

# Flame Deburring Thin Aluminum Sheetstock, Version 1.0

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Aluminum flashing, sometimes called coil, is great stuff. I can easily bend it with my fingers and cut it even with scissors. It does have one downside – deburring. Being so thin, I found it difficult to remove those razor-sharp burrs. Here, let me show you using times ten magnification.



When I am cutting straight, I raise a tiny jagged edge perpendicular to the surface. It isn't lethal but can give me a world-class paper cut. Then I'm bleeding all over my project.

Even worse, when I cut a curved line, I sometimes generate needles—nasty little buggers. Do you see the one in this picture?

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Given how soft this material is, using a standard deburring tool doesn't work well. It tends to bend the stock before it can smooth the edge. My solution was inspired by "flame polishing." This trick lets me transform the cut edges of a piece of thick acrylic into a smooth and clear surface. It does this by reflowing the plastic and allowing surface tension to do the rest.

Oh yes, back to jagged aluminum.



Using a MAPP torch, I heat up the edge until it starts to discolor. This takes less than a second, so I have to move fast. Those sharp edges and needles melt first. They don't go away but, instead, turn into harmless tiny balls.

If it wasn't for the discoloration, I can't tell which edges have been flame deburred. But when I gingerly run my finger along the edge, it becomes *painfully* obvious.

I welcome your comments and questions.

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