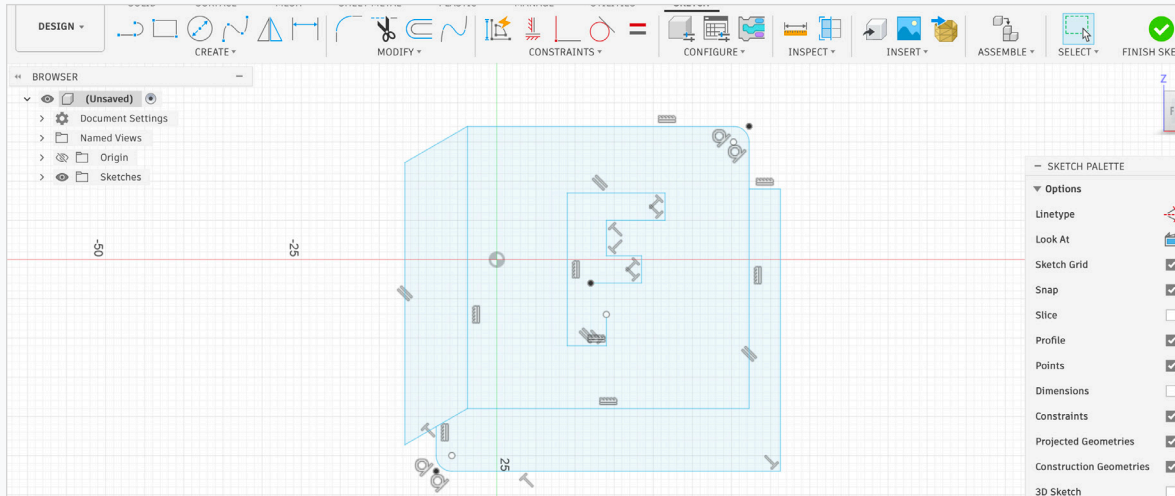


Sketch Constraint Practice: Fix the Autodesk Fusion logo!

The current sketch of the Fusion logo is under-defined and cluttered. Instead of utilizing sketch constraints, the previous designer relied entirely on redundant sketch dimensions.

The goal

Simplify and fully define the sketch by stripping away unnecessary dimensions and replacing them with sketch geometric constraints.



Key requirements

- Close the Profile: Use the Coincident constraint to close the open gap in the letter “F” outline.
- Anchor the Design: Apply a Coincident constraint to lock that newly closed point directly to the sketch Origin.
- Turn Dimensions back on in the Sketch Palette
- Optimize the Fillets: Delete one of the duplicate 2mm fillet dimensions, then apply an Equal constraint to ensure both fillets scale together.
- Standardize Leg Thickness: Remove one of the redundant 3.5mm width dimensions on the letter “F” and replace it with an Equal constraint.
- Clean Up Dimensions: Delete two of the repetitive fx:36mm equation-driven dimensions. Replace them with Equal constraints to link their lengths geometrically.
Tip: Do not delete or reference the very top fx:36mm dimension; it is bound to the sketch fillet and will break the geometry if altered.

Challenge reflection

- Design Intent: If a future design change required the top arm of the “F” to always be exactly twice as long as the middle arm, how would you change your strategy? Would you use a constraint, or would you have to reintroduce a specific type of dimension?