# MasterSeries 2021 What's New?

# MasterFrame Pro, MasterFrame FE & MasterFrame Dynamic

+ Up to 10x faster analysis of larger models

### MasterKey FE Slab Design - EC2

- + Slab deflections with non-linear analysis, including cracking, creep, shrinkage, load event sequencing and more
- + Deflection check lines with multiple deflection check criteria, including differential deflection between two lines
- + Crack width calculations

#### **BIM**

- + Tekla Structures uni-directional and bi-directional links, with revision control for bi-directional links
- + IFC 2x3 Structural Analysis View MVD import, IFC4 Support
- + IFC I section haunches exported

# **Steel Design**

+ Weld design for plated I-sections

#### Concrete

- + Concrete design groups in MasterFrame for items with common design parameters
- + Options to make rebar and pad sizes common across a group
- + Design options dialog has been revised to cater for a suite of design groups

## **Retaining Walls**

- + Highways design to Eurocode Road traffic loading to BS EN1991-3 + UK NA, with PD 6694-1:2001
- + Design walls adjacent to roads or bridge abutments
- + Eurocode ultiamte soil bearing calculations to Annex D, with service load case checks
- + Span/Depth ratio checks

# Composite

- + Implementation of Hilti Shear Connection Library
- + Weld design for plated I-sections

## **PowerPad**

- + Increase from 100 to 200 members in analysis and design
- + Analysis for a single FE surface up to 200m² allow for a typical large domestic floor slab