

MasterSeries 2019

What's New?

General

- + Redesigned MasterSeries front screen, providing easier access to modules
- + New file selector for accessing existing files and creating new files
- + Documentation updates for main tutorials and manuals
- + Network Softlock licencing option, providing much greater flexibility for licencing, including the ability to temporarily *check-out* a licence from your licence pool

MasterFrame Pro

- + Draw any shape line or patch load using graphical CAD drawing tools
- + Varying line and patch loads
- + Graphically manipulate loads using handles
- + Copy, move, rotate load functions
- + Loads linked to levels with optional offset
- + Repeat loads at selected levels
- + Anchor loads to structure so they move as structure moves
- + Old style line/patch loads are migrated to a new system

General

- + The default composite metal deck type can now be defined in the level defaults, rather than a single global default
- + Updated interface for wind loading

MasterFrame

- + Member section property editing interface icons updates
- + Member loading editing interface icons updated

MasterFrame FE

- + Updated editing interface

MasterKey Connections

General

- + Graphical interaction with all joints, allowing dimensions and graphical items to be selected

Bracing Connections

- + Six new bracing connection configurations for vertical and horizontal bracing
- + Full design checked are carried out to BS EN 1993
- + Brace connections can be created with a hollow, flat, angle and double-angle sections
- + End connection styles for hollow sections include T-plates, L-plates and embedded plates
- + Ability to auto-size gussets with pre-set styles – alternatively, you can also manually size the gusset
- + Bracing can be offset in the horizontal and vertical directions from a setting out point
- + Additional offset member forces are calculated with an option to relate bracing connections to a flexible endplate beam to column connection type, accounting for additional shear forces
- + Option to set the gusset plate to one member only e.g. attached to beam, or column (or both)

Column to Beam Moment Connection

- + Handles column to beam connection, with a column above and/or below the beam
- + Full stiffening and haunch options as per beam to column moment connection
- + Fully welded connection option

Eave and Apex Connection

- + Previously the design methodology was limited to the green book assumption that the moment capacity of the connection was derived assuming a tension, compression force couple. The eaves and apex connections now handle cases of net axial compression (no tension force) and net tension (no compression force), producing more accurate design
- + Fully welded eaves connection design option

MasterKey Pile Caps

- + Integrated design with MasterFrame
- + All loading cases imported with option to detect most critical case
- + Pile caps included selected orientation with offset are drawn in MasterFrame

MasterKey Masonry

- + Bed joint reinforcement library contains 120 products
- + Design for Murfor® Compact range of Bekaert multi-stranded bed joint reinforcement on a roll
- + European National Annex implementation for 9 additional countries: Ireland, Belgium, Netherlands, Germany, Italy, Spain, France, Sweden and Denmark

MasterKey Concrete

- + EC2 Beam Design – option for optimised Cot Theta value to be calculated, whereas previously the user-applied value was used for all sections (default of the most conservative 2.5). This can considerably enhance shear capacity and reduce the Ft shear drag value
- + EC2 Beam Design – Check for Ft shear drag now included in the text design output. This was previously checked exclusively at the graphical stage.