# LEAP Bridge Concrete CONNECT Edition V17



Version	v17.00.00.07
Operating Systems	Windows 8, Windows 10
Language	English

#### Before you begin, please note the following:

- Review the End-User License Agreement (or EULA) carefully during the installation of LEAP Bridge. By installing this release, you agree to the terms and conditions of the agreement. A copy of the End User License Agreement named EULA.pdf will be included in the "\LEAP Bridge Concrete\eula.pdf" folder of the product installation. By default, this location is "C:\Program Files\Bentley\LEAP Bridge Concrete."
- Before installing LEAP Bridge, be sure to fully read this document as well as the Installer Note where you can find critical information important to your installation.

This document contains the following information:

- What is New & Changed?
- Installer Notes
- Directory Structure
- Support and Services Information
- Using the Online Help

## What is New & Changed?

LEAP Bridge Concrete (LBC) CONNECT Edition V17.00.00.07 is the consolidated version of all LEAP standalone products including CONSPAN, CONBOX, RC-PIER, GEOMATH, and CONSPLICE. It incorporates Bentley CONNECT which helps you produce better designs by facilitating collaboration, interoperability, standardization and skills development. For an organization and enterprise, CONNECT provides greater insight and control over project design, deliverables and the people working on them. To learn how CONNECT will benefit you and your projects, <u>please read this (http://bit.ly/CONNECT-Overview)</u>.

Following enhancements are available in this LEAP Bridge Concrete release.

- Response spectrum analysis for seismic design
  - US LRFD code
  - Indian code
- Support new PennDOT girder types for superstructure design
  - 28 Adjacent Box Beams
  - 75 I-Girders
  - 28 Spread Box Beams
- Support installation of multiple versions
- New features for India market
  - Sloped footing
  - Sloped abutment
  - Detailed design reports

Apart from the enhancements to LEAP Bridge Concrete listed above, this release incorporates fixes for the following bugs.

- Precast/Prestressed Girder module (formerly called CONSPAN)
  - Analytical results of individual load cases were not correctly reported under the Analysis tab.
  - Value of the user input for the center of gravity of beam section was not saved in the correct format, causing unexpected change when the dialog was reopened.
  - Unable to retain user-defined settings.
  - Unable to retain the patterns of strands when the option to Ignore Haunch for Composite Section Properties was toggled.
  - Unable to read girder section information out of the library file shared on ProjectWise.
- CIP RC/PT Girder module (formerly called CONBOX)

- Incorrect version of design code was shown under Project tab for California option when an old user file was opened.
- Jacking force of the tendon saved in percentage format was unable to be correctly retained.
- Program was using unnecessary positions of truck and lane of the live load reports for US design code.
- Unable to add multiple rows of steel reinforcement, and steel reinforcement was accidentally removed when a file with multiple rows of steel reinforcement was opened.
- Substructure module (formerly called RC-PIER)
  - Unable to read from the existing component library files (\*.rcplib and \*.rp6).
  - Incorrect load factors of the permanent loads were used in Extreme Event I for AASHTO LRFD code with 2016 Interims
  - Column design was unable to proceed and the program crashed for selected files.
  - Moment capacity was calculated incorrectly in flexural design check when multiple rows of steel reinforcement were used.
  - Unable to retain any new pile sections added to the library.
  - Program crashed when a new load group was created by copying from an existing load group.
  - Strain load was not correctly shown after it was input and reopened.
  - Braking loads were incorrectly calculated when they were automatically generated together with the live loads due to two design trucks/tandems.
  - Unable to generate braking loads for a slab bridge with integral pier cap.
  - Unable to generate wind on live load (WL) for AASHTO LFD code.
  - Incorrect note was shown about the control of cracking per LRFD Art. 5.7.3.4 when the tensile stress in steel reinforcement was zero.
  - Height of traffic barrier defined in the CIP RC/PT Girder module was incorrectly read into the Substructure module.

#### **Installer Notes**

#### How to install & activate LEAP Bridge CONNECT Edition?

#### Contents:

- Installation Wizard
- Activation wizard

This section guides you through the process of installing LEAP Bridge on your computer. In order to install LEAP Bridge Concrete, please login as an Administrative user. LEAP Bridge can be installed by invoking Setup.exe. If you use Setup.exe, no other special consideration is necessary. Simply follow the instructions that follow. For details on the installation, please refer to the Installation Wizard section in this manual.

Note: LEAP Bridge Concrete requires Microsoft .NET 4.5 framework to be installed in order to operate properly.

#### Upgrading to the newer version of LEAP Bridge Concrete

Before following the Installation Wizard instructions, please note the following regarding the libraries:

- During installation, program default libraries will be added under "C:\ProgramData\Bentley\LEAP Bridge Concrete\" folder to comply with Windows standards to eliminate problems with access to users without Admin privileges.
- The installation program will not overwrite the files already existing in the library folder.
- If you have customized program libraries, you can move them to the above folder, and set the correct paths in the Library Setup dialog from within LEAP Bridge interface.

#### **Installation Wizard:**

- First log into the <u>Bentley CONNECTION Center (https://connect.bentley.com/)</u> and download the LEAP Bridge Concrete installation files for the version you have purchased.
- Once you have downloaded the LEAP Bridge Concrete installation files, locate the install folder. Run the installer file by double clicking the setup.exe icon.
- You will be greeted by the Welcome screen. Click Next> to proceed with the installation process.
- You are now presented with the End User License Agreement for this software. Please read the agreement and then click the radio button to accept the terms. You may also print a copy for your records. Click Next> to continue.
- You will be asked for an installation location. This is the directory location of the program on your computer.
- The installer now has gathered all the information needed to complete the installation. Click Install to finish the process. The wizard begins installing the program onto your computer. Once the process is complete, click Finish to exit the Wizard.
- After the installer completes its process, the program is ready for use. You can launch the program by clicking the Start button and then All Programs > Bentley > LEAP Bridge Concrete.

Note: Until you have activated a license for the program, it will remain in the demo mode and function for only 30 days past installation.

## Activating a product using the Product Activation Wizard

This is for installations which use a Bentley Server to authenticate the Bentley SELECT License used to run LEAP Bridge Concrete. In order to complete the installation, the SELECT Server Name and Site Activation Key will be required. If you do not have these, please contact Bentley technical support. Without this information, the installation will operate using a trial license valid for only 30 days.

• Install LEAP Bridge Concrete following the instructions in the Installation section.

- Locate the Bentley SELECT License Management Tool, LicenseTool.exe in the program installation folder (typically the location is c:\Program Files\Bentley\LEAP Bridge Concrete\).
- Select the installation type, then click the Next > button.
- Type in the Server Name and the Activation Key provided to you. Click the Next > button. Before accepting the entered information, you may choose to click the Test Connection button to confirm that the entries are correct.
- After the information is accepted by the system, the program then displays the summary of the Activation Parameters. Review the information and click Finish. The license security is now in place. The installation is complete and LEAP Bridge Concrete is ready for use.

Note: You may need to contact your system administrator if your organization uses a proxy server to connect to the Internet. Click the Proxy... button in the Product Activation Wizard to display a dialog for entering these connection settings.

### **Directory Structure**

The default directory of LEAP Bridge Concrete is "C:\Program Files\Bentley\LEAP Bridge Concrete \", if the user has not changed the location during installation. The tutorials are installed in the Example directory within LEAP Bridge folder. Help directory within LEAP bridge folder contains all the necessary help files for individual components. Lib folder contains the default library files for rebars, tendons, cross sections. It is recommended not to delete the default library files. Starting with v12.01.00.57, there is a change in the location of the library files. During installation, program libraries will by default be added under "C:\ProgramData\Bentley\LEAP Bridge Concrete\" folder to comply with Windows standards to eliminate problems with access to users without Admin privileges. If you have customized program libraries, you can move them to the above folder, and set the correct paths in the Library Setup dialog from within LEAP Bridge interface.

### **Support and Services Information**

FAQs, What's New/Changed and other technical information can be found on Bentley's <u>technical</u> <u>support documentation (https://www.bentley.com/en/support</u>) page.

Please log issues that you encounter in Bentley products with the <u>Service Ticket Manager</u> (<u>http://apps.bentley.com/srmanager/ProductSupport</u>).

# Using the Online Help

LEAP Bridge Concrete features a user manual available in the *.chm* format. The step by step guides to the tutorials is also provided in the .chm format. Tutorial files are located in Example directory. To access the manual and tutorial guides, select the appropriate link from the Help menu.

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