

ADAPT-MAT® Foundation Design Software

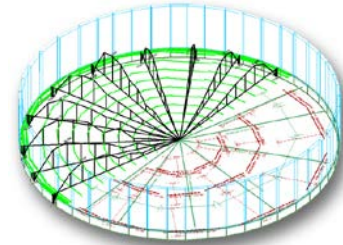
The industry's most flexible and powerful foundation modeling and design tool.

ADAPT-MAT is the most comprehensive three-dimensional (3D) Finite Element Analysis and Design tool for Conventionally Reinforced, Post-Tensioned, and/or steel fiber reinforced shallow foundation systems including mat foundations or spread footings, and pier caps, with or without grade beams. ADAPT-MAT offers unprecedented flexibility to model any geometry or loading condition, making it the most versatile foundation design software in the industry. Using ADAPT-Edge together with MAT, Engineers can model and analyze a multi-level concrete building with seamless integration of building loads into the foundation. Or, import a model from ETABS® and quickly size and design foundations for loads from the stored solution.

Accelerate your model generation process by importing DWG or DXF files or simply link to Revit Structure®. All program-generated reinforcement in the foundation slab/s are intelligent and fully editable reinforcement bars, giving you ultimate control to optimize the layout and prepare your structural drawings. Where applicable, under horizontal loading or applied moments, the program accounts for separation of the foundation from the soil. Add Dramix® steel fibers for slabs on ground or traditional foundation systems to increase capacity and efficiency.

Applications:

- Mat foundations for steel or concrete buildings
- Pile supported foundations
- Spread footings, combined footings, strip footings
- Grade beams
- Tower foundations (transmission or wind turbine)
- Tank foundations
- Industrial (machinery foundations)
- Slabs on Ground with Dramix® steel fibers, seamless floors,



Key Modeling Capabilities:

- Represents 3D multi-level model of foundation and structural elements above and below slab, as well as full concrete building model, leading to more accurate stiffness model
- Mild-reinforced or post-tensioned concrete
- Handles any geometry or loading condition (gravity & lateral)
- Automated load takedown for gravity & lateral loads with Edge
- Include any combination of piles or soil support in same model
- Model compression and/or tension soil properties
- Supports any user-defined configuration of base reinforcing
- Import and easily convert DWG and DXF files into 3D model
- Bi-directional integration with Revit Structure
- Imports geometry and loads from CSI's ETABS 2015

Supported Design Codes:

- ACI-318 (1999, 2005, 2008, 2011, & 2014)
- IBC (2006, 2009, 2012, & 2015)
- British-BS8110 (1997)
- Canadian-A23.3 (1994, 2004, & 2014)
- Australian-AS3600 (2001, 2009)
- Indian IS1343 (2004 reprint)
- European EC2 (2004)
- Hong Kong CoP (2007, 2013)
- Chinese GB 50010 (2002)
- Brazilian NBR 6118 (2014)
- Singapore Annex to EC2

Key Design Features:

- Performs code check for reinforcement and post-tensioning
- Generates all required reinforcement and its disposition in slab
- Calculated reinforcement checked against base rebar
- Integrated punching shear analysis and design
- Clearly shows locations where stress due to PT is exceeded
- User can easily modify all generated reinforcement

