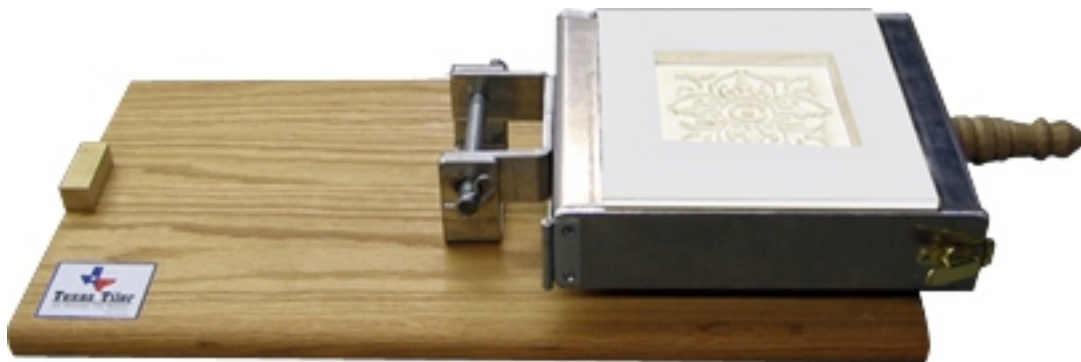


**Ceramic Manufacturing Services, Inc.**  
**410 Blue Smoke Court (w)**  
**Fort Worth, TX 76116**  
Tel: 1-800-794-5586  
Ofc: 1-817-535-3030  
**www.cowtownceramics.com**



# Texas Tiler

## Air Release Tile Maker



Patent Pending

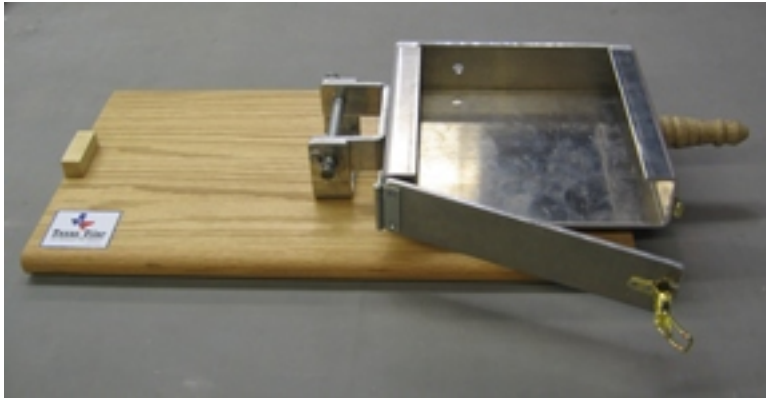
# TUTORIAL

How the Texas Tiler Air  
Release Tile Maker Works

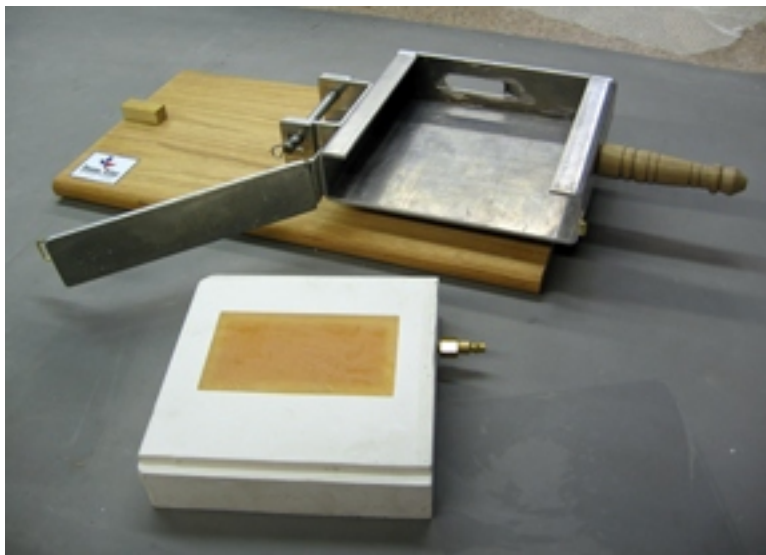
# How the air release die system works.

An air release die has a porous air tube throughout the center of the die. The air tubing is connected to an air quick connect hose that is connected to the air compressor. When air pressure is turned on, the air escapes from the air tubing in the die and forces water that's in the die to escape like beads of sweat on your brow.

The water then releases the clay that's pressed into the die cavity.



The Texas Tiler uses a “one die casing system. The casing is made of heavy duty aluminum with a die lock-in system. All dies made with the Tiler Rubber Die Mold fit perfectly in the aluminum casing thereby only requiring one single casing, no matter how many different dies you use.



Urethane rubber models are used to make the dies which are made of ceramical. Molduct air tubing with an air coupler fitting attached is located in the rubber die mold before the die is cast. (See tutorial on die making for complete instructions)



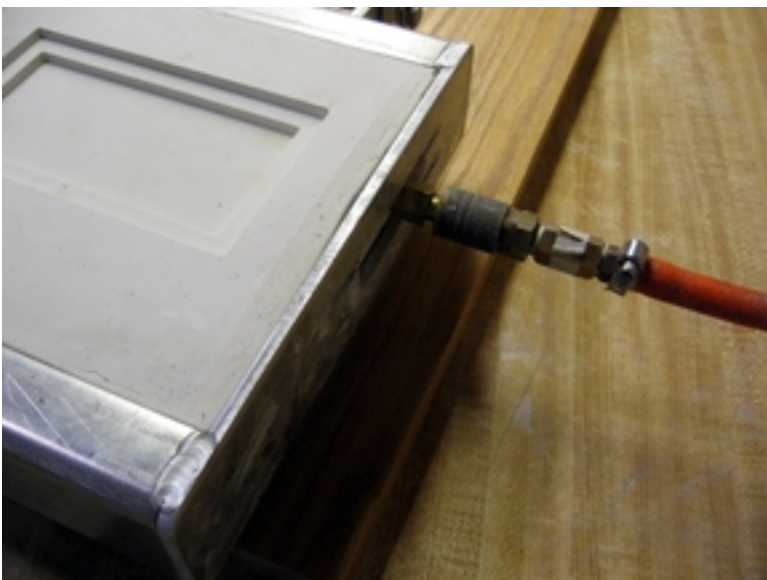
A new die is ready to be inserted into the aluminum casing.



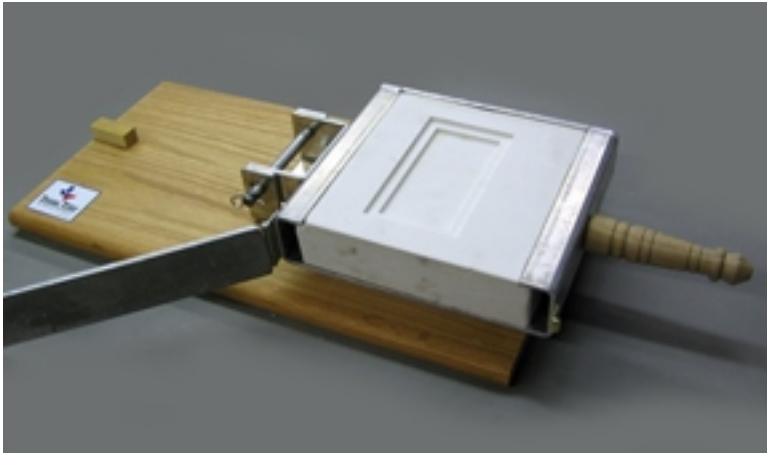
Notice how the air fitting comes from inside the die.



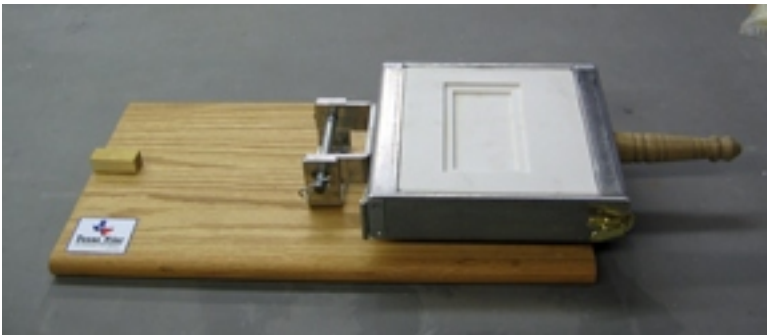
The die slides easily into the casing while the air fitting fits thru a hole in the rear of the casing. The front door of the aluminum casing will be closed and latched locking the die in place ready to use.



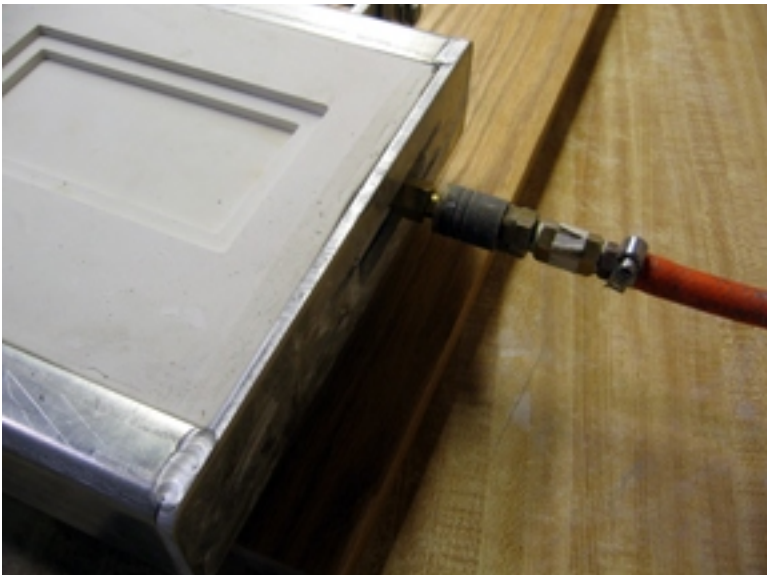
After the die is locked into the casing, the air hose is connected to the die air fitting. Air pressure is now able to be blown into the die.



After the die is pushed all the way into the casing, the casing front door will be closed and latched.

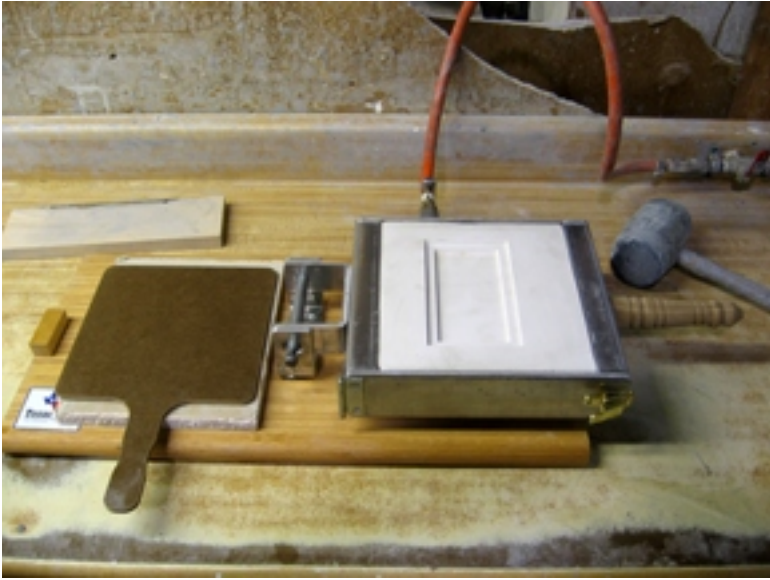


The system is now ready to use.

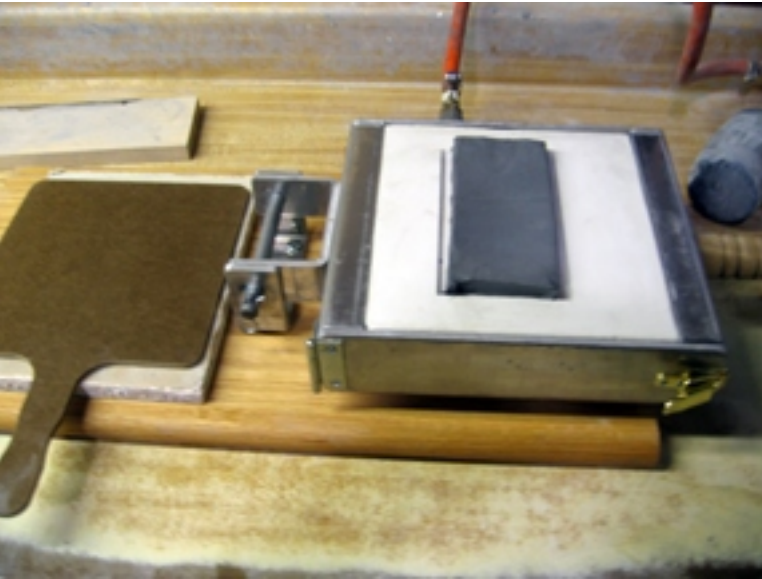


The air compressor is connected to the die.





Paddle bats are put into place - now awaiting clay.



A clay pug previously measured, is placed into the die cavity, and is now ready for pressing.



A piece of plastic is placed over the clay.



Using a rubber mallet and a hardwood board, the operator gently taps the hardwood board to press the clay into the cavity. Such tapping must be firm enough to make sure the clay fills the entire cavity, but not so hard that you will break the die.



After the clay is pressed into the die cavity, the plastic film is removed.



The operator now uses a wire line to remove most of the excess clay.





After the plastic film is removed, the die is ready for scraping.



Using a hardwood board like a squeegee, the excess clay is scraped off of the die thus leaving the tile perfectly clean requiring very little additional work.



After excess clay is scraped away, the tile is now made and ready to be released from the die. The casing is flipped upside down so as to allow the clay tile to fall out of the die and onto a paddle bat. It is now time to turn on the air pressure so as to fill the die with air and then sweat water beads that will release the clay from the die.



The air pressure has been turned on for 3 or 4 seconds. That's all the time required to make the clay tile fall out of the die and onto the paddle bat.

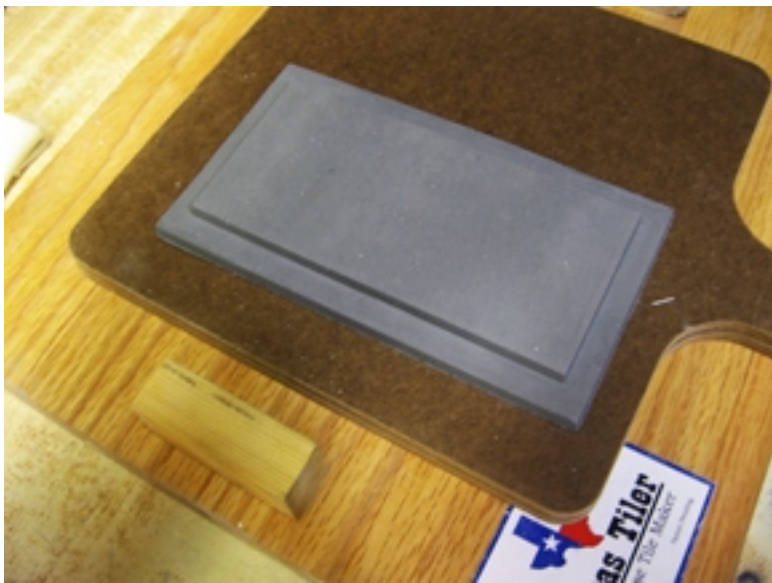


After 3 or 4 seconds, the air pressure is turned off. This will stop the die sweating process.



After the clay tile releases, the air pressure valve is turned off and the die casing is now ready to make another piece.





The finished tile.