form contained some typo's. fixed. QP R7.00-02

Quikport release 7.02

17-05-11

Quikport release 7.02 runs under all versions of Windows from '95 to Windows 7 and is supplied in a single self extracting file: QP32-702.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- 1. Wind load generation to BS EN 1991-1-4 In the table of wind coefficients the values of w_e and w_i were interchanged. Fixed. Note the fault occurred only when the coefficient report was viewed. To ensure that the correct values are recalculated, Input Wizard should be rerun and the coefficient table reviewed. *OP R7.01-01*
- 2. Overriding the peak velocity pressure in the *Wind options EN 1991-1-4* form would produce the correct calculations, but the value stated at the head of the wind coefficients report was not updated. *OP R7.01-02*

12-07-11

Quikport release 7.10 runs under all versions of Windows from '95 to Windows 7 and is supplied in a single self extracting file: QP32-710.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- 1. The following additional options are now added to the Help menu:
 - a) Visit the Quiksoft website: This option opens the Quiksoft home page on the web.
 - b) Check for latest updates: This option displays a 'Check for latest updates' form. The form will connect to the Quiksoft website and advise if program updates are available. *QS-WS-1*
- 2. The Quiksoft programs have encountered problems with compiled HTML help systems (.chm files) running over networks due to Microsoft enforced security issues. The recent release of *Internet Explorer 9* has made the situation even worse. Hence at start-up the program will now copy the entire help file from the server to a temporary folder on the client. The help system is then run locally. This should resolve all known HTML help issues. *QS-HLP-1*
- **3.** Upgrading to a new release will now require a code when the digit immediately after the decimal changes e.g. Upgrading from 7.01 to 7.09 will not require an upgrade code. Upgrading from 7.09 to 7.10 will require a code. This does mean that release codes will be required more frequently, but better fits our release strategies since the effected releases often contain considerable enhancement. *OS-UPG-1*
- **4.** After installation, unlocking Quikport with a demo code will now automatically unlock all design modules (Eurocode and BS5950). Design modules must still be unlocked in full purchased versions. *QJ R7.33-01*
- **5.** The final form in Quikport's input wizard has revised text. Specifically, for Eurocode design, it advises that the load cases and combinations wizard should be used. *QP R7.02-02*
- **6.** Quikport's On-line help and manual are updated.

12-09-11

Quikport release 7.11 runs under all versions of Windows from '95 to Windows 7 and is supplied in a single self extracting file: QP32-711.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- 1. Very rare bug Selecting the bending moment diagram, then advanced analysis and then changing the bending moment set from Eurocode to BS5950 could case Quikport to display the error message: 'List index out of bounds'. Fixed. *QP R7.10-01*
- 2. Eurocode member stability output The formula for L_m outlined in BB.3.1.1 of EN 1993-1-1 was marked in Quikport's output as being (BB.7) it is now correctly marked as (BB.5). *QP R7.10-02*
- **3.** The Calculations options form permits control of the quantity and detail of the printed output. There are four options: Show all, Show with a given percentage of the worst, Worst only, or None. Unfortunately there was a slight error, the 'Worst only' option could result in a complete absence of stability detail. Note this affected the quantity of output only, not a pass/fail verdict for the frame. Fixed. *QP R7.10-03*
- 4. Modifications to enhance software security. QS-23-08-11
- 5. The Changes detailed for release 7.10 item 3 OS-UPG-1 where flawed. Fixed. OS-26-08-11-1
- **6.** The Quiksoft programs show the currently selected national annex on their main window caption. However where the national annex had not been selected the programs showed a blank. Now before a national annex is selected the caption shows 'National annex: Box' and until a new national annex is selected the Box values will be used in any Eurocode calculations. *OS-26-08-11-2*

Quikport release 7.12

12-10-11

Quikport release 7.12 runs under all versions of Windows from '95 to Windows 7 and is supplied in a single self extracting file: QP32-712.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

The changes to Quikport are as follows:

1. An error in the printed output for design to BS5950 is fixed. The quantity of output can be reduced by selecting *Worst* in the Calculations options form. Unfortunately, under certain circumstances the true 'worst check' could be omitted from the output. Note that Check wizard, Design wizard and the capacity/stability diagrams were not affected.

18-10-11

Quikport release 7.13 runs under all versions of Windows from '95 to Windows 7 and is supplied in a single self extracting file: QP32-713.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

- 1. Additional code added to strengthen the copy protection was flawed. Demo copies produced an error: *QSStream.pas error=81* when viewing and saving results. Fixed. *QS-18-10-11-1*
- 2. When Eurocode design is available the selected national annexe is displayed in the program's main window caption. However, Demo copies may have failed to show the caption. *QS-18-10-11-2*

Quikport release 7.14

04-11-11

Quikport release 7.14 runs under all versions of Windows from '95 to Windows 7 and is supplied in a single self extracting file: QP32-714.exe. This self extracting file contains a Setup program that will automatically guide you through program installation upgrade, removal and registration.

See: Program installation, upgrade and removal in the Quikport User's Guide.

The changes to Quikport are as follows:

1. The changes in release 7.11 item 5 corrected a fault, however the changes should have also been compiled into the Quiksoft setup program. Following a program upgrade Quikport could demand an upgrade code, these are normally entered into the Setup program, but the setup program could fail to display the 'New release' form leaving the user with no means to supply the code.

17-07-12

Quikport release 7.15 runs under all versions of Windows from XP onwards and is supplied in a single self extracting file: QP32-715.exe. This self extracting file contains a Setup program that will automatically guide you through program installation, upgrade, removal, and registration.

Instructions for program installation, upgrade and removal are available on the Quiksoft web site: www.quiksoft.co.uk/quiksoftdownloads

- 1. Support for operating systems older than Windows XP is now withdrawn.
- 2. Value of Alphacc for the UK national annex for EN 1992-1-1 was taken as 1.00 but should have been 0.85. Also typo in National Annex change form corrected. Note that this value is not used by any program other than Quikjoint. *QS-14-12-01-1 QJ R7.40-53*
- **3.** All Quiksoft executable downloads and applications are now digitally signed using Microsoft Authenticode. For additional security the Quiksoft applications now check that the signature is intact and that the executables have not been altered or corrupted. *QS-11-04-12-1*
- 4. Quikjoint's Help|About form now displays the file signature status. QS-11-04-12-1
- 5. All Quiksoft executables now have extended manifest files. The WinZipSE program that we use to produce the self extracting installation file is updated to release 4.0. These changes should avoid the message: 'This program might not have installed correctly' after installation.

 QS-23-04-12-1 QS-23-04-12-2
- **6.** Changes to network licensing to simplify deletion of logged on users. On start up, networked copies of the Quiksoft programs count the number of copies already in use (logged on users). If these exceed the number of concurrent licences a warning is produced, however from time to time because of system crashes users could remain logged on. This can be repaired by rerunning the Setup program and selecting Network server tools and Log off users.
 - However, now the problem can be fixed more directly from within each application by selecting a new 'Log off users' button displayed within the Licence error form. 'Log off users' now produces a report showing each file deletion. *QS-25-04-12-3*
- 7. The default name and address for new users used to be loaded from Quiksoft.ini in the user's Windows folder. Quiksoft.ini is a legacy 16bit windows file and will no longer be used. The default user name and address is now obtained from the program source code. *QS-27-04-12-4*
- **8.** The Quiksoft Setup program no longer copies Quiksoft.ini into the user's Windows folder. This file was used by the old 16bit Quiksoft programs, which are no longer supported. *QS-27-04-12-5*
- 9. The Quiksoft logo displayed by the Setup program is modernised. QS-27-04-12-6 QS-02-05-12-8
- **10.** The Quiksoft logo displayed in Quikport's introduction form is modernised. *QS-27-04-12-7 QS-02-05-12-8*
- 11. When first run, before the user's project folder was set, the Quiksoft programs sometimes created an empty folder: c:\quiksoft data\quikjoint. Fixed. *QS-08-05-12-9*
- 12. The Quiksoft Setup program is extensively modified to automate network installations. *QS-18-06-12-01*
- 13. On startup, if the licence folder is missing the Quiksoft programs now issue an error: *License folder:* <*Path> is missing*'. Prior to this they would report: *'There is a copy of Quik??? already running'. QS-18-06-12-02*
- **14.** The section in the manual and on-line help covering program installation is removed and replaced with a link to the Quiksoft web site *QS-18-06-12-03*

31-01-13

Quikport release 7.16 runs under all versions of Windows from XP onwards and is supplied in a single self extracting file: QP32-716.exe. This self extracting file contains a Setup program that will automatically guide you through program installation, upgrade, removal, and registration.

Users are advised to upgrade immediately, see item 1.

Instructions for program installation, upgrade and removal are available on the Quiksoft web site: www.quiksoft.co.uk/quiksoftdownloads

- For doubly symmetrical I sections and channels the effects of axial load on moment capacity can be ignored provided that the criteria described by formulas (6.33), (6.34) and (6.35) of EN 1993-1-1 are met. Unfortunately, the program omitted to use the absolute value of N_{Ed} causing the combined affect of axial tension and moment to be ignored. Axial compression and moment were dealt with correctly. Fixed. QS-29-01-13-01
- 2. Opening a frame file with member self weight turned off and immediately selecting *Loads* on the view bar would incorrectly display the self weight speed button with a green tick rather than red cross. Fixed. *QP R7.15-01*
- 3. The *Load case and combinations wizard Details* form now prevents the load case used for automatic member self weight from being deleted. *QP R7.15-02*
- **4.** On deleting a section group that is used by one or more members Quikport requests an alternative group. In some instances the self weight in the loads diagram may not have been immediately updated. This affected the screen display only. Self weight would always be correct in any subsequent calculations. Fixed. *QP R7.15-03*
- **5.** Similar problem in the member properties form. Changing a member's section group may not have immediately updated the displayed self weight. Fixed. *QP R7.15-04*

15-05-13

Quikport release 7.20 runs under all versions of Windows from XP onwards and is supplied in a single self extracting file: QP32-720.exe. This self extracting file contains a Setup program that will automatically guide you through program installation, upgrade, removal, and registration.

Instructions for program installation, upgrade and removal are available on the Quiksoft web site: www.quiksoft.co.uk/quiksoftdownloads

- 1. Quikport's Boundary Fire check now offers the choice of checks in accordance with BS5950-P8 or the newer SCI guide: 'Single Storey Steel Framed Buildings in Fire Boundary Conditions P313'. Checks to the newer guide are more flexible and include mono-pitch and asymmetrical dual pitched frames. *OP R7.20-01*
- 2. Under Windows 7 and 8 there was a slight alignment problem with the controls in the Member and Frame results forms. Cosmetic only. Fixed. *QP R7.20-02*
- **3.** Under Quikport's Dimensions tab it is possible to add angle dimensions. These angle dimensions did not respond to being mirrored or rotated. Fixed. *QP R7.20-03*
- **4.** Continuos restraints were not being considered as suitable for hinge restraints in BS5950's Check Wizard. The fault affected Check Wizard and BS5950 only. The Stability diagram and Eurocode's Check Wizard operated correctly. *QP R7.20-04*
- **5.** There was a logic problem with the Check Wizard report. If the Quikport data file resided in a location other than the current project folder the report could be omitted from the printed results. Fixed. *OP R7.20-05*
- **6.** Where Input Wizard, Fire Wizard and Check Wizard reports are selected in the Results Options form the program now checks that they are available prior to producing print out. Where they are not available it issues a warning and refers to a full explanation in the Quikport Help system. *QP R7.20-05*
- 7. Quikport's help system and manual are updated.

04-06-13

Quikport release 7.21 runs under all versions of Windows from XP onwards and is supplied in a single self extracting file: QP32-721.exe. This self extracting file contains a Setup program that will automatically guide you through program installation, upgrade, removal, and registration.

Instructions for program installation, upgrade and removal are available on the Quiksoft web site: www.quiksoft.co.uk/quiksoftdownloads

- 1. Table B.3 of EN 1993-1-1 Calculation of C_{my} , C_{mz} and C_{mLT} . These values are used in the calculation of the k_{ij} factors for combined buckling checks. When making the decision to use either α_s (Case 2) or α_h (Case 3) the program failed to use the absolute value of the moment M_h causing a non conservative value to be selected. Fixed. QS-03-06-13-01
- 2. Following clarification in the SCI's document P397, when applying equation BB.9 of EN 1993-1-1, Quikport now uses the C1 factor to account for bending moment shape for haunched sections. *OP R7.21-01*
- 3. When applying stability checks Quikport looks at the bending moment shape to determine weather to apply C_m or C_n. It did this by looking for loads acting along the length being considered. It now more correctly examines each load to see if it has a component normal to the member. This change affects checks to both Eurocode and BS5950. *QP R7.21-02*
- **4.** SCI's document P397 page 120. This document confirms suspicions that the formula (BB.14) for C_n in EN 1993-1-1 is in fact wrong. The Formula is now multiplied by R_{max} as per SCI guide. *QP R7.21-03*
- **5.** The frame file P397.qp2 is now included with the installation. This file contains the example in the SCI guide. *QP R7.21-04*

Quikport release 7.22

05-06-13

Quikport release 7.22 runs under all versions of Windows from XP onwards and is supplied in a single self extracting file: QP32-722.exe. This self extracting file contains a Setup program that will automatically guide you through program installation, upgrade, removal, and registration.

Instructions for program installation, upgrade and removal are available on the Quiksoft web site: www.quiksoft.co.uk/quiksoftdownloads

The changes to Quikport are as follows:

1. The Quiksoft programs have an option to list the values of the selected National annex. Unfortunately, the values for the 'Box' national annex were displayed incorrectly. Note this affected the display of the Box national annex values only, all calculations were correct. *QS-05-06-13-01*

27-03-14

Quikport release 7.30 runs under all versions of Windows from XP onwards and is supplied in a single self extracting file: QP32-730.exe. This self extracting file contains a Setup program that will automatically guide you through program installation, upgrade, removal, and registration.

Instructions for program installation, upgrade and removal are available on the Quiksoft web site: www.quiksoft.co.uk/quiksoftdownloads

- 1. Changes to Quikport's Input wizard to accommodate the amendments to BS EN 1991-1-4:2005+A1:2010 and its UK National annex. *QP R7.22-08*
- 2. The Quikport's handling of projects in modernised. Quikport now includes the option for existing users to switch to a new method of handling project folders. Existing users should select the menu option: File|Project manager|Adopt new file handling. New users will automatically be given the new file handling. See Quikport's Help system. QS-09-10-13-02 QS-09-10-13-04
- 3. When New file handling is selected, the headings for the printed output are modified:
 - a) The current project is removed.
 - b) The box for the file name permits a longer file name. QS-09-10-13-03
- **4.** The printed output for the Quiksoft programs now includes the full path to the data file printed just outside the margin. *QS-12-08-13-01*
- **5.** The *Help|Purchase design modules* option no longer requires restarting Quikport using 'Run as Administrator...' *QS-25-10-13-01 QS-30-10-13-02*
- **6.** The *Help|Purchase design modules* form is updated and improved. *QS-30-10-13-05*
- 7. The Quiksoft programs no longer require to be unlocked by the Setup program. Instead unlock codes are requested at program start-up. *QS-29-10-13-01 QS-21-11-13-03*
- **8.** The program's introduction form displayed for demonstration copies is generally improved and now includes number of days remaining. *QS-25-11-13-05 QS-08-01-14-04*
- **9.** All options to do with registration including major releases are removed from the Setup program. These are now performed at program start-up. *QS-30-10-13-01 QS-05-11-13-02*
- **10.** For network copies Quikport's Help menu now includes a 'Network licence settings' option. The new option covers administration options for concurrent network copies. *QS-30-10-13-03 QS-30-10-13-04*
- 11. The Quiksoft installation copied Setup.exe into each applications program folder. On network server installations this could be started to quickly perform a setup on a client computer. Unfortunately many users were confusing it with the full Setup program. It is now more correctly named 'ClientSetup.exe'. *QS-05-11-13-01 OS-05-11-13-03 OS-08-11-13-04*
- **12.** The Quiksoft program's *Browse For Folder* form was found to be unreliable when browsing deep directory structures on a network server. It is replaced with the standard windows form. *QS-08-11-13-05*
- **13.** The Quiksoft setup program's network client setup in improved. It now includes a Search button to find the Quiksoft program on the server. *QS-19-11-13-0*
- 14. Edits and updates for Quikport's help content. QS-21-11-13-02 QS-21-11-13-04
- 15. An unusual error is fixed affecting the combined buckling check of single channel sections with bi-axial bending and zero axial load. The combined buckling checks for these Mono-symmetric sections are supposed to use elastic properties. See SN030a-EN-EU. Unfortunately, where a channel section carried zero axial load it was possible for Quikport to wrongly calculate and use W_{pl,y,eff} as described in 6.2.2.4(1) of EN 1993-1-1. The fault was found using QuikEC3, it is very unlikely that it would affect Quikport since biaxial bending is rare. Fixed. *QS-17-07-13-01*
- **16.** There was a slight error in Quikport's Input wizard. When reading data created with on older release, Quikport could crash with a message: 'Quiksoft exception number 60'. Fixed *QP R7.22-01*

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- **17.** Project selection in Quikport's Input wizard is modified to accommodate the new current project folder system. *QP R7.22-02 QP R7.22-03*
- 18. Project selection in Quikport's Export wizard is also amended. QP R7.22-07

15-07-14

Quikport release 7.40 runs under all versions of Windows from XP onwards and is supplied in a single self extracting file: QP32-740.exe. This self extracting file contains a Setup program that will automatically guide you through program installation, upgrade, removal, and registration.

Instructions for program installation, upgrade and removal are available on the Quiksoft web site: www.quiksoft.co.uk/quiksoftdownloads

- 1. Changes to more easily and rapidly design agricultural buildings in accordance with: "BS 5502-22:2003+A1:2013 Buildings and structures for agriculture Part 22: Code of practice for design, construction and loading."
 - Input wizard has additional text and links to help text. The Load cases and combinations wizard now has a 'Lookup factors' facilitating automatic selection of suitable factors for BS5502-22 class 2 buildings. *OP R7.30-01*
- 2. Eurocode steel design Using Method 1 for the calculations of k_{ij} factors for combined buckling, the formula taken from Table A.2 of EN1993-1-1 (case 2) for C_{mi,0} was presented wrongly as '1.0(' rather than '1.0 +'. Note the actual calculations performed were correct, only the representation of the formula in the on screen and printed output were wrong. *QS-15-05-14-03*
- **3.** The new project handling contained a fault. The project title was not always updated properly. Fixed. *QS*-20-12-13-03
- **4.** For demonstration copies the days remaining in the program's introduction form could be displayed incorrectly. Fixed. *OS-08-01-14-04*
- 5. The Quiksoft Help|About form now displays the Quiksoft logo. QS-12-05-14-01
- **6.** The Quiksoft Introduction form for unregistered and demonstration copies now displays the latest Quiksoft banner logo. *QS-21-05-14-04 QS-12-05-14-02*
- 7. The Quiksoft Setup program now uses the new Quiksoft banner logo. QS-21-05-14-04
- **8.** Quikport's manual is updated.

20-05-15

Quikport release 7.45 runs under all versions of Windows from XP onwards and is supplied in a single self extracting file: QP32-745.exe. This self extracting file contains a Setup program that will automatically guide you through program installation, upgrade, removal, and registration.

Instructions for program installation, upgrade and removal are available on the Quiksoft web site: www.quiksoft.co.uk/installation-upgrade-and-removal.

- 1. Links to the old access steel website in Quikport's help are replace with www.steel-ncci.co.uk. *QP R7.40-01*
- 2. Quikport's *Load case and Combinations wizard* now has additional options to control how the Eurocode combinations are created. The designer is now able to choose between combining 'Imposed and Wind' and/or 'Snow and Wind'. For full detail see Quikport's help. *QP R7.40-03*
- 3. Within the Eurocode combination titles 'Notional' is replaced with 'EHF'. QP R7.40-03
- **4.** The load case and combination titles produced at the end of *Input wizard* are modified to match those of the *Load case and Combination wizard*. For Eurocode design the user should still run the *Load case and Combinations wizard*. *QP R7.40-03 QP R7.40-04*
- **5.** To clarify the carrying over of nominal base rules from BS5950 to Eurocode, the help text for nominal bases now references NCCI SN039a-EN-EU. *QP R7.40-05*
- **6.** With new file handling selected, the *Input Wizard* failed to store any change in the current project folder meaning that restarting the program picked up the previous project. Fixed. *QP R7.40-06*
- 7. Because of confusion and the operation of nominal bases, the automatically generated combinations: 'Unfactored Imposed [SLS]' etc. are replaced with 'SLS imposed [SLS]' and 'Unfactored imposed []' etc. *QP R7.40-07*
- **8.** The text output, *Check Wizard*, and *Design Wizard* reports are modified to accommodate longer combination titles. *QP R7.40-08*
- **9.** The *Load cases* form has additional *Move up/Move down* options on it's popup menu. These may be used to change the order of the load cases. *QP R7.40-09*
- **10.** The *Load combinations* form has additional *Move up/Move down* options on it's popup menu. These may be used to change the order of the combinations. *QP R7.40-10*
- 11. The default list of loadcases when File|New is selected now matches that of the Load case and Combinations wizard. QP R7.40-11
- **12.** A minor glitch is fixed Quikport's *Load cases and combinations* wizard shared the storage for it's settings with Quikframe. They are now kept separately. *QP R7.40-12*
- **13.** A minor glitch in the creation of wind load cases at the end of Input Wizard is repaired. The decision to include loadcases was based on BS5950 input rather than EN 1991. Fixed. *QP R7.40-13*
- **14.** The *Lookup factors* form in the *Load case and Combinations* wizard now includes factors for the national annex of Singapore. *QP R7.40-14*
- **15.** *Input wizard* now has a new form for the frame's bay centres offering greater flexibility. The old method is still available by clicking the 'Auto' button. *QP R7.40-15 QP R7.40-16*
- **16.** The right click popup menus in *Input Wizard* now have a red cross graphic next to the 'Delete' item. *OP R7.40-17*
- 17. A minor glitch in the *Export Wizard* is fixed. The form for the bay centre could produce an input validation error even when 'Cancel' was pressed. *QP R7.40-18*
- **18.** Changes in *Input Wizard* to ensure that an older release is not trying to read a more modern data file. *QP R7.40-19*

- 19. In the table of wind coefficients for EN 1991-1-4 the values of 'b' and 'h' used to calculate 'c_s' in Table NA.3 were swapped for some zones (wind direction 90 degrees). Note this would not affect the final result since the values are only used to lookup 'c_s' and the index into the table for 'c_s' is 'b+h'. *QP R7.40-20*
- 20. There was a problem in the handling of the Eurocode national annexes. The programs stored the currently selected national annex in the registry in a location used by all of the Quiksoft programs. However the actual data files were stored in a separate location for each member of the Quiksoft family. e.g. '....\Quiksoft\Quikframe\UK.na3'. This was illogical. Each program now stores it current national annex separately. This makes it possible to be working in QuikEC3 using say BOX values and at the same time having Quikjoint open using 'UK' values. The default national annex is now 'UK'. *QS-16-01-15-01*
- **21.** The form displayed when the 'Help|Check for latest updates' menu option is selected is modified. The form now directs the user to upgrade instructions on the revised Quiksoft website. QS-19-03-15-01
- 22. A minor change to the way the tutorial videos are displayed. QS-30-03-15-01
- 23. This release includes a National Annex for Singapore (SS). Please note that there are still differences for Singapore in Quikport's wind loading generated by *Input Wizard*. For Singapore you should use the 'Options' button and override the 'peak velocity pressure qp(z). There are also slight differences in the pressure coefficients, these should be reviewed and modified if necessary. *QS-23-04-15-01*
- 24. Qukport's help and manual are updated.

23-07-15

This release is prompted by the final publication of: *JR Henderson, SCI P399: Design of steel portal frame buildings to Eurocode 3. The Steel Construction Institute, 2015.* (P399). We always seize on these excellent publications as an opportunity to carry out further detailed checking of our software.

However based on our experience over many years with portal frame design we are unable to agree with one of the recommendations in this guide, namely the application of the Merchant Rankine approach to second order affects.

P399 states that only horizontal loads need be amplified. This is contrary to the BS5950 approach, also see *NCCI SN033a-EN-EU* and the very detailed paper: *Lim et. al. Structural Engineer November 2005*. It is the case that *EN 1993-1-1* states horizontal only but we feel that this was drafted with multi-storey in mind where there is no significant compressive force in the beams due to vertical loading. This is not the case with portal frames where the rafter is usually the most slender member in axial compression and the compression is due to vertical loading.

It is also the case that *Dead+Imposed+EHF* is often the critical load combination, the EHF component has virtually no affect on bending and none whatsoever at the apex. Amplifying only EHF will have virtually zero affect on the final design.

Unfortunately there is no mathematical basis to Merchant Rankine, it's more of a 'designers convenience' so neither us nor the SCI can resort to mathematic proof. But we can apply Quikport's advanced analysis and this tells us that amplifying 'EHF only' leads to under design.

Quikport therefore continues to amplify all loadings which is safe.

Designers who wish to follow P399 can turn off Quikport's in built amplification and modify the load factors in Quikport's combinations form.

Quikport release 7.46 runs under all versions of Windows from XP onwards and is supplied in a single self extracting file: QP32-746.exe. This self extracting file contains a Setup program that will automatically guide you through program installation, upgrade, removal, and registration.

Instructions for program installation, upgrade and removal are available on the Quiksoft web site: www.quiksoft.co.uk/installation-upgrade-and-removal.

The changes to Quikport are as follows:

- 1. Quikport's *Calculations options* form is extended to include options for:
 - a) Including the national annex values in the output.
 - b) Changing the method used to calculate the C1 factor for bending moment shape.

The Calculations Options form is now also available from the 'Options' menu and on the right click popup menu displayed when the results are selected. See Quikport's help for more detail. *QP R7.45-01*

- 2. The formula (BB.7) in Annex BB of EN 1993-1-1 contained an error. We spotted that it was different to BS5950, but until P399 was published we had no firm evidence that it was wrong. Since the sqrt term is generally less than unity it should not cause problems. *QP R7.45-02*
- **3.** The presentation of the formula (BB.6) in Quikport's results was missing the '-1' term. Corrected. Note that the behind the scenes calculations were correct. *OP R7.45-03*
- 4. Stability checks Eurocode Elastic stability checks The results for X_{LT} could state the buckling curve for flexural rather than lateral torsional buckling. Fixed. Note the calculations were correct, the fault was in the presentation only. $QP\ R7.45-04$
- 5. Stability checks Eurocode Quikport's implementation of the formula for L_m (BB.5) contained a fault. The value used for N_{Ed} was in kN rather than N. Fixed. Note that this release will produce slightly shorter lengths for L_m. Hopefully this will be offset by the changes in *item 1* above. *QP R7.45-05*
- **6.** Stability checks Eurocode Minor improvement in presentation of results, references to P164 supplemented with P399. *QP R7.45-06*

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7. Online help and manual updated including references to P399.

05-05-17

Quikport release 7.50 runs under all versions of Windows from XP onwards and is supplied in a single self extracting file: QP32-750.exe. This self extracting file contains a Setup program that will automatically guide you through program installation, upgrade, removal, and registration.

Instructions for program installation, upgrade and removal are available on the Quiksoft web site: www.quiksoft.co.uk/installation-upgrade-and-removal.

The changes to Quikport are as follows:

- 1. There was an error in the fire check wizard when calculating in accordance with P313. The error affected only mono-pitch multi-bay portals with staggered eaves/verge heights. Fixed. If errors of this type were to occur in the future (unlikely), Quikport now issues a message in the calculations. *QP R7.46-01*
- 2. A user report a 'Quiksoft exception number 1' when using Input Wizard. No other users have reported this and we were unable to re-create, however, the program is modified so that no matter how it is used this error should not occur. *OP R7.46-02*
- 3. An error was found affecting the force envelopes available in the printed output. It was possible that some maximum/minimum forces could be missed, this tended to affect the axial and shear envelopes more than the moment. The fault was found in Quikframe and is now also fixed in Quikport. *QP R7.46-03*
- 4. Boundary wall fire check in accordance with SCI publication: 'Single Storey Steel Framed Buildings in Fire Boundary Conditions (P313)'. The check for a mono-pitch portal omitted the calculation of the vertical reaction. Fixed.
 - The calculations now also include a summary at the end. QP R7.46-04
- 5. Boundary wall fire check P313 Quikport produced a warning when the eaves height was greater than eight metres. Guidance regarding wind loading in the fire limit state has changed. Quikport now instead produces a 'Note' with reference to the relevant clause in P313. *QP R7.46-05*
- 6. Boundary wall fire check P313 An alignment problem (accidental edit) is fixed. *QP R7.46-05*
- 7. Design Wizard The latter part of design wizard automatically adds restraints to purlins and rails. This part of Quikport stores tens of thousands of results in the computer's memory. On very rare occasions Quikport could stop and offer an explanation that the frame was 'too complex'. We have now doubled the size of the data tables, so although still possible this should be very rare. *QP R7.46-06*
- 8. Input Wizard Eurocode Wind. It is possible in the Wind options form to override the peak velocity pressure 'qp(z)' and provide some text as an explanation. Although the overridden pressure was published in the wind loading report together with the explanation, the explanation was missing in the wind coefficient report. Fixed. *QP R7.46-07*
- 9. A rare fault is fixed in Quikport's capacity checks. A customer's five span portal was entered with a valley column very slightly off plumb. The fault caused huge shear in the column and a capacity fail. Fixed. *QP R7.46-08*
- 10. Quikport now has an option to include Input Wizard's bay centres in the final results. QP R7.50-09
- 11. Quikport's 'Calculations options' form under its 'General' tab provides control over the detail of calculations produced. Its last option was 'None'. This caused confusion and concern if accidentally selected. It is therefore removed. *QP R7.50-11*
- 12. Input Wizard is modified. At the end of Input Wizard it writes out a set of frame files along the building: Gable01

Frame02

E.......02 -4-

Frame03 etc.

If the Input Wizard was re-run it would overwrite any pre-existing frame files, changes in these files would be lost. Input wizard now detects this and displays a new form asking the user if he wants to keep

the exiting files, or overwrite them. If the option to keep the files is chosen the older files are renamed as follows:

```
Gable01 - Old
Frame02 - Old
Frame03 - Old etc.

OR even:
Gable01 - Old (2)
Frame02 - Old (2)
Frame03 - Old (2) etc.
```

Quikport's Help and manual are also updated. QP R7.50-13

- 13. Input Wizard The BS5950 wind coefficients form is larger. QP R7.50-13
- 14. Input Wizard The final form is larger. QP R7.50-13
- 15. Input Wizard's final form now includes a 'View report' button where its contents can be viewed and printed. The contents of the report are also available in the final results. *QP R7.50-14*
- 16. Input Wizard Wind coefficient table There was a glitch in the form to change the internal pressure coefficients. Under some circumstances it could report bad user input. Fixed. *QP R7.50-15*
- 17. Input Wizard Wind coefficients Eurocode There was an error when using the scaling length 'e' to calculate the width of the panel covering the gable frame at the eaves. Fixed. *QP R7.50-16*
- 18. Load cases and combinations Wizard The EN1990 factors form now has a new check box. This must be checked to confirm that the designer has reviewed the factors and that they are correct. *QP R7.50-17*
- 19. There was a slight glitch in Design wizard. If a frame was sized using all UKB's, then Design wizard used with 'Try current sections' selected, and then only UB's selected in the consider sections list, the top pane in the 'Select sections' form would show the selected UKB's as failed. This was because according to Quikport's logic they were not in the list of 'passed' sections. Design Wizard now detects this and ensures that the currently selected section (and grade) is included in the list of suitable sections.
 - Some of the logic of the Design Wizard has been re-written. This has enabled us to present the forms in a more logical order. Now if the frame is not sized, the form offering to 'Try current sections' is not shown. There are other minor improvements: the help has been updated; a small glitch in the 'Design wizard Select sections' form's interaction is fixed. *QP R7.50-18*
- 22. The 'Smart select' form, displayed by right clicking on 'Combination' in the 'Results Options' form, is modified to include a third set of options. These new options cover combinations that are not selected as either ULS or SLS. Typically these will be used to set the combinations for which reactions are required. *QP R7.50-19*
- 23. Quikport's window displayed when a frame is open now displays the 'Quiksoft' logo on the left hand side of the toolbar. Clicking on this displays a form with fast access to Quikport's wizards. *QP R7.50-20*
- 24. Quikport now displays a new form on program start up similar to that above. The form gives Quick access to common options. It can be turned off by un-checking the option 'Show this form at startup' and redisplayed by clicking on the new 'Quiksoft' logo button. *QP R7.50-21*
- 25. British section table types: (UB, UC, RSJ etc.) are now presented in a more logical order. *QS-16-10-15-01*
- 26. When more than one window (portal frame) was open selecting the *Window*|Close all menu item would close all windows but fail to display the main windows tool or status bar. Fixed. QJ R7.20-05
- 27. As of April 18, 2012 all Quiksoft executable downloads have been digitally signed using Microsoft Authenticode. This ensures that the downloaded files originate from us and have not been altered; reducing operating system and browser warnings associated with downloads.
 - As of May 27, 2016 new software releases will be signed using a more advanced system. The name on the certificate is now 'Quiksoft Limited'. Downloads should have immediate good reputation using Mi-

- crosoft's Explorer and Edge browser, but others may take a little time before downloads are easily accepted without warnings. *QS-27-05-16-03*
- 28. Modern project handling When selecting a project folder, if the folder does not exist, Quikport now asks the engineer if he wants to create it. *QS-15-02-17-01 QP R7.50-10*
- 29. Quikport's 'Headers details' form used to select among other things the first sheet number for the printed output now performs additional data validation. *QS-17-02-17-02 QP R7.50-12*
- 30. The form that controls the contents of the headers in the printed output (Options|Results headers) now includes a new check box 'Show file path in margin'. *QS-04-04-17-03*
- 31. Quikport's on-line help and PDF manual are updated.

10-10-17

Quikport release 7.51 runs under all versions of Windows from XP onwards and is supplied in a single self extracting file: QP32-751.exe. This self extracting file contains a Setup program that will automatically guide you through program installation, upgrade, removal, and registration.

Instructions for program installation, upgrade and removal are available on the Quiksoft web site: www.quiksoft.co.uk/installation-upgrade-and-removal.

- 1. Unfortunately release 7.50 of Quikport introduced a fault. The fault was purely cosmetic. If Quikport was run anything other than full screen and re-sized, the sizing of its toolbars was corrupted. Fixed. *OP R7.50-01*
- 2. Design Wizard stay optimisation The stay optimisation can be quite slow if frames have a large number of purlins (typically lean to rafters). Quikport now properly displays progress with member and pattern count rather than appearing to stall. *OP R7.50-03*
- 3. Again a slight fault in release 7.50. Double clicking in Windows on a frame file will open it in Quikport. However the new Introduction form introduced in release 7.50 would still be displayed. Fixed. *OP R7.50-04*
- 4. Fire check to P313 The units for OTM were stated as kN, now corrected to kN.m. *QP R7.50-05*
- 5. The calculations for wind velocity quoted the wrong units for 'Distance inside town terrain'. *OP R7.50-06*
- 6. A very rare problem is fixed. If using Windows, Quikport's project folder was renamed or deleted, then selecting results could cause Quikport to hang with the message: 'Cannot create file <ProjectFolder>\QPInputWizard.rtf'. Fixed. *QP R7.50-07*
- 7. New project handling The form where the project folder and program data folder are selected now validates that the folders have write and create file permissions. *QS-20-09-17-01*
- 8. Project handling On rare occasions users were experiencing problems when their selected project folder became invalid. It can become invalid after changes using Windows file explorer (renaming, moving, or changes to folder access permissions). The project folder and program data folder are now checked just after program start-up. If the Quiksoft programs detect a problem, they display a warning with a 'Help' button that will give information and a remedy. *QS-10-10-17-01*

05-08-19

Quikport release 8.00 runs under all versions of Windows from XP onwards and is supplied in a single self-extracting file: QP32-800.exe. This self-extracting file contains a Setup program that will automatically guide you through program installation, upgrade, removal, and registration.

Instructions for program installation, upgrade and removal are available on the Quiksoft web site: www.quiksoft.co.uk/installation-upgrade-and-removal.

The changes to Quikport are as follows:

- 1. Quikport's 'Design Wizard Select sections' form, now has an 'Edit limits' button. This displays a form where the deflection limits can be changed without leaving design wizard. *QP R7.51-02*
- 2. The form that accepts single numerical input for construction lines, deflection limits, etc, is slightly modified so that the top right cancel option operates correctly. *QP R7.51-03*
- 3. Edits to wind coefficient reports for Eurocode and BS5950 Coefficients are now input and displayed to two decimal places. *QP R7.51-04*
- 4. When exporting connection details to Quikjoint, Quikport uses a file stored in the default project folder. If for any reason Quikport was unable to write to this folder, it would display a message. Unfortunately, the message was displayed multiple times. The message is now shown just once and advises to 'Check file permissions'. Note this is an improvement of error handling, the message will not normally be displayed. *QP R7.51-06*
- 5. The text in the second 'Input Wizard' form that covers project folder selection is improved. QP R7.51-07
- 6. When a file is opened that is not in the current project, a new form is displayed asking if the user wants to change the current project folder. The new form is displayed when the Quikport data file is opened in any of these ways:
 - a) From 'File|Open' on the main form's menu.
 - b) From the 'File Open' icon on the main form.
 - c) From the 'File|Reopen' option on the main form.
 - d) From the 'Open recent frame file' option in the 'Quick start' form displayed at program start-up or when the Quiksoft logo is clicked.
 - e) When a Quikport frame file is opened with a double click from file explorer.

Note that the new form will not be displayed in any of these circumstances:

- a) When the program is still using 'old style' file handling.
- b) When there is already a Quikport file open.
- c) When the file to be opened is on the desktop.
- d) When the file does not have a containing folder.
- e) When the containing file can't be written to.

Online Help is updated. *QP R7.51-09*

- 7. A rare problem is fixed. (Found whilst working on Quikframe). Prior to analysis Quikport performs checks on the frame's geometry. If crossing members are found Quikport will offer to show the affected members. However, if these items were immediately dragged using the mouse it was possible that loads, haunches, purlins and restraints could become unattached to their members. Fixed. There was also a slight glitch to the routine that checks for overlapping members. Fixed. *QP R7.51-10*
- 8. The routine that detects joints that fall along the length of a member is re-coded. Under very rare circumstances it could fail. *QP R7.51-11, QF R8.61-05*
- 9. When working on Quikframe's troubleshoot option we found a potential problem in Quikport whereby loads could become attached to the wrong member. We were not able to find an instance of this happening in Quikport, but the potential was there. Fixed. *QP R7.51-12*

- 10. Slight changes to bring Quikport into line with Quikframe. OP R7.51-13, OF R8.61-09, OF R9.01-01
- 11. The property forms for distributed and point loads now include additional validation on the intensity of the loads. *QP R7.51-14*
- 12. The forms that accept numerical input used to input distances, angles, load intensities and deflection limits are improved and now include validation for correct input as well as a 'Cancel' button. *QP R7.51-15*
- 13. The two forms that accepted load intensities for trapezoidal loads are now replaced with a single form. The forms that accept load intensities for uniform and trapezoidal loads now include the option to apply the load to either the purlins or member. *QP R7.51-15*
- 14. DXF Output The form that requested a file name is replaced with the standard Windows file save form. The file can now be saved in any location with any name. *QS-05-06-19-01*, *QP R7.51-15*
- 15. File handling routines are modified to handle file names containing '.'. Over the years file naming convention has changed. It was originally assumed that file names would only contain a single '.' and that all characters after would be the file extension. However, this seems no longer to be the case. That said we would still advise that as far as possible this be avoided. It's likely that it could cause problems when transferring files to other programs and operating systems. We have found here that servers that use Unix derivatives (NAS drives, Android, Apache etc.) have differing standards. We have also tested using a folder path containing '.' mimicking an IP address with no problems detected. *OP R7.51-16, OS-05-06-19-02*
- 16. Right clicking on the Axial, Shear, Bending, Capacity, Stability or Deflection diagrams displays a popup menu. The popup menu now includes a 'Copy for Quikjoint' option to provide for more convenient access. *QP R7.51-17*
- 17. The popup menus now make more use of icons (cosmetic). QP R7.51-18
- 18. It's possible to use the scroll wheel to zoom in and out. The convention now seems to be that if the wheel is rotated forward the diagram gets bigger. The Quiksoft programs are modified to conform. *QP R7.51-19, QS-05-06-19-03*
- 19. When the view the 'Geometry' tab is selected, selecting a member and right clicking, displays a pop-up menu. The popup menu now includes a 'Section group...' option. The new option opens the 'Section group' form facilitating rapid alteration of section sizes and steel grades. Help is updated. *OP R7.51-20*
- 20. Fire Wizard Slight changes to accommodate stepped portals. Quikport now correctly calculates the column height from the rafter eaves to column base distance rather than the column length. Similar changes to the older BS5950 approach. *OP R7.51-21*
- 21. The 'Results contents' form available from the 'Options' menu now has an additional drop-down list box. The engineer can now choose to either arrange the results 'By item' or 'By combination'. This will enable all results for say 'Reactions' to be grouped together in the output. Other minor improvements to output including 'End of results' page. Help updated. *QP R7.51-22*
- 22. The context sensitive help was not set correctly for the 'Hinges' form available from the button in the 'Haunches' Forms. Similar problem in the 'Create Haunch' form. Fixed. *QP R7.51-23*
- 23. The member properties form has improved data validation. *QP R7.51-24*
- 24. The base properties form is uprated to include better data validation, particularly for spring bases. *OP R7.51-25*
- 25. The haunches form now checks that the length and depth are not set to zero. OP R7.51-26
- 26. User input validation for deflection limits has been reviewed and improved. QP R7.51-27
- 27. Quikport now includes the option to use your company logo in place of your address text on the printed output. See the 'Addresses' option available on the 'File' menu, and via right clicking on the results preview page and selecting 'Results headers' on the popup menu. The help is also updated. *QP R7.51-28*
- 28. The customer address default is now Quiksoft Limited with contact details. QS-19-07-18-01
- 29. The introduction form displayed for trial copies now includes a link to the 'Buy now' page of the Quiksoft website. The link is displayed when the remaining free trial days falls below seven. The same form now

- includes better advice (hint text) on how to copy and paste the serial number to email. The popup menu is also improved. *QS-19-11-18-01*
- 30. Prior to registering as a fully licenced copy the Quiksoft programs display an introduction form. The forms main function is to accept codes to unlock the software. The program details now include the program release number. *QS-12-18-01*
- 31. Quikport now automatically checks the Quiksoft website to see if updates are available on start-up. The check is made every other time the software is started. If updates are available a form is displayed with access to a direct download link and full instructions. There is also a Snooze option. *QS-07-03-19-01*
- 32. The existing form 'Check for latest updates' available from the 'Help' menu, is uprated to give access to the same direct download link and instructions. The form also provides an option to turn the automatic check off. *QS-07-03-19-01*
- 33. Dual monitor systems When running on the second monitor Quikport could display some forms on the primary monitor. Fixed. *QP R7.51-01, QS-05-04-19-01, QS-08-04-19-01*
- 34. Additional code is added to detect when a form is displayed 'off screen' and move it back to a visible area. Because the Quiksoft programs 'remember' some window and form positions, they could have previously been displayed on a second monitor that has been disconnected. This caused the form to be displayed 'off screen' leading customers (and us!) to believe the program had become unresponsive. On the occasions this was reported it involved the scrolling calculations form in Quikjoint. Fixed. *QS-08-04-19-01*
- 35. Quikport's manual is updated.

20-01-2021

Quikport release 8.01 runs under all versions of Windows from XP onwards and is supplied in a single self-extracting file: QP32-801.exe. This self-extracting file contains a Setup program that will automatically guide you through program installation, upgrade, removal, and registration.

Instructions for program installation, upgrade and removal are available on the Quiksoft web site: www.quiksoft.co.uk/installation-upgrade-and-removal.

- 1. A rare bug dure to numerical comparison is fixed. On very rare occasions Quikport was miscalculating nominal base stiffnesses. In both cases that we saw this was due to the column being very slightly out of plumb. Fixed. *QP R8.00-01*
- 2. When viewing Axial, Shear, bending and deflection diagrams, selecting a member and right clicking will display a popup menu where member or frame results can be selected. These forms are now slightly larger, and their operation is improved. *QF R9.10-17 QF R8.00-02*
- 3. Eurocode Checks to elastic lengths between restraints with intermediate restraints to the tension flange. The calculations for C_n correctly (we believe) use the elastic modulus, but the printed output used the heading 'f_{v Wpl,v}' corrected to 'f_{v Wel,v}'. *OF R8.00-03*
- 4. Load cases and combinations Wizard The EN1990 Factors form now defaults to the UK National annex rather than the last used and displays an additional warning that the values may not be appropriate for your region or design. *QF R8.00-04*
- 5. Quikport's diagram displayed on the 'True' view tab also available in the printed output, now shows the restraints and purlin positions more clearly. *QF R8.00-05*

10-03-2023

Quikport release 9.00 runs under all versions of Windows from XP onwards including 10 and 11 and is supplied in a single self-extracting file: QP32-900.exe. This self-extracting file contains a Setup program that will automatically guide you through program installation, upgrade, removal, and registration.

Instructions for program installation, upgrade and removal are available on the Quiksoft web site: www.quiksoft.co.uk/installation-upgrade-and-removal.

- 1. Quikport is now supplied with an updated 'Advance.sec' sections file with additional sections from British Steel. *QS-08-11-22-02*
- 2. Quikport contacts the Quiksoft website to check for new releases and provides links and help text to facilitate easy upgrades. The text now advises contacting support@sigma-x.net. QS-08-11-22-03
- 3. Quikport will now print in colour. The default remains as black and white, but this can be changed using the 'Paper setup' option on the 'File' menu. Note that the option is not available until a file is open. *OS-29-11-22-04*
- 4. Quikport's default colours are changed. We have added colour printing and some colours, namely yellow, are too light on a white paper background. If you are choosing to print in colour, visit the 'Colour and styles' menu item on the 'Options' menu and select 'Return to defaults'. This will select the new default Quiksoft colour scheme. *QP R9.00-01*
- 5. Quikframe, Quikport and Quikjoint have tutorial videos available on their 'Help' menu. These have been in the programs since 2004, but for some reason they stopped working under Windows 11. The videos have been re-compressed in a newer format. *QS-18-01-23-05*
- 6. Modifications to the 'Setup' program to fix a Windows 10/11 fault in the operation of 'Add or Remove programs'. *QS-18-01-23-06*
- 7. Corresponding modifications to the Quiksoft 'Uninstall' program. The 'Uninstall' program now simply shows a message advising that program removal be carried out via the original setup program. *OS-18-01-23-07*
- 8. The form displayed when 'About' is selected on the 'Help' menu is improved (cosmetic). QS-20-01-23-08
- 9. The setup (installation) program is improved. Installations on drives other than 'C:' are simplified. *QS-08-02-23-01*
- 10. Further changes to the Setup program -'XP' is removed from the program startup icons. OS-27-02-23-02
- 11. There are changes to the diagrams for the printed output: The stability diagram now correctly shows purlins, restraints, and haunches; better text alignment for the titles. *QP R9.00-02*
- 12. Input wizard Eurocode Wind pressure: Unfortunately, when 'Orography significant' was selected there was an error in the calculation of the wind pressure. Fixed. *QP R9.00-03*
- 13. Input wizard Eurocode Wind pressure: Where orography is significant, the Wind speed form is modified to provide additional guidance. *QP R9.00-03*
- 14. Steel design to Eurocode Clause 6.33 and 6.34 Where axial is low it can be ignored, and we use N_{Rd} rather than the reduced value. Unfortunately, Quikport was reporting N_{Ed}. Now corrected to N_{Rd}. Note that the calculations were correct. *QP R9.00-04*
- 15. The bases are now displayed in the Axial, Shear, Bending, Capacity, Stability and Deflection diagrams. The corresponding 'Show' popup (available by clicking bottom left on the status bar) now includes the option to display base names. This should simplify interpreting reactions on screen. *QP R9.00-05*
- 16. Quikport's help system and manual are updated to cover colour printing and changes to Input Wizard's Wind pressure form.