

# CSiXRevit Version 2021.0

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CSiXRevit Version 2021.0 is a new product that integrates into Autodesk Revit® 2021 to enable the exchange of information with CSI products ETABS®, SAFE®, and SAP2000®. (See Version Compatibility below for specific versions).

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## 1. Installation Instructions for CSiXRevit Version 2021.0

CSiXRevit 2021.0 is a 64-bit application (plug-in) and must be installed and run on a 64-bit Windows operating system. Windows 8.1 (with Update 2919355) and Windows 10 Build 1507 or higher are currently supported. Installing CSiXRevit 2021 will not uninstall older versions of CSiXRevit (2020 and earlier).

Before installing CSiXRevit 2021 on a given machine, you must first install Autodesk Revit® 2021. This includes all the Revit structural-column and structural-framing families you may possibly need in your Revit projects. Note that, as of this writing, the content libraries installed by the Revit 2021 installation do not include structural-column and structural-framing families for all the known AISC section profiles. However, these are currently available for download from the following Autodesk web site: [autodesk-revit-2021-content](https://www.autodesk.com/revit/2021/content).

CSiXRevit 2021 can be installed on the same machine as ETABS, SAP2000, or SAFE, but this is not required. Data transfer files (\*.EXR) exported by CSiXRevit on one machine can be moved to another machine for importing into ETABS, SAP2000, or SAFE, and vice-versa.

CSiXRevit 2021.0 is available electronically as a full installation by download from the internet. Two different installations are available, depending on the type of licensing you are using:

- CSiXRevit202100CloudSetup.exe for the newer Cloud and Trial licenses
- CSiXRevit202100LegacySetup.exe for the older Standalone and Network licenses

When you purchase CSiXRevit 2021.0, you will receive an email with an Activation Key and a link to download the correct installation. You will similarly receive an email with a download link if you request a Trial version of CSiXRevit 2021. Links to download CSiXRevit 2021 installations are also available in the CSI Customer Center for authorized users.

After downloading, run the respective installation executable (CSiXRevit202100CloudSetup.exe or CSiXRevit202100LegacySetup.exe) and follow the prompts.

See the following Sections 2 through 5 for specific instructions depending upon the type of licensing to be used. Most users will use a Cloud license, perhaps after starting with a Trial version.

Installation of CSiXRevit 2021 requires “Administrative” privileges to run. You should expect to be prompted to allow the installer access to system folders and the Windows registry. Please allow it to continue so that the installation can complete.

You may be prompted to install Microsoft C++ redistributable packages at the beginning of the installation. This could include a request to restart the installation or even restart the computer. Please proceed as requested.

### **Integration with Autodesk Revit 2021**

The CSiXRevit 2021 installation will create the CSiXRevit.addin file which loads CSiXRevit whenever a new session of Autodesk Revit 2021 starts. The CSiXRevit.addin file will be placed in the non-user specific system folder “C:\ProgramData\Autodesk\Revit\Addins\2021”.

The following four commands will be available in Autodesk Revit 2021 > Add-ins > External Tools after successful installation of CSiXRevit 2021:

- Export to Create New ETABS SAFE or SAP2000 Model...
- Export to Update Existing ETABS SAFE or SAP2000 Model...
- Import to Create New Revit Project from ETABS SAFE or SAP2000...
- Import to Update Existing Revit Project from ETABS SAFE or SAP2000...

**Important!** User authorization may be required to complete add-in integration with Revit. The first time you try to use one of these CSiXRevit commands from inside Revit, the form below may be displayed. Choose the “Always Load” option to perform a one-time authorization. We recommend that this be checked during installation so that the end user does not have to perform this operation.



If the CSiXRevit.addin file gets corrupted or altered for any reason, you can recreate this file by running *XMLPluginFile.exe* as administrator. *XMLPluginFile.exe* can be found in the folder where CSiXRevit 2021 was installed.

## 2. Trial Version

*CSiXRevit 2021 currently offers a one-time Trial license that may be used to evaluate the product before purchase. If you have already purchased a CSiXRevit 2021 license, you can skip this section.*

Use of the Trial version is subject to the following conditions:

- The Trial version is for evaluation purposes only and may not be used for commercial or professional purposes.
- Use of the trial version is limited to a single machine.
- License check-out is not available for Trial licenses.
- Use of the trial version is currently limited to 30 days, after which time you must acquire a standard registered license from CSI to continue using the software, whether on the same or a different machine. The duration of the Trial period is subject to change.
- The Trial version may be discontinued at any time.

To obtain and use a Trial license:

- Register for a CSiXRevit 2021 Trial license on the CSI website at <https://www.csiamerica.com/products/csixrevit/try>
- You will receive an email with an Activation Key and a download link.

- Download the installation on the machine you plan to use for evaluating CSiXRevit 2021.
- Make sure Autodesk Revit 2021 is already installed before installing CSiXRevit 2021.
- Then run CSiXRevit202100CloudSetup.exe as described in Section 1 (Installation Instructions), and then follow the prompts.
- When you are ready to begin your trial, run CSiXRevit 2021 from inside Autodesk Revit 2021. The Trial period begins the first time you use CSiXRevit 2021.
- You will be asked to enter contact information for license-support purposes.
- Next you will be prompted to enter the license Activation Key from the email.

The Trial license communicates with the cloud license server on the Internet via ports 80 and 443. If either of these ports is blocked, they need to be opened to acquire and maintain a license while using the product. If your connection to the internet is through a proxy server, these ports must be opened on that server. Contact your IT department for more information, if necessary, although this is not normally a concern.

We recommend obtaining a standard registered license several days before expiration of the Trial period so you can continue to use CSiXRevit 2021 without interruption.

Note: The activation key used for a Trial license is distinctly different from the key used to activate a Cloud license.

### **3. Cloud License**

*Most users will use a Cloud license, perhaps after starting with a Trial version. However, if you are using a legacy license (Standalone or Network) license, you can skip this section.*

Make sure Autodesk Revit 2021 is already installed before installing CSiXRevit 2021. Then run CSiXRevit202100CloudSetup.exe as described in Section 1 (Installation Instructions), and then follow the prompts.

The first time you use CSiXRevit 2021 after installation, you will be asked to enter contact information for license-support purposes. Next you will be prompted to enter the license Activation Key that was provided when you purchased the product. Thereafter you will not need to re-enter the key unless you explicitly request to change the key.

The Cloud license communicates with the license server on the Internet via ports 80 and 443. If either of these ports is blocked, they need to be opened to acquire and maintain a license while using the product. If your connection to the internet is through a proxy server, these ports must be opened on that server. Contact your IT department for more information, if necessary, although this is not normally a concern.

The same Activation Key can be activated on multiple machines. Each license Activation Key is associated with a certain number of users (or “seats”), as determined at the time of purchase of the license. When the number of users running CSiXRevit 2021 simultaneously with a given

Activation Key reaches that limit, no additional users can run CSiXRevit 2021 until one of the current users closes the application. If this happens frequently, you may want to consider purchasing additional licenses for CSiXRevit 2021.

To deactivate the license, use the menu command Help > License Information > Change Activation Key. Once a license is deactivated on your machine, you can reactivate it using the same or a different Activation Key. There is normally no need to deactivate the license unless you wish to change the key. Simply closing CSiXRevit 2021 makes the license available to another user or machine.

### **License Check-out (Commuter Feature)**

If you want to use CSiXRevit 2021 while disconnected from the internet, you can check-out a license for a limited time period. Keep in mind that once you check-out a license on your machine, no other user or machine can use that “seat” until you check the license back in, or until the check-out period expires.

Use the menu command Help > License Information > Checkout License and Check-in License to perform these operations. You must be connected to the internet while checking out or checking in a license. The license will become available to other users when the check-out period expires even if you are not connected to the internet.

## **4. Standalone License**

*This section only applies if you have an Activation Key for a Standalone license.*

Make sure Autodesk Revit 2021 is already installed before installing CSiXRevit 2021. Before starting installation, be sure to have your Standalone-license Activation Key available. Run CSiXRevit202100LegacySetup.exe as described in Section 1 (Installation Instructions), and then follow the prompts.

During installation, you will be asked if you want to activate a Standalone license. Select “Yes” and enter the Activation Key when prompted.

An active internet connection is required throughout the installation and license-activation process. The license activation server ports are 80 and 443. If either of these ports is blocked, they need to be opened when activating a Standalone license.

After installation, you can activate or deactivate your Standalone license by running StandaloneKey. This is available from the Windows Start menu as “StandaloneKey CSiXRevit 2021”, or you can run StandaloneKey.exe found in the CSiLicensing subfolder of the CSiXRevit 2021 installation folder on your machine.

## 5. Network License

*This section only applies if a License Manager is serving licenses on a license server in your local area network. In this case, you will not have an Activation Key, or the Activation Key applies to the licenser server and not to the local workstation running CSiXRevit 2021.*

Make sure Autodesk Revit 2021 is already installed before installing CSiXRevit 2021. Then run CSiXRevit202100LegacySetup.exe as described in Section 1 (Installation Instructions), and then follow the prompts. An active internet connection is required throughout the installation process.

During installation, you will be asked if you want to activate a Standalone license. Select “No”.

To use CSiXRevit 2021 after installation, it is necessary to have a Network license already activated and available on a license server that is accessible to your workstation through your local area network.

See topic [Sentinal RMS License Manager](#) in the CSI Knowledge Base for more information about setting up a network license server running License Manager. This is independent of installing CSiXRevit 2021 for use on a local workstation.

To speed up finding a Network license from your workstation when CSiXRevit 2021 is used from inside Autodesk Revit 2021:

- Create a text file, LMHOST.INI, and enter the network name or IP address of the machine that is running the License Manager.
- If you are serving licenses on more than one machine, enter each name or IP address on a separate line of text.
- Save this file to the folder where CSiXRevit 2021 is installed.
- The LMHOST.INI file can also be placed in the user settings folder, which can be found by entering “%LocalAppData%\Computers and Structures\CSiXRevit 2021” (without quotes) in Windows Explorer. Accessing this folder does not require administrative permissions like the installation folder does.
- Files located in the user settings folder will take precedence over those in the installation folder, but they apply only to a single user.

## 6. Changing License Mode after Installation

After installing CSiXRevit 2021 using either of the two installations, it is possible to change the license mode without needing to reinstall the software.

To check the current license mode or to make changes, run CSiLicenseAssistant. This is available from the Windows Start menu as “CSiLicenseAssistant CSiXRevit 2021”, or you can run CSiLicenseAssistant.exe found in the CSiLicensing subfolder of the CSiXRevit 2021 installation folder on your machine.

Two actions are available:

- Summary: See the current settings
- License Mode: Change the license mode

Note that when changing the license mode, you can set the default for all users or the setting for the local (current) user. If the setting for the local user is undefined, it will use the default for all users. If the setting for the local user is defined, it will override the default for all users when CSiXRevit 2021 is run by the current user, but not by any other user.

Here are instructions to change license mode for the most common cases:

- Trial version → Cloud license:
  - Run CSiXRevit 2021 from inside Autodesk Revit 2021.
  - Upon startup, a form titled “Continue CSiXRevit 2021 Trial” or “CSiXRevit 2021 Trial Complete” will be displayed.
  - Enter the Cloud license Activation Key.
- Trial version or Cloud license → Standalone license:
  - Run CSiLicenseAssistant.
  - Go to License Mode, select Standalone License, and Apply.
  - Run StandaloneKey.
  - Enter the Standalone license Activation Key.
- Trial version or Cloud license → Network license:
  - Run CSiLicenseAssistant.
  - Go to License Mode, select Network License, and Apply.
  - Make sure that your machine has access to a license server running License Manager.
  - You may need to create an LMHOST.INI file as described in section “Network License” above.
- Standalone or Network license → Cloud license:
  - Run CSiLicenseAssistant.
  - Go to License Mode, select Cloud License, and Apply.
  - Run CSiXRevit 2021 from inside Autodesk Revit 2021.
  - Enter the Cloud license Activation Key.
- Network license → Standalone license
  - Run StandaloneKey.
  - Enter the Standalone license Activation Key.
- Standalone license → Network license:
  - Run StandaloneKey to deactivate the Standalone license.

- Make sure that your machine has access to a license server running License Manager.
- You may need to create an LMHOST.INI file as described in section “Network License” above.

## 7. Version Compatibility

CSiXRevit 2021.0 is compatible with:

- ETABS (v15.0.0 and later)
- SAP2000 (v17.2.0 and later)
- SAFE (v14.0.0 and later)

## 8. Changes from Version 2020.0

The following changes have been made from CSiXRevit 2020.0 to 2021.0.

### ***Enhancements Implemented***

<b>Incident</b>	<b>Description</b>
1715	An enhancement was made so that slanted walls of rectangular shape can now be imported into Revit 2021 from SAP2000 and ETABS.
2402	An enhancement has been made to import rebar for walls and floors exported from CSiDetail v19.0.0. This is in addition to the already available import of rebar for beams and columns from CSiDetail v18.0.0 and v19.0.0.
4284	CSiXRevit 2021 is a new product that integrates into Revit 2021 and supports data exchange between Revit 2021 and either ETABS (v15.0.0 and later), SAP2000 (v17.2.0 and later), or SAFE (v14.0.0 and later). Data is transferred through a neutral file with extension .EXR so that ETABS, SAP2000, or SAFE do not need to be present on the same machine as Revit 2021.
5443	CSiXRevit 2021 utilizes cloud licensing by default, allowing access to the license by multiple users and/or from multiple machines. The number of simultaneous users corresponds to the number of licenses owned. Cloud licensing requires connection to the internet while using the software, either directly or through a proxy. Connection to a company network or VPN is not necessary. Licenses can be checked out for a limited time period to allow use while disconnected from the internet. Legacy licensing options (Standalone and Network) are still available upon request.

### Incidents Resolved

Incident	Description
3997	<p>Two incidents affecting frame-section orientation were resolved:</p> <p>(1.) SAP2000 and ETABS columns, beams, and braces with angle, double-angle, tee, and channel sections were imported into Revit with an incorrect section orientation. When this occurred, the error was visually obvious and had no effect on the design results.</p> <p>(2.) SAP2000 and ETABS columns, beams, and braces with their section mirrored from the default orientation were imported into Revit as if they were not mirrored. When this occurred, the error was visually obvious and had no effect on the design results.</p> <p>Note that these issues have been corrected for .EXR files created in SAP2000 v22.1.0 or later and ETABS v19.0.0 or later.</p>
4205	<p>An incident was resolved which affected the import of .EXR files into Revit. Some frame objects were not imported at all when two conditions occurred simultaneously: (1) The active Revit family libraries did not include any Revit families that defined the structural sections assigned to these frame objects, and (2) The Revit project into which the .EXR file was imported contained both a metric and an imperial version of the families defining these sections. When this occurred, the error was visually obvious and a message in the import log file informed the user of the problem.</p>
5195	<p>An incident was resolved where the cardinal point of frame objects was not exported from ETABS v18 models for import into Revit 2020, and it was not exported from Revit 2020 projects for import into ETABS v18. The cardinal point of frame objects was instead set to its default value by the importing application. When this occurred, the error was visually obvious, and the analysis results agreed with the model as imported. Choosing the “Export to Revit 2019 or earlier” option when exporting from ETABS, and choosing the “Export to ETABS v17, SAP2000 v21, SAFE 2016 or earlier” option when exporting from Revit 2020 prevented this problem from happening, and it created .EXR files that were still compatible with Revit 2020 and ETABS v18.</p>