

INSTALLATION INSTRUCTIONS & GUIDELINES

For:

**Fiber-Lite,[®] FiberCorr,[™] White-Wood,[®] Ground Breaker,[®] Nu-Poly,[®]
Nu-Alum[®] Prelaminated Panels and Fiber-Lite[®] Liner Panels**

**For Kydex Prelaminated Panels, see separate Kydex Installation Guide or use concealed fastener methods shown on page 7 and discussed in item 9, pages 4 and 5.
Read all instructions before installation**

Uses & Applications

Fiber-Lite, FiberCorr, White-Wood Nu-Poly and Nu-Alum Prelaminated panels with factory bonded substrates of wood, drywall or gypsum, foam, fluted polypropylene, etc., may be applied to wood or metal studs (proper gauge studs must be used for panel selected), furring strips, solid walls, ceiling joists, or used as dividers. Nu-Poly panels can be used for floors or decking.

Install a vapor barrier behind panel installations in high moisture areas or use panels with a factory applied vapor barrier. Proper selection of substrate is also required in high moisture areas. This requirement is necessary for either interior or exterior installations.

Fiber-Lite Liner panels (no substrate) should only be installed over solid wall surfaces (wood, plasterboard, concrete, etc. .). Wall surfaces should be clean, flat, dry and smooth. Uneven wall surfaces should be corrected for best results. Liner panel will form to contour of the wall surface to which it is attached.

Some panels may be used as drop in ceiling panels. Clips are recommended to hold panels in place.

For Ground-Breaker installation use Fiber-Lite Liner Panel installation.

For Fiber-Lite Sticky-Back Liner Panel installation see page 8.

NOTE: All panels are U.S.D.A. accepted.

Due to the nature of the wood component parts used in the fabrication of some panels, moderate bowing of the finished product may be experienced prior to installation.

Storage & Preparation

Panels should only be stored in a dry area. Do not store panels outdoors.

Panels should be unwrapped and removed from skid and stacked on a flat, dry surface.

Panels should be pre-conditioned for at least 24 hours in temperature and humidity conditions of installation area(s). Normal fire-safety precautions should be taken when storing and using panels.

Tools

Panels can be cut using power saws with carbide tip blades. Liner panels may also be cut with a masonry blade.

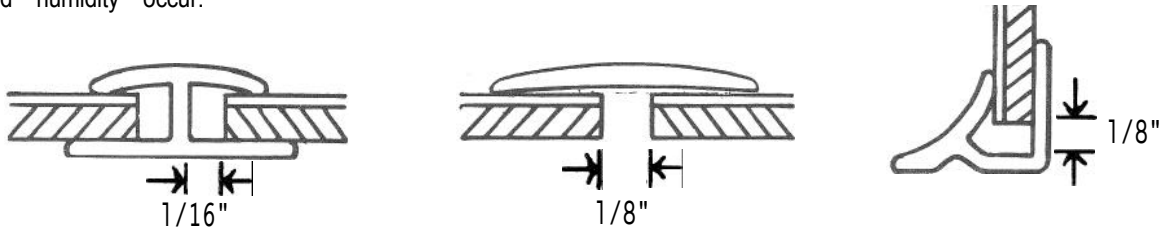
Panels may be drilled for fastening with a metal drill bit. A masonry bit should be used when drilling into concrete is required. If drill bit becomes worn during installation, replace with a new one.

Caution: Protect eyes with goggles and cover mouth with filter mask when cutting panels.

Expansion & Contraction

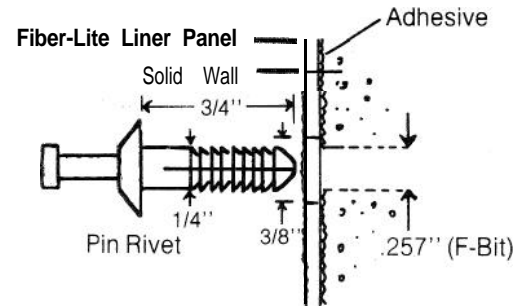
All panels will expand and contract. Allow 1/8" gap at ceiling and base. Allow 1/16" gap between panel and division bar. If face mounted moldings (T-Bar, Batten, two piece division bar, etc...) are used allow a 1/8" gap between panels. See diagrams below.

Allow more space for expansion and contraction of panels longer than 8' and in areas(s) where high fluctuations in temperature and humidity occur.



Pre-drilled holes for **Fiber-Lite Liner Panel** (ONLY) should be slightly larger than diameter of fastener shank to allow for normal expansion and contraction. See diagram at right. When the Quadrex One Stepper fastener is selected, this spacing is accomplished in one operation.

NOTE: Allow for expansion of panels when installing around pipes, conduits, electrical outlets, etc.



Moldings & Sealants

Use of moldings and silicone sealant with panels having appropriate substrates is recommended to achieve a moisture resistant installation. Moldings also give installation a "finished" appearance.

Cut moldings to size and place Super Silicone Sealant (SSW or SSC) or equivalent into channel of molding during installation. Place molding on panel before fastening, if required. See diagrams below.

Place small amount of super silicone into hole before fastener is installed. See diagram below.



In high moisture and frequent washdown area(s), silicone should be placed between molding and floor to prevent moisture from penetrating back of panel substrate. On cement floors, use a self-priming sealant (i.e. Mono).

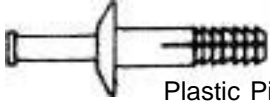
If no moldings are used, silicone sealant should be placed in gaps at floor, ceiling and between panels for moisture resistant installation. Remove excess silicone during installation or trim off after silicone has cured.

Caution: Failure to use moldings and sealant may cause panel deterioration. In high moisture areas or in standing water, edge swelling and moisture absorption by substrate will occur if appropriate moldings and sealant are not used.

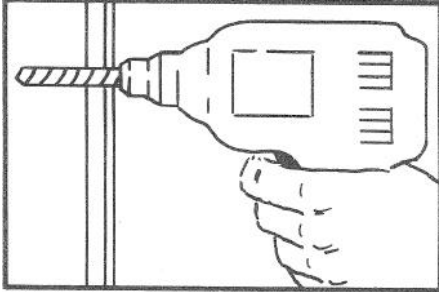
Install a vapor barrier behind panel installations in high moisture areas or use panels with a factory applied vapor barrier. Proper selection of substrate is also required in high moisture areas. This requirement is necessary for either interior or exterior installations.

Fasteners

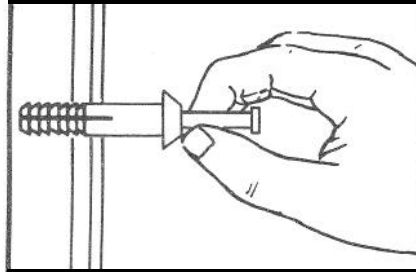
All panels should be installed with non-corroding fasteners. Plastic pin rivets, chrome pin rivets, one piece nylon rivets, stainless nails, Quadrex One Steppers or screws are recommended. See below. Fasteners should be installed to fit snug but should not be over-tightened. Always select proper size fasteners for installation.



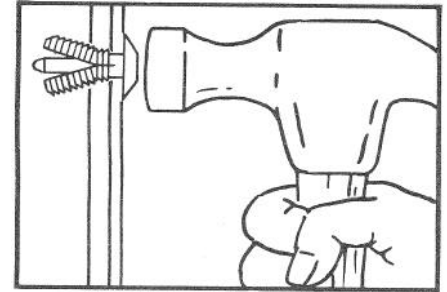
Plastic Pin Rivet fastens panel to wood, metal, drywall, concrete, insulation material, etc.. See diagrams below.



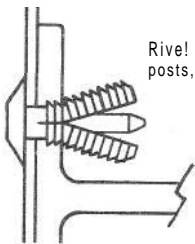
Easy to use Drill a hole (.257"-F Bit)



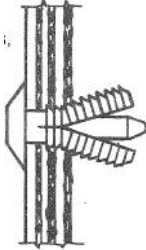
Remove dust and filings from the hole. Insert rivet.



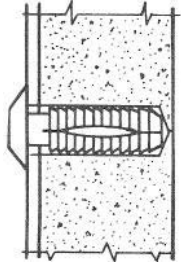
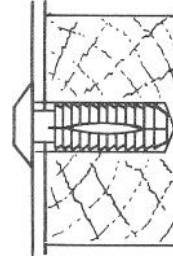
Hit the pin. The shank expands into or behind material for a tight, secure grip



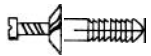
Rivet expands behind metal angles, posts, sheets, or metal studs



Rivet expands into solid furring strips, studs, substrates of brick block, concrete, drywall



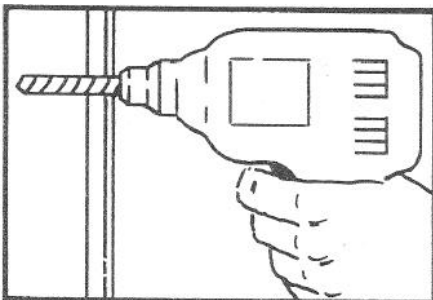
NOTE: If pin in rivet does not drive flush when fastening into solid materials and applications where expansion may be restricted, a larger hole is required, use .261 "-G Bit.



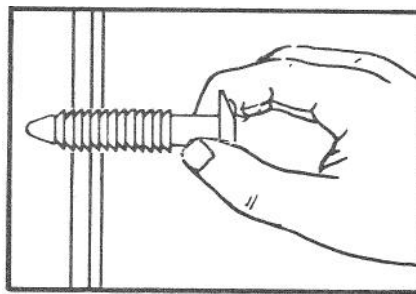
Chrome pin rivet has high shear strength but should be used in low moisture areas. Installation is the same as plastic pin rivet above.



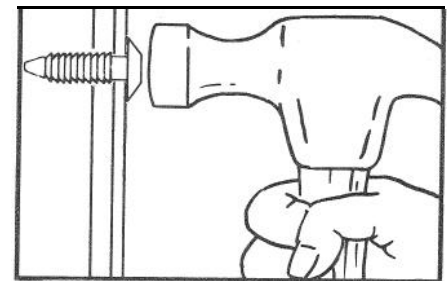
One piece-nylon rivet fastens panel to any wood substrate or wood stud. See diagrams below.



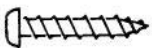
Easy to use. Drill a hole (.281"-K Bit)



Remove dust and filings from the hole. Insert rivet.



Drive rivet flush



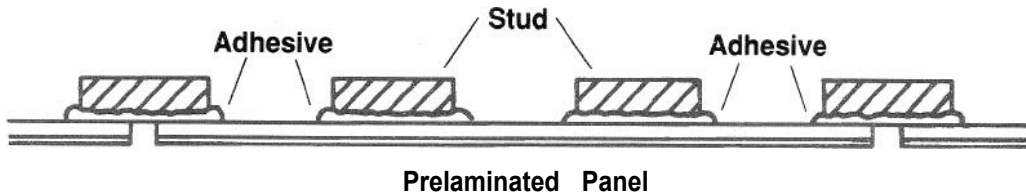
Stainless nails, screws, staples, nylon head screws or Quadrex One Steppers can be used to install panels.

Adhesives

The use of adhesive when installing panels is recommended along with fasteners.

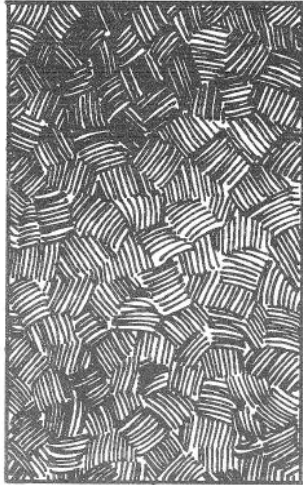
Henry #117 panel adhesives or any equivalent general purpose construction adhesives are recommended. Whenever adhesive is used, follow the manufacturer's instructions carefully as many adhesives are flammable and some may not be compatible with paneling. Henry #444 or Franklin #4457 non-flammable FRP adhesives are also acceptable for use on new drywall, plywood, OSB or gypsum walls.

Adhesive should be used on studs in conjunction with fasteners when installing **Fiber-Lite, FiberCorr, White-Wood, Nu-Poly** or **Nu-Alum** prelaminated panels for best installation. See diagram below.

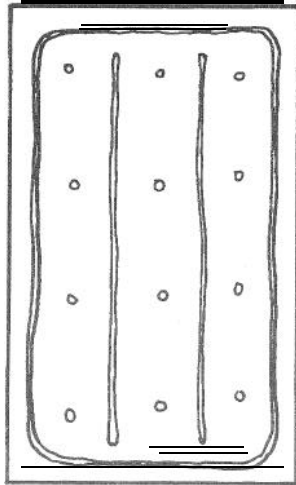


Fiber-Lite Liner Panels may be successfully installed over new drywall or gypsum using only adhesive. However, it is **recommended** to use fasteners along with adhesive for best results. Adhesive failure is not panel failure.

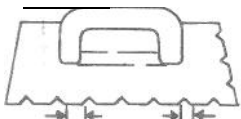
Adhesive should be applied to wall surface with a serrated trowel or cartridges. See diagrams below.



Trowel Application



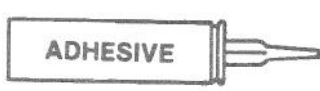
Cartridge Application



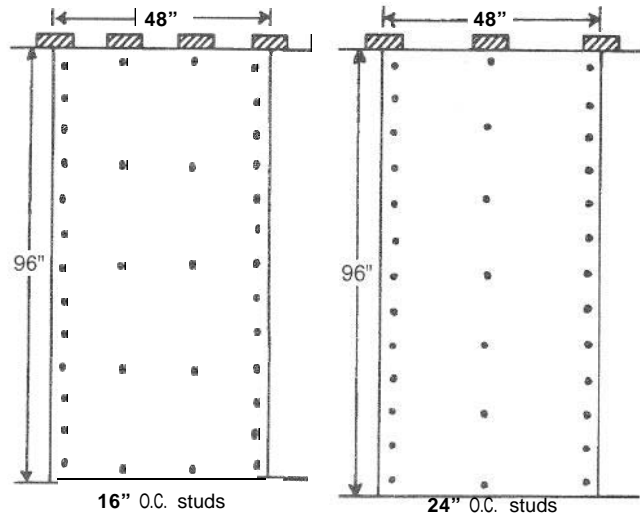
Trowel



ADHESIVE

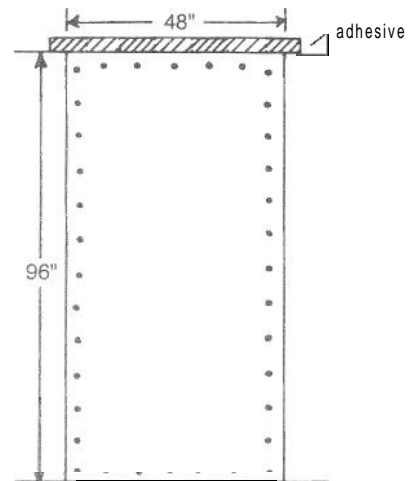


Fiber-Lite, FiberCorr, White-Wood



16" O.C. studs

24" O.C. studs



Prelaminated panels

After applying adhesive tap surface of panel with a rubber mallet or block of wood to aid bonding of adhesive to wall and panel.

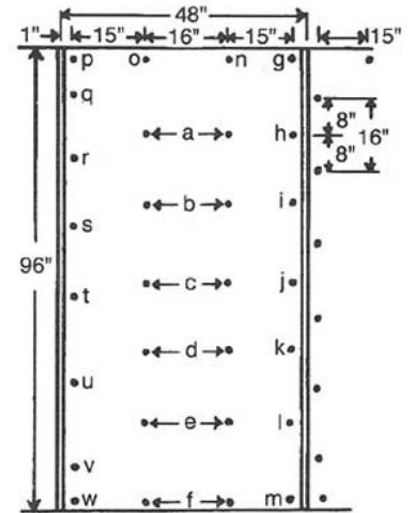
Fastening/Fastener Layout

First panel installed should be set true with a plumb line. Check plumb line during installation. Do not fasten edges of panel until moldings are in place (except when using face mounted moldings).

Fiber-Lite Liner panel-fastener layout - solid wall

1. Fasten panel at center and work outward.
2. Fasteners based on 16" O.C.
3. Fasteners should be staggered on opposite panel edges and next to division bar for a flat seam. See diagram at right.
4. Liner panels may be pre-drilled for faster installation using a guide panel.
5. Less fasteners are required if panel is also installed with adhesive.

NOTE: When it is desired to install prelaminated panels over solid wall use liner panel fastener layout.



Solid wall (fasten as indicated, in alphabetical order)

Nu-Alum and Nu-Poly Prelaminated panel-fastener layout - walls and ceilings

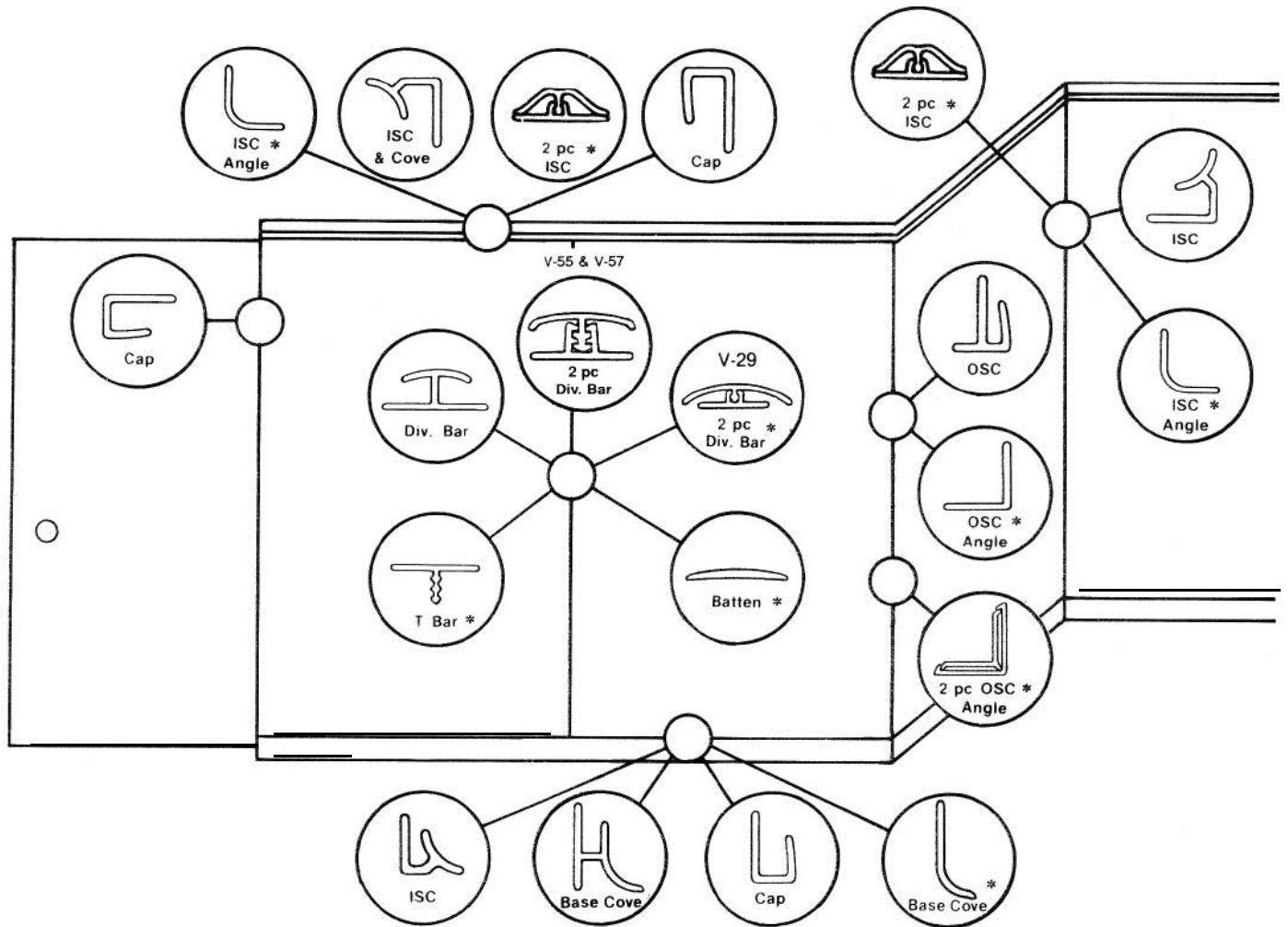
1. Pre-fit each panel before fastening and cut panel if required to center on studs for proper fastening.
2. Apply vapor barrier behind panel installation if required. Always use vapor barrier in high moisture areas.
3. Stud walls 16"-24" O.C. use minimum 3/8" panel substrate. Ceiling joists 16" O.C. use minimum 3/8" panel substrate; 24" O.C. joists use minimum 1/2"-5/8" panel substrate.
4. Fastener frequency may vary with thickness of panel substrate.
5. On wood studs 16" O.C. use stainless nails on edges every 8" O.C. staggered on opposite panel edges. On center studs use plastic rivets every 24" O.C. For 24" O.C. studs see diagram at left. See page 7 for alternate methods.
6. On metal studs 16" O.C. use stainless screws or TEK screws on edges every 8" O.C. staggered on opposite panel edges. On center studs use plastic pin rivet every 24" O.C. For 24" O.C. studs see diagram at left. See page 7 for alternate methods.
7. If studs run horizontal, plastic or other types of fasteners may be used for complete installation of panels. Fastener frequency same as in No. 5 or 6. See page 7 for alternate methods.
8. If only plastic fasteners are used for installation of panels, fasteners should be placed at 12" O.C. on edges and 16" O.C. on center studs.
9. Some types of panels may be compatible for commercial installations using fasteners on edges (8" o.c.) and adhesive on center stud(s). For example, **Fiber-Lite Panels** may be fastened on edges (flush mounted nails or drywall screw) and bonded to center stud(s), top and bottom plates with panel adhesive. Fasteners may be covered with surface mounted moldings (T-bar, 2 pc. division bar, batten, 2 pc. ISC, base cove, etc . . .). This results in a panel installation with no visible fasteners. See diagram at left, page 7 and first note below.
10. Stud walls must be supported on opposite side of panel installation and **proper gauge** stud must be used for panel selected, to prevent deflection of wall system.
 - Additional Instructions When Installing FiberCorr Prelaminated Panels**
 - 11. **FiberCorr** may be installed on studs, ceiling joists, furring strips or solid walls and ceilings.
 - 12. **When FiberCorr** is installed on studs, ceiling joists and furring strips, the substrate should be 10mm (.400") min. and the support members placement should no exceed 16" on center. When stud walls are constructed 24" or more on center, furring strips placed 16" on center are recommended.
 - 13. All **FiberCorr** edges should be supported through placement of additional studs, headers or crossmember furring strips.
 - 14. The fluted substrate of **FiberCorr** may be run either horizontally or vertically.
 - 15. Due to the plyable nature of the **FiberCorr** substrate, care should be taken in setting drive pin rivets to avoid indenting the fiberglass face particularly at panel edges. Consideration should be given to using concealed edge fastener methods shown on page 7.
 - 16. In a temperature rise of 50°F, fiberglass will expand .040" in 4' width and .080" in 8' length. This expected expansion and again the plyable nature of the substrate make strict adherence to the 1/8" panel separation rule at all edges even more important when installing FiberCorr. Also, after drilling each fastener hole, redrill the panel only 1/8" larger. This permits expansion or contraction at the fastener location as well.

NOTES: If panel deflects from center stud(s) after this type of installation, fasteners will be required on center stud(s).

The 1/8" edge separation rule may make it necessary to trim panels width or length occasionally as installation progresses along a long wall with support members evenly spaced at 16" or 24"

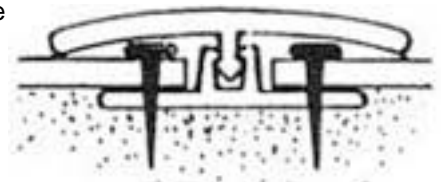
Molding Installations

The diagram below shows the various moldings that can be used when installing **Fiber-Lite** panels.

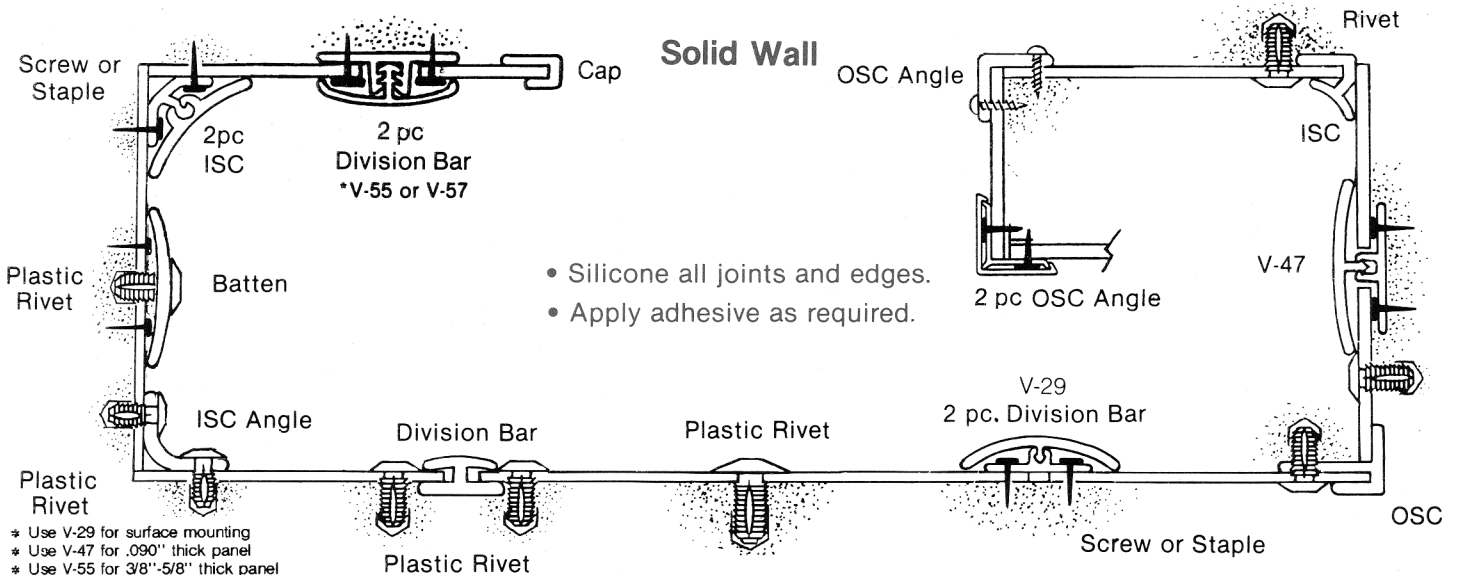
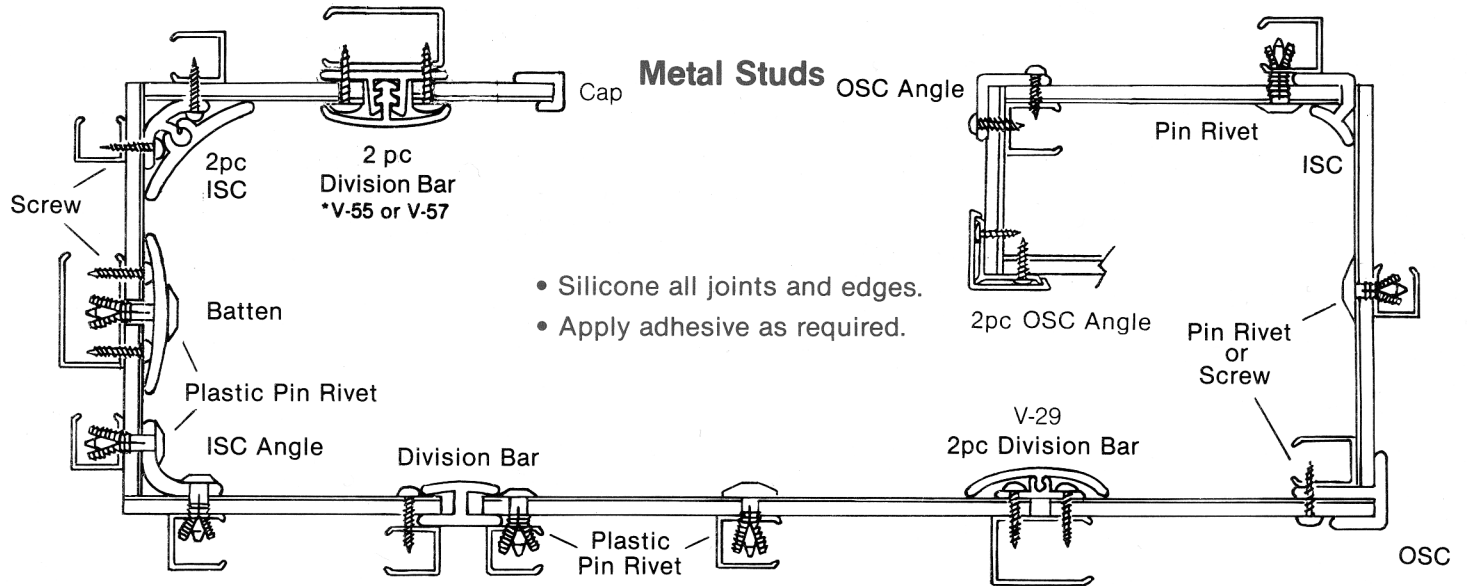
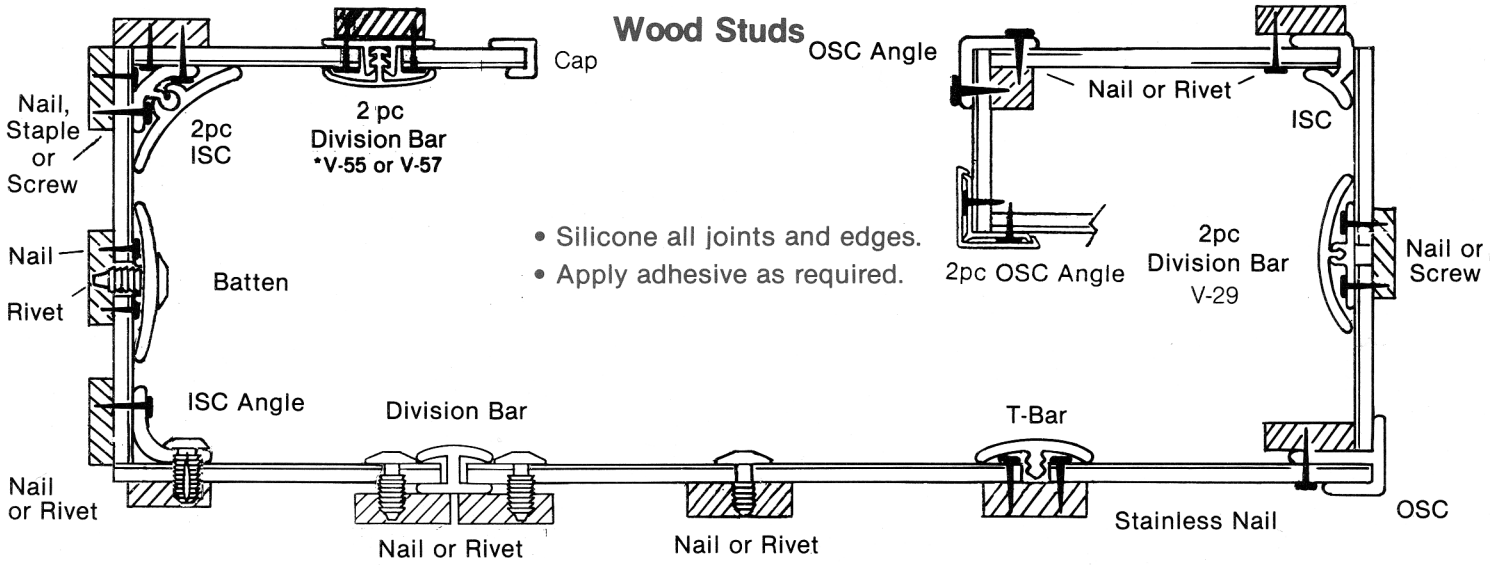


- A. Vinyl or aluminum moldings can be used in the above diagram.
- B. Vinyl moldings are USDA accepted, aluminum moldings **should not be used** where USDA acceptance is required.
- C Cut moldings as needed for proper fit. The divider, ISC & OSC moldings may need to be cut to accommodate for ceiling and base moldings.
- D. Place molding on panel before fastening edges, if required.
- E. Always use moldings in high moisture areas.
- F. Surface mounted moldings may be applied with 3M tape no. 4930VHB, a compatible adhesive, or fasteners if required.
- G. Moldings are available for thickness of panel selected.
- H. Surface mounted moldings are designed to cover fasteners.
- I. See page 7 for top view of molding application.
- J. The symbol * designates surface mounted moldings.
- K. Pre-drill moldings (if required) for fastening, (i.e. batten strip, two division bar, etc.)
- L. Aluminum moldings can be used for interior or exterior use.
- M. Vinyl moldings can be used for interior use. Exterior available.

NOTE: Fiber-Lite Liner panel 2-pc division bar (V-47 only) may be mounted as in diagram at right.



Top View of Panel Installation



* Use V-29 for surface mounting
 * Use V-47 for .090" thick panel
 * Use V-55 for 3/8"-5/8" thick panel
 * Use V-57 for 3/4"-1" thick panel

Fiber-Lite STICKY-BACK Liner Panel Installation

The durable Fiber-Lite **STICKY-BACK** Liner Panel is a fiberglass reinforced plastic (FRP) panel. A factory coating of adhesive is applied to the back of the FRP panel. This pressure sensitive adhesive is protected and kept fresh by a special removable cover sheet. This adhesive bonds exceptionally well to most building materials. Special care must be exercised to properly prepare the bonding surface.

* Drywall and gypsum, plywood, waferboard and particleboard bond much better when primed and sealed * Ceramic tile, metal and most foams bond well with Sticky-Back * Bond surfaces must be clean, dry and flat * Ideal temperature for installation is 60°-90° F * Always test a small area for bonding compatibility between Sticky-Back and substrate

1. Cut and fit Sticky-Back before removing cover sheet
2. Remove cover sheet as panel is being pressed into position
3. Firmly roll or press all areas of Sticky-Back onto the substrate
4. Secure edges (all liner panels have a natural tendency to curl)
5. Install moldings

Installation Reminders

1. Follow safety and fire guidelines during installation and use of panels. Compliance with local building codes is recommended.
2. First panel installed should be set true with plumb line. Check plumb line during installation.
3. Pre-condition panels prior to installation and allow for expansion and contraction during installation.
4. Use moldings, silicone, fasteners, and adhesive with panels for best installation.
5. Remove excess silicone during installation or trim after silicone has cured.
6. Place molding on panels, if required, before fastening panel (i.e., CAP, ISC, OSC, etc.).
7. Cut moldings as needed. For example, division bar may need to be cut to accommodate a ceiling or base cove.
8. Cut panels, if required, for proper installation.
9. Use hold-down-clips if panels are used in a suspended ceiling.
10. Span studs or joists only with proper thickness of panel.
11. Clean panels, if required, after installation.

Cleaning Instructions

All panels discussed in this instruction are designed for minimum care and maintenance. When cleaning panels they should be washed with a light detergent such as Spic & Span, Pine-Sol, Mr. Clean, etc....Panels may also be cleaned with steam, high pressure sprayers or soap and water.

A 5% to 10% Tri Sodium Phosphate water solution may also be used to clean panels. Rinse thoroughly after applying. Hard water deposits may be cleaned with a 10% solution of Acetic Acid in cold water. Rinse thoroughly after applying.

It is strongly recommended not to use abrasive cleaners when cleaning panels (i.e., SOS Pads, Ajax, Comet, etc.)

Adhesive can be removed from panels surface by using mineral spirits or equivalent solvent based cleaner.

All panels can be re-conditioned by using wax, Endust or similar conditioner.

Following these instructions **Fiber-Lite** and all other panels will give a fine and lasting appearance for many years.

* Nonwarranty: The information contained in this information is presented in good faith and is believed to be accurate, but without guarantee. Conditions of use are beyond our control and all risks are assumed by the user. Nothing herein is a recommendation for uses which infringe valid patents or as extending a license under valid patents.

* **Notice:** Panels and components made of aluminum, polystyrene foam, vinyl and wood may be combustible and, accordingly, should be used in compliance with local codes and insurance regulations.

Foam Insulation Thermal Barrier Notice

When applying interior building panels over or with foam plastic insulation, an approved thermal barrier system (i.e. 1/2" gypsum board or other approved system) must be used between the foam and panels. In all cases, design, use, and installation should comply with current ICC building code requirements. Check current ICC building codes for further information.

