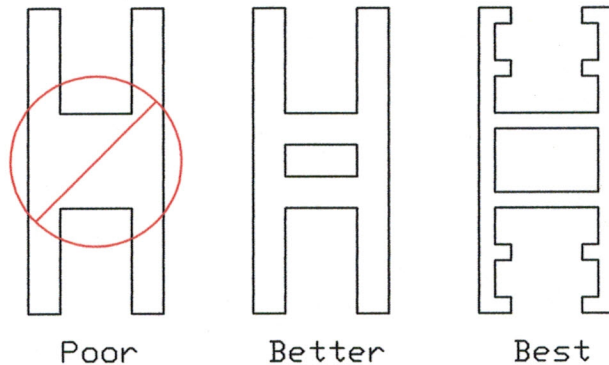


# DESIGN TIPS

One area of extrusion that is critical to making a quality profile is to maintain an even or uniform wall throughout the part. With an uneven wall material shrinkage is uneven leading to bowing or warping. An uneven wall can also create sink marks and slow down the production speed, raising the per piece cost.



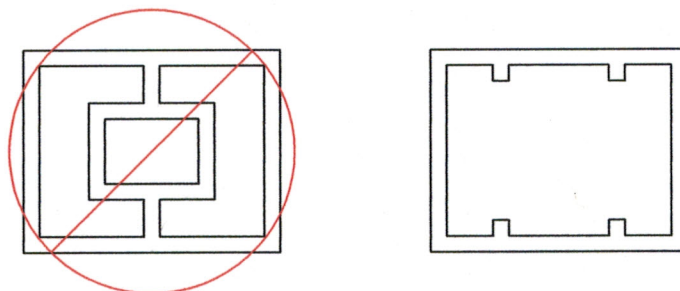
In profile design, the use of hollow sections is usually discouraged, unless its a tradeoff between an unbalanced wall or including the hollow section.

Die cost is considerably more with dies with hollows due to the internal mandrels and the need for a vacuum calibrator to maintain the shape.

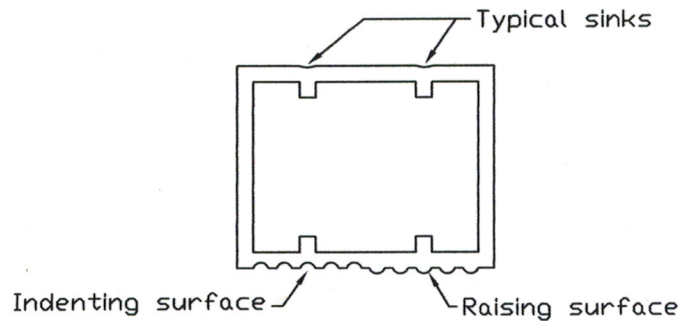
If hollows are nessacarry try to avoid internal walls or legs as there is no easy way to control them.

If such a leg is essential it should project no deeper then the thickness of the part.

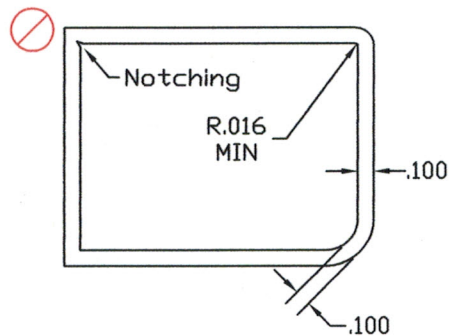
Example: If the wall is .100" thick, the projection should be a maximum of .200" from the outside of the wall to the inside end of the projection. Avoid designing a hollow within a hollow as control of these is virtually impossible.



Sink marks happen opposite adjoining legs or projections. They can be hidden or covered up by creating raises or indents to disguise them.



Radiuses should be as large as possible. An inside radius should be no less then .0156" to eliminate the possibility of notching which could lead to the corner easily cracking. The wall on the radius should be the same as the rest of the part.



These tips should help you in designing your extrusion. Please feel free to call us with any questions.

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