

TRAINING OF INDEPENDENT INSTALLERS:

It is the goal of Ultra Creative Concepts©, to aid quality construction oriented individuals to install the Ultra CSV® in new and existing homes.

STEPS TO INSTALL ULTRA CSV® CRAWL SPACE VENTS

1. Measure width and height of opening twice to be absolutely certain the Ultra CSV® faceplate will overlap the opening by at least ¼” or more on all four sides (covering the opening top to bottom and right to left).
2. Completely remove the mortar that secures the vent to the foundation using a hammer, or a flat pry bar and/or large masonry chisel preferably with hand guard protector.
3. Make one dry run to see if the faceplate fits flush with the foundation and sill plate. If the faceplate fits flush with the foundation and sill plate then caulk the backside of the faceplate with ample *non-petroleum* based silicone caulk that goes on white and dries clear, or use clear caulk to insure quality seal. Then start to install the rest of the assembly.
4. Put the lock nut on the threaded rod. Reach inside through the faceplate and screw the threaded rods through the insert of the faceplate and screw it forward until the rod protrudes at least 5/8”. Tighten locknut with 7/16” wrench. Do NOT over tighten. Reaching through the opening with the backer bar in your hand align the backer bar to the threaded rods and insert to allow installation of wing nuts. Once again reaching through faceplate opening install the wing nuts on both sides of the threaded rods behind the backer bar and finger tighten until bar begins to bend slightly. This will apply tension to the unit and allow for consistent sealing of the caulk that was applied to the back of the faceplate. Apply protective wax from an ordinary white candle to the threads of the threaded rod that protrudes through the faceplate. This protects the rod, but also it is easier to apply and/or remove the knurled nut. Remind the homeowner this is an excellent maintenance procedure that can be performed twice a year once when the winter sealer door is put in in the fall, and once when the sealer door is removed in the spring.
5. Place the screen summer door on the unit and hand tighten the knurled nuts to the faceplate. Make sure that the winter sealer door is given to the customer

with instructions on how to install that if so desired for winter or heating season use. Remember to point out that it is at the customer's discretion to contact his contractor, his building inspector or use his best judgement when sealing and unsealing and/or insulating the vent utilizing the winter door.

TROUBLESHOOTING POTENTIAL PROBLEMS

1. VENT FACEPLATE DOES NOT FIT UNDER SIDING

On some homes the siding/sheathing needs to be pried away from the sill plate and the foundation about 1/8" to 1/4" for the vent faceplate to slide up and between the siding and the sill plate. To do this use a flat bar/pry bar and or wedges/shims to pry the siding away from framing and foundation. **Be careful when prying.** Some homes sheathing/siding are very weak and brittle with age. **Always remember to secure down all areas you may have loosened when prying. (caulking, nails, screws, and etc.) To resecure the sheathing to the home frame or the sill plate.**

2. SIDING IS PRIED AWAY AND THE VENT STILL WILL NOT GO UP UNDER SIDING TO THE SILL PLATE:

A person installing the Ultra CSV crawl space vent can use the back side of a flat knife between pried away siding to determine where obstructions may exist. These obstructions may be nails, screws and other fasteners may be in line with the vent opening under the siding. Many tools can be used to remove these fasteners, i.e. wire cutters, dikes, pliers, hacksaw, pry bar can be used to cut and/or remove fastener obstruction, or follow number 4

3. THE ULTRA CSV® CRAWL SPACE VENT MAY ALSO BE TRIMMED DOWN TO FIT PROPERLY.

The backside top of the vent has a faceplate that has pre-scored lines to assist in trimming. This area can be trimmed using simple tools (utility knife, pliers, or hack saw) to customize the height of the faceplate. Width trimming is usually not needed, but may be done using cutting tools made to cut abs materials.

4. SILL PLATE OVERHANGS OR IS RECEDED FROM THE FOUNDATION AND THE VENT DOES NOT FIT FLUSH AGAINST FOUNDATION, OR OTHER OBSTRUCTIONS WHICH WILL NOT ALLOW THE EASY INSTALLATION OF THE FACE PLATE UP AND BETWEEN THE SILL PLAGE AND THE PRIED AWAY SHEATING OR SIDING.

If an obstruction is found to be too far down on the sill plate to allow the face plate to slide up and between the sill plate and the sheating an installer can simply mark the outside wall or siding with a pencil and then using tin snips can notch the face plate in those appropriate areas, which will allow the face plate to fit up in between the sill plate and the sheating. If an installer tries to remove such obstructions a variety of tools can be used, wire cutters, pry bar, or other hand tools at the installer's discretion. However, notching the vent and applying a generous supply of caulk or following step 4 is the most expediate method in handling most obstructions. A flush and airtight fit is a must!!! If the sillplate over hangs or is recessed from the foundation/crawl space, use a 1x2, 1/3, or 1x4 lumber cut to the length of the opening in the foundation. Attach the cut lumber to the sill plate flush with the foundation using all purpose screws or nails to attach. *This now becomes your new flush sill plate for you to mount your vent faceplate to. This new flush sillplate will give you a 3/4" top seal, but in order to get the face plate to fit properly if it is recessed and your newly added piece of lumber is flush, the removal of the 2 scored lines may not be necessary.*

5. FACEPLATE IS FLUSH, THREADED RODS ARE IN THE FACEPLATE BUT THE THREADED RODS DO NOT GO ALL THE WAY THROUGH THE PREDRILLED HOLES IN THE BACKER BAR, OR I CANNOT ATTACH THE WING NUTS BECAUSE I DON'T HAVE ENOUGH THREADS.

Possibly you have extended the threaded rod too far. Loosen the hex nut and back the threaded rod up to allow for a few more threads. If the wing nuts will still not attach, then remove your backer bar and with your hand reach in on the right and left of the inner foundation to make sure there is no obstruction in the area where you are placing your backer bar. If there is insulation mounted to the side walls of the foundation, use a knife, drywall saw, etc. To trim a small rectangle out of that insulation flush with the inner foundation wall and remove the rectangle so your 9" rod will go completely through the backer bar and allow for enough threads to tighten the wing nuts, which will pull the faceplate

tight to the foundation, which should have been caulked with a liberal amount of latex caulk. This will provide a high quality seal of the faceplate to the foundation. There is a small percent of homes that have foundation blocks that are more than 8". In this case remember the standard rods are 9" which gives ample threaded rod protruding through the face plate and back to and through the threaded rod and leaves room to apply the wing nuts. Some homes have larger blocks, i.e. 12" blocks or 12" poured walls. In these cases, most hardware or lumber yards have 12" threaded galvanized 1/4 20 rods or you can buy them in longer lengths and cut for appropriate distance. Make sure you file the ends to the point of easy access for the insert, hex nuts and knurled nuts.

The standard threaded rod is 9 inches. Standard 9 inch threaded rod will accommodate crawl space widths up to 8 inches. Some homes have larger blocks, thicker foundations. If the foundations/crawl space is thicker than 8 inches you need to purchase some stainless steel, or zinc coated aluminum threaded rod from your local hardware store and cut it to the length you need. Remember to add at least 1 inch to the thickness of the crawl space/foundation so that your vent screen, winter door, and backer bar will fit properly.

6. VENT OPENING IS BIGGER OR SMALLER THAN THE ULTRA CVS® CRAWLSPACE VENT

There are many options to accommodate this. Building frames for openings and mounting the csv vent to the frame, cutting the csv® crawl space vent down to size may also make installation possible.

7. THERE IS A CINDERBLOCK MOUNTED SIDEWAYS IN THE VENT OPENING

Crawl spaces are designed and installed by many different types of contractors who have their own philosophy on how to meet code requirements and maintain structural strength. There is a very small percent of contractors who will insert a block into the opening behind the crawl space vent and mortar them in. Some believe that putting a cinder block sideways in the vent opening acts as a vent and adds strength. Before removing any existing vent, shine a high power flashlight to insure that there is not an 8" block laid sideways and mortored into the opening. If there is, you need to understand if you desire to go to the extra work; the block can be removed to once again give you full access to place the ultra csv® crawl space vent into the opening. Concrete

blocks are designed with hollow cavities, and these cavities make it possible to take a small dally bar and a small hand sledge, or ball pin hammer to bust the different sections (and/or ribs) of the block to allow it to be removed chunk by chunk. Remember patience and a little extra work and common sense will make the block removal an interesting experience. One should wear gloves and safety glasses. Make sure before removing cinder block that you consider checking with contractor, building inspector, or your local building codes. However, most crawl space vents are put into openings without cinder blocks behind them.

Remember always measure twice! Check to make sure the vent opening will accommodate the ultra csv® crawl space vent! Remember to never over tighten the lock nuts or the wing nuts!! Doing so will buckle/warp the vent faceplate making the vent less beneficial and may cause vent to become damaged.

Never use petroleum based products on any part of the vent assembly!! Petroleum products tend to damage abs and other plastic type products.

8. Additional abnormal installation scenario:

If one takes out an old crawl space vent and finds a floor joist or a support beam, duct work or other obstructions that will not allow for normal installation which utilizes the backer bar, the installer may want to follow these installation instructions:

- a. Always try to clear out as much of the opening to provide the maximum amount of free flowing airspace as possible. If one cannot use the rods and backer bar due to limited space, one can replace the rods with a ¼ X 20 bolt that will be long enough (approximately 1 1/2" to 2") to allow a ¼ X 20 hex nut to be screwed onto it and then screwed through the back of the face plate into the threaded ¼ X 20 insert that is molded into the face plate. It should be screwed in far enough that it will allow for the winter or sealer door and the summer door to be placed onto the face plate and allow for enough extended threads to install the knurled nuts that hold both doors in place which would be approximately 3/8" beyond the

- summer and sealer door. Tighten the hex nut snugly to the rear of the face plate.
- b. By using concrete fasteners, such as 'Tapcons' or 'Molly Screws', the installer can measure and lay out a series of four to six places on the face plate of the vent to drill holes through the face plate and the foundation wall to apply fasteners which would then affix the face plate securely to the foundation. Be sure to use a concrete drill of the appropriate size of the Tapcons or Molly Screws used. The information regarding which size concrete drills to be used can be found at your local hardware store or building supply or internet. Installation of the fasteners chosen can be obtained at the same locations.
 - c. It is recommended that the installer use coated, treated or rust resistant fasteners when performing this type of installation.
 - d. Remember to caulk the backside of the face plate before attaching it to the foundation.

(If the face plate is to be mounted into wood siding and there is no room to utilize the backer bar, then one can use the same $\frac{1}{4}$ X 20 bolt with locking hex nut scenario as above and simply affix the face plate to the siding with caulk and non corrosive screws.)