## REVIT FAMILY USER

## GUIDE

## IBAR



## SET UP \& INSTALL

## 1. Choose correct material Revit Family package through our BIM library and download to desired location: <br> -IBAR - HXA - Internal IP55 busbar - aluminium <br> - IBAR - HXC - Internal IP55 busbar - copper <br> - RESINBAR - CXA - External IP68 busbar - aluminium <br> - RESINBAR - CXC - External IP68 busbar - copper

## 2. Open Project in required Revit release

## 3. Load the family

3a. Insert -> Load Family


3b. When you 'Load Family' in Revit, import all the various part files in one go


3c. When you insert the families into Revit, an Insert Table will appear prompting you to choose the ampere rating for each component. (feeder, elbow, tee etc)


3d. When selecting 'Feeder Straight' lengths in the Insert Table, please select $1 \mathrm{~m}, 2 \mathrm{~m}$ \& 3 m lengths from the rating you desire.

| Specity Types |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Family: | Types: |  |  |  |  |  |  |  |  |  |  |  |
|  | Type | $\left\lvert\, \begin{gathered} \text { Busbar Conductor } \\ \text { Type } \end{gathered}\right.$ | Busbar Rating | Busbar Length | Busbar Casing Wiath Wiath | Busbar Casing Height | $\begin{array}{\|c} \text { Busbar Conductor } \\ \text { Wiath } \end{array}$ | $\begin{aligned} & \text { Busbar Rating } \\ & \text { Code } \end{aligned}$ | Busbar Single <br> Stack Boundary <br> Rating | $\begin{array}{\|c} \text { Busbar Stack size } \\ \text { Code } \end{array}$ | Busbar Range Code | $\begin{array}{\|c\|c\|} \hline \text { Busba }{ }^{2} \\ \text { Ty } \end{array}$ |
|  |  | (al) | (all) | (all) | (all) | (ali) $\checkmark$ | (all) | (ail) $\checkmark$ | (all) | (all) | (all) |  |
|  | 1000 Alm | COPPER | 1000.00 A | 1000.0 | 155.0 | 115.0 | 55.0 | 10 | 3200.00 A | s | HX | c |
|  | 1000 A 2 m C | COPPER | 1000.00 A | 2000.0 | 155.0 | 115.0 | 55.0 | 10 | 3200.00 A | $s$ S | HX | c |
|  | 1000 A 3 m C | COPPER | 1000.00 A | 3000.0 | 155.0 | 115.0 | 55.0 | 10 | 3200000 A | 5 | HX | c |
|  | 1250 AlmC | COPPER | 1250.00 A | 1000.0 | 155.0 | 130.0 | 70.0 | 12 | 3200.00 A | 5 S | HX | c |
|  | 1250 A 2 m C | COPPER | 1250.00 A | 2000.0 | 155.0 | 130.0 | 70.0 | 12 | 3200000 A | 5 S | HX | c |
|  | 1250 A 3 m C | COPPER | 1250.00 A | 3000.0 | 155.0 | 130.0 | 70.0 | 12 | 3200000 A | 5 | HX | c |
|  | 1600 A 1 mc | COPPER | 1600.00 A | 1000.0 | 155.0 | 150.0 | 90.0 | 16 | 3200000 A | 5 S | HX | c |
|  | 100VA Lm | cuppek | lovulua | aveuo | 135.0 | tsuev | Y0.0 | 10 | savoun A | 3 - | HX | - |
|  | 1600 A 3 m C | COPPER | 1600.00 A | 3000.0 | 155.0 | 150.0 | 90.0 | 16 | 3200.00 A | 5 | HX | c |
|  | 2000 AlmC | COPPER | 2000.00 A | 10000 | 155.0 | 185.0 | 125.0 | 20 | 3200000 A | 5 | HX | c |
|  | 2000 A 2 ml | COPPER | 2000.00 A | 20000 | 155.0 | 185.0 | 125.0 | 20 | 3200.00 A | 5 | HX | C |
|  | 2000 A 3 ml | COPPER | 2000.00 A | 30000 | 15550 | 185.0 | 125.0 | 20 | 3200.00 A | S | HX | c |
|  | 2500 Alm C | COPPER | 2500.00 A | 1000.0 | 155.0 | 220.0 | 160.0 | 25 | 3200.00 A | 5 | HX | c |
|  | 2500 A 2 m c | COPPER | 2500.00 A | 2000.0 | 155.0 | 220.0 | 160.0 | 25 | 3200.00 A | 5 | HX | c |
|  | 2500 A 3 m C | COPPER | 2500.00 A | 3000.0 | 155.0 | 220.0 | 160.0 | 25 | 3200.00 A | s | HX | c |
|  | 3200 Alm CO | COPPER | 3200.00 A | 1000.0 | 155.0 | 290.0 | 230.0 | 32 | 3200.00 A | s | HX | c |
|  | 32200 A 2 mc c | COPPER | 3200000 A | 2000.0 | 155.0 | 2900 | 230.0 | 32 | 3200.00 A | 5 | HX | c |
|  | 3200 A 3 m C | COPPER | 3200.00 A | 3000.0 | 155.0 | 290.0 | 230.0 | 32 | 3200.00 A | 5 | HX | c $\checkmark$ |
| < ${ }^{\text {a }}$ | < |  |  |  |  |  |  |  |  |  |  | , |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

3e. Once loaded, all families will list under 'Cable Tray Fittings' in your Project Browser

| Project Browser - Sample File CXC.rvt | $\times$ |
| :---: | :---: |
| $\square$ Families <br> (- Air Terminals <br> Annotation Symbols <br> Cable Tray Fittings <br> it Dusdar nesinvar-CXC-Combination Offset <br> \# Busbar RESINBAR-CXC-Elbow Edgewise <br> (1) Busbar RESINBAR-CXC-Elbow Flatwise Busbar RESINBAR-CXC-Feeder Custom Length <br> Busbar RESINBAR-CXC-Feeder Straight Busbar RESINBAR-CXC-Joint Pack Busbar RESINBAR-CXC-Offset Edgewise Busbar RESINBAR-CXC-Offset Flatwise Busbar RESINBAR-CXC-Panel Flange Edgewise Busbar RESINBAR-CXC-Panel Flange Flatwise <br> I Busbar RESINBAR-CXC-Panel Flange Standard <br> (1) Busbar RESINBAR-CXC-Tee Flatwise <br> ( Busbar RESINBAR-Shared Joint Pack <br> - Cable Trays <br> + Ceilings | $\wedge$ |

## USER GUIDE

We have created the following Level of Detail for your visual display mode:

SINGLE LINE / LOD100 - COARSE


DOUBLE LINE / LOD 300 - MEDIUM


AS BUILT / LOD 400 - FINE


## FEEDERS

The 'Feeder Straight' object should be used for 3000 mm , 2000 mm or 1000 mm straight busbar pieces (These have a different part number than the custom or 'non-standard' length feeders, hence the reasoning for two separate families).


The 'Feeder Custom Length' family should be used for all other straight length measurements. Simply change 'Busbar Custom Length' parameter to size required.


Each component has one end open, and one end with the option to toggle the joint pack on/off (in the instance parameters). This is to enable the production of an accurate Bill of Materials with correct number of joint packs


## POLE SELECTION

It is critical that you select the correct amount of poles per element created. This creates the right size in RESINBAR elements, provides the correct part number for any BOM you export, and easy for your electrical engineer to check against any tech subs!


## NEUTRAL

The Neutral 'BLUE' side is indicated by the BLUE face in a 3D view, or thin BLUE line in 2D / floor plans. This is to follow the phasing orientation from panel to panel. You can toggle this by using the 'Busbar Neutral to Inside' parameter on Elbows, Offsets \& Combinations, or use the rotation symbols on Straight Feeders.


## CUSTOM LENGTH ITEMS

If you need to create custom elbows, offsets, combinations \& panel flange elbows, please tick 'Busbar Custom Item' box and input a new measurement. We recommend, where possible, to utilize the standard sizes to enable faster manufacturing and delivery.


IMPORTANT - Please ensure that all element connectors are placed at the same location when joining to the previous / next piece to create a completed run. We suggest using the Align tool between two external casings of two separate elements.

NAMING
Once the run is complete, you can name the run via the 'Busbar System Name' parameter. This should make filtering easier for you.


## ROTATION

Some items do not rotate in section view. To get an item rotated into the correct position, use the rotate symbols when highlighting an element.


## CASING WIDTH

Please do not alter the 'Casing Width' parameters in the Type parameters. This will severely alter the IBAR Revit families and have a knock-on impact across the entire run

## IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT US

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We produce the most comprehensive product range in the market - from power to control and monitoring solutions through to our unique service capability.

