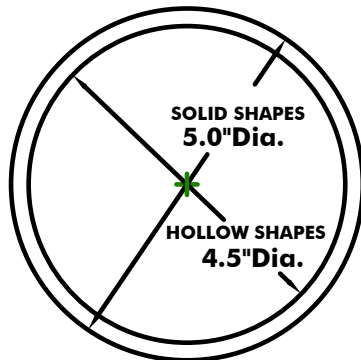


# BRITELINE DESIGN GUIDE

## 1. Maximum Circle Size is 6"

Briteline extrudes 6" diameter billets. For best results, we extrude solid shapes up to 5" and hollow shapes up to 4.5"



Note: To be used as a guide.  
Quotes based on actual prints.

## 2. ALLOYS USED

**6063** Most popular extrusion alloy. Good surface finish; corrosion resistant; can be heat treated for strength

**6463** Designed to accept brite finish. Good for decorative trim applications and shower door parts. Machinable. Heat Treatable

**6005** Good extrudability and strength. Good surface finish response, machinability; Heat treatable.

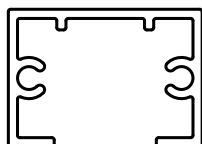
3. **MINIMUM WALL - .040/SOLIDS & .050/HOLLOWS**

4. **MAXIMUM POWDERCOAT LENGTH - 12'**

3. **MAXIMUM ANODIZE LENGTH - 12' 20' anodizing line under construction, available mid-2011**

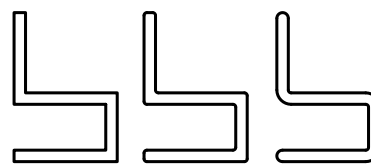
**For the most cost-effective, functional, and attractive part, your design should be as production-friendly as possible.**

**PARTS NEED TO BE AS SYMMETRICAL AS POSSIBLE**



EXAMPLE

**RADII NEED TO BE AS LARGE AS POSSIBLE**



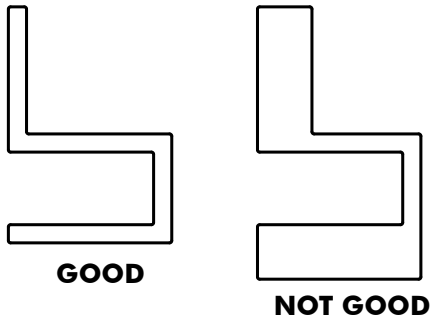
NOT GOOD

GOOD

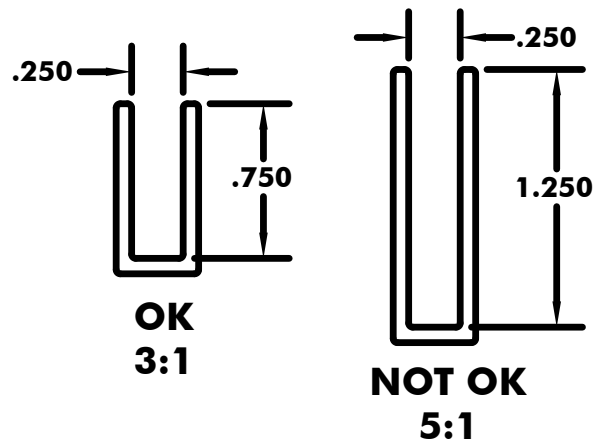
BETTER

# BRITELINE DESIGN GUIDE

**THICKNESS NEEDS TO BE AS UNIFORM IF POSSIBLE**

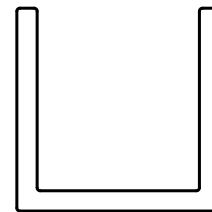


**KEEP TONGUE RATIOS AS CLOSE TO 3:1 AS POSSIBLE**



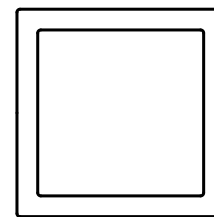
## TYPES OF DIES EXTRUDED AT BRITELINE

**Solids:** Use solid dies wherever possible. They are easier to extrude; reduce die cost; takes 2 weeks to make a solid die.



**SOLID EXAMPLE**

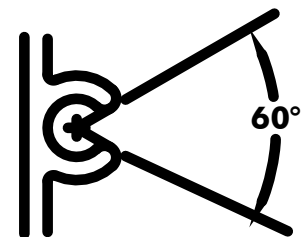
**Hollows:** An extruded shape which completely encloses a void. Harder to push, costs more to construct a hollow die; takes 3 weeks



**HOLLOW EXAMPLE**

**Screw Boss:** Often you can put a screw boss in your design to save die costs. A fully encapsulated hole qualifies as a hollow die. By using a screw boss design, you get the functionality of the hole, less metal required in the extrusion, and a less expensive solid die to make a hollow die.

**SCREW BOSS EXAMPLE**



# **BRITELINE DESIGN GUIDE**

## **CHECKLIST**

- **Description or drawing of part, with part name and number**
- **Product's intended end use. This will help us determine alloys, tempers and other factors.**
- **Requirements for finish, machinability, strength and other necessary properties.**
- **End use lengths and purchased lengths, if different**
- **Tolerances required. If special tolerances are required for the part, be sure to discuss before making the die.**
- **Fits and assemblies. Mating parts are required to design a part that will produce a good fit.**
- **Surface finish requirements. If color matches or brush matches are required, finish sample should be sent with RFQ.**
- **Exposed surfaces clearly marked on drawing.**
- **Fabrication requirements and fab print.**
- **Quantity for first order and anticipated annual usage.**
- **Packaging requirements. Size, type, weight requirements per package.**