

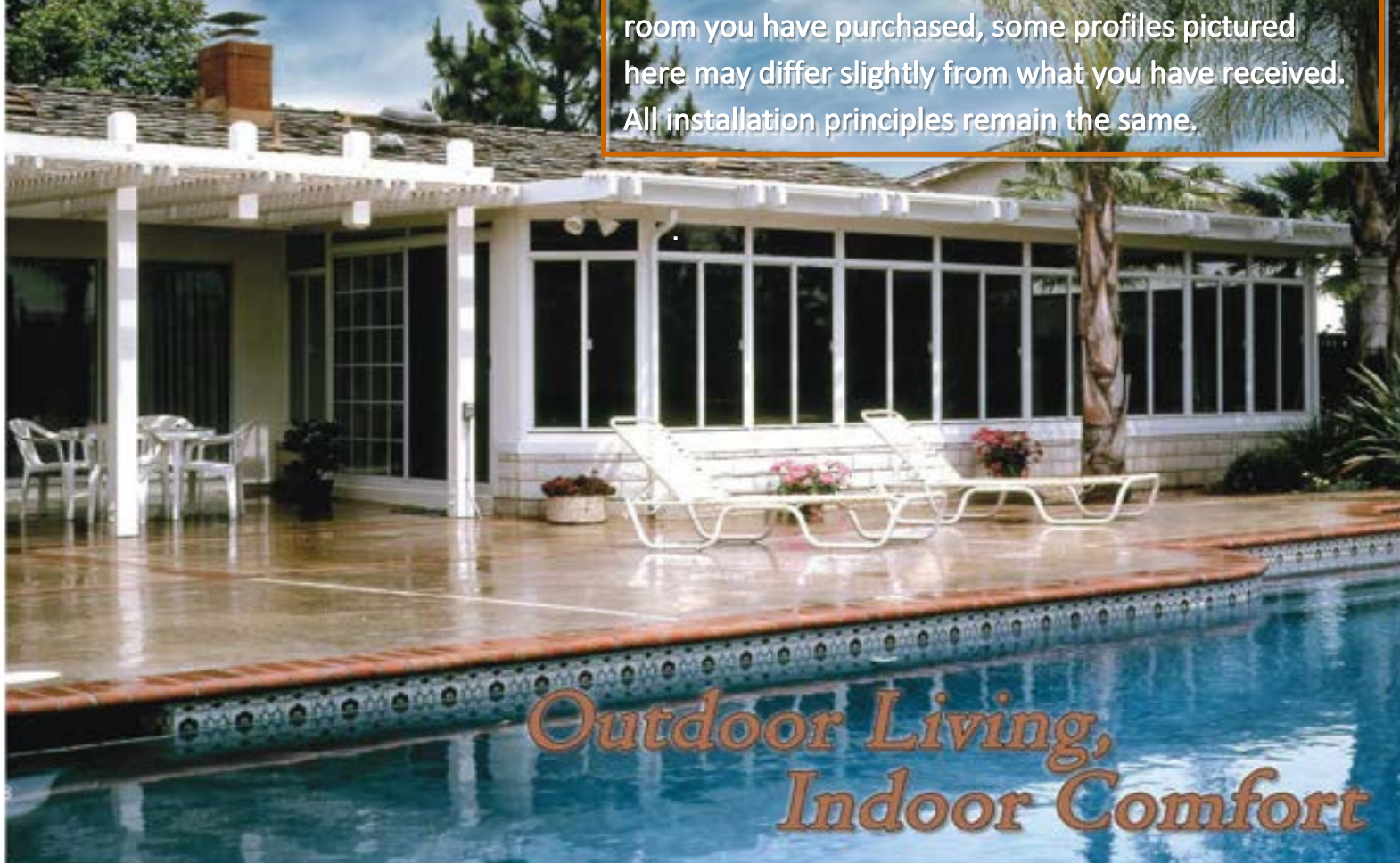
The Original Sunroom Manufacturer Since 1947



Studio Patio Room

Manufacturer's Installation Guidelines

These are guidelines only. Depending on the type of room you have purchased, some profiles pictured here may differ slightly from what you have received. All installation principles remain the same.



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Studio Patio Room: Manufacturer's Installation Guidelines

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Introduction:

C-Thru recommends that you review this manual thoroughly prior to your installation. These Installation Guidelines should be used as a reference tool during the room construction process. Technical and installation questions can also be addressed the Dealer you purchased the kit from, in this case Home Porch & Patio Kits Inc. (1.844.404.0484 / request@homeporchandpatiokits.com)

C-Thru Industries & Home Porch & Patio Kits Inc are a **"materials only"** supplier. It is the responsibility of the homeowner / installer to make sure that the C-Thru room complies with the requirements of local building codes. C-Thru provides a variety of engineering for permitting purposes. Rooms designed within the scope of these engineering documents meet or exceed the current IBC, IRC and CBC building codes.

Before



After



DEPENDING ON WHICH UNIT YOU HAVE PURCHASED THE PROFILES PICTURED IN THESE GUIDELINES MAY DIFFER SLIGHTLY FROM WHAT YOU RECEIVED.

THESE ARE TO BE CONSIDERED GUIDELINES ONLY AND ARE NOT MEANT TO COVER EVERY FORESEEABLE CIRCUMSTANCE WITHIN A DIY APPLICATION.

ALL CLIENTS OF HOME PORCH & PATIO KITS CAN CALL US ANYTIME, TOLL FREE (1.844.404.0484) WITH YOUR INSTALLATION QUESTIONS. IF WE CAN'T ANSWER THEM, WE WILL FIND SOMEONE WHO CAN!

IT IS HELPFUL TO INCLUDE PICTURES OF YOUR 'QUESTIONS' request@homeporchandpatiokits.com



The Accomplished

This rating is for those who know their way around a workbench and are familiar with miter saws, reciprocating saws, framing squares, chalk lines, and rivet guns. They are not intimidated by complexity and intuitively understand that ingenuity will be part of solving the inevitable assembly challenges. They are able to read between the lines of instructions, using experience to anticipate solutions to potential roadblocks. They will be able to organize and prioritize a large number of materials and

different profiles. They will have the kind of experience and a skill level that has regularly experienced high praise from others on finished projects. This build level will require more time, the ability to research, and a good understanding of tools used in the DIY world. They will have already experienced the pay off in doing these projects and know it to be usually worth it. This build level provides a finished product that should appear professional looking, and none of your friends will believe you did this! This type of job can take between 3 - 7 days, including preparation and clean up, depending on the size of the project and your skill level.

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Your installation will go smoother when you have the proper tools. Before you begin the installation, please make sure you have the recommended tools

Power Tools:

- 12" Compound Miter Saw (60-80 Tooth Carbide Blade)
- Worm Drive Circular Saw (24 Tooth Carbide Blade)
- 10" Circular Saw (60-80 Tooth Carbide Blade)
- ½" Hammer Drill
- ½" Hole Shooter
- 14.4 Volt Drill/Driver (Variable Speed, Torque Setting)
- Reciprocating Saw (Sawzall)
- Rotozip Spiral Saw

Miscellaneous Tools:

- Adjustable Framing Square
- Power Strip
- Extension Cord(s)/GFI Pigtail
- Chalk Line
- Putty Blade (1" & 3")
- Measuring Tape (30' & 50')
- Caulking Gun
- Nail Set
- Holster For Cordless Drill
- Gloves
- Safety Goggles
- Tool Box (for misc. fasteners)
- Extrusion Profile Sheet
- Installation Manual
- Shop Vacuum

Drill Bits

- Magnetic Bit Holder w/#2 Phillips Bit
- 2" or 3" Phillips Bit Extension
- Magnetic Nut Setters (1/4", 5/16", 3/8")
- ¼", 9/64", 3/16" Drill Bits
- ¼" Masonry Bit
- 5/8" Wood Boring Bit

and that they are working in a safe and efficient manner.

Hand Tools:

- Pop Rivet Gun
- 16 Oz. Rubber Mallet
- 16 Oz. Hammer
- Chisel
- Utility Knife
- Flat & Phillips Head Screwdrivers
- Pliers
- Flat Head Vise Grips
- Needle Nose Pliers
- 4' & 2' Level
- Tin Snips
- Step Ladders 4' (a taller ladder may be useful)
- Tool Belt W/Nail Bag
- Chalk & Carpenter's Pencils

This list is not to be considered as comprehensive. We have rated the assembly of our Sunrooms as a 4 out of 5 in difficulty (see WEBSITE). This assumes the homeowner/installer is already familiar with the tools required for these types of projects.

Section 2: Job Site Preparations:

Manufacturer's Installation Guidelines

1

Room Foundation:

The C-Thru Room Layout sheet (your CAD Drawing) will list the dimensions of the room. The dimensions needed for the slab or deck are the room dimensions plus min. 1 ½". Thus, if your room dimensions are 10' X 12', the foundation must be a minimum of 10'-1 ½" x 12'-3".

Many potential problems can be eliminated before any construction begins by having a level and square slab or deck. If installing the room on a new concrete slab, it may be necessary to seal the slab. This will help avoid condensation form within the room. Preferably, the room should be installed on a new slab or deck. A pre-existing slab or deck needs to be in "like new" condition if used. Numerous buckles or cracks in the foundation will make it unsuitable for construction and could contribute to future leaks in an otherwise weather-tight system. Please reference your local building code for the slab, deck, or footing requirements needed to construct your C-Thru room.

Use a 4' level to determine the degree of the foundation's slope. If the foundation is not level and the run off the slab is less than 1 1/2 inches, then 2" to 3" of solid fill should be ordered at the bottom of each wall module with a glass kick plate to compensate for the slope. If the slab or deck is uneven to a larger degree, a two-stage kick plate or extra solid may be necessary to construct the room. Two-stage kick plates generally have a minimum of 2" of solid below the glass kick plate. Modules with solid kick plates generally provide the most flexibility in dealing with non-level slabs.

The room's foundation must be higher than the grade of the surrounding area to avoid drainage problems. Any water that penetrates the structure of the sunroom will drain out the bottom rails, which are designed to drain water away from the room at connection points. Standing or pooling water next to the sunroom could potentially block and destroy the functionality of the internal weep system.

The general work area must be kept as organized and clean as possible. Make sure the area is free from clutter or debris before the room arrives. Potential obstruction must also be removed. These include trees, bushes, or other greenery that could make the construction of the room difficult. If needed, clean the slab or deck before construction begins. You should try to keep the construction area free from excess material, tools, or debris during all phases of construction.

Preparation of the house walls may also be needed. Examine the attachment "foot print" of the room on the house and identify any elements that may need removal, demolition, adjustment or repair.

The Job Site Preparation Checklist should be used as a checklist to ensure your site is ready for the room's arrival. Once completed, you can begin the installation process.

This section/checklist is given ONLY as a help to the homeowner. As a DIY application these elements are entirely up to the homeowner to assess and carry out in preparation for the Sunroom Installation.

Section 2: Job Site Preparations:

Manufacturer's Installation Guidelines

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SITE CONDITION

- ☐ **Yes** ☐ **No** Check accessibility - can materials be delivered easily?
- ☐ **Yes** ☐ **No** Are there fences or other interferences which must be removed for access?
- ☐ **Complete** Check the following for interference:
- | | | |
|--|--|---|
| <input type="checkbox"/> Sprinklers | <input type="checkbox"/> Underground Utilities | <input type="checkbox"/> Air Conditioners |
| <input type="checkbox"/> Telephone Lines | <input type="checkbox"/> Electric Meters | <input type="checkbox"/> Exhaust Vents |
| <input type="checkbox"/> Water Pipes | <input type="checkbox"/> Gas Pipes | <input type="checkbox"/> Meters |
- ☐ **Yes** ☐ **No** Check the roof connection, ridge connection, etc.
- ☐ **Yes** ☐ **No** Does the eave or soffit need modifications or repairs?
- ☐ **Yes** ☐ **No** Will the existing gutter and downspouts need to be modified or repaired?
- ☐ **Yes** ☐ **No** Is there existing drainage which can be connected to (French drain, street drain etc.)?
- ☐ **Complete** Roof type:
- | | | |
|----------------------------------|-------------------------------|-------------------------------------|
| <input type="checkbox"/> Shingle | <input type="checkbox"/> Tile | <input type="checkbox"/> Tar/Gravel |
|----------------------------------|-------------------------------|-------------------------------------|

FOUNDATION / FLOOR

- ☐ **Yes** ☐ **No** Does the natural slope carry water away from the new foundation?
- ☐ **Yes** ☐ **No** Measure the drops and clearances for cap-overs and slabs (2"-3" min)
- ☐ **Complete** Can Concrete be poured manually or does the job require a pump?
- | | |
|---------------------------------|-------------------------------|
| <input type="checkbox"/> Manual | <input type="checkbox"/> Pump |
|---------------------------------|-------------------------------|
- ☐ **Complete** If excavating soil is required, will the dirt be used or hauled out?
- | | |
|-------------------------------|---------------------------------|
| <input type="checkbox"/> Used | <input type="checkbox"/> Hauled |
|-------------------------------|---------------------------------|
- ☐ **Yes** ☐ **No** If a raised floor is specified, is there adequate crawl space?
- ☐ **Yes** ☐ **No** Carefully measure the property drop dimension - are steps/landings required?
- ☐ **Yes** ☐ **No** Are existing steps and landings to code?
- ☐ **Yes** ☐ **No** Determine proper projection of foundation, from house wall or foundation

Section 2: Job Site Preparations:

Manufacturer's Installation Guidelines

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CONNECTION

- ☐ **Yes** ☐ **No** Are there interferences at the attachment points (doors, windows, etc...)?
- ☐ **Yes** ☐ **No** Verify height connection. Is it adequate for proper connection?
- ☐ **Yes** ☐ **No** Does the eave need to be removed or modified?
- ☐ **Yes** ☐ **No** Does the exterior wall need to be modified (sheetrock, siding, stucco...)?

DEMOLITION

- ☐ **Yes** ☐ **No** Will the existing siding be removed?
- ☐ **Yes** ☐ **No** Is the site clean-up and debris removal included?
- ☐ **Yes** ☐ **No** Any modification to existing wall for opening, doors and windows?
- ☐ **Yes** ☐ **No** Will the existing headers carry the loads of the new openings?

ELECTRICAL CONNECTION

- ☐ **Yes** ☐ **No** Is there enough service at the panel for the new addition? (100 amp recommended, check at main panel)
- ☐ **Yes** ☐ **No** Is there room in the panel for additional breakers or wafers?
- ☐ **Complete** Can the home run be concealed or will exterior conduit be needed?
- ☐ Concealed ☐ Exterior Mounted
- ☐ **Yes** ☐ **No** Determine location of sub-panel, interior wall, exterior wall, closet and how the new home run will be routed. Will it be difficult to run?
(If an exterior run is required, document and obtain sign off from owner)

HVAC (Optional)

- ☐ **Yes** ☐ **No** Is the existing system adequate to support the new addition?
- ☐ **Yes** ☐ **No** Can you connect to the existing ducts/registers?
- ☐ **Yes** ☐ **No** If additional unit is to be installed, check electrical and duct routing.

4

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no vertical margin lines or other markings present. The paper appears to be a standard sheet of notebook paper.

Section 3: Material Delivery: Manufacturer's Installation Guidelines

The construction process begins when the room arrives to the jobsite. Identifying, organizing, and planning at this stage may save hours on the installation. Use the following checklist during material delivery to help speed along the construction process.

1. If the room is packaged for LTL shipping, make sure you receive all the boxes. A total box count can be found on the bill of lading. Note any missing pieces on the bill of lading. Take pictures of the load upon arrival.
2. Inspect the material for damage. Note any damaged boxes or parts on the bill of lading. Note that the packaging is designed to sustain some abuse during transport. Although the packaging may be damaged, the material inside may be intact.
3. If you do not plan on immediately installing the room, remove some of the packaging for ventilation. See the packing stickers for important maintenance and storage information i.e. **Do not store packaged/unvented vinyl in direct sunlight or at angle so as to prevent the sun from warping or distorting vinyl parts prior to installation of these parts.**
4. When unloading, organize all similar materials together. Place them in a readily accessible area so you can easily select the appropriate materials needed for each step of the installation process.
5. Inventory all the materials that have arrived. You can refer to the C-Thru layout and cut list for the parts. These documents should arrive with your room and will give important information about the particular room being installed. The information includes room dimensions, extrusion cut sizes, and module locations. Keep these documents accessible during all steps of the installation process.
6. The room materials should be placed outside the perimeter of where the room is being built.
7. Be sure to place the material in a hazard-free area, **as damage on the job site is not covered under your warranty and is subject to replacement costs.**
8. Window inserts and screens are shipped within the wall modules. ***Remove them from the modules and store in a safe cool location for future installation.***
9. In the unlikely event of an error or missing pieces, contact Home Porch & Patio Kits as soon as possible. Every effort will be made to expedite replacement parts to help avoid job shutdowns.
10. **Figure 01** is an example of a job site in which the materials have been separated, organized and are ready for installation.

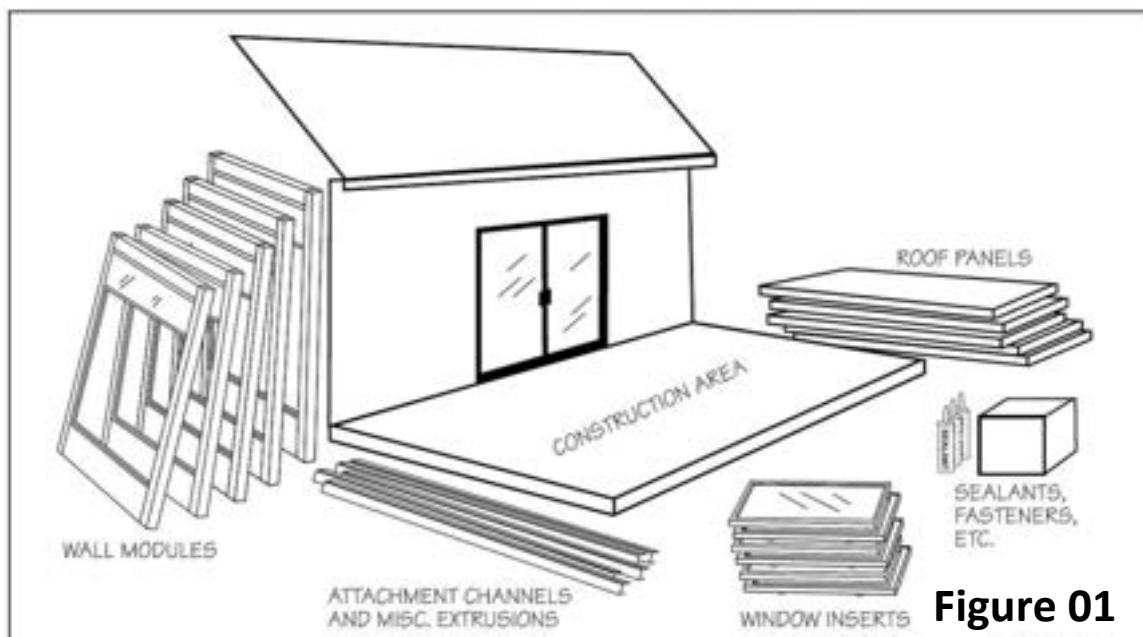


Figure 01

Section 4: Attachment Channels: Manufacturer's Installation Guidelines

Identifying and Inspecting Materials:

Your room will be attached to the existing structure and foundation with a series of attachment channels. The following is a brief list of the attachment channels needed and the items required for their installation:

1. Bottom Track (**Figure 01**): affixed to the slab or deck. The walls of the sunroom will rest in the bottom tracks.
2. Wall Channel (**Figure 02**): affixed to the existing structure's walls. Used to attach the side walls of the room to the structure.
3. Roof Attachment Channel (**Figures 03**) affixed to the existing structure above the wall channel. Used to attach the sunroom rafters to the existing structure.
4. Anchors: When attaching to wood applications, use 3 ea. 14g SST wood screws. When attaching to concrete applications, use Hilti 3/8" Kwik Bolt II or approved equals (refer to ICC-ES Report #4627 for acceptable fasteners substitutes)
5. Sealants: Premium Silicone Caulking.
6. Metal flashing may also be required. See roof attachment section for flashing details. Additional flashing may also be needed at the bottom track and wall channel.
7. Carpenter's pencil and chalk line.
8. There is a full picture library of the channels supplied for both Alpha Plus and Omega rooms at the end of these guidelines.



Figure 01

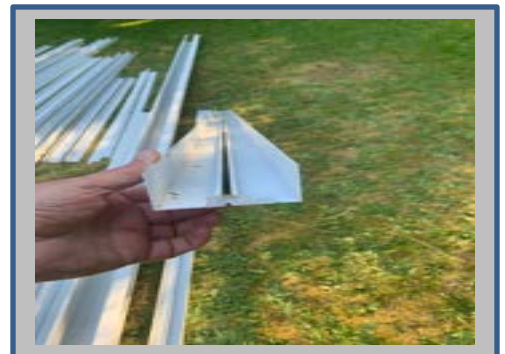


Figure 02

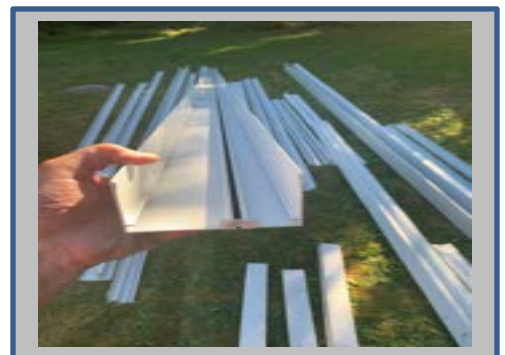


Figure 03

Once the proper materials have been identified, inspect that they are free from damage. Many of C-Thru's extrusions will contain a screw guide. The screw guide is a line etched into the extrusions that can be used as a guide for fastener placement.

Section 5: Bottom Track Installation: Manufacturer's Installation Guidelines

Note: The most important part of any room installation is to make sure the room is square to the house. This is essential in the installation process.

Room wall and roof dimensions and heights can be found on the C-Thru Room Layout sheet (your CAD Drawing). The C-Thru Room layout is the original drawing that the room was confirmed with. The layout sheet is divided into two sections, wall system and roof. The wall drawing will show the three sections of the walls **from the perspective of standing outside the room**. Thus, the left wall of the room is found in the upper left corner of the sheet. The wall height listed is the module height. **It does not include the bottom track height, header beam height or the height of the roof. You must take this into consideration when determining your overall attachment height.**

The wall projections listed on the sheet are exterior to exterior dimensions and include the measurements of the wall tracks and corners. Use this layout sheet as a reference when placing your tracks and attachment channels.

1. Squaring the Slab or Deck

Once the site preparations are complete, measure the slab or deck to make sure it has been constructed to support the dimensions of the sunroom. The room dimensions are found on the C-Thru room layout sheet. In addition, make sure the slab or deck is plumb and square. Measure the diagonals "A" and "B" as shown in **(Figure 01)** They should be the same distance apart.

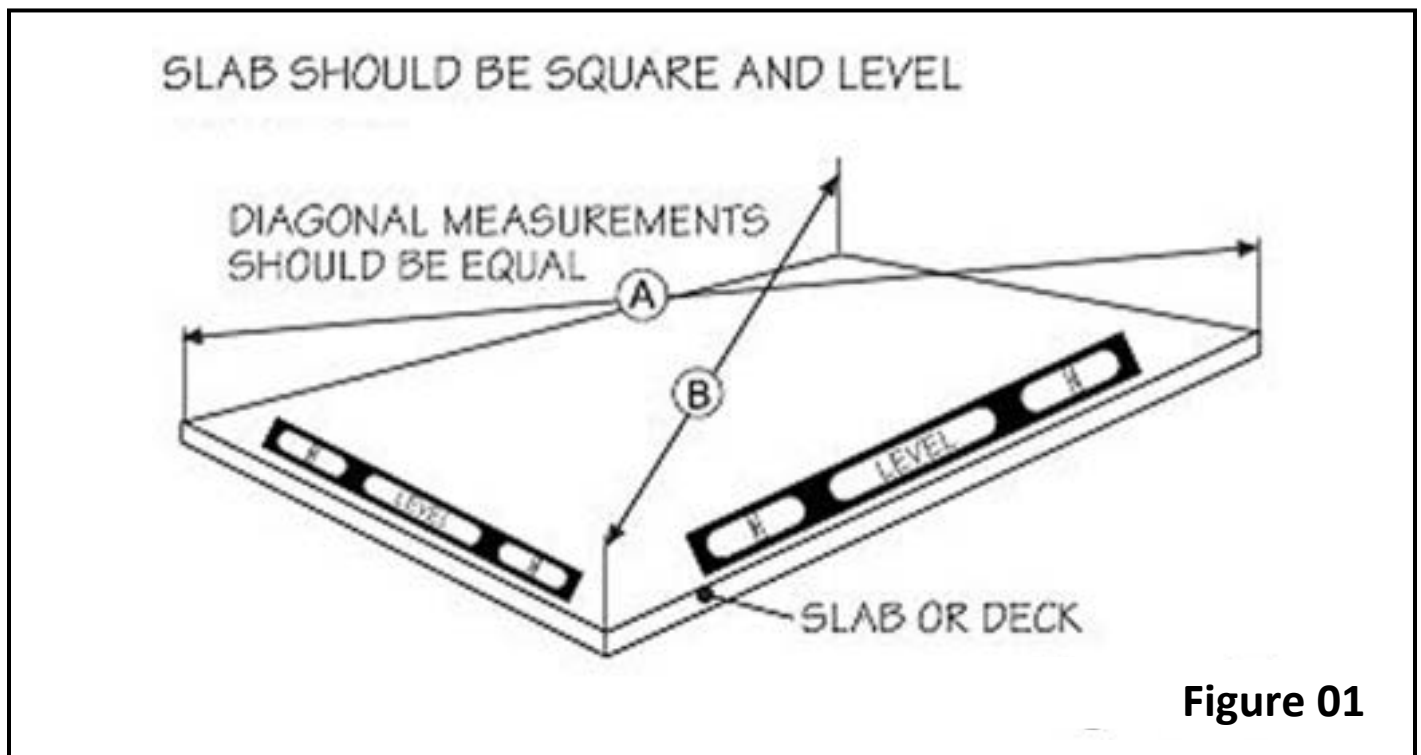


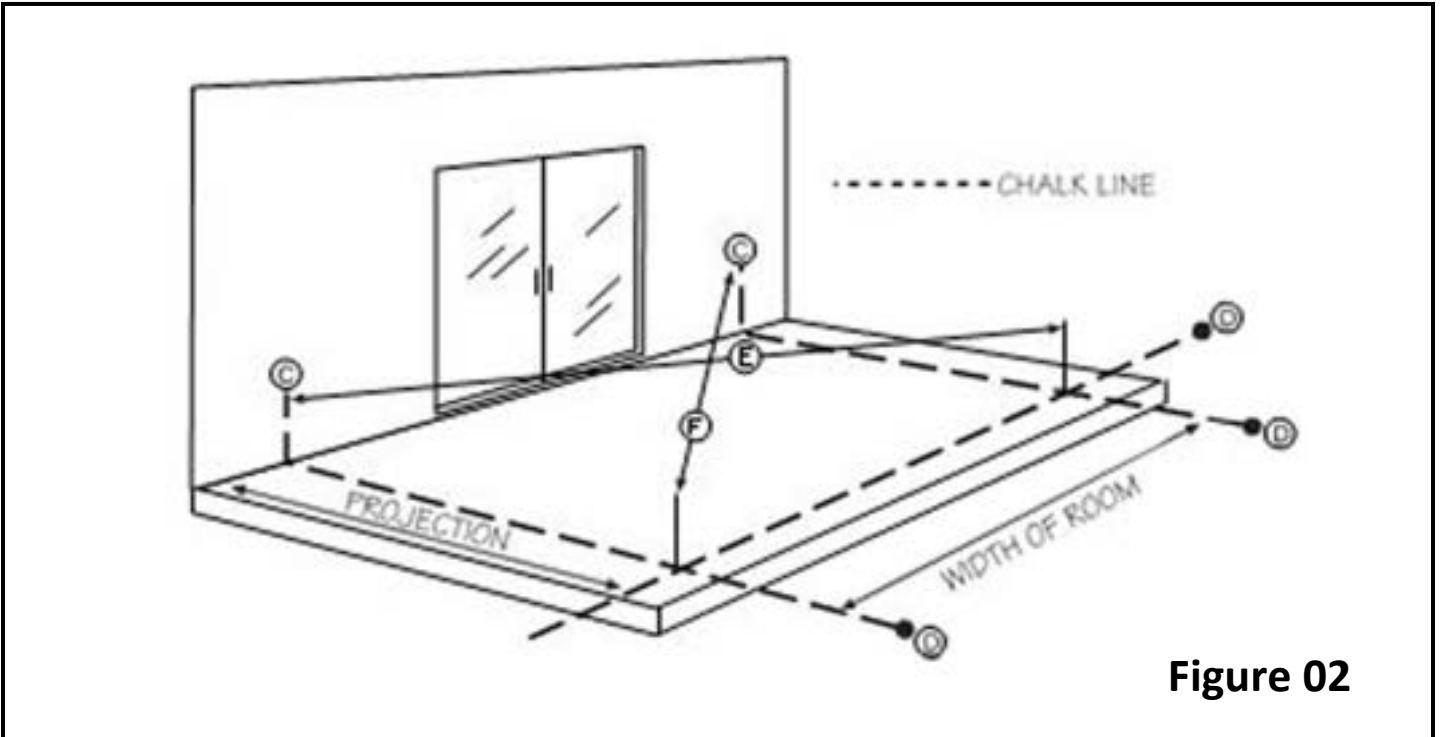
Figure 01

Section 5: Bottom Track Installation: Manufacturer's Installation Guidelines

2

2. Marking the Width of the Room

Indicate the width of the room at the house wall and mark it on the foundation. This measurement should match the front wall width on the room layout sheet. See **(Figure 02)**.



Note: Measure diagonal lines from the opposite corners of your chalk lines. Lines "E" and "F" in **Figure 02** should be equal and would therefore indicate that your chalk lines are square.

*The above squaring and leveling drawing are illustrative only. If you have never squared or leveled a base for the purpose of installing a Sunroom, perhaps the following resources can help you...

https://www.youtube.com/watch?v=UBDZxL9_OM&ab_channel=seejanedrill

<https://www.wikihow.com/Use-the-3-4-5-Rule-to-Build-Square-Corners>

Section 5: Bottom Track Installation:

Manufacturer's Installation Guidelines

3

3. Outlining the Footprint of the Room

The sidewall measurements can be found on the C-Thru Room Layout sheet (your CAD Drawing). Snap a chalk line where the exterior side of the bottom track will be attached to the foundation for the left, right and front wall. See **Detail D** in **Figure 03**. These chalk lines will indicate where the sidewalls and the front walls will intersect (**Figure 03**). A 45-degree cut will have to be made at these intersections to the bottom track. Once again, the dimensions provided on the C-Thru room layout are exterior dimensions and should match those chalked on the foundation.

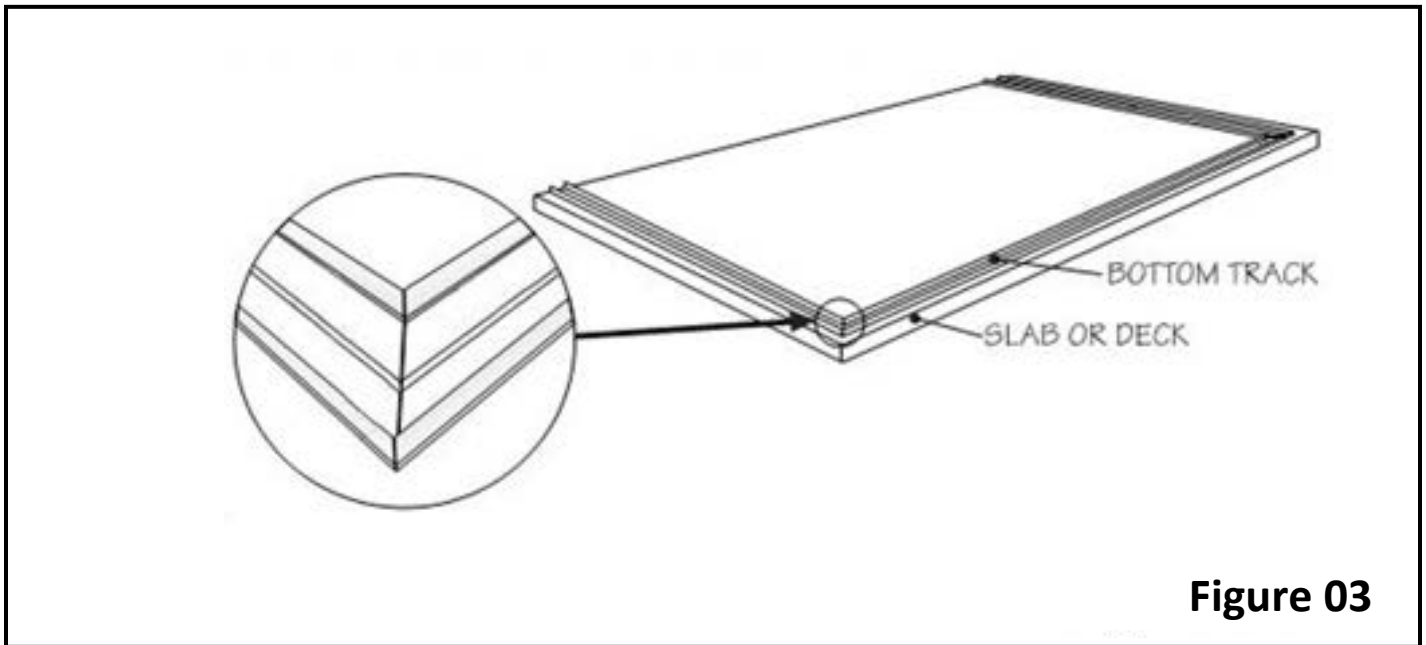


Figure 03

4. Cutting the Bottom Track

The bottom tracks for your job will arrive in stock lengths. They will need to be measured for the correct size and cut to length. These measurements can be confirmed on the C-Thru room layout (your CAD drawing) as well as the chalk lines on the foundation. As a general rule, measure twice and cut once.

Make 45-degree cuts on the bottom tracks where front and side wall tracks meet. These cuts should fit tightly at the intersections of the front and side walls see (**Figure 03**).

NOTE: IF YOUR BOTTOM RAILS HAVE WEEPHOLES, MAKE SURE THE WEEP HOLES ARE FACING OUTWARD, PRIOR TO CUTTING THE BOTTOM TRACKS!



Section 5: Bottom Track Installation:

Manufacturer's Installation Guidelines

5. Pre-Drilling the Bottom Track

The bottom track will be attached to the foundation using fasteners. Fasteners must be positioned on the bottom track where each module joins the next (module joint mullion). The location & distance between each module joint can be found on the C-Thru room layout sheet (your CAD drawing). Mark the location of each joint on the bottom track. At each module joint, pre-drill two ¼" holes about 3" apart down the center screw line of the bottom tracks as shown in **(Figure 04)**. There is a sealant reservoir on the under portion of the bottom track that separates the interior and exterior half of the bottom track, it looks like a "fin."

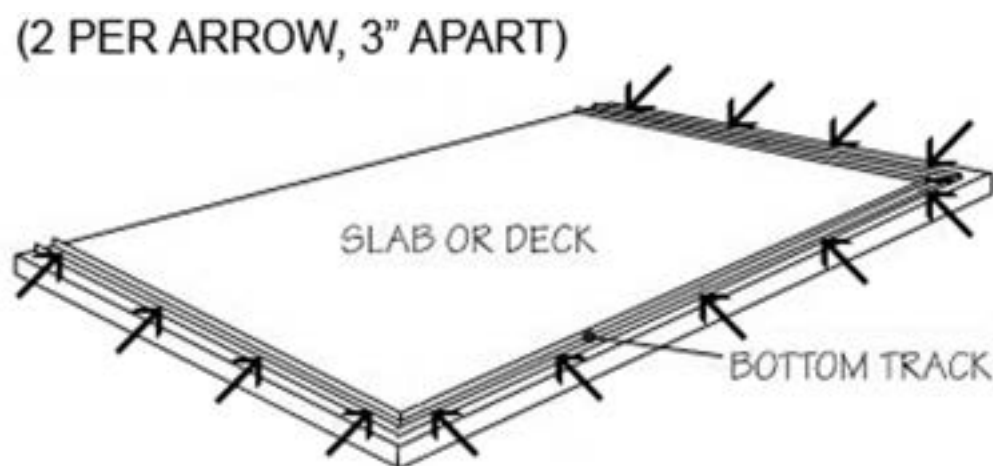


Figure 04

If properly sealed, the sealant reservoir will prevent water from penetrating the room from under the bottom track. You will need to make sure the holes are drilled center of the extrusion. Your bottom track may look slightly different than what is illustrated here. (see **Figure 05**).

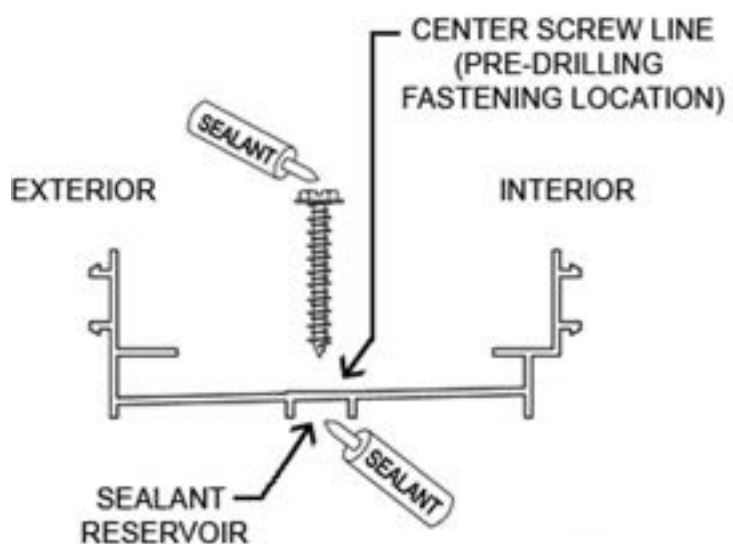


Figure 05

Section 5: Bottom Track Installation:

Manufacturer's Installation Guidelines

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6. Pre-Drilling the Foundation

Place the outside of the bottom tracks on the foundation and line them up with the chalk lines. First, drill into the foundation with a masonry bit (for concrete) or regular drill bit (for decks) through the first hole that is closest to the house wall in each sidewall bottom track. Temporarily secure each side wall bottom track to the foundation with one lag screw or nail set. This temporary attachment will act as a fixed pivot point to square the bottom track. Once the bottom track is square, drill the remaining foundation holes needed to anchor the bottom track. Once all foundation holes are drilled, remove the bottom track and clear the debris left from the drilling with a broom or shop vacuum.

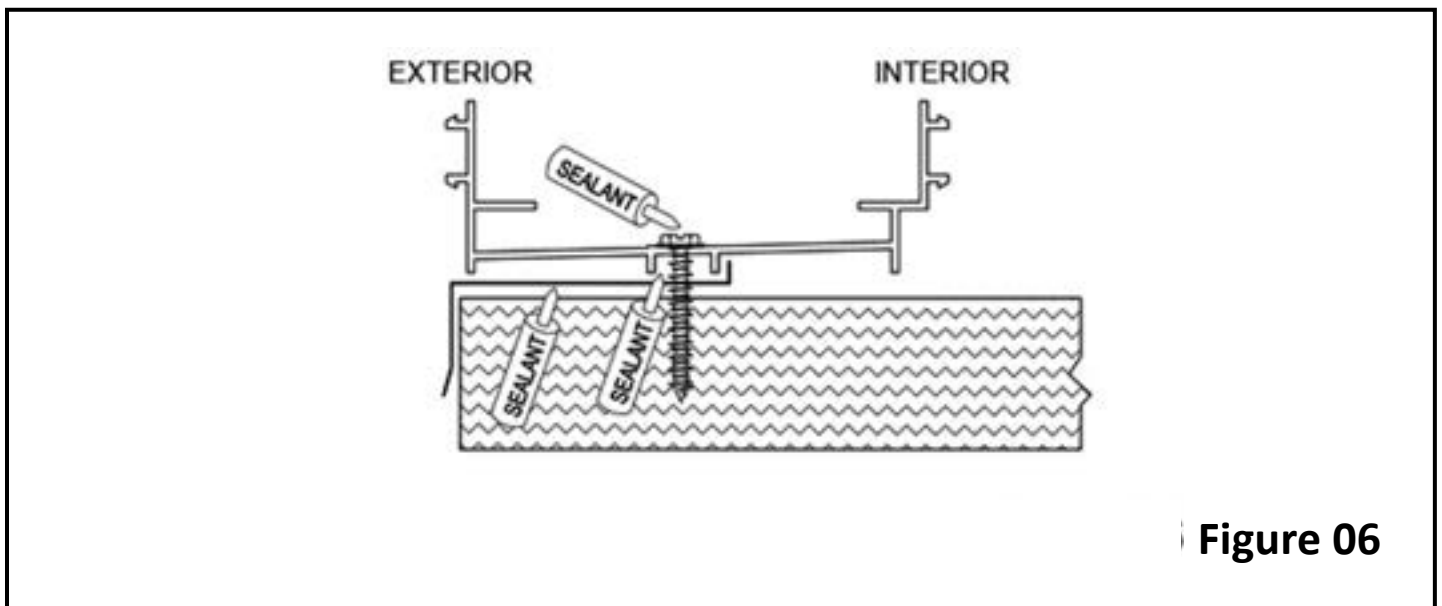
Note: Use the appropriate bits and fasteners for wood or concrete applications.

<https://www.bing.com/videos/search?q=best+fasteners+for+concrete&docid=608017367916938179&mid=20C1B6FB7E7224AC828720C1B6FB7E7224AC8287&view=detail&FORM=VIRE>

<https://www.bing.com/videos/search?q=best+fasteners+for+concrete&docid=608050061195623247&mid=900EA0F6C2D4F9F4A327900EA0F6C2D4F9F4A327&view=detail&FORM=VIRE>

7. Sealing and Attaching the Bottom Track

Once the bottom tracks have been cut, pre-drilled, and the foundation holes predrilled, the bottom tracks are ready to be attached to the foundation. Turn the bottom track upside down and run a bead of caulk in the sealant reservoir see **(Figure 06)**. You should also bead over the drill holes you have made. Place the bottom track back next to your chalk line and begin anchoring the bottom track. Remember, the chalk line should line up with the exterior of the bottom track. Seal the corners of the bottom track and the top of the fasteners with silicone sealant as well as any mitered corners.



Note: A polyurethane sealant may be substituted to seal bottom tracks to concrete. Wood foundations should be sealed with an "L" metal flashing and silicone **(Figure 06)**.

Section 5: Bottom Track Installation: Manufacturer's Installation Guidelines

8. Finishing Bottom Track

Repeat this process for all bottom track attachments. When finished, the bottom track should look like (Figure 07).

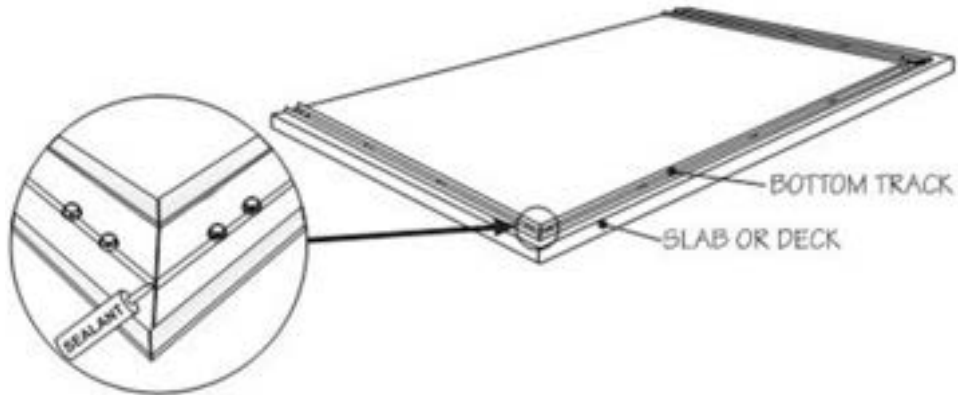


Figure 07

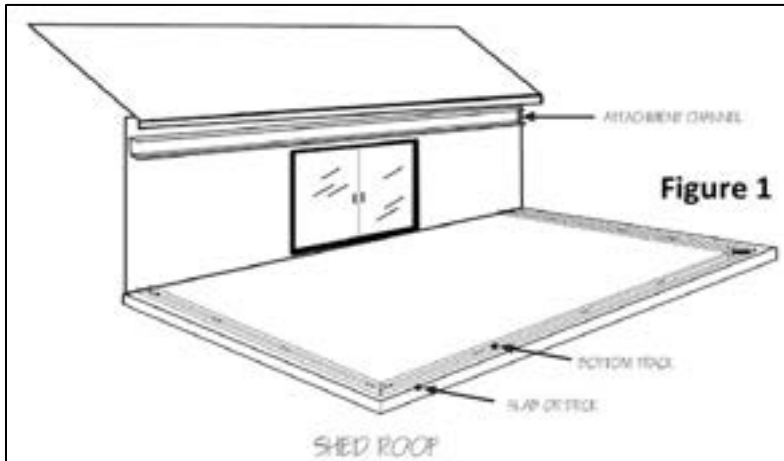


Section 6: Roof Attachment Channel Installation: Manufacturer's Installation Guidelines

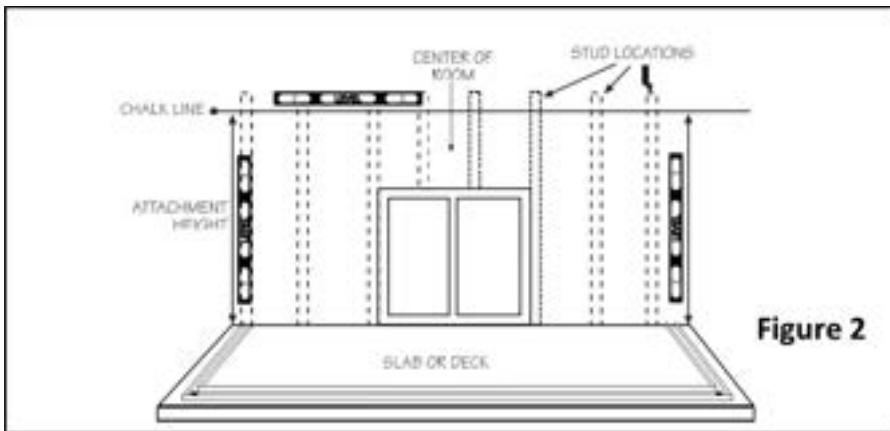
Studio Room Roof

Marking the House Wall

The attachment channel placement height (**Figure 01**) can be determined by using the C-Thru Room Layout sheet (your CAD Drawing).



The maximum attachment height is the module height (wall height), plus $\frac{1}{2}$ " for the bottom track, plus the roof attachment channel height. The roof attachment channel height will be determined by the thickness of the roof, 3", 4" or 6" depending on the thickness of your WeatherGuard roofing. Transfer the maximum attachment height onto the house wall for roof attachment channel placement. Using a chalk line mark the maximum attachment height on the house wall (**Figure 02**). This chalk line will mark the upper most edge of the roof attachment channel. Locate studs in the house wall (approximately every 16") and mark their location just above the maximum attachment chalk line. Remember not to go beyond the widths of the wall attachment channel.

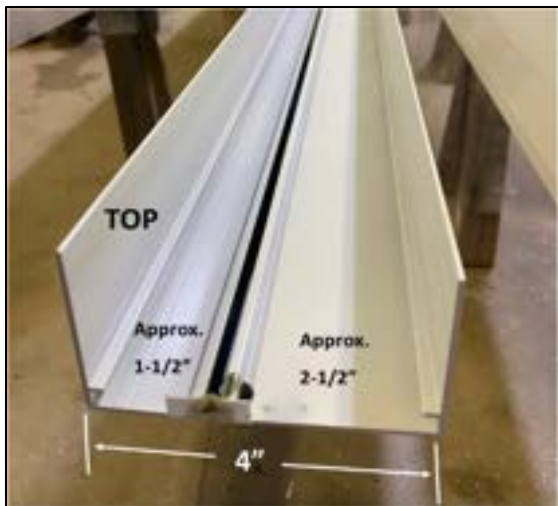


Note: It is important that the pitch of the roof is a MINIMUM of $\frac{1}{2}$ " in 12" unless specified otherwise by your local building municipality. If the pitch to the roof is not in accordance with the pitch dictated by your local municipality, the warranty may become null and void.

NOTE: Some of the depictions below show an older style backwall mounting channel.

This is a picture of a 4" back wall channel. All sizes will look similar to this, where the 3" will have (2) 1-1/2" sections on each side of the thermal break. The 4" has (1) 1-1/2" section above and a 2-1/2" section below the thermal break. The 6" channel will have a (1) 1-1/2" section above and a 4-1/2" section below the thermal break.

There is no 'built-in' pitch on any of the backwall mounting channels. You are responsible for making sure you calculated the $\frac{1}{2}$ " per foot of projection pitch from the backwall mounting channel to the top of the front wall you will be building in Section 8.



Section 6: Roof Attachment Channel Installation: Manufacturer's Installation Guidelines

2

Determine the correct height on your back wall taking into account the thickness of the roof (3", 4", 6"), the slope (1/2" per foot of projection) and the total height of the side walls.



Prepare the roof mounting rail by removing the protective film. Cut to the finished size of your total roof width. Dry mount the channel marking the location of the house wall studs (if mounting on the wall) or the roof rafter tails (if mounting to the fascia board of an existing overhang). Take it down and predrill holes in the channel, one above another at each location.



Lag the mounting channel onto the house wall with a minimum 3" lag screws. Prepare the house wall prior to mounting to take care of anything that will prevent a "flush against" the wall installation.



Put a bead of caulk on the back of the mounting channel prior to lagging it into place.

Caulk the wall & mounting channel connection. Put a bead of caulk underneath the upper leg of the mounting channel just prior to inserting the roof panel.

This will all help prevent water from leaking behind the roof panel and behind the mounting channel.



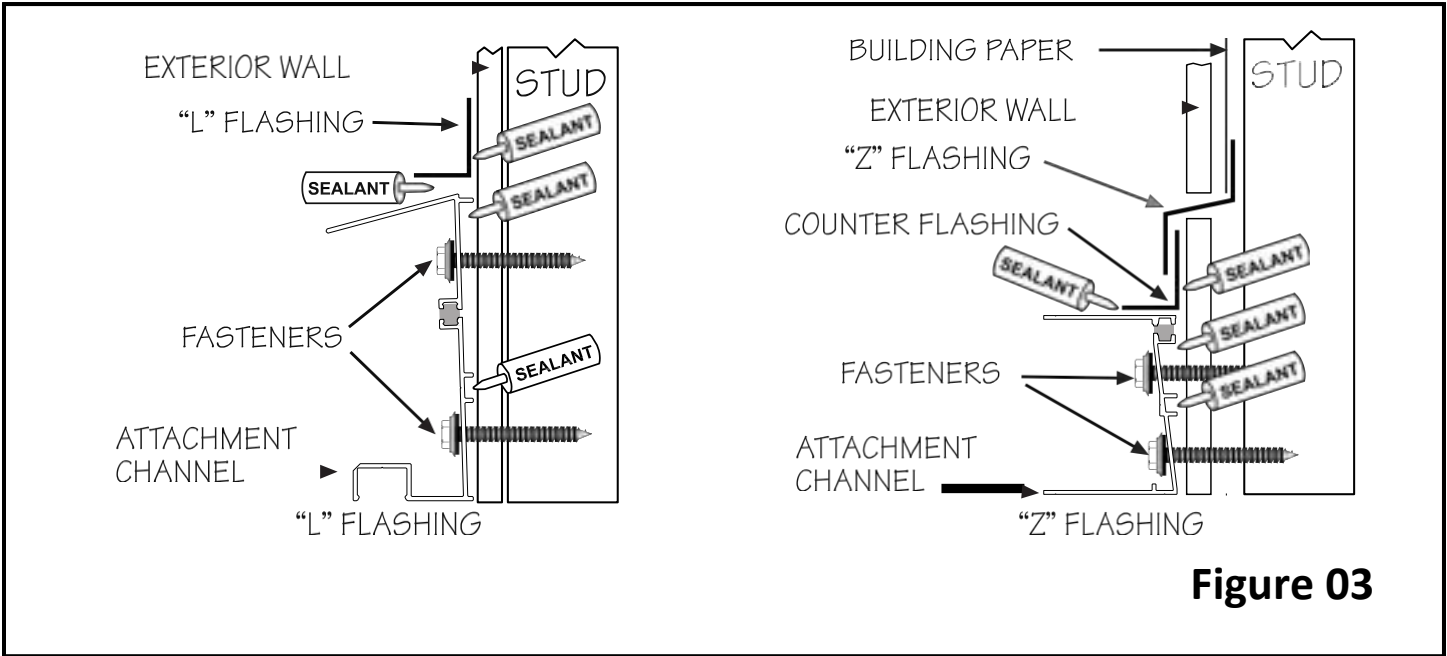
Typical roof overhangs beyond the side walls will range from 6" to 2'.



This is again further explained below in more detail.

1. Counter Flashing

Counter flashing may be required when installing the attachment channel. When attaching to a wall with siding, it may be necessary to remove a course of siding or cut a groove in the house wall so that the counter flashing may be attached under the felt paper behind the siding. **(Figure 03)** shows two examples of counter-flashing the roof attachment channel. *The shape of your attachment channel will be slightly different.*

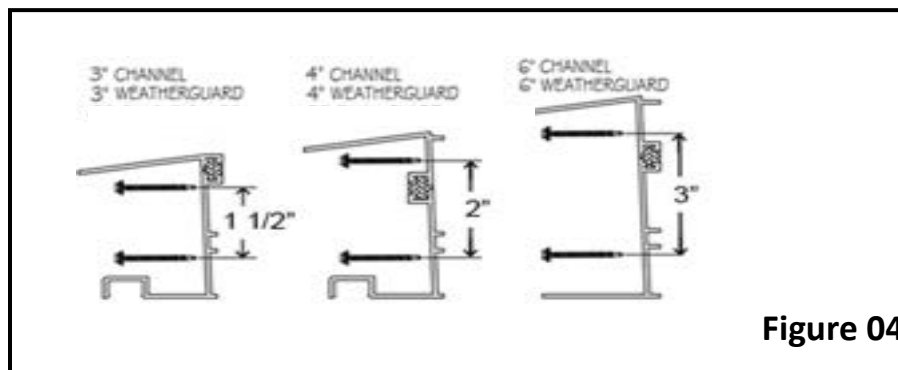


1. Cutting and Pre-Drilling the Attachment Channel

The roof attachment channel will arrive in stock lengths. The overall roof width is listed on the C-Thru layout sheet (your CAD drawing), measure twice and cut the roof attachment channel to the correct length.

Note: The roof attachment channel will be the exact width of the room. Temporarily place the roof attachment channel(s) on the house wall and mark the location of the studs onto the attachment channel. Pre-drill two $\frac{1}{4}$ " holes in the roof attachment channel at each of these "stud location" marks. See **(Figure 04)** for the vertical spacing of the pre-drilled holes for each roof extrusion thickness.

Note: On thermally broken mounting channels, fasteners should be placed above and below the thermal break. *Figure 4 below is illustrative only. The shape of your mounting channel will be slightly different.*



Section 6: Roof Attachment Channel Installation: Manufacturer's Installation Guidelines

2. Sealing and Securing the Attachment Channel

Tip: Now is the best time to cut the front wall header beam. Cut the front wall header beam to the same length as the roof attachment channel.

Apply silicone or caulking to the back of the channel, as shown in **(Figure 05)**. The roof attachment channel will be attached to the house wall with lag screws. Use two 5/16" diameter lag screws (at least 3" in length) through the predrilled holes of the roof attachment channel to secure to the studs on the house **(Figure 05)**. Use your 4' level and framing square to ensure that the roof attachment channel is level, plumb, and square to the bottom track. You may have to account for any small variances of slope of the foundation during this process.

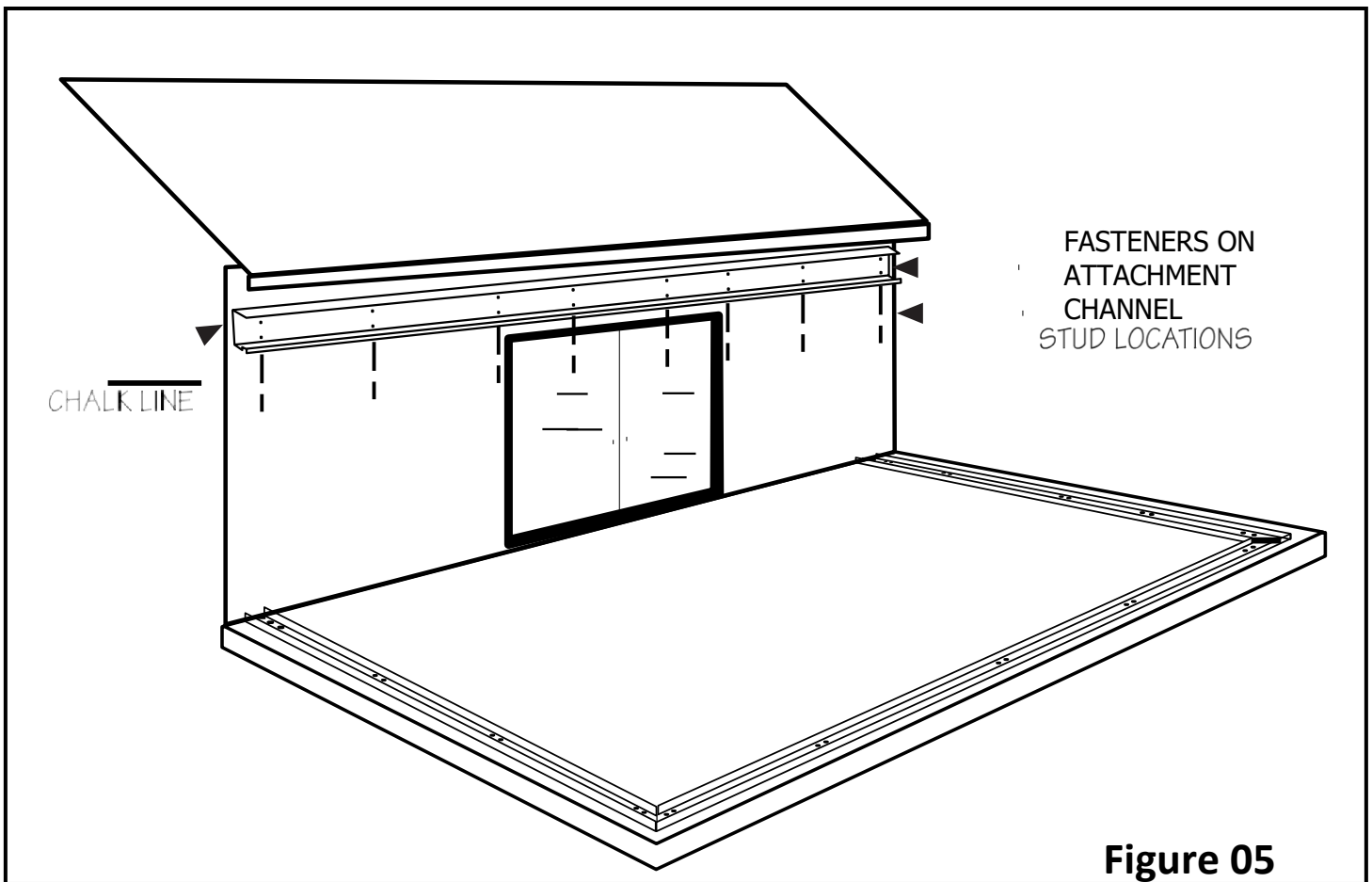


Figure 05

Note: For stucco walls, caulk the back of the attachment track with sealant and secure with 3 ½" lag screws. On house walls with siding, secure the attachment track just under the counter flashing.

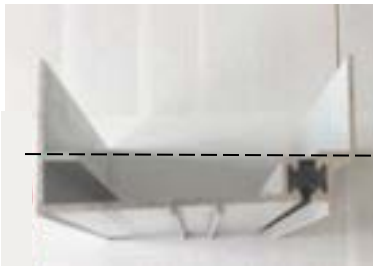
Section 7: Wall Attachment Channel Installation: Manufacturer's Installation Guidelines

1

1. Measuring and Cutting Wall Attachment Channel

The last attachment channels to be secured are the wall channels to allow you to secure the room sidewalls to the house. Each room wall module will rest on a lip found on the inside of the bottom track. This lip must be taken into consideration when measuring for the wall channel cut lengths (**Figure 01**).

**Alpha Plus
Bottom Channel**



**OMEGA
Bottom Channel**

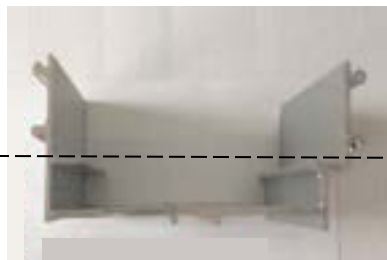
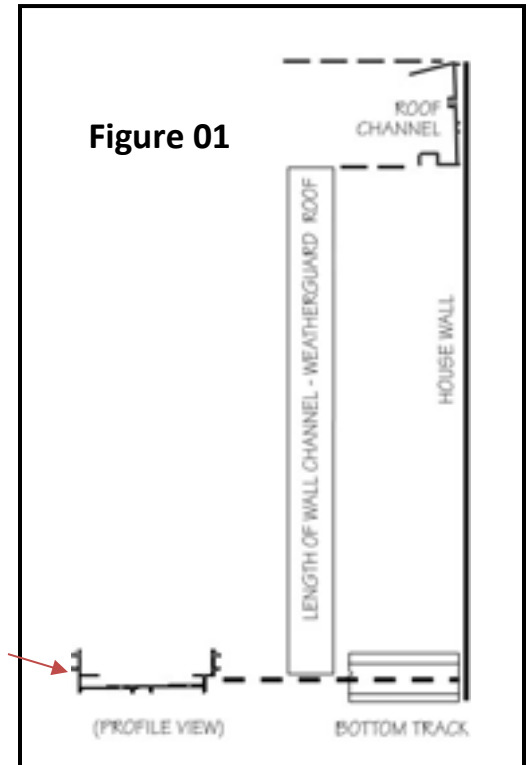


Figure 01



2. Notching the Wall Channel

Cut a notch so that the outside face of the wall channel covers the outside edge of the roof attachment channel. See (**Figure 02**) for notch detail. Repeat this for the other wall channel.

***Notched Wall Track**

***Installed ½"x 3/4" Filler Block**

***Finished Look w/ Clad**

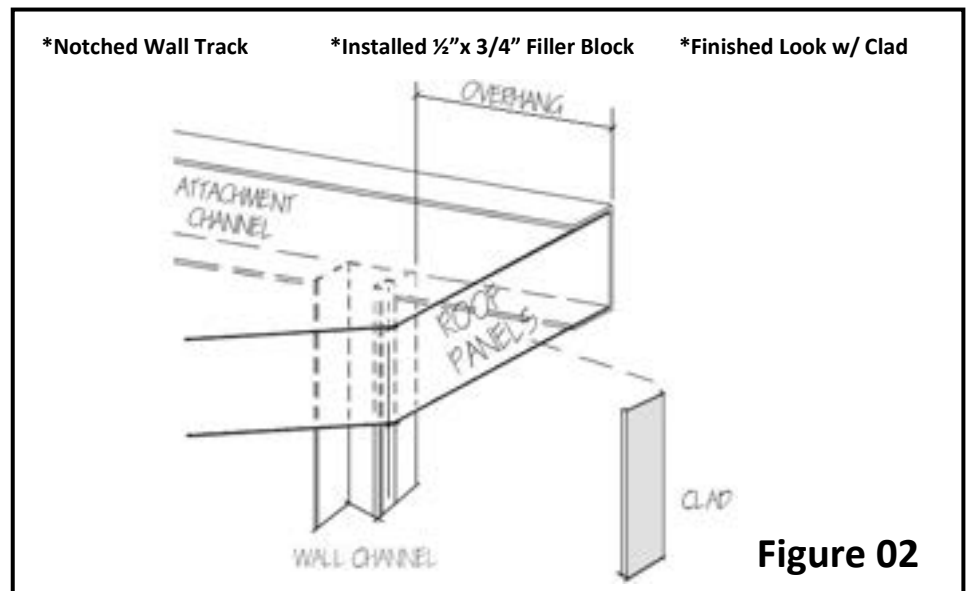


Figure 02

Section 7: Wall Attachment Channel Installation:

Manufacturer's Installation Guidelines

2

Note: In applications under an existing roof or in between two posts (where the module spacing will be very tight) it may be necessary to rip the wall channel along its length, into 2 pieces, to fit the module(s) into place. The inside fin will be re-attached once the module is in place.

3. Checking for Square

Place the wall channel inside the bottom track at the house wall and plumb it with a level. Place a mark on the house wall at the outside of the wall channel. Do the same for the other sidewall attachment. Measured from mark to mark, the dimension should be the same as the front wall width (**Figure 03**).

Note: On the **OMEGA** wall channels, prior to attaching, you will need to remove cladding tits so wall track can slide into the bottom track see (**Figure 04**).

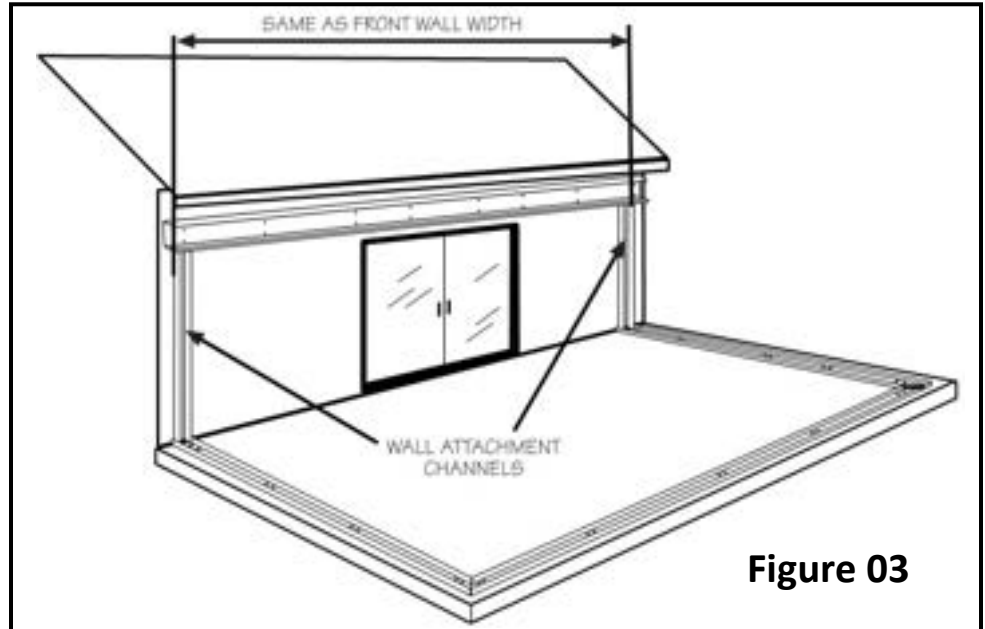


Figure 03

4 Pre-Drilling, Sealing, and Securing the Wall Channel

Hardware appropriate to the house wall material should be used to attach the wall channel to the house. Starting at the uppermost end of the wall channel, mark your first location for attachment. Continue to mark fastener locations every 16 inches. Remove the channel and pre-drill $\frac{1}{4}$ " holes into the wall channel at each mark. Before bolting, seal the wall channel by placing a bead of sealant center of the back of the extrusion (**Figure 05**). Use polyurethane or silicone, depending on the material of the house wall.

Note: Expanding plastic plugs may be used to secure the bolts to a stucco wall.



Figure 04

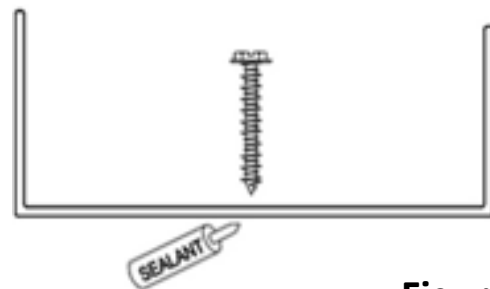


Figure 05

1. Preparing for Installation

Wall modules for the room are individually numbered and will correspond with the module numbers listed on the C-Thru room layout sheet. The work order number and the module number can be found on the inside web of the mullion for each module (**Figure 01**). Remember that the number 1 module is usually not the first module in the front wall. Refer back to the room layout sheet for the correct module numbers for the front wall. It is important that you identify which modules go to which walls as module heights and widths will vary.

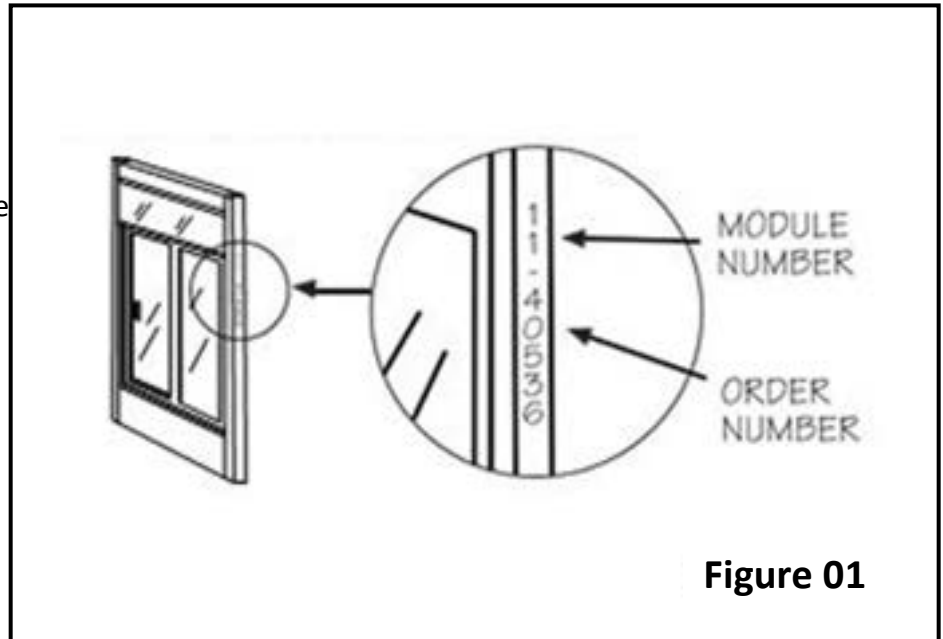


Figure 01

Note: When placing modules in the bottom track, if there are weep holes, make sure they are facing outward.

A. On concrete foundations and deck applications, the foundation may not be level. Place a 4' level on the inside edge of your front wall bottom track to determine if the foundation is level. If there is a slight slope, you may have enough solid material on the kick plate to trim, compensating for the slope (**Figure 02**). C-Thru does not recommend this as a norm for sloppy foundation work as this could create problems as the installation continues. If the slope is not uniform, then each module must be cut separately, adding the adjustment for each module cut size to the next module. Not all modules are the same width; therefore, each cut must be made according to the size of the individual module.

Note: It is essential that the window frames and the tops of the modules maintain a continuous level surface. The windows will not operate properly unless the modules and the window frames are level and square. This must be taken into consideration when cutting the solid kick plates to adjust for slopes.

Note: The 2 stage kick plate (glass with solid base trim) gives the ability to install glass kick plates while using an existing out-of-level concrete slab or deck

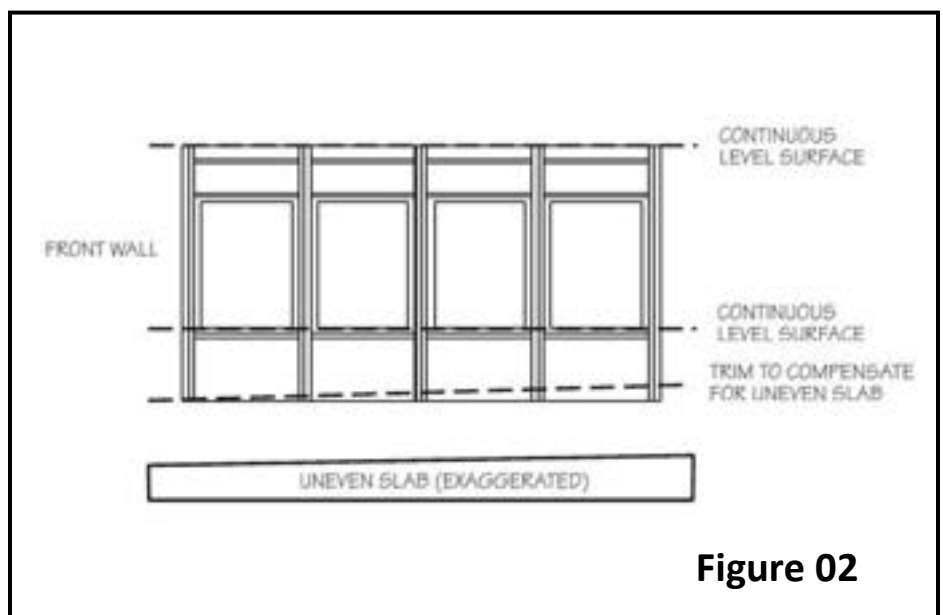


Figure 02

Section 8: Front Wall Installation: OMEGA | 2

Manufacturer's Installation Guidelines:

Your "Installers Layout" will show you where to install each module. Every module is numbered on the layout and on the actual module itself. Also on the layout, the sizes are listed as well as the approximate size of the wall panel that needs to be installed in the corners and at the house.

We have provided a brief pictorial instruction followed by written instruction. Read carefully.

ATTENTION!! The front wall corner assemblies for the Alpha Plus & OMEGA Systems are different. The considerations for assembly are outlined below.

OMEGA Front Wall Assembly Guidelines (Alpha Plus on Page 7)



Start with the front wall first. *You can start at either end, but some installers believe it is most often easier if you start in the center of the wall and work toward the corners.* If you need to cut the height of the panel, so you arrive at the desired slope of the roof, cut it off the top of the module.

****Confirm the correct module number for where you are starting****



Place the next module in position and slide them together. Remember, this is a "male/female" fit, not just overlapping.

Slide the modules together.



The electrical utility mullion connection looks like the first of the three picture above. Screw the modules together in the center where they over-lap. About every 16" from the bottom to the top of the wall.

Section 8: Front Wall Installation: OMEGA | 3

Manufacturer's Installation Guidelines:



Measure and cut the Header Channel for the top of the wall. It should be the same length as the floor channel. The electrical raceway cavity will be on the inside of the room.



Level and plumb each module. This will ensure that the windows will slide and operate properly. This will not be an issue if the concrete or floor was done correctly. If you need to level a module, if your kickplates are solid you can cut the bottom of kickplate at the angle that levels the windows. If you have a glass kickplate, your 2" bottom fill can be used to level your module. You can also shim the bottom inside the track and fasten it into place.



By making sure all your modules are plumb, you can measure the distance from the last module to the side wall at the bottom and the measurement for the header channel will be the same.



Note the location of the screws in the wall and for securing the header channel to the wall.

Section 8: Front Wall Installation: OMEGA | 4

Manufacturer's Installation Guidelines:

2. Beginning the Front Wall

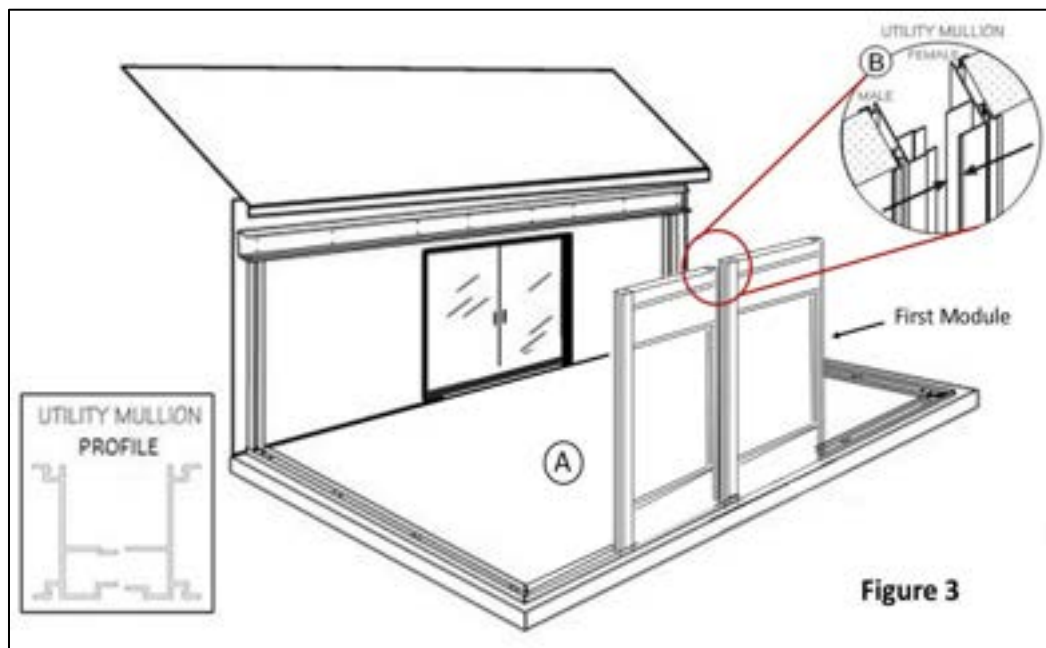
Place the first module (without the window inserts) into the bottom track (**Figure 03, Detail "A"**). *Some installers like to start in the middle. By doing that you can adjust the full assembly left or right to make sure that the outside fill section at each corner is exactly the same.*

You will need to determine your total front wall height, **including** the top header rail (see roof attachment channel installation in Section 6 above), which is determined using a ½" per foot drop of the roof panels along the projection out to the front wall. If you need to trim the module to achieve the total height, it is generally best to trim it off the top of the module.

Note: If you need to level a module, if your kickplates are solid you can cut the bottom of kickplate at the angle that levels the windows. If you have a glass kickplate, your 2" bottom fill can be used to level your module. You can also shim the bottom inside the track and fasten it into place.

The leftmost end of the module should line up to the inside corner of the sidewall bottom track. Slide the module into the bottom track making sure that it slides snugly in the track. In the event that the kick plate catches the lip of the bottom track, use a putty knife to slide it in (silicon spray can be used to help allow the modules to slide into place). **Do not fasten the module at this point** to allow for adjustability.

Note: Your room layout calls for solid fill at the ends of the front wall, When you start at the center module of the front wall and move outwards, it allows for you to make sure the solid fill on either end of the front wall will be equal in width, creating a balance to the room. The C-Thru room layout sheet (your CAD drawing) will have the correct cut size for solid fill. It will not be necessary for the solid fill to terminate perfectly equal to the inside lip of the sidewall bottom track (though you should try!), as the inside and outside corners will conceal it and compensate for any gap.



Tip: Having one to two helpers at this stage (and moving forward) may be useful to hold the modules up. You may also support the front wall with a temporary rafter.

3. Installing the Second and Subsequent Modules

You will install the next module in the same way. Each wall module contains either a male utility mullion extrusion on one side and a female utility mullion extrusion on the other side (**Figure 03, Detail "B"**) OR an "H" channel which is likely already connected to one of the modules. Utility mullion males and females are designated on the C-Thru room layout sheets with UM and UF. These two extrusions mate to form a complete utility mullion between each module. Exceptions may occur at the house wall, next to solid, or corners where a regular female extrusion may be found. Female extrusions are identified with an F on the room layout sheet.



Once in the track, a soft mallet may be used to nudge the second module to interlock with the first (*silicone lubricant may be helpful*). Continue as needed to assemble the front wall.

Important! Place all the modules in the front wall without fastening them.

Note: The front wall will need to be aligned so the end modules line up with the inside corners of the sidewall bottom track.

IMPORTANT! THE MODULES AND THE WINDOW FRAMES MUST BE PERFECTLY LEVEL AND PLUMB IN ORDER FOR THE WINDOWS TO OPERATE PROPERLY. BEFORE PROCEEDING, TEST EACH MODULE WITH THE WINDOW SASHES TO MAKE SURE THE WINDOWS FIT AND LOCK PROPERLY.

4. Fastening the Wall Modules Together

You will be attaching the modules together by the utility mullions affixed on either end of each module. Be sure to mate a male and female utility mullion together for a proper fit. For the Omega (vinyl) system, snap in several scrap pieces of utility mullion cladding on both sides of the utility mullions to temporarily hold the width of the mullion.

A sheet metal screw or Pop rivet will be needed every 24" to attach both sides of the utility mullion together.

Use #8 x 1/2" tek screws (Figure 04).

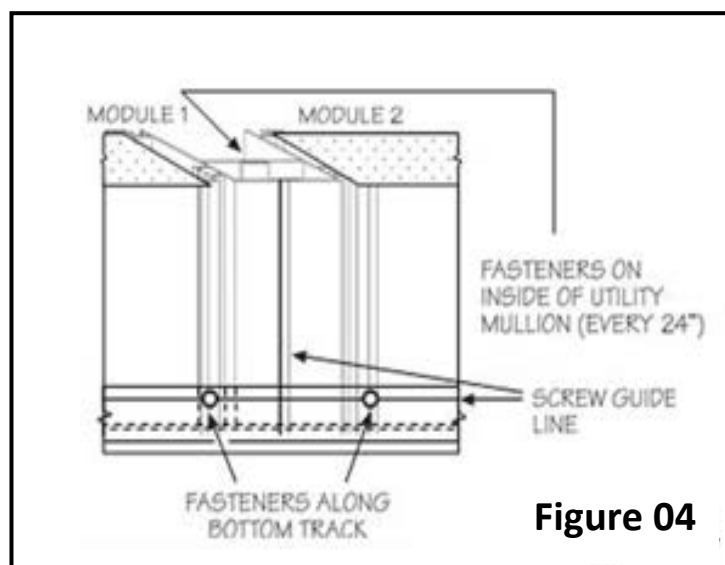


Figure 04

Vinyl cladding will be added on top of the utility mullion during any electrical wiring installation section of this manual.

Section 8: Front Wall Installation: OMEGA | 6

Manufacturer's Installation Guidelines:

5. Fastening the Wall Modules to the Bottom Track

The modules will be fastened with #8 x 1/2" tek screws at the base where the vertical mullions and bottom track intersect. Use the guideline (**Figure 04 above**) in the bottom track to place the screws. Fasten two sheet metal screws per utility mullion connection at the base on the room's exterior.

6. Adding Solid Fill

Suggestion: The C-Thru Room Layout Sheet will note a section of solid fill is required for both the front wall and side wall at the corners. We suggest that you proceed to putting the roof panels on to make your front wall

solid. Then build out your side walls from wall to corner. You will then be able to measure and cut your fill sections for both front and side walls to finish your corners and allow for the installation of the aluminum corner covers.

You will be able refer to the layout for the cut size of the solid fill. By leaving the corners to last, you can double check this measurement by measuring from the inside of the "H" channel of the module to the inside corner of the bottom track for the width, and the height of the module for the height (both sides may be slightly different to account for the slope of the foundation).

Cut the solid material and place it on the sides of the front wall.

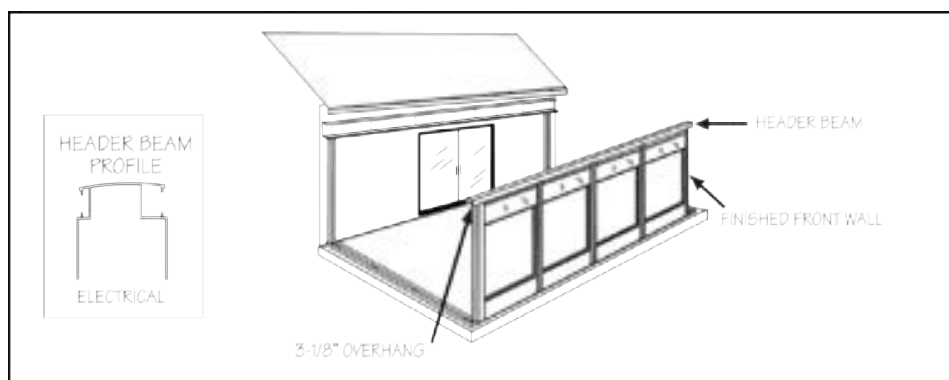


7. Cutting and Attaching the Header Beam

Once all the modules on the front wall have been attached to each other, you will need to attach the header beam. The header beam will arrive in stock lengths and will need to be cut to size. Measure the distance along the front wall modules from end to end and add 6-1/4 inches to this measurement. This will be the cut length for the electrical header beam.

To double check, by making sure all your modules are plumb, you can measure the distance from the last module to the side wall at the bottom, and the measurement for the header channel will be the same. Cut header

beam to length making sure you cut the 45-degree finishing cut. *Triple Check:* Dry fit the header beam on the front wall. Each end hangs 3-1/8" over the edge on each side.



****Place two sheet metal screws at each utility mullion and electrical header beam junction (just like for the bottom track), using the screw guide lines on the header beam.**

Go to Roof Installation | Section 9

(Alpha Plus Front Wall Installation Given on page 7 of Section 8)

Section 8: Front Wall Installation: Alpha Plus | 7

Manufacturer's Installation Guidelines:

Your "Installers Layout" will show you where to install each module. Every module is numbered on the layout and on the actual module itself. Also on the layout, the sizes are listed as well as the approximate size of the wall panel that needs to be installed in the corners and at the house.

We have provided a brief pictorial instruction followed by written instruction. Read carefully.

ATTENTION!! The front wall corner assemblies for the Alpha Plus & OMEGA Systems are different. The considerations for assembly are outlined below.

Alpha Plus Front Wall Assembly Guidelines (OMEGA on Page 2)



Start with the front wall first. *You can start at either end, but some installers believe it is most often easier if you start in the center of the wall and work toward the corners.* If you need to cut the height of the panel, so you arrive at the desired slope of the roof, cut it off the top of the module.

****Confirm the correct module number for where you are starting****



Place the next module in position and slide them together. Remember, this is a "male/female" fit, not just overlapping.

Slide the modules together.



The electrical utility mullion connection looks like the first of the three picture above. Screw the modules together in the center where they over-lap. About every 16" from the bottom to the top of the wall.

Section 8: Front Wall Installation: Alpha Plus | 8

Manufacturer's Installation Guidelines:



Measure and cut the Header Channel for the top of the wall. It should be the same length as the floor channel. The electrical raceway cavity will be on the inside of the room.



Level and plumb each module. This will ensure that the windows will slide and operate properly. This will not be an issue if the concrete or floor was done correctly. If you need to level a module, if your kickplates are solid you can cut the bottom of kickplate at the angle that levels the windows. If you have a glass kickplate, your 2" bottom fill can be used to level your module. You can also shim the bottom inside the track and fasten it into place.



By making sure all your modules are plumb, you can measure the distance from the last module to the side wall at the bottom and the measurement for the header channel will be the same.



Note the location of the screws in the wall and for securing the header channel to the wall.

Section 8: Front Wall Installation: Alpha Plus | 9

Manufacturer's Installation Guidelines:

2. Beginning the Front Wall

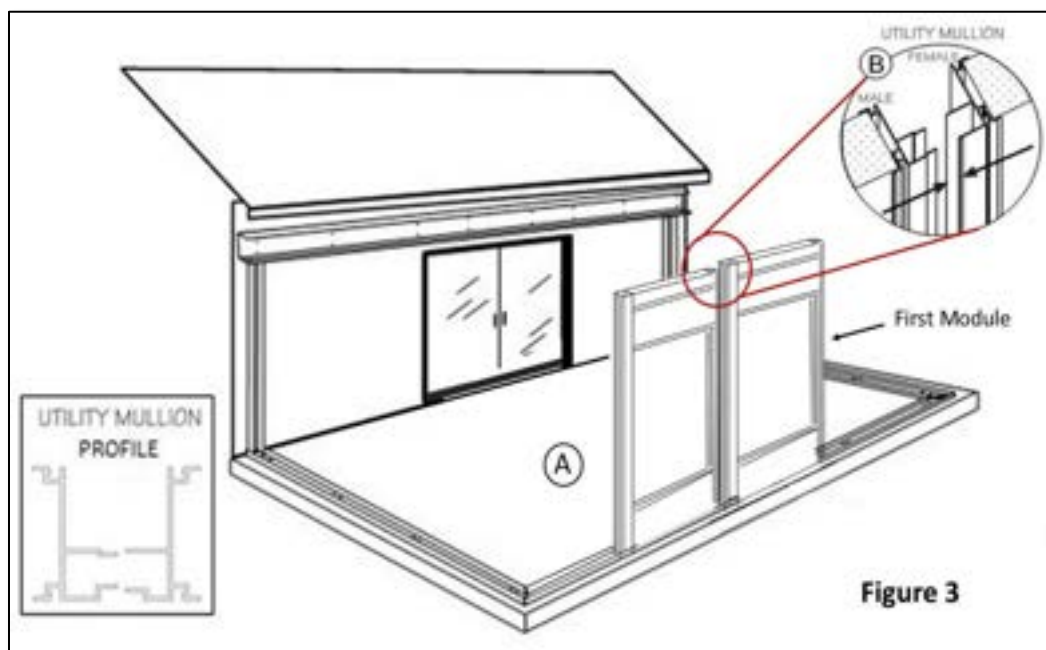
Place the first module (without the window inserts) into the bottom track (**Figure 03, Detail "A"**). *Some installers like to start in the middle. By doing that you can adjust the full assembly left or right to make sure that the outside fill section at each corner is exactly the same.*

You will need to determine your total front wall height, **including** the top header rail (see roof attachment channel installation in Section 6 above), which is determined using a ½" per foot drop of the roof panels along the projection out to the front wall. If you need to trim the module to achieve the total height, it is generally best to trim it off the top of the module.

Note: If you need to level a module, if your kickplates are solid you can cut the bottom of kickplate at the angle that levels the windows. If you have a glass kickplate, your 2" bottom fill can be used to level your module. You can also shim the bottom inside the track and fasten it into place.

The leftmost end of the module should line up to the inside corner of the sidewall bottom track. Slide the module into the bottom track making sure that it slides snugly in the track. In the event that the kick plate catches the lip of the bottom track, use a putty knife to slide it in (silicon spray can be used to help allow the modules to slide into place). **Do not fasten the module at this point** to allow for adjustability.

Note: Your room layout calls for solid fill at the ends of the front wall, When you start at the center module of the front wall and move outwards, it allows for you to make sure the solid fill on either end of the front wall will be equal in width, creating a balance to the room. The C-Thru room layout sheet (your CAD drawing) will have the correct cut size for solid fill. As your finish your front wall toward each corner, you will want to 'dry fit' the two corner pieces, so you can determine the final height of your corners AND the solid fill measurements at each corner **which will finish off** the front wall.



Tip: Having one to two helpers at this stage (and moving forward) may be useful to hold the modules up. You may also support the front wall with a temporary rafter.

3. Installing the Second and Subsequent Modules

You will install the next module in the same way. Each wall module contains either a male utility mullion extrusion on one side and a female utility mullion extrusion on the other side (**Figure 03, Detail "B"**) OR an "H" channel which is likely already connected to one of the modules. Utility mullion males and females are designated on the C-Thru room layout sheets with UM and UF. These two extrusions mate to form a complete utility mullion between each module. Exceptions may occur at the house wall, next to solid, or corners where a regular female extrusion may be found. Female extrusions are identified with an F on the room layout sheet.



Once in the track, a soft mallet may be used to nudge the second module to interlock with the first (*silicone lubricant may be helpful*). Continue as needed to assemble the front wall.

Important! Place all the modules in the front wall without fastening them.

Note: The front wall will need to be aligned so the end modules line up with the inside corners of the sidewall bottom track.

IMPORTANT! THE MODULES AND THE WINDOW FRAMES MUST BE PERFECTLY LEVEL AND PLUMB IN ORDER FOR THE WINDOWS TO OPERATE PROPERLY. BEFORE PROCEEDING, TEST EACH MODULE WITH THE WINDOW SASHES TO MAKE SURE THE WINDOWS FIT AND LOCK PROPERLY.

4. Fastening the Wall Modules Together

You will be attaching the modules together by the utility mullions affixed on either end of each module. Be sure to mate a male and female utility mullion together for a proper fit. For the Omega (vinyl) system, snap in several scrap pieces of utility mullion cladding on both sides of the utility mullions to temporarily hold the width of the mullion.

A sheet metal screw or Pop rivet will be needed every 24" to attach both sides of the utility mullion together.

Use #8 x 1/2" tek screws (Figure 04).

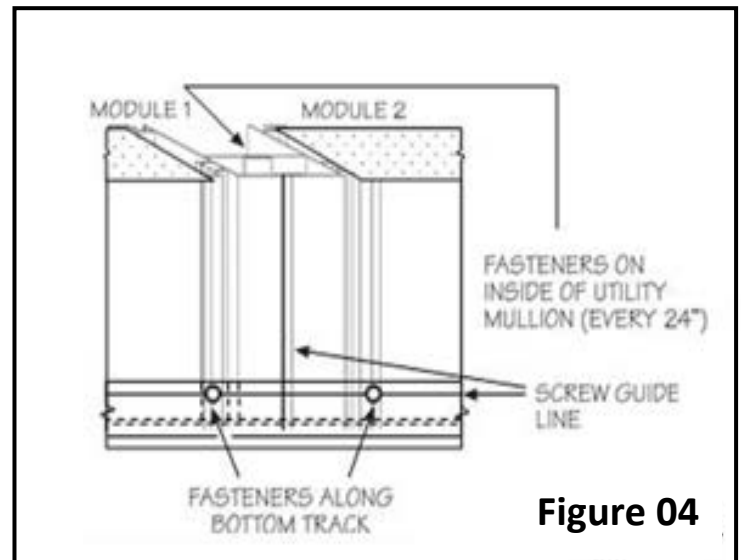


Figure 04

Vinyl cladding will be added on top of the utility mullion during any electrical wiring installation section of this manual.

Section 8: Front Wall Installation: Alpha Plus | 11

Manufacturer's Installation Guidelines:

5. Fastening the Wall Modules to the Bottom Track

The modules will be fastened with #8 x 1/2" tek screws at the base where the vertical mullions and bottom track intersect. Use the guideline (**Figure 04 above**) in the bottom track to place the screws. Fasten two sheet metal screws per utility mullion connection at the base on the room's exterior.

6. Adding Solid Fill

Suggestion: The C-Thru Room Layout Sheet will note a section of solid fill is required for both the front wall and side wall at the corners. Just finish the front wall of the Alpha Plus unit assembly at this stage. You will then install your front header. Afterward you will install your WeatherGuard roof panels to make your front wall solid. Then build out your side walls from wall to corner. You will then be able to measure and cut your fill sections for your side walls later (section 10, page 22), to finish your corners.



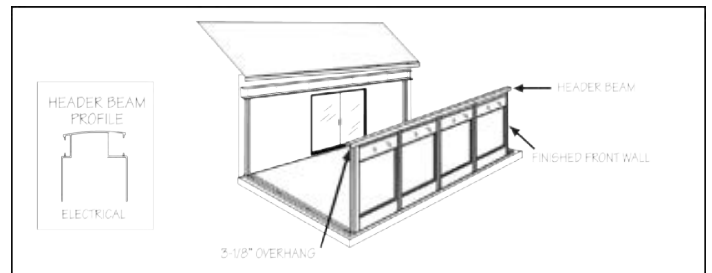
Refer to the layout for the cut size of the solid fill on the corners of the front wall. Double check this measurement by measuring from the inside of the "H" channel of the module to the inside corner of the bottom track for the width, and the height of the module for the height (both sides may be slightly different to account for the slope of the foundation). Cut the solid material and place it on the sides of the front wall. Cut your left and right corners to the correct

height of for your front wall and secure them in place with the left & right front wall corner fills in place.

*****Finish your front wall installation with your two corner pieces cut to size and installed.***

7. Cutting and Attaching the Header Beam

Once all the modules on the front wall have been attached to each other, and your corner pieces are in place with the front wall side fill pieces, you will need to attach the header beam. The header beam will need to be cut to size. Measure the distance along the front wall modules from end to end and add 6-1/4 inches to this measurement. This will be the cut length for the electrical header beam. **To double check**, by making sure



all your modules are plumb, you can measure the distance from the last module to the side wall at the bottom.

The measurement for the header channel will be the same. Cut header beam to length making sure you cut the 45-degree finishing cut. Your side wall header (installed after roof panels are on!) and front wall header, which you are doing now, will come together at 45 degree angles each. **Triple Check:** Dry fit the header beam on the front wall. Each end hangs 3-1/8" over the edge on each side.



****Place two sheet metal screws at each utility mullion and electrical header beam junction (just like for the bottom track), using the screw guide lines on the header beam.**

Go to Roof Installation | Section 9

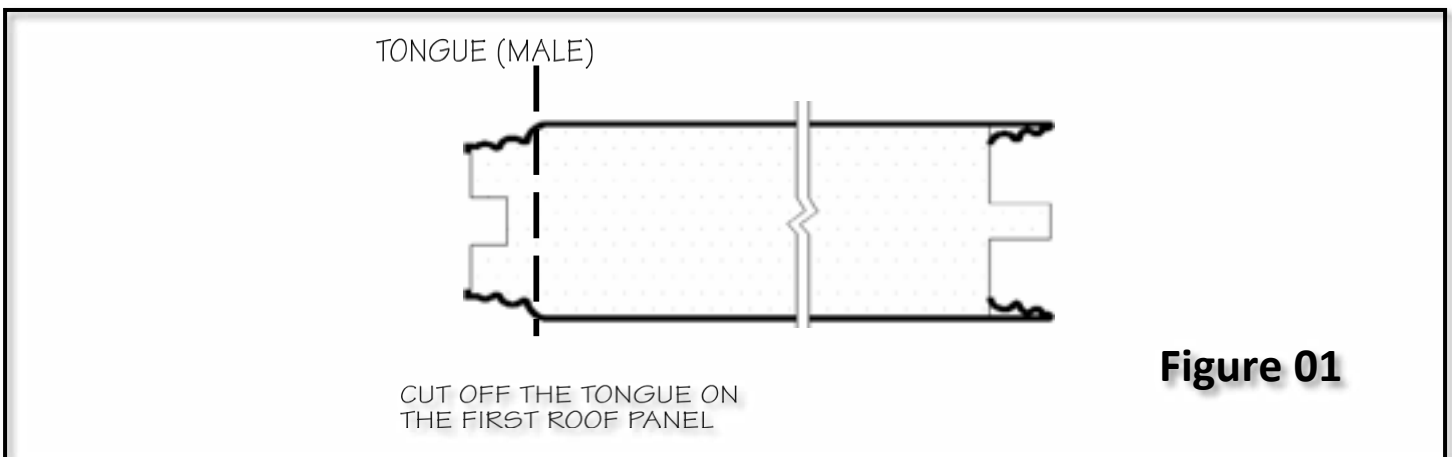
(OMEGA Front Wall Installation Given on page 2 of Section 8)

Note: The WeatherGuard roof panels have tongue and groove edges (**Figure 01**), which interlock with each other for a snap-lock fit. Your WeatherGuard roof will arrive in increments of 4' panels. Most WeatherGuard roofs will be longer than the length of the bottom track to allow for the overhang of the roof. The overhang can be anything from 6" – 24" inches. You may also have roof panels that contain a fan beam concealed within it. Make sure you properly place the panel with the fan beam within the room. Double-check the C-Thru Room Layout sheet for the correct size of the roof for beam placement and attachment channel cut sizes. You will be responsible for cutting roof panels to create your finished roof dimensions. For example if you want a 19' width for your finished size you would cut six inches off each of the left & right end roof panels.

1. STRAIGHT ROOF - Installing the First Roof Panel

Cut off the tongue section of the first WeatherGuard roof panel to allow for side fascia attachment (**Figure 01**). Start at either end of the room and place this WeatherGuard roof panel (with the cut side facing out) into the roof attachment channel. Push the roof panel as far back as it will go, at the pitch created by the difference of your back wall channel height and the front wall height (including header rail). Fasten the panel, top & bottom to the roof attachment channel with #8 x ½" tek screws roughly every 10" (**Figure 02, Detail "B"**).

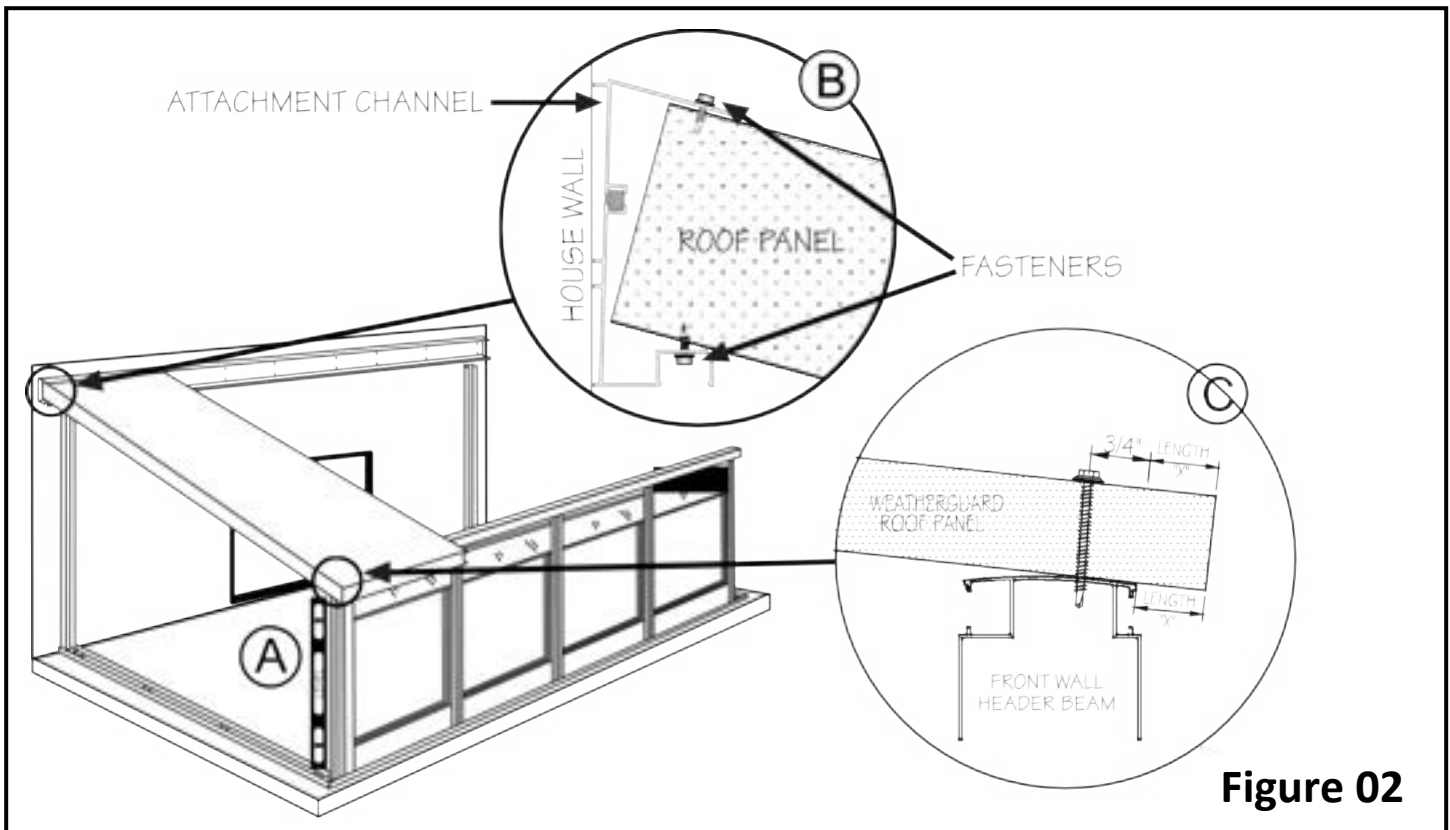
NOTE: You could also start by placing the female edge of your first panel facing out. You would then take the male tongue off the **last** panel you install to complete the final 'exact' width of the roof assembly.



2. Plumbing and Securing the Roof Panel to the Front Wall

Before attaching the front of the roof panel to the front wall header beam, plumb the front wall with a level (**Figure 02, Detail "A"**). The 3" roof panel will be attached from the top of the roof panel using #14 x 4" tek screws with sealing washers (use 5" screws for the 4" roof, and 7" screws for the 6" roof) (**Detail "C"**). To find the location for the screws, measure the length of the overhang on the bottom of the roof panel. Add ¾" to this length and mark the top of the roof panel. This will be the attachment location and allow you to avoid fastening into the electrical raceway. Secure each roof panel with two screws located 4" from the edges of the panel (make sure to account for any overhang). After the full roof system is installed, you will finish securing the roof panels with screws spaces as dictated by the engineering specifications (see Section 9-4).

Your backwall channel will look different to what is illustrated below. Attachment guidelines remain the same. To review actual backwall channel shape review Section 6 page 1.



Hint: When maneuvering your roof panels into position, we suggest putting a towel or cloth over top of the front wall header to protect the underside of the roof panel from scratching. Once the 'next panel' is pushed into place onto the adjacent panel and then slid into the backwall channel, remove the towel or cloth before securing the panel to the front wall header.

3. Installing the Second and Subsequent Roof Panels

Clean the next roof panel's male lock (tongue) edge and apply sealant along the entire top length of the panels male lock. Place the panel parallel to the first, 3" away from the roof attachment channel and overhanging the header beam. Push second panel into the first panel until the tongue and groove are interlocked (**Figure 03**). Fasten the roof panel to the attachment channel with #8 x 1/2" tek screws every 10". Then attach the roof panel to the header beam as outlined in Section 9-2 on the previous page. Follow this procedure until all the roof panels are installed.

Hint: To make the electrical wiring installation easier, run the wiring along the backwall channel and then through the length of the fan beam of the WeatherGuard roof panel at the time of the installation.

4. Fastening the Seams and the Perimeter of the Roof Panels

The fastener type and spacing along the seams of the roof is dictated by ICC-ES Legacy Report 1968 and vary depending on projection and loading. These charts are also available in the standard engineering plans. Fastener spacing on the perimeter to the electrical header beam should be between 8" – 10" on center using #14 x 4" (x 5" for 4" roof, or x 7" for 6" roof) tek screws with sealing washers.

Note: Seal all the WeatherGuard seams with a small bead of silicone, for a second weather tight seal. Additionally, seal the connection of all aluminum roof profiles where they sit on top of the WeatherGuard panels. C-Thru also offers a roof seam tape that is intended to supplement the silicone bead and not replace it. As you apply it, press firmly, taking out all bubbles along the way. The sun will activate the tar like substance on the back side of the white tape sealing it to the surface and sealing the seam against the weather. The tape remains flexible, moving with the panels and extrusions as they naturally expand and contract.

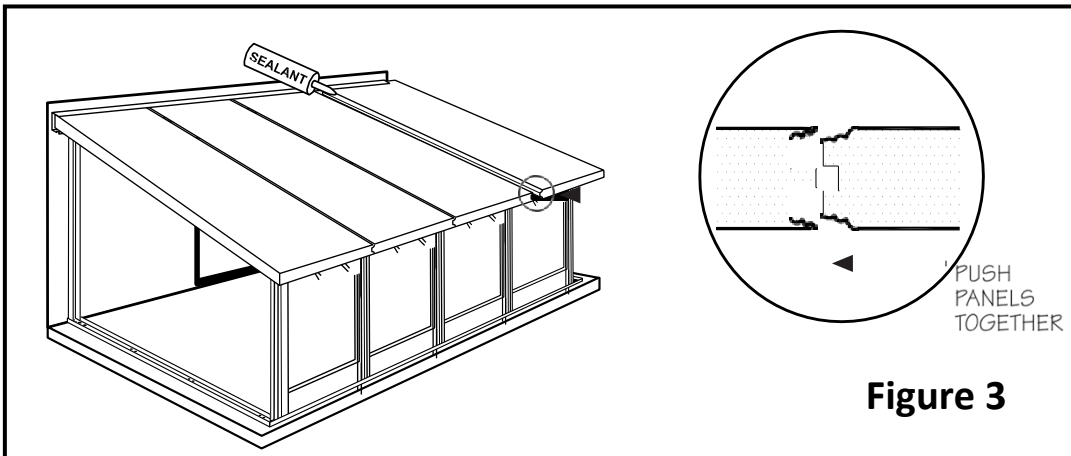
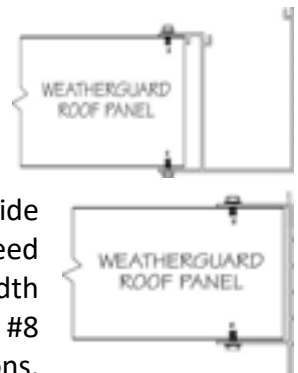


Figure 3

5. Gutter, Side Fascia Attachment

There will be a front gutter, and two side fascia's (or drip edge) that will cover the outside perimeter of the WeatherGuard roof. These pieces will arrive in stock lengths and will need to be cut to size. Dry fit the front gutter and then cut to length. It should be the exact width of all the installed roof panels. Dry fit and cut the side fascia, Secure both to the roof with #8 x 1/2" tek screws at 24" on center, top and bottom. Use sealant on all corners and junctions.

The side fascia is designed to cap the ends of your front gutter. You will need to notch the ribs where it caps the gutter for a nice tight fit. If you have a drip edge installation as your finishing roof profiles, we suggest a 45-degree cut to meet at the front corners.



Note: The side fascia or drip edge should extend to the house wall. Simply cut the attachment "legs/ribs" where the side fascia will overlap the roof attachment channel. See the end of the pictorial below.

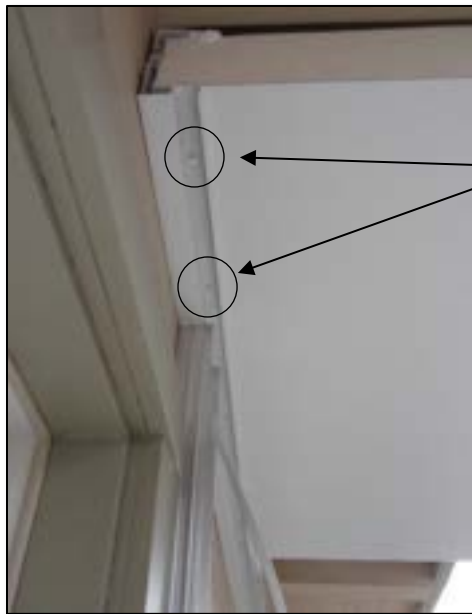
The following is a brief pictorial of a typical WeatherGuard roof installation for illustrative purposes only!

Manufacturer's Installation Guidelines:

Cut the wall panels as needed.

Remember where you want your fan beam panel if this applies.

Panels come in 4' widths. Plan your roof for the width you need. If you are using a 7 1/4" circular saw, make the cut on one side and you turn the panel over to make a second cut, matching your first cut.

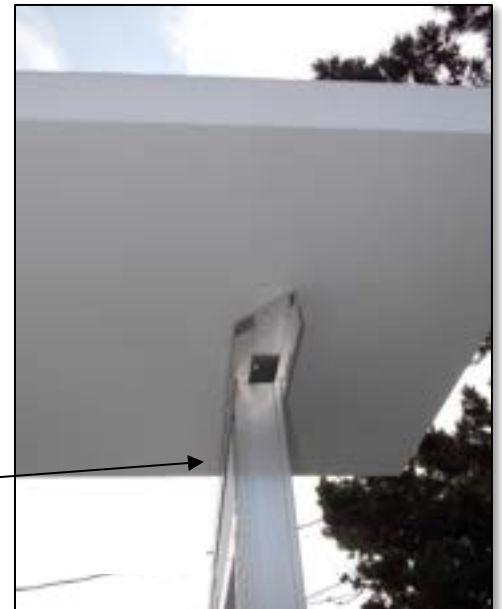


You will have a "C channel" backwall attachment channel screw through the bottom lip of the channel. Screws should be roughly 10" apart.

Longer screws that install from the top of the roof panels will secure the roof to the walls Front wall.

Square the panel to the house and the front wall. From the side wall you should have an equal overhang at the house and the front wall.

Before screwing the panel into place, plumb the front wall.



Caulk the top channel or valley of the panel just installed. This is where the two panels will snap together. Caulk the entire length of the panel. You can be generous and smooth the excess from the top of the roof after it is installed.

Continue to install the 'next' panel. Take care not to slide the panels on the front wall header channel. This may scratch or scuff the finish on the panel. Slide the panel into the room mounting channel and next to the previous panel. "Bump" the panels until the snap together. Snap the entire panel snug against the previous panel. The seam should be an eighth of an inch or less. **Do not caulk the bottom seam.**



Continue to install the 'next' panel. Take care not to slide the panels on the front wall header channel. This may scratch or scuff the finish on the panel. Slide the panel into the room mounting channel and next to the previous panel. "Bump" the panels until the snap together. Snap the entire panel snug against the previous panel. The seam should be an eighth of an inch or less. **Do not caulk the bottom seam.**



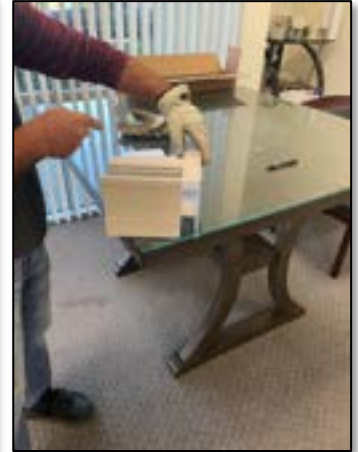
Screw the roof panels to the wall header below. **BE CAREFUL NOT TO PIERCE THE ALUMINUM SKIN.** Tighten the screws just enough to create a dimple in the aluminum skin.

After laying down a bead of caulking along each roof seam, smooth the excess caulking that oozed from the seams.

Caulk and seal over every screw



Your side fascia is designed to cap your front gutter. You will need to put about a 3 ½" notch on the top and bottom lips. The last picture on the right shows how they should fit together, flush, after you make those notches.



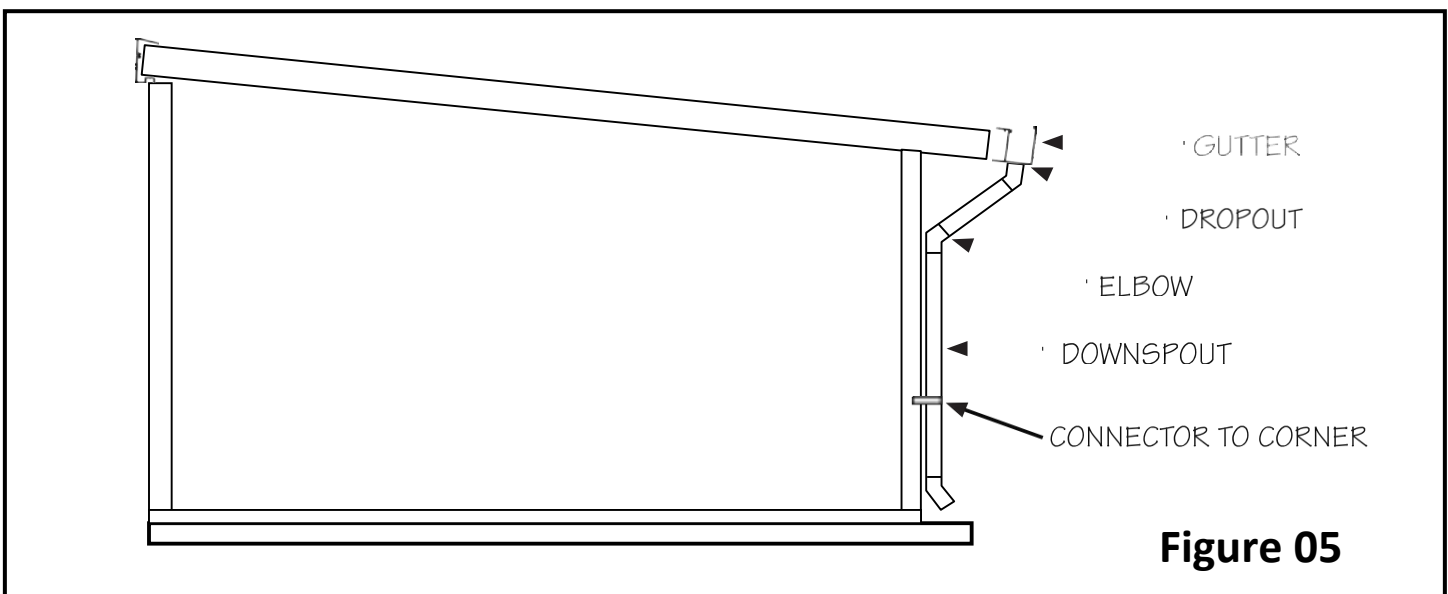
1. Downspout Attachment

Note: Downspouts should be installed after the room is complete.

Downspouts and elbows will be required at the corners of the gutter to channel water away from the foundation. Run a bead of silicone at the junction of the roof panels and the fascia. At the point of the downspout, use a hole saw to drill a hole for the downspout dropout in the gutter. The dropout should be secured and sealed to the bottom of the gutter. Any necessary elbows and downspouts should be added to the dropout. The downspout connector should be secured to the front of the outside corners to accept the downspout (**Figure 05**).

Note: If the roof design of the house is such where water will be channeled to the area above the sunroom, additional downspouts may improve drainage from the roof.

Note: The gutters should be cleaned and freed from clutter if no leaf guard is added.



1. Measuring and Cutting the Header Beam

The header beams will arrive in stock lengths and will need to be cut. Measure the length from the edge of the roof attachment channel to the inside corner of the front wall just below the roof (**Figure 01**). This will be the cut length for the header beam.

Note: On straight eave rooms, you may need to trim the header channel the thickness of the roof attachment channel lip to allow the header beam to sit flush with the roof panel. The **end** of the header beam will also need to be cut at an angle to fit tightly against the house wall (**Figure 02**).

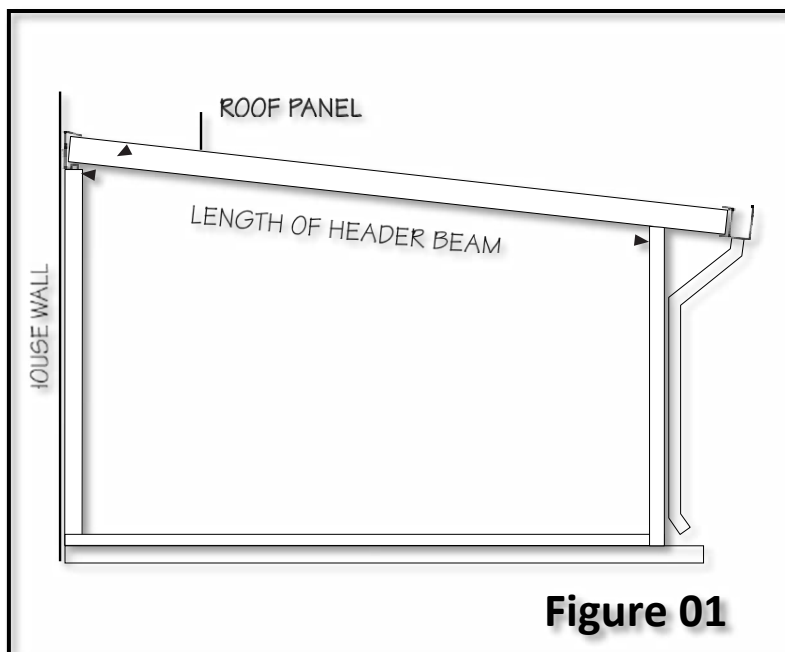


Figure 01

2. Installing the Header Beam

Slide the header beam over the side wall attachment channel and secure it at the junction of the screw guide lines with a #8 x 1/2" tek screw on each side (**Figure 02**). Line up the inside of the header beam with the outside edge of the front wall. The header beam should be directly above the bottom track. Temporarily secure the header beam to the roof panel or roof rafter from the underside with #8 x 1/2" tek screws.

Note: If there is a door in the side wall, refer to the Door Installation in Section 11.

3. Preparing the Side Wall Modules

A. The wall modules for the side wall room are individually numbered and will correspond with the module numbers listed on the C-Thru room layout sheet. Refer to Section 8 page 1 to help identify the modules.

Note: When placing modules in the bottom track, make sure the weep holes on the windows are facing outward.

Note: On concrete foundations and deck applications, the foundation may not be level. See Section 8 page 1 on trimming the solid material on the kickplate to compensate for a sloped foundation.

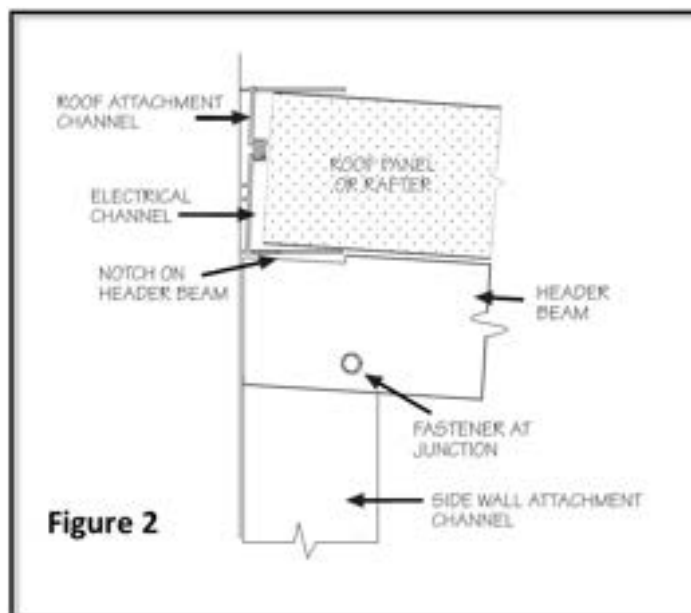
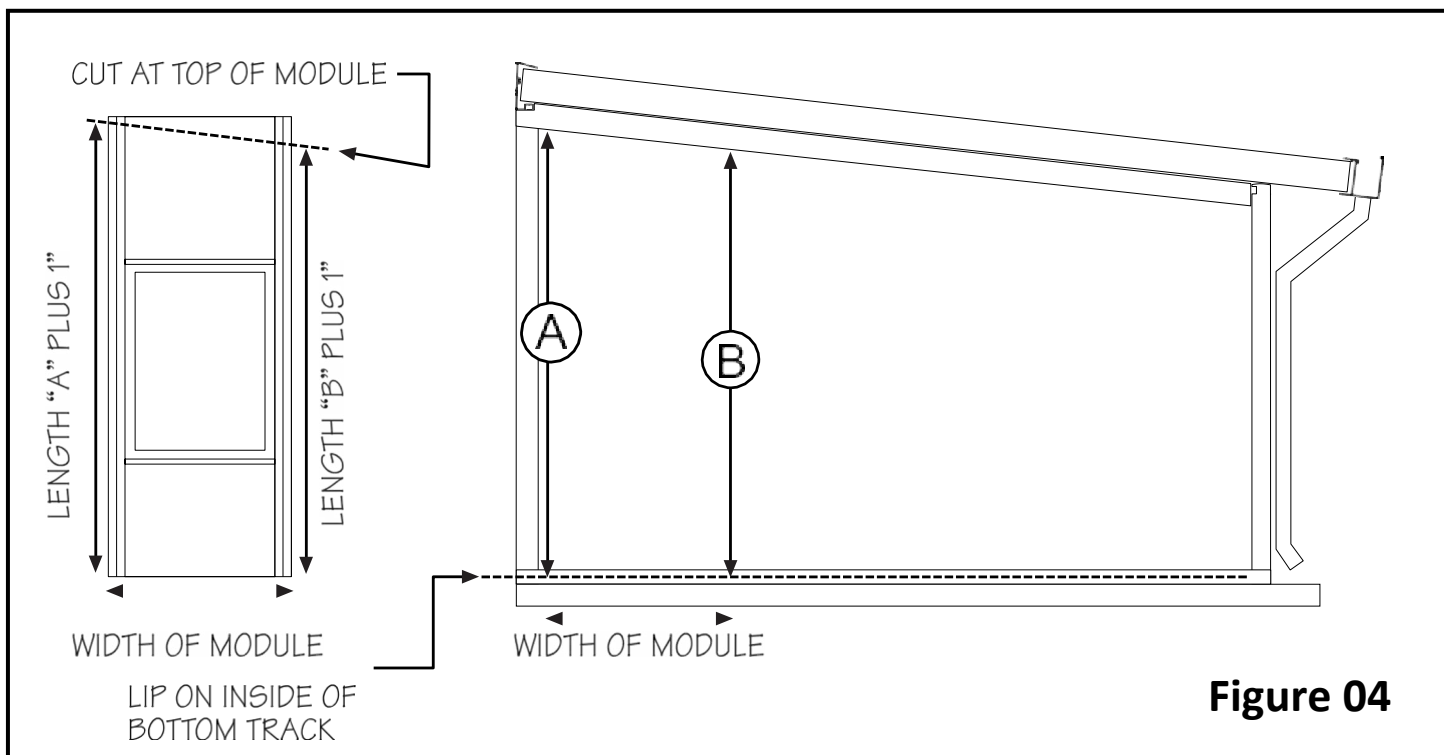


Figure 2

4. Measuring the Correct Module Height

The side wall modules will all arrive at the same height. Single slope rooms will need the tops of the transoms trimmed to conform to the slope of the roof. Check the C-Thru Room layout sheet to see where first side wall module will be placed in relation to the house wall. Beginning at this point, take the vertical measurement from the inside lip of the bottom track to the bottom of the header beam and add 1" (**Figure 04, Detail "A"**). Using the width of the module as a guide, take this same measurement on the side wall where the opposite end of the wall module would sit. Again, add 1" to this measurement (**Figure 04, Detail "B"**).

Note: For side walls with glass transoms & kickplates, the modules will arrive with the transoms & kickplates in place. There will be a minimum of 2" of fill below the glass kickplates and about 4" of fill above the glass transoms.



5. Solid Fill

The C-Thru room layout sheet will note if the ends of the side wall require solid fill. If the side wall requires solid fill, refer to the layout sheet for the cut size of the solid fill. You can double check this measurement by measuring from the inside of the "H" channel of the module closest to the house to the inside of the wall attachment channel for the width, and the height of the module for the height (both sides may be slightly different to account for the slope of the foundation). Cut the solid material and place it on the sides of the side wall (**Figure 05**). You may need to slide the modules back and forth to fit the solid fill closer to the house wall. The solid fill at the front of the sunroom should reach the inside edge of the front wall and will be concealed by the inside and outside corners.

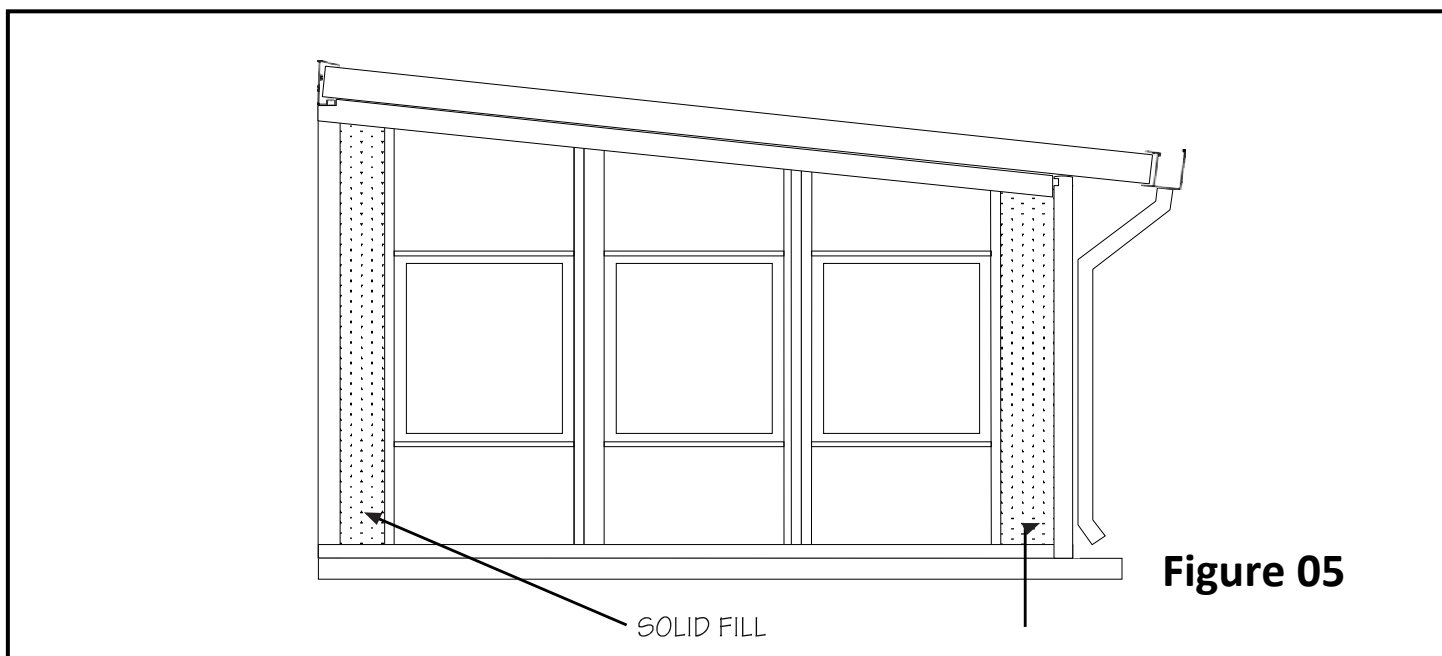


Figure 05

IMPORTANT! THE MODULES AND THE WINDOW FRAMES MUST BE PERFECTLY LEVEL AND PLUMB IN ORDER FOR THE WINDOWS TO OPERATE PROPERLY. BEFORE PROCEEDING, TEST EACH MODULE WITH THE WINDOW SASHES TO MAKE SURE THE WINDOWS FIT AND LOCK PROPERLY.

6. Cutting and Placing the Side Wall Modules

Transfer this measurement to the wall module and chalk a line along the slope of your cut. Use a 10" circular saw to cut the module to the correct height. Once the correct slope is cut, the module can now be placed into the wall. Lift the module, tilt it slightly, and slide it into the header beam. Return the module back to perpendicular and rest it into the bottom track. If the module does not clear the bottom track, remove more material from the top of the module.

Note: Repeat these steps until all the wall modules have been placed.

Note: Do not fasten the wall modules at this point. You may need to slide each module back and forth to place the subsequent modules.

Note: If the outside fin of the side wall channel was cut (in Section 7-2), it may now be re-attached using #8 x 5/8" tek screws.

5. Fastening the Wall Modules Together

You will be attaching the modules together by the utility mullions affixed on either end of each module. Be sure to mate a male and female utility mullion together for a proper fit. A sheet metal screw or Pop rivet will be needed every 24" to attach both sides of the utility mullion together. Fasteners should be placed to the inside of the Utility Mullion, thus allowing the fasteners to not be exposed. *Vinyl cladding will be added on top of the utility mullion during the Electrical Installation section of this manual.*

6. Fastening the Wall Modules to the Bottom Track and Header Beam

The modules will be fastened with sheet metal screws at the base where the vertical mullions and bottom track intersect. Use the guideline in the bottom track to place the screws. Fasten two sheet metal screws per utility mullion connection at the base on the room's exterior. Repeat this process at the top of the modules where the vertical mullions and header beam intersect.

OMEGA Corner Installation

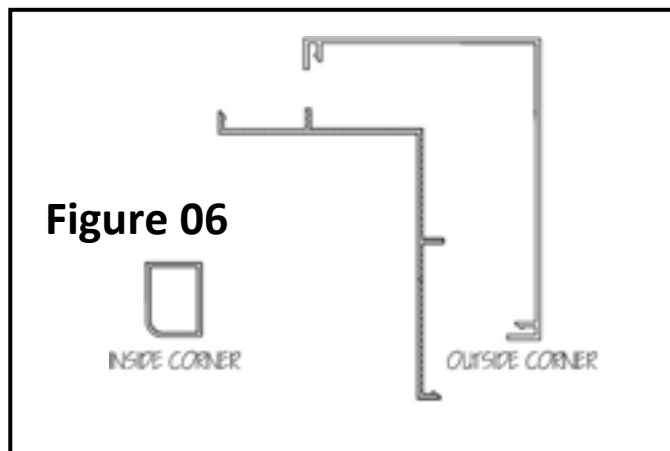
7. Cutting and Attaching the Outside Corner

The outside intersection of the front wall and side wall will be covered with an outside corner extrusion (**Figure 06**). The outside corner will arrive in stock lengths and will need to be cut to size. Measure the height of the corner from the foundation to the bottom of the roof. Note that on a straight roof, the side wall half of the outside corner will be cut at an angle to conform to the slope of the roof. Fasten the outside corner to the header beam and the bottom track using #8 x 1/2" tek screws.

You will want to make the final length of the corner extrusion about 1" shorter than the total length from the bottom of the roof to the foundation. Then you will need to trim off the fins at the bottom, the depth of the bottom channel – about 1". You will also need to trim off the fins at the top, the depth of the header channel, plus 1", for a total of 2". This will allow you to slip the top of the corner extrusion into the header channel and then drop the bottom of the corner extrusion into the bottom channel.

8. Cutting and Attaching the Inside Corner

The inside intersection of the front wall and side wall will be covered with an inside corner extrusion. The inside corner will arrive in stock lengths and will need to be cut to size. Measure the height of the corner from the foundation to the ceiling. Cut the inside corner at an angle to conform to the pitch of the ceiling. Follow the same instructions as above regarding the fins and the final inside corner extrusion measurements. Fasten the inside corner to the header beam and the bottom track using #8 x 1/2" tek screws.



Your corner is now ready to finish. Cut your fill sections for both the front and side walls. You may have already cut your front wall fill section. Once you have installed the last module of the wall, you will measure and cut the filler sections to fit into the corner. As a reminder, the header channel is deeper than the floor channel so you can slide the wall panel up and over the floor channel and then down into the floor channel. Secure into place with a screw as show previously.

Section 10: Side Wall Installation: Manufacturer's Installation Guidelines



Measure and cut the aluminum corner piece the same way as the wall panel. So that it will slide up into the header channel and then down into the floor channel. Remove all the "Ribs" on each side of the corner piece about 1" from the bottom and 2" from the top. This allows the corner to slide into the header channel and the floor channels.



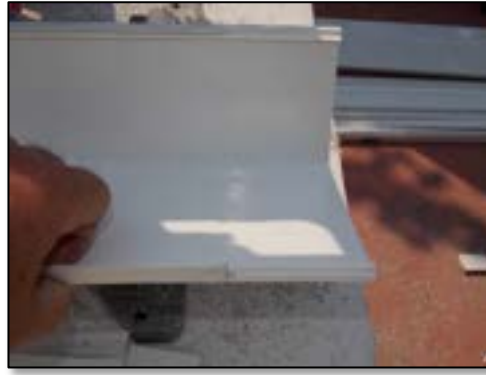
Note how the corner is notched at the top.

One side of the corner piece is wider than the other. The wider section covers the exposed edge of the corner wall panel.

Screw the corner to the corner wall panels using the screws shown. About every 16" on both sides.

Screw the corner to the floor channel just like all the modules are screwed to the floor channel.

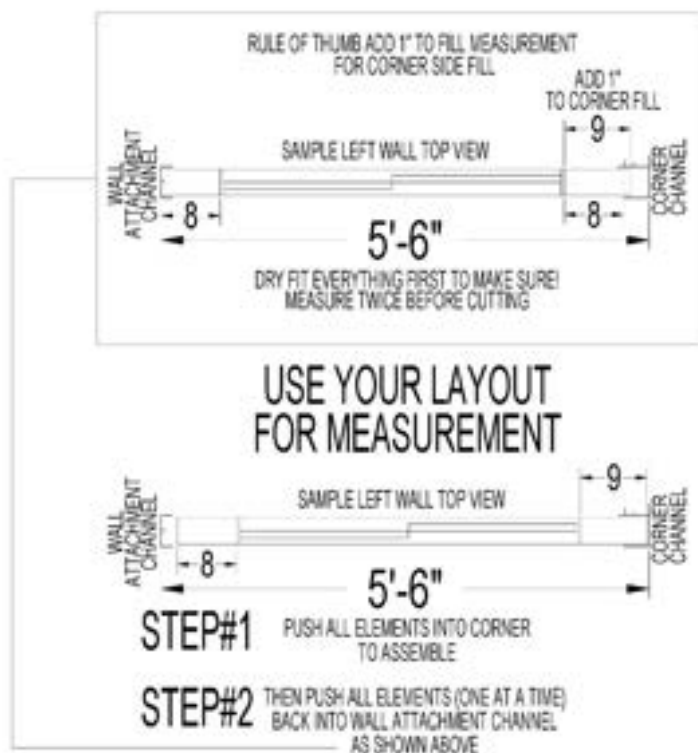
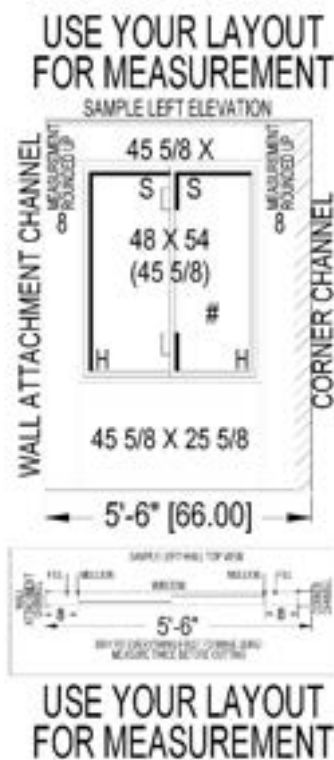




1. Measure and cut the Vinyl corner cladding to fit. A proper fit will bump the roof above and go down to the concrete or deck below.
2. Notch the vinyl cladding enough to fit over the floor channel and the header channel. Each side and each end.
3. Use a plastic or rubber non-scurf hammer to tap the cladding onto place. Snap on one side at a time and stretch the second side over the snap rib and hammer into place.

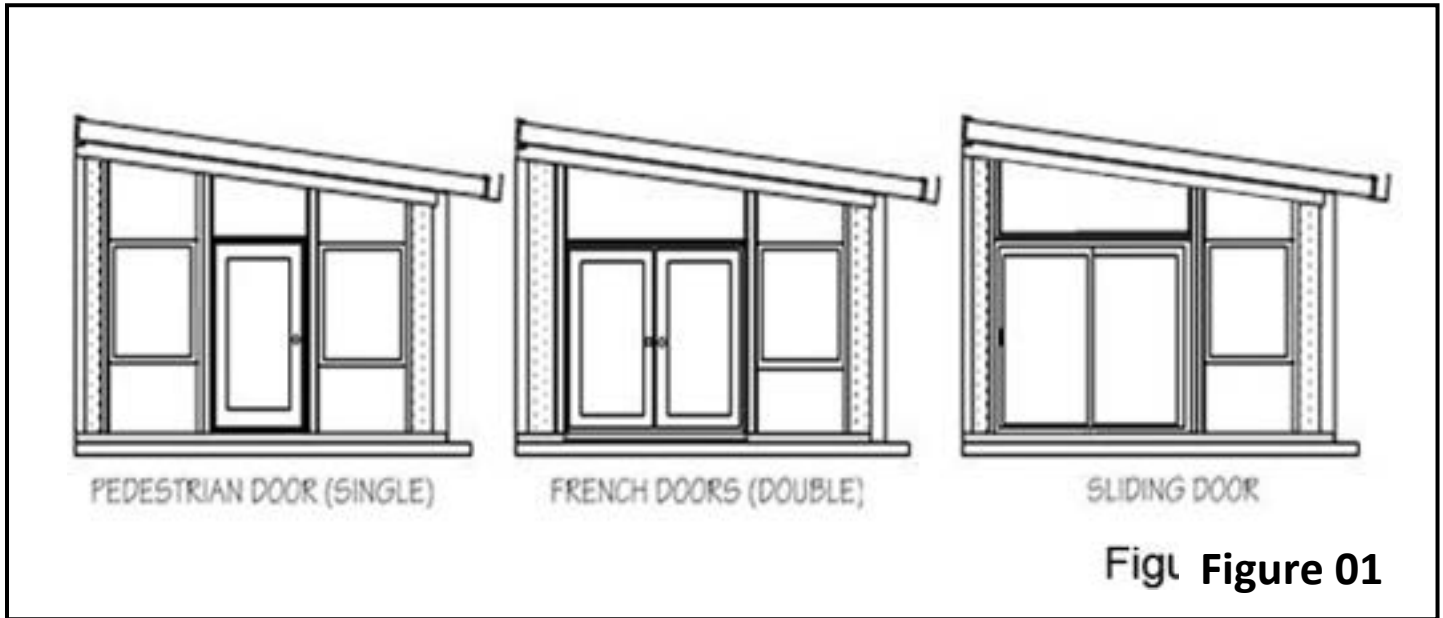
Alpha Plus Corner Installation

You should already have your front wall corners in place with the front wall fill sections. All that is left is how to get the finishing fill sections in your side wall installation. The C-Thru room layout sheet will indicate how much fill is to be placed at the house wall and out at the front corner. We suggest you cut your finishing corner fill section, per the suggestion below, and place it into the corner section, all the way to the back. Slide all your modules toward the corner. Insert the finishing wall fill section right up snug into the wall channel. Then slide all modules and the corner fill piece all back toward the house wall.



Door Installation:

Note: C-Thru offers three types of doors: pedestrian (single), French (double), and sliding doors (**Figure 01**). The pedestrian and French doors have similar installation procedures. Refer to section 11B for the sliding door installation.



1. Assembling the French Doorjamb

The French doorjamb will arrive in four pre-cut sections: vertical doorjamb (2 pieces), horizontal doorjamb, and threshold. The horizontal and vertical jambs are miter-cut at 45-degrees and will be joined together with two "L" brackets per corner. Use a mallet to press-fit the "L" brackets on the horizontal doorjamb. Mate the vertical doorjambs with the horizontal pieces until they form a tight seam at their juncture (**Figure 02**).

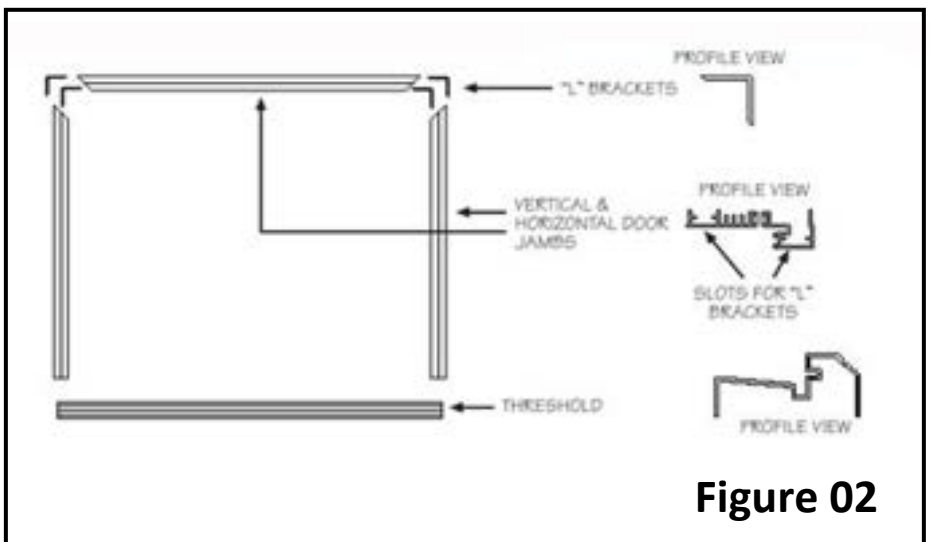


Figure 02

Tip: Punch door jamb and L bracket with a flat blade screw driver, this will lock the jambs together and prevent them from moving apart.

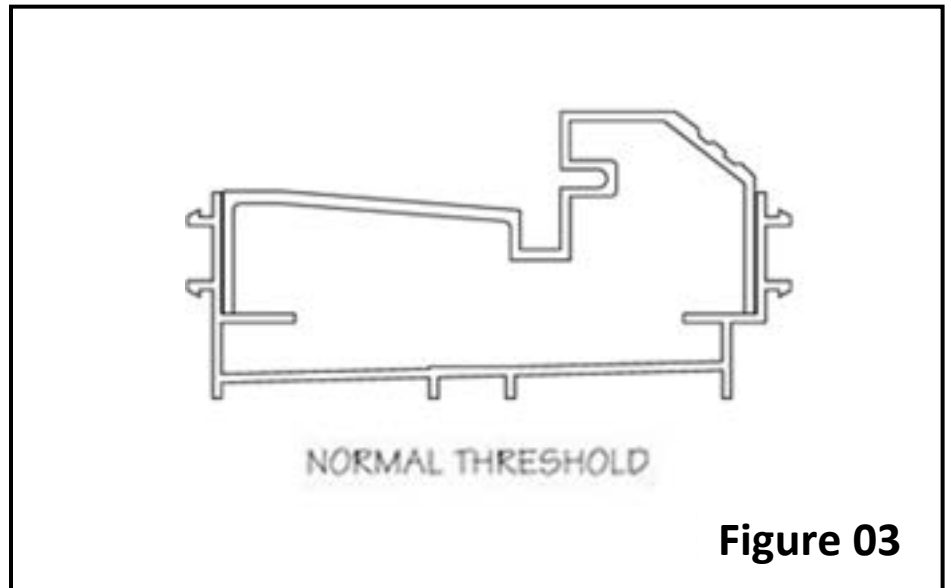
2. Adding a Female Extrusion above the Doorjamb

A female extrusion will be used for the transition between the top doorjamb and the transom. Measure the width of the assembled doorjamb. Deduct 3/4" from this length and cut a section of female extrusion to this length. Center this female extrusion on top of the door jamb. Do not fasten the female extrusion yet.

3. Installing the Threshold

Note: The bump-out on the threshold must be notched on both ends to accept the bump-outs on the vertical door jambs (**Figure 03**). Place the bottom threshold in the bottom track, make sure it is level, and fasten it to the bottom track with #8 x 1/2" tek screws.

****The threshold will be wider than the bottom track.**



Note: The threshold by design, can compensate for some out of levelness of the slab/ deck.

4. Installing the First Utility Mullion

A complete utility mullion will be secured to each side of the doorframe. Determine the location of the doorframe on the C-Thru room layout sheet and mark the opening on the bottom track. The C-Thru room layout sheet will also note which side the utility mullion male (UM) and female (UF) piece should be attached. At each end of the opening, measure from the inside lip of the bottom track to the bottom of the roof rafter and subtract 1/4" for the C-bracket. This will be the length of each utility mullion. Cut each utility mullion to the proper length. Making sure it is level, fasten one utility mullion to the C-bracket and the bottom track. Insert the assembled doorframe into the opening.

Note: If the wall modules have already been assembled, they may have half of a utility mullion already attached to each module. Complete the utility mullion by attaching a male or female utility mullion to the other side to complete the mated utility mullion. See the C-Thru room layout sheet for proper U/M and U/F locations.

5. Completing the Transom

Please refer to the appropriate side wall section of this manual to place glass transoms, glass trapezoids or solid fill above the doorframe.

6. Installing the Second Utility Mullion and Securing the Doorframe.

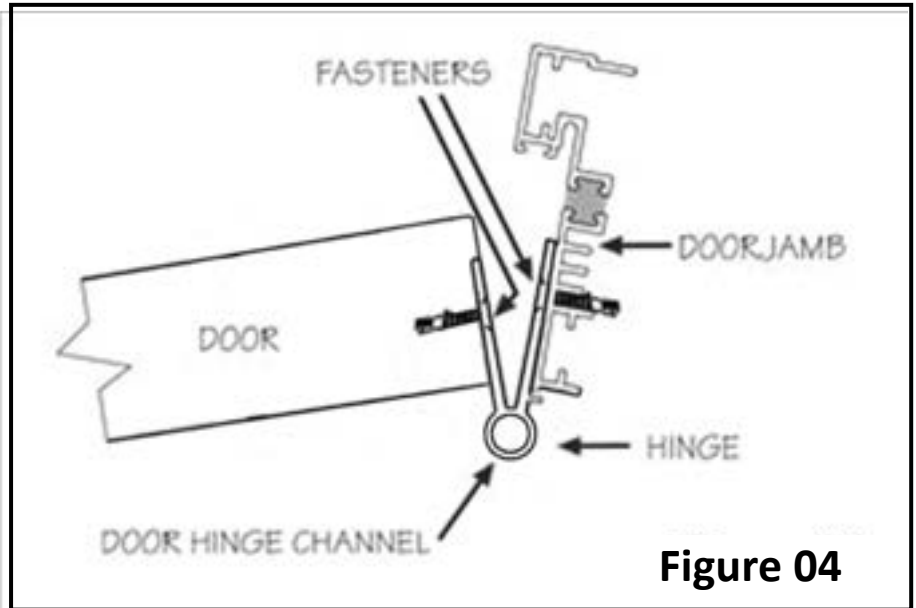
Place the second utility mullion on the opposite side and slide the doorframe into the opening. Make sure it is level. Fasten the utility mullion to the C-bracket and the bottom track. Making sure that the doorframe is level, secure it to the utility mullions with Pop rivets or #8 x 1/2" tek screws spaced every 16".

7. Installing the Adjustable Hinge Channel

Cut the hinge channel to the length of the door and attach it to the door jamb using #12 x 1/2" tek screws.

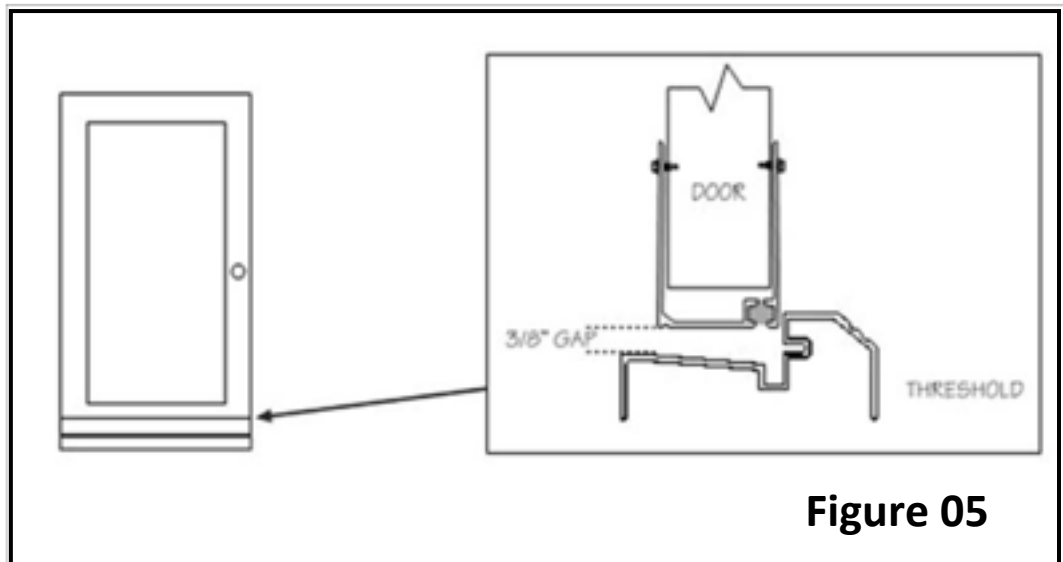
8. Installing the Door(s)

Slide the door into the hinge channel and place the door in the "closed" position. Make sure the gap around sides and the top of the door is even. Place shims underneath the door until the top of the door is spaced approximately 3/8" from the door jamb. For French doors, leave a gap to account for the astragal that will be placed on the non-operable door. Secure the hinge channel to the door on both sides with Pop rivets or #8 x 1/2" tek screws spaced every 16". Repeat this process for the other door as necessary for double pedestrian door installations. See (Figure 04) for the completed door attachment.



9. Installing the Bottom Adjustment Channel

Measure from the edge of the door to the edge of the hinge channel, and cut a section of hinge channel to this length. Place it onto the bottom of the door. This will be the bottom adjustment channel. Close the door, and slide this channel down until there is a 3/8" gap between the bottom adjustment channel and the threshold (Figure 05). Fasten this channel into place.



Note: For level or near level slab/ deck the threshold can be adjusted to eliminate the need for a bottom door adjustment channel.

10. Installing the Locking Astragal (French Doors Only)

The astragal is the unit that locks the fixed door in place with a set of pins. It is secured to the locked side of the two doors. Remove the rubber caps from both ends. Cut a 1" tall by 1-1/4" deep notch on the back section of the astragal on both the top and the bottom so it will fit around the raised section of the doorjamb and the threshold when the door is closed (**Figure 06**). Attach the astragal to the door with #8 x 3/4" tek screws every 16". With the door in the "closed" position, slide the locking pins up to the door jamb and down to the threshold. Mark these two locations and drill a 1/4" hole where the pins will slide into place securing the door.

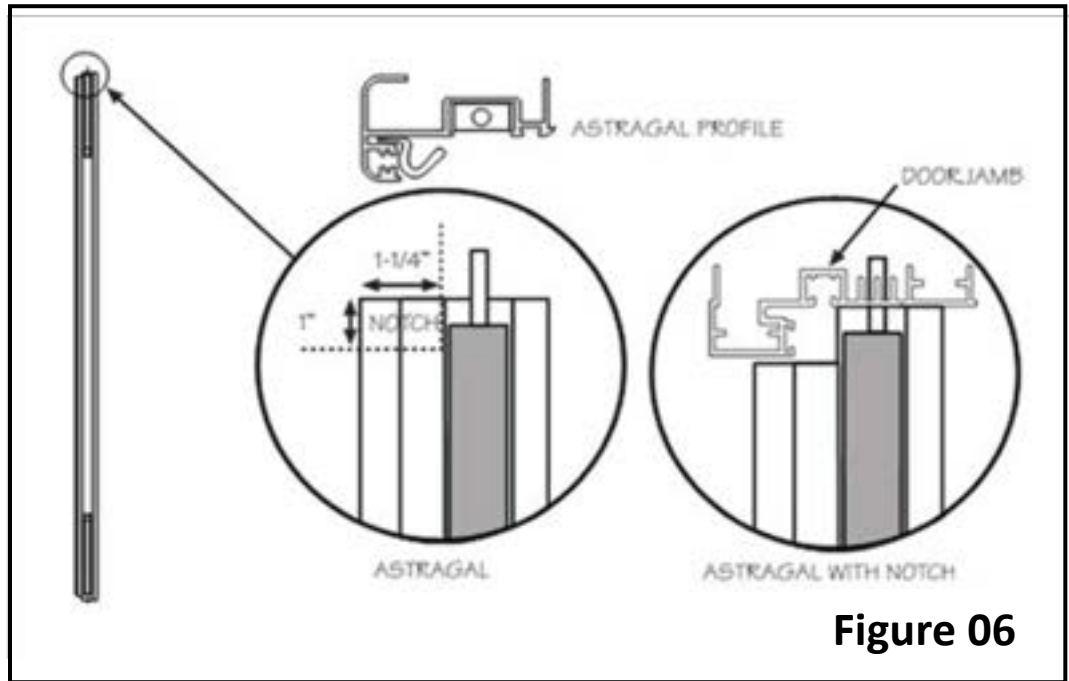


Figure 06

11. Installing Door Hardware

Install the door hardware and the striker plate per the instructions included with the door hardware.

Note: For French doors, install the striker plate on the fixed door. Install the dummy handle on the outside of the fixed door.

12. Installing Weather-Stripping

The doorjamb, threshold, and astragal have a small groove that accepts weather-stripping. Insert the weather-stripping into this groove to ensure a weather tight seal (**Figure 07**).

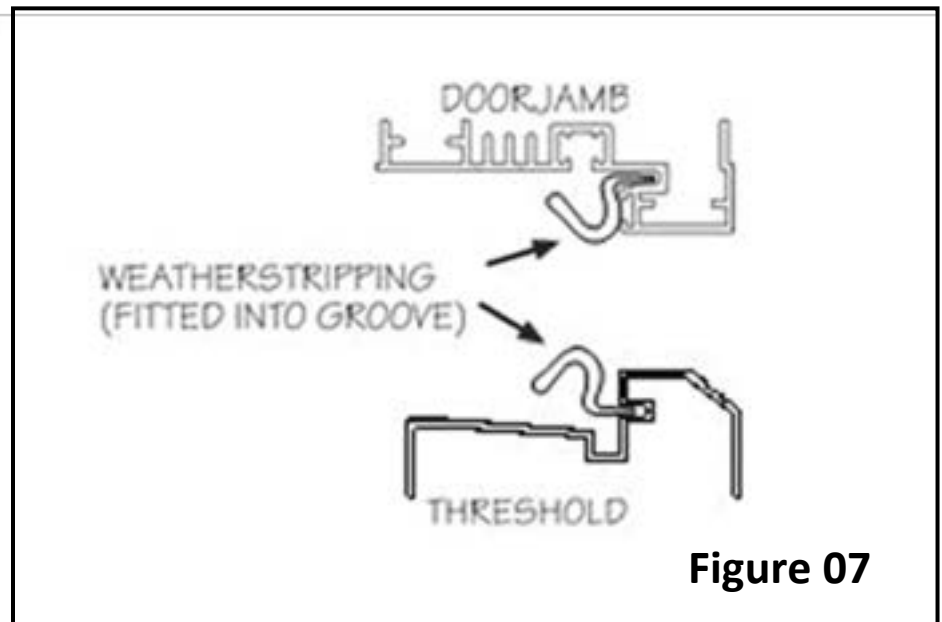


Figure 07

Sliding Door Installation

Note: The sliding door frame will arrive assembled.

Note: There is a pictorial installation PDF on the Home Porch & Patio Kits WEB site to offer some additional tips and tricks for the sliding door installation.

https://www.homeporchandpatiokits.com/pdfs/Sliding_Door_Installation.pdf

13. Installing the First Utility Mullion

A complete utility mullion will be secured to each side of the sliding door frame. Determine the location of the door frame on the C-Thru room layout sheet and mark the opening on the bottom track. The C-Thru room layout sheet will also note which side the utility mullion male (UM) and female (UF) piece should be attached. At each end of the opening, measure from the inside lip of the bottom track to the bottom of the roof rafter, subtract $\frac{1}{4}$ " for the C-bracket. This will be the length of each utility mullion. Cut each utility mullion to the proper length. Making sure it is level fasten one utility mullion to the C-bracket and the bottom track.

Note: If the wall modules have already been assembled, they may have half of a utility mullion already attached to each module. Complete the utility mullion by attaching a male or female utility mullion to the other side. See the C-Thru room layout sheet for proper UM and UF locations.

The opening for the vinyl door should be $\frac{1}{8}$ " larger than the door frame (approximately 71-5/8"). Plumb and secure the mullions on either side of the opening. Take diagonal measurements to make sure before the opening.

14. Raising or Lowering the Threshold

A female extrusion must be placed on the bottom track to raise door above bottom track clads and allow for adjustment with non-level slabs/ decks. Trim the female extrusion to the length of the opening and fasten it to the bottom track with #8 x 1/2" tek screws every 18". See **(Figure 08)**.

Tip: If slope is greater than $\frac{3}{4}$ " use solid fill below female & trim to level. Also, to prevent the threshold entry from being too high, locate the opening side of the door on the high side of the slope.

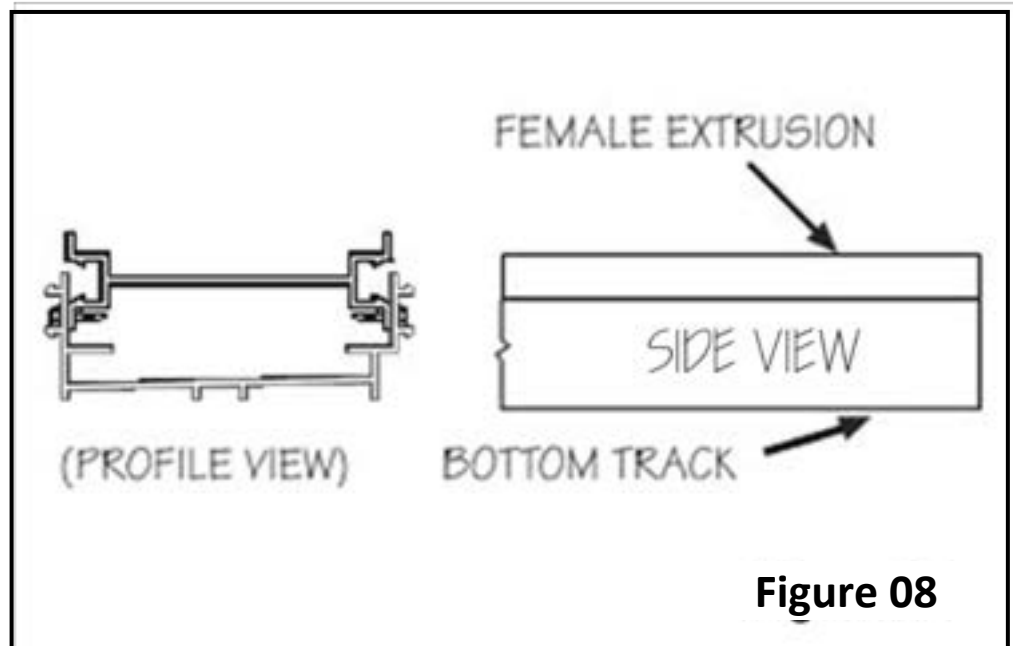


Figure 08

Tip: In extreme circumstances (such as city code or customer request), it may be necessary to lower the height of the door threshold. Mark the position of the sliding door on the bottom track, and cut a notch in the bottom track (as illustrated), so door is resting on horizontal legs. You will not need to use the female in this situation (Figure 09).

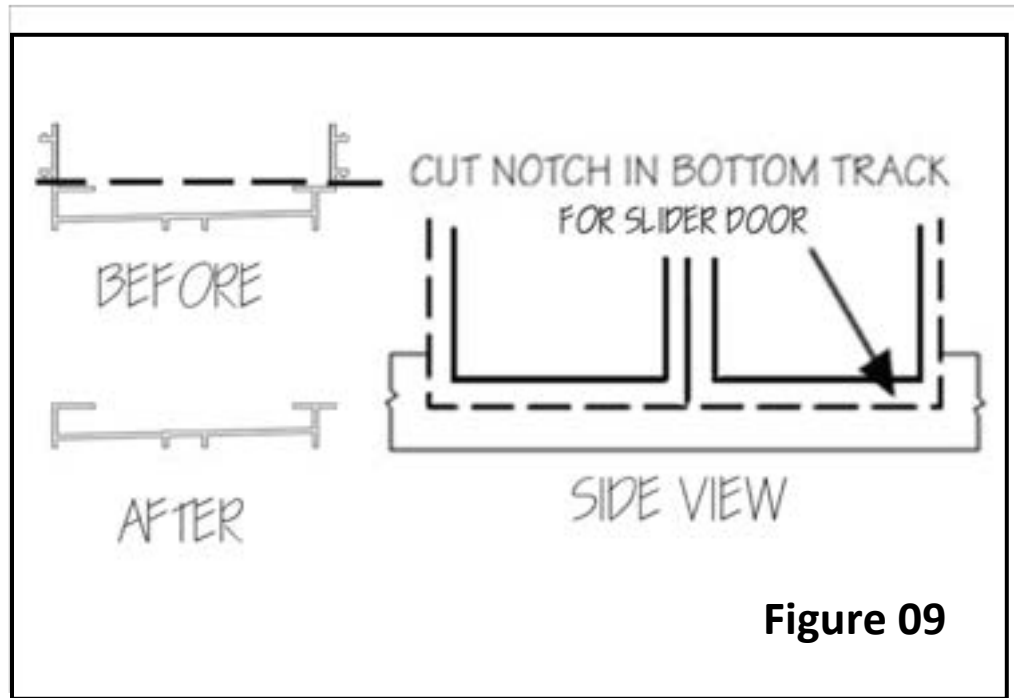


Figure 09

15. Installing the Sliding Door Frame

Note: Installing the unit "upside down" will change the direction of the door opening. Place the sliding door frame into the door frame from the outside of the room. Make sure it is square and level. Pre-drill 3/8" pilot holes through the **First Layer** of the door frame. See (Figure 10A).

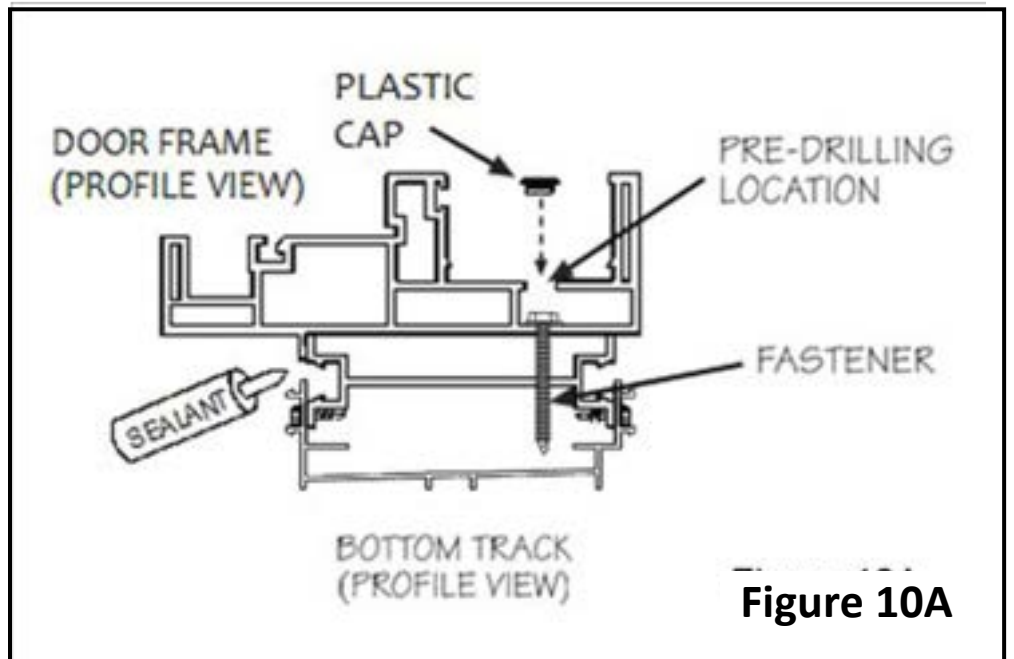


Figure 10A

Note: Do Not Drill Thru The Entire Door Frame.

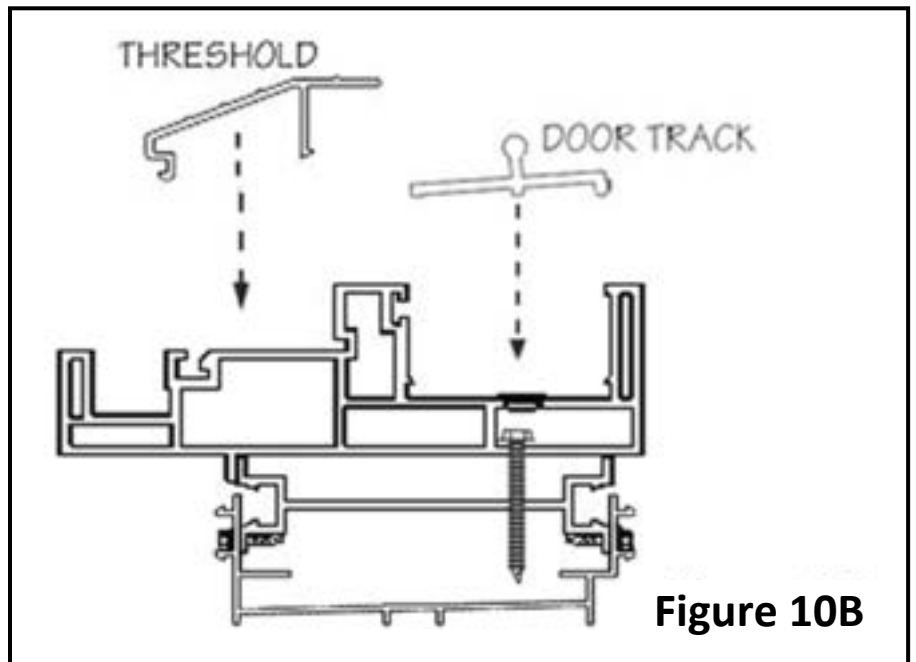
Fasten the door frame to the side mullions, top channel, female and the bottom track approximately every 18" using #8 x 1" tek screws. Plug the hole with the supplied plastic caps.

16. Adding a Female H Extrusion above the Sliding Door

An "H" channel will be used for the transition between the top of the sliding door and the transom. Measure the width of the opening and cut a section of "H" channel to this length. Fasten this piece to the top of the sliding door frame as in **Section 15B-3**.

17. Placing the Door Track and Threshold

The door track and threshold will need to be snapped into place in the bottom of the sliding door frame. Refer to **(Figure 10B)** for the correct placement of each piece.



18. Installing the Operable Door Panel

Note: The sliding door contains two adjustable rollers on the top and the bottom of the door. These rollers are adjusted by the screws located on the sides of the door.

Note: The sliding door is punched on one side to accept the door handle and locking hardware. Make sure this side will sit next to the door frame when the door is closed.

Adjust the rollers on the bottom of the door so they protrude 1/4" from the frame. From the inside of the room, lift the door up, into the top of the door frame and down into the bottom of the door frame. The rollers should rest on the door track. Adjust the bottom rollers again so that the door is plumb and it operates smoothly. Adjust the top rollers so that they rest snugly against the top of the door frame. Install the door hardware per the instructions supplied with the kit.

Section 12: Electrical Wiring: Manufacturer's Installation Guidelines

1

WARNING: In many areas, the electrical must be installed by a certified electrician. It is always going to be our suggestion to use a certified electrician. Please consult your local building department for rules and regulations regarding the installation of electrical.

Note: The electrical wires can be fed through the electrical header beam, utility mullions, roof attachment channel and roof rafters.

Note: There is a pictorial installation PDF on the Home Porch & Patio Kits WEB site to offer some additional tips and tricks for the installation of electrical wiring.

https://www.homeporchandpatiokits.com/pdfs/Electrical_Installation_Pictures.pdf

1. Routing the Main Electrical Source

The main electrical source will enter the sunroom at the right or left side wall channel at the house wall. You may choose to tap into an existing electrical source on the house wall or run conduit to the electric box and create a new circuit (**Figure 01**). Please follow the requirements of your local building department.

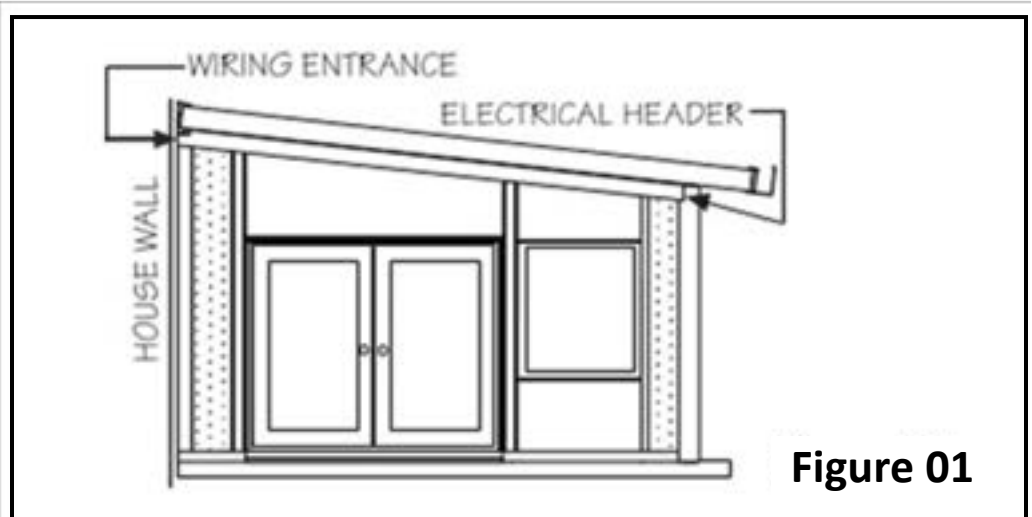


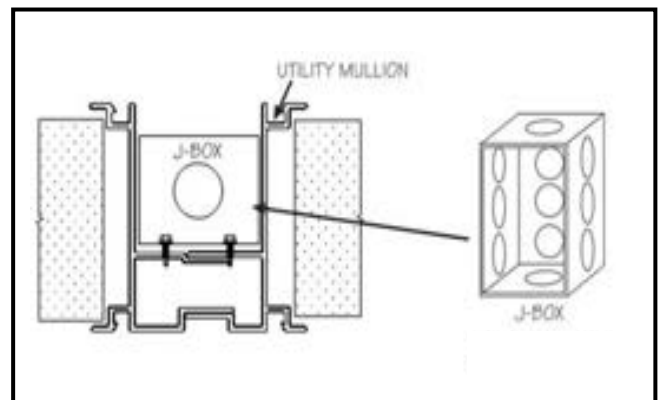
Figure 01

IMPORTANT! DO NOT ACTIVATE THIS CIRCUIT UNTIL ALL OF THE ELECTRICAL CONNECTIONS HAVE BEEN MADE. CONTACT WITH A LIVE ELECTRICAL WIRE MAY RESULT IN SEVERE INJURY OR DEATH.

2. Mounting the Interior Electrical Boxes

Note: All interior electrical boxes will be placed inside the channels of the utility mullions.

Note the location of all electrical switches and outlets on the C-Thru room layout sheet. Place an electrical box (J-box) in the utility mullion channel. If there is a screw or rivet in this location, remove it. Fasten the J-box to the utility mullion with four #8 x 1/2" tek screws (**Figure 02**). If you removed a rivet or tek screw in the utility mullion, add one above and below the J- box. Repeat this process for every outlet or switch in the sunroom.



Note: Each electrical box requires a threaded chase nipple or plastic insert where the wire will be threaded into the box.

Note: If a fan/light is to be installed in the room ceiling, a junction box will be needed on the roof rafter that the fan will be located on. Follow the same procedure described above.

3. Chase Nipple/Plug Installation

A threaded chase nipple or plug must be used at every wiring junction of the sunroom's structural components such as between a utility mullion and the electrical header beam. Check your local building code for requirements. Drill a 7/8" hole into the header beam (from the underside) that will act as a junction between the utility mullion and the electrical header beam. With a locknut threaded on one end, slide a 1-1/2" x 3/4" chase nipple through the hole. Secure the top of the chase nipple with a locknut (**Figure 03**).

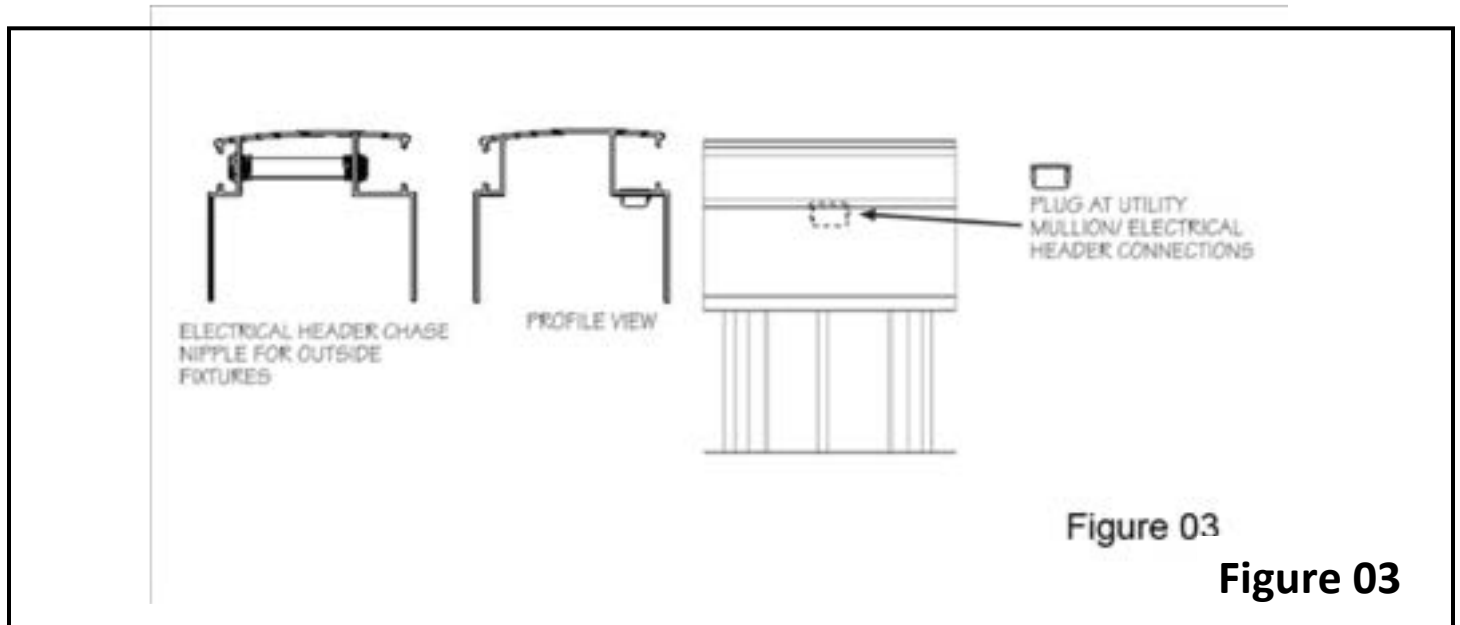


Figure 03

Figure 03

4. Installing Wiring

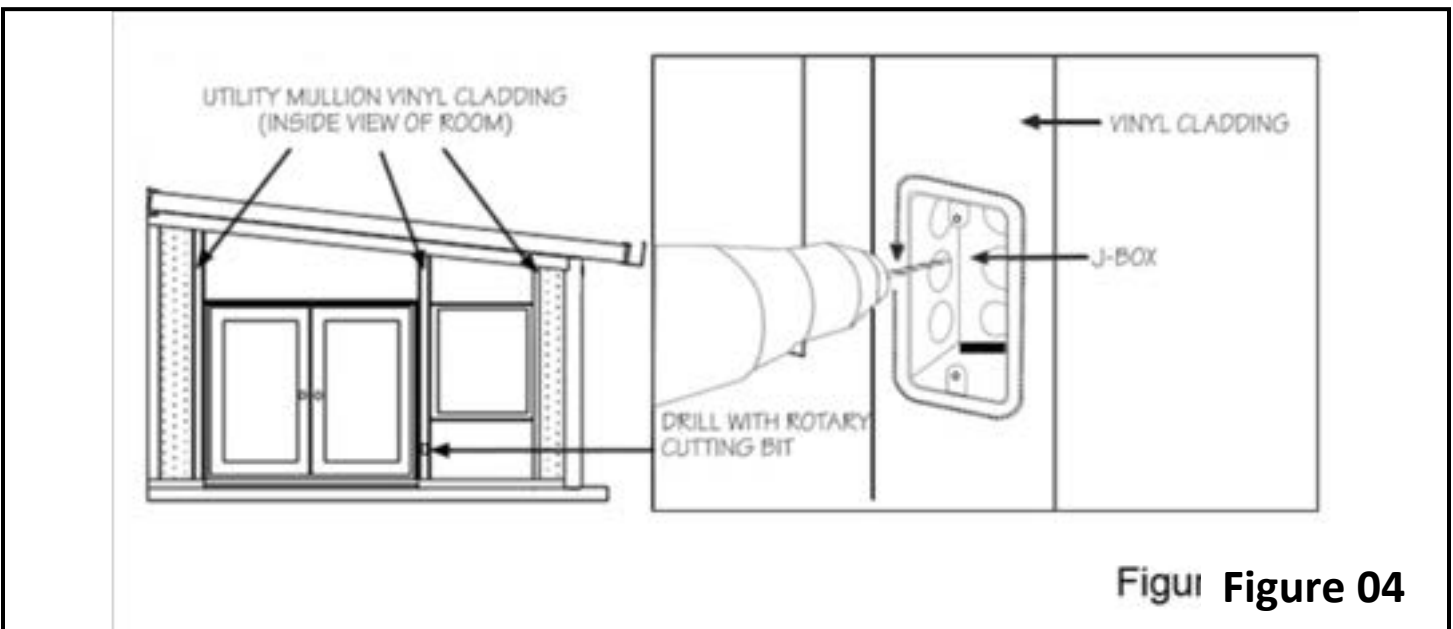
Thread the wiring to all of the switches, outlets, and fixtures, according to the desired operation of the electrical system. Use 12- or 14-gauge single strand solid Romex wiring. Check with your local Building Department to make sure they approve this method.

Note: For fan beam wiring, thread the wiring through the roof attachment channel to the roof rafter.

5. Installing Vinyl Utility Mullion Cladding

The vinyl cladding will cover the utility mullion channels on the inside and outside of the room. Measure from the bottom track to the header beam, and cut the vinyl cladding to length. Make sure the cuts conform to the angles of the header beam. Mark the location of each electrical J-box. Snap the vinyl cladding into place with a soft mallet.

Use a rotary cutting tool (or a rotary cutting bit on a drill) to cut the openings for the electrical boxes. Simply insert the cutting tool through the vinyl cladding and follow the drill bit along the inside of the J-box (Figure 04).



6. Installing Electrical Switches and Outlets

The first outlet on the electrical circuit in the sunroom must have a Ground Fault Circuit Interrupter (GFCI) type outlet. Make the electrical connections to all of the outlets, switches, and fixtures.

7. Mounting Outside Fixtures and Outlets (Optional)

Outside electrical fixtures will be surface mounted to the exterior of a utility mullion. Depending on the location of the fixture, drill a 7/8" hole through the center of the utility mullion or the top of the header beam. The cladding or snap cover may have to be temporarily removed to drill this hole. With a locknut threaded on one end, slide a 2" x 3/4" chase nipple through the hole. Secure the exterior electrical box to the chase nipple with a locknut. A weatherproof exterior outlet is available from C-Thru.

WARNING: In many areas, the electrical must be installed by a certified electrician. It is always going to be our suggestion to use a certified electrician. Please consult your local building department for rules and regulations regarding the installation of electrical.

Section 13 Final: Details & Clean Up:

Manufacturer's Installation Guidelines

1

At this point, your new room should be nearly complete. The only remaining steps are installing your window sashes and screens. In addition, it is time to give your new room a good wipe down. Wash the windows and sweep the floor. Wipe the ceiling and walls down of dust and debris. You may also use a leaf blower, shop vac, or vacuum cleaner with attachments to clean.

1. Installing Window Sashes

Group your window sashes in like sizes (small, medium, and large). Start installing sashes from the inside of room by lifting the sash up and into the center track of the window header and down into the center track of the sill.

Note: The direction of the sash interlock must be facing in and center for window sashes to interlock properly.

2. Window Adjustment

The windows may need some slight adjustments to open and close smoothly.

The vinyl windows have brass rollers on the bottom of each sash. Pop out the roller with a screwdriver and move it to the alternate location in the plastic clip if necessary.

3. Installing the Screens

Install your screens from the outside of the room. Lift screens up and into window header and down into the sill. Repeat this procedure for all of the window screens.

4. Installing Weep Hole Covers

If your unit has weepholes, the openings in the bottom track and the window frames contain punched openings that accept weep hole covers. Find the appropriate sized weep hole covers and press-fit them into these openings.

Section 14: Care & Maintenance:

Manufacturer's Installation Guidelines

1

The following are some points of interest that should be reviewed with the homeowner upon completion of the sunroom:

1. Clean your room both outside and inside using mild household cleaning solutions. This should be done on a regular basis to maintain its luster.
2. Periodically check flashing and caulking. The caulking sealants need to be cut away and re-caulked as needed to maintain a leak-free room. Silicone Tape is also available to seal the roof seams.
3. Gutters need to be checked for debris and cleaned regularly.
4. Do not allow sprinklers, down spouts, or fountains to spray the walls for a prolonged period of time as sediments and minerals may deteriorate materials or impede the integrated drainage systems.
5. Do not paint the sunroom as it will null and void the warranty. Review the warranty with the homeowner, for more details see the warranty card.
6. For the operable windows and doors, be sure to vacuum the tracks out and thoroughly wipe down with a damp rag and occasionally lubricate wheel housings with silicone spray to keep them free from debris and operating correctly.

Warning






Under NO circumstances should you use acid tone or any type of solvent cleaner on the vinyl. This may damage the UV coating.

ALL PRODUCT FASTENERS

NOTE: Some of the profiles shown in Appendix A have slightly changed in both the Alpha Plus and OMEGA style sunrooms.

- If your profiles look slightly different than what is pictured below, that is okay! You have the right material!
- For example, the Alpha Plus Sunroom system now has 'single piece' corners. The OMEGA Sunroom still has the "two piece" finishing corner materials. This is explained & pictured in the guidelines above.

Weatherguard Roof Fasteners

- 
1. 1/4" Panhead Screw x 3"
Roof Attachment Channel To House
- 
2. 1/8" Machine Screw W/Washer x 4", 5", 7"
Insulated Roof Panel to Wall Header Or Beam
- 
3. 1/2" Rivet x 1 3/4"
Misc. Detail Areas - All Purpose
- 
4. 1/4" Self-Tap Screw x 1"
Insulated Roof Panel To Attachment Channel
- 
5. 1/4" Tek Screw x 1/2"
Misc. Detail Areas - All Purpose

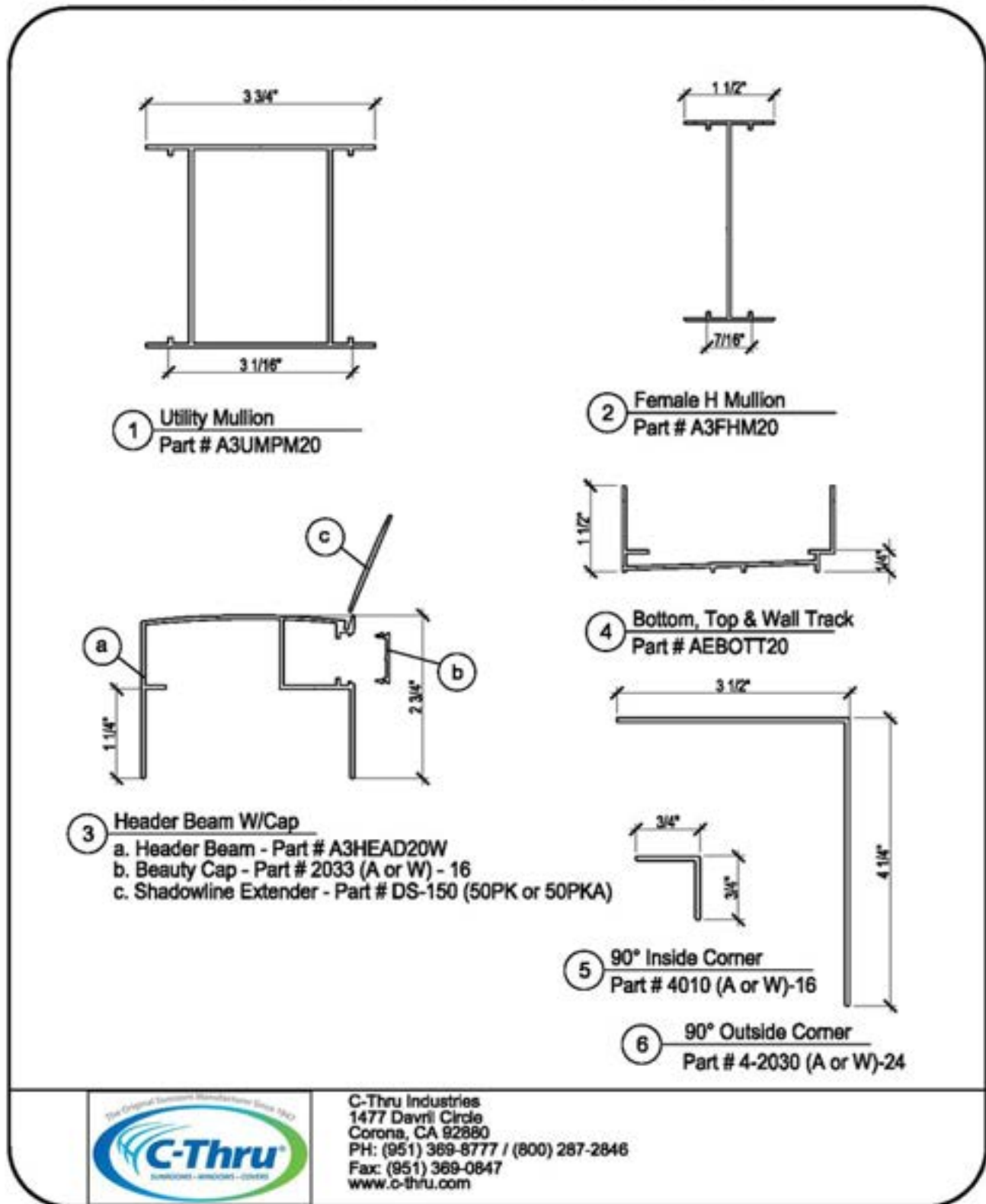
Wall Fasteners

- 
1. 3/8" Hilti Kwik Bolt x 3"
Bottom Track to Wood Deck
- 
2. 1/2" Self-Tap Screw x 1 1/2"
Bottom Track to Cement Slab
- 
3. Plastic Expansion Plug
Plug For Wall Track To House Wall
- 
4. 1/2" Self-Tap Screw x 1 1/2"
Wall Track To House Wall
- 
5. 1/2" Rivet x 1 3/4"
Misc. Detail Areas - All Purpose
- 
6. 1/4" Tek Screw x 1/2"
Bottom / Top Track / Corners & Wall Tracks To Mullions



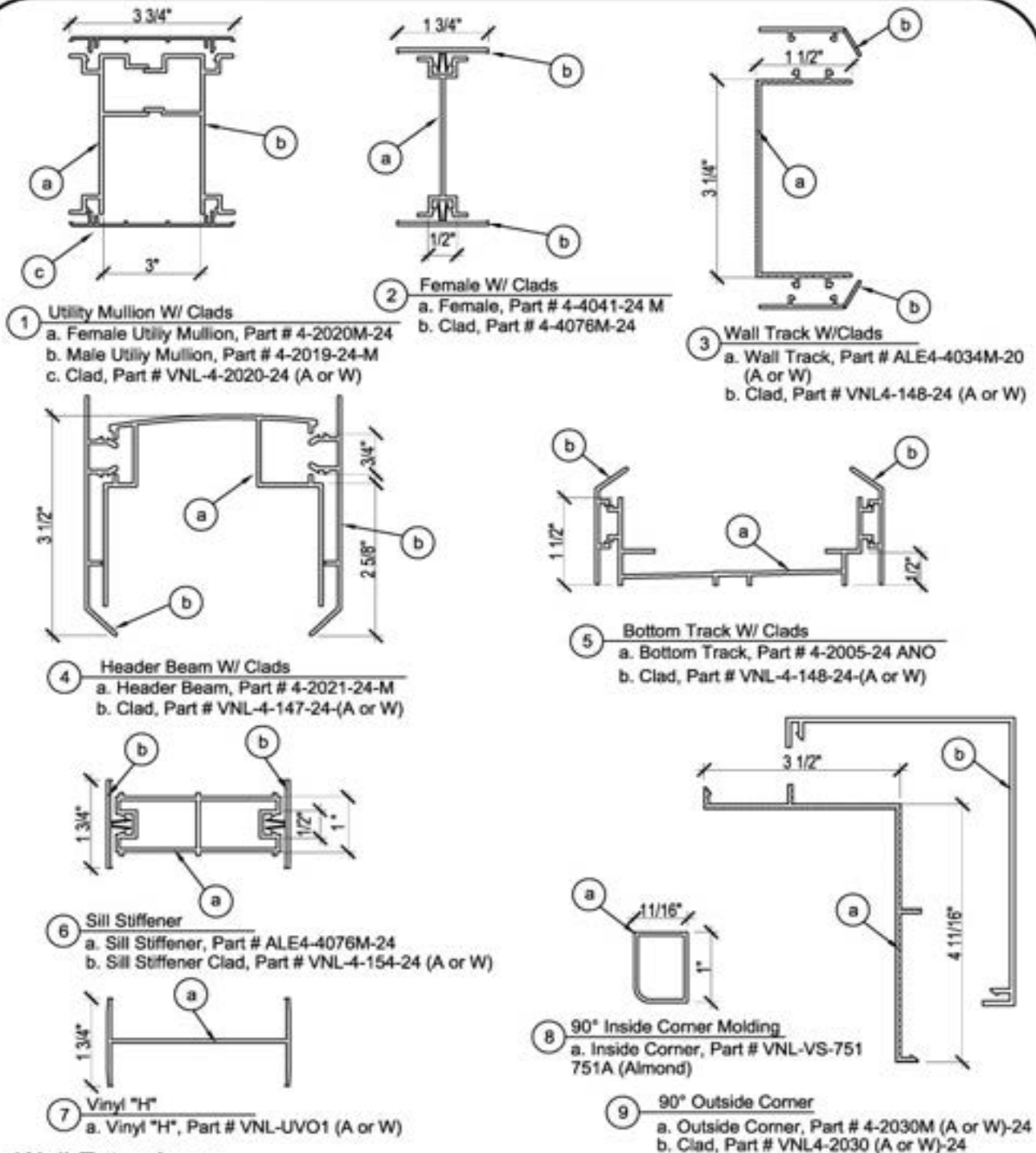
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www.c-thru.com

COMPONENT PROFILES - ALPHA WALL SYSTEM



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COMPONENT PROFILES - OMEGA WALL SYSTEM



Wall Extrusions:

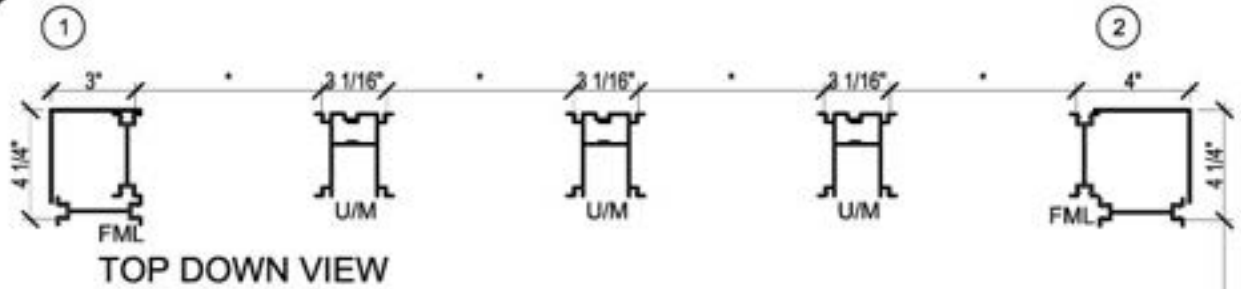


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Appendix A: Part Profiles & Connection Details: Manufacturer's Installation Guidelines

4

ASSEMBLY GAINS - OMEGA & ALPHA WALL SYSTEM

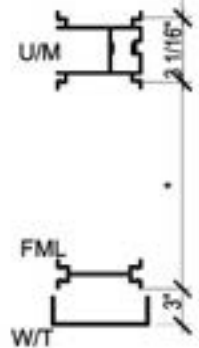


* Windows, Doors & Solids Widths

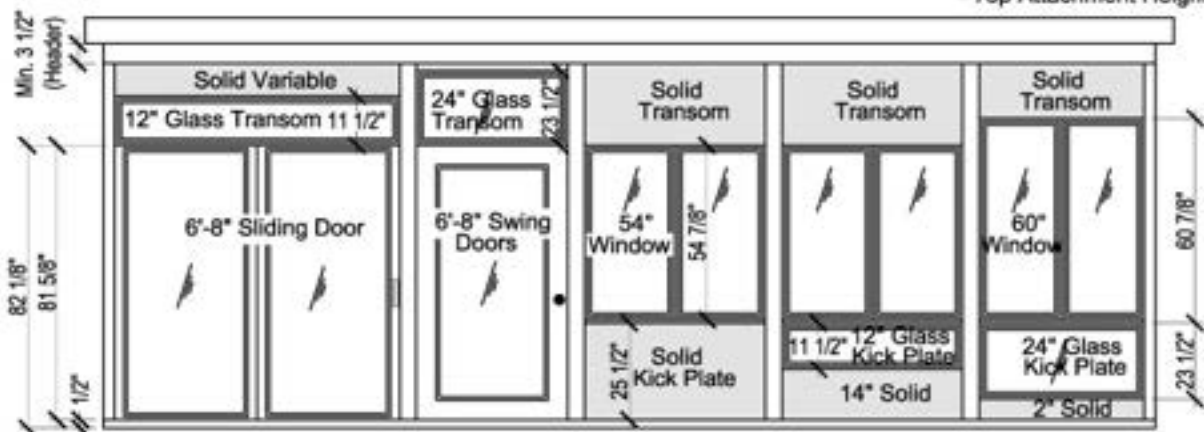
24" Window	23 1/8"
36" Window	36 3/8"
42" Window	39 5/8"
48" Window	45 5/8"
54" Window	54 3/8"
36" Pedestrian Door	38"
72" French Doors	74 3/4"
72" Sliding Door	71 1/2"
96" Sliding Door	96 1/4"

U/M= Utility Mullion
FML= Regular Female
W/T= Wall Track

- (1) Fully Compressed Corners
(2) Non-Compressed Corners



Roof Thickness
+ Slope
= Top Attachment Height

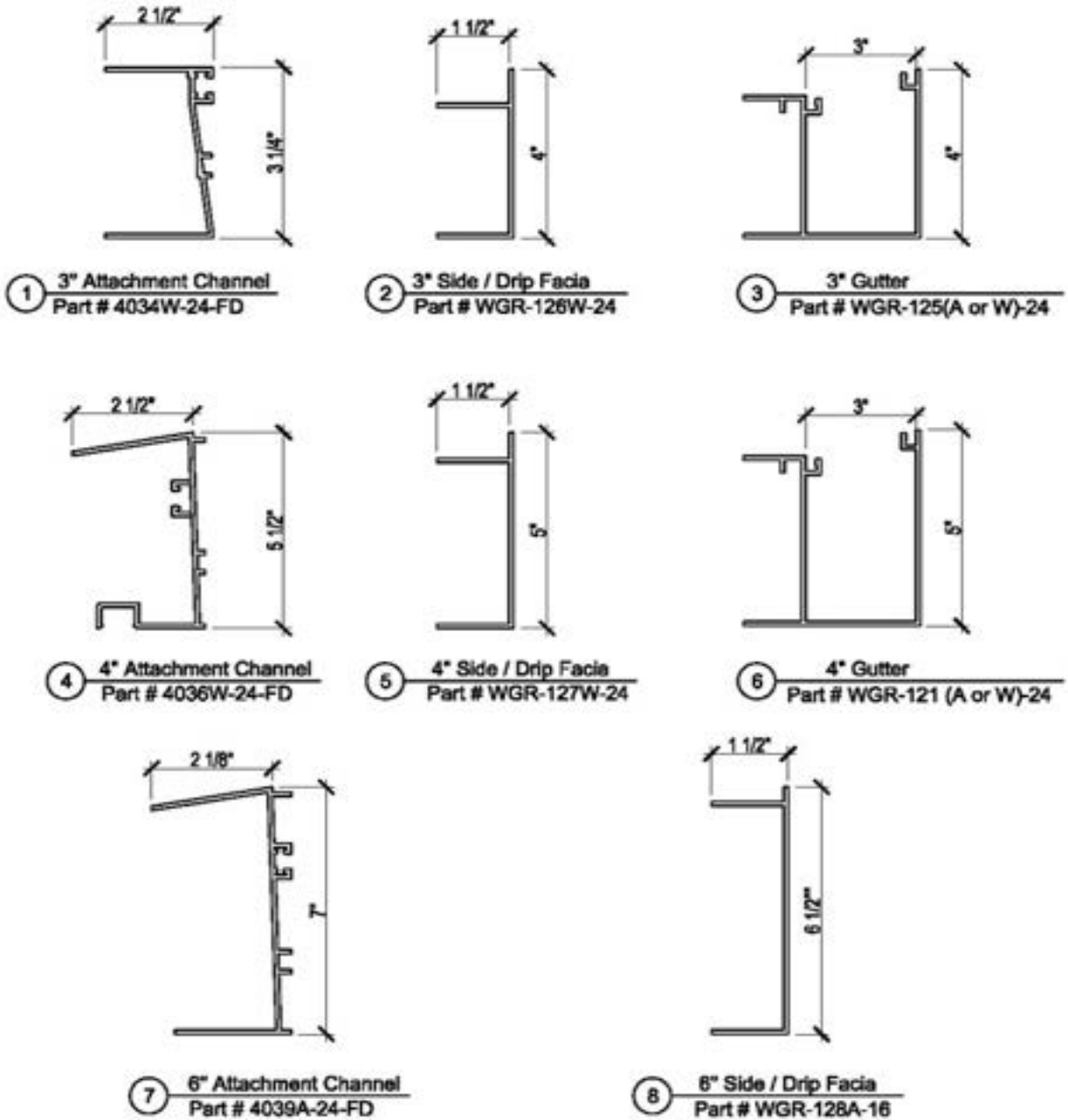


Side View
Wall Dimensions:



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COMPONENT PROFILES - WEATHERGUARD ROOF SYSTEM

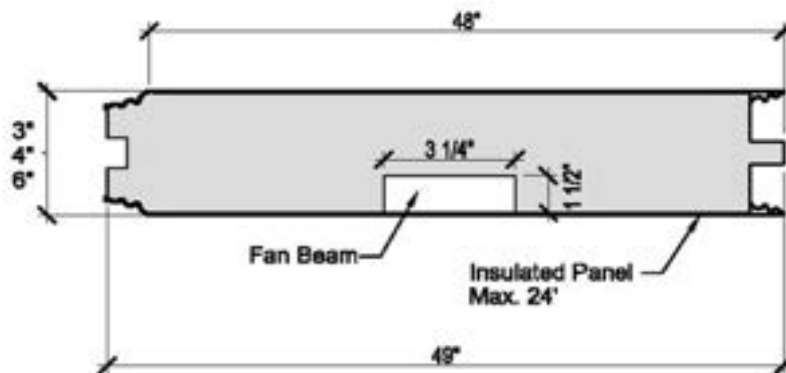
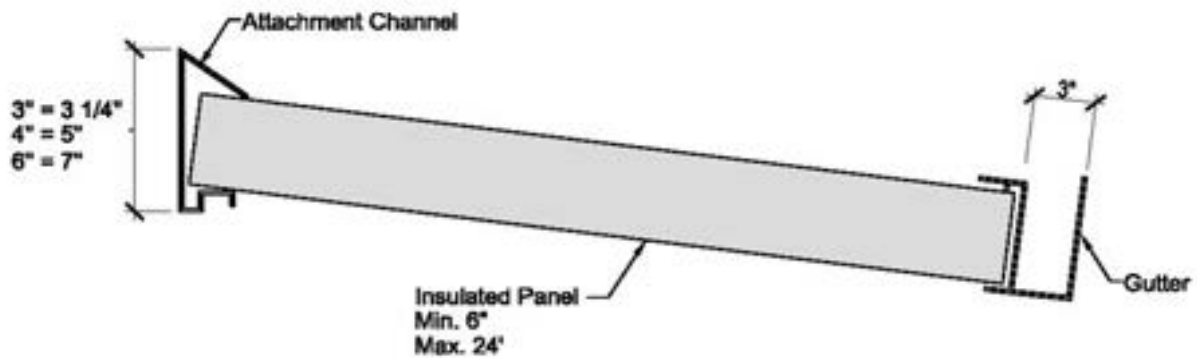


WeatherGuard Insulated Roof Extrusions:



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ASSEMBLY GAINS - WEATHERGUARD ROOF SYSTEM



WeatherGuard Insulated Roof Dimensions:



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