



## HOW-TO BOOKLET #3089

# CAULKING/WEATHERSTRIPPING



### TOOL & MATERIAL CHECKLIST

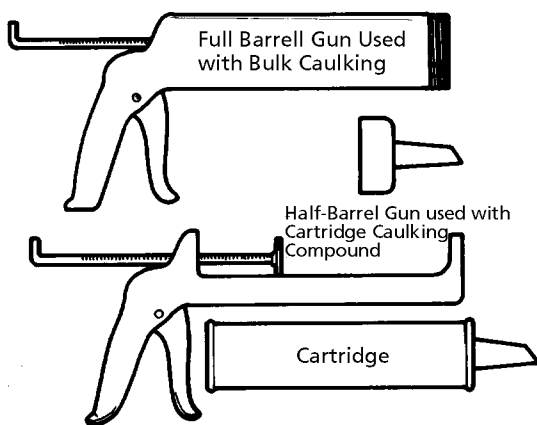
- Weatherstripping
- Cartridge
- Hammer
- Wire Brush
- Razor Knife
- Paintbrush
- Caulking Gun
- Quality Caulking Compound
- Putty Knife
- Scraper
- Paint
- Screwdriver

*Read This Entire How-To Booklet for Specific Tools and Materials Not Noted in The Basics Listed Above.*

Of all building products for sale, caulking and weatherstripping probably cost less and do more good than most other weather protection. As a bonus, both caulking and weatherstripping are easy to apply and install. Here's a list of places to install caulking and weatherstripping. First, caulking:

- 🏠 Around windows and doors
- 🏠 Around basement sash
- 🏠 In splits and cracks in siding
- 🏠 Between joints in wood siding
- 🏠 Cracks between door thresholds and stoops
- 🏠 Between dissimilar materials such as wood and masonry, masonry and metal, wood and metal
- 🏠 Along the bottom of siding where it meets the foundation of a house
- 🏠 At dormers and roof flashing
- 🏠 Around gable vents and roof vents
- 🏠 At power entrances and exits
- 🏠 Around fixed storm windows

**Fig. 1**



**Caulking gun shells** are bulk type (at top) and cartridge type. The bulk guns suck caulk out of a bulk container by inserting the end in the container and pulling back on the plunger – similar to a water pistol. The cartridge type uses a plunger that drives another plunger in the plastic-like cartridge. When the cartridge is empty, the plunger is pulled back and the cartridge is removed and junked.

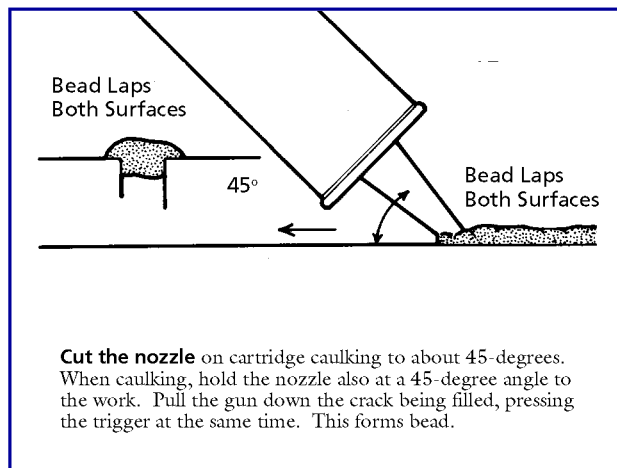
## CAULKING PRODUCT SELECTION

To caulk, you will need two products: a metal caulking gun shell and the caulking, which comes in a plastic-like or cardboard cartridge and fits the caulking gun shell. Cartridges and shells are the same standard size. You also can buy caulking in bulk and fill a steel-tubed caulking gun with it, like you would fill a water pistol. Bulk caulking is really a professional product and the savings of buying it in bulk probably would not be worth your time and the extra mess.

You have a variety of caulking types and prices from which to choose. The basics are:

**Oil-based caulking.** This is the inexpensive spread. It may be used almost anywhere. However, oil-based caulking tends to “dry out” in cracks, and when dry, it falls out of the cracks. Or it shrinks in the cracks when the oil in the caulking disappears. If you use this product, plan on recaulking every 3 years or less. The initial savings may not be a wise investment in the long haul—unless you like to caulk.

**Polyvinyl acetate.** This is a good buy for most any surface. The cost is moderate and it will stick to the job for several years – much longer than oil-based. Check the label on the caulking tube.



**Latex caulking.** This is sometimes known as “painter’s caulking”. It is quick-drying, and may be thinned with water. The cost is moderate; the lasting qualities about the same as polyvinyl acetate.

**Silicone caulking.** This is the good stuff. It is very costly, but will last for years - up to 50 or more years on most surfaces. It comes in colors, since the material doesn’t take paint finishes very well.

**Butyl rubber caulking.** Butyl is on the level of silicone caulking. It is long-lasting – up to 20 years or even longer. Butyl is tops for sealing masonry joints. It is costly. Be sure to read the label; the caulking is sometimes restricted to certain usage.

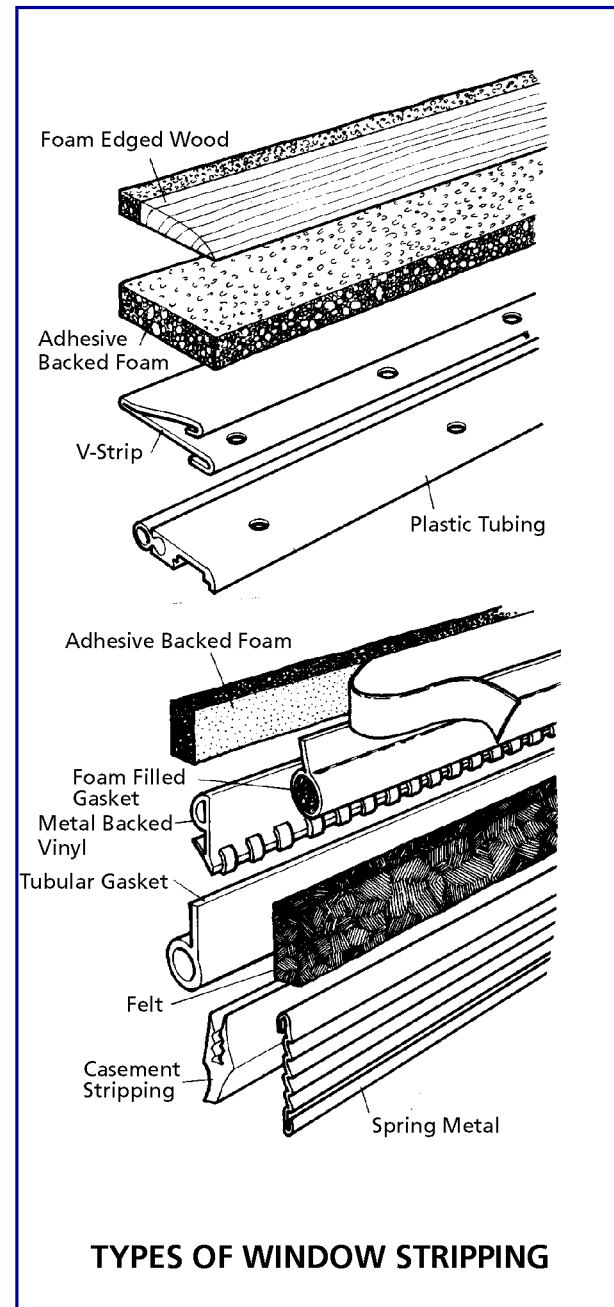
## HOW TO WORK WITH CAULKING

It’s easy to see an open joint that needs to be caulked. If the joint is already caulked, but you doubt its soundness, take a putty knife and press the blade of the knife into the caulking. If the caulking is still “gummy”, the material doesn’t have to be replaced. But if the caulking cracks and falls out of the joint when you scratch it with the putty knife, remove the old caulking and apply new caulking.

**Loading the gun.** To caulk, insert the caulking cartridge in the caulking gun shell. Then, with a razor knife or pocketknife, cut the plastic nozzle at about a 45-degree angle.

The nozzle is tapered - small at the tip and large at the base. You should cut the angle on the nozzle at the point where you think it will span the crack which you will fill with caulking. Step back and figure an average for the crack widths. This will help you make the cutting decision.

Some manufacturers have stamped a graduated scale on the plastic nozzle to help you cut it properly. For example, if you are going to be filling cracks that average 1/4-inch wide, cut the nozzle at “1/4”. These numbers on the plastic are difficult to see so look very closely.



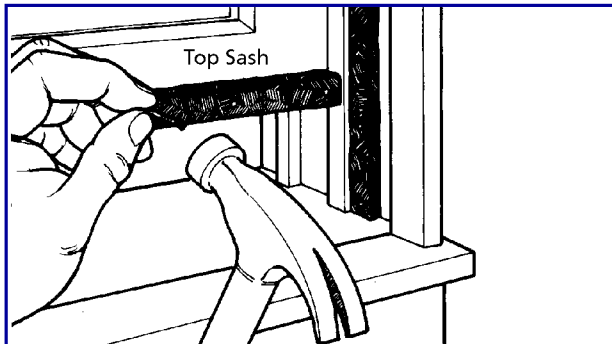
TYPES OF WINDOW STRIPPING

With a 16d or 20d nail, puncture the seal between the nozzle and the cartridge. You'll have to poke the nail down the cartridge to do this – after, of course, you cut the angle on the nozzle. If you do not break this seal, the pressure generated by the caulking gun on the cartridge can crush the cartridge. It's a mess.

**Procedures:** With a putty knife and wire brush, clean the joint that you will caulk. Remove any old caulking, putty, dirt, grit, and so on. The wire brush helps rough up the surface so the caulking can get a good bite on it. The brush serves as a broom to clean the area.

If the crack is deep, fill it with fiberglass insulation, packing the insulation deep into the void. Do not use newspaper as a base. If it becomes wet, it will rot. Do not use steel wool as a base. If it becomes wet, it will rust and water running from it can streak the paint or finish on a house. Most home center and building material stores sell small bags of fiberglass “wool”. It is inexpensive.

To operate the caulking gun, turn the plunger in back of the tube to engage the trigger mechanism. As you pull the trigger, the plunger is forced down into the caulking cartridge and the caulking is squeezed out of the nozzle into the crack you are filling with the caulking compound.



**Felt weatherstripping** usually is applied with tacks to wooden windows/doors. Lower the top sash to fasten it on. Felt “spans” the cracks; felt is not “crushed” like foam rubber to form the seal. Tacks are usually furnished by the manufacturer in the package.

Hold the caulking gun at about a 45-degree angle – the same angle as the cut on the nozzle of the cartridge – pull the trigger and, at the same time, pull the caulking gun down the crack. Always pull the caulking gun toward you. Never push it up along the crack or break that you are trying to caulk.

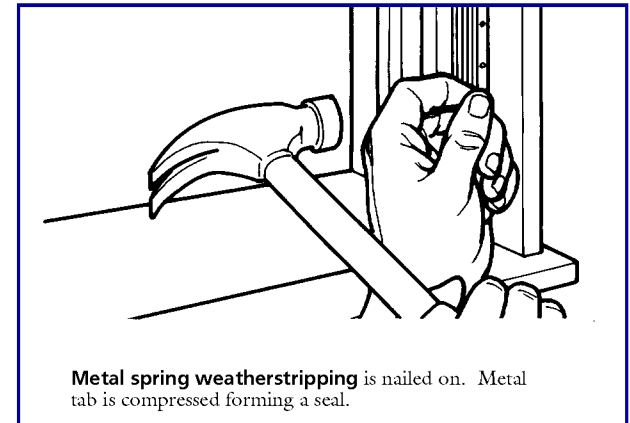
After several runs, you will be able to judge the speed that you should move the gun in relation to the amount of caulking coming out of the nozzle. If you pull the gun too slowly down the crack, the crack will overfill and the caulking will bulge out of the crack. If you move too quickly, the caulking will be stringy and will not fill the crack.

Usually the final caulking job, when you get the hang of using the gun, will be smooth. But occasionally the surface of the caulking will look rough and uneven. You can smooth it with a wet finger. Dip your finger in a coffee can filled with water. Then lightly run your finger down the caulking. Rewet your finger as needed. The caulk will come off your finger with a cloth. Sometimes a wet ice cream stick – with a rounded end – can be used to smooth caulking. Use plenty of water; work slowly.

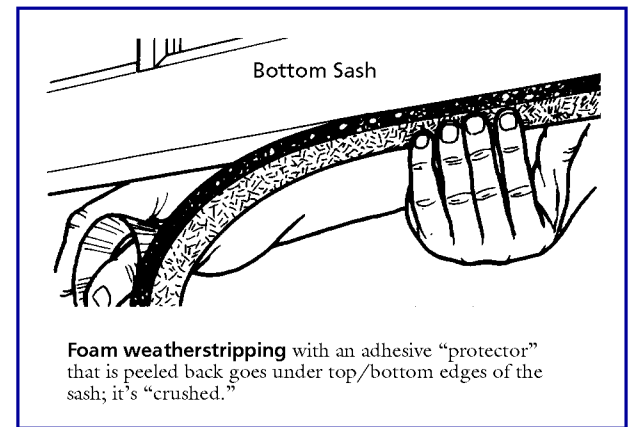
Let the caulking set a least a day before you paint over it. Caulking develops a light seal on its surface after it sets for 24 hours or so. You then can run a paintbrush over the caulking without it sticking to the brush or being damaged by it. Latex caulking, however, sets faster – in 30 minutes or so. You can paint right over it after that period of time.

When you have finished running a caulk line, immediately turn the plunger at the back of the caulking gun. This releases the pressure so the caulking doesn't ooze out of the nozzle and make a mess.

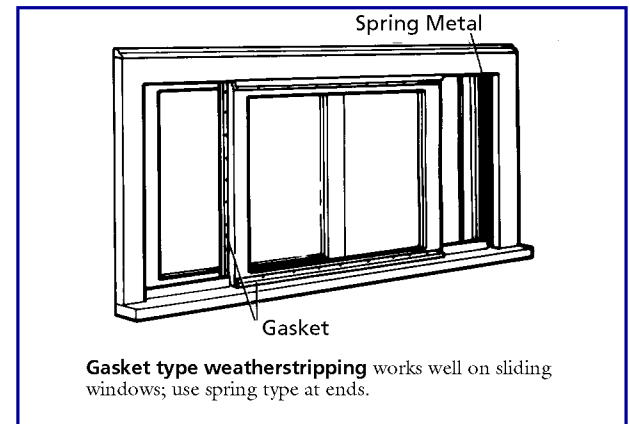
If there is any caulking left in the cartridge after you have finished the project (you'll know by how far the plunger has gone down into the cartridge), stick a 20d nail or golf tee in the nozzle to keep the caulking fresh for the next project.



**Metal spring weatherstripping** is nailed on. Metal tab is compressed forming a seal.



**Foam weatherstripping** with an adhesive “protector” that is peeled back goes under top/bottom edges of the sash; it's “crushed.”



**Gasket type weatherstripping** works well on sliding windows; use spring type at ends.

If the caulking is latex, you can clean up any caulking mess with water. If the material is silicone, oil-based or butyl, you should immediately use mineral spirits for clean-up. Do not use water.

## ALL ABOUT WEATHERSTRIPPING

Weatherstripping can save you plenty in heating and cooling bills. Consider this example:

The little crack around the exterior door of an average home – about 1/4 inch or so – if compounded would be equivalent to a 6-inch square cut through the face of the door! The heating/cooling loss/gain would be horrendous over a year's time. For less than \$5 this little crack could be sealed with weatherstripping, saving you plenty. The life of the weatherstripping is about 5 years. Your actual cost would be \$1 per year plus about 30 minutes of your time to install it.

Look in these places for weatherstripping protection:

### Around Windows

- 🏠 Around exterior doors
- 🏠 At attic doors
- 🏠 Along the bottom of doors
- 🏠 Doors to basements and crawl spaces
- 🏠 Around storm doors
- 🏠 Along the bottom of garage doors

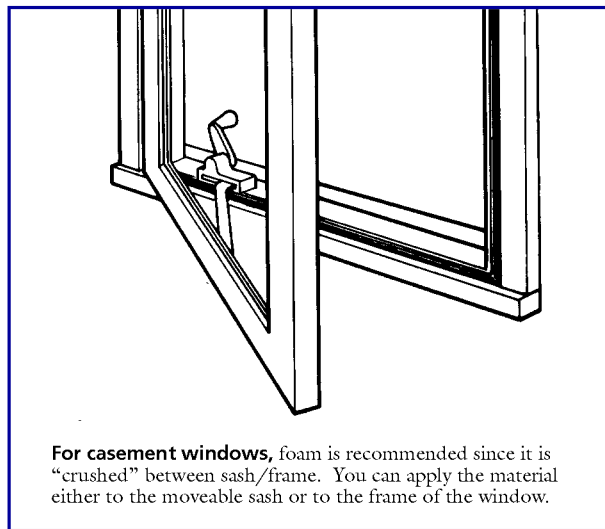
Weatherstripping in stores and in packages is usually classified by the usage: door and window weatherstripping; garage door weatherstripping; threshold weatherstripping. The product can be manufactured from brass, aluminum, plastic, felt, rubber, or fabric. Most of it will work well for the job it is designed to do. Most of it is very inexpensive.

Weatherstripping is nailed and sometimes glued to windows and doors. However, most of the sponge rubber door and window weatherstripping has an adhesive backing that is simply pressed into position. The metal strips almost always have to be tacked in place, as do some of the plastic materials.

The prime tip in weatherstripping installation is not to tangle it as you unroll it to glue or nail it in position. As you install the product, pull the material taut. It should not bunch or gap along the door or window frames. Also, if you are installing metal stripping and you kink it, you can sometimes straighten out the kink by tapping it with a hammer on a concrete or other hard, flat surface. If you can't remove the kink, throw the strip away. It is not serviceable.

**GARAGE WEATHERSTRIPPING.** Install garage door weatherstripping along the bottom edge of the door. Hot-dipped galvanized shingle nails are the best fasteners to hold the weatherstripping in place. Space the nails about 2 to 3 inches apart.

Garage weatherstripping is “tubular” in cross-section. When the door is closed the weatherstripping compresses, forming a seam between the bottom of the door and concrete. It is a good idea to weatherstrip your garage door even if the garage is not attached to the house or heated. The weatherstripping helps keep out insects and small reptiles and mice, and protects the wood on the door from moisture and water damage.



**THERMAL THRESHOLDS.** These are great energy savers. The wide aluminum strips have a concave plastic strip running down the center of them. After installation, the bottom of the door sweeps across the plastic strip, compressing it. This forms an airtight seal between the bottom of the door and the threshold.

You can buy thresholds in standard sizes. To know the size you need, measure between the jambs of the door. You will have to cut out a small chunk of door stop to fit the ends of the threshold flush against the side jambs. Take this measurement into consideration before you cut the threshold. The threshold may be cut to fit – if a tad too large – with a hacksaw. But remove the plastic strip before cutting and trim the strip with a razor knife. The strip fits into channels in the threshold.

After the threshold is in position, run a small bead of caulking compound along the joint between the metal and the wood. Caulking keeps out moisture and small insects.

