

## Working with Daikin and McQuay Revit® Schedules

Daikin and McQuay Revit content ship with working sample schedules, which you can simply copy and paste into a sheet in your building project, and as you place instances of the family types into your design, they will be added to the schedules automatically.

This is accomplished using shared parameters that are endorsed by Autodesk®. These are available in the “McQuay and Daikin Revit Shared Parameters en-US.txt” shared parameters file that is provided with the family files, or you can also get them directly from Autodesk via the **Autodesk Revit Model Content Style Guide**.

### Copying the Sample Schedule to Your Project

As of this writing, Revit does not support copying and pasting between two different Revit sessions. So in the same Revit session as your project, open the “Schedule and Instructions Project” provided with the Daikin or McQuay family files.

When initially loaded, you’ll see something like this:

**IMPORTANT:**

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Always download these files again before finalizing a project to ensure you have the most current revision. Also, review the latest instructions.

Parameters desirable for schedules or tags are shared parameters, which have been defined and endorsed by Autodesk with the intent of being used by all HVAC equipment manufacturers. This will allow data from participating manufacturers to be included in the same schedules.

The recommended workflow is to first contact your McQuay sales representative and make a selection based on your job conditions, then select the associated family file, if it is available. You can find your McQuay sales rep at <http://www.mcquay.com/daikin/Revit/FreeDownloads>.

**INSTRUCTIONS FOR USING THE SAMPLE SCHEDULE:**

- In the same Revit session, select and copy the schedule on this page (using Ctrl+C) and paste it (using Ctrl+V) into a sheet in your project. The schedules supplied are set up to filter by a pre-defined Designation value provided in McQuay families. You may change the value of the Designation parameter or change the filtering parameter to another (e.g. Make) to maintain consistency with other families in your project.
- This schedule contains cells that are filtered in the schedule editor if critical values (for example, required air flow values) are out of range for the equipment, or have not been given a project-specific value.
- For compact schedules, units used by the schedule MUST match what the column headers say. To change units for a column (parameter), edit the schedule. Formatting tab, select the parameter, then use the “Field Format...” button, change the column header text, too.
- Length, Width, and height parameters refer only to the immediate main air box geometry of the equipment, excluding extensions such as pipe and duct connector protrusions.

**VERTICAL STACK WITH UNIT:**

- For units with a flow supply or return (no duct connector), you must always type in the supply air flow value in the instances Element Properties.
- The return air flow is calculated automatically.

**INSTRUCTIONS FOR USING THE FAMILY FILES:**

- Text files downloaded with family files are Type Catalogs and must be in the same folder as the family files. When loading or adding the family, you can filter out and select only those types you want. You must always click on at least one type from the list, even if you filter the list down to one type (selected types) tab below the list.
- NOTE: Type catalogs will not work if a family is included in a project by the drag-and-drop method from Windows Explorer or a web browser. They only work from File/Load from Library or when doing a Reload. Use the Family Load Status parameter (the first parameter on the list) to ensure the family was loaded properly.
- NOTE: Some values such as capacities are provided with the models at ARI conditions, and should be changed to match job conditions.
- Equipment selection software values should ALWAYS be used if the default parameter values differ from the selection values. You are responsible for updating all parameter values on the Revit list to match the values you get from the equipment selection software results, or your McQuay sales representative.
- The Product Documentation Link and URL family parameters will take you to the latest documentation for the products. Click on the link text, then the ellipses (...) button that appears to the right to visit online documents. Because products and documents change over time, it is recommended that you download and keep all documentation related to your equipment with your project files.
- For larger products, the lightning bolt symbols indicate power connection areas.
- Parameters with names starting with “Actual” are project-specific (often bound to connectors). Parameters with names starting with “Design” are manufacturer values at ARI or other non-project specific conditions.

For families with clearance definitions, use the Clearance Type parameter to toggle on or off the 3D clearance volume geometry. Excluding it will physically remove the clearance volumes from the model, so as not to participate in interference checks.

For families with options that affect geometry, use the parameters in the Construction group to change option settings.

Model numbers provided in these families may only be the first portion of the actual model numbers generated from the selection software. Options outside the scope of these families may control the latter part of the full model numbers.

EQUIPMENT WITH DUCT CONNECTIONS																														
UNIT	TYPE	MAKE	PRODUCT	DESIGNATION	UNIT	TYPE	MAKE	PRODUCT	DESIGNATION	UNIT	TYPE	MAKE	PRODUCT	DESIGNATION	UNIT	TYPE	MAKE	PRODUCT	DESIGNATION	UNIT	TYPE	MAKE	PRODUCT	DESIGNATION	UNIT	TYPE	MAKE	PRODUCT	DESIGNATION	

EQUIPMENT WITH UNIT CONNECTIONS											
UNIT	TYPE	MAKE	PRODUCT	DESIGNATION	UNIT	TYPE	MAKE	PRODUCT	DESIGNATION	UNIT	TYPE

**McQuay**  
International

Project Name

Instructions

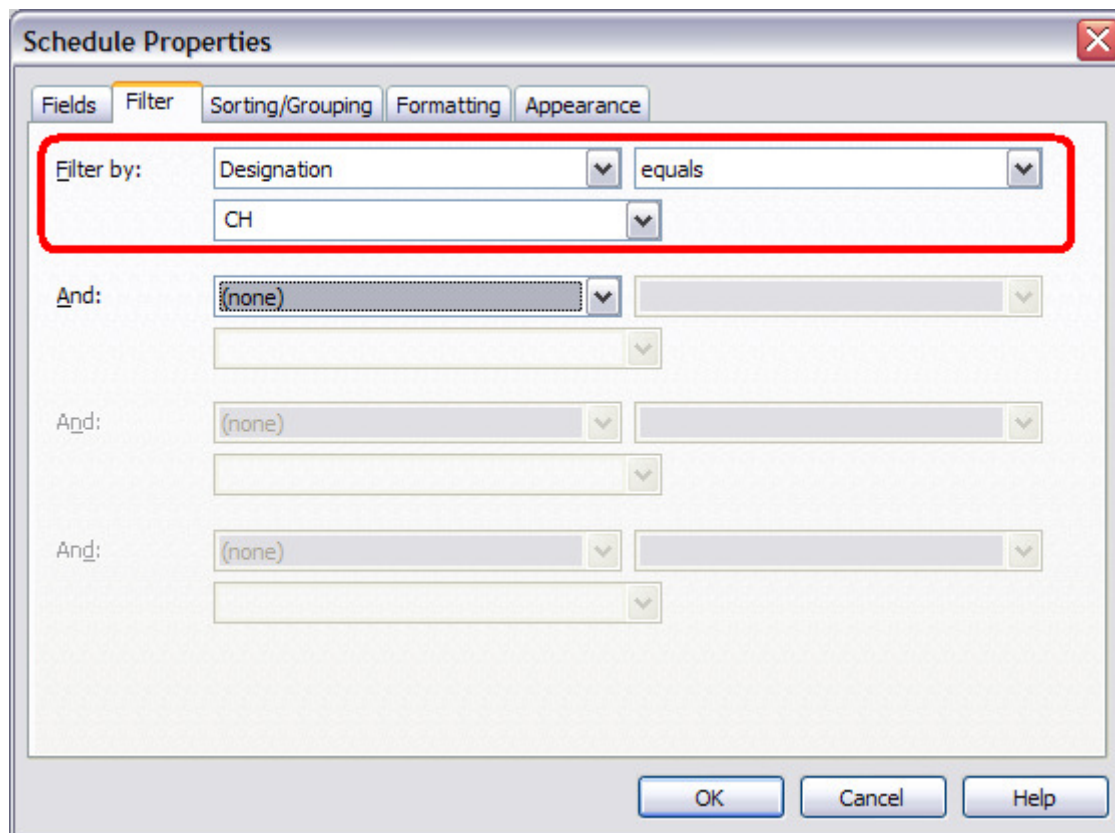
**A101**

Simply click on the schedule of interest to highlight it, copy it to the clipboard, switch to your project window, and paste the schedule into a sheet in your project. The entire schedule definition will be copied into your project.

## Schedule Filtering

Each schedule has a default filter which is based on the *Designation* shared parameter. Each Daikin or McQuay family file has a Designation value that matches the filter setting for the schedule associated with that product. This allows exactly and only the correct equipment models to appear in the proper schedule.

Here is an example of the filter definition for the McQuay water cooled chiller schedule:



The screenshot shows the 'Schedule Properties' dialog box with the 'Filter' tab selected. The 'Filter by:' section is highlighted with a red box and contains the following configuration:

- Filter by: Designation (dropdown) equals (dropdown)
- CH (text field)

Below this are three 'And:' sections, each with a '(none)' dropdown and an empty text field. At the bottom of the dialog are 'OK', 'Cancel', and 'Help' buttons.

All McQuay water cooled chiller families have the Designation parameter set to have a value of “CH”

## Displaying Units of Measure

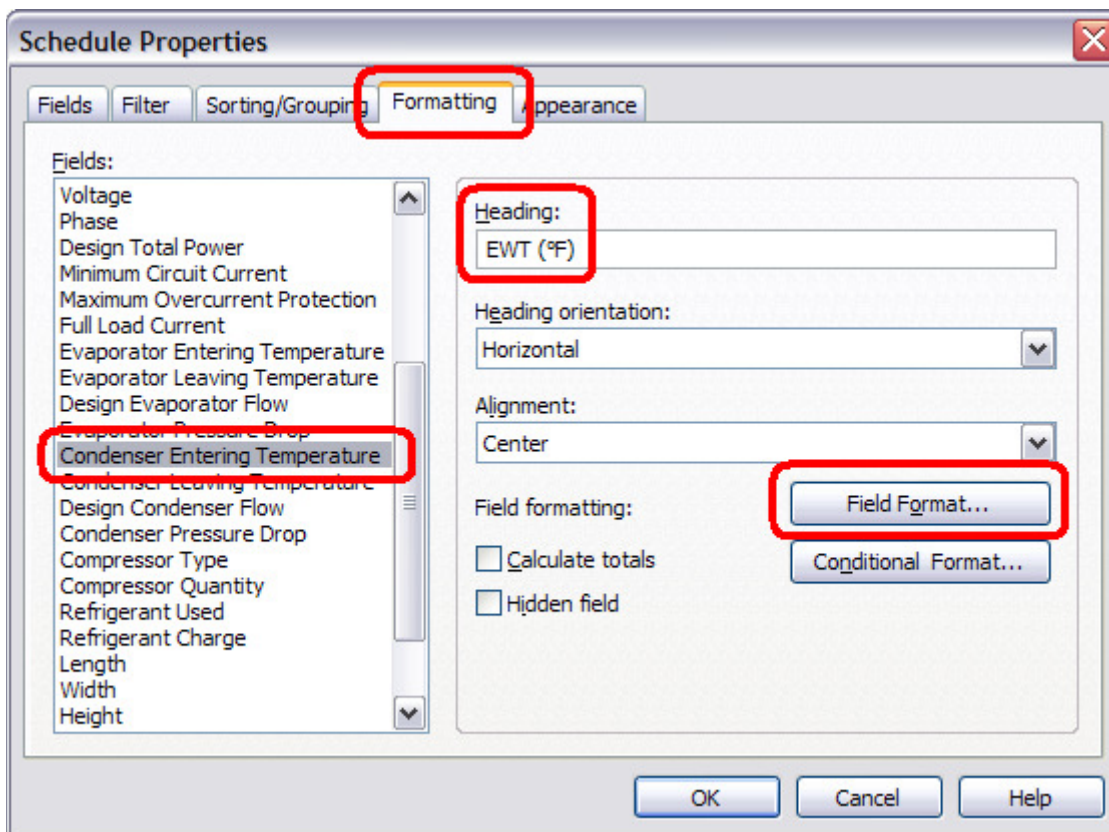
In order to minimize the column widths (and clutter) and thus maximize the number of columns that will fit on a page, the units of measure are specified in the column headers, as can be seen here:

WATER COOLED CHILLER SCHEDULE													
ELECTRICAL						EVAPORATOR				CONDENSER			
VOLT.	PH.	UNIT POWER (KW)	MCA (A)	MOCP (A)	FLA (A)	EWT (°F)	LWT (°F)	FLOW (GPM)	WPD (FT WG.)	EWT (°F)	LWT (°F)	FLOW (GPM)	WPD (FT WG.)

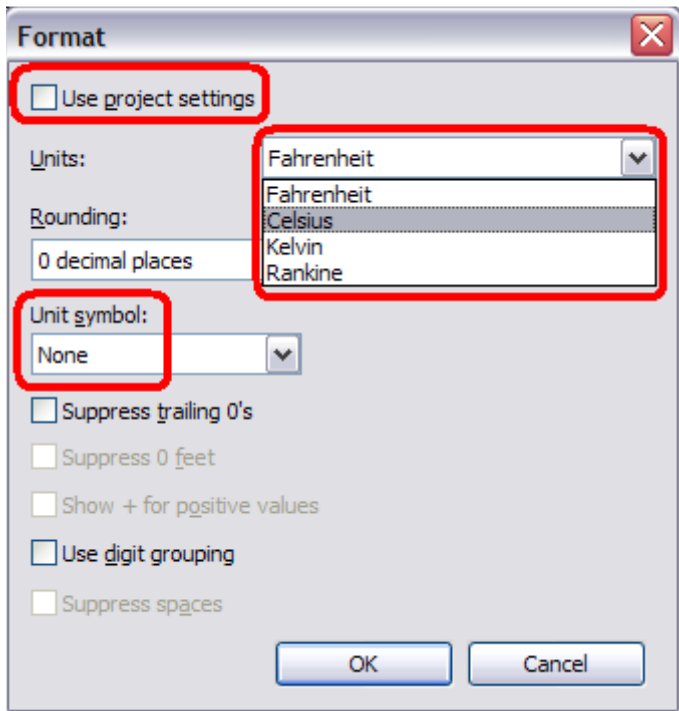
Ensuring the values appearing in the schedule match the units specified by the column headers is accomplished using the “Field Formatting” feature in Revit.

This allows the values displayed to be forced to match what the column headers say, regardless of the current Project Units settings. This is quite useful when you want to, for example, display a water pressure drop (Piping / Pressure units) in feet of water and also a steam pressure (also in Piping / Pressure units) in pounds per square inch.

To change the units of measure for a column, on the Formatting tab of the schedule editor, select the parameter on the left, change the “Heading” text (e.g. from °F to °C) then click on the “Field Format...” button.



On the “Format” dialog that appears, ensure that the “Use project settings” checkbox is UNchecked, select the units of measure to match the column header text, and ensure the “Unit symbol” is set to “None.”



## Conditional Formatting

Because there are equipment or performance values that are directly or indirectly dependent on job-specific conditions, it is not possible to provide exact values for these parameters in content that is freely and immediately available for download.

However, in the schedule editor, cells will turn red if the value in those cells has not been set or is possibly invalid.

For example:

ELECTRICAL		EVAPORATOR			
VOLT.	PH.	EWT (°F)	LWT (°F)	FLOW (GPM)	WPD (FT WG.)
460	3	-460	-460	0	0.00

This is provided as a tool to help draw your attention to questionable values that may need to be set from the results of your selection, or that simply may warrant further investigation.

**TIP:** The easiest way to update values on the family instances in your project is to simply enter them right into the cells of the schedule editor. Because Revit uses a single, unified database changes made anywhere, including the schedule editor, are reflected everywhere automatically.

## Miscellaneous

The Length, Width and Height parameters for the equipment refer to the values for the “main box” and do not include protrusions such as for pipe connections, hoods, etc.

Model numbers provided in these families may only be the first portion of the actual model numbers generated from the selection software. Options outside the scope of these families may control the latter part of the full model numbers.