CANDLE MAKING by ...



Prepare an Adequate Working Area:

WAX MELTING AREA - Before beginning candle making, you should spread newspaper or cardboard over your working area. Place a shallow tray under your mold to catch any wax that may seep throught the wick hole. Avoid pouring the mold in or near your sink, because melted wax will clog up the drain once it hardens. If you are using a seamless aluminum mold, please wash with soap and water to clean out any residue from the manufacturing process. Make sure all molds are dry and clean before using. Mold release spray or a powder releasant will help candles come out of the mold and keep the mold clean.



HOW TO MELT WAX - You need a seamless container to act as your melting pot. The process of melting wax should always be done with a double-boiler system. This means keeping the melting pot in a pan of water. This should be a dedicated melting pot for wax applications only. By creating a double boiler for melting wax you will insure that the wax does not reach temperatures that are too hot to use.

What you will need to make your candle:

Wax
Metal pillar mold
Wick
Wick Screw
Wick Rod (or wooden skewer)
Mold Sealer Putty
Optional Additive: Dye (use 1-7 chips per 500gms of wax) - do not use more than 8 chips, it can clog the wick and affect the burn of the candle. Start with 1 and add more as desired up to 7 chips per 500gms of wax.
Optional Additive: Fragrance Oil (use 1-2oz per 16oz of wax) - Start with the minimum amount and test! You can add more but you can't take it out. Always add SCENT BEFORE DYES because it can affect color.

INSTRUCTIONS -



Step 1. Start by melting wax -

Some molds have a screw that needs to be removed before inserting the wick. From the bottom of the mold, thread the wick through the hole until it reaches the top of the mold.



Secure the wick at the top to the wick rod (skewer) that will lay across the top of the mold.

Step 2. Pass Wick Through Wick Hole and Secure to Wick Rod -

TIP: If it is difficult to get the wick through the hole because it is frayed, try dipping the end in some molten wax and rolling it through your fingers to form a nice pointed end.



Step 3. Secure Wick to Wick Hole -

Secure the wick at the bottom of the mold with a wick screw. You will need a Phillips screwdriver for the wick screw. Do not over-tighten the wick screw as it may cut the wick or damage your mold. The purpose of the wick screw is to simply keep the wick from sliding back through the hole, not to seal the hole (we use mold sealer for that). Your wick should be taught, but do not tighten to the point were it will cause the mold to warp. Trim the wick leaving about 1/2 to 1 inch of wick. Scissors or diagonal cutters work well for this.



Step 4. Seal Wick Hole -

Using some mold sealer, seal the wick hole, wick screw and wick. This is to prevent leakage of molten wax. Press the sealer firmly into place to ensure a tight seal. It may help to lightly wind the wick around the screw before applying sealer. You don't want to be able to see any wick. The mold is now ready for pouring.

Step 5. Adding Color/Scents & Pouring the Wax -

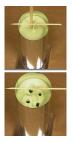
Once your wax has reached the proper temperature (175°F-185°F for most pillars) in the double boiler, add your additives (if any), your fragrance oil, and dyes to the wax in the pouring pot and mix well using an old **Step**



5. Adding Color/Scents & Pouring the Wax -

Once your wax has reached the proper temperature $(175 \degree F-185 \degree F$ for most pillars) in the double boiler, add your additives (if any), your fragrance oil, and dyes to the wax in the pouring pot and mix well using an old wooden spoon or stick. Once it is thoroughly mixed, and is at the proper temperature, *moderately* tilt your mold to reduce air bubbles and gently pour in the wax. Have an old towel or some paper towels handy to catch any spills that may occur. Fill your mold to about $1/2^{n'}$ from the top of the mold. Let sit for a minute and then gently tap the sides a few time to release air bubbles

Leave some wax in the pouring pot for a later stage, but do not return it to the heat source yet.



Step 6. Poke Relief Holes -

Allow to cool a bit until a surface has formed on your wax (roughly 30 minutes or so). At this point poke relief holes into the the candle to accommodate the natural shrinkage that will occur as the wax solidifies. The relief holes should be positioned around the wick as shown and should be poked to a depth of about 1 inch less than the depth of the candle. The exact number of holes is not important. The important point here is to provide a vent by which the contracting volume of wax can suck air through to make up for the decreased volume. Without these relief holes, you may get air cavities within the candle, the wick may get pulled off-center, or the external walls of the candle may become deformed.

You may need to poke relief holes several times during the cooling process to ensure that the vent remains open and clear. Insuring that they are open will make it possible to fill in the voids on the next step.

Allow the candle to cool completely to room temperature before proceeding to the next step. This cooling process may take several hours. On very large candles, it may take in excess of a full day.



Step 7. Re-Pour to fill in void (sink-hole) -

Re-melt the leftover wax from step 5 until the temperature is about $5^{\circ}-10^{\circ}$ hotter than the original pouring temperature. The hotter temperature aids adhesion between layers. Once your wax is at the proper temperature, fill the sinkhole in your candle. Fill to to about $\frac{1}{4}$ " below the level of the first filling. Filling higher than this may cause a horizontal seam line to be visible on the exterior of your finished candle. Overfilling may also cause wax to seep down between the mold and the candle, resulting in an unsightly finish.

Allow the candle to cool completely either at room temperature or in the refrigerator. Thermal shock can happen if cooled too quickly. The bottom of refrigerators are cooler so you will need to rotate the candle in the refrigerator every 30 minutes. Take it out of the refrigerator when the mold becomes cold.



Step 8. Remove Candle From Mold -

Remove the mold sealer and the wick screw. If cooled completely, your candle should slide out of the mold. If it does not slide out easily, then place the candle in a refrigerator for a period of about 15 minutes, then try again. The cooling will help the wax shrink even more and help it separate from the mold. The end of the candle attached to the wick-rod is the bottom of the candle. Trim the wick on this end flush with the base of the candle using a pair of scissors or diagonal cutters.

If desired, you may level the base of the candle by placing the candle on a cookie sheet (one with sides will work best) that is sitting atop a pot of boiling water. Use the heated cookie sheet to melt away some of the wax until you have a flat base. Trim the top wick to about 1/4".

To remove a seam line on the candle surface, use a dull knife or metal spatula. Hold it at a right angle to the candle and slide it down the seam(s). To provide added luster and to protect your candle from finger marks, apply Pourette Candle Sheen or Spray Gloss to the surface.

If surface blemishes appear on your finished candle due to excessive handling or other reasons: buff lightly with an old nylon stocking, piece of felt, or waxed cloth to resore the sheen. Pourette's Candle Sheen and Spray Gloss will provide permanent protection and shine to your candles.

Working with CM10 Molds

These molds will allow you to create two candles that fit together to form one 4" diameter round candle.

The mold is wicked following the standard instructions. The divider that comes with the mold is placed in the mold with one edge locked in the seam groove. This will divide the mold into two equal halves. The notched end on the divider should be facing up out of the mold. The wicks should be tied off to the wick rods and resting on the mold. Pour the candle as you would for any metal mold. Poke and refill as needed. When the candle is cool and ready to come out of the mold, untie the wick and gently pull on the divider. The candles should come out easily. Refrigerate if needed for easy removal.

HURRICANE CANDLES

What you will need for the Water Bath:

Large Container to hold water - as tall as your mold Water Pitcher - (or two) to fill bath Mold Weights - anything that can be used to keep the candle in place Separate Container - for excess wax

1. Melt wax -

Using a double boiler as instructed above, melt the wax and add your color and scents as previosly described. While this is heating up, you will need to prepare a water bath for the candle mold. Use a container large enough for the mold and keep it close to a water source.

2. Pour the wax -

Place your prepared mold (wicked, sealed, & weighted to hold the mold in place) into the large container. When the wax temperature reaches 190° F, pour it slowly into the mold to within $\frac{1}{2}$ " from the top. Protect your hands!

3. Water Bath -

Carefully, but quickly pour COOL (room temperature) water around the mold up to the level of the wax - do not splash into wax! Do not pause while pouring in the water to avoid unsightly lines on the surface of the candle. The water will cool the hot candle mold.



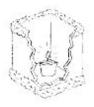
4. Thin Film on Surface -

Allow the mold to sit in the bath until a thin film or skin of about 1/8" has formed over the surface of the wax (the walls should be about 3/8" thick). Remove from water and gently dry the outside. Cut out and remove the center of the film.



5. Remove Excess Wax -

With a separate container ready, pour out the remaing melted wax leaving a shell of congealed wax about 3/8" thick. For taller hurricane candles and while the wax is still soft, you can attach a cookie cutter to the end of a stick and push it all the way through the bottom to the metal base. When the cooled shell is removed, the small wax "cookie" may be snapped out of the bottom, allowing the candle to be placed over the votive candle, rather than lowering the votive candle down into the hurricane.



6. Allow to Cool -

Allow the wax shell to cool until ready to withdraw from the mold. With the shell out of the mold, place a votive glass in the center of the hurricane shell which will glow through the sides when lit. Separate inserts can be found for embedded items to be inserted and contained within the walls while the hurricane is being formed.

Only high temperature wax (139°F - 150°F) should be used when creating a hurricane candle; because the shell must withstand the heat of the votive candle flame. Even then it is recommended that they be burned for only about two hours at a time to prevent softening of the sides. While burning , it is also

advisable to place this type of a candle away from drafts that might blow the flame toward one side.

Water baths are only meant to be used for molded candles like pillars and not for container candles. Glass and ceramic containers are likely to break from the thermal stress.

Potential Problem and Their Causes

Problem - Reason -	Candle will not come out of the mold • Releasant was not used • Mold may have been dented • Candle is not yet ready to be removed
Problem - Reason	Candle surface has frost marks • Wax may not have been hot enough when poured • Mold may have been too cold when poured • Candle was forced from mold befoe being ready
Problem - Reason -	Candle has pit marks • Wax was poured into mold too fast or mold wasn't tipped when poured • Dust particles were inside mold at time of pouring • Mold was too cold, should be warm to the touch
Problem - Reason	Large cracks appear inside the candle • Wax was cooled too rapidly • The well was refilled after the wax in mold had cooled too much • Candle was frozen
Problem - Reason -	Wax becomes too brittle causing chips to break away • Too many or too much additive(s) added
Problem - Reason	Candle has a ditch or caved in on the side • Relief holes were not poked soon enough to ease tension and strain of the cooling wax
Problem - Reason -	Small bubbly lines encircle the candle • These are water level lines and occur either when the water level is not above the wax le

- Reason • These are water level lines and occur either when the water level is not above the wax level or when water is added after the mold is in a cool water bath
- **Problem -** Rust is or has formed in the metal mold...
- Over a period of time rust may begin to form in the mold due to over scenting or from moisture collecting in the mold. Pourette recommends the use of their Rust Inhibitor to break up and remove rust.

Please remember: Excessive use of a fragrance or essential oil will dry plastic molds and make them brittle. It may also discolor or damage the surface of metal molds. This will shorten the life of your mold. Please use care.

Cleaning Your Metal Molds

If you should find it necessary to clean your mold of contaminated or stubborn wax, use one of the following effective methods:

EASY METHOD - Pour your next candle with the wax at 230°F. This normally cleans the mold and absorbs the stubborn wax. CANDLE WAX REMOVER METHOD - If residual wax remains in your mold, candle wax remover is a sure fire remedy.

- a) Seal the wick hole
- b) Pour 1/4 cup of wax remover into mold
- c) Place your hand over the opening of mold and swirl solution around the interior
- d) To remove stubborn wax still present, wrap a soft rag around the end of a stick and rub the mold until clean
- e) Pour solution back into bottle and allow the mold to dry thoroughly. Spray with silicone spray before using

HAIR DRYER METHOD - You can take your hair dryer and heat the walls and base of your candle mold to melt stuck on wax. It will run out. Since Pourette metal molds are hand soldered, excessive heat during cleaning may melt the solder. Please use caution.



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