Chief Architect®

Architectural Home Design
Software

Creating a New Material

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QUESTION

I have an image on my computer that I would like to use in my plan as a material or I would like to create a custom material that can be applied to 3D objects. How do I do this?

ANSWER

Materials in Chief Architect have two primary attributes that determine what they look like in 3D views: patterns composed of CAD lines, and textures which are created using image files such as .jpg's or .png's. A new material with both a custom pattern and

texture can easily be created in the User Catalog, which is located in the Library Browser.

If you want to import a new material that will be tiled seamlessly across a surface, make sure that the image that will be used will line up accurately to look realistic for 3D camera views.

In X17 and newer, you can also use the Material Builder to create a new custom stone, masonry, tile, or wood material.

> Additional information on materials can be found in the Materials: Patterns & Textures (https://www.chiefarchitect.com/videos/playlists/170/materials-patterns-textures.html) Video Playlist, as well as the Materials (https://www.chiefarchitect.com/support/category/8/materials.html) Knowledge Base category.

To create a new material through the Define Material dialog

1. If the Library Browser is not already open, navigate to **View> Library Browser** 📚.

2. Right-click once on the User Catalog folder and select **New> Material** from the contextual menu that displays.

> **Note:** On a Mac, hold down the Control key while clicking to initiate a right-click command. More information about right-click commands on Apple input devices can be found in the following Apple resource: Right-click on Mac (https://support.apple.com/guide/mac-help/right-click-mh35853/mac).
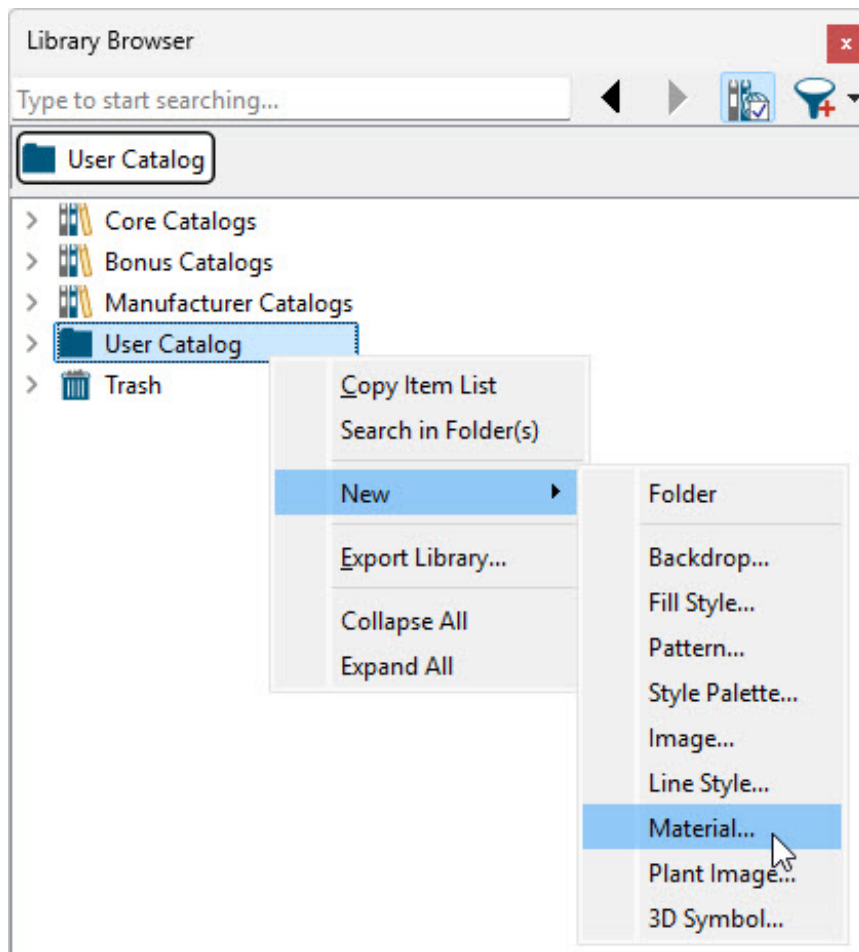
If you would like to add a new material to a folder or subfolder in your User Catalog, right click on the desired folder and select New> Material.

3. The **Define Material** dialog will open.

The settings on the PATTERN panel control how the material will appear in the Vector View, Technical Illustration, and Hand Drawn Line rendering techniques. When the Hand Drawn Lines on Top setting is enabled within the Standard, Physically Based, Clay, or Watercolor rendering techniques, pattern lines are also used.

Define Material

Pattern	Material Name: Gray Slate Wall
Texture	
Properties	☐ Keep Pattern/Texture in Sync
Materials List	

Colors

Material Color:

Line Color:

Line Weight: 0

Shading Contrast: 31%

Pattern

Pattern Type: No Pattern ⌄   Library...

Pattern From Texture...

Scale

Width: 0"

Height: 0"

☐ Retain Aspect Ratio

Offset and Angle

Row Offset: 1/2

Horizontal Offset: 0"

Vertical Offset: 0"

Angle: 0.0°

☐ Global Symbol Mapping

- Specify a **Material Name**.

- If desired, choose a **Material Color** and a **Pattern Type** using either the drop-down menu or clicking the **Library** button.

   Note: You can manually create a custom pattern, or a custom pattern can be automatically generated based upon a texture image by clicking the Pattern From Texture button. However, it's recommended to only select this option after a texture image is specified for the material, which is discussed in the next step.

4. The settings on the TEXTURE panel control the appearance of the material in the Standard, Physically Based, Watercolor, and Duotone rendering techniques.
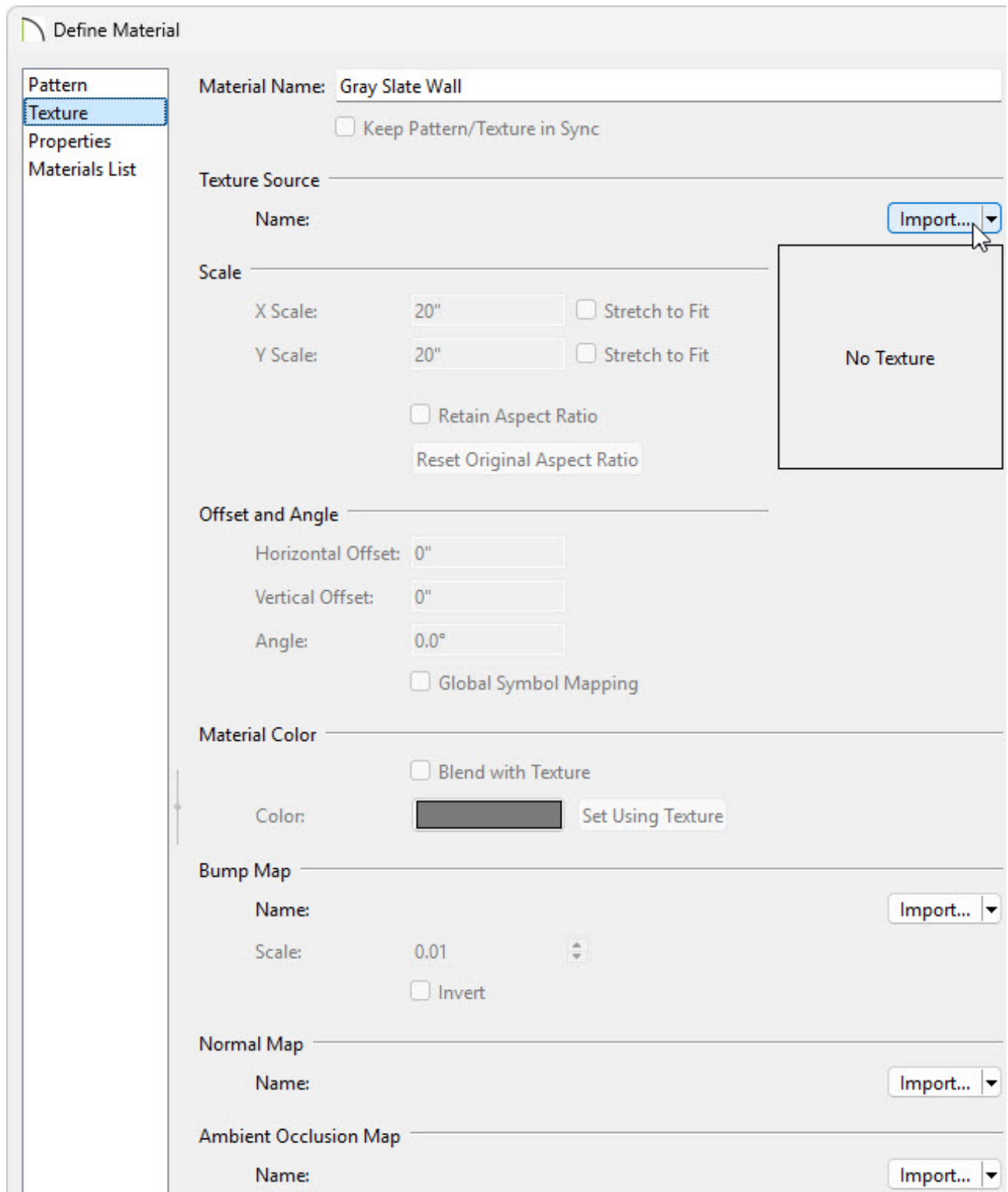
- In the Texture Source section click **Import** and browse your computer for the image that you'd like to use as a custom material.

  If you see **Select** instead of **Import**, either click **Select** to choose an image from your **Asset Management**, or click the dropdown next to **Select** and choose **Import**.
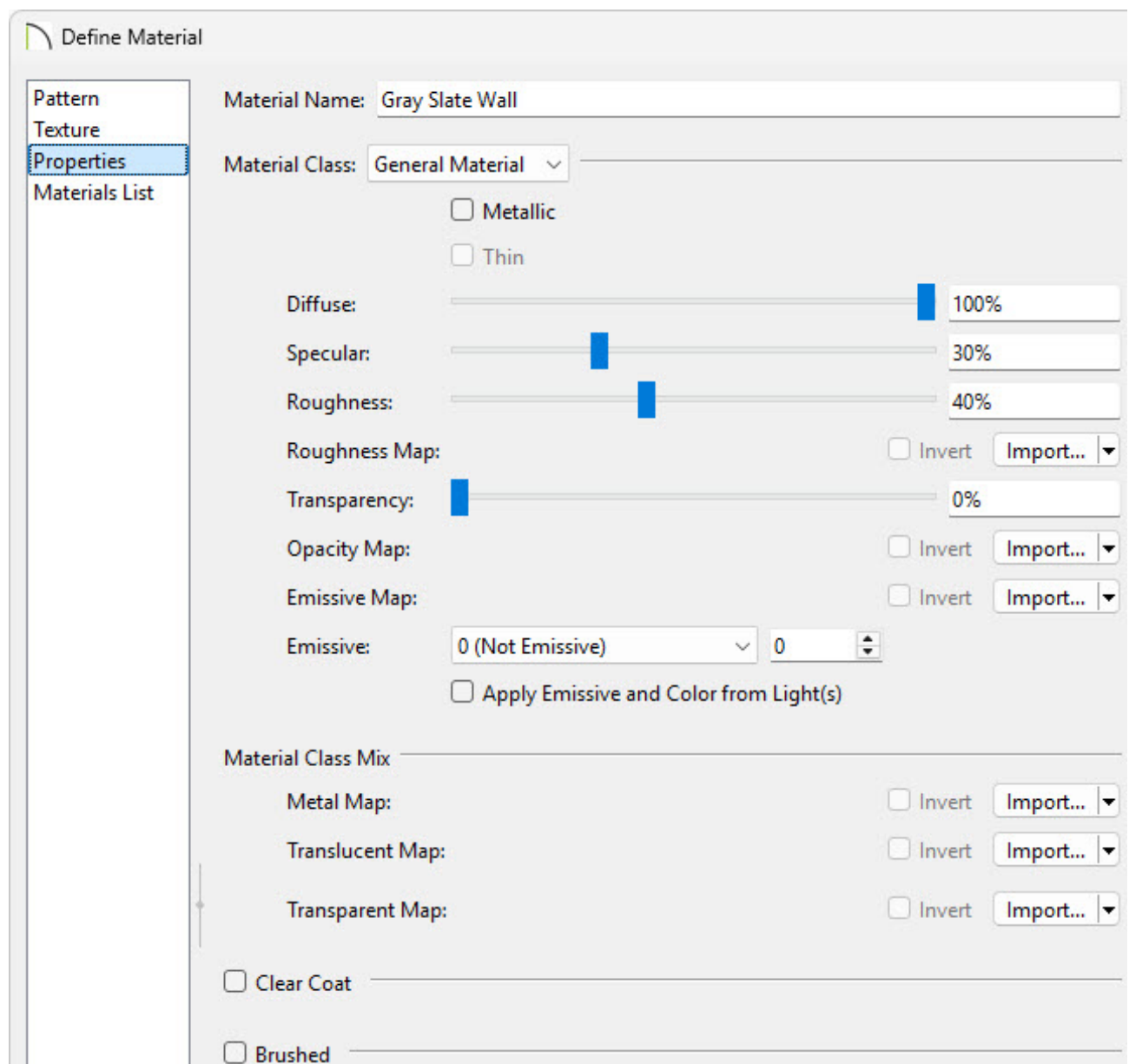
If using Traditional File Management or using X16 and prior, click the **Browse** button next to **Texture Source File** and browse your computer for the image that you would like to use as a custom material.

If using Traditional File Management and you see **Edit Path** instead of **Browse**, click the dropdown next to **Edit Path** and choose **Browse**.

- Once it's specified, adjust the **Scale** and **Offset and Angle** settings to your liking.

  > For more information on each of the options listed here, click on the Help button at the bottom of the dialog box to open your software's documentation.

5. The settings on the PROPERTIES panel control how materials appear in most rendered 3D views.

Define Material

Pattern	Material Name: Gray Slate Wall
Texture	
Properties	Material Class: General Material ⌄
Materials List	

☐ Metallic
☐ Thin

Diffuse:	●━━━━━━	100%
Specular:	━━●━━━━━	30%
Roughness:	━━━●━━━━	40%
Roughness Map:	☐ Invert	Import... ⌄
Transparency:	●━━━━━━━━	0%
Opacity Map:	☐ Invert	Import... ⌄
Emissive Map:	☐ Invert	Import... ⌄
Emissive:	0 (Not Emissive) ⌄ 0 ⬍	

☐ Apply Emissive and Color from Light(s)

Material Class Mix

Metal Map:	☐ Invert	Import... ⌄
Translucent Map:	☐ Invert	Import... ⌄
Transparent Map:	☐ Invert	Import... ⌄

☐ Clear Coat

☐ Brushed

Note: To learn more about material properties, please view Video 83: Advanced Materials (https://www.chiefarchitect.com/videos/watch/83/advanced-materials.html).

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6. The settings on the MATERIALS LIST panel control how the material is counted in the Materials List.

7. Once all desired changes have been made, click **OK** to add the material to the User Catalog.

   You can also click the **Add to Library** button to add the material to the User Catalog without closing the dialog box. This allows you to add several material variations to
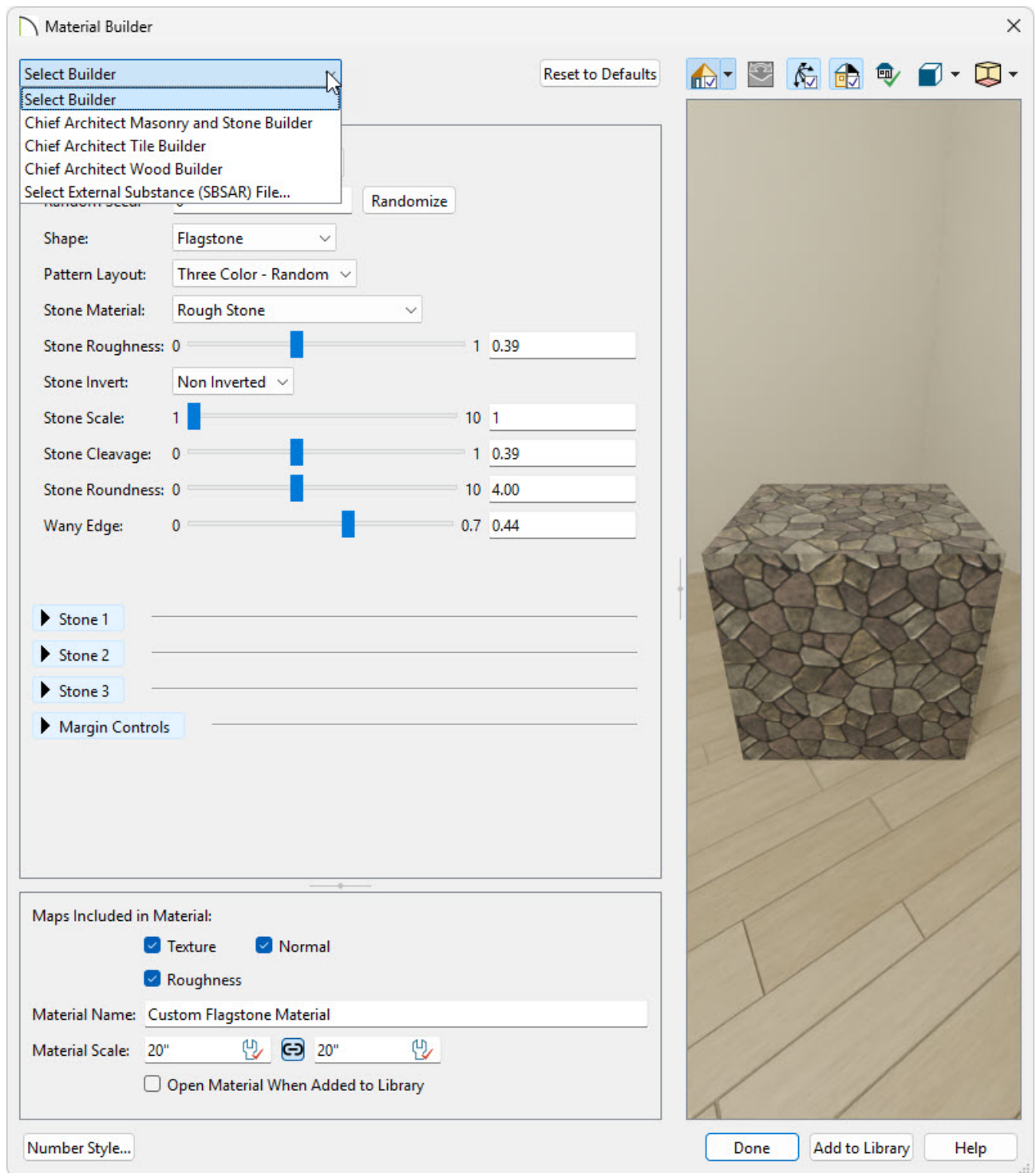
the library without the need to create copies beforehand.

Your new material is now available for use in any plan.

To create a new material using the Material Builder*

Applies to versions X17 and newer.

1. Select **3D> Material Builder** to open the **Material Builder** dialog.

2. At the top of this dialog, click **Select Builder** to select a material builder:

- The **Chief Architect Masonry and Stone Builder** is helpful for creating various stone materials that can be used for stone walls or terrain pathways.

- The **Chief Architect Tile Builder** is helpful for creating various tile materials with custom configurations, colors, and grout styles.

- The **Chief Architect Wood Builder** is helpful for creating various wood materials that can be used for flooring, ceilings, or 3D objects

- You can also **Select External Substance (SBSAR) Files** that you may have downloaded from the internet. This allows you to utilize other SBSAR files that

aren't provided by Chief Architect.

3. Once you're done customizing your material, you can decide how it's added to your library:

   ○ Underneath Maps Included in Material, you can choose to include/exclude the **Texture**, the **Normal** map, the **Roughness** map, and the **Metal** map.

   ○ Fill out the **Material Name**, as this will be the name of the material once added to your User Catalog.

   ○ Adjust the **Material Scale** to your liking.

   ○ Check the **Open Material When Added to Library** checkbox if you'd like to open the **Define Material** dialog once added to your User Catalog.

   > The Material Name and Material Scale can always be customized after the material is added to the User Catalog. For more information, please see the <u>Related Articles</u> section below.

   > **Note:** To learn more about this feature please see your software's Help documentation, or see our <u>Custom Tile & Materials - New Material Builder (https://www.chiefarchitect.com/videos/watch/10301/custom-tile-materials-new-material-builder.html)</u> video.

4. Once your material is completed click the **Add to Library** button to add it to your User Catalog.

MORE INFORMATION

- Materials can also be created within the **Plan Materials** dialog by navigating to **3D> Materials> Plan Materials** 📒, by copying/pasting images that are located on your

system's clipboard by navigating to **Edit> Pate> Paste** 📋, as well as when using the **Capture Screen** 🔲 tool by navigating to **Tools> Screen Capture> Capture Screen** 🔲 . For more information on these various options, please access the "Creating Materials" section in your software's Reference Manual (https://www.chiefarchitect.com/support/documentation.html?version=25).

- In 3D views, you can create a new material by blending a solid color such as a paint color with a textured and/or patterned material. Select **3D> Material Painter> Blend Colors With Materials** to toggle this feature on or off. The result is a new material that is saved in the current plan. It can be found in the **Plan Materials** dialog, edited as needed, and added to the library if desired.

  Materials created using this tool are given the name of the patterned/textured material with the extension "--PAINTED:" followed by the name of the solid color material.

- Materials often have a texture and one or more material maps, which are images files that add realism to the material's appearance. In order to display a material's texture and material maps, Chief Architect needs to be able to locate the image files associated with them on your computer.

  If a texture or material map referenced by a newly created material is not located in either the Chief Architect program's Data folder or the installation folder for the program's library textures, a copy of the file will be made in Chief Architect program's Data folder, and the material will reference that copy.

- When the **Adjust Material Definition** 🖌 tool is used with any scoping mode other than Plan Mode, the program will prompt you to choose whether to edit the original material or create a copy of it.

- In X17 and newer versions, a material's texture can be edited in real time in camera views by navigating to **3D> Adjust Materials> Interactive Material Editor** 🎴, and then clicking on the material in your camera.

- An entire folder of textures can be converted into a library of materials. Select **3D> Materials> Convert Textures to Materials** 🗂 and then browse to a folder of textures on your computer. The converted library folder assumes the same file structure as the original folder. Materials created using this tool do not refer to the original folder of texture files. Instead, they refer to files copied into the Data folder like individually-created materials do.

- Select **3D> Materials> Create Plan Materials Library** 🎨 to create a library of materials based on the materials used in the current plan. This is useful for converting material template plans, a common way to store material definitions in prior versions of Chief Architect, into a materials library. This command creates a new library in the Materials category using the same name as the plan. Adding materials to the library individually allows you to store the material within the existing directory structure.

Related Articles

📄 Blending Colors with Materials (/support/article/KB-00004/blending-colors-with-materials.html)

📄 Changing the Direction of a Material's Pattern and Texture (/support/article/KB-00194/changing-the-direction-of-a-material-s-pattern-and-texture.html)

📄 Customizing a Library Material (/support/article/KB-01006/customizing-a-library-material.html)

📄 Importing and Applying a Custom Picture to a Frame, Computer, or TV Screen (/support/article/KB-00007/importing-and-applying-a-custom-picture-to-a-frame-computer-or-tv-screen.html)

📄 Incorporating Custom Colors (/support/article/KB-00730/incorporating-custom-colors.html)

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