



# Pettit Technical Bulletin

## Using Dual-Cartridge Containers

Using dual component cartridges, whether side-by-side or tandem, is simple. But, some basic rules must be observed to make sure they “start up” in the correct ratio. Once going their geometry dictates that they meter the two components in the correct ratio.

First off, make sure you have a proper dispensing gun. The 50ml cartridge has its own special gun that has plenty of power to handle this small cartridge. The 250ml u-TAH cartridge fits a standard caulking gun. Because forcing the two components through a static mixer tip creates a significant amount of backpressure only 18:1 and 26:1 mechanical guns are recommended. The only pneumatic (air pressure) gun acceptable is one where air pushes a piston that pushes on the back of the cartridge. Still, this gun cannot create the pressure of the 18:1 or 26:1 mechanical gun with the average “hand squeeze” of an adult male. If you don’t have a proper gun then omit the use of the static mixer and squeeze the two components into a cup and hand mix as you would any two-component product.

In addition to the gun a suitable static mixer is required. This should be one supplied by the producer of the filled cartridge or otherwise recommended by him. Incomplete mixtures may result from the use of the wrong mixer tip.

Open the cartridge so that the two materials can flow once pressurized by the gun. Save the cap as it can be used to reseal the cartridge. Install the cartridge in the gun without the static mixer tip. Gently squeeze the gun handle until both components start to flow. Most likely one of the two sides will flow out before the other since it is impossible to fill both sides equally. Discard this material. Trim and install the mixer tip after “leveling” both materials. Pressurize the cartridge and discard the first little bit of material that flows out of the end of the mixer tip. You are now ready to apply the material to your project. The key to using these premium high-ratio caulk guns is to use the hand trigger to main pressure on the cartridge to get good even flow through the tip.

Depending upon the material being dispensed and temperature a mixer tip can sit idle for 10-15 minutes. After this the material may be too thick to dispense properly. In this case either change to a new tip (always equalize the two streams before installing a new tip) or flush the tip by pressuring the cartridge and discarding material until it flows easily. If pressurizing does not result in flow then you must change to a new tip. Continuing to apply more pressure at this point may cause the cartridge to split. Mixer tips are almost impossible to clean and reuse.

Remove the cartridge from the gun when you have finished. Remove the tip and clean up the thread with a paper towel. Q-Tips work well to tidy up the outlet ports. Reinstall the cap the same way it was oriented when removed. The cartridge is now ready for re-use. Start again by equalizing the flows as discussed above.

### **u-TAH Cartridge**

Unscrew the nut on the top of the neck. Mark the neck below the threads and the cap with a Sharpie before wiggling off the cap. Use the material as above. Cartridge is empty when the piston is half way into the cartridge. Use the Q-Tip to remove a small divot from each port when finished and reinstall the cap in the same orientation when removed. Clean off any material from threads and reinstall the nut.