Flexible Families – Learn to Make Your Families Flex and Stretch Like Never Before

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Class Summary

This hands-on lab will teach you built-in Revit methods that let your Revit families flex like never before. Multiple, positionable 3D grip handles for sliding doors, grip handles that are formula driven, and grip handles with visibility are just a couple of the examples we’ll cover in this lab.

Since this is a hands-on lab, some special thanks are in order...

*Thank you to our magnificent lab assistants.*

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Key Learning Objectives

- Review traditional methods to family creation.
- Learn new methods to enable 3D grip handles in Revit.
- Learn new methods to control visibility of grip handles in Revit families.
- Learn to control location of grips in Revit families.
- Learn how to create formula driven grip handles.
Traditional Creation of Flexible Families

- Reference Planes Only
  - 2D Grips
  - Can get overwhelming
- No visibility of grips beyond 2D view
- Tried and true method
- Used in just about all families
There is such a thing as too much...

51 reference planes for every piece of geometry...

All of the dimensions involved as well
Fixing OOTB Families

- OOTB families are using traditional methods.
- Grip handles located in less than desirable locations.
- Revise this OOTB countertop family to be more user friendly.
Hidden Rotation Method for Components

- Generate a “host” sweep.
- Host door panels to it.
- Easy rotation to use elsewhere now.
Revit Sliders + Animation Export of Content

- Control elements with 3d sliders.
- Supports visibility.
- Also, create animated GIFs to demonstrate the abilities of content.
Generic Annotation Families

- **Cannot** add reference planes using the following means:
  - Through the UI (it is not there!)
  - Through the API / Dynamo
  - Through CTRL + Drag Copy

- **Warning:** ReferencePlane.ByLine operation failed. The attempted operation is not permitted in this type of family.

- **Error:** Selection cannot be copied. Element must be unique.
Generic Annotation Families with Grip Handles

WHAT IF I TOLD YOU

THERE IS A WAY
Be heard! Provide AU session feedback.

- Via the Survey Stations, email or mobile device.
- Chance to win an AU2018 pass!
- Give your feedback after each session.
- Give instructors feedback in real-time.
THANK YOU!

Say hi sometime!
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