

# Illustrated Guide to the World of Creative Glass Etching...

Featuring:  
*The ARMOUR ETCH*  
Glass Etching System

*You are about to create Professional  
Quality permanent etched designs using  
3 easy steps in less then 5 minutes!*

- Project Ideas
- Detailed Instructions
- Create Your Own Stencils



**Please Read the following Safety Precautions:**

Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use of or the ability to use the product. Before using, user shall determine the suitability of the product for the intended use and assume all risks and liabilities in connection therewith.

**Kit contains ARMOUR ETCH® Glass Etching Cream,  
KEEP OUT OF REACH OF CHILDREN & PETS**

Contains: Ammonium and Sodium Bifluorides. Avoid contact with eyes & skin. Do not taste, swallow or breathe liquid or mist. Always use near water. Use in well ventilated area. Wear long sleeve protective garments, rubber or plastic gloves & protective glasses or goggles. Rinse empty container thoroughly with water before discarding in proper receptacle. Contains fluorides. Use only under adult supervision.

**First Aid:** Call physician immediately.

**External:** Wash with soapy water. Clean under fingernails.

**Internal:** Give large quantity of water and follow with mineral oil or egg whites.

**Eyes:** Flush with water for 15 minutes.

For Emergency information call the Poison Control Center 1 (800) 222-1222

Contains glass, which may break exhibiting sharp edges. Conforms to ASTM D-4236 Ages 18 and Over.

**Important: Armour Etch® Cream will not etch plastics and some Pyrex. When in doubt, test the material before starting. Not intended to etch larger solid areas. Please read safety instructions on the Armour Etch® Glass Etching Cream container before beginning your project.**

**MATERIALS NEEDED:**

- Ruler
- Paper Towels
- Cotton Swabs
- Lint-free Cloth
- Carbon Paper (smudge proof)
- Newspaper or Plastic Drop Cloth
- Additional Patterns & Designs
- Masking Tape
- Water Source
- Steel Wool
- Pen, Pencil, Eraser
- Protective Glasses or Goggles
- Long Sleeve Garment or Apron
- Contact Brand Shelving Vinyl
- Glass Cleaner
- Hobby Knife
- Gloves

## Clean the glass or mirror

1. Clean the glass or mirror thoroughly to remove all grease, dust and fingerprints. Avoid cleaner solutions that advertise “Finger print resistant”, as these cleaners leave a film on the glass that hinders the etching process. Avoid finger prints on the glass where you are going to etch. Dry glass or mirror completely.

## Selecting stencil design & applying to glass

2. Choose the design of your choice and carefully cut the stencil sheet and the frosted backing sheet together to avoid touching the back side of the stencil sheet. Measure carefully to determine where you will locate the stencil on the glass or mirror. Separate the blue stencil sheet from the frosted backing sheet. Put aside the frosted backing sheet to be used later. Place stencil sheet on the glass with the blue (tacky) side touching the glass. Secure stencil sheet temporarily to the glass with masking tape as shown in **Photo A1**.



(Photo A1)

3. Using the wood stick enclosed, transfer the stencil from the sheet to the glass surface by rubbing firmly over the design with smooth, even strokes. Rub left and right, then up and down. **Do not dig into the stencil.** You will be able to see the stencil being transferred by the change in color from a dark blue to a lighter blue see **Photo A1**. Be careful when you rub near the edge of the stencil not to peel it back up by accident.

## Remove top carrier sheet

4. When the entire stencil has been adhered, carefully remove some of the masking tape and slowly peel back the clear top sheet. See **Photo A2**. If the stencil has not been totally adhered to the glass, put the top sheet back down and re-rub area until all pieces are adhered.

## Preparing the glass for etching

5. Apply a border of masking tape around the entire stencil overlapping the tape on the blue stencil by 1/16" to 1/8", being careful not to overlap the design. This overlap prevents the etching cream from contacting the glass and etching unwanted areas! If a very large area of glass needs to be protected, use strips of adhesive backed shelving vinyl. When all sides of the stencil have been taped, use the white frosted backing sheet to lightly rub over the entire stencil area. Check the stencil for small tears or holes by holding the project up to the light. If any holes appear, cover them with small pieces of tape. Be careful where you put the tape, because the stencil will tear if you try to remove it.



(Photo A2)

## Applying the Armour Etch® cream

6. For best etching results we recommend that the room temperature, the etching cream temperature and the object you are etching be over 70 degrees. Shake the ARMOUR ETCH® Cream thoroughly. Work in a well lighted and well ventilated area near a water source. Wear plastic gloves and protective eyewear. You must apply a thick layer of etching cream in order for the chemical to react properly on the glass or mirror. Thick enough so that you cannot see the design of the stencil through the Armour Etch® Cream. Stay within taped area. See **Photo A3**.



(Photo A3)

## Removing etching cream & stencil

**7.** Allow ARMOUR ETCH® Cream to remain on glass for one minute only.. No longer! Immediately wash off all the etching cream under luke warm water, see **Photo A4**. Some of the stencil will be removed during this rinse, but it's OK. After all traces of the etching cream are washed away, remove all the remaining tape and stencil pieces. Clean the glass using window cleaner and dry completely.



(Photo A4)



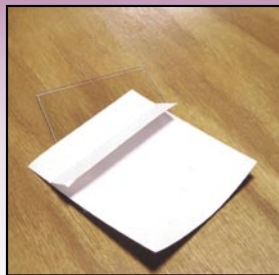
Clean the glass or mirror (Refer to “Rub’N’Etch” Instructions). Cut the masking vinyl 1” larger than the length and width of your glass.

## Applying the vinyl masking

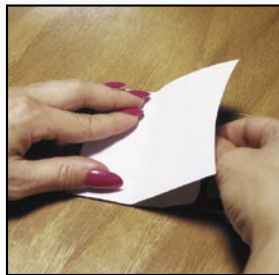
Turn the sheet of vinyl masking over with the backing sheet facing up. Peel down about 1” of the backing sheet across the top of the vinyl. Press down and crease the backing sheet to force it to lay flat, as shown in **Photo B1**. Turn the sheet of vinyl masking over so the adhesive side is facing the glass. Align the top edge of the vinyl with the top edge of the glass. Allow vinyl to overlap evenly all around. When aligned, press the exposed adhesive strip to adhere the vinyl to the glass. With one hand on top of the vinyl, rub from side to side to adhere it to the glass. With your other hand underneath, slowly pull to remove the backing sheet. See **Photo B2**. Press out the air bubbles as you go. If you miss a few, pull up the vinyl masking until the bubbles disappear, then continue rubbing from side to side until the vinyl is evenly applied. Fold the excess vinyl over the edges of the glass.

### Helpful Hint:

The vinyl masking should be slightly larger than your project so the vinyl can wrap around the edges of the glass.



(Photo B1)



(Photo B2)

## Transferring your design onto the vinyl masking

### Some helpful hints before you get started.

- *Rubbing the masking vinyl gently with steel wool, before you trace your design, will give your tracing a darker impression.*
- *The longer the vinyl masking remains on the glass, the better the adhesive sticks.*
- *We recommend using Contact Brand Shelving vinyl.*
- *Avoid using tape as a stencil.*
- *You should start with a simple design for your first glass etching project and gradually work up to more intricate patterns once you gain confidence and experience with the knife cutting techniques.*

*Now let's get started!*

**Technique A: Trace your design.** Position your design in the desired location on the vinyl covered glass. Use a ruler to determine if your design is aligned on all sides. Tape only the top edge of the design sheet firmly to the masking vinyl. The design is taped only on the top edge so it may be lifted periodically to check how the design is transferring. Place a sheet of smudgeproof carbon paper face down under the design sheet and trace over the design with a ball point pen. See **Photo B3**. Use enough pressure to transfer the design but not so hard that you tear the design sheet. Upon completion of the tracing, lift up the design sheet and carbon paper to make sure all lines were transferred accurately. If so, then remove both tracing sheets.

**There are four techniques we use to transfer designs before they are cut by hand to create a custom glass etching stencil. (For this lesson you will be using technique A).**

**Technique B: Draw your design freehand.** If you have artistic ability you can try your hand using a rounded pencil and light pressure to avoid tearing the vinyl.

**Technique C: Create a stencil from cardboard.** Use a cardboard or plastic stencil to help guide your pencil. Good for repeat patterns.

**Technique D: Use a photocopy of your design.** Use a copy machine to duplicate your design. Then coat the back of the photocopy with spray adhesive and adhere the design to the vinyl.

## Select the areas to be etched

Every design has several possibilities of how it can be cut out as a stencil and etched as shown in the following illustrations. You can choose to cut and etch only the outline of the design (**Illustration A**), or you may choose to cut and etch only the solid areas (**Illustration B**). Another alternative is to remove the background and reverse etch the area (**Illustration C**), which is only recommended for sandblasting. If you are unsure as to which technique to use, take your original design sheet and use a pencil to shade in the areas you think would look good as an etched area or outlined area.

## Cutting out the design

Hold the hobby knife in your hand as you would a pen for writing. Rest the weight of your hand on the side of your palm and grip the knife handle firmly but not too tight. Slowly and smoothly,



(Illustration A)



(Illustration B)



(Illustration C)



pull the knife along the side of the line using just enough pressure to cut through the vinyl, but not so much as to scratch the glass. Make sure your blade is sharp. A dull blade will tear the vinyl instead of cutting it. Guide the blade along the design turning the glass when needed to insure proper hand position to avoid hand fatigue. You will be using the Solid Area Technique (**Illustration B**) cutting on the outside of the design line. It is important that your cut lines connect the start and finish of each area. Avoid cutting past the point where lines meet. After all the lines have been cut, use the tip of your knife blade to pry under the cut edges. Carefully lift up and remove the pieces of vinyl masking. Grip them with your fingers and slowly peel up making sure all the lines have been cut. See **Photo B4**. If for some reason you are not happy with the stencil you have finished, or the design just wasn't right, you can remove the remaining masking and start over again from step one. You are not committed to the design until the Armour Etch® Glass Etching Cream is applied.

### **Prepare for etching**

Use the backing sheet from the vinyl masking (or any clean piece of paper) to press down on all the cut edges of your stencil making sure that all the edges are firmly adhered to the glass. Clean off finger prints from the exposed glass with a lint free cloth. Lightly dampen the cloth with glass cleaner and dab gently on the exposed areas of the glass to be cleaned. Never apply the cleaner directly onto the stencil as it will lift the edges.



(Photo B3)



(Photo B4)

## Applying Armour Etch® Cream

We recommend that the room temperature, etching cream temperature, and the object you are etching be at least 70 degrees. Work in a well lit and well ventilated area near a water source, and wear plastic gloves and protective eyewear. You must apply a thick layer of Armour Etch® Glass Etching Cream in order for the chemical to react properly on the glass or mirror. You should not be able to see your design through the etch cream. Work quickly and safely.

See **Photo B5**.



(Photo B5)

## Removing etching cream

Armour Etch® reacts instantly upon contact with the glass. However, the amount of time you wait to rinse will vary with the type of stencil used. When using vinyl masking as a stencil, allow the etching cream to remain on the glass for 5 minutes.

After 5 minutes, use water to rinse off the etching cream. Rinse from the top of the project down, work quickly and use your brush to help. Use plenty of water and wash thoroughly until all etching cream residue is removed. Avoid splashing! See **Photo B6**. The etched effect will

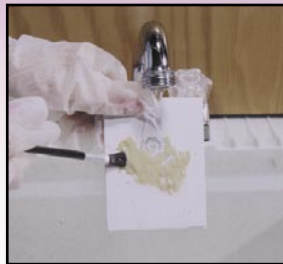
**Helpful Hint:** We have found that when etching large solid areas of a design, the natural textures and striations of the glass (which are invisible to the eye) sometimes show up after etching. To avoid this undesirable result, pick designs with more detailed areas or add more detail to large solid areas of existing designs. Avoid etching large solid areas.

not show up as dense until the glass is rinsed and completely dried. When dry, remove the vinyl masking. Most larger pieces will come off pretty easy. If you have trouble with all those smaller pieces, run your project under hot water to loosen the vinyl adhesive, then pick off the remaining stencil pieces. Use glass cleaner to clean your project.

**Important:** *Porcelain and Enamel sinks will lose their shine after repeatedly being subjected to rinses of diluted Armour Etch® Cream. Use stainless sinks, utility sinks or a plastic pail with water.*

#### Helpful Hint:

When working on motor vehicles and other vertical glass surfaces, tape a plastic drop cloth on the bottom and along the sides of the design to protect the paint. Direct the rinse water into a bucket. Mask off glass areas above the design too.



(Photo B6)



Photocopy Patterns Before Using

## Lettering Placement System

1. On a piece of paper, determine the wording you wish to etch and arrange the words in the manner you wish them to appear. Count the number of letters on each line (including spaces between the words) and find the center point of each line. Count capital letters as if they were two or three letters according to their width. (i.e.: W, M, etc). This paper is your **reference guide**.
2. Clean the glass you wish to etch. Avoid using cleaners that promote “finger print resistant”, as these cleaners leave a residue or film on the glass that will hinder the etching process.
3. To set up the guidelines on your glass, measure down from the top of the glass to where you would like the first line to start. Measure and mark in several spots along glass with a fine tip washable marker to create a straight line. Lay a strip of masking tape along the bottom edge of the marks and wipe away marker lines. Determine where the center point of your first line will be on the glass and mark on the tape.
4. Cut the stencil sheet into horizontal strips. This will make it easier to align the letters and rub them down. Using your **reference guide** from step 1, locate your center letter on a stencil strip and position accordingly at your center mark, lining up the bottom edge with the masking tape. See **photo C1**. Hold stencil strip in place making sure the letter you are transferring is flat against the glass and aligned vertically.
5. Transfer the center letter onto the glass by carefully but firmly rubbing the letter down with the craft stick that comes in the



(Photo C1)



(Photo C2)

stencil package. The stencil will change from dark blue to light blue when it releases from the transfer sheet. If the stencil is a little stubborn, rub a little harder until it releases.

**6.** Following your **reference guide**, apply the rest of your letters one by one, first to the left, then to the right, overlapping the blue edges of the stencil slightly so there are no spaces or gaps in between the stencil letters. See **photo C2**. When you approach a place where a space is needed, cut a piece of masking tape the size of a mid-width letter and tape in place, overlapping the blue stencil edges the same as you did for the letters. Fix any small gaps that may have happened with a sliver of masking tape or some art mask. Repeat the above steps for any additional lines of wording.

**7.** Once all your lettering is in place, carefully apply masking tape all around the outer edges of your completed words or phrases, overlapping the blue edges of the stencil. Take care not to cover any part of the open areas of the actual letters with tape. Continue applying masking tape or contact vinyl to all surrounding areas of glass. See **photo C3**. If you do not protect the surrounding glass, the etch cream can “haze” or “fog” unprotected areas of glass during the rinsing process. Once completed, take the frosted backing sheet from stencil package and carefully rub over all stencil letters and tape to make sure they are secured to the glass.

**8.** Finish with steps 6 & 7 of Rub’N’Etch section.



(Photo C3)



## Fabric Painting with Rub 'N' Etch Stencils

### Additional Materials needed:

- Masking tape
- Hand held hair dryer
- 2" wide packing tape
- Fabric Paint (you need to find the THICKEST heat set fabric paint)

This procedure works best on a smoother closed or fine weaved fabric such as cotton. We recommend that you wash the fabric to remove the sizing. It is extremely important to use THICK heat set fabric paint. It is highly recommended that you test a piece of your selected fabric with a stencil and your heat set fabric paint to be sure that they are all compatible. This way, you are assured of getting the final results you are looking for.

1. Select the Rub 'N' Etch stencil of your choice from the stencil sheet. Separate and remove the frosted backing sheet.
2. Position and apply the stencil by rubbing it down while on a hard surface as per the instructions for glass etching.
3. Place a piece of cardboard and / or a piece of paper toweling behind the fabric to absorb any paint that may bleed through to the other side.
4. Apply a light layer of paint onto the exposed areas of the stencil to color the fabric. Remove excess paint from the stencil with the paint brush. If you using more than one color, try to restrict the paint color only in the desired area.



(Photo D1)



(Photo D2)



(Photo D3)

**5.** Use the hand held hair dryer to dry and heat set the fabric paint. Be sure to keep the hair dryer moving while holding it far enough away from the fabric to avoid burning the fabric. Do this until the paint is firm (dry) to the touch.

**6.** Place the 2" wide packing tape over the stencil and rub lightly on the tape. Peel up the tape to remove the stencil leaving behind the painted design. Use more tape to remove any excess stencil material.

**7.** After all the stencil is removed, use the hair dryer again and completely dry until the paint is a uniform color. Some paints might puff up slightly.



(Photo D4)



(Photo D5)



## Some Other Great Glass Etching Products From Armour Products!



# 15-0250  
Armour Etch®  
Glass Etching Cream  
( available in 3 sizes )



# 70-9000  
Deluxe Sand Etch® Kit



# 77-7721  
Bottle & Jar Cutter



#14-9000, #14-0101, #14-0270  
Full line of instructional books



# 70-9001  
Starter Sand Etch® Kit



#70-9007  
Inflate 'A' Booth

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