PRODUCT PAGE:

Adapt - New

For over two decades, engineers worldwide have relied on ADAPT's industry leading software solutions to achieve the highest levels of design productivity. Since 1981, ADAPT has been the most popular and recognized software for the design of post-tensioned concrete. Now, ADAPT is as widely used for the design of RC, PT and Hybrid floor systems and foundations.

Builder Platform - New

ADAPT-Builder is the 3D modeling, analysis and design platform for ADAPT Floor-Pro, ADAPT Edge, Modeler, MAT and SOG that can be used together with ADAPT-PT and RC.

Builder- Platform - Key Points

Generates Rebar and PT shop drawings

Add in ADAPT -Edge
Info currently on ADAPT-MAT

Adapt 2 links

http://www.youtube.com/user/ADAPTSupport

Selection guide for Adapt Builder:

Elevated building structures, e.g., concrete beam frames and floor systems What structural concrete system do you use?

- **Conventionally reinforced**
  - You need **ADAPT-RC** for beam frame and one-way slab (Parking Structure) designs
  - Column supported floor system
    - Is the structure very complex?
      - **If No**: you need **ADAPT-RC**
      - **If Yes**: you need **ADAPT-Floor Pro**
      - Hint: you can save time by importing existing CAD files of your project into **ADAPT-Modeler** and quickly generating your input data for **ADAPT-RC**

- **Post-tensioned**
  - You need **ADAPT-PT** for beam frame and one-way slab (Parking Structure) designs
  - Column supported floor system
    - Is the structure very complex?
      - **If No**: you need **ADAPT-PT**
      - **If Yes**: Are you an experienced designer and can estimate the optimum tendon layout and post-tensioning values?
        - **No**: you need **ADAPT-PT**
        - **Yes**: you need **ADAPT-Floor Pro**
        - Hint: you can save time by importing existing CAD files of your project into **ADAPT-Modeler** and quickly generating your input data for **ADAPT-PT**.
        - Hint: if you are unsure of the amount of post-tensioning needed and are using **ADAPT-Floor Pro**, you can export your design strip data into **ADAPT-PT** and have the program give you recommended values.
        - Hint: many leading engineering firms rely on **ADAPT-PT** as their primary production tool for their day-to-day post-tensioned designs and use **ADAPT-Floor Pro** to fine-tune their complex projects.

Ground supported structures, e.g., mat and slab-on-ground foundations What type of structure does the foundation support?

- Structure with three or more stories
  - You need **ADAPT-MAT** whether it is designed with or without post-tensioning
- Low-height building including residential and light industrial
  - Is the ground supported structure post-tensioned?
    - Yes: you need **ADAPT-SOG**
    - No: you need **ADAPT-MAT**

Evaluation and retrofit of existing elevated concrete structures
What is the predominant structural concrete system of the existing structure?

- Conventionally reinforced column supported floor system
  - You need **ADAPT-RC** to evaluate the capacity
- Post-tensioned column supported floor system
  - Are the critical support locations of the floor system somewhat regular?
    - No: you need **ADAPT-PT**
    - Yes: you need **ADAPT-Floor Pro**

Bridges If your project meets the following requirements, you need **ADAPT-ABI**.

- Segmentally constructed
- Time-dependent factors such as construction sequence, creep, shrinkage and relaxation are critical
- You need to model and design temporary supporting structures

Recommendations for engineers new to post-tensioning. How do you acquire best practice details for post-tensioning?

If you are new to the design of post-tensioned structures and want to acquire best practice details for the application of post-tensioning, you need **ADAPT-Details**. Hundreds of engineering firms have already relied on this set of approximately 100 commonly used details for column supported floor systems, beams, parking structures, and ground supported slabs, together with the associated notes to be placed on your structural drawings. **ADAPT-Details** include a hard copy and AutoCAD version of each typical detail.

Where can you find design guides?

If you need to familiarize yourself with the theoretical underpinnings and practical applications of post-tensioning, you will benefit from our **ADAPT-Book** on "Design Fundamentals of Post- Tensioned Concrete Floors" and the rich library of ADAPT Design Literature posted on our

website.

How can you receive expert guidance on your first post-tensioned project?

In addition to providing our customers with the best concrete and post-tensioning design software solutions, ADAPT has a long-standing reputation of providing our customers with design guidance and expertise on their projects. You can take advantage of our step-by-step guidance and extensive design experience by either engaging us on a project-by-project basis or by subscribing to **ADAPT-Extended Support**.

You need to quickly calculate tendon elongations for stressing.

If you need to quickly calculate tendon elongations for stressing, you need **ADAPT-FELT**. **ADAPT-FELT** can also give you stress losses in prestressing tendons due to long-term effects of creep, shrinkage and relaxation of prestressing steel.

You require a simple and reliable tool to design and analyze post-tensioned sections. If you need to calculate the design moment capacity of a post-tensioned section or design a post-tensioned section to resist a given moment, you need **ADAPT-PULT**.

Recommendations for existing ADAPT-PT and ADAPT-RC users. If you are an **ADAPT-PT** or **ADAPT-RC** user and want to streamline the generation of your design strip input data, you can benefit from **ADAPT-Modeler**.

ADAPT software descriptions. **ADAPT-PT for post-tensioned beams and slabs of common structures**

Select ADAPT-PT if you need to post-tension the beams and slabs of common structures such as office buildings, residential

buildings, and parking structures. ADAPT-PT determines the necessary amount and profile of post-tensioning as well as any supplemental non-prestressed reinforcement. Based on the Equivalent Frame Method, ADAPT-PT is the industry standard software for engineers who specialize in post-tensioning design. ADAPT-RC for designing beams and floors of conventional structures Choose ADAPT-RC if you are designing the beams and floors of conventional (non-prestressed) building structures. Based on the Equivalent Frame Method, ADAPT-RC provides a complete design of new floor systems, and also determines floor capacity for existing reinforced concrete buildings. When developing a new design, simply input the geometry and loading. To discover the capacity of what you already have, input the geometry and the available reinforcement.

ADAPT-Floor Pro for analyzing post-tensioned buildings and floor systems

ADAPT-Floor Pro is the software you need to investigate an existing post-tensioned building or check the design of a post-tensioned floor system. Based on the Finite Element Method, ADAPT-Floor Pro delivers a comprehensive floor (with or without beams) solution. When using the solution's finite element program, simply input the location, number, and profile of the post-tensioning tendons. The program will then determine if your data meets code requirements. ADAPT-Floor Pro also rapidly verifies the adequacy of assumed values, making it an invaluable tool for experienced engineers who can accurately estimate appropriate tendon layout and force (position and amount of prestressing). ADAPT-Floor Pro is a standalone solution for investigative work and an ideal complement to ADAPT-PT. ADAPT-Modeler for generating 3D structural models Enhance the value of the Builder Platform suite (ADAPT-PT, ADAPT-RC, or ADAPT-Floor Pro) with ADAPT-Modeler. This solution, which is included in ADAPT-Floor Pro, ADAPT-SOG, and ADAPT-MAT, generates 3D structural models through its own drafting capabilities or by converting existing floor system drawings. ADAPT-Modeler automatically generates information such as span length, tributaries, design strips, and loading allocation. This solution minimizes errors and significantly improves the productivity of design engineers. ADAPT-ABI for complex

prestressing and post-tensioning design ADAPT-ABI is essential for any serious prestressing or post-tensioning designer. Select ADAPT-ABI for expedient and rigorous solutions to complex single- or multi-story frames with tendons of varied profiles and stresses or other irregularities. A particularly notable feature of ADAPT-ABI is its ability to accurately account for time-dependent parameters of creep, shrinkage, prestressing relaxation, and concrete aging. ADAPT-ABI also allows you to simulate the step-by-step construction of your building frame. ADAPT-FELT for preparing installation drawings of post-tensioned structures Select ADAPT-FELT to prepare or check installation (shop) drawings for post-tensioned structures. This program provides the elongation of tendons at stressing, as well as stresses needed for performing checks against permissible code values. ADAPT-FELT also determines immediate and long-term (after losses) average tendon force, used by many design engineers for structural drawings. A basic version of ADAPT-FELT is included in ADAPT-PT. Upgrading to ADAPT-FELT enables ADAPT-PT users to perform friction and long-term stress loss analyses independent of ADAPT-PT runs. ADAPT-PULT for determining capacity of pre-stressed sections ADAPT-PULT quickly provides the capacity of a prestressed section (pre- or post-tensioned). If you wish to design a given demand moment for a section with a known amount of prestressing, ADAPT-PULT also determines any required additional reinforcement. ADAPT-PULT works for a cross-section of the member you design.