

Step #1:

Start with a clean car, and a relatively dust and wind free environment. The tint is applied on the inside of the windows, you may work the window film on the outside, but car tint is finally installed on the inside of the windows, so you may need to remove the 3rd brake light and/ or rear deck if they are against the clear part of the glass.

Preparation

First, get the right tools for the job, a heat gun or hair dryer tinting squeegee, spray bottles, hard cards, Bondo cards, red devils, a cutting surface (I use linoleum glued to plywood as a cutting table for patterns, a piece of flat glass will work too) butcher paper (plastic coated on one side), a snap off razor blade knife, razor blades, Baby Shampoo(15 drops per pint or so.), paper towels (preferably paper shop towels), and some hand tools.

First you want to clear anything that will get in the way or that is against the glass where the car tint needs to be, like the inner flaps on the door panel where it goes down into the door, depending on the car, you can tape this back with masking tape, or if that doesn't work you can take off the door panels.

Remove the rear deck, and or 3rd brake light IF NEEDED. You will appreciate it when you're in there trying to lay a long piece of window film without touching anything but the clean glass, its not that easy and if the felt from the rear deck is against the glass, the film will be difficult to reach and squeegee completely. Most cars only need to have the brake light removed.

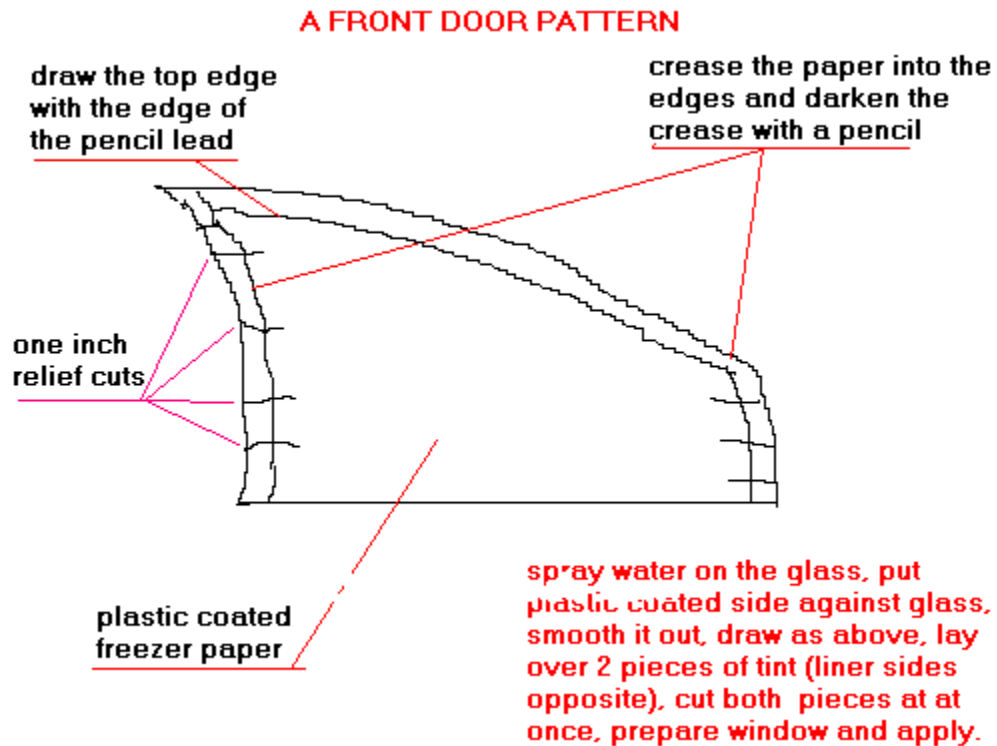
Side Glass

One way to pre-cut the film for the roll up windows is on the window itself, placing the window film on the outside, with the liner side facing up, the film can be trimmed to the approximate shape of the window, this method is o.k. but there is a way to get a much more accurate shape to the film using freezer paper patterns and without using blades on the car glass. To avoid sloppy cuts and creasing, I like to use Reynolds plastic coated freezer paper to make a pattern for rollup windows. Cut a piece of the paper about an inch larger than the window. Make several cuts along the sides of the paper, about an inch long and about 5 per side, this is so the paper will lay flat when you tuck the edges into the frame. Spray the outside of the fully rolled up window with unsoapy water.

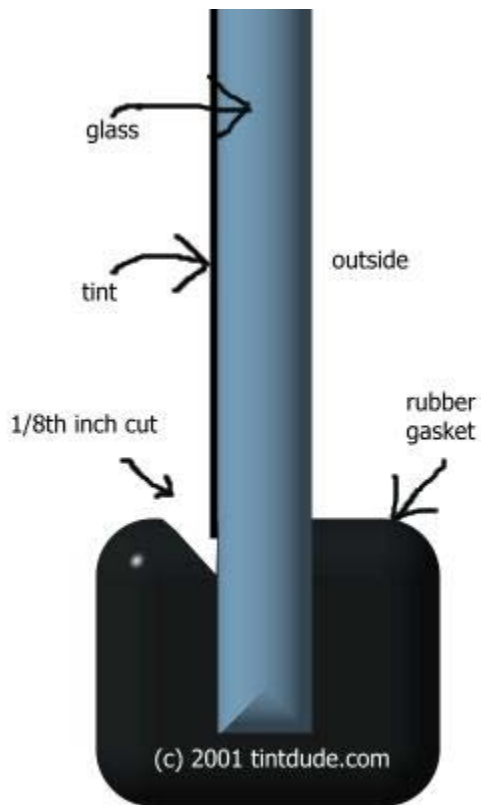
Lay the paper over the glass plastic side down and smooth it out with a hard card. Be sure to keep the paper side of the plastic coated paper dry. Trace the edges where you want the edge of your film to be onto the paper with a hard card and draw them in with a sharp pencil.

Use the factory edge of the paper against the bottom flap of the car window, (so you wont have to draw the bottom line). First draw the sides with the pencil, lift the bottom of the paper about an inch away from the glass and roll the car window down until the upper edge is exposed. Use the edge of the pencil lead to trace the top edge of the glass. You should now have a perfect, REUSABLE representation of the car window. Take the pattern and lay two pieces of film, with the liners opposing, under the pattern. Spray a

little water in between all of the layers to keep them still as you cut. Cut them on a piece of flat glass or a linoleum cutting table. Here is an illustration:



I shrink most car roll ups because I don't tape the flaps anymore and I don't want any fingering under the flap. To shrink the door pieces, I place the film on the wet outside about an inch above the bottom flap and about an inch to the left or right of the side felt, squeegee the film so that its tight on top and all the excess is on the bottom, then wet shrink the excess film on the bottom. When you're ready to tint the car window, start with the glass rolled down so that the top of the window is about a half inch from the felt, Clean and prepare the glass to receive film, lay the film near the bottom of the soapy wet glass first and slide it down into position as you lay the top into position. Then squeegee from an anchor point to keep the film from moving, working from the middle out. Roll the window up and squeegee the bottom out. Blot any water from the sides with a hard card wrapped with a paper towel.



Another good tip is to mark the outside edges of the window with a dry erase marker (with the window rolled fully up), then when the window is down a little and you are laying the film you will be able to tell where the edge of the film should be. As you know, the window shifts as it is rolled up and down, so this will let you position the film properly before it sets up to much to move.

To prevent gaps, stationary 1/4 panes should be cut slightly oversize and the inner rubber should be trimmed to accommodate the slightly larger piece of tint.

Cleaning the glass in preparation

This is the main thing about window tinting, keeping the dirt to a minimum. This may be hard to follow, but I'll try to keep it understandable. Most cars have a felt edge inside that guides the glass as it rolls up and down. When this felt gets wet it 'bleeds' tiny black felt hairs. These really stand out when the film is dry. To avoid this I will roll the window as far down as it will go, and cover the felt with masking tape, then roll the window back up until the top of the window is about 1/2 inch from the top. Spray the window down with soapy water (10 drops of Joy dish soap per pint) and clean it with a new razor blade. The blades wont scratch if they are new and the window is wet. Spray the glass again lightly, get a blue shop paper towel and wipe the edge of the glass and frame in one stroke to pick up heavier dirt, wipe your squeegee with a moist blue shop paper towel, and make one

pass along the side of the window, wipe your squeegee again, start at the dry side you just did and squeegee side ways to the other side, repeat until you reach the bottom. Then a last stroke down the side you were squeegeeing toward and the window should be completely clean and dry.

As you are squeegeeing, (on roll up windows) do the top first, work down avoiding the edges until last, stroke them downward, some times I will use a thin card, like a credit card cut into a triangle to squeegee the last stroke down the edges, it depends on how tight the frame is.

Defroster line.

Usually 4 pieces of film will lay flat on most rear windows, some can be done in fewer strips. Let me know what kind of car it is for more specific information. Cut the strips so that the pieces will overlap each other on a defroster line (if the car has them), then, when you are laying the film inside you can cut both pieces at once along the line, to make a 'butt seam'.

Make sure to use new high quality stainless steel razor blades to reduce unavoidable glass scratches. Try not to use carbon razor blades or olfa knives on glass, the will almost certainly scratch the glass, especially on the outside! Most rear car windows have a compound curve, a curve on the horizontal plane and a curve on the vertical plane. This prevents the window from being tinted with a single piece of tint. A good analogy is trying to wrap paper around a basketball, the paper will not lay flat without creases and folds. One way to overcome this is the same way a basketball is made, with pieces and seams. Most rear windows can be done in four pieces of tint with three seams. The seams can be hidden by the horizontal defroster element. You should first cut all of your pieces to shape, and then install them. Make sure to use new high quality stainless steel razor blades to reduce unavoidable glass scratches. Try not to use carbon razor blades or olfa knives on glass, the will almost certainly scratch the glass, especially on the outside!

Back Glass

For the back window, most shops will do them in one or two pieces (depending on the car), with the heat shrinking method. This is a very tricky technique, and is very easy to mess up if you don't know what you are doing.

An older technique is to use strips, butt seamed at the Preparing the rear window for film installation should be done after all the film has been cut and laid out ready to peel. Spray the inside of the glass with soapy water and scrub it with a white abrasive dish sponge, paying extra attention to the edges and the dotted areas. Squeegee the glass dry and wipe the dotted edge with a paper towel to lift up the black residue the ceramic edge gives off, (This will help the film to stick to the dots.) and spray the window again, this time squeegee very carefully to get all of the water off. Now flush the window from the top down, avoiding the very top and the dots, if the window has them, to prevent dirt from bleeding down. Just flush the area thats going to receive the strip of film.

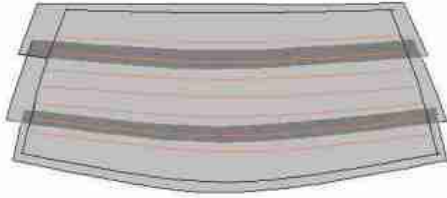
Lay all the cut film out on the wet cutting table so you can pull the liner off without it laying over onto itself (if dry adhesive surface touches itself you will need to start over as it will stick firm). Wash the windows in preparation to receive the film one at a time. For the back window, use a white dish scrubber not a green one (it will scratch). For the side glass use razor blades and soapy water, squeegee clean, then spray with soapy water, go peel the film, and spray it with soapy water too, pick it up and lay the film onto the wet inner glass, position it until its just right, squeegee most of the water out, then lay the next piece, squeegee both, then cut along the defroster line to make a butt seam making sure not to cross and cut any defroster lines as they will no longer work, also some cars have the radio antenna on the window with the same type of line, do not cut these as your antenna will not work anymore! Remove the cut away pieces as you lightly spray soapy water where you lift the film away from the glass, squeegee out the seam, then lay the next strip and so on.

After you apply the film for the doors wait a little while before you put the panels back on, or removing the masking tape from the flap. After all the film is laid and cut, here and there parts of it might pop up, push them down with a bondo card then blot any excess water from the window film with paper towels.

Go peel the film and carefully lay it into position without creasing it or touching the adhesive side, or letting it touch anything but wet glass. If it hits a dry spot of glass it will grab, so be methodical, don't be afraid to rehearse how you are going to get in the car without using your hands holding a long strip of film. Once it is in position, carefully squeegee it out, prepare the next section of glass as above, and lay the next piece in. Once the second strip is squeegeed out, cut the butt seam at the defroster line.

Try to cut on the top edge of the defroster line on the glass and not in the metal of the line. Make sure to cut firmly through both pieces of film to get a good clean seam the first time. Make sure to use new high quality stainless steel razor blades to reduce unavoidable glass scratches. Try not to use carbon razor blades or olfa knives on glass, the will almost certainly scratch the glass, especially on the outside! After the cut is done, remove the extra pieces. to remove the piece that is under the second strip, peel back the corner of the second strip just enough to grip the extra piece, and pull the strip of extra film out slowly as you spray a little soapy water to keep any dry spots from grabbing. Once the excess pieces of film are gone, squeegee both the first and second pieces firmly, prepare the next section of glass and repeat as above until all 4 pieces are in and all three seams are cut.

USING PIECES
FOR THE REAR
WINDOW



Pieces Illustration

**Cut along this line and
remove excess overlap**

