MasterSeries 2021
PowerPad Plus & 500 Features

Note: This is not an exhaustive list but is designed to give you an Idea of the power behind PowerPad.

Analysis

- 2-D Frames- 200 or 500 member
- 3-D Frames- 200 or 500 member
- Full Area Loading
- Full Wind Analysis in GB & Ireland
- Semi-automatic Wind Analysis outside GB & Ireland
- Portals - Single-bay, Multi-bay, Mono Pitch, North Light & Wind Portals
- Automatic Plastic Portal analysis
- Multi-material frames in Steel, Concrete, Timber, User Defined
- Edit, Add to and even simplify the steel section database
- Mixed rigid/pinned and partially pinned analysis
- Edit Section Grades for historical design
- FEA Raft Slab analysis up to 200m2
- FEA Flat, Piled & Transfer Slabs up to 200m2
- Compound Steel Section Analysis
- Rigid & Pinned Multistory frames
- Built-in library of trusses
- Gable framing analysis
- General mixed frames
- Continuous beams
- Ground Beams
- Wind post design
- Bracing Analysis
- Notional loads
- Sub-frames
- Grillages
- Towers
- P-delta
- Beams
- Built in BS, Euro, American, South African & Chinese steel section databases
- Editable Eurocode National Application Documents for different countries
- Automatically generate loading cases for Eurocode and British Standard
- Fully upgradeable

Steel Design

- Beam design including torsion design
- Connection design - see connections
- Columns in simple construction
- Double beam design
- Compound columns
- Compound beams

- Struts & Ties
- Appendix BB
- Appendix G
- Haunched member Design
- Welded & Rolled Sections
- Weld design
- Eurocode 3 design
- BS 5950 design
- SABS design
- Switch & compare results to BS or EuroCode
- Fully upgradeable

C

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- Beam to Column - Eaves Connection (bolted or welded)
- Beam to Beam - Apex Connection
- Column Splice with external and/or internal cover plates
- Beam Splice with external and/or internal cover plates
- Column Splice with Cap & Base Plate
- Hollow Section End-Plated Splice
- Slab Base Plate
- Stiffened Base Plate
- CHS Base Plate on PCD bolts
- Column over/under beam (bolted or welded)
- Beam to Column Full Depth Flexible End-Plate
- Beam to Beam - End-Plated Splice Connection
- Beam to Column - Multi-Storey Connection
- Beam to Column Flexible End-Plate
- Beam to Beam Flexible End-Plate
- Beam to Column Angle Cleat
- Beam to Column Fin-Plate
- Beam to Beam Angle Cleat
- Beam to Beam Fin-Plate
- Vertical Bracing to columns with plates, Angles, PFC & CHS
- Vertical Bracing to beams with plates, Angles, PFC & CHS
- Horizontal Bracing to beams with plates, Angles, PFC & CHS
- Switch & compare results to BS or EuroCode
- Grade 4.4, 4.6, 4.6, 6.6, 8.8, 10.9, 12.9 Bolts
- Morris, K and Diagonal Stiffener
- HSFG Pt1 + Pt Bolts
- Extended End Plates
- Countersunk Bolts
- EuroCode 3 Design
- BS 5950 Design
- TCB Bolts
- Fully upgradeable

Concrete Design

- Beams with torsion design
- Short & Slender Bi-Axial Columns
- 1-way Slab design
- 2-way Slab design using tables
- Strip footing design
- Bi-Axial eccentric Pad footing design
- Twin pile Pilecaps
- Retaining walls - See Retaining wall
- Reinforcement schedules to BS 8666, BS 4466 & SABS 8
- Printer & DXF output of finished details
- Interactive curtailment of reinforcement
- 4 layers of steel Top & Bottom in Beams
- Numerous curtailment arrangements
- 7 link zones & Links in pairs
- EuroCode 2 Design
- SABS 0100 Design
- BS 8110 Design
- Switch & compare results to BS or EuroCode
- Fully upgradeable

Composite Beams

- Secondary beams
- Primary beams with 1 or 2 secondary beams
- Mixed Primary & secondary beams
- Auto Design for Non-composite if better
- Profile Deck Library
- BS 5950 Pt 3 Design
- EuroCode 4 Design
- Vibration checks
- Solid Slabs
- Edge Beams
- ASB Beams
- Fully upgradeable

Masonry

- Cavity & single skin walls
- Columns
- vertical and lateral loading
- Piers varying leaf fixity on all sides
- Upto 2 Openings using sub-panel method
- Eurocode 6
- BS 5628
- Fully Upgradeable

Retaining Walls

- Cantilever retaining wall
- RC retaining wall design
- Mass concrete retaining wall
- Plain Masonry Wall design
- Inclined face retaining wall
- Stepped retaining wall
- Gabion retaining wall
- Concrete Design to BS 8110, EuroCode 2 or SANS 0100
- Masonry Design to BS 5628, EuroCode 6 or IS 325
- Analysis to CP 2, BS 8002 or EuroCode 7
- Fully upgradeable

Timber

- Timber beam design
- Timber Rafter design
- Timber joist design
- Gluelam beams
- Column design
- Flitch beam design to BS5268
- Design to EuroCode 5
- Design to BS 5268
- Fully Upgradeable

Office Tools

- Create your own library of template Calcs
- Export results to Microsoft Word
- Export results to Microsoft Excel