



Jewel Of The Tile

Making a mosaic shelf is totally fulfilling, plus it's a training ground for future home improvements. Once you know how to attach the tiny pieces and grout them, you can move on to more ambitious undertakings like tiling the bathroom or executing a mosaic of the Mona Lisa on the bottom of your pool.

Materials:

- Tiles
- Plates
- Thinset mortar
- Acrylic admixture (optional)
- Grout
- Grout sealer

Tools

- Tile nippers
- Hammer
- Eye protection
- Gloves

Steps:



Make or buy a shelf and seal it with urethane

Shelf Absorption

Start by making a custom shelf from cedar, pine or plywood - a horizontal piece attached with zinc screws to a vertical support. Or you can just buy an unfinished pine shelf. In either case though, coat the shelf with water-based urethane to seal it.

Tile Me No Lies

Next, get a selection of tiles from a tile shop or home center. For a cheaper alternative, sort through boxes of leftover tiles at a recycled building-materials store.



The easiest way to break tile is to hit it with a hammer



Alternatively, use a glass cutter



Score the tile with the cutter

To break the tiles into mosaic pieces, wear protective gloves and eye gear. The fastest method is to whack the tiles with the flat edge of a hammer. If you want more control over the shapes of your pieces, use 'tile nipper' pliers, made especially for shaping tile.



Use pliers to break the tile down and away from the cut line



Use tile nippers to shape the pieces



Grozers (found at stained glass shops) can be used to dull sharp edges

Broken china also makes good mosaic pieces. If you haven't dropped any dishes lately, try Goodwill or Value Village for cheap, colourful plates. To cut plates into useable pieces, tile nippers work really well.



Sort the pieces into colour groups

Take time to sort shards by colour and stow them in different containers. Otherwise you'll have to sort them as you're affixing pieces to the shelf, with your fingers all covered in mortar, murmuring cruel epithets and wearing a pinched expression.

Next, carefully lay out your design, or just dive in and start sticking the pieces on with madcap abandon.



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Use white 'Thinset' tile mortar



Use acrylic admixture for a stronger, more flexible bond

Mortar Love

To attach the pieces you'll need tile fixative, a mortar commonly sold as Thinset. Look for it in the tile aisle. Get **WHITE** Thinset if you can find it. It doesn't show through the grout as badly as regular Thinset, which dries very dark gray.

Tip: Also in the tile aisle you'll find acrylic admixture, a liquid polymer that replaces the water you would normally use to mix up mortar. Admixture strengthens the mortar and I highly recommend it, especially if you'll be using your shelf outside.



Mix to stiff peaks



Tile pieces can vary in thickness

Mix the Thinset to the 'firm peak' stage. It should be quite stiff and tacky. Using a Popsicle stick, spread a little mortar on the back of a piece of broken tile or plate, and plop it on your shelf. Start setting pieces around it, matching the edges with complementary shapes.



Put more mortar on the thin pieces so that the tops become level

Try to set all the pieces flush by applying varying amounts of Thinset to the underside of each piece, depending on its thickness. Keep the spaces between pieces roughly an eighth-inch to a quarter-inch wide.





Build from the bottom up on vertical surfaces



Use spacers to maintain space between pieces

Some parts of the shelf are more difficult, like the edges. You may need plastic tile-spacers or matchsticks if you're working vertically up an edge, because the pieces will tend to slide downward in response to gravity. You can also use masking tape to hold pieces in place until the mortar sets up.

You pretty much have to do the shelf in stages. Otherwise, pieces drop off when you flip the shelf over. So mix your mortar in small batches (about a cup at a time), and stretch the project out over a few days.

Once you have the entire surface covered (except the back edge where you'll hang it), allow time for the Thinset to cure. Then you're ready to grout.



Use a rubber float to press grout into the spaces



Work the grout in with the float



Fill all the spaces - use your finger to press it in if necessary

Grouter Limits

Buy 'unsanded' grout if your spaces are less than 1/8"; it's creamy and flows into tiny spaces. If you have more generous spaces up to 3/8", buy 'sanded' grout, which contains fine sand to lock the grout in place in larger crevices.

If you haven't tried grouting before, it's fun. You smush the grout into the spaces with a rubber float (also available in the tile aisle), pushing grout across and down into the little trenches until no more will go in.



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Use a tile sponge with softened edges and corners to clean off the excess grout



Gently wipe the surface



Rinse and wipe again

Let it sit for a few minutes, then wipe diagonally across it using a damp sponge to clean off the mosaic pieces. Then let it sit for another 10 minutes or so, and wipe again, always rinsing the sponge in clean water between each pass.



Always use a clean side of the sponge, and continually rinse the sponge in clean water!



The final wipe must be dead clean

When the mosaic surface is really clean, leave the shelf for a week to allow the grout to cure fully, then seal the entire shelf with grout sealer.



Drill and install screws for hanging the shelf



Seal the back with tub and tile caulk



After curing, seal with grout sealant

Mount the shelf indoors or out and admire your handiwork for years to come.

