

## LEAP Bridge Concrete CONNECT Edition V18 Update 2 (October 29, 2018)

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<b>Version</b>	V18.02.00.12
<b>Operating Systems</b>	Windows 7, Windows 8, Windows 10
<b>Language</b>	English

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### 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.

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This document contains the following information:

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

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### What is New & Changed?

LEAP Bridge Concrete (LBC) CONNECT Edition v18.02.00.12 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, please read this (<http://bit.ly/CONNECT-Overview>). This release extends CONNECT features further.

### CONNECT Licensing

This product version utilizes CONNECT Licensing, which is not supported by SELECT activation key(s). [CONNECT Licensing](#)

([https://communities.bentley.com/products/licensing/w/licensing\\_wiki/37813/connect-licensing](https://communities.bentley.com/products/licensing/w/licensing_wiki/37813/connect-licensing)) features new behavior to enhance your organization's user administration and security with mandatory user sign-in via CONNECTION Client to access the application. If you are already signed in to the CONNECTION Client, you have met this prerequisite. If you have not, please refer to the [Administrator's Resource Center](https://www.bentley.com/en/perspectives-and-viewpoints/topics/campaign/bentley-user-registration) (<https://www.bentley.com/en/perspectives-and-viewpoints/topics/campaign/bentley-user-registration>) and/or contact your administrator for assistance in the registration and sign-in process. For more information about working with the Update service, visit the [Update Infrastructure SharePoint](https://bentley.sharepoint.com/sites/MSPP/_layouts/15/start.aspx#/SitePages/Update%20Infrastructure%20SharePoint.aspx) ([https://bentley.sharepoint.com/sites/MSPP/\\_layouts/15/start.aspx#/SitePages/Update%20Infrastructure.aspx](https://bentley.sharepoint.com/sites/MSPP/_layouts/15/start.aspx#/SitePages/Update%20Infrastructure.aspx)) page.

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.

Following enhancements are available in this release.

- State spec option for Nebraska  
LBC now supports the customized configurations, including the live load factor for the Strength Limit State I and the tension limit for Service Limit State III per Nebraska DOT's practice.
- Extended improvement concurrent shear/Torsion  
Finding the controlling case of the concurrent shear and torsion when the max shear is corresponding to multiple concurrent torsion or the max torsion is corresponding to multiple concurrent shear is now supported.
- Extended FLS check per LRFD 8<sup>th</sup> Edition  
Updated the load factor of the live load for the Fatigue Limit State I for all the LBC modules.
- Extended improvement of live load report  
Added the echo of user's input into the detailed live load report to improve the user's friendliness. Added a label differentiating the bearing loads due to truck from those due to lane.
- Extended improvement on stepped cap pier  
The self-weight of steps is now included in the analysis and design.  
LBC now supports manual revision of the dimensions of autogenerated steps.
- Manual input of moment for column loads  
LBC now supports moment as a load type input for pier column. This brings more flexibility to allow users to define complex loads for both column and footing design.

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

- Main module
  - Incorrect layout of beams in a flared girder bridge when the option Allow Advanced Definition was selected.
  - Deck width was incorrectly shown when the option Allow Advanced Definition was selected.

- Incorrect set in the material data of drilled shaft caused error at the end of bridge definition when the ABC Wizard was used.
  - Precast/Prestressed Girder module (formerly called CONSPAN)
    - Three-point bearing system did not function well for the X-Beam/Box Beam which was developed per TxDOT's request.
    - Crash occurred when a user's file was run for load rating based on LRFR.
  - Substructure module (formerly called RC-PIER)
    - Incorrect message warning about the truck load in a user's file different from that in the library when LFD code was used.
    - Non-numerical data incorrectly showed up in the results under the Analysis tab of a user's file.
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## Installer Notes

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### How to install LEAP Bridge CONNECT Edition?

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.
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### Installation Wizard:

- First log into the Bentley CONNECTION Center (<https://connect.bentley.com/>) 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.

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## 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.

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## Support and Services Information

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

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

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## 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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