



## ADAPT-MAT® Foundation Design Software

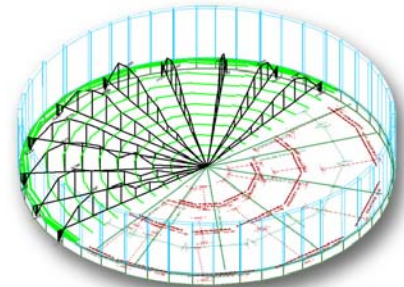
*The industry's most flexible and powerful foundation modeling and design tool.*

ADAPT-MAT is the most comprehensive three-dimensional (3D) Finite Element (FEM) Analysis and Design tool for Conventionally Reinforced or Post-Tensioned mat foundations or spread footings, with or without grade beams. Using ADAPT's intelligent structural modeling components, it offers unprecedented flexibility to model any geometry or loading condition, making it the most versatile foundation design software in the industry.

Accelerate your model generation process by importing DWG or DXF files or simply link to Revit Structure®. Once modeled, accurately analyze your foundation using ADAPT's automated, adaptive mesh technology. To complete the design process, ADAPT-MAT determines the location, amount and length of all the reinforcement required to satisfy code provisions. All reinforcement is placed in the slab as 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 the foundation from the soil.

### Applications:

- Mat foundations for steel or concrete buildings
- Pile supported foundations
- Spread footings
- Grade beams
- Tower foundations (transmission or wind turbine)
- Tank foundations
- Industrial (machinery foundations)



### Key Modeling Capabilities:

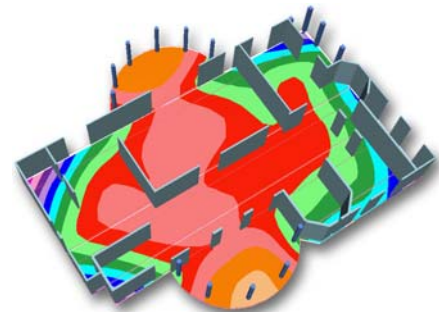
- Represents 3D model of foundation and structural elements above and below slab, leading to more accurate stiffness model
- Mild-reinforced or post-tensioned concrete
- Handles any geometry or loading condition (gravity & lateral)
- Include any combination of pile or soil support in same model
- Model 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

### Supported Design Codes:

- ACI-318 (1999, 2005 & 2008)
- IBC (International Building Code) 2006
- British-BS8110 (1997)
- Canadian-A23.3 (1994 & 2004)
- Australian-AS3600 (2001)
- Brazilian-NBR6118 (2003)
- Indian IS456 (2005 reprint)
- European EC2 (2004)

### 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



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