Recent Modifications

17/08/2026

Id	Version	Program	Type	Notes
MAS-6110	2025.20.11	Calc Wizard	Bug	The Calculation Wizard was always returning a verdict of OK.
MAS-6105	2025.20.11	MasterKey Masonry	Bug	In EuroCode MasterKey Masonry Design an out of plane laterally loaded wall vertical bending moment capacity can be enhanced by the wall axial stress σd. Mrd = fxd1,app x Z where fxd1,app = fxd1 +σd, with σd being subject to a limit. In EN1996-1-1:2005+A1:2012 6.3.1(3) the A1 amendment changed the limit from 0.2fd to 0.15Nrd. Whilst the 0.15 was included in MasterKey Masonry, the change from fd to Nrd was not. Nrd =Φm x fd x t and is thus the wall mid buckling capacity. Since σd is a stress it was interpreted that this should be Nrd/t, or in other terms Φm x fd. Hence the Φm eccentricity slenderness reduction to the limit of σd introduced in EN1996-1-1:2005 amendment A1 was not included. In some cases this may result in a lower value of fxd1,app and a more onerous design.
MAS-6104	2025.20.11	MasterPort	Bug	Connections design group data not retained in the simplified interface.
MAS-6103	2025.19.14	MasterKey Connections	Bug	Clicking bolt row dimensions unnecessarily activated the add/remove bolt dropdown in the property grid.
MAS-6100	2025.19.03	MasterKey Concrete	Improvement	EN1992-1-1:2004 Column design, k1 and k2 end flexibility rotational restraint derivation. k1 and K2 are determined from the analysis output of nodal rotations and member end moments as per cl 5.8.3.2 (3). Where end nodal rotations were in the same sense as the global column rotation, this did not align with the expected deflected pattern of figure 5.7 g). This resulted in the larger end theta rotations which included the global rotations and smaller end moments, creating larger k1 and k2 value and hence larger lo effective lengths. This resulted in conservative design. The software now adjusts the nodal rotations theta relative to the global column rotations when this condition is detected.
MAS-6096	2025.18.12	Dynamics	Improvement	Calculate effective X,Y and Z direction mobilised mass in mode shape for each node with export to excel.
MAS-6088	2025.18.12	MasterKey Masonry	Bug	Non-yield line analysis (PowerPad version) 1. Issue with drawing of partial line loads in panel with openings 2. With point or partial line loads and two openings, the first opening was ignored for load take down.
MAS-6087	2025.18.01	MasterFrame	Bug	In nodal loading, deleting a nodal load brief could lead to briefs being associated with the wrong nodes.

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MAS-6084	2025.17.21	MasterBeam Composite	Improvement	SMD Composite Metal Deck Profiles updated and added - R51+ (S350)*, R51+ (S450), TR60+ (S350)*, TR60+ (S450), TR80+ (S350)*, TR80+ (S450), TR220 (350). Note * denotes that these decks update the existing library SMD 350 grade profiles with modified geometry. The other 450 grades and TR220 are new entries.
MAS-6083	2025.17.21	MasterKey Connections	Improvement	Prying force can have a beneficial effect on plate bending design as it creates double curvature bending in the simplified T-Stub model, however prying also introduces additional forces in the bolts. In base plates EN 1993-1-8:2004 6.2.6.11(2) states that prying forces may be ignored when determining the thickness of a column base plate, resulting in conservative plate design and typically a thicker plate. It has been common UK practice to also ignore the prying force in the bolts as typically the plate is stiff, the bolts are longer and can elongate - resulting in no contact between the plate and the grout/concrete at the tip of the plate where the reaction prying force is generated. Where the plate is thinner, the bolt lever arm 'm' is larger, the bolt diameter larger; the assumption of no prying may not always hold true. This update introduces the additional prying checks under certain conditions. For a detailed description see link below. See notes for more details.
MAS-6081	2025.17.21	MasterFrame	Bug	The new Node Id's introduced in version 2025.14.19 provide a stable Id number reference to nodes for reporting and outputting purposed. It was detected that these Node Ids were being lost after an 'Undo' or 'Preview Changes', in that they reverted to the current node member system.
MAS-6076	2025.17.07	MasterKey Masonry	Critical Bug	In multi-storey walls (walls with internal horizontal lateral restraint lines) and where Partial Line Loads or Point Loads are applied at 2nd floor level and above, any eccentricity value input in these loads may have been ignored in certain cases. We recommend walls with this configuration are rechecked with this updated version.
MAS-6074	2025.17.07	MasterKey Masonry	Bug	Change to how load eccentricities are dealt with for the part of the line load or point load on lintels. The eccentricity of this portion of was was previously taken as zero in its contribution to the mid height distribution as it was considered to be nullified by the lintel. It is now conservatively taken as the full input eccentricity value at top of wall.
MAS-6066	2025.17.07	MasterBeam Composite	Improvement	Multideck 50, 60 & 80 V3 (450 yield strength) added to metal deck open library.
MAS-6065	2025.15.31	MasterKey Steel	Bug	Class 4 Slender Flat LTB design was using full section depth in AD 391 Lambda_LT calculation, when the reduced effective class 3 depth should have been used, leading to a more conservative design outcome.
MAS-6063	2025.15.31	MasterBeam Composite	Improvement	Effect of web opening stiffeners on Vierendeel Tee section axial capacity - unexpected reduction in capacity on adding stiffeners. See notes for more details.
MAS-6061	2025.15.31	MasterFrame	Improvement	In Frame Statistics, the frame info sidebar is now visible by default.

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MAS-6058	2025.15.12	MasterKey Retaining Walls	Bug	Where wall stem to base 'L' bar are used and the horizontal leg of the wall inner rebar does not have space to project to the left side of the base, the horizontal leg of the bar is flipped to point to the right. In the case the placement of the 'L' bar on the section drawing of the RC detailing DXF/DWG export was vertically incorrect. This did not affect the design or scheduling.
MAS-6057	2025.15.12	MasterCAD	Bug	Issue importing IFC4 files.
MAS-6059	2025.15.05	MasterKey Steel	Improvement	In EC3 Elastic Critical Load Factor αcr assessment, for models with FE concrete shear walls the HEd/VEd forces components used in equation 5.2 included only the 1d column and bracing line elements, and did not included the components of force in the FE shear walls. Since the shear walls typically attract a higher proportion of a levels total horizontal load than vertical load, this generally resulted in lower value of αcr, which was conservative.
MAS-6056	2025.15.05	MasterKey Connections	Bug	Eaves beam to column connection at end 2 (higher node number) of a curved beam member was not getting the correct forces in frame linked design.
MAS-6055	2025.15.05	MasterKey Wind	Improvement	10,000 year wind site risk factor now supported in SCIPHYR wide site analysis engine.
MAS-6047	2025.15.05	MasterKey Connections	Bug	Fix for exporting all briefs to Word for Connections context menu.
MAS-6045	2025.15.05	MasterBeam Composite	New Feature	New metal deck input for 'Trough Top Nib Height (mm)'. Current metal deck trough height input is depth to shoulder. The existing metal deck library has been updated with this 'trough top nib height' data. Whilst this meant that the concrete flange depth 'hc' in secondary transverse beams (deck spanning perp. to beam) would possibly have been over estimated, this is most unlikely to occur due to partial shear connection reducing the concrete effective depth by the partial shear connection ratio. Inclusion of the 'trough top nib height' generally has a favourable effect, since reducing the concrete compression flange capacity can increase the partial shear connection ratio, meaning the minimum degree of shear connection required can more easily be achieved.
MAS-6046	2025.14.23	MasterCAD	Improvement	Uni-directional import of curved beam from Tekla Structures to MasterSeries
MAS-6043	2025.14.19	MasterKey PileCap	New Feature	Option in the 'Design Method' tab to to preform rigorous calculation of crack width in accordance with EN 1992-1-1: 2004 7.3.3.
MAS-6040	2025.14.19	MasterFrame FE	New Feature	Global FE Meshing Pptions - Slab Column\Wall Stiff Region option split into separate options for columns and walls
MAS-6034	2025.13.29	MasterFrame	New Feature	MasterFrame Envelope Cases graphical output, in max/min envelope values labelled, new option to annotate associated load case.

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MAS-6033	2025.13.29	MasterKey Connections	Bug	In a Base Plate with three columns of symmetrical bolts with full uplift, the forces used in the various patterns concrete bolt pull-out checks to EN 1992-4:2018 7.2.1.4 were incorrectly distributed in some patterns. The pull-out for all bolts pattern was correct.
MAS-6032	2025.13.29	MasterKey Connections	Bug	Base Plate Concrete Edge Shear to EN 1992-4:2018 7.2.2.5 (1) places a limitation the applicability of the check when the edge distance in the direction of shear is greater than max(10*hef, 60*bolt dia). This was observed by MasterKey Connections. However a second condition of this clause is that edge shear is checked when when this distance is exceeded and the bolts are acting as 'Shear with lever arm'. This second condition was not observed leading to some circumstances where concrete edge shear was not checked. When both parts of 7.2.2.5 (1) are not met, for clarity the design output now includes a note to report that concrete edge shear is not checked.
MAS-6031	2025.13.29	MasterFrame	Improvement	MF Pro Patch and Line load discretization resolution control. These loads are discretized for distribution to members through the area loading panel span with a default resolution of 0.1m. In some cases where the patch or line load transverses several panels and members, this discretization could result in unexpected variances in the distribution, albeit the total load would be correct. Control is now given in the 'MasterSeries Preferences (Defaults)> MasterFrame tab' area over the resolution of discretization and can be set to a lower limit of 0.025m.
MAS-6030	2025.13.29	MasterKey Steel	Improvement	In accordance with EN 1993-1-1:2005 5.2.2. (7) where minor axis local bow and geometric non-linear (GNL) effects are included in the analysis, the χz flexural axial buckling reduction factor is taken as 1.0 in assessment of the Axial + Moment interaction formula in 6.62. χt (axial torsional buckling) and where relevant χtf (axial torsional-flexural buckling) is used in place of χz in equation 6.62.
MAS-6029	2025.13.29	MasterFrame	Bug	From MasterSeries 2025 onwards, for user-defined custom Equal Angle and Channel Section steel sections in the Open Library, using the "2. Calculate Values >>" button produced an incorrect torsional constant (J). Standard steel library sections, and values calculated and stored prior to version 2025, were not affected unless they were recalculated and saved using MasterSeries 2025. In affected cases, the torsional constant (J) was significantly underestimated and, in many instances, could be negative.
MAS-6028	2025.13.29	General	Bug	Clicking "Include All Sections" from the Steel Sections database caused a crash.
MAS-6026	2025.13.29	MasterFrame	New Feature	In graphical analysis output for envelope cases, option added to annotate the load case number that the max/min envelope case values are attributed to.

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MAS-6025	2025.13.29	MasterKey Masonry	Bug	In a Masonry panel with internal horizontal orientated partial width fixities from left and right that do not meet or overlap horizontally, this incorrectly created an exclusion zone for the wall vertical load take down, resulting in no vertical load checks being performed in the region between the internal horizontal fixities. This would have been evident in the vertical take down diagram with no force being displayed in this region.
MAS-6016	2025.13.29	MasterFrame	Bug	For wind direction normal to a parapet the D zone was getting B zone value. Conservative error.
MAS-6023	2025.13.13	MasterKey Timber	Bug	When designing a flitch beam, if shear unity ratio was above 1, the design output background colour wasn't changed to a warning.
MAS-6022	2025.13.13	MasterKey Steel	Critical Bug	Incorrect application of c taper factor in calculating Mcr for elastic tapered Annex BB.3 unrestrained compression flange design segments. This is discussed in greater detail and context in the more complete design review document in point 4. Designers are advised to recheck designs where REDUCED depth tapered sections WITHOUT a mid-flange have been designed to En 1993-1-1 (Eurocode 3). See notes for more details.
MAS-6021	2025.13.13	MasterKey Steel	Improvement	Haunched and Tapered Steel Member Design Review. See notes for more details.
MAS-6020	2025.13.13	MasterFrame	Bug	Possible incorrect plastic analysis instability when combined with a P-Delta analysis
MAS-6019	2025.13.13	MasterKey Connections	Improvement	Additional dimensional checks on minimum plate thickness required for countersunk bolts
MAS-6018	2025.13.13	MasterKey Connections	Bug	Crash in connections after scan for failures since version 2025.12.10 update.
MAS-6013	2025.11.04	MasterKey Concrete	Bug	In the calculation of the punching shear perimeters for edge and corner zones, where the dimension of the pad differed in the X and Z directions, these perimeter length may have been incorrectly determined, producing negative lengths in extreme cases. In all cases where this issue was examined the error produced a conversative design.
MAS-6011	2025.10.27	MasterFrame	Bug	The wrong cursor could be displayed when carrying out operations in MasterFrame.