

### Storage

If bundles are to be stored outside, do not lay them directly on the ground. Lay them on wood supports (e.g. 2X4)  
 Do not store under tarps.  
 Do not store bundles upright.  
 Do not store bundles more than 5 high.  
 Keep away from heat sources.

### Wall Preparation

Celect siding is a rain screen but not intended to be a water resistive barrier. Therefore, Celect siding must be installed over a continuous water-resistive barrier with properly integrated flashing.

### New Construction

Celect must be applied over rigid nailable sheathing that provides a smooth flat surface. Never install Celect siding directly to open framing/studs.

### Re-siding

It may not be necessary to remove existing siding providing all loose boards are re-secured and any rotten boards are replaced. Install furring strips or wall leveling siding underlayment to create a flat surface for the siding.

### Cutting

#### Siding

Circular or miter saws with a trim or plywood blade.  
 Jig saw, rotary tools (Dremel, router, etc.) can be useful for cutting around obstructions.

#### Trim

The use of a compound miter saw with a trim blade is recommended.

### Key Vocabulary

- Course - Row of siding panels, one panel wide, running the length of the wall.
- Center Pin - placing a nail at both ends of a nailing slot to force the movement of the panel left and right of that slot.
- Pocket - Space created behind the trim to hide or cover the panel ends so as to allow the expansion and contraction of the panel(s) without it being visible.

### Key Rules

- Nail in the center of the nailing slot unless pinning is necessary.
- Fasteners must be placed in the center of the nailing slots at approximately 16" spacing leaving about 1/32" between the head of the fastener and the nailing hem of the panel. Celect panels expand and contract through temperature changes.
- Never face nail the panels.

### Fasteners

#### Siding

- Corrosion-resistant nails (stainless steel nails or galvanized roofing nails) with a minimum head diameter of 3/8", 1/8" shank and length enough to penetrate framing or furring 3/4" .
- Corrosion resistant, #8 truss or pan head screws with a length sufficient to penetrate a solid nailable surface (framing or furring) a minimum of 3/4" in depth.

#### Trim

- Celect Cortex screws and plugs are recommended to secure finished Celect Trim pieces.
- If other trim fasteners are used, they must be fasteners intended for exterior use with PVC trim such as stainless steel or hot dipped galvanize.
- DO NOT USE staples, small brads, ring shank or wire nails.
- For "padding out" finished trim, fasteners should be long enough to penetrate the solid wood substrate a minimum of 1 1/2".
- Professional grade PVC adhesive for joining trim pieces. PVC adhesive along with Cyanoacrylate (super glue) and activator as a "clamp" can be used.

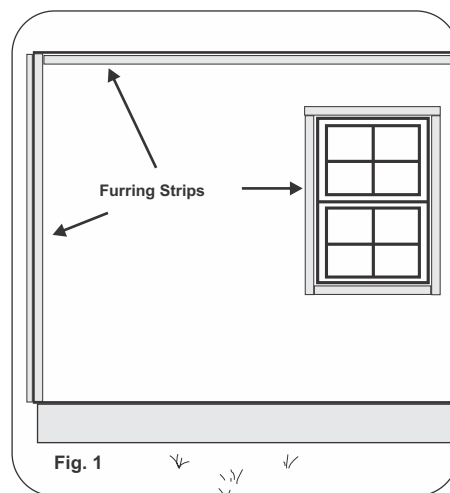
## Celect Installation

### Installation Sequence

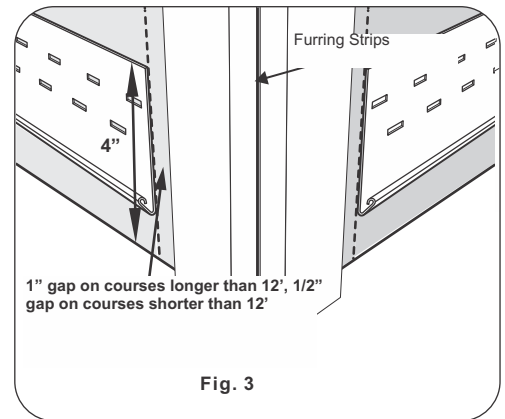
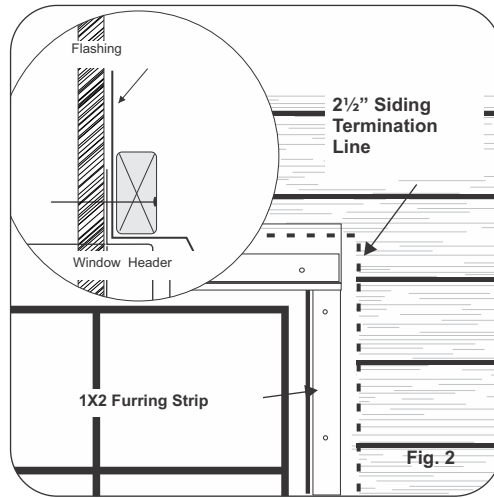
- 1 Weather Barrier & Flashings
- 2 Furring strips for trim
- 3 Inside Corner Posts
- 4 Starter Strip for Panels
- 5 Celect Siding Panels
- 6 Window, Door, Etc. Trim

- After preparing the walls for the siding installation (see *Wall Preparation pg. 1*), install 1X2 furring around all windows, doors, outside corners, etc. This must be done anywhere the ends of the siding will be terminated (Fig 1-2).
- Make sure to install the proper flashing as required by specific local building codes (Fig 2)

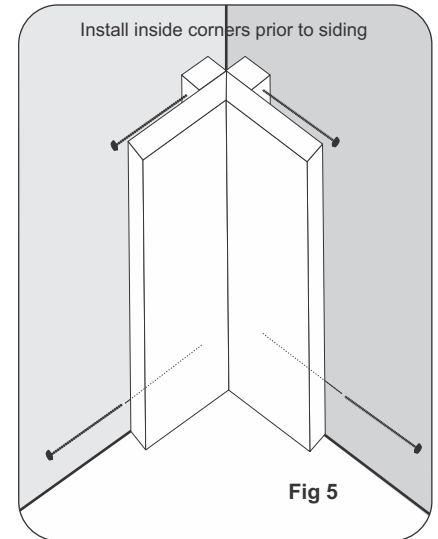
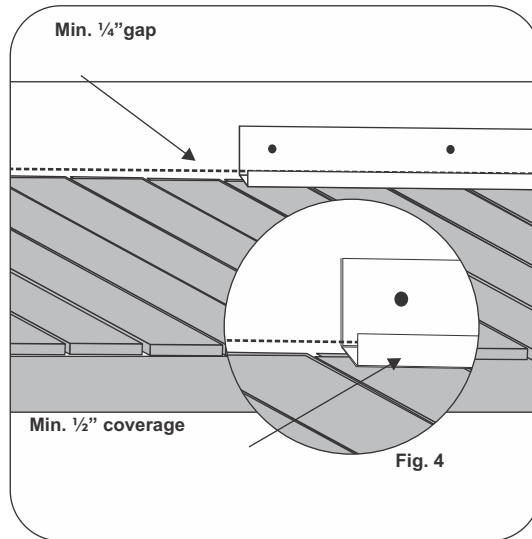
NOTE: if the furring strips will be completely hidden by the trim, treated 1X2 furring can be used in place of PVC strips.  
 Secure the furring every 8"- 12".



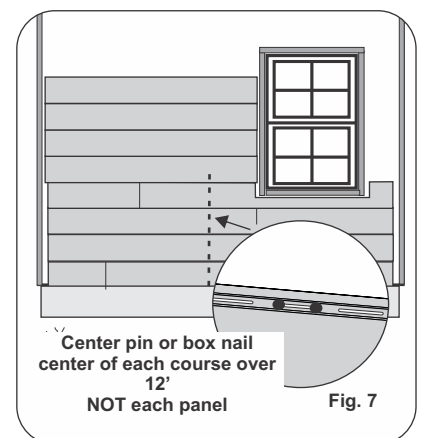
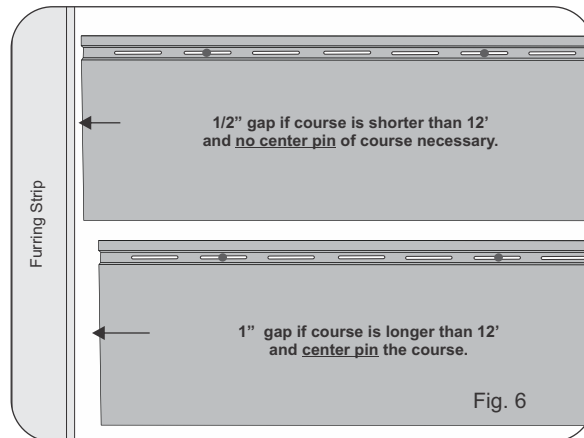
- Install starter strip along the bottom of the wall fastening every 8"-12" (Fig. 3). In certain situations, it may be necessary to remove a bottom section from of the panels to accommodate variations in the first course such as porch floors, etc. In these situations, where the bottom lock is removed, the cut edge of the panel(s) must be covered by trim. Due to the limited expansion and contraction of the panels vertically, the face of the channel or trim only need be wide enough to cover the cut edge of the panel by 1/2" (Fig 4).



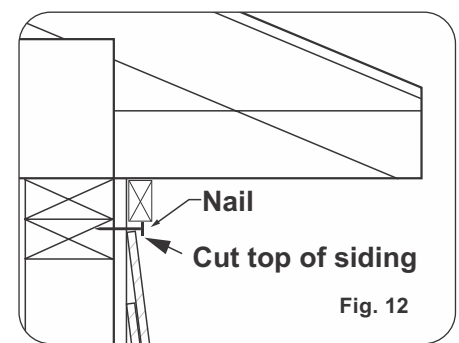
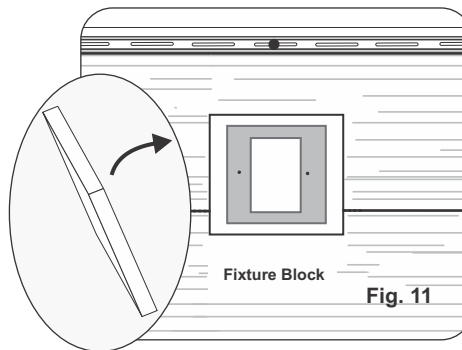
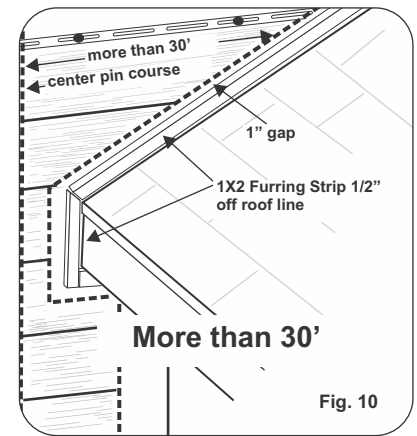
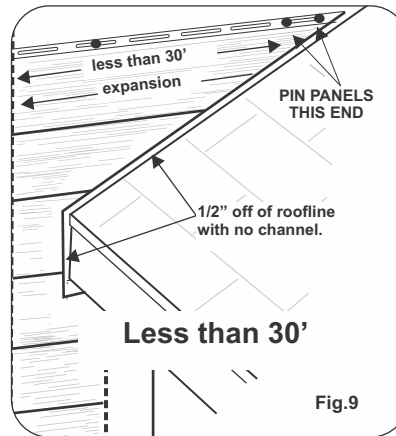
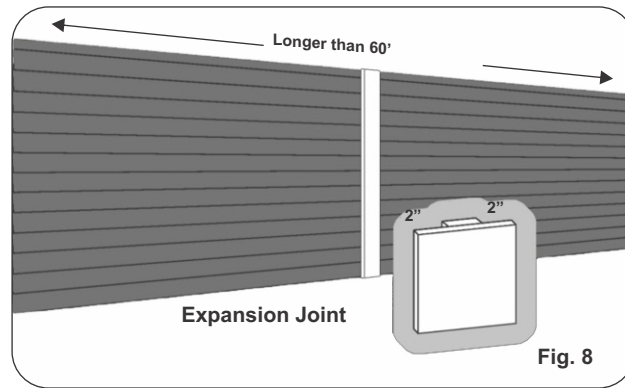
- Install any inside corners. Fasten the inside corners using weather resistant screws placed inside the pocket of the corner no more than 16" apart (Fig 5). Unlike the other finished trim, inside corners are applied before the siding. NOTE: Make sure not to draw the pocket in when fastening to the wall. The pocket width must remain 3/4". Use a scrap piece of siding as a spacer in the pocket. The inside of the corner post should not lay against the siding.



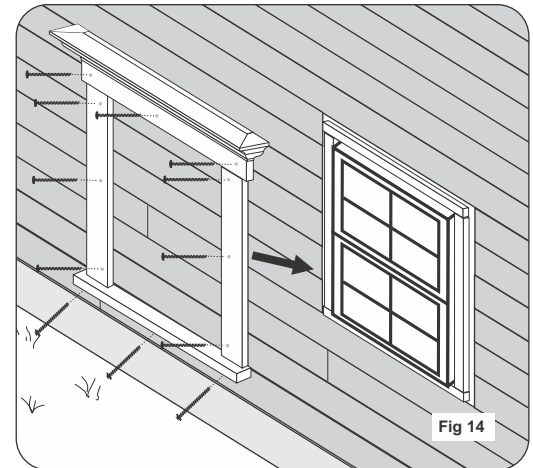
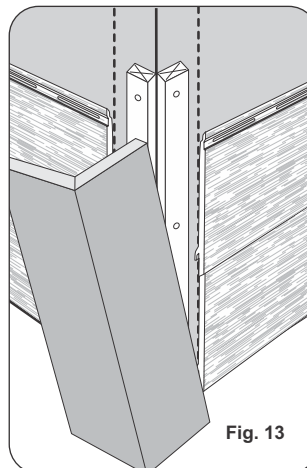
- Install the Celect siding panels keeping the ends of the panels 1" away from the furring strips if the course is over 12' long, 1/2" away if the course is less than 12' long.
- Fasten the panels by placing a fastener in the center of the slot approximately every 16" leaving about 1/32" between the head of the fastener and the nailing hem of the panel. Celect panels expand and contract through temperature changes. (Fig. 6).
- If the course is **longer than 12'** pin the center of **the course (not each panel)** by placing a fastener in each side of one slot keeping in mind that the "center" of each course will change as you work around windows, doors, etc. (Fig. 7).



- Celect siding panels can be installed continuously **up to 60'**. If the siding courses are longer than 60', break the course(s) with an expansion joint. This joint can be fabricated using furring strip and 1'X6" (Fig. 8).
- Celect fixture mounts are available for obstructions such as lighting, dryer vents, water faucets, etc. Begin by installing the base "ring". Install the siding panels allowing for the appropriate expansion gap depending upon the length of the siding course. Center and secure the face plate with two Celect Cortex trim screws and plugs (Fig 11)
- Fixture mounts can also be field constructed using Cellular PVC, wood, etc. The pocket depth must be 2" for courses over 12' and 3/4" for courses under 12' to allow for the appropriate expansion gap.
- For courses under 12' preformed vinyl siding fixture mounts can be used. In this case, the expansion gap should be 3/8".
- Depending upon the trim you choose to you use to finish the top of the wall, measure and cut the top course panel to fit. Due to the limited expansion and contraction of the panels vertically, the face of the channel or trim only need be wide enough to cover the cut edge of the panel by 1/2".
- Install the panel securing it by placing nails *along the cut edge* of the panel approximately every 16". **DO NOT FACE NAIL THE PANEL.** The head of the nails will hold the panel back to the wall and the shaft of the nail will keep the panel from raising and becoming unlocked from the panel below it (Fig 12).

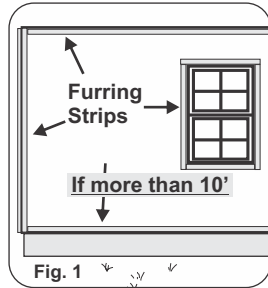


- Install trim over furring strips (Fig. 13-14). It is easiest to assemble window and door trims before applying them to the wall. When using Celect trim, be sure to build the trim slightly larger (1/8" each side) than the window or door to give the finished frame room to expand and contract through temperature changes.
- Cortex screws and matching plugs should be used when installing Celect trim. Space the fasteners no more than 16" apart and no closer than 2" from the end of the trim. Make sure not to fasten through the siding or into the expansion pocket (Fig 14).



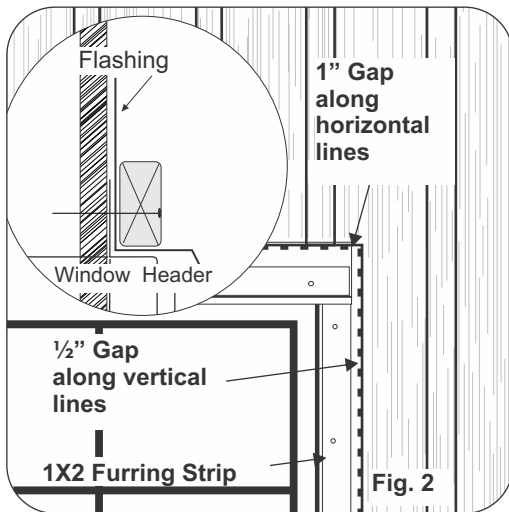
**BOARD AND BATTEN**

- 1 Weather Barrier & Flashings
- 2 Furring strips for trim
- 3 Inside Corner Posts
- 4 Celect Board & Batten Siding Panels
- 5 Window, Door, Etc. Trim



- After preparing the walls for the siding installation (see *Wall preparation pg. 8*), install 1X2 furring around all windows, doors, outside corners, etc. This must be done anywhere the ends of the siding terminate with the exception of along the bottom of the course up to 10'. If the panels are longer than 10' a furring strip and trim will be necessary along the bottom as well. (Fig 1-2)
- Make sure to install the proper flashing as required by specific local building codes (Fig 2)

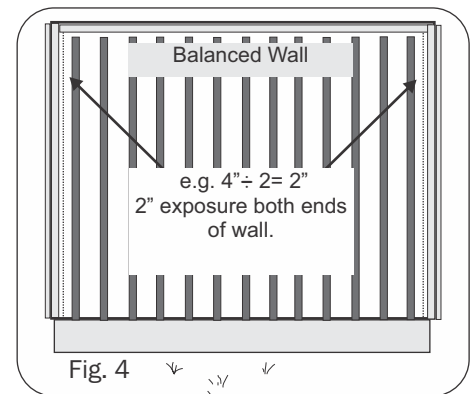
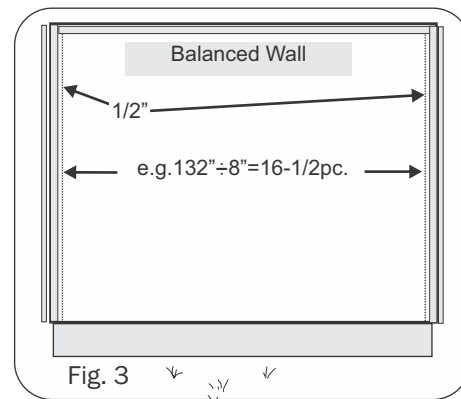
**NOTE: If no solid nailable substrate exists, either furring strips installed horizontally at 12" spacing or solid nailable sheathing MUST be applied prior to the installation of the vertical panels.**



**Creating a Balanced Appearance**

It's important to create a "balanced" appearance across the wall; meaning, the batten strips appear to be the same distance from both corners. The following describes how to achieve this.

- 1 Using a chalk line, strike a plumb line 1/2" from the furring strips on both the starting side and the ending side.
- 2 Divide the length of the wall in inches by 8 (Fig. 3)
- 3 The divide any fraction of a panel into 2. This will give you the width of exposure for both the starting panel and the ending panel (Fig. 4).



**Inside Corner Posts**

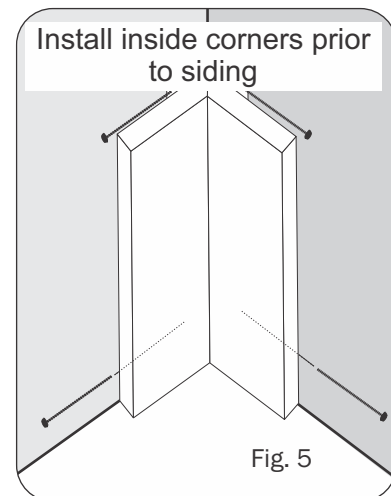
Inside corner posts are the only finish "trim" piece to be installed prior to the siding. panels. (Fig 5)

- Install any inside corners. Fasten the inside corners using weather resistant screws placed inside the pocket of the corner no more than 16" apart. Unlike the other finished trim, inside corners are applied before th siding.

NOTE: Make sure not to draw the pocket in when fastening to the wall.

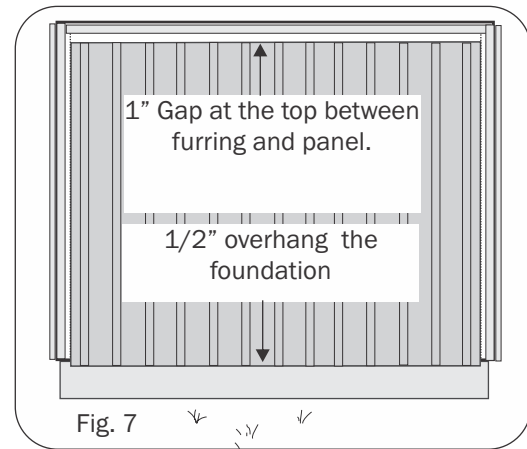
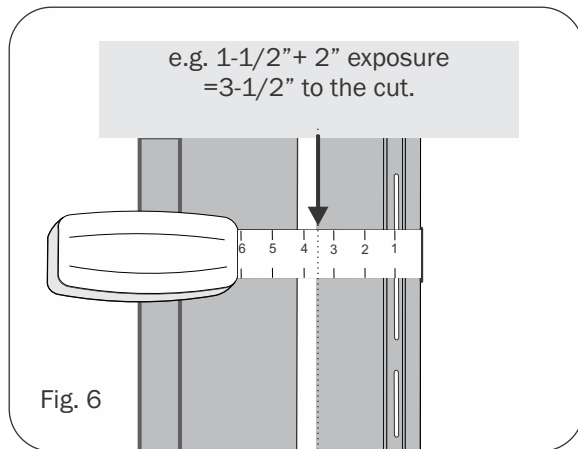
The pocket width must remain 3/4". Use a scrap piece of siding as a spacer in the pocket. The inside of the corner post should not lay against the siding.

- As a general rule, you will install panels from the inside corner outward on both sides.



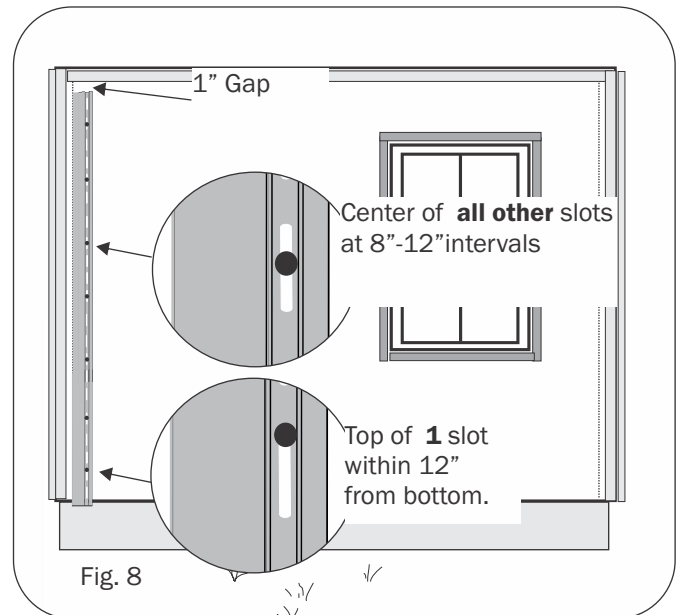
## First Panel

Once the exposure for the first panel has been calculated (Fig 6-7), measure from the edge above the nailing slots across the panel the calculated measurement plus 1-1/2". In our example from the previous page 3-1/2".

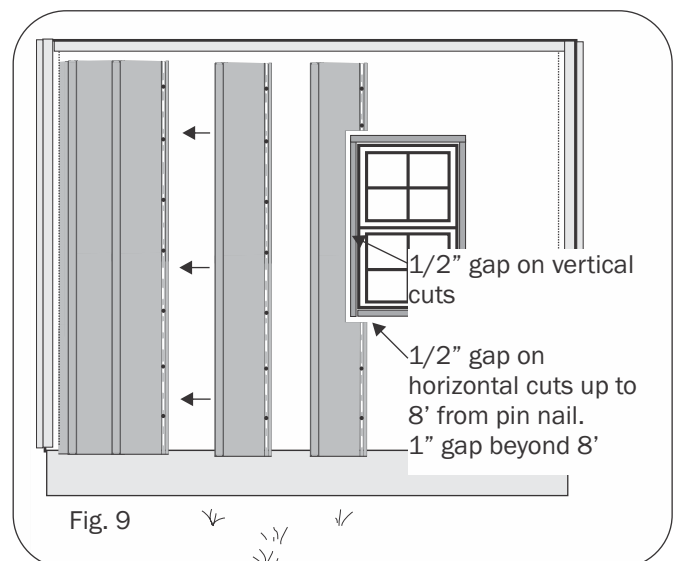


## Panel Installation

- The length of the panel should be 1" from the top furring and a minimum of 1/2" over the foundation at the bottom (Fig. 7)
- Install the first panel by placing the cut edge along the chalk line.
- Hold the panel in place by placing the first fastener at the top of a nailing slot **no more than 12" from the bottom edge of the panel.** Do not drive tight. Leave approximately 1/32" between the head and the panel.
- Make sure the panel is plumb and continue fastening it placing the fasteners in the center of the slots at 8"-12" intervals (Fig. 8)

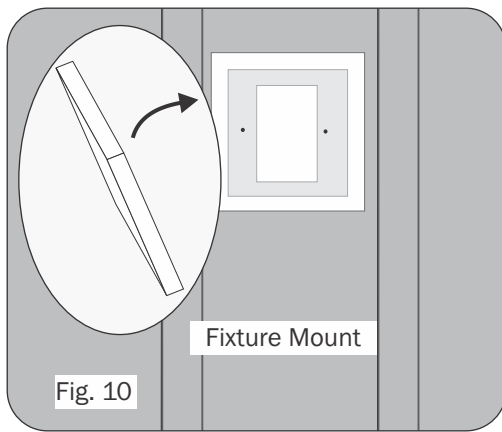


- Continue installing panels across the wall making certain that 1) the lock is fully engaged and 2) the panel is "pinned" into place by 1 fastener within 12" of the bottom of the panel.
- For the best look, make sure that all the panels are even across the bottom of the wall.
- When cutting and installing around windows, doors, etc., allow for 1/2" gap along any vertical cuts and 1/2" along horizontal cuts up to 8' and 1" beyond 8' (Fig 9).



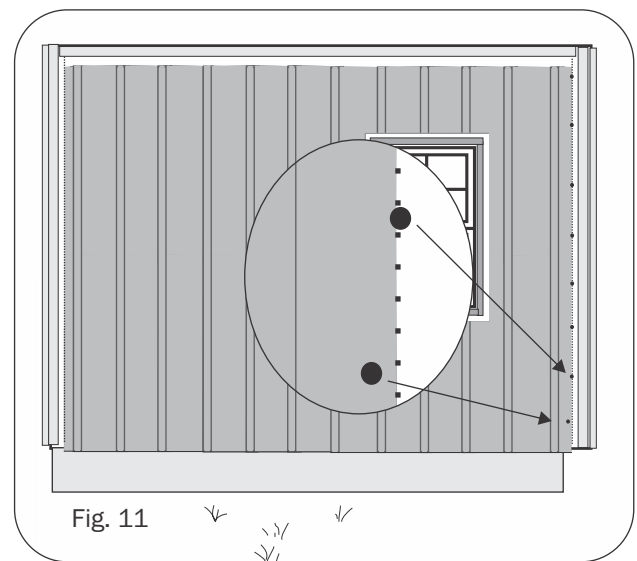
## Fixture Mounts

- Celect fixture mounts are available for obstructions such as lighting, dryer vents, water faucets, etc. Begin by installing the base “ring”. Install the siding panels allowing for the appropriate expansion gap depending upon the length of the siding course. Center and secure the face plate with two Celect Cortex trim screws and plugs (Fig 10)
- Fixture mounts can also be field constructed using Cellular PVC, wood, etc. The pocket depth must be 2” for courses over 12’ and 3/4” for courses under 12’ to allow for the appropriate expansion gap.
- Preformed vinyl siding fixture mounts can be used. In this case, the expansion gap should be 3/8”.



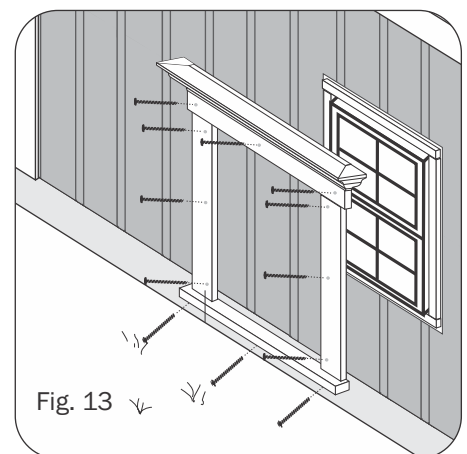
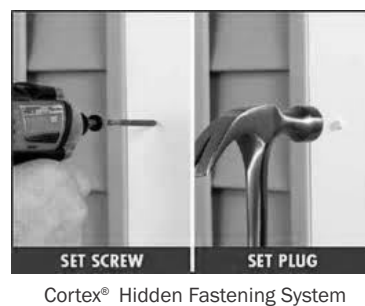
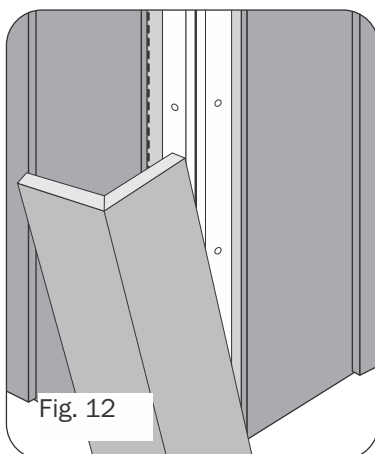
## Final Panel Installation

- Measure for the last panel by measuring from above the nailing hem of the next to last panel to the chalk line and add 1-1/2”.
- Measure from the batten strip side of the last panel and cut.
- Prior to installing the panel, pre-drill a hole within 12” of the bottom of the panel to hold it in place. the hole should be slightly larger than the shaft of the fastener.
- Install the panel and place a fastener through the pre-drilled hole.
- Continue to secure the panel by placing fasteners along the cut edge of the panel at 8”-12” intervals. The fastener head will hold the panel back. do not fasten tightly and **do NOT place the fasteners through the panel.** (Fig. 11)



## Trim Installation

- Install trim over furring strips (Fig. 12-13). It is easiest to assemble window and door trims before applying them to the wall. When using Celect trim, be sure to build the trim slightly larger (1/8” each side) than the window or door to give the finished frame room to expand and contract through temperature changes.
- Cortex screws and matching plugs should be used when installing Celect trim. Space the fasteners no more than 16” apart and no closer than 2” from the end of the trim. Make sure not to fasten through the siding or into the expansion pocket (Fig 13).



### Storage

If bundles are to be stored outside, do not lay them directly on the ground. Lay them on wood supports (e.g. 2X4)  
 Do not store under tarps.  
 Do not store bundles upright.  
 Do not store bundles more than 5 high.  
 Keep away from heat sources.

### Wall Preparation

Celect siding is a rain screen but not intended to be a water resistive barrier. Therefore, Celect siding must be installed over a continuous water-resistive barrier with properly integrated flashing.

### New Construction

Celect must be applied over rigid nailable sheathing that provides a smooth flat surface. Never install Celect siding directly to open framing/studs.

### Re-siding

It may not be necessary to remove existing siding providing all loose boards are re-secured and any rotten boards are replaced. Install furring strips or wall leveling siding underlayment to create a flat surface for the siding.

### Cutting

#### Shake Panels

Circular or miter saws with a trim or plywood blade.  
 Jig saw, rotary tools (Dremel, router, etc.) can be useful for cutting around obstructions.

#### Trim

The use of a compound miter saw with a trim blade is recommended.

### Key Vocabulary

- Course - Row of siding panels, one panel wide, running the length of the wall.
- Pocket - Space created behind the trim to hide or cover the panel ends so as to allow the expansion and contraction of the panel(s) without it being visible.

### Key Rules

- Secure each shake panel with five (5) nails evenly placed per panel.
- Celect shake panels can be locked directly on to Celect horizontal lap panels. No transitional trim is necessary.

### Fasteners

#### Siding

- Corrosion-resistant nails (stainless steel nails or galvanized roofing nails) with a minimum head diameter of  $\frac{3}{8}$ ",  $\frac{1}{8}$ " shank and length enough to penetrate framing or furring  $\frac{3}{4}$ " .
- Corrosion resistant, #8 truss or pan head screws with a length sufficient to penetrate a solid nailable surface (framing or furring) a minimum of  $\frac{3}{4}$ " in depth.

#### Trim

- Celect Cortex screws and plugs are recommended to secure finished Celect Trim pieces.
- If other trim fasteners are used, they must be fasteners intended for exterior use with PVC trim such as stainless steel or hot dipped galvanize.
- DO NOT USE staples, small brads, ring shank or wire nails.
- For "padding out" finished trim, fasteners should be long enough to penetrate the solid wood substrate a minimum of 1  $\frac{1}{2}$ ".
- Professional grade PVC adhesive for joining trim pieces. PVC adhesive along with Cyanoacrylate (super glue) and activator as a "clamp" can be used.

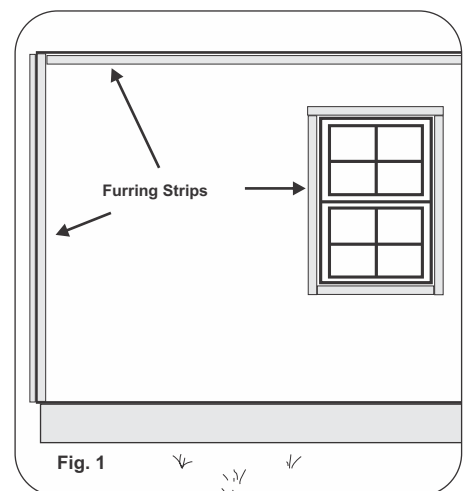
## Celect Shake Installation in combination with Celect Horizontal Lap Siding

### Installation Sequence

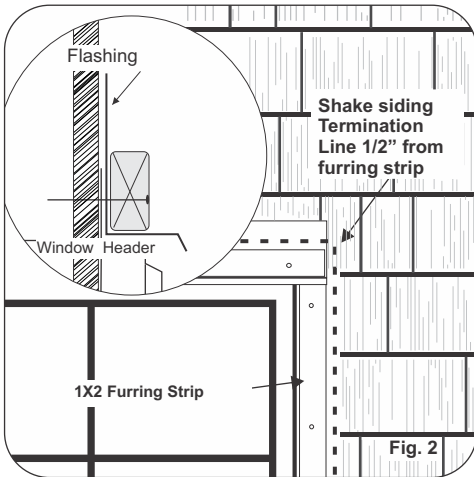
- 1 Weather Barrier & Flashings
- 2 Furring strips for trim
- 3 Inside Corner Posts
- 4 Starter Strip for Panels
- 5 Celect Siding Panels
- 6 Window, Door, Etc. Trim

- After preparing the walls for the siding installation (see *Wall Preparation above*), install 1X2 furring around all windows, doors, outside corners, etc. This must be done anywhere the ends of the siding will be terminated (Fig 1-2).

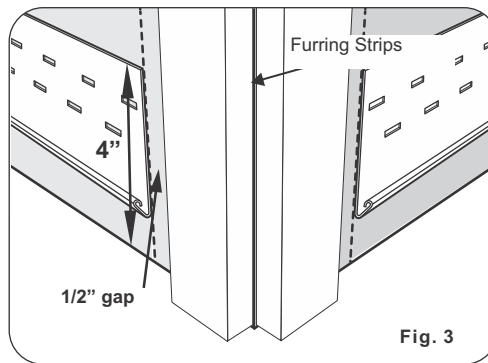
NOTE: if the furring strips will be completely hidden by the trim, treated 1X2 furring can be used in place of PVC strips.  
 Secure the furring every 8"- 12".



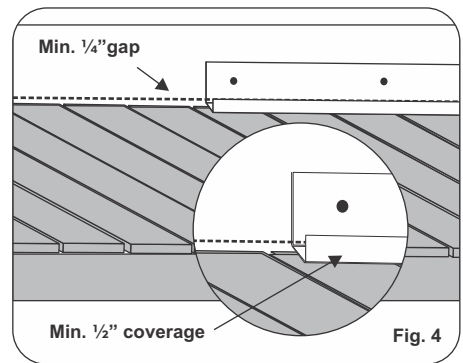
**Celect Shake Installation in combination with Celect Horizontal Lap Siding cont.**



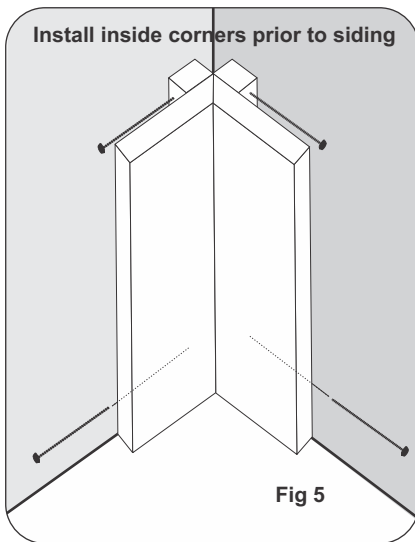
- Make sure to install the proper flashing as required by specific local building codes (Fig 2)



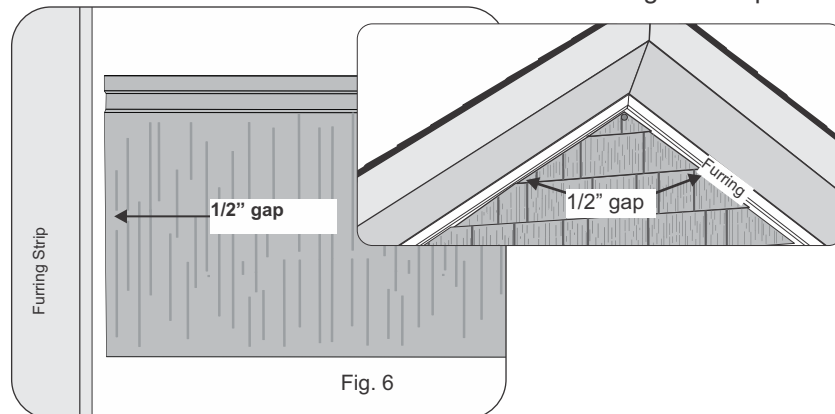
- Strike a chalk line 4" above the point you wish the bottom of the panel(s) to sit.
- Install starter strip aligning the top of the strip with the chalk line and fastening every 8"-12" (Fig. 3).



- In certain situations, it may be necessary to remove a bottom section from of the panels to accommodate variations in the first course such as porch floors, etc. In these situations, where the bottom lock is removed, the cut edge of the panel(s) must be covered by trim. The face of the channel or trim only need be wide enough to cover the cut edge of the panel by 1/2" (Fig 4).



- Install any inside corners. Fasten the inside corners using weather resistant screws placed inside the pocket of the corner no more than 16" apart (Fig 5). Unlike the other finished trim, inside corners are applied before th siding.  
NOTE: Make sure not to draw the pocket in when fastening to the wall. The pocket width must remain 3/4". Use a scrap piece of siding as a spacer in the pocket. The inside of the corner post should not lay against the siding.



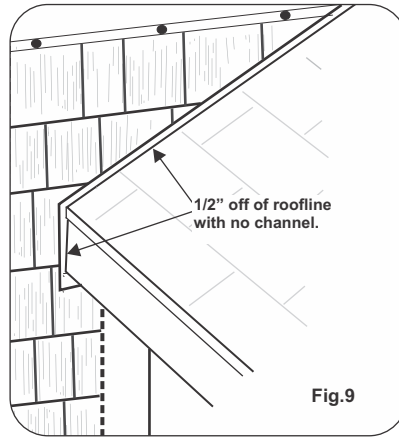
- Install the first course of the Celect shake siding panels keeping the ends of the panels 1/2" away from the furring strips.
- Fasten the panels by placing a fasteners in the nailing flange; one in the center of the panel and two on either side, evenly placed. Keep fasteners approximately 2" in from both ends. (Fig. 6).



**Celect Shake Installation in combination with Celect Horizontal Lap Siding cont.**

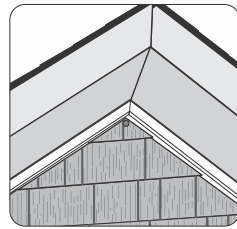
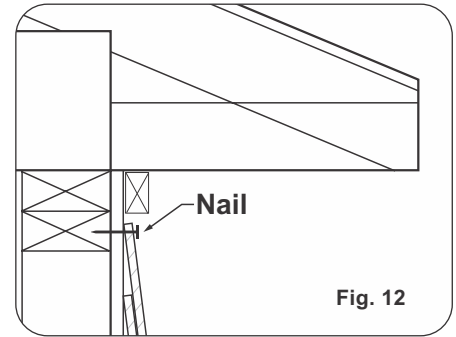
**Roof Lines**

- When working up over roof lines, hold the shake panels off the roof line a minimum of 1/2". No additional trim is needed. (Fig. 9)

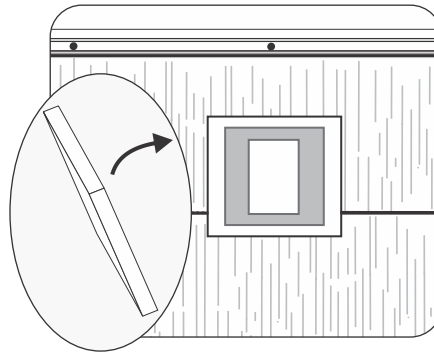


**Top Course**

- Measure and cut the top course panel to fit. Due to the limited expansion and contraction of the panels vertically, the face of the channel or trim only need be wide enough to cover the cut edge of the panel by 1/2".
- Install the panel securing it by pre-drilling holes and placing nails approximately every 12". (Fig 12).
- When installing Celect shake panels in a gable, secure the last panel by pre-drilling a hole 1/2" in from the upper most point and placing a fastener through the hole. (Fig )



- Celect fixture mounts are available for obstructions such as lighting, dryer vents, water faucets, etc. Begin by installing the base "ring". Install the siding panels allowing for the appropriate expansion gap depending upon the length of the siding course. Center and secure the face plate with two Celect Cortex trim screws and plugs (Fig 11)
- Fixture mounts can also be field constructed using Cellular PVC, wood, etc. Allow for the appropriate 1/2" expansion gap.
- Vinyl siding fixture mounts can be used.



- Install trim over furring strips (Fig. 13-14). It is easiest to assemble window and door trims before applying them to the wall. When using Celect trim, be sure to build the trim slightly larger (1/8" each side) than the window or door to give the finished frame room to expand and contract through temperature changes.
- Cortex screws and matching plugs should be used when installing Celect trim. Space the fasteners no more than 16" apart and no closer than 2" from the end of the trim. Make sure not to fasten through the siding or into the expansion pocket (Fig 14).

