ADAPT-PT/RC® 2017 All-in-One Software for Beams and Slabs
The world’s most popular software for the design of post-tensioned and mild reinforced projects

ADAPT-PT/RC 2017 is a highly efficient, reliable, fast, and easy-to-use software for the analysis, design, and investigation of any concrete project. It supports concrete beams, pan joist, one-way and two-way slabs systems - for conventionally reinforced (RC) and/or post-tensioned (PT) projects. It is based on the Equivalent Frame Method of analysis and leads the user through a simple to follow, step-by-step modeling and design process. Its unmatched ability to speedily produce optimized designs and quantity take-offs in minutes has made it the tool of choice for design professionals seeking to complete their concrete projects profitably and consistently on time.

Designers of post-tensioned beam and slab parking structures, in particular, find ADAPT-PT/RC to be the best suited solution for their type of projects. And, ADAPT-PT/RC is widely deployed as a training tool for engineers new to the design of post-tensioning.

Applications and Project Types:
- Concrete slab systems (buildings)
  - One-way slabs and two-way flat plates
  - Waffle, pan joist, and skip joist systems
- Beams and beam frames (parking structures)
- Bonded (grouted) and unbonded post-tensioning
- New design or existing capacity investigation

How PT/RC Saves you Time & Money:
- Allows you to use one software for your PT & RC projects
- Eliminates need to pay two annual maintenance fees
- Improves productivity by only needing to learn one system
- Supports interchangeable PT and RC models with one click

Key Modeling Capabilities:
- 3D structural view reduces modeling errors
- Models design strips with regular or irregular geometry including non-prismatic spans
- Supports drop caps, drop panels and transverse beams
- Multiple tendon profiles with customizable shape functions
- Tendons anchored and stressed at any location
- Supports any user-defined configuration of flexural and shear base reinforcement

Key Analysis Features:
- Simple or Equivalent Frame analysis options
- Design for crack width (Euro code)
- Cracked deflection calculation
- Automatically combines gravity and lateral loads
- Calculates secondary (hyperstatic) actions in PT mode
- Investigation of existing slabs and beams
- Integrated friction, long-term loss, and elongation calculation
- Automated live load skipping

Supported Design Codes:
- British-BS8110 (1997)
- Australian-AS3600 (2001)
- Indian IS1343 (2004 reprint)
- Hong Kong CoP (2007)
- Chinese GB 50010 (2002)
- Brazilian NBR 6118 (2014)
- Singapore Annex to EC2
Advanced Interactive PT Design:
- Automates optimized design based on user- and code-specified design parameters
- Interactive design review dashboard clearly shows all relevant metrics of each design iteration
- Instantly shows effect of changes in tendon force and profile
- Performs code checks for reinforcement and post-tensioning
- Calculated reinforcement checked against base rebar when present
- Includes moment redistribution option
- Integrated punching shear design for studs or stirrups
- One-way shear design for beams and one-way slabs

New Features & Improvements in 2017:
- Canadian CSA A23.3-14 Code added
- Mixed RC and PT systems are now supported in the software, and spans without PT will be designed for RC code req's
- Option to define deflection limit as design criteria in calculating required tendon force and profile
- Design Summary sheet improved to show max tensile & compression stress values for service load combinations
- Report generator now includes Microsoft Excel .xls option
- Colorized shear reinforcement diagram in Design Summary to show where concrete shear capacity is exceeded by demand
- For CSA code, drop panels and caps are always included in calculation of flexural resistance, L/6 threshold not req'd
- Bug fixes, maintenance updates, and more!

Slab Sizing:
- Slab thickness recommendation feature for one-way and two-way RC and PT slabs

Available Reports:
- Concise tabular and graphical reports
- Summary report for reinforcement, P/T, force/width, precompression, and more
- Graphical and condensed tabular results for deflections
- Material quantities
- DXF export of reinforcement (flexural and shear) in elevation
- DXF export of tendon CGS profile(s) or support heights
- XLS Rebar Schedules with customizable curvature definitions and other exported report options

Licensing Options:
- PT/RC for post-tensioned and mild reinforced projects
- RC for mild reinforced projects only

Consolidate your workflow and licenses to save time and money with PT/RC – The Industry Standard for cast-in-place Concrete Beam and Slab Design