RCDC® FE
Design, Detailing, Drawing, and Reporting for Slabs and Foundations

RCDC FE is a structural design, detailing, and drawing solution for reinforced concrete slabs and foundations. RCDC FE integrates with various finite-element-based analysis products and delivers a seamlessly integrated design and documentation process. RCDC FE can be applied to flat slabs and plates, rafts, mats, pile rafts, and combined foundations.

Expedite Concrete Design
With RCDC FE, you can design a variety of concrete elements in an automated, interactive workflow. You will gain full control of your designs by setting a collection of carefully considered parameters, from design strip width and stations, mesh coverage, minimum and maximum reinforcing ratios, mesh, and extra bar spacings, bar sizes, shear bar or link preferences, anchorage settings, and many more. Designs can be driven by arrangements created by the application or prescribed by the designer. Check for code compliance using envelope FEM plate design forces or automatically create load combinations. RCDC FE also supports rebar curtailment.

Using RCDC FE you can design non-orthogonal shaped buildings. The application allows you to control the design and detailing direction of each region independently. The user can perform different checks including crack width, long-term deflection, thermal cracking, and punching as per code requirements.

Produce Comprehensive Quantity Takeoffs
With your designs complete, it is easy to gain critical insight into concrete design alternatives with comprehensive material takeoffs and cost estimation organized by material, size, and shape. Additionally, you can gain a better understanding of the overall construction by obtaining formwork area and cost estimates up front.

Design to International Standards
You can extend the reach of your business practice and take advantage of global design opportunities by using international standards and specifications. With RCDC FE it’s easy to design and produce drawings according to global design standards in compliance with publications from India (IS) and United States (ACI).

Required reinforcement contour view

Produce Concrete Drawings and Schedules
The main requirement from the design process is the production of project documents. With RCDC FE you can produce comprehensive reinforcing drawings including automated reinforcing labels, dimensions, and notes. Reinforcing placement drawings can also be produced, including sections, plans, and details from the 3D model. You can customize all drawings to adhere to your organization’s standards. All documents update automatically to changes made in the 3D model. With the design checks complete, you can quickly produce detailed design drawings for in-plan detailing and cross section details.
Need a more comprehensive structural portfolio of trusted analysis and design applications? Check out Structural Enterprise. Design in any infrastructure sector, with multiple materials, using any analysis method that is appropriate for the job. Learn more by visiting, www.bentley.com/StructuralEnterprise