

# ADAPT-Advanced Dynamic Rebar Designer: DRD®

## *Structural Concrete Design and Investigation*

The Advanced Dynamic Rebar Designer, or DRD, module extends the capabilities of ADAPT-Builder 2010 software by giving structural engineers full interactive access to the graphical slab and beam reinforcement in their models, allowing them to define or adjust orientation, bar size, spacing, and other parameters of mild rebar reinforcing at any location. In addition to the ability to specify a top and/or bottom rebar mesh, Advanced DRD lets the user specify rebar such as typical corner bars for beams, rebar above supports, or at any other location. The Advanced DRD enables engineers to accurately investigate existing structural capacity of slabs, foundations, and floor systems with the ability to define precise rebar as shown on structural documents or shop drawings, with output showing deficient rebar, where applicable.

### Intelligent Rebar Design:

- Achieve maximum rebar layout flexibility with fully editable rebar designs using the DRD
- Engineer has full control to optimize and manipulate rebar designs automatically generated in ADAPT-Builder
- Gives the designer full control over Rebar layout to optimize design



### Flexible Rebar Modeling:

- Manipulate program generated rebar or create user-defined reinforcement
  - Uniform distribution of rebar or wire mesh
  - Individual bars
  - Distributed bars
- Unique Rebar length, bar size, rotation, cover and spacing can be defined precisely
- User-defined or edited rebar can be saved so design iterations maintain rebar placement as intended.
- Used with ADAPT-Floor Pro and MAT for floor or foundation system design/investigation

### Investigation Mode:

- User can easily verify capacity of existing structures for reuse or renovation projects, or quickly determine locations and amount of deficient reinforcing where applicable.

### Creation of Structural Drawings:

- Used in conjunction with the basic DRD, rebar drawings can easily be exported to
  - DWG/DXF files
  - REVIT® Structure model
- Using DRD, the ADAPT-Builder model can be a direct reflection of physical structure to be constructed, satisfying BIM requirements to provide an electronic model of completed design
- Eliminate the need for redlines by doing all rebar edits in the analysis model

### Automated Quantity Reporting:

- Advanced DRD provides the user with automated report generation of P/T and RC quantities

