



Is One of the Pieces Clear/Translucent?
(and will be visible through the clear face)

YES

NO

Are the pieces big?
(2 inches square or larger surface area)

YES

NO

****With large pieces it's almost impossible to get the glue across the whole surface, so you're best off applying it strategically and hiding it or using mechanical elements as a part of the design.**

Mechanical Attachment

Consider using stand offs, Chicago binding screws, rivets, or some other physical way to bind the pieces (especially for frames)

OR

Hide Your Glue

Hide the areas you apply glue using wooden veneer, or by applying glue behind some element of an opaque layer above it. You can use scores in your file to mark where to put your glue and prevent seeing squish out.

OR

Use a LOT of Glue

Acrylic specific UV resin glues will work for larger pieces but you have to get it across the whole surface to hide the edge of it, so just be aware, you can do it... it's just going to be expensive and tedious.

Wait, I want to glue to wood, veneer, or something else...

Gorilla Glue Gel or Loctite GO2

If the surfaces are non porous then mist the entire surface of the smaller piece (if they aren't identical shapes) with water then apply the glue not too close to the edges to minimize any potential squish out. Apply and Let dry.

Allcraft Glue

Use like Super Glue. Don't drip or get it on your finished surface though!

Contact Adhesive or Spray Glue

This works really well for applying a veneer. I have a blog post on it that goes into detail. daniellewethington.com/acrylic-wood/

Are the pieces tiny/delicate or is glue squish out a major concern?

YES

3M Sheet Adhesive
(apply first, then cut)

****Remember that 3M is pressure activated! Add weight or clamp for full strength & clarity. I like 300 LSE for acrylic**

NO

Weldon & syringe
(use # with the speed of set you need, #4 or #3 are watery and fast set)

Are the pieces very complicated or super small (tiny letters, stud earring sized)?

YES

****When your pieces are very small, the fuzzy edges of the Weldon are not typically super visible and it's easier to minimize them anyway by getting the glue to flow from edge to edge.**

NO

What is most important about attaching the pieces?

DURABILITY

If your object will take a lot of abuse such as a key chain or must be waterproof use...

Any Resin

Apply and flash cure if UV or let dry at normal speed for 2 part resin

OR

Weldon & Syringe

(use # with the speed of set you need, #4 or #3 are watery and fast set). Clarity, is sacrificed but it creates a strong bond.

CLARITY

If gluing two clear acrylic layers or you need maximum clarity use...

UV Resin

Apply to the whole surface edge to edge, press, and flash cure through clear side to minimize bubbles. Some squish out is likely but usually doesn't detract if the pieces are identical (aka a sandwich)

OR

Gorilla Glue Gel or Loctite GO2

Mist the entire surface of the smaller piece (if they aren't identical) with water then apply the glue. brush over surface as best you can then press/-clamp to eliminate bubbles and squish glue to edges. Squish out can be trimmed away with a blade later or even pulled away with fingers. This option does not work well for letters on a sign backer due to possible squish out though.

OR

Allcraft Glue

This works just like super glue - it's quick and pretty clear. I have noticed some very minor hazing on some pieces, but it's much clearer than any other fast set I've used.

SPEED

OR

PERFECT EDGES

If you absolutely cannot have squish out or risk marring the surface of your backer or you need to make a lot of objects fast use...

Weldon & Syringe

(#4 or #3 are watery and fast set). Clarity, is sacrificed though. If any of this drips on your backer it can mar the surface so only use if you're steady with the syringe. Do NOT wipe if it drips, allow to evaporate and use Novus Acrylic polishing system to remove any mark(s) left behind.

OR

3M Sheet Adhesive

Apply to your sheet before cutting, then cut. When attaching clamp or apply a lot of pressure using a laminator or press for best clarity. Be aware that 3M can leave a very fine sticky edge that attracts dust along the outer edge. I do not use 3M when making glitter filled shakers for this reason

DO'S

- **Apply Good, Even Pressure** - every glue on this list benefits from pressure, but Gorilla Glue/Loctite don't require it.
- **Consider Gluing the Outer Edge** UV resin is great for this, if your pieces are identical, try clamping them and applying a bead of UV resin along the seam then curing. You can hide this by sanding it a bit or using edge banding.
- **Glue from Center to Edge** - when applying glue start at the center and draw an X (vs a bunch of swirls or squiggles). The same when you apply pressure, this will help push air out towards the edges and minimize bubbles
- **Hide Glue Creatively** - you can sand your acrylic to make it frosted, hide it behind other elements, or apply paint, veneer, or other decoration to help hide your glue. Don't be afraid to make mechanical attachments like stand offs a key part of your design.

DONT'S

- **Use Heat** - in all my tests heat did not help in any way and actually could cause flash curing
- **Flame Welding** - although it can work in certain cases, mostly you'll end up scorching your piece or burning yourself. It's slow, finicky, dangerous and only works in specific applications (like gluing identical shapes along the edge)
- **Use solvents or alcohol** - I attempted misting alcohol/solvents to help the Weldon spread (the way water is used with Gorilla Glue to improve capillary action), but it causes major cracking and filming
- **Use Regular Super Glue** - super glue creates a gas that sticks to oil - it will haze and ruin most projects.