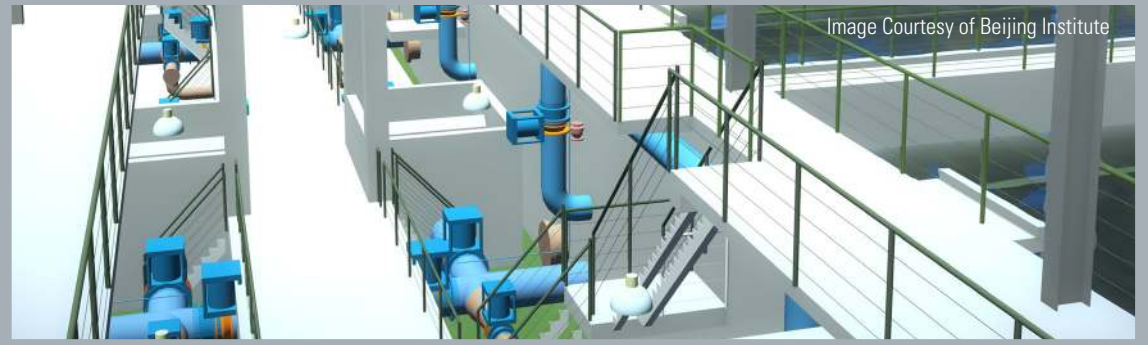Image Courtesy of Beijing Institute

ProConcrete CONNECT Edition
Model Anything, Detail Everything

ProConcrete allows structural engineers, designers, detailers, and fabricators to model parametric reinforced concrete objects of any shape, with any combination of reinforcing. Easily create concrete structures for a variety of industries such as building, plant, civil, and bridges. ProConcrete helps you reduce documentation production time and eliminate errors and design flaws.

It allows users to quickly create accurate 3D models, placement drawings, fabrication details, bar bending schedules, concrete quantity, and material reports with automatic updates to reflect model changes. As part of ProStructures, which includes the capabilities of ProConcrete and ProSteel applications, you can increase your productivity and profitability.

The CONNECT Edition

The SELECT® CONNECT Edition includes SELECT CONNECT *services*, new Azure-based services that provide comprehensive **learning, mobility,** and **collaboration** benefits to every Bentley application subscriber. *Adaptive Learning Services* helps users master use of Bentley applications through CONNECT Advisor, a new in-application service that provides contextual and personalized learning. *Personal Mobility Services* provides unlimited access to Bentley apps, ensuring users have access to the right project information when and where they need it. *ProjectWise® Connection Services* allow users to securely share application and project information, to manage and resolve issues, and to create, send, and receive transmittals, submittals, and RFIs.

Create Accurate Models with Powerful 3D Parametric Reinforced Concrete Modeling
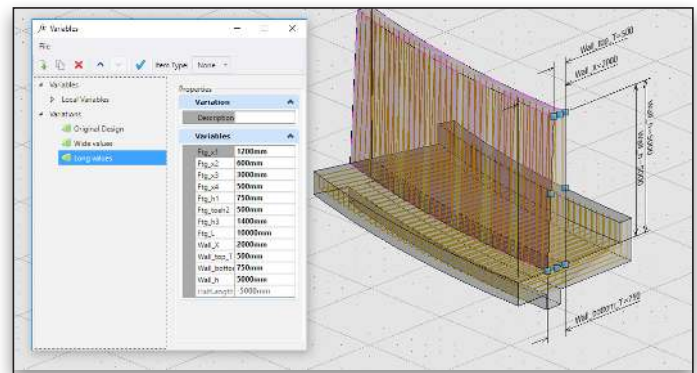
ProConcrete allows you to model any reinforced concrete shape with advanced parametric capabilities.

Using intuitive reinforced concrete modeling commands, you can easily model industry standard structural members, such as beams, columns, slabs, walls, and foundations, as well as complex reinforced concrete shapes including curves, sloping, or non-orthogonal shapes. Added steel reinforcement is attached to concrete objects and updates automatically as the concrete shape changes.

Communicate Design with High-quality Documentation

ProConcrete drawings, bills of materials, and bar bending schedules are produced directly from the 3D model.

Plans, sections, and details based on user defined drawing styles can be created from

ProConcrete delivers a feature called faced-based rebar modeling, allowing users to add 3D steel reinforcing bars that are parametric to concrete faces. This enables changes to the concrete faces to automatically correct the rebar.

any view direction and are dynamically updated following changes to the model. Bar-bending schedules and material takeoffs are easy to extract from the 3D model and are highly customizable to conform with any country or company standard.

This substantially reduces the time to produce documentation and virtually eliminates errors and design flaws.

Re-use Structural Data with Interoperability

Information modeling process is based on exchanging data among project participants to assure best quality and faster delivery.

ProConcrete allows for seamless collaboration and exchange of information with other disciplines including architectural, plant and process, HVAC, and services. Reinforcing concrete models from other solutions like AECOsim Building Designer, OpenBridge Modeler, and MicroStation® is made easy by enabling reinforcement modeling in models attached as references. Collaboration with engineers who use third-party solutions like Autodesk Revit or Tekla Structures is enabled through industry standard formats, including IFC (Industry Foundation Class).

Reinforcement models can then be transferred digitally to rebar manufacturers for fabrication and rebar placers for construction, which allows users to manage their day-to-day work with digital data and 3D models, vastly improving efficiency.

ProConcrete CONNECT Edition At-A-Glance

Parametric Reinforced Concrete Modeling

- Support for multiple national and international codes
- Use standard parametric and easily modified reinforced concrete objects like beams, columns, slabs, footings, and walls with their respective reinforcement
- Intuitive modification capabilities allow you to model openings and adjust reinforcement. Specific opening reinforcement capabilities enable quick additional reinforcement modeling
- Model rebar of any shape and complexity with user reinforcement capabilities
- Face based rebar modeling updates user reinforcement when concrete shape changes by constraining reinforcement to concrete faces and edges
- Templates and Styles – Recorded settings for sharing and maintaining standards in all the dialog boxes
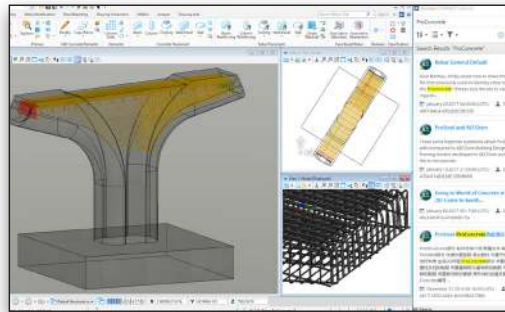
Documentation

- Quickly extract fabrication, placing, and general arrangement drawings
- Automatically update drawings based on changes to the 3D model
- Customize drawing output based on user-defined detail styles and preferences
- Generate bar bending schedules and bills of material (BOM) in single or batch process
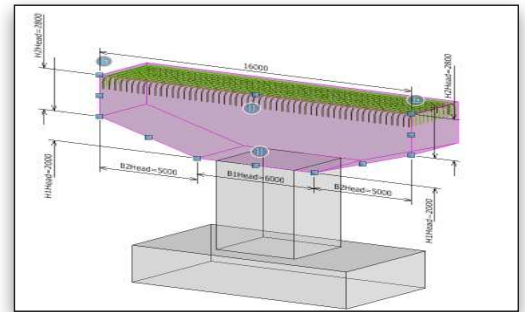
Interoperability

- Provides integrated capabilities, minimizes duplication among various software platforms, and easily investigates alternative designs
- Reinforce existing concrete models from applications like AECOsim Building Designer, OpenBridge, and MicroStation
- Easily collaborate with other disciplines by sharing and referencing project information
- Output in many file formats such as IFC, ISM, iModels, and 3D PDF
- Interfaces to enterprise resource planning (ERP) systems

Integrate Modeling and Documentation Workflows

- Support for ProjectWise Managed Workspaces
- Share personal files including iModels and 3D PDFs directly from your desktop
- Review project details and status, and gain visibility into project performance
- Access personalized learning, communities, and project information
- Coordinate work and share information with real-time project visibility

CONNECT Advisor has been integrated into ProConcrete as a unified interface to various Bentley content.

ProConcrete's functional components enable you to easily create reinforced components like parametric bridge piers and foundations.

Bentley®
Advancing Infrastructure