

REVIT  
TECHNOLOGY  
CONFERENCE



---

# Schedule Everything!

(and take out the boredom)

**Bruce Gow**  
Application Specialist.



# The Speaker.

**Bruce Gow**

*Karel\*Cad.*

*Bruce Gow Architects.*

Bruce is an architect who trains, demonstrates, supports and implements Revit for *Karel\*Cad*, as well as running his own architectural practice.

He is active in the international Revit community since becoming a moderator in the Zoogdesign forum, then with the Autodesk Users Group International (AUGI).



# Schedule Everything.

- Question: What is one of the most tedious, time consuming, error prone and unrewarding tasks in any design based firm ?
- **No ...** its not asking the boss for a raise ( although that could be unrewarding too. Its .... )
- Preparing ( *that is ... compiling counting, organizing and checking* ) **SCHEDULES. !**



# Schedule Everything

- But don't despair ! Revit is here to help.
- **Autodesk Revit** with its building information modeling basis instantly presents information about the building components with all other required information.



# Schedule Everything

- You can be sure that when you amend the door number on the schedule it updates on the plan, elevation , section or anywhere else
- You can be sure that the correct number of windows on level 5 are counted and scheduled.
- You can tell the builder with confidence that there are 25 90 x 90 SHS columns on Level 3.



# Schedule Everything

- Sounds Good ?
- So what *is* a schedule in Revit ?
- A schedule is essentially a view of the building model.
- It extracts information from the database, based on **system** , **user created** or **shared** parameters, or calculated values based on those parameters.
- The information is then displayed as text in a table format



# Schedule Everything

There are 6 types of schedules in Revit :-

- Component Schedules.
- Multi Category Schedules
- Key Schedules.
- Note Blocks.
- Material Take-offs.
- View Lists
- *In theory, there are two additional schedule types – Revision Schedules and legends, but they are beyond the scope of this discussion*



# Schedule Everything

## Component Schedules:

- This is the common type of schedule, listing properties of a building category in a tabular form. It should probably be referred to as a single category schedule.
- A door schedule for example, would typically include fields for the door height, width, finish, fire rating and possibly cost.



# Schedule Everything

There are 2 types of Component Schedules –

- Instance Schedule.
- Type Schedule.



# Schedule Everything

- An Instance schedule lists **each component** as a separate line item. So, an instance schedule for doors, would list each door in the project – probably by its door number.
- A Type schedule on the other hand, **groups components** of the same type into a single line item. In that case, our door schedule would list all the door types 820 wide in one line and there would be another line for the 920 wide doors and so on.



# Schedule Everything

## Multi Category Schedules.

- This schedule type allows selection of elements from different categories. Multi category schedules list available fields from all the components within the model. It is therefore necessary to ***filter*** the fields to return the information you need.



# Schedule Everything

## Key Schedules.

- These schedules are effectively **style** schedules.
- They consist of multiple component parameters that can be said to have a consistent style, such as room types in a multi residential project may have certain finishes , or doors may use certain hardware packages.



# Schedule Everything

## Note Blocks.

- Note blocks are schedules listing all instances of annotations that are members of the Generic Annotation family category.



# Schedule Everything

## Material Take – Offs.

- Material take offs are a new feature in Revit Building 9.0.
- These schedules allow detailed material quantities to be calculated.
- All the tools and methods available for schedules apply to material take offs



# Schedule Everything

## The Schedule Dialogue Box.

- Firstly, you need to select the appropriate **category** for the type of schedule you wish to create. Revit will then populate the available fields for that category with *system parameters*, when the Schedule Properties dialog box opens ( see below )
- You can also enter the **name** for the schedule, the type of schedule ( **component** or **key** see below.) and the **phase**.
- Click OK and the Schedule Properties dialogue opens.



# Schedule Everything

## **The Schedule Properties Dialogue.**

All schedules are controlled by the five tabs in the Schedule Properties dialog box.

- Fields.
- Filter.
- Sorting / Grouping.
- Formatting.
- Appearance.



# Schedule Everything

## Fields Tab.

- **Revit provides a list of fields for the category of schedule you selected.**
- **This list is different for each schedule category.**
- **The available fields are the system parameters in the family.**
- *Note that user created parameters from within the family, are not available as fields in the schedule.*



# Schedule Everything

## Filter Tab.

- The Filter tab allows the fields displayed to be restricted based on a set of up to four defined filtering criteria. All the filters must be satisfied for an element to display in the schedule.
- Fields must be placed in the schedule to be used as filters, but they could be hidden in the final output.
- You cannot *directly* filter by phases, each schedule must belong to a phase.



# Schedule Everything

## Sorting Grouping Tab.

- **Sorting is the way the information in the schedule is displayed. For instance, a door schedule could be sorted by door number and would then display all the doors in numerical order based on the door numbering system.**
- **To Sort, you select a field ( parameter ) and then select if the sort is ascending or descending.**



# Schedule Everything

## Sorting Grouping Tab. ( contd )

- **Grouping, on the other hand, allows the scheduled elements to be combined into groups. In the door schedule example, you could group door by level and then sort them by door number.**
- **To Group, you select a Header or Footer checkbox below the field used for sorting. If a footer is selected, the Title, count and or totals pulldowns can be applied to that field**



# Schedule Everything

## Formatting Tab.

- How do you want to display the data in the fields ( ie the columns in the schedule ? )
- Each field can be configured to display a heading ( different to the field name ), a header orientation ( horizontal or vertical ) and an alignment ( left, right or center justified )
- In addition, there is **field formatting**, which allows the project settings formats to be overwritten. You can round and set the number of decimal places and also set the units display.



# Schedule Everything

## Formatting Tab. ( Contd )

- **Calculate Totals** is used to display numerical fields when the sum of the data is required.
- To create a field that is a *percentage* of another field, click Calculated Value. Enter a name for the field, set its type to percentage, and enter the name of the field to take a percentage of. By default, percentages are calculated based on the total for the entire schedule. If you set grouping fields in the Sorting/Grouping tab, you can choose one of those fields here. For example, if you group a room schedule by level, you can display what percentage of the total area of the level the room occupies.
- **Hidden Field** is used to hide fields that are not required to be displayed in the schedule. An example could be where a field is used purely to group the schedule data



# Schedule Everything

## Appearance Tab.

- The Appearance tab controls the display of a range of text and linework when the schedule is placed on a sheet.
- Grid Lines, controls the line style used in the cells of the schedule as well as in the header, footer or blank spaces..
- Outline does the same thing for the linework surrounding the schedule.
- Header Text and Body text control the font, size and font style and whether the header displays a title and column headers.



# Questions?