

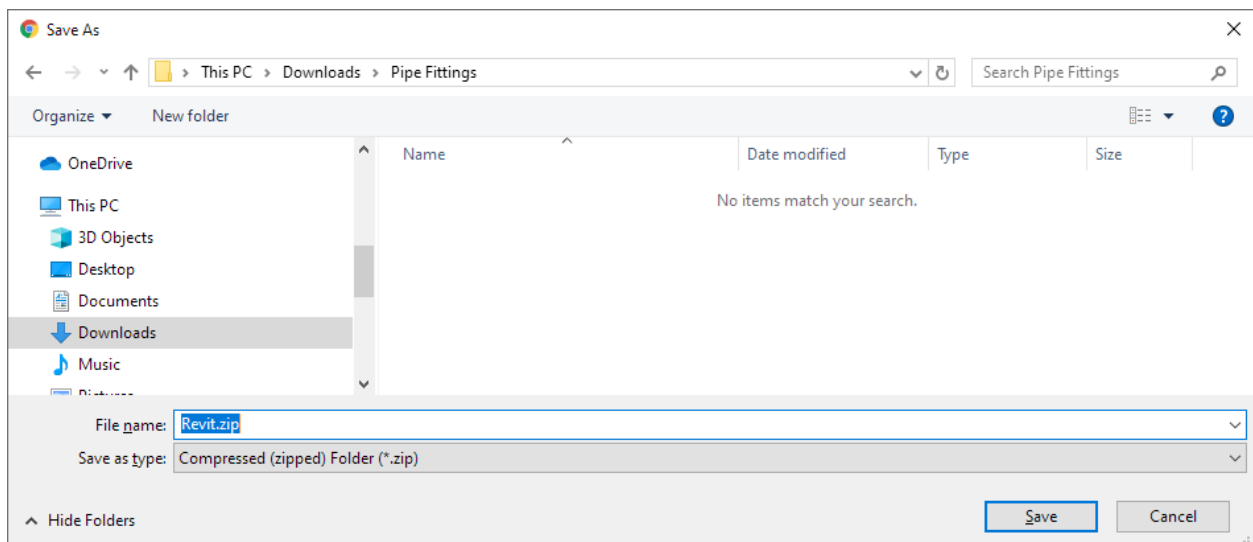
Using Charlotte Pipe's Product Library Downloads

1. In Charlotte Pipe's Design Studio select the required Charlotte Pipe Product Line.

The screenshot shows the Charlotte Pipe and Foundry Company website's product library. The search bar at the top contains the text "What are you looking for?". Below the search bar, the page is titled "All Products" and shows "Showing 1 products" with a filter for "Product Line: No-Hub". The "Refine By" section on the left lists various product lines, with "No-Hub (1)" selected and highlighted with a red box and the number "1". The main product card for "No-Hub Cast Iron Pipe and Fittings Product Line" is displayed, showing a product image and a description. A red box and the number "2" highlight the "RFA" link in the "LINKS" section of the product card.

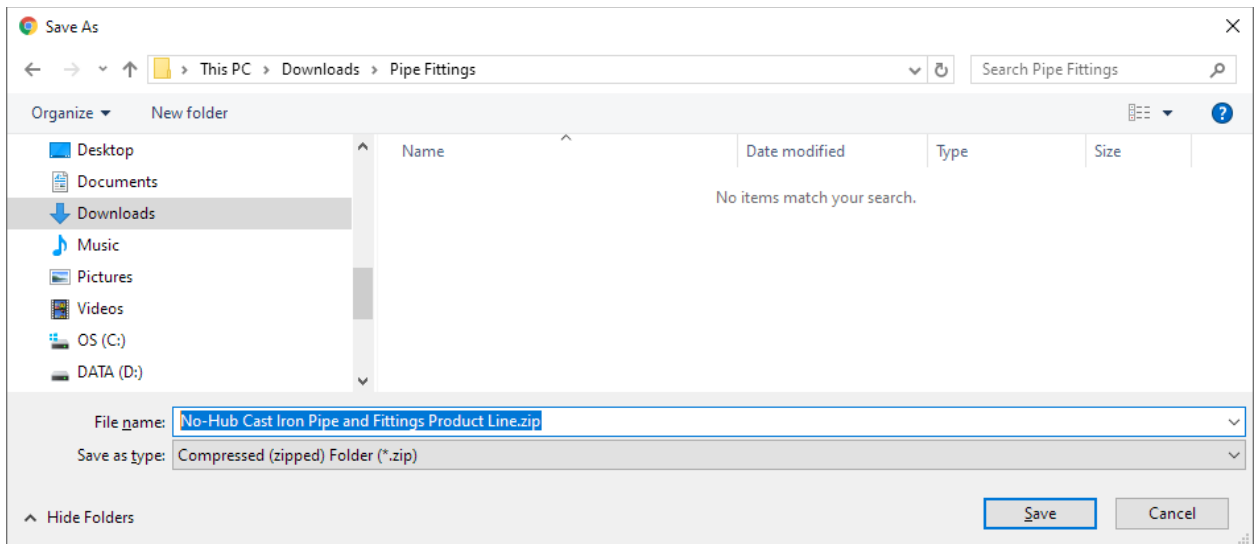
2. Select the RFA link to download the Revit project (.rvt) that contains the product line's (No-Hub, ABS DWV, CPVC CTS, etc.) Revit component (.rfa) models.
3. The selected Charlotte Pipe Product Line .rvt file will download as a Revit.zip file. For clarity the name of the zip file can be changed in your Save File browser when to download the zip file. This process varies between the major web browsers, see your Browser's Help section for file download support.

Example – Google Chrome – download opens Save As window:

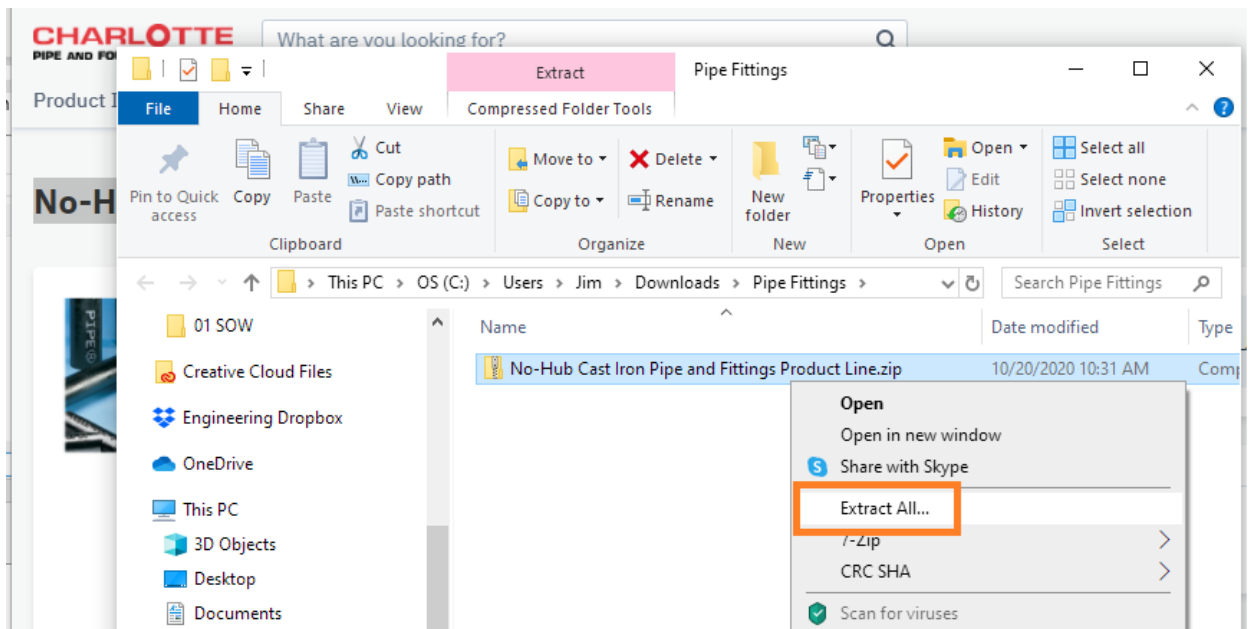


4. Navigate to where you want file saved

TIP: Change zip file name before picking Save button

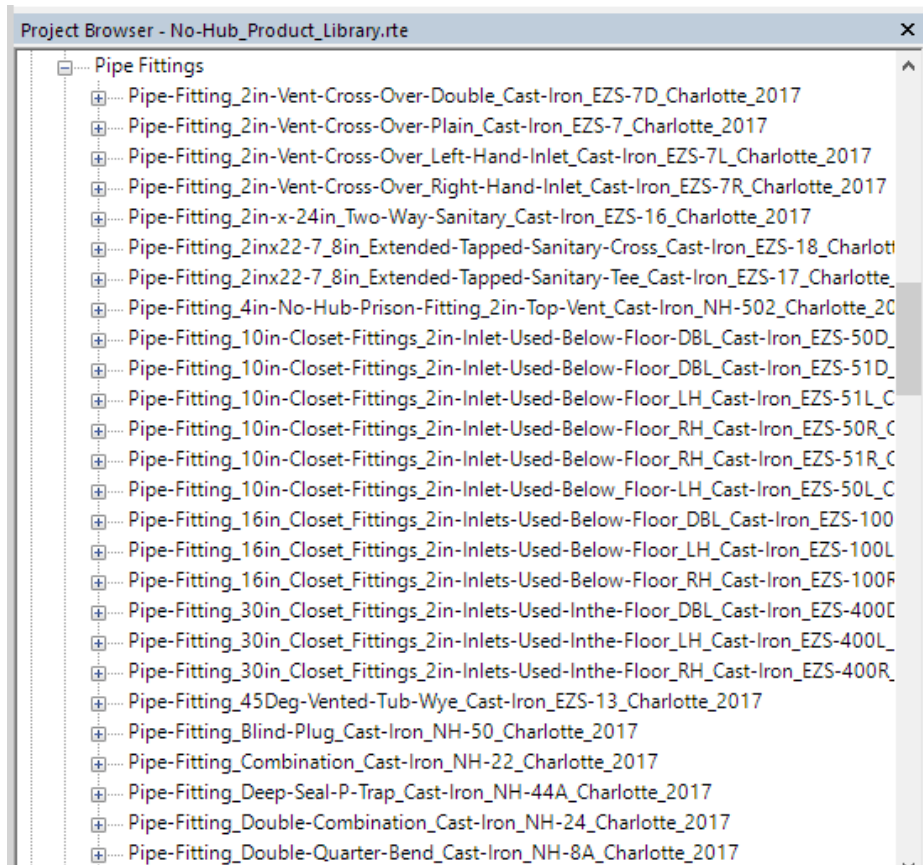


5. Extract the downloaded zip.



6. Open the Product Line's Revit rvt file in your current version of Revit (2019 through 2022):

In Revit go to the Project Browser under the list of Families, navigate to the Pipe Fittings family category and expand it to see the complete list of Charlotte Pipe fittings (Revit Family files) available in the Revit rvt file.

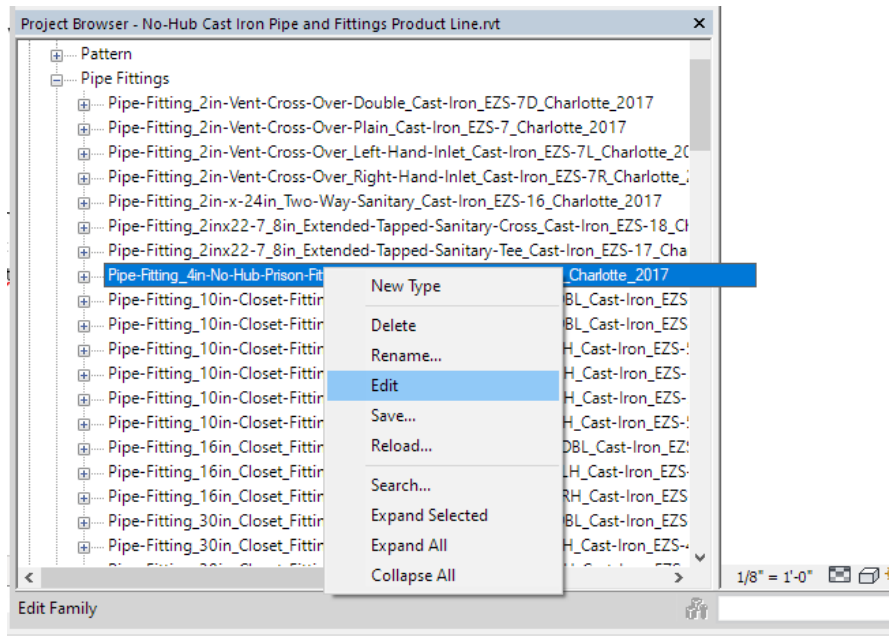


Transferring Pipe Fitting families from the Charlotte Pipe Product Line Revit rvt file into a Revit building/MEP project file:

Option 1 – Transfer pipe fitting families (.rfa) from the Charlotte Pipe Product Line rvt file to a building /MEP project rvt file through Revit’s Family Editor.

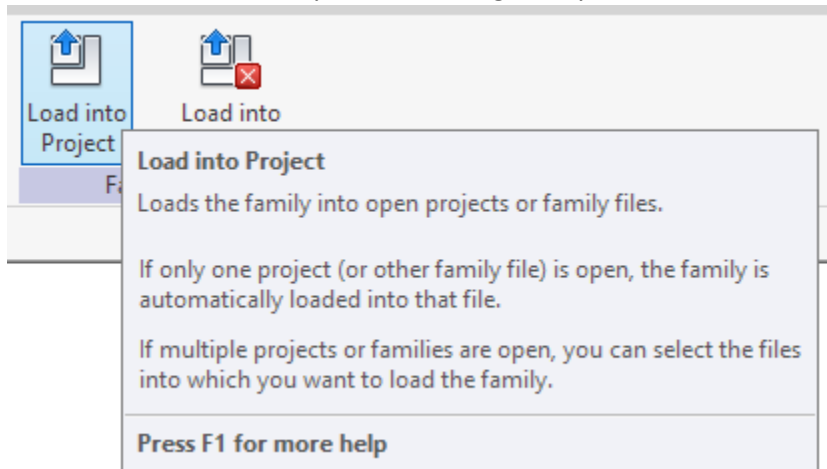
In the Charlotte Pipe Product Line rvt file’s Project Browser:

- Under Families navigate to the required fitting family
- Select the fitting
- Right-click and select Edit



This will open the fitting in Revit Family Editor

- You can save the file into your local fitting library or use the Load into Project tool



Option 2 – Copy/Paste

- Open the MEP project rvt.
- In the same instance of Revit, open the Charlotte Pipe Product Line rvt.
- In the Charlotte Pipe Product Line rvt place the required pipe fitting(s) from Project Browser > Families > Pipe Fittings category into a Product Line's Plan View.
- Select fittings in the Charlotte Pipe Product Line rvt Plan View and pick Copy to clipboard tool or with the fitting selected hit <ctrl> + <C> keys (fundamental Windows Copy to clipboard shortcut keystroke)
- Go to the MEP project file appropriate View and paste the fittings into the View (Paste tool or <ctrl>+<V> shortcut). The fitting families are 'loaded' into the MEP project file.

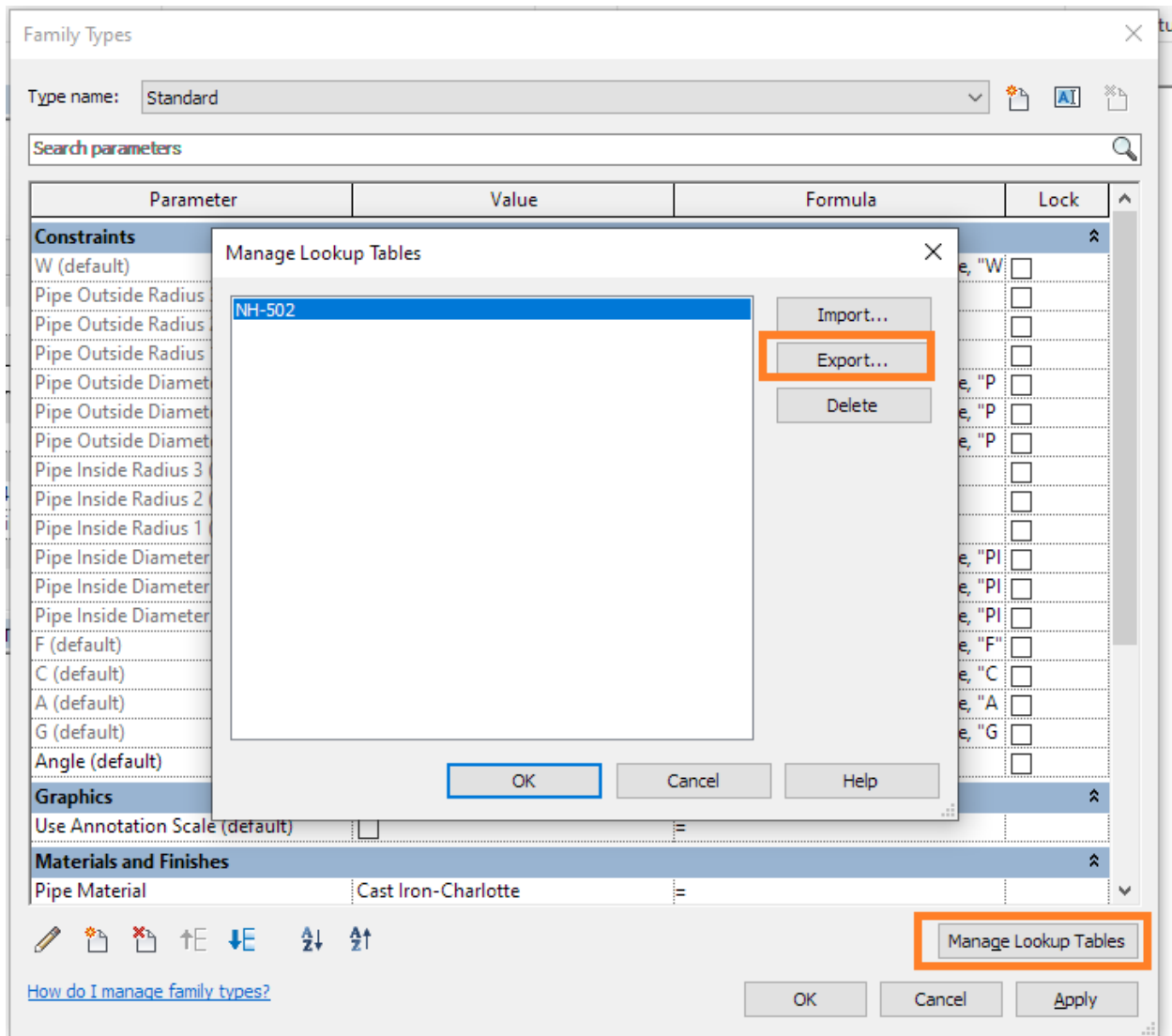
Using Revit Lookup Table files

Starting in Revit 2013 Lookup Tables have been embedded in Pipe Fitting families. To allow for a transition period we continued providing Lookup Tables with Revit 2014 fittings but since Revit 2015 we have not been providing the Lookup Tables we use to generate the Charlotte Pipe Revit fitting families.

Break-down of how Lookup Tables are used in Charlotte Pipe Revit model pipe fittings:

- Dimensional requirements are identified for all the available sizes of Fitting 'A'.
- A Lookup Table csv file is created in Excel that contains the dimensions for all available sizes for fitting 'A' – see Revit Knowledge Base for detail regarding the syntax and structure to the .csv file. <https://knowledge.autodesk.com/support/revit-products>
- Starting with Revit Family pipe fitting template file, the form (shape) of the fitting is created, constraints and labeled dimensions are applied.
- The fitting's LookUp Table file is associated (loaded) into the fitting via the LookUp Table parameter in fitting 'A's Properties.
- The Manage LookUp Table feature can be used to load the LookUp Table into the pipe fitting family (it actually imports all the values in the csv file into the family).
- The completed file is saved and added to the appropriated Product Line rvt file.

A copy of the fitting's Lookup Table can be extracted from the fitting Family using the Manager Lookup Tables button.



In the Manage Lookup Tables dialog pick Export:

The Lookup Table is exported to a .csv file with the same name as the Lookup Table originally loaded into the fitting.

Conceptually the Lookup Table file is embedded in the fitting file (.rfa) – in actuality it is the values in the Lookup Table csv file that are loaded into the fitting part and these can be exported back to a csv Lookup Table file.