Here is basic outline of bonding fiberglass flares to metal quarter panels

The materials you can use for the quarter panels would be 3M panel bond or polyester resin with 1.5 ounce fiberglass matt. For cleaning, use Acetone to prep the surfaces.

On the quarter panels..

A) Sand down the perimeter of the quarter panel on your car to the bare metal. 2" wide. Put the fiberglass part (flare) up against your car to establish a perimeter line to work with. Sand wide with the lines to be sure to bond our fiberglass panel to bare metal and NOT old paint or primer. Use 36 or 60 grit sanding discs. Sand the back side of the flare as well with the same process. Rough surfaces are better to bond to!

B) Drill approx 5 perimeter holes in your NEW fiberglass flare for sheet metal screws to attach to the steel quarter. Your sheet metal screw size should fit a hole size of .120" Drill the first hole in the top center of the part. Then one hole in each corner, spacing the screws out about 10+ inches. Make sure the fiberglass part lines up in all corners and edges.

C) Clean and prep the meal surface as well as the fiberglass flare before bonding.

D) Cut out the stock metal flare.

Most all metal quarter panels have 2 layers of sheet metal, an inner and an outer. The inner is the wheel well and the outer is the quarter panel. When you cut the outer line you want ultimately pull the inner sheet metal straight out so the wheel well will be flat and out at a 90 degree angle to the quarter. It is best to cut the inner into 1" wide sections as the inner has a curve and you are pulling it out flat. We have images and the image will help to clarify this step. Stitch weld the inner sheet metal to the outer for strength and integrity. Careful NOT TO CATCH YOUR CAR on FIRE!!! Keep a water bottle nearby and have access to the back side of the quarter panel. You will then need to fit the fiberglass flare up to the sheet metal of the inner wheel well. You will likely have to trim back some of the sheet metal again to fit the shape of the new flare. Once you have the sheet metal as you want it, fiberglass the sheet metal closed. Seal it up with panel bond or fiberglass and polyester resin so that no water gets into the quarter later. Once this is dry you can go back to bonding the flare on the quarter.

E) Bond on the quarter panel.

Clean the surface of the fiberglass as well as the metal on the car with Acetone. Now that everything is ready. Put the fiberglass panel on the car with your sheet metal screws and drill holes every 2". Put sheet metal screws in the fiberglass part only at this point. Back all the screws off enough to get the part off the car. Set it aside for a minute.

F) Prepare your resin or panel bond.

Apply the adhesive evenly across the 2" wide surface(s) both on the car and the part. If you are using fiberglass matt, wet it out now onto the part. Put the part on the car and screw in all the sheet metal screws. Start in the center and work your way out to the corners. The matt is going to want to twist up... not to worry too much unless it holds the part away from the car. As you screw in the sheet metal screws the resin or adhesive will come/squeeze out, this is good.. Do not try to OVER tighten the screws, just enough to evenly hold the part up to the car for an hour or

so, while the resin sets up. Before the resin is rock solid, we back off the screws (in most case this is after 30-45 minutes of set up time on the car). You may need a drill with the appropriate head to back off the screws. (with a screw driver tip of course). we used to do this all by hand and it take way too long and as the resin sets up, it really difficult.

Let it set up with some heat or in the sun.. 70F + Over night is good. The next day the part should be ON THERE SOLID!!

It is better to fill the holes with resin or panel bond instead of bondo. Bondo has a tendency to shrink back later.

The last fiberglassing step is to run a 2" wide fiberglass strip inside the wheel well to seal the new fiberglass flare to the inner sheet metal wheel well from the under tire side. This will prevent the water from getting up inside the wheel well and between the fiberglass flare and the metal quarter.

From this point it is all "body work 101"...

We need to do a video and or offer many images but have not yet. Please feel free to call in for any tips, clarifications or suggestions. 510 581 7600.