

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

Analysis

- 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
 - Portals - Single-bay, Multi-bay, Mono Pitch, North Light & Wind Portals
 - 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
 - Compound Steel Section Analysis
 - 2-D Frames- 100 or 500 member
 - 3-D Frames- 100 or 500 member
 - Rigid & Pinned Multistory frames
 - Built-in library of trusses
 - Gable framing analysis
 - General mixed frames
 - Continuous beams
 - Wind post design
 - Bracing Analysis
 - Notional loads
 - Sub-frames
 - Wind posts
 - Grillages
 - Towers
 - P-delta
 - Beams
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- Fully upgradeable

Steel Design

- Switch & compare results to BS or EuroCode
 - 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
 - Eurocode 3 design
 - BS 5950 design
 - SABS design
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- Fully upgradeable

Connection Design

- Column Splice with external and/or internal cover plates
- Beam Splice with external and/or internal cover plates
- Beam to Column Full Depth Flexible End-Plate
- Beam to Beam - End-Plated Splice Connection
- Switch & compare results to BS or EuroCode
- 4.4, 4.6, 4.6, 6.6, 8.8, 10.9, 12.9 Bolts
- Beam to Column - Multi-Storey Connection
- Column Splice with Cap & Base Plate
- Beam to Column Flexible End-Plate
- Beam to Column - Eaves Connection
- Morris, K and Diagonal Stiffener
- Beam to Beam Flexible End-Plate

- Beam to Beam - Apex Connection
 - Hollow Section Plated Splice
 - CHS Base Plate on PCD bolts
 - Beam to Column Angle Cleat
 - Beam to Column Fin-Plate
 - Beam to Beam Angle Cleat
 - Beam to Beam Fin-Plate
 - Stiffened Base Plate
 - HSFG Pt1 + Pt Bolts
 - Extended End Plates
 - Countersunk Bolts
 - EuroCode 3 Design
 - Slab Base Plate
 - BS 5950 Design
 - TCB Bolts
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- Fully upgradeable

Concrete Design

- 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
- Bi-Axial eccentric Pad footing design
- Retaining walls - See Retaining wall
- Numerous curtailment arrangements
- Short & Slender Bi-Axial Columns
- 2-way Slab design using tables
- Beams with torsion design
- Strip footing design
- 1-way slab design

- EuroCode 2 Design
- SABS 0100 Design
- Links in pairs
- BS 8110 Design
- 7 link zones

- Fully upgradeable

Composite Beams

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

- Fully upgradeable

Masonry

- Piers varying leaf fixity on all sides
 - vertical and lateral loading
 - Cavity & single skin walls
 - Eurocode 6
 - Columns
 - BS 5628
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- Fully Upgradeable

Retaining Walls

- 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
 - Inclined face retaining wall
 - Mass concrete retaining wall
 - Plain Masonry Wall design
 - Cantilever retaining wall
 - RC retaining wall design
 - Stepped retaining wall
 - Gabion retaining wall
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- Fully upgradeable

Timber

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

Office Tools

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