

ConStruct™ – Conceptual Selection Process



This web-enabled application is an easy-to-use tool that electronically captures all segments of the conceptual selection process that

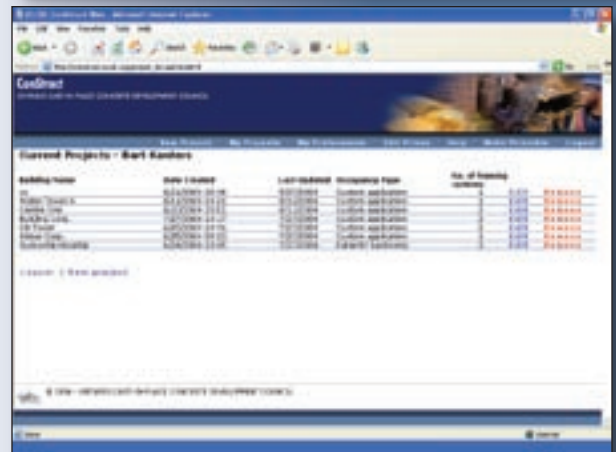
owners and designers must consider when initiating new building projects. Using it can quickly help you become familiar with this proven step-by-step process for the selection of the optimum building structural system.

The program was developed for decision makers who want an easy yet complete method of data gathering and evaluation, to ensure that all pertinent criteria is properly considered. This project represents collaboration between the Ontario Cast-In-Place Concrete Development Council (OCCDC) and the Concrete Reinforcing Steel Institute (CRSI), and is applicable to building projects in Canada.

Structural system selection is often based upon perception or past personal experience without a process for evaluating the advantages of new systems or materials. The conceptual selection process provides an orderly way to review pertinent criteria, plus develop quantity and cost factors, which will help you in selecting the most appropriate structural system.

The **ConStruct™** (short for “concrete construction”) software program allows you to quickly conduct preliminary estimates of the reinforced concrete structural framing system costs for new buildings during the initial planning stage. Detailed preliminary design calculations are based upon the following six reinforced concrete framing options:

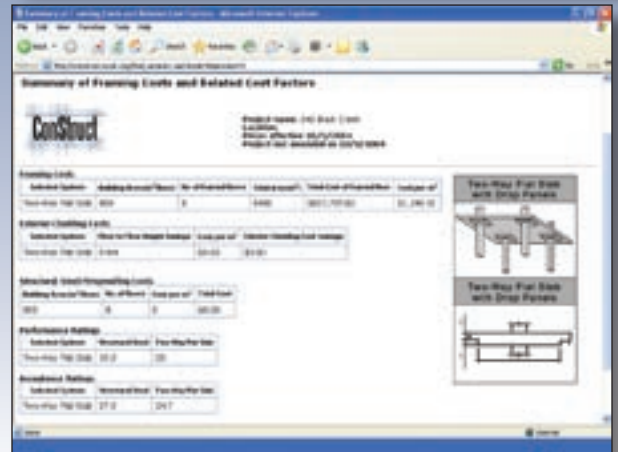
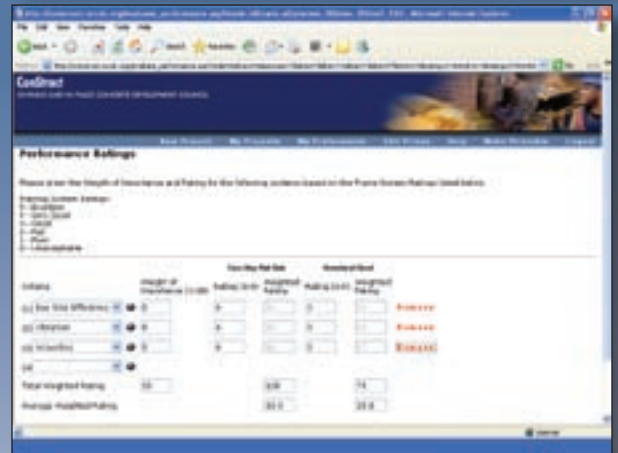
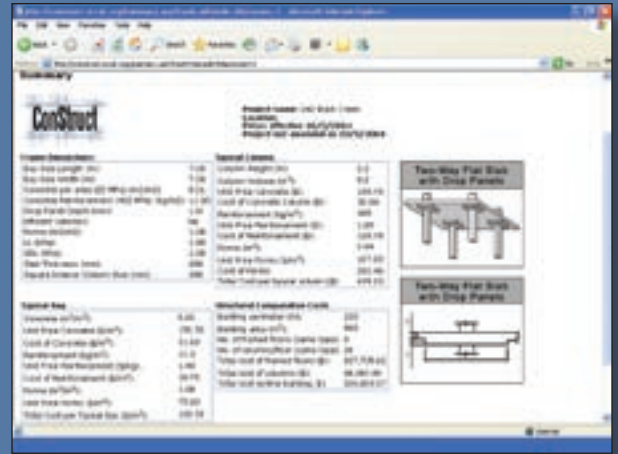
- Two-Way Flat Plate
- Two-Way Flat Slab with Drop Panels
- One-Way Beam and Slab
- One-Way Joist Slab
- One-Way Wide Module Joist Slab
- Two-Way Joist Slab (Waffle)



Each framing system has been designed based upon four typical live loads (1.9 kPa, 2.4 kPa, 2.9 kPa & 4.8 kPa) and a superimposed dead load of 1.0 kPa. The program is based upon the requirements of CSA A23.3, the Ontario Building Code and the National Building Code.

The **ConStruct™** software has been developed as an interactive web application. Individual user projects are stored for up to one year, although users are given a copy of their projects before they are deleted. So of the advantages and features of this software include:

- Projects are created using your individual account which only you have access to
- There is no software to install or maintain on your computer. The program is entirely web based
- Unit costs for the various construction materials are user specific. While the program starts with default values the user can update the values as appropriate and this information is retained for all future projects
- Project information is saved for future review or editing
- Detailed cost estimates can be printed or electronically pasted into other documents



For assistance in using this program, or to schedule a brief 30-minute lunch box presentation on this software tool, please contact Bart Kanters, P.Eng. of the Ready Mixed Concrete Association of Ontario (RMCAO) at 905-507-1122.



Ontario Cast-In-Place Concrete Development Council (OCCDC)
 365 Brunel Road, Unit #3
 Mississauga, Ontario, L4Z 1Z5
 Phone: 905-507-1122
 Fax: 905-890-8122
 E-mail: buildings@occdc.org
www.occdc.org