How to Use THICK Fiber Felt to Create Channels Through Glass

Creating perfect channels through your fused glass art is really quite simple. Aside from a nice assortment of your favorite glass, your scoring tool and some pliers, you'll need a nice sharp pair of scissors or a utility knife and a ruler, some Elmer's Glue (the Two Lasses are specially fond of Elmer's Blue School GEL glue because we LOVE the way it stays put!) and some of our fabulous THICK Fiber Felt!

You will want to begin with a base piece of glass (the Two Lasses used a 3” x 3” piece of dichroic). This will be the foundation upon which you will build your piece. Rather than using a tiny piece of glass for your base, we would encourage you to create one large piece that you fuse and then cut down into a few smaller pendant pieces, using a glass tile, band or ring saw.

You will need to cut a strip of our THICK fiber felt that will leave a large enough opening through which you can insert whatever chain, cord or neckwire that you are planning to use with your finished piece. You will also need to cut a piece of CLEAR glass that is 1/4 inch BIGGER than your base piece (allowing 1/8th of an inch overhang on each side). This clear glass will cap off the piece and the extra 1/4 inch is needed to ensure that the entire project will be encased properly.

**LASS TIP** You want to cut the felt just a wee bit wider than the width you ACTUALLY need/want, because after you fuse your glass, you will undoubtedly want to re-tool and/or reshape it using a grinder. You may even want to cut it down to make several smaller pieces after which you will then need to FIRE POLISH your glass. When you fire polish your piece you will need to place another piece of felt back into the opening in order to hold the channel open during the second firing. The Two Lasses USUALLY begin with a piece of felt that is just over 3/8ths of an inch wide for the first firing and then use a piece that is just over a 1/4 inch across for the fire polishing process.
You want the length of the felt to hang off the edge of your base glass by a good half an inch on both sides! Once you have cut the felt to the desired width and appropriate length, you'll want to lay it on your base piece of glass to get an idea of where the channel will run through the piece. When making pendant pieces, be sure to leave at least a half an inch from the top of your fiber felt to the top edge of the glass. You will need at least that amount of room if you need to re-shape or re-tool your piece after it has been fused. Once you have decided on the location of the channel, you will want to glue your fiber felt in place by running a bead of Elmer's glue along the felt strip and laying it on the base glass piece. We recommend that you allow this to dry completely before you begin arranging the other pieces of glass onto your base piece.

You do not have to use glue at all, but when you are first learning this technique, the glue DOES help hold the felt in place while you work around it.

Now I think it is safe to say that we have all seen some fabulous warm glass pendant pieces with channels running through them, only to discover a huge and dare we say, UNSIGHTLY BUMP on the top of the glass that, in our opinion, ruins the whole look of an otherwise elegant piece. The "secret" to creating a nice, even channel through your glass without having a big lump on top is to layer the glass in pieces alongside the felt until you have built up enough layers of glass to become even with the top of the felt. This is CRITICAL!! You can see in the photo (above) that there are TWO more layers of glass on top of the base layer, and built up alongside the felt. You can, and probably would be wise to use glue (sparingly, please) to anchor a few pieces of glass in place. For this task, the Two Lasses can also recommend SUPER GLUE (generic brands work just as well as the original) but be careful because, as the commercials promise, SUPER GLUE dries SUPER FAST, and is SUPER strong!

Once you have built up your layers to lie flush with the top of the felt, you will need to decide whether you want to completely hide the channel (using an opaque piece of glass), or subtly disguise it (using perhaps a busy, patterned
piece of glass), or embrace it, by using a matching silk cord that will enhance the beauty of the glass. For illustrative purposes, we have placed a strip of patterned dichroic on black over top of the fiber felt. You will then need to add yet another layer of glass pieces to meet up with the strip you have just set in place over the fiber felt.

Once you have all your layers in position, you will want to encase the piece by placing that last piece of clear glass (the one you had cut 1/4 inch larger than your base piece), on top. If you haven't used any glue so far, this might be the time to place a small dab in each corner of your glass topper before setting it in place. We DON'T recommend SUPER GLUE for this one last job, as you may need to reposition the top piece of glass. Ideally, when looking directly down onto your piece, you should be able to see a thin "border" (measuring 1/8th of an inch) around the edges of your piece.

Remember it is VERY important that your piece is thoroughly DRY before you place it in the kiln for fusing, so if you have used glue, allow it to cure for at least 12 hours before firing! After firing your pieces, you will find that the fiber felt is EASILY removed with a gentle pull on one end, or by placing the channel under running water.
As you can see from the photos (above) we fired the 3" x 3" tile and sliced it up into smaller "bar" pendant pieces. After cutting the tile into strips, we used the disk grinder to carefully grind flat, crisp sides on our pendants and then we did some fine tuning with our diamond sanding pads, to really smooth out the glass (the Two Lasses recommend polishing the pieces with 200 and then 400 grit sanding pads. After re-tooling our pieces, we gave them a good scrub with mild soap and water and a toothbrush or nail brush (to get rid of the micro-fine glass debris created while grinding), and dried them thoroughly before inserting a NEW piece of fiber felt back into the hole that was created during the initial fusing process. These bar pendants then went back into the kiln for fire polishing (to heal the abrasions caused by the re-tooling/re-shaping of the piece). It is CRITICAL that you remember to place another piece of felt into the channel before you put your glass back in the kiln for fire polishing! Failure to do so, will result in the collapse of the channel!

**Tip for Using THIN Fiber Felt to Create Channels Through Glass**

For those of you who are working with our wonderful THIN Fiber Felt, if you want precise glass pieces you will need to cut your glass very carefully as the THIN Fiber Felt cannot be re-inserted back into the channel for firepolishing and therefore you won't be able to re-tool your glass after it has been fired. For this reason, our THIN fiber felt is best used for creating irregular, abstract glass pieces that you will string together using nylon thread or beading wire (as shown in the photo below).