# Trachte Erection Guide

## Conversions and Door/Hallway Systems

TBS TRACHTE Building Systems

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**Service Support**

Trachte Building Systems, Inc. offers a toll-free technical support hotline for field erector consultation at **800-356-5824.**

For assistance before and after building erection, please contact Trachte customer service at **800-356-5824.**

# SAFETY CONSIDERATIONS

### BASIC PERSONAL SITE SAFETY

It is the responsibility of every worker to guard their own safety and that of their co-workers. This responsibility can be achieved by practicing basic personal site safety by following start-up, operational, and shut-down precautions.

### MAKING SAFETY A PRIORITY

Making safety a priority is the key ingredient to basic personal site safety. Being careless on the job site is the first step towards injury. Each crew member must regularly assess their own knowledge and ability, and if necessary, ask for help. No one should ever operate equipment that he/she is not familiar with.

All needless distractions should be avoided. Top priority must be given to concentrating on the work at hand, and watching out for potential hazards. Workers should constantly strive to reduce job site hazards. A worker should never modify or alter safeguarding devices.

### INSPECTING THE ENVIRONMENT

Building materials should be neatly stacked and easily accessible. The workers should ensure that there is sufficient space to work and assemble the product in a convenient location. The few minutes it takes at the start of a day to plan out activities and ensure that the work area is clean and uncluttered, can go a long way toward improving safety and increasing productivity.

### INSPECTING THE TOOLS AND EQUIPMENT

The job site inspection must also include a thorough evaluation of all tools and equipment that will be utilized during the job. Machinery should be examined for any indication of worn or broken parts. This inspection should include hand tools.

Safety devices must also be checked. If a worker notices any sign of equipment defect, the tool or equipment must be taken out of service and repaired or replaced.

### ERGONOMIC

Since many job site injuries come from muscle related injuries, it is essential that all workers practice good body mechanics. The basic principle of effective body mechanics, or ergonomics, is to utilize the body most effectively within its limitations. For example, when bending or lifting, it is most effective to use the large muscles of the legs rather than the smaller, weaker muscles of the back.

The back is particularly at risk for injury, and therefore, extra caution must be given to proper lifting and bending. Prior to any lifting, workers must assess the weight of the object and if it is too heavy, secure extra help. Because muscle injuries can become quite painful and debilitating, it is advisable that all workers learn and practice good body mechanics.

### DRESS SAFELY

When on the job, workers must be careful to dress with safety in mind. Loose or frayed clothing may become caught in the machinery or on materials, placing the worker at risk for injury. Likewise, jewelry such as metal watch straps, rings, necklaces, and bracelets can become a hazard. Long flowing hair or beards present a similar danger. To prevent becoming tangled in moving tools or parts, workers must dress properly and practice good grooming.

### SUMMARY

Job site safety is everyone's responsibility. It starts with a thorough knowledge of safety standards and safety procedures. It includes competency with machine tools and related equipment. It's an on-going process, made better with new advances in equipment design, controls, and education. It is the requirement of each individual worker and job site to follow OSHA requirements.

You may wish to consult with safety professionals in the industry, or with safety equipment suppliers. Or contact OSHA (Occupational Safety & Health Administration) or the U.S. Department of Labor for regulations, standards or help with learning more about safety. It is the requirement of each individual worker and job site to follow OSHA requirements.

### WARNINGS, CAUTIONS, AND NOTES IN MANUAL

A ***warning*** tells you about something that could harm you or another person.

A ***caution*** tells you about something that could damage the building.

A ***note*** tells you other important information.

## 1. GENERAL INFORMATION

**1.1** This erection guide is used in combination with the system plans for the installation of the Trachte Create-A-Space self-storage project.

**1.1.1** Make sure that the persons who will be responsible for erecting the storage system read this entire guide and plans carefully and completely before starting.

**1.2** If there are any questions on any part of the instructions in this guide, please do not hesitate to contact Trachte Building Systems, Inc. at **800-356-5824.** Asking questions before starting will save time and eliminate mistakes. It is important to Trachte that erectors fully understand all the information necessary to successfully erect the storage system before actually starting the installation.

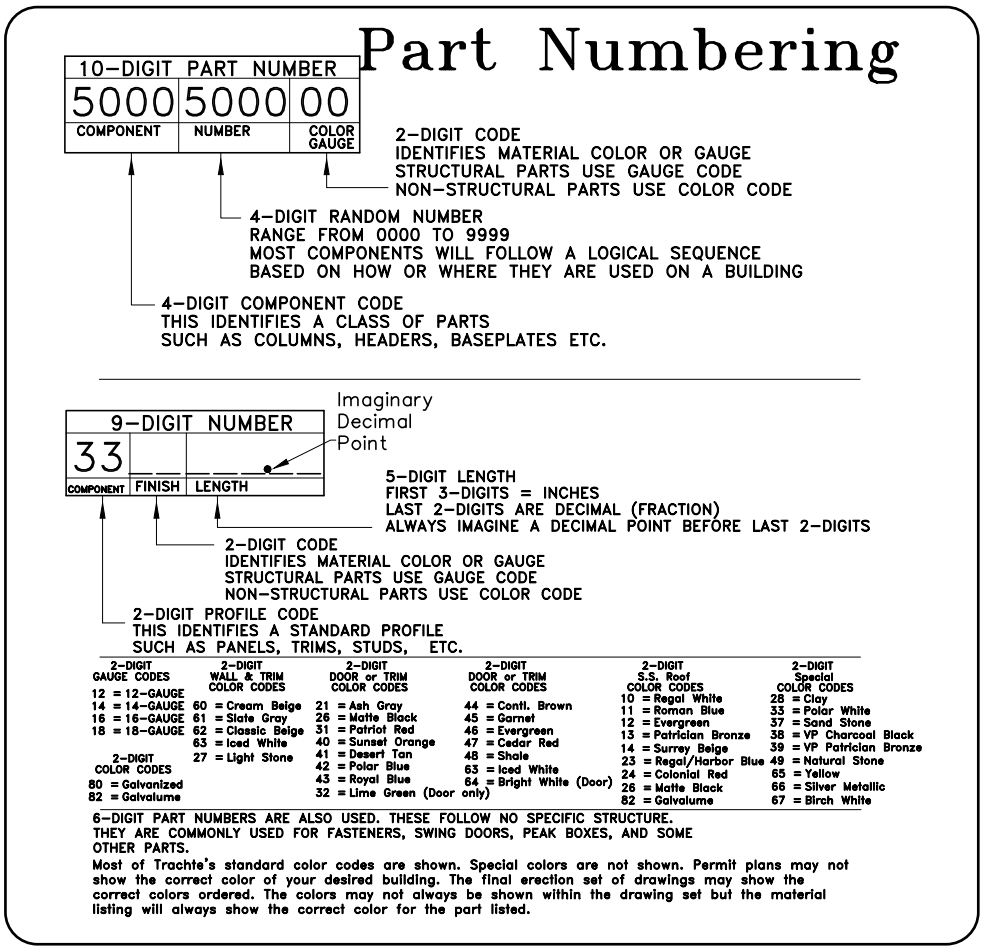
**1.3** This guide describes the erection of a **typical** Create-A-Space system and may **NOT** include procedures which apply to the system ordered, or may contain additional details and procedures that do not apply to this project.

**1.3.1** Trachte prepares erection drawings specifically for the partition system(s) you receive which contain dimensions, details, descriptions and installation details of accessories and optional items ordered from Trachte. These plans and details, along with the descriptions and illustrations in this guide, provide you with complete instructions necessary to efficiently and successfully install this particular Create-A-Space system.

**1.4** Part number references: In the bottom left hand corner of the cover page of the plans, there is a detailed explanation of how the part numbering system works. An example is listed below. Please become familiar with the system before beginning installation.

**1.5** Some parts look alike, varying only in length, material thickness, or hole locations. Part numbers may be similar, so carefully read the whole part number.

**1.6** Structural lines identify the outside of a corridor wall, or the center of an interior/partition wall. This manual also refers corridor and partition lines to better communicate.



## 2. STAGING SHIPMENTS

**2.1** To simplify and expedite erection of the storage system, separate each group of materials and components by part number and size as they are unloaded.

## 3. UNLOADING THE SHIPMENT

**3.1** Unless notified otherwise, the materials will arrive at the site on one or more flat bed semi-trailer trucks.

**3.2** If streets and/or parking in the vicinity where the truck(s) will be unloaded are narrow, congested, or otherwise restricted, it is recommended that arrangements be made IN ADVANCE with local traffic authorities for any special parking requirements, permits, barricades, or traffic-control personnel which may be necessary.

**3.3** In addition to arranging for adequate truck parking, it is highly recommended that an adequate number of personnel and material handling equipment be at the site when the truck(s) arrive(s) to unload and stack each group of materials and components in an orderly manner which will not cause damage to either the materials or finished surfaces.

**3.4** Materials and components will be packaged and/or strapped together for shipment. Some materials may be on wood pallets or in corrugated cardboard containers.

**3.5** The maximum load of any pallet is 5,000 lbs. **A forklift capable of lifting at least 5,000 lbs. is recommended for unloading.**

## 4. SHIPMENT INSPECTION

**4.1** When the parts arrive, they will be accompanied by a bill of lading and picking tickets (packing list). Immediately inspect the shipment for missing items or damage to components and/or hardware using the picking ticket to verify completeness of the shipment. Each piece is separately marked and all parts should be counted.

**4.2** Note any damaged items or components on the shipper's bill of lading BEFORE the truck(s) leave(s) the site. **You have 48 hours to notify Trachte of any missing or damaged items.**

**4.3** If moisture is evident as the truck(s) are unloading, write: "MOISTURE FOUND ON SHIPMENT," or similar words, on the shipper's bill of lading BEFORE the truck(s) leave(s) the site.

**4.4** Promptly report damaged or missing components or hardware, or presence of moisture to Trachte customer service. Please have your copy of the picking ticket and the bill of lading available BEFORE contacting customer service at **800-356-5824.**

## 5. MATERIAL STORAGE

**5.1** Trachte Building Systems, Inc. furnishes materials for your Create-A-Space system with either a zinc coated or factory-painted finish. While being stored on the site, galvanized materials may be subjected to staining (commonly known as "white rust"). To minimize conditions which can cause staining, the following precautions are recommended. Follow storage instruction located on the parts bundle.

**5.1.1** If moisture is found, promptly wipe each piece dry.

**5.1.2** If erection will be delayed more than 72 hours after delivery, store all materials in a dry location with fairly steady temperatures and adequate air circulation.

**5.1.3** If site and/or changing weather conditions cause condensation on materials' surfaces, DO NOT allow moisture to remain between pieces of stacked materials, or on formed sections. DRY each piece as soon as possible after moisture is discovered. Promote air circulation through material stacks and if available, use fans to insure adequate air movement among stacked materials.

**5.1.4** Diamond plate and partition panels should be stored inside.

**5.2** If proper storage facilities are not available in the field prior to installation, sheets may be stored for a limited time (24 to 48 hours) by placing wood blocking or cribbing between them to permit air to freely circulate and allow moisture to drain from finished surfaces.

**5.3** Never cover galvanized material with plastic sheets or wrappings; plastic will trap moisture, possibly creating worse conditions for condensation to occur.

## 6. PREPARATION

**6.1** Your Create-A-Space™ system has been manufactured to strict quality-controlled tolerances to ensure the highest quality product. The proper sizes, types and shapes are accurately placed at the locations indicated on the plans and details.

**6.2** Trachte furnishes a detailed layout drawing based on customer or installer provided dimensions, Trachte is NOT responsible for accuracy of the drawings related to the site. The following paragraphs outline some general recommendations which will help to ensure that your Trachte product will give you many years of satisfactory service.

**6.3** Dimensional tolerances: Your storage system features a number of components which allow for on-site adjustment and slight deviation from the planned layout.

**6.3.1** If a space is too small for the parts as planned by a few inches, adjustments may be made by trimming a panel slightly at the end of a row of units (the cut edge will be covered by a corner trim).

**6.3.2** If the space is too wide or too long, the extra space is typically absorbed by a hallway. Ensure that all hallways remain a minimum width, as required by code - usually they must be 44" width or greater to pass ADA single passageway standards.

**6.3.3** If there are overhead obstructions that interfere with the system, installation will be much more difficult. Walls containing doors can not have notches or cut-outs for mechanical systems, as this will weaken the structure of the walls.

**6.4** Consult with Trachte's customer service for advice in what adjustments to make to your storage system layout in the event that the plan does not exactly match your available space. Each system ships with a minimum of extra parts needed to create the agreed upon layout as referenced in the contract, so it's important that the plan is followed closely to prevent shortages at the end of the installation.

**6.5** Site cleanliness: Although minimal debris is produced during erection of a Create-A-Space™ system, less chance of damage or loss of components or parts will occur if the building site is kept clear of trash and debris at all times.

## 7. RECOMMENDED TOOLS

To expedite the erection of your Trachte Create-A-Space system, have the following types and quantities of tools available.

- ☐ Drill or screw gun - 1 per worker
- ☐ Hilti/Fastening gun with fasteners (if desired)
- ☐ Hammer drill with appropriate bits for anchors
- ☐ Assortment of step ladders in appropriate heights
- ☐ Electrical extension cords
- ☐ Self-locking welding clamps - 4pr
- ☐ Compound tin snips - 2pr
- ☐ Electric nibbler/shear - 1ea
- ☐ Rubber head mallets - 1ea
- ☐ Metal tape measure, 25 foot
- ☐ Metal tape measure, 100'
- ☐ Mason's level, 4 foot [1.22m] or longer, magnetic work best - 1ea
- ☐ 5/16" Hex nut driver bits - 2 per worker
- ☐ Chalk line, 20 foot - 1ea, no red or black color
- ☐ New, waterproof, black marker
- ☐ Heavy duty wire cutter (for mesh top) - 1ea

## 8. FASTENERS

**8.1** Trachte Building Systems, Inc. furnishes all fasteners for metal to metal, *and metal to floor connections,* connections within your storage system. Anchors to fasten the system to the existing building are only included if specifically stated in the sales contract.

**8.2** Pay close attention to the types and sizes of fasteners described in the text and your detail sheets. Always use the correct fastener, in the proper quantities as shown on erection drawings, for the intended application.

**8.3** Anchors may split or damage a slab or curb if driven too close to edges. Check with the project masonry contractor and fastener manufacturer to determine correct application and use.

## 9. ADDITIONAL SITE PREP

**9.1** Any demolition work should be finished prior to delivery of the storage system materials, to reduce the chances of damage and accumulation of dust.

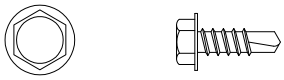
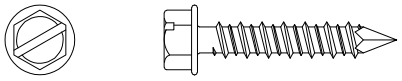
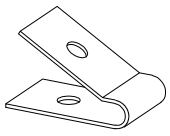
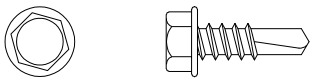
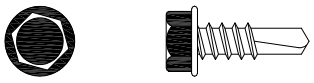
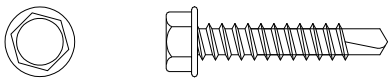
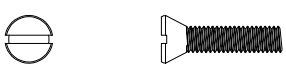
**9.2** Consider painting the existing walls and ceiling of your building prior to delivery and installation of your storage units. Additionally, apply any needed floor coatings in advance.

**9.3** Coordinate with your local fire and building inspectors BEFORE PLACING YOUR ORDER to ensure that your sprinkler system (if required by local codes) is compatible with your layout. Trachte is not responsible for obtaining any needed permits.

**9.4** If your project includes HVAC work, ensure that your subcontractors are provided with written documentation of your layout, including height. Be sure that any new duct work or mechanicals are installed above the top of you storage system.

**9.5** In many conversion projects, lighting must be moved and adjusted. Lighting fixtures should ideally be located over the center of hallways to provide light into units on both sides of the hall. Avoid placing lights directly above or within units when possible, as this makes maintenance more difficult. Consider motion or timer switches to conserve energy and reduce costs.

## FASTENER DESCRIPTIONS:

| Actual Size Profile | Description & Part # (P/N) | Typically Used For: |
|---|---|---|
|  | #8 x 1/2" LONG SELF–DRILLING SCREW #508670 | ATTACHING GALV MATERIALS TOGETHER. |
|  | #8 x 1/2" LONG SELF–DRILLING SCREW #508674 | ATTACHING WHITE PAINTED MATERIALS TOGETHER. |
|  | TAPCON 1 1/4" CONCRETE ANCHOR #502840 | FASTENING BASE TRACK OR CHANNEL TO EXISTING FLOORS. |
|  | WIRE MESH CLIP #5050008720 | FASTENING WIRE MESH TO GALV LIGHT GAUGE MATERIAL. |
|  | #12 x 3/4" LONG SELF–DRILLING SCREW #760600 | ATTACHING PARTITION PANELS AND DECKING TO STRUCTURE FOR MULTI–STORY PROJECTS & FOR ATTACHING BURGLAR BAR |
|  | #12 x 3/4" LONG SELF–DRILLING SCREW #760674 | ATTACHING WHITE PAINTED BURGLAR BAR. |
|  | #12 x 1 1/4" LONG SELF–DRILLING SCREW #760602 | ATTACHING STRUCTURE MATERIAL TO STRUCTURE MATERIAL FOR MULTI–STORY PROJECTS |
|  | BOLT, #8–32 x 3/4", DOOR HINGE #506500 | ATTACHING SWING DOOR TO JAMBS. |
|  | NUT, DOOR HINGE #8–32 #506510 | ATTACHING SWING DOOR TO JAMBS. |

FASTENERS

## 10. LAYING OUT THE CREATE-A-SPACE SYSTEM

**10.1** When satisfied with the overall length and width of the existing space, proceed with laying out the partition and corridor system. You will be snapping a number of chalk lines on the floor to ensure that the system is erected square and plumb, even if the floor is not. Chalk lines will also mark wall locations.

**10.2** Locate the first line: Select a starting corner, preferably one that is square. Measure 10' in from the corner on the width and mark this location. Measure and mark 10' from the other corner on the long side. Snap a chalk line on the two marks parallel to the long dimension of the floor, 10' in from the wall.

**10.2.1** Locate this line carefully, as it will be the main alignment point for wall erection.

**10.2.2** Measure the length of the chalk line; it should be at least as long as the length shown on the plans and details. If it is not, correct the condition or revise the layout before proceeding.

**10.3** Locate the first perpendicular line across the floor by constructing a true perpendicular line to the first line snapped.

**10.3.1** Snap your first chalk line one bay depth in from the back wall. Next, construct a 6-8-10 triangle on mark and extend a chalk line across the short dimension of the building. 10.3.1 Add note 6-8-10 triangle can be made bigger if needed.

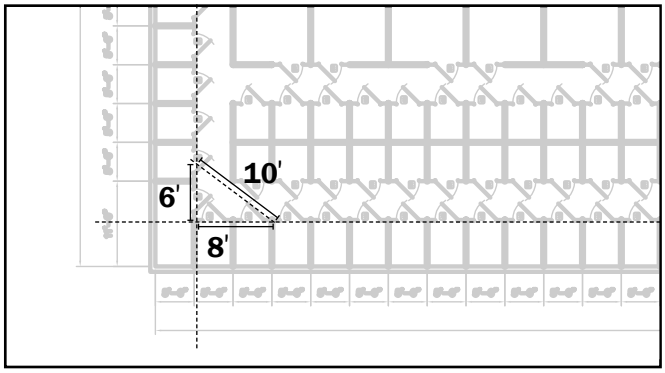



**Fig. 2 - Creating a 6-8-10 Triangle**

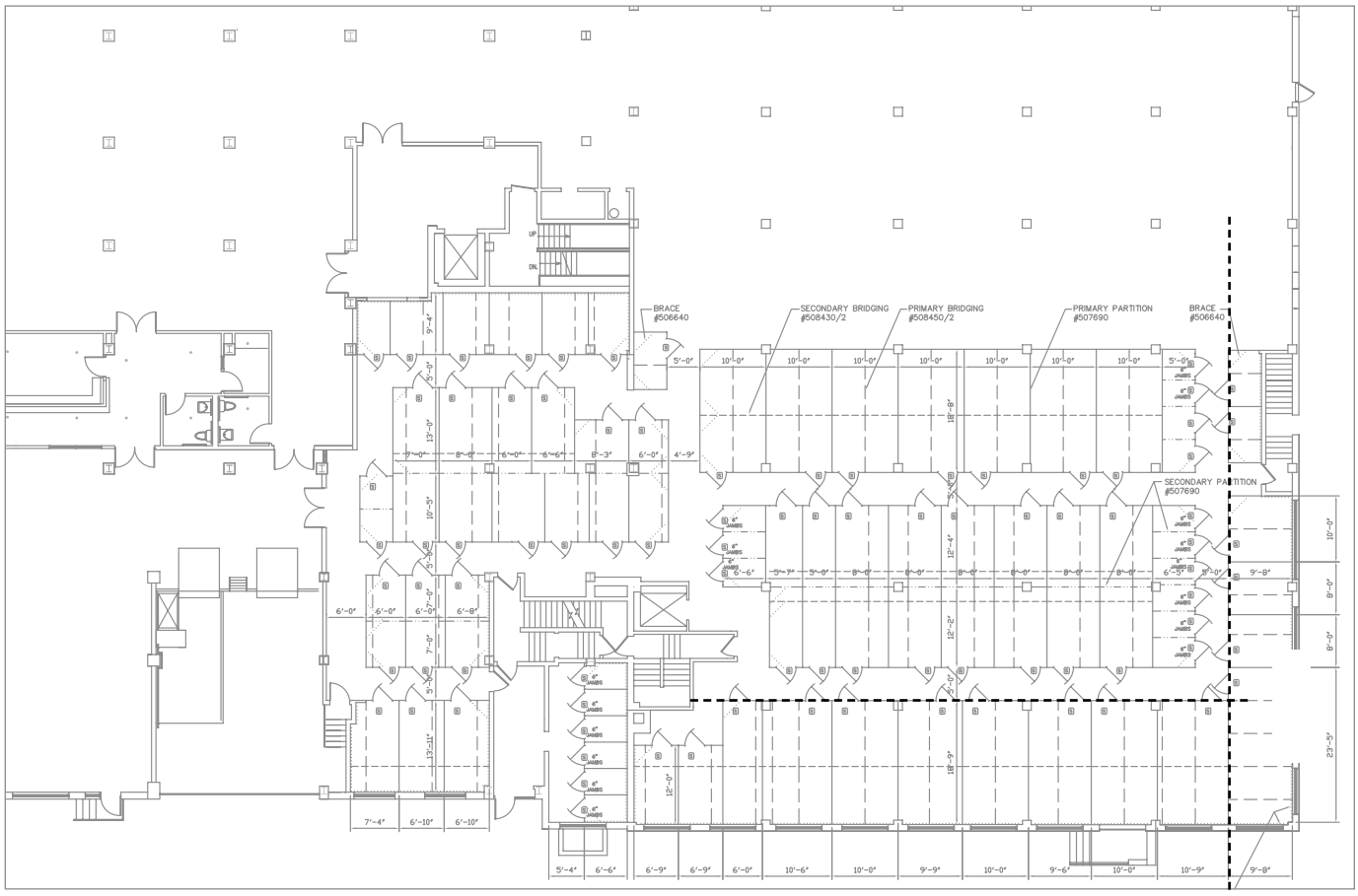



**Fig. 1 - Typical plan**

*The heavy dashed lines identify an ideal location to snap reference lines for this installation.*

**10.3.2** Measure the width of the bay along this second chalk line; it should be the same as shown on the plans and details. If not, make corrections to either the site or layout before proceeding.

**10.4** Locate lines across the floor width. At each edge on the "long" floor sides, mark the bay intervals and snap a chalk line across the floor on each set of marks.

**10.5** Verify all dimensions again to make sure that chalk lines are parallel or perpendicular to each other and match the drawings, including space allotted for hallways.

**10.6** Once satisfied with the chalk line locations, mark the chalk line intersections with a waterproof marker so they won't wear off or wash away during construction.

**10.7** Before starting assembly, take time to carefully study this particular floor plan. Note any differences or incompatibilities with the general procedures provided in this manual, and if there are conflicts, follow the project's specific details and drawings.

**10.8** If any instructions are unclear, call Trachte's customer service dept. at **800-356-5824** for an explanation. Be ready to review the plans with TBS staff and have the order number (from the lower right corner of the plans) handy.

**10.8.1** Taking the time to thoroughly study the plans and details will help to better understand what components are required, where they go in the project, how they relate to each other and when they are installed in the assembly sequence. Becoming familiar with these procedures will help prevent mistakes and result in a quality project in the shortest time possible.



# WHERE DO I START?

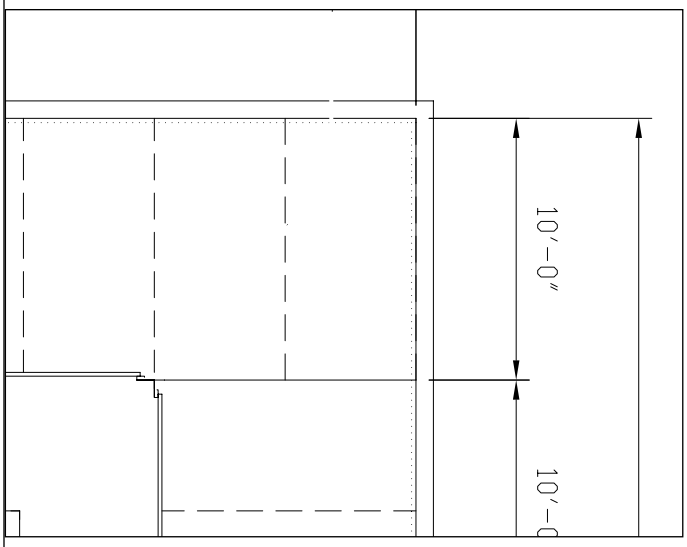
It is recommended to start building your system from an existing wall or corner, and work outward. The existing wall will help hold up the initial components as you get started. Section 11 explains how to start at an existing wall.

If you are building a group of storage units that are free standing, start by assembling corner components to create a stable project as quickly as possible. Section 16 explains how to start a bank of freestanding units.

This manual is organized in TASKS, not the exact sequence for any specific job. As you build, look for your next task in the table of contents.

When planning the building sequence, you may also find that it is helpful to consider where your opportunities for adjustment are (a ribbed section of wall, a hallway that could allow for an inch of play, etc) and build those areas which do not allow flexibility first.

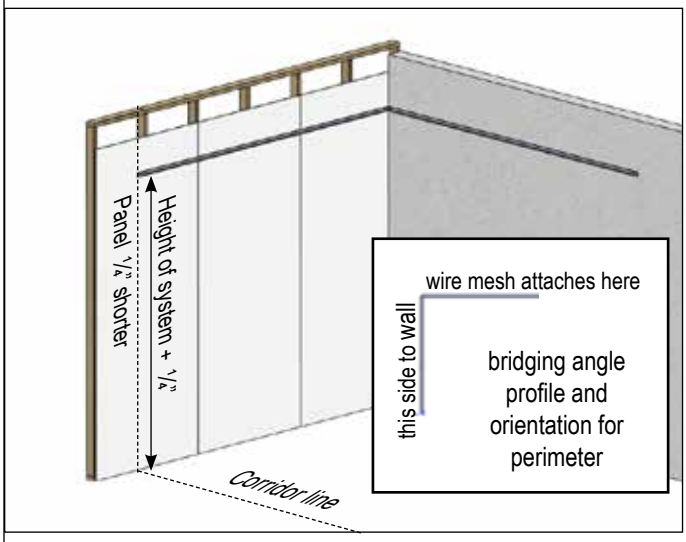
**Please see page 35 before erecting. PREVENT COMMON MISTAKES**



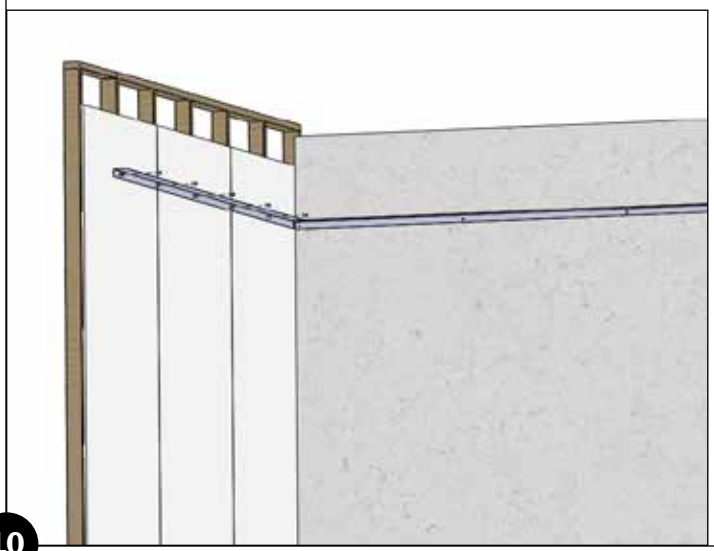

*Above: Close up example of plan showing bridging angle*

## SECTION 11 INSTALL BRIDGING ANGLE ALONG PERIMETER OF UNITS ON EXISTING STRUCTURE

**11.1** Check the plans to see if bridging angle is provided for the entire perimeter. Be sure to verify the part number for the bridging angle. The partition system may ship with a number of angles in various lengths and gauges. If there are columns within your area, these may also require the angle.




**11.2** Position the top of the angle at the system height. Measure from the floor at each point where a partition wall meets an existing wall. The top of the system will follow any slope of the floor. The top of the system will follow any slope of the floor. Panels are manufactured 3/4" shorter than then system height to allow for floor variation. Use fasteners appropriate to the material of the existing structure. These are not provided by Trachte unless specified in the sales contract.

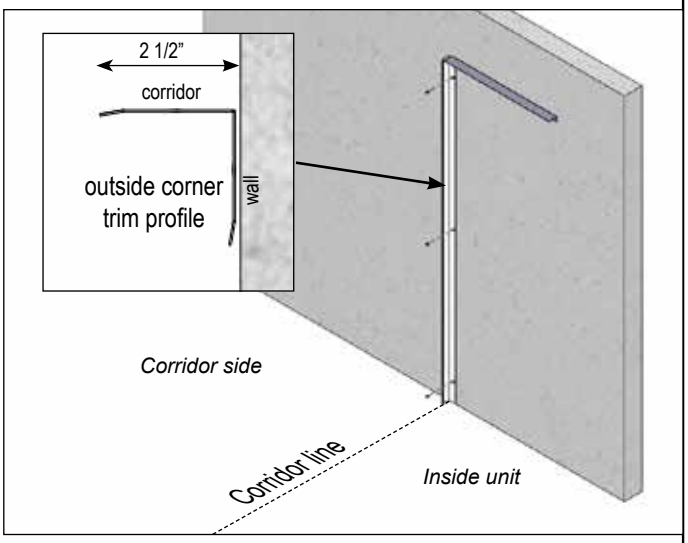


**11.3** Fasten the bridging angle at each end and approximately every 24 inches or into wall studs, depending on the wall construction. Use fasteners appropriate for the material of the existing walls. These are not provided by Trachte unless specified in the sales contract. Continue with the sections on starting corridor walls.

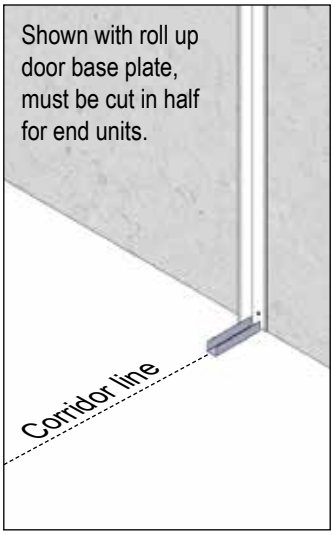
## SECTION 12 CONNECT CORRIDOR WALLS TO EXISTING WALLS

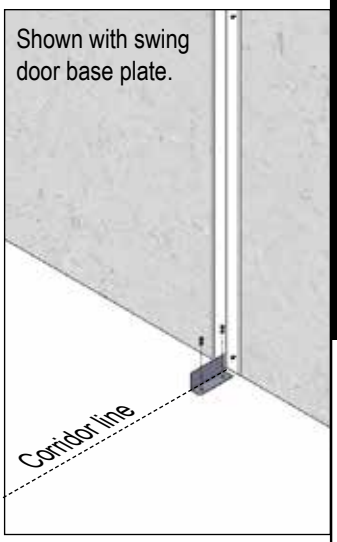
**NOTE: This procedure assumes starting with a jamb, not a filler panel. Check the plans for details on this system.**

**12.1** Attach outside corner trim to the existing wall using three evenly spaced fasteners. Locate the trim as illustrated, glossy white side facing the hall, with the face on the structural line for the corridor wall. Use a 4' level to orient the trim in one plane, while following the wall in the other. Use fasteners appropriate to the material of the existing structure. These are not provided by Trachte unless specified in the sales contract.



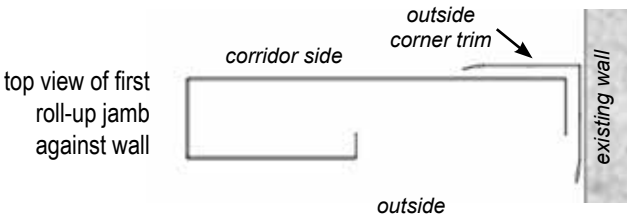

**12.2** Locate the front edge of the base plate so the front edge is 1/32" behind the line for the corridor (See section 15 for more info on base plates). This will put the front edge of the door jamb flush with the corridor line. Make sure the base plate is positioned so the door jamb will be as close as possible to the existing wall, yet plumb. If the door jambs are not perfectly vertical, the rest of the system will not be plumb. Fasten base plates to the floor using appropriate fasteners.

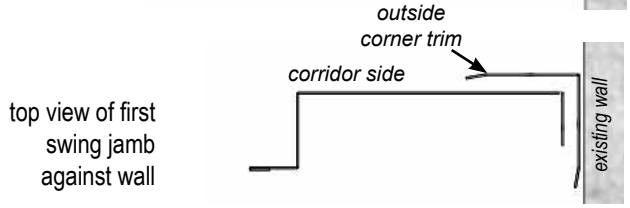


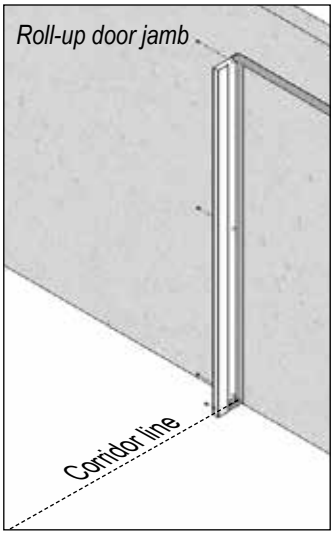



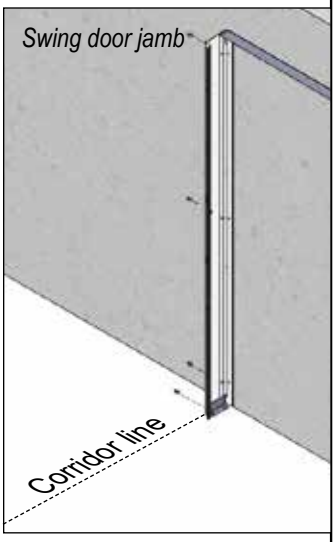

**CAUTION: Components fastened to the floor present a tripping hazard.**

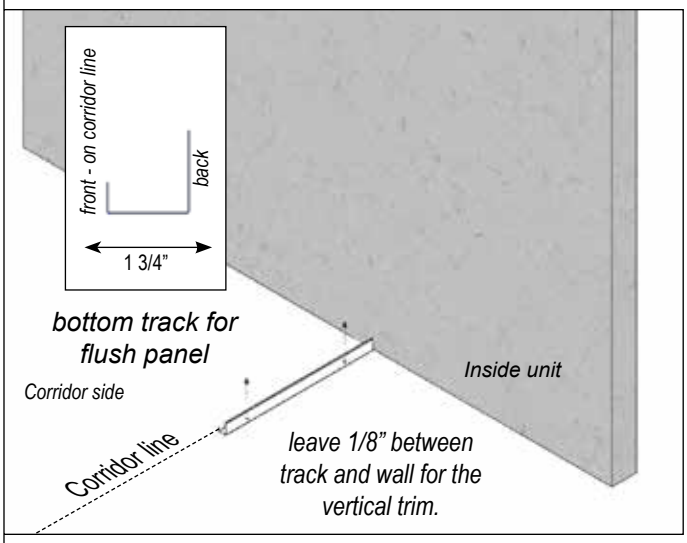
**12.3** Depending on the mix of units in the layout, there may be multiple sizes of jambs. Refer to the plans and make sure to start with the right part. Position a single jamb, plumb in both planes, and fasten to the base plate and corner trim using white self-drilling screws. Continue with section on assembling corridor walls.



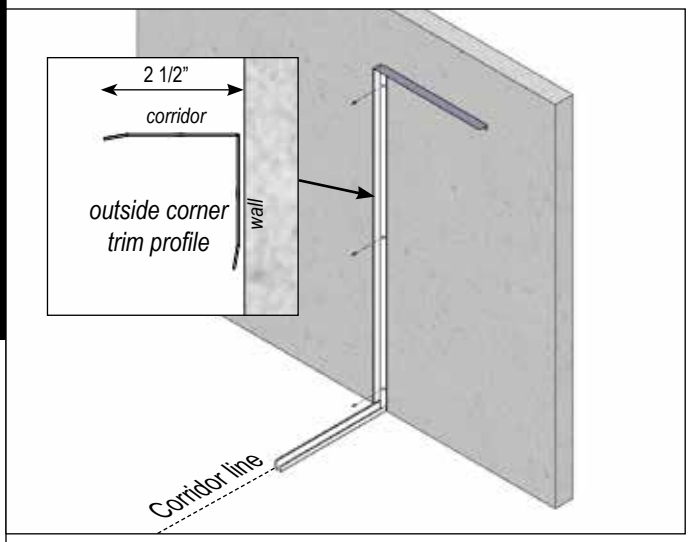





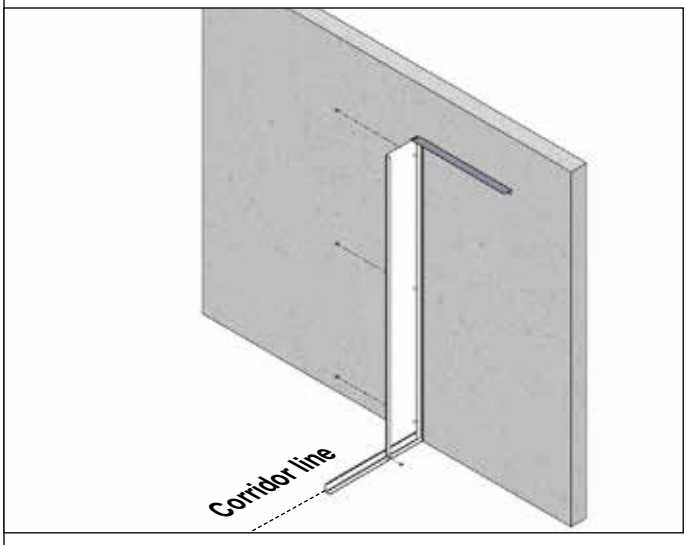

## SECTION 13 CONNECT FLUSH PANEL WALLS TO EXISTING WALLS

**13.1** Locate the bottom track and, if needed, cut a piece to fit between the wall and the next feature (door jamb or end of this wall). Position the bottom track so the front edge (shorter leg) is on the corridor line marked earlier and facing the hallway. Fasten track to the floor at each end and approximately every 36 inches using the proper fasteners for the surface.

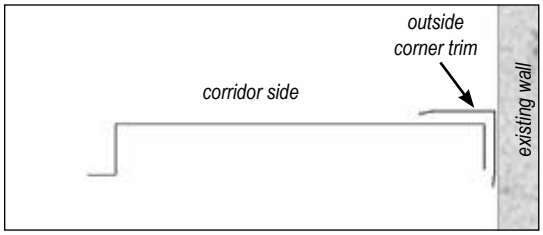



**13.2** Attach outside corner trim to the existing wall using four evenly spaced fasteners. Locate the trim as illustrated, glossy white side facing the hall, with the inside face on the corridor line for the front wall. Use a 4' level to orient the trim in one plane, while following the wall in the other. Use fasteners appropriate to the material of the existing structure. These are not provided by Trachte unless specified in the sales contract.

**CAUTION: Components fastened to the floor present a tripping hazard.**




**13.3** Position the first flush panel into the track, as close to the existing wall as possible, yet plumb. Plumb and fasten flush panel to the corner trim using three white self-drilling screws, spaced evenly. Refer to site plan for fastener spacing. Continue with the section on flush panel wall construction.

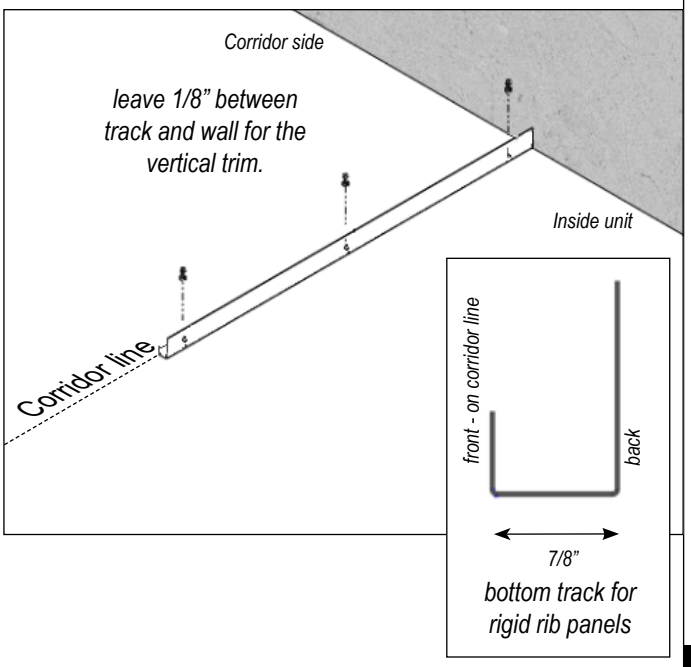



*top view of first flush panel against wall*

## SECTION 14 CONNECT RIBBED PANEL WALLS TO EXISTING WALLS

**NOTE: Install the brighter side of the panel so it faces the shorter leg on the bottom track and the corridor wall.**

**14.1** Locate the narrow (7/8" width) bottom track and cut a piece to the length needed to fill the gap between the wall and the next feature (door jamb or end of this wall). Position the bottom track so the front edge (shorter leg) is even with the corridor line marked earlier and facing the hallway. Fasten track to the floor at each end and approximately every 36 inches using the proper fasteners for the surface.




**14.2** Attach a starter trim to the existing wall using three evenly spaced fasteners. Locate the trim as illustrated, glossy white side facing the hall, with the face on the corridor line for the front wall. Use a 4' level to orient the trim in one plane, while following the wall in the other. Use fasteners appropriate to the material of the existing structure.

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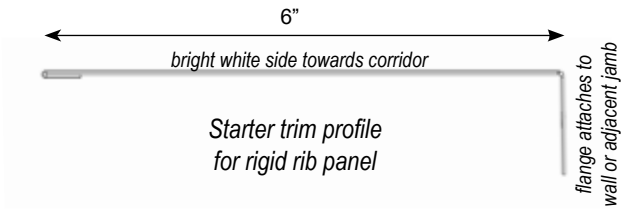
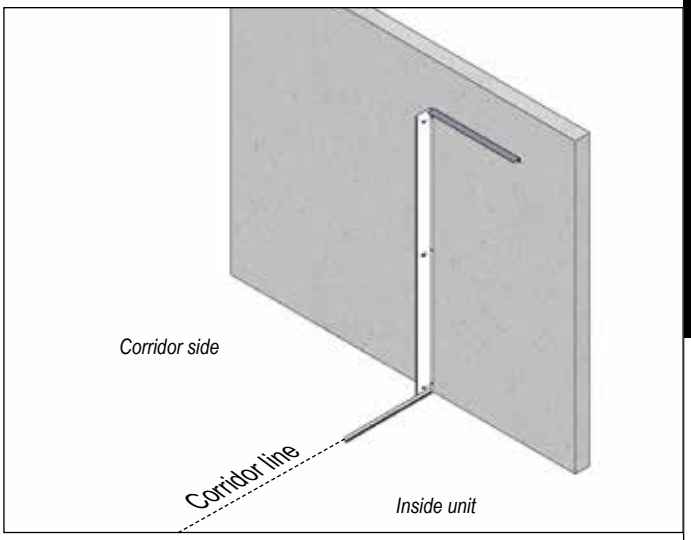
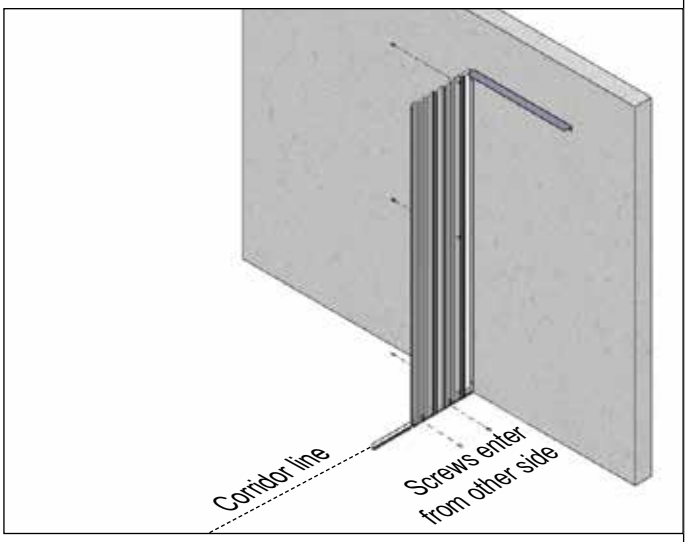
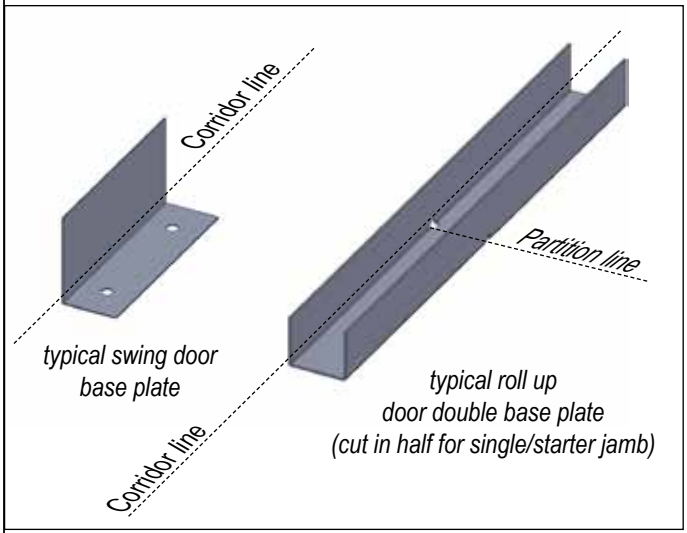


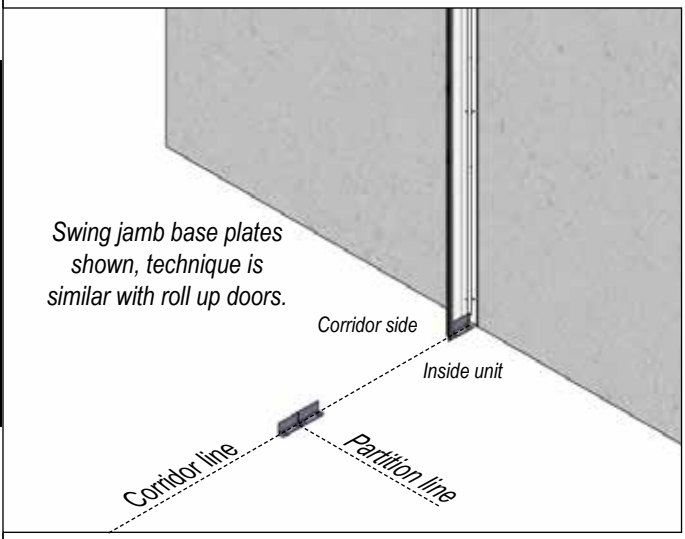



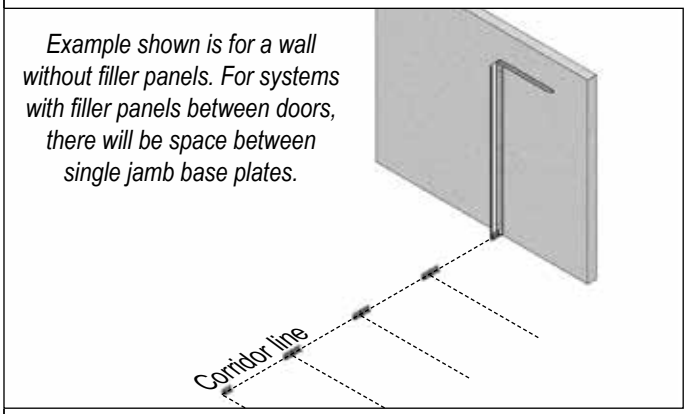

**14.3** Position the first ribbed panel in the bottom track so the bright white side is facing the corridor and is as close to existing wall as possible. Plumb and fasten the panel to the starter trim using three white self-drilling screws, spaced evenly. Make sure the screws fasten to the outside rib of the panel. Ribbed panels are secured to the bottom track with a screw in each corner. Continue with the section on ribbed wall erection.




**CAUTION: Components fastened to the floor present a tripping hazard.**




## SECTION 15 ERECT CORRIDOR WALLS

**NOTE: Depending on the plan, there may be flush or ribbed spacer panels between the doors, as needed, for the unit sizes. To erect these walls, refer to the correct sections.**

**Install base plates**

**15.1** Position the front edge of the base plate to lie 1/32" back from the corridor line. Fasten base plates using two fasteners per plate. Roll-up jambs are installed using a "U" shaped base plate. Cut a roll-up base plate in half to install a single/starter jamb. Swing door jambs are installed using an "L" shaped angle. The base plates vary in length to match the jamb width.

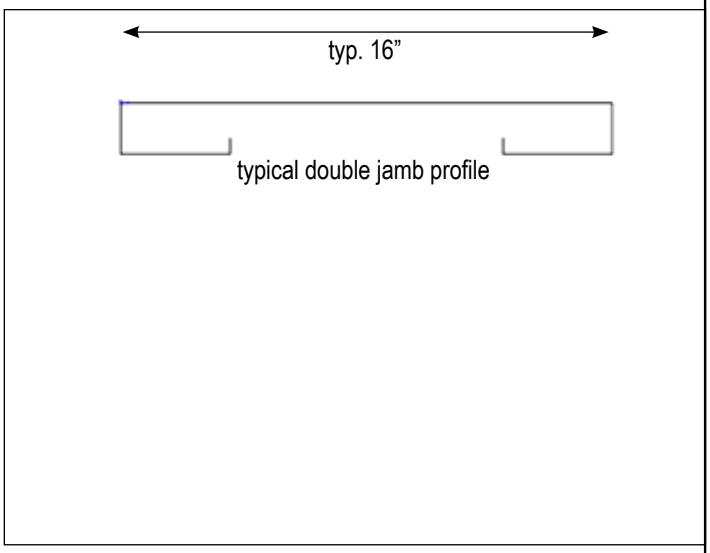
**15.2** Mark the locations of corridor wall base plates on the floor according to the plan. Double jamb base plates should be centered on the partition wall center line. Position base plates 1/32" back from the corridor line for the corridor wall.

**15.3** Position the base plates along the corridor wall as marked above, and fasten the door jamb base plates to the floor using the correct fasteners. Start by assembling one complete unit. Once comfortable with the technique, base plates can be installed for an entire row of units to save time.

**CAUTION: Components fastened to the floor present a tripping hazard.**

**NOTE: Even if the floors are not level, ensure that the wall components are installed as plumb as possible. On severely sloped floors, this may result in a "stepped" appearance during assembly, but this will be hidden by the top trim, which will be installed later. Make sure headers are installed level, even if the floor isn't. If the floors are severely sloped, the pre-drilled holes provided on jambs may not line up on both sides and new holes should be made adjacent.**

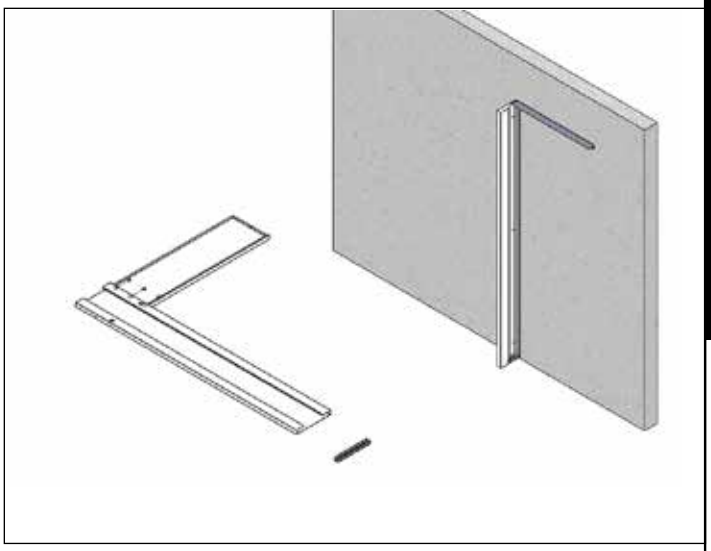
**NOTE: Tops of the headers may assemble a half inch to an inch, lower than the top of the jambs in some cases. This is normal and will be covered by top trim.**



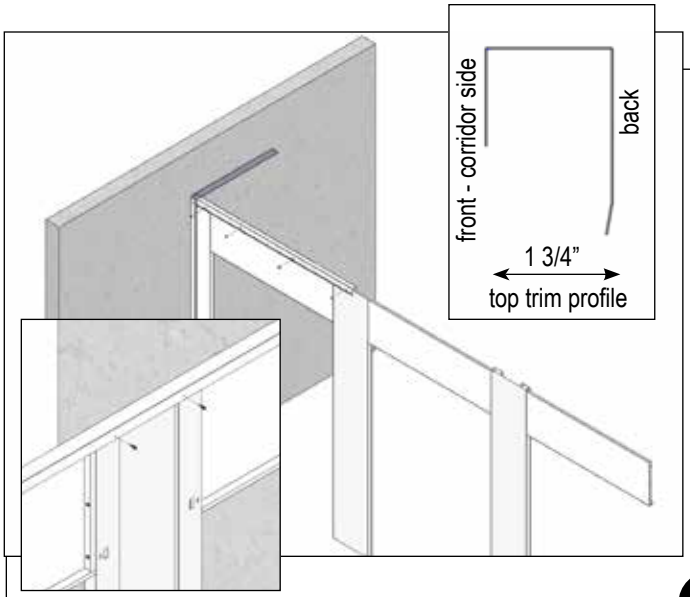

**Assemble the door frame (roll-up doors)**

**15.4.1** If starting from an existing wall, there should be a single door jamb that was installed earlier. To finish the first door opening, lay out a door jamb and header, face down, on a piece of cardboard, or similar, **to prevent scratches**. The single narrow flange on the header is always the top.

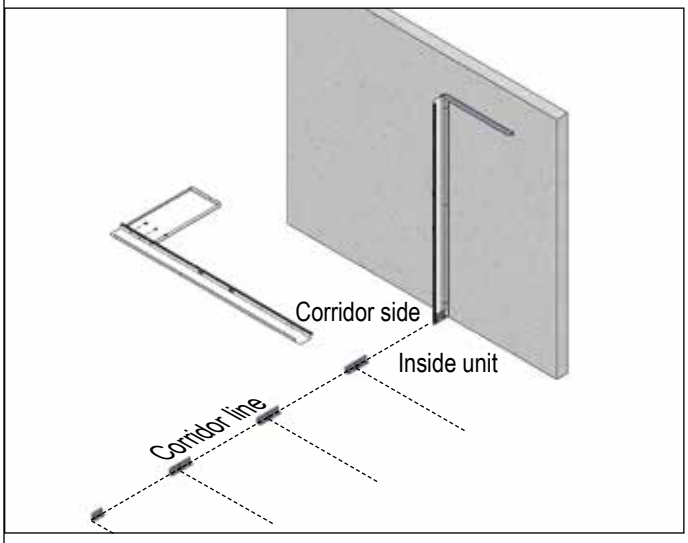
**15.4.2** Position the header to line up with the punched holes on the door jambs. Fasten from the header into the door jamb using zinc screws. Continue adding door jambs and headers to complete the wall. Walls become stiffer as top tracks and partitions are installed.



**15.4.3** Install the top track (channel with 10° bend in the long leg) in lengths as the wall is constructed to keep the wall straight. Fasten the top track with 4 evenly spaced white screws to the headers and jambs. For a neater appearance, install the screws at a consistent height. Be sure to install them low enough to go into the headers (which can be a 1/2” to an inch shorter than jambs). From inside the unit, fasten the top track to the back of each jamb as shown.




**NOTE: Jambs are supplied as single or double (double jambs are used between two doors). Different jambs are used for swing and roll-up doors.**

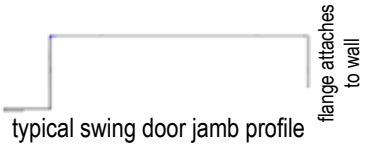



**NOTE: Different jambs are used for swing and roll-up doors. Check the layout details carefully to ensure the parts are used in the correct locations.**

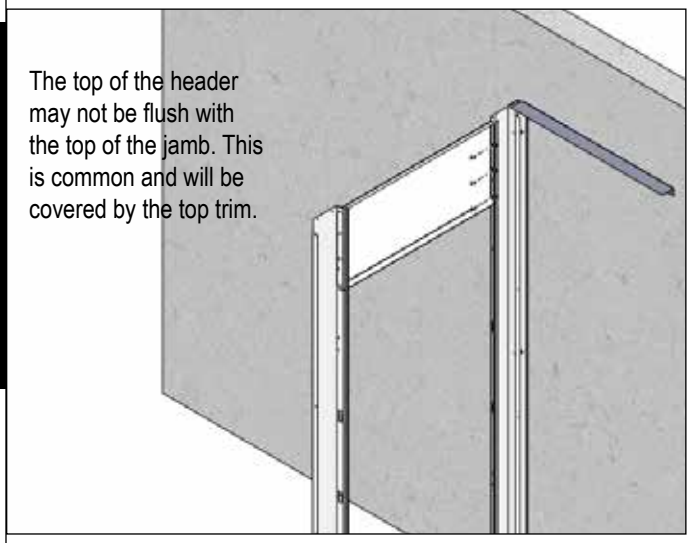
---

**Assemble the door frame (swing doors)**

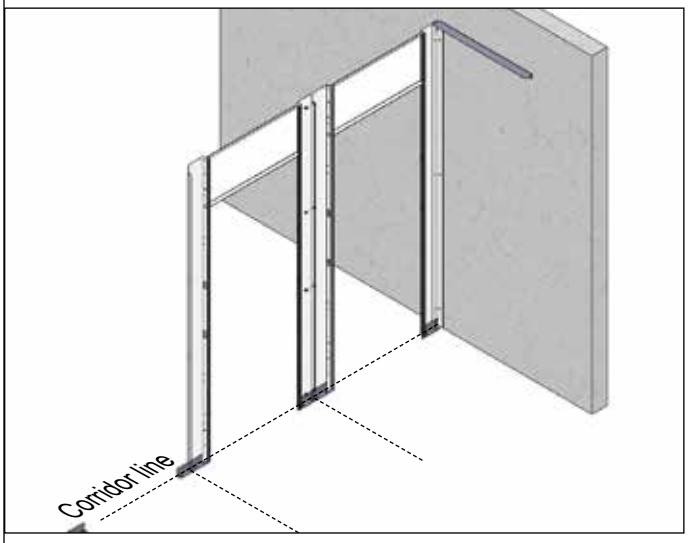
**15.5.1** If starting from an existing wall, there should be a single door jamb that was installed in section 12. To finish the first door opening, lay out a door jamb and header, face down, on a piece of cardboard, or similar, **to prevent scratches**. The single narrow flange on the header is always the top.



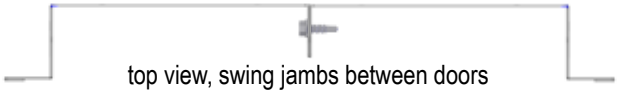

typical swing door jamb profile




**15.5.2** Keep the front surface of the door jambs and headers flush to each other. Line up the pre-punched holes in the header with the pre-punched holes in the jamb. Fasten from the header into the door jamb using zinc screws. For later door jamb assemblies, these can be pre-assembled on the floor with two door jambs and a header and then installed into the corridor wall as a unit.




**15.5.3** Fasten the next header and jamb assembly to the previously installed assembly using the prepunched holes in the flanges and zinc self-drilling screws. Continue adding door jamb/header assemblies as needed, alternating with construction of partition walls so that they support each other. Install top track as described in step 15.4.3.



top view, swing jambs between doors

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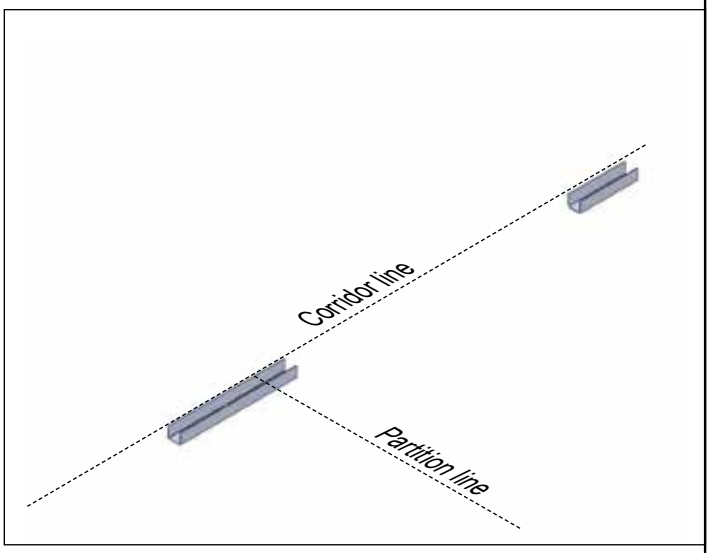
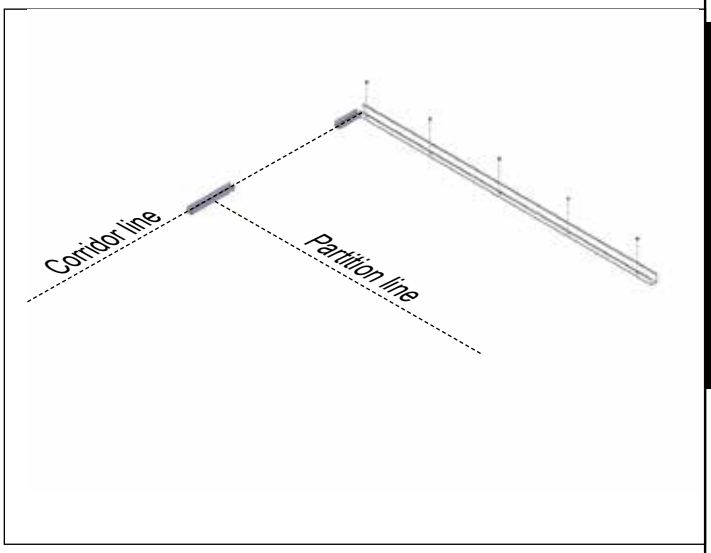
**NOTE: If the floors are sloped, keep the jambs and headers plumb and level, drilling new holes for the header on one side if needed.**

## SECTION 16 START A FREESTANDING BANK OF STORAGE UNITS

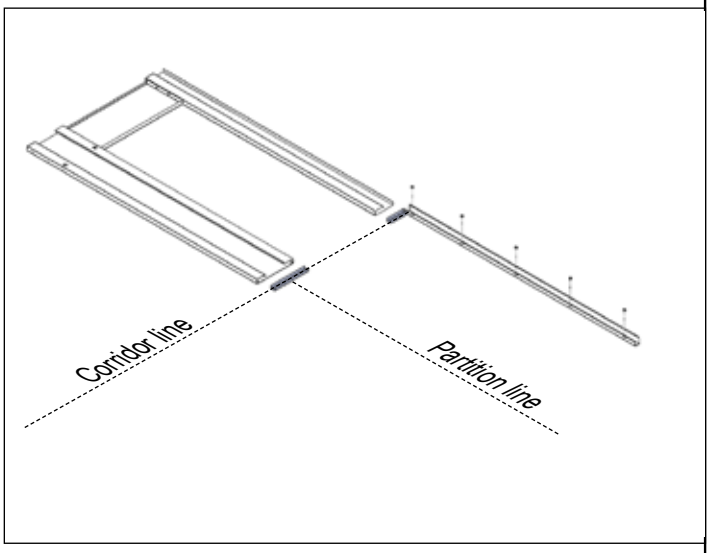
**16.1** Locate and install base plates. Position the front edge of the baseplate to lie 1/32" back from the corridor line. Fasten base plates using two fasteners per plate. Roll-up jambs are installed using a "U" shaped base plate. Cut a roll-up base plate in half to install a single/starter jamb. Swing door jambs are installed using an "L" shaped angle. The base plates vary in length to match the jamb width. See steps 15.1 - 15.3 for additional details on baseplate installation. **See options and 27.2 for chamfered corner.**

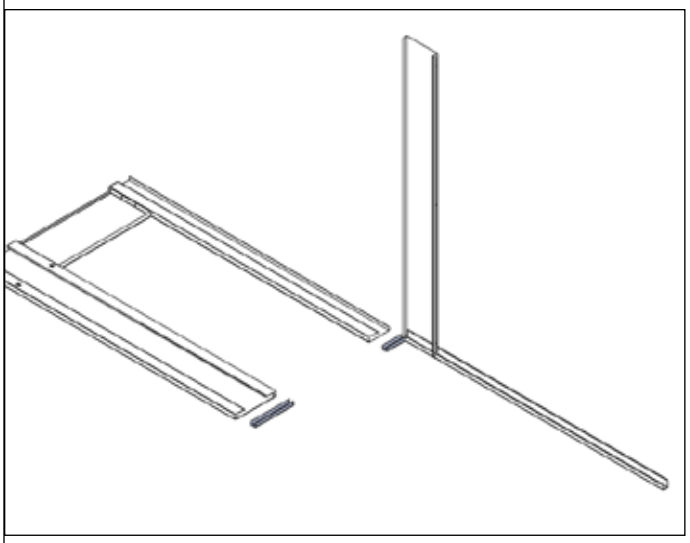



**16.2** Install the bottom track for the blank (side) wall of the corridor. The specific project details will call out either flush panel or rigid rib corridor wall. Ribbed panel walls are built with narrow 7/8" bottom track, while flush panel walls are built with wider 1 3/4" bottom track. Cut the track to fit the length of the wall if/as needed. Position the bottom track so the front edge (shorter leg) is even with the corridor line marked earlier and is facing the hallway. Fasten the bottom tracks to the floor at each end and with at least 2 fasteners on 36" centers.

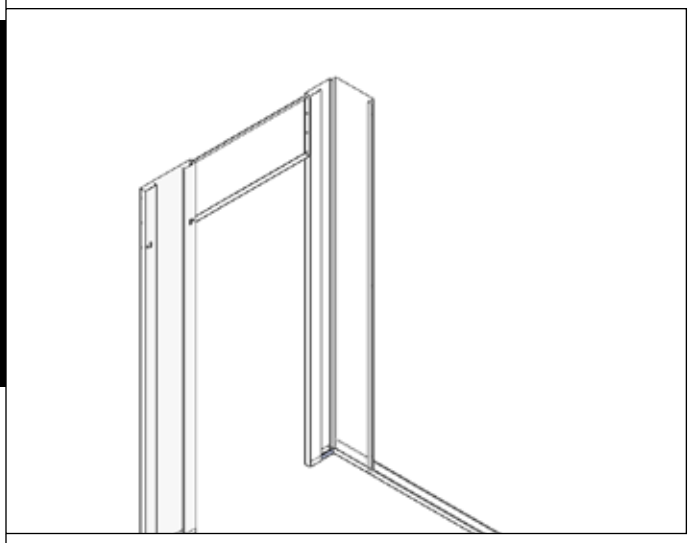



**16.3** Lay out and fasten a door frame assembly, face down, on a sheet of cardboard to prevent scratching it. See section 15 for additional information on the various jamb types, and refer to job specific details and layout to ensure that the correct jambs are used.





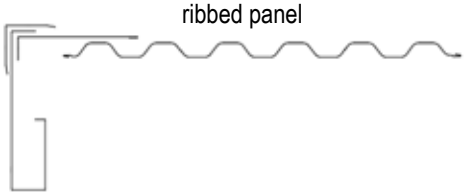
**16.4** Install the first flush panel (or starter trim and first rigid rib panel) adjacent to the location where the first door frame will be installed. Plumb and fasten the flush panel (or ribbed panel and starter trim) with a bright white screw at each lower corner to the bottom track. An assistant or temporary bracing will be needed to help support the panel until the door frame is installed. **See options and 27.2 for chamfered corner.**



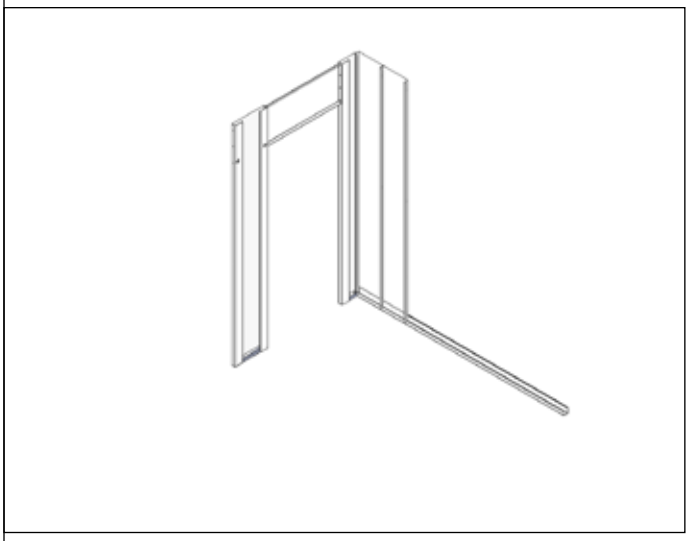
**16.5** Position the door frame assembly upright so that it can be attached to the base clips. Verify that the opening is plumb and square, and fasten to the base clips and adjacent flush panel or starter trim. A corner trim will eventually cover the corner, hiding any gap and providing additional strength, but it should not be installed until after the top trim is installed on both walls.

top view, corner assembly with flush panels

top view, corner assembly with starter trim and ribbed panel



**Depending on the project, center midspan angle may be provided for the rigid-rib panel. See project plans for midspan angle installation detail if applicable.**



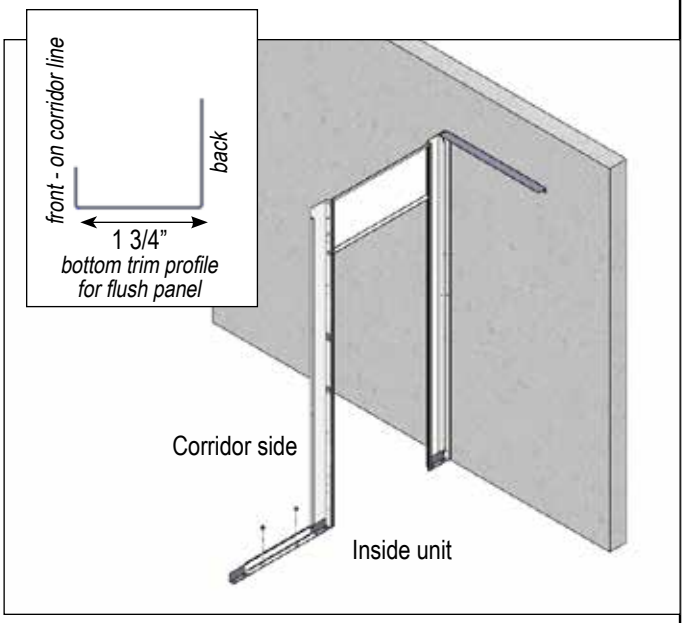
**16.6** Continue assembly of the corridor (door) wall and blank wall as outlined in other sections of this manual. Alternate between adding door frame assemblies and partition walls to reduce or eliminate the need for temporary bracing. **See options and 27.2 for chamfered corner.**

## SECTION 17 INSTALL FILLER PANELS AND BLANK WALLS

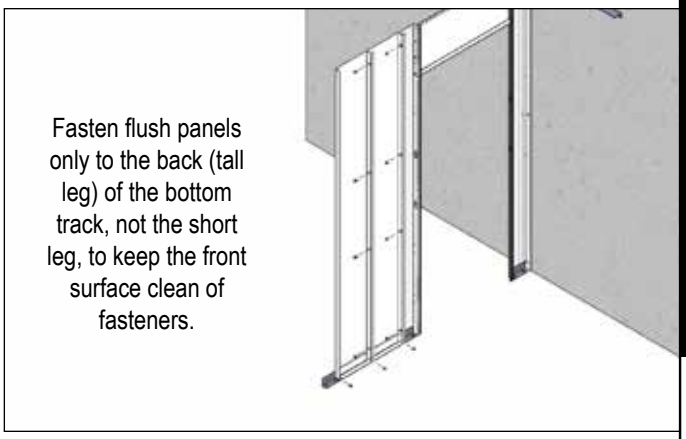
**CAUTION: Components fastened to the floor present a tripping hazard.**

**Corridor walls with flush panel spacers**

**17.1.1** Depending on the width of the units on a specific plan, there may be spacer panels between the doors. If the plan includes these, locate the bottom tracks and cut them to the correct length so the tracks meet up with the door jambs. Fasten the bottom tracks to the floor. Fasten track to the floor at each end and approximately every 36 inches.

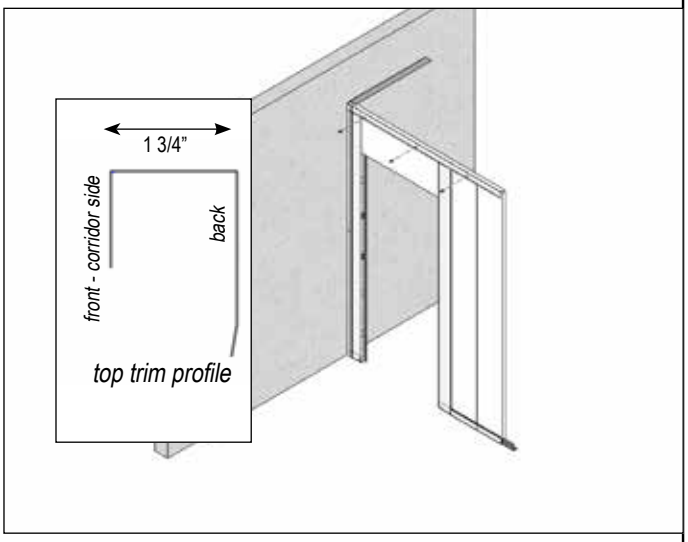



**17.1.2** Insert the first panel into the track. When flush with the adjoining jamb, fasten the flange to the door jamb from behind, and then to the bottom track, from the inside of the unit. Use two white self-drilling screws on the bottom of each panel. Keep the height of the screws consistent on all panels for a neat appearance. Install the flush panels as needed and fasten per the details provided with the plans. Install door jambs and flush panels as shown.

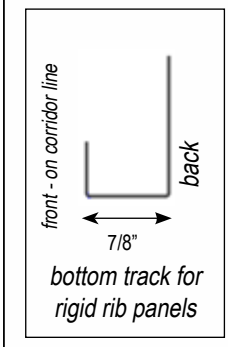



flush panel profile
(2 panels and one swing jamb shown)

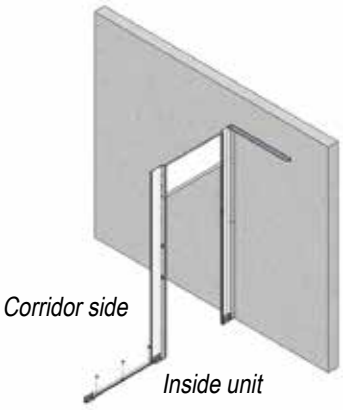
**17.1.3** Install the top trim (channel with 10 degree bend on the long leg) in lengths as the wall is constructed to keep the wall straight. Fasten the top track, using two white self-drilling screws per panel, and about every 24 inches to the headers and jambs. Install the screws at a consistent height for a neat appearance.




**NOTE: When installing Flush panels in a corridor wall, make sure to use the door jambs with square bends on each side.**




bottom track for rigid rib panels




**NOTE: Install the brighter side of the panels facing the hall, with the shorter leg of the bottom track facing the corridor.**

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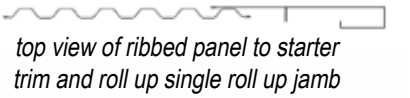
**Corridor walls with rigid rib panel fillers**

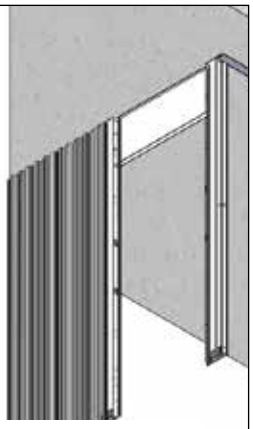
**17.2.1** Depending on the width of the units on a specific plan, there may be filler panels between the door jambs. If the plan has these, locate the bottom tracks and cut them to the correct length so the tracks just meet up with the door jambs. Install a narrow 7/8" bottom track to receive the ribbed panels. Fasten track to the floor at each end and approximately every 36 inches.

**CENTER MIDSPAN ANGLE IS PROVIDED FOR THE RIGID-RIB PANEL ONLY. SEE PROJECT PLANS FOR MIDSPAN ANGLE INSTALLATION DETAIL IF APPLICABLE.**



top view of ribbed panel to starter trim and roll up single roll up jamb

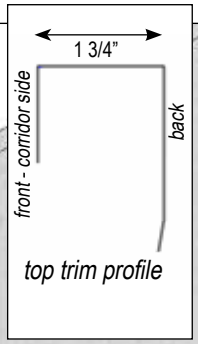
top view of ribbed panel to starter trim and roll up single swing jamb



Rigid rib panel interlocking detail

**17.2.2** If not already installed, attach a starter trim to the jamb to provide a transition to the ribbed panel, as shown in the illustration to the left.

**17.2.3** Insert the first panel into the track so that it overlaps the adjacent jamb or trim by about three inches. When plumb, fasten the panel to the bottom track, remove and replace, using one screw on the first and last rib from the inside of the unit. Also fasten it to the jamb or trim adjacent to the panel. Keep the height of the screws consistent on all panels for a neat appearance. Continue to add panels, interlocking and fastening the panels as the wall is created. Pull each panel tight to keep the seam locked until the panels are plumbed and fastened.



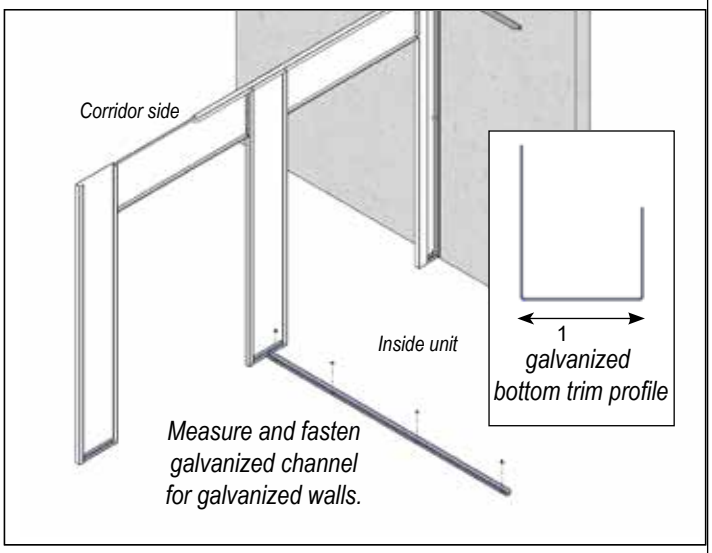

top trim profile




**17.2.4** Install the top trim (channel with 10 degree bend on the long leg) in lengths as the wall is constructed to keep the wall straight. Fasten the top track, using two white self-drilling screws per panel, and about every 24 inches to the headers and jambs. Install the screws at a consistent height for a neat appearance.

## SECTION 18 INSTALL INTERIOR R-PANEL PARTITION WALLS

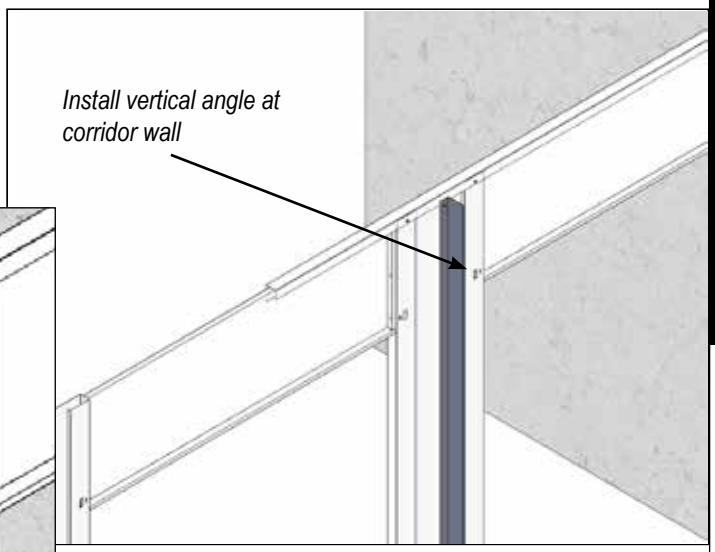
**CAUTION: Components fastened to the floor present a tripping hazard.**

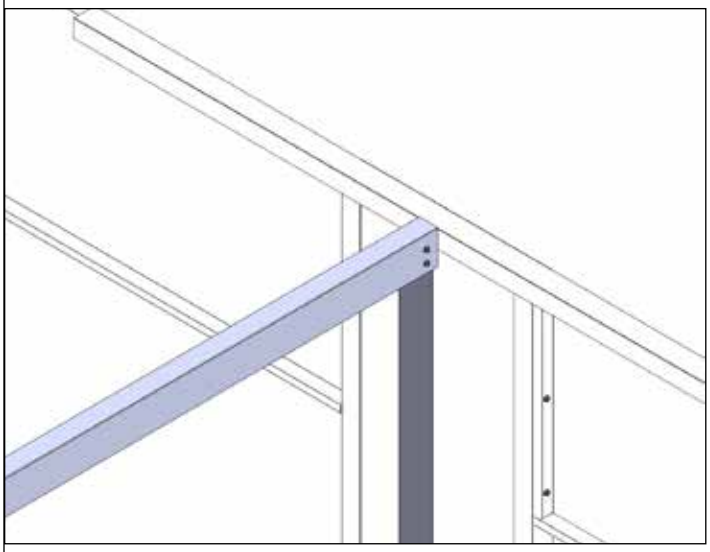



**Corridor wall to R-panel partition**

**18.1** Locate the galvanized bottom channel and cut to the length needed for the wall. This part will be cut to fit between the corridor wall and the back wall. The line marked earlier for the wall location is the centerline of the wall. The wall can be built offset slightly to use the existing line or mark a new, offset line to get the wall centered as shown on the plans. Fasten the bottom track to the floor at each end and approximately every 36 inches.

**18.2a** Install the galvanized angle trim to start the partition wall, cutting to the system height, if necessary. Plumb and attach the vertical trim to the corridor top trim and partition bottom track.

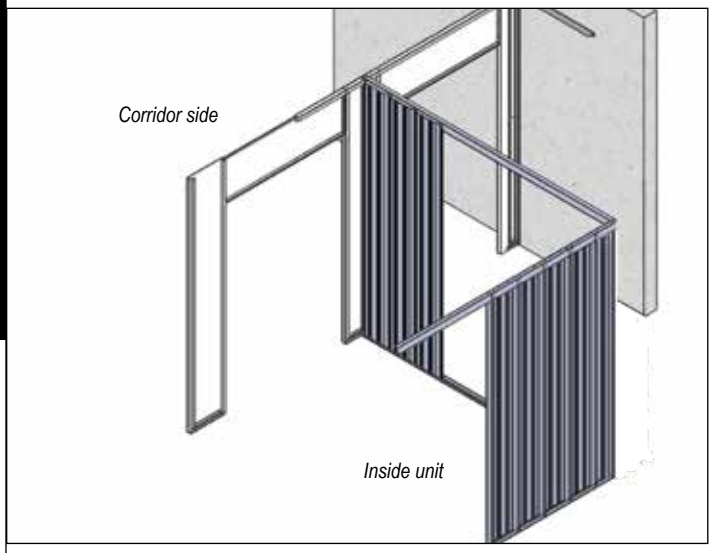




**NOTE: When connecting to a corridor wall with two single door jambs, the partition wall can be offset slightly so the partition wall can be fastened to the door jamb flanges for a more secure installation. The first panel should be notched, top and bottom for this to work.**

---

**18.2b** Position and cut, if needed, a top angle for the partition wall. Plumb the corridor wall, then fasten the partition top angle to the previously installed vertical trim and perimeter angle or back wall. Check the plan details and use the correct part number for the angle, as it is provided in multiple gauges for various uses.

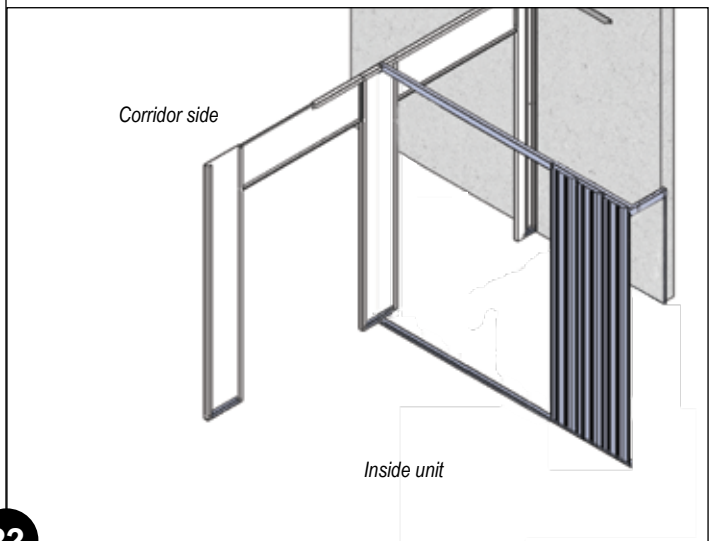



## 18.3
## PANEL FROM JAMB TO JAMB

Plumb and fasten the first panel to the vertical trim behind a jamb. A slight gap between the partition and corridor wall is normal. Continue adding panels to reach the needed wall length and the other jamb, overlapping the last rib of each panel. Fasten each panel at each corner to the bottom track and top angle. Stitch panels, at mid height and at each overlap. Trim the last panel to length and/or width. **Save any scrap panel for later use.**

## 18.4
## PANEL FROM WALL OR PANEL TO JAMB

Plumb and fasten the first panel to the vertical trim at the back of the unit. If the existing back wall is masonry, the vertical trim may be attached to it. Continue adding panels to reach the needed wall length and the jamb, overlapping the last rib of each panel. A slight gap between the partition and corridor wall is normal. Fasten each panel at each corner to the bottom track and top angle. Stitch panels, at mid height and at each overlap. Trim the last panel to length and/or width. **Save any scrap panel for later use.**




**R-panel overlap and stitch screw detail**
**Note: Three evenly spaced screws on laps.**

---

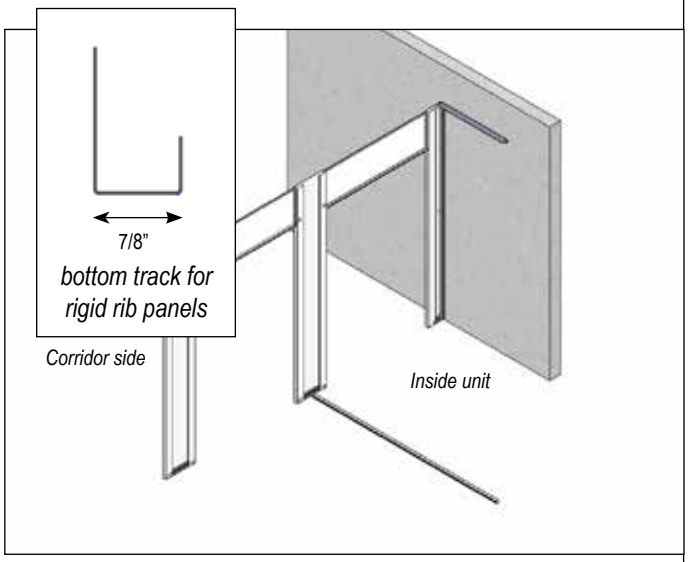
**CAUTION: When stitching panels together, drive the screw from a high side of a deep rib so that the point on the other side is in a valley.**

## SECTION 19 INSTALL INTERIOR RIGID RIB PARTITION WALLS

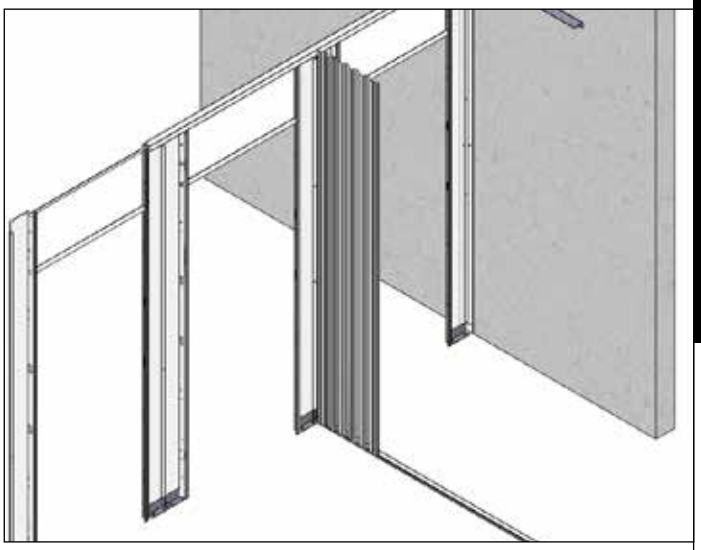
**CAUTION: Components fastened to the floor present a tripping hazard.**

**Corridor wall to rigid rib panel partition**

**19.1** Locate the narrow 7/8" bottom channel and cut to the length needed for the wall. Cut the channel to fit between the corridor wall and the back wall. The line marked earlier for the wall location is the centerline of the wall. The walls can be offset slightly to use the existing line or mark a new, offset line to get the wall centered as shown on the plans. Fasten the bottom track to the floor Fasten track to the floor at each end and approximately every 36 inches.

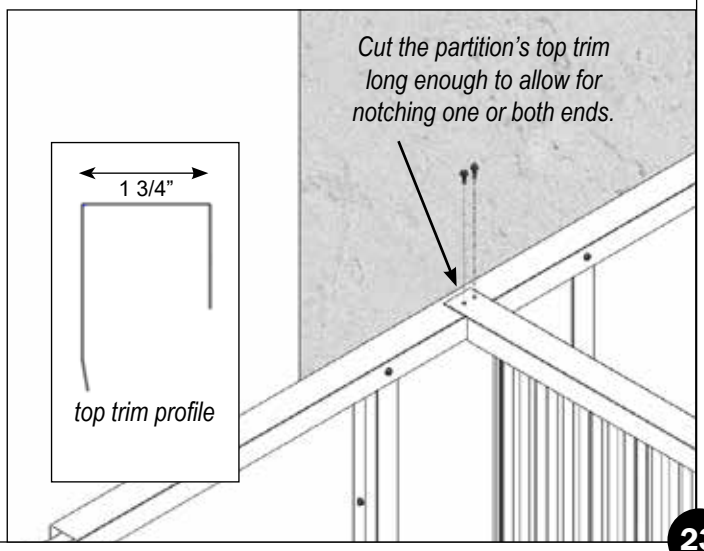


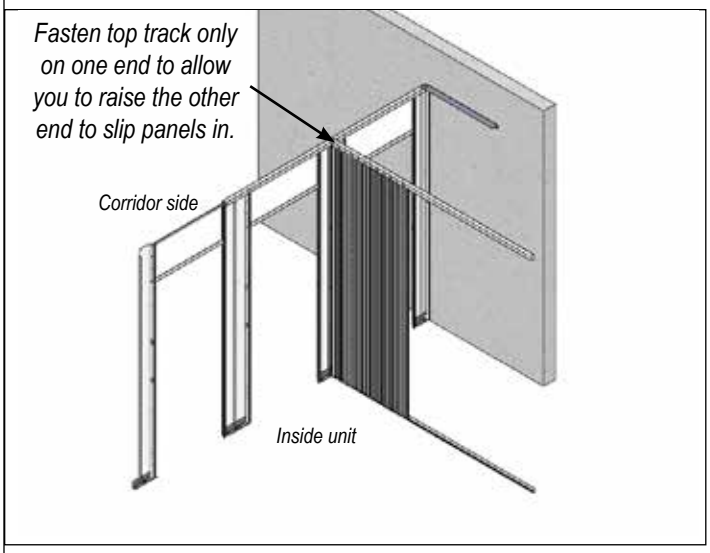

**19.2** Install the glossy white starter trim to start the partition wall, cutting to the system height, if necessary. Plumb and attach the vertical trim to the corridor top track and partition bottom track.



**19.3** *Locate the top channel (with the 10° bend on the long leg) and cut this to length, leaving enough material to create a notch.* Cut the channel to fit over the top of the corridor and back walls (it should be about 3 inches longer than the bottom channel to allow for the notch). Install the shorter leg of the top trim on the same side as the shorter leg of the bottom channel. Plumb corridor wall before fastening the top trim.

**NOTE: When connecting to a corridor wall, the panels can be notched on the top and bottom so the gap between the door jamb and partition wall is minimized or the panels can be left intact and a small gap left.**





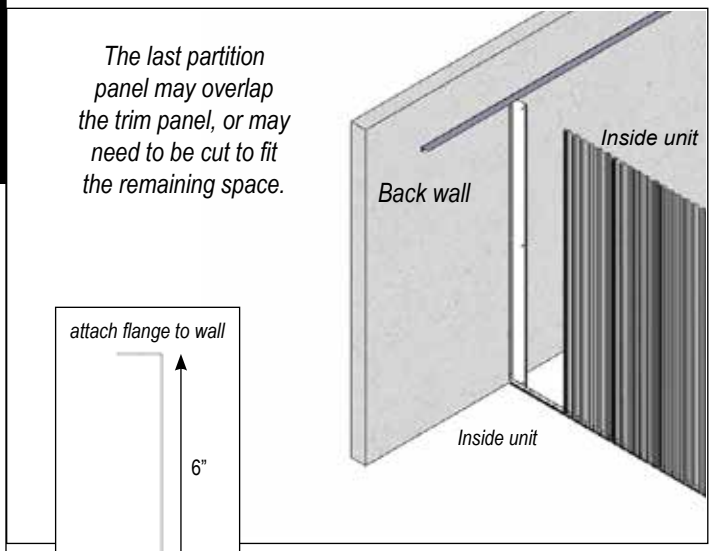

**NOTE: When connecting to a corridor wall with two single door jambs, the partition wall can be offset slightly so that the partition wall can be fastened to the door jamb flanges for a more secure installation. The first panel will have to be notched, top and bottom, for this to work.**

*Karmen Post*

---

**19.4** Depending on preference, it may be helpful to loosely install the top channel on one end only to help when installing more ribbed panels as this wall is assembled. When the wall is complete, fasten each end of the top channel to the corridor and back walls with two screws each. Continue adding interlocking panels to create the wall to the length needed. Test fit, but don't install the last panel yet. If the last panel does not fit, it may be overlapped by up to half a panel width. **Otherwise, cut the panel to fit and save the remainder for later use.**

*Rigid rib panel interlocking detail*







*Starter trim profile*

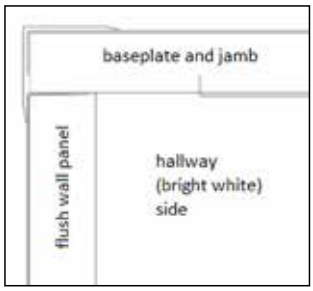
**19.5** Plumb and fasten a glossy white starter trim to the back wall where the partition will meet it. For masonry walls, fasten with appropriate fasteners at the top, bottom and center. For sheet rock walls, fasten only to the bottom track and top angle. With the trim in place, insert and fasten the last panel. Finally, place the top track over the wall, sliding it under the perimeter angle and fasten.

## SECTION 20 CONNECT INTERSECTING CORRIDOR WALLS

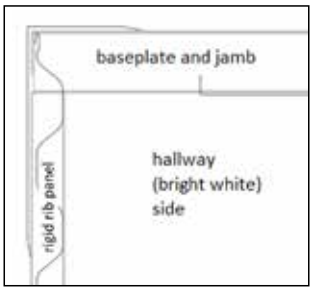
**20.1** Where two corridor walls meet, install a corner trim piece after the top channels have been installed. Corners within corridor walls typically consist of a door wall and a "blank" wall, ie: a wall with no doors made of either rigid rib panel or flush panels. The illustrations shows ribbed panels. Flush panel walls require corner trims not starter trims. If the last flush panel needs to be cut to fit, the corner trim covers the cut. **See options 27.1 and 27.2 for corner guards.**

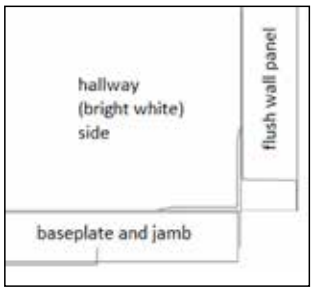
*Typical corridor corner details*

*Outside corner flush panel and starter jamb top view*

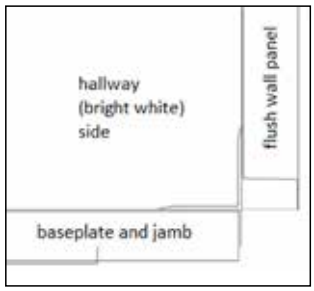



*Outside corner rigid rib panel and starter jamb top view*



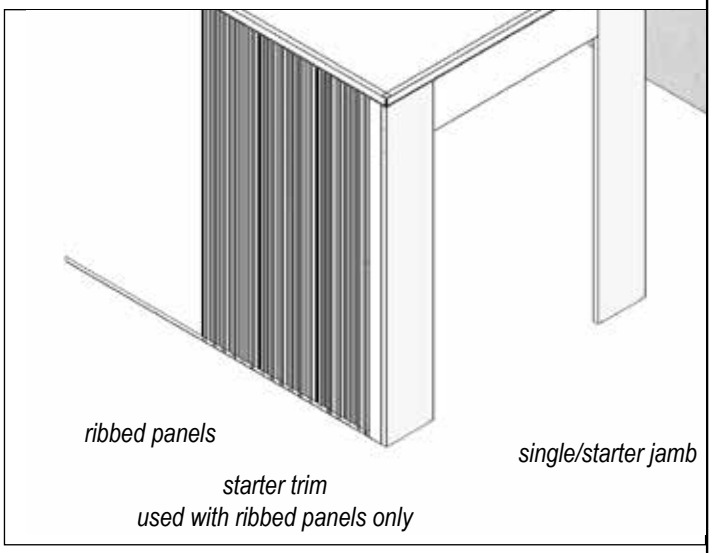




*Inside corner flush panel and starter jamb top view*

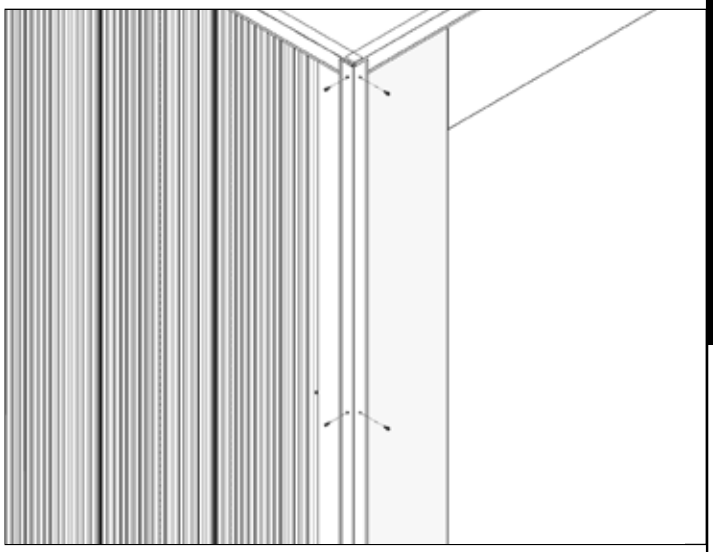


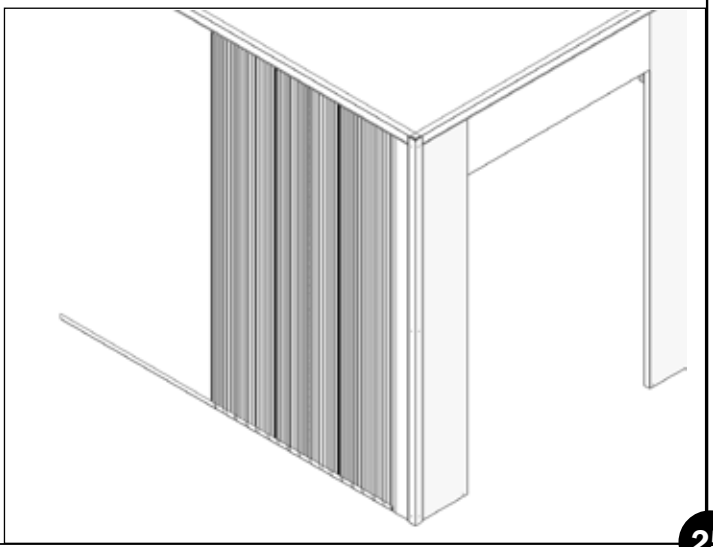

*Inside corner rigid rib panel and starter jamb top view*

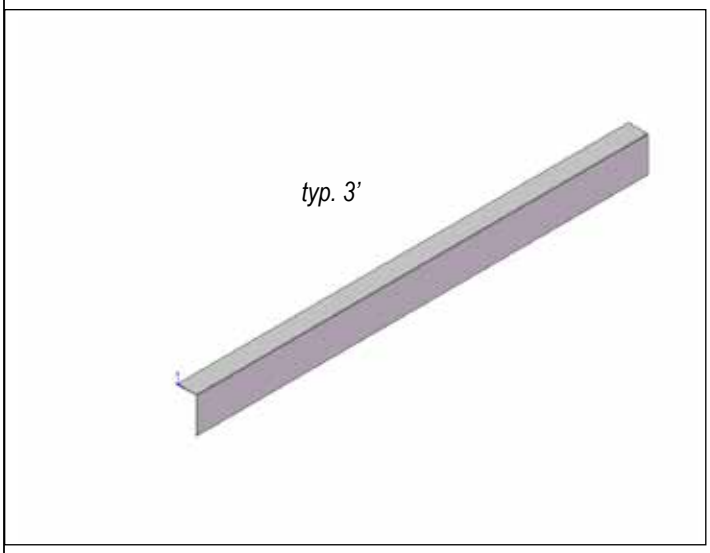
**20.2** Corner trim is available for inside and outside corners, to cover cut edges and gaps between walls. Apply with the bright side facing the corridor. Fasten the corner trim to the top and bottom channels and at 36", using white self-drilling screws. The corner trim should be installed over the top and bottom tracks, and will cover any field cut ends.




*starter trim*
*used with ribbed panels only*

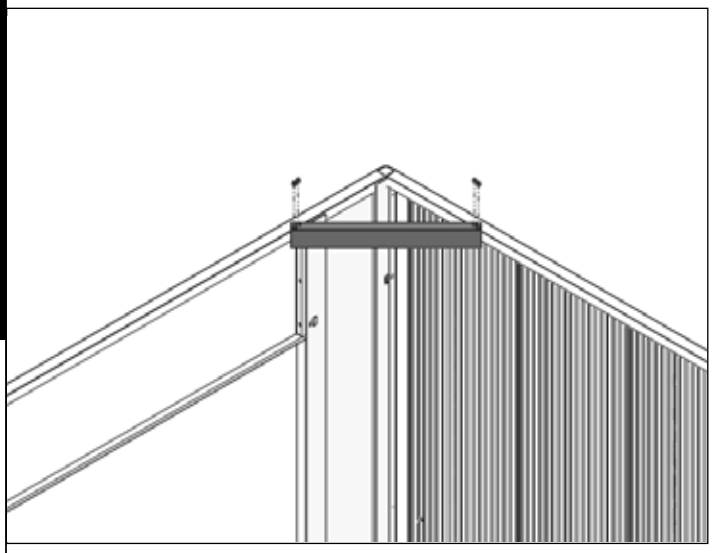




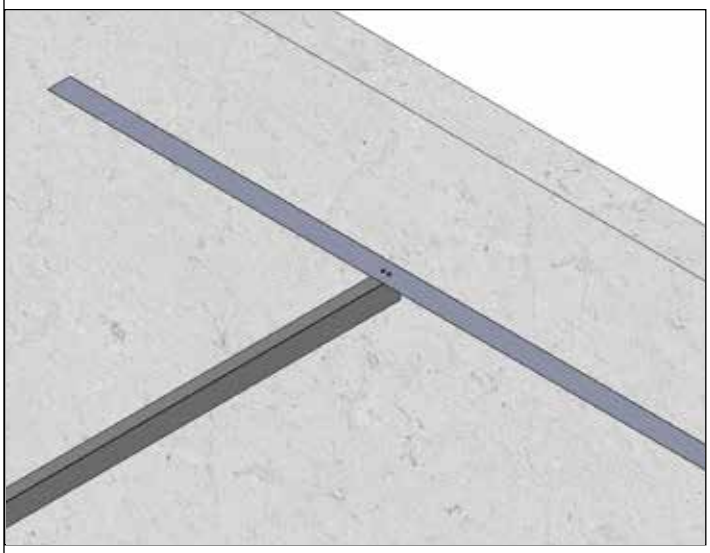



## SECTION 21 INSTALL CORNER ANGLE SUPPORTS

**21.1** Cut galvanized bridging angle to the lengths shown on the plan and install as shown on the plan. Plans typically call out for corner bracing when system is self-standing.



**21.2** Ensure the pieces are oriented as shown on the plan. Position (and if needed, trim) the piece so that it is not visible from the corridor. Fasten with two zinc self-drilling screws on each end of each piece.



## SECTION 22 INSTALL BRIDGING ANGLE

**NOTE: The spacing is typically 5' but should be installed at intervals to support wire mesh if it will be used.**

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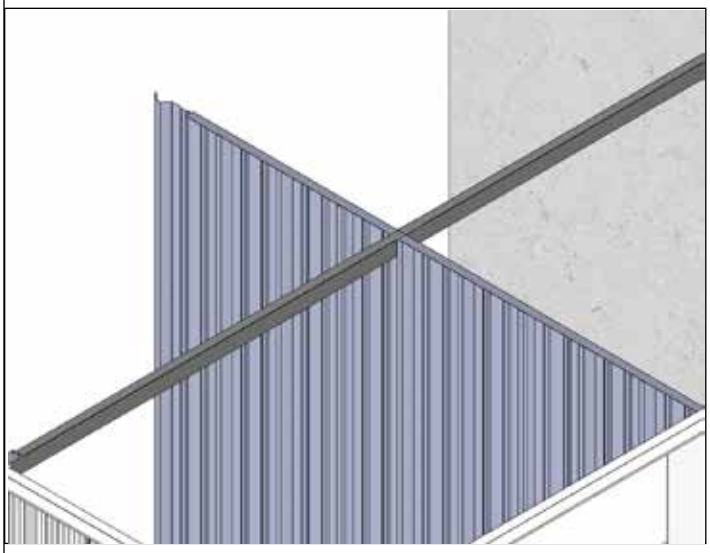
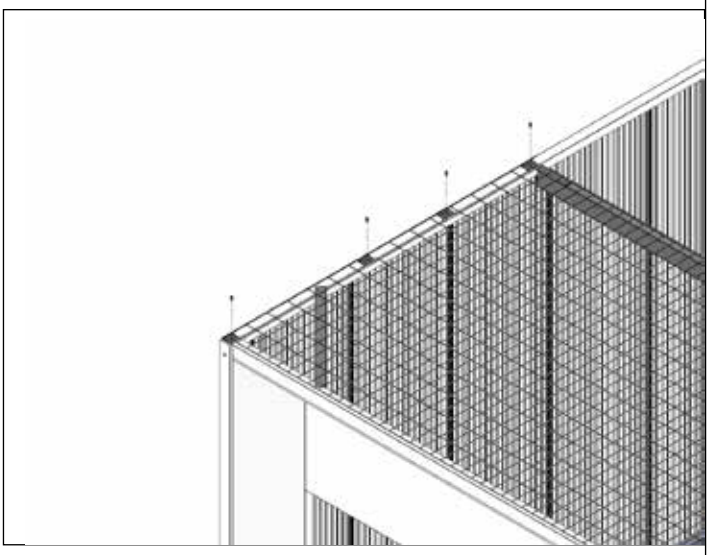
**22.1** Fasten bridging angle as indicated on the plan. Use zinc self-drilling screws to fasten the angle underneath the already installed perimeter angle.



**22.2** The galvanized bridging angle should run parallel with the door headers and typically 5'-0" in spacing. **Notch as needed.**

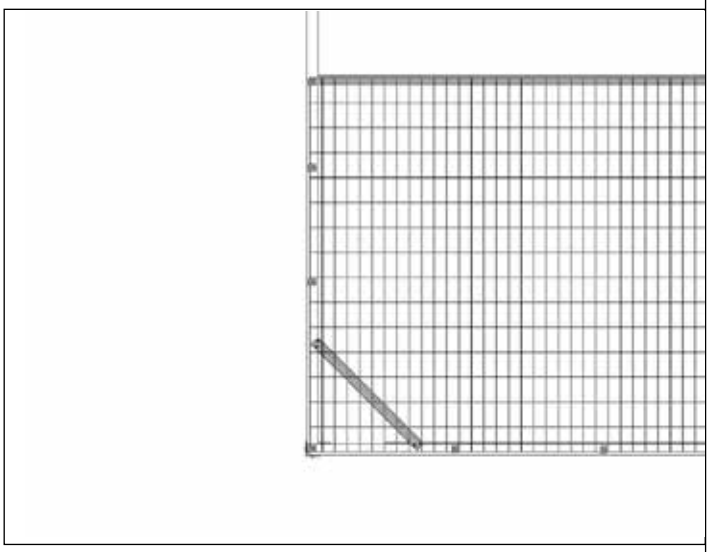
## SECTION 23 INSTALL THE WIRE MESH CEILING AND BURGLAR BARS

**NOTE: Wire mesh is included only if specified in the sales contract. Bridging may be used without mesh to add support to front walls.**



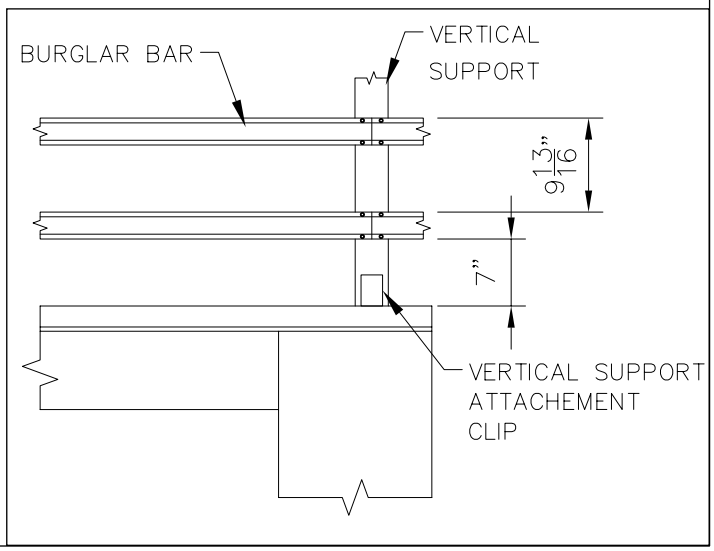
**23.1** If wire mesh is included with this system, roll the wire mesh out on top of the system and cut to length. It may be helpful to roll the mesh out so the natural curl in the roll is down. If using two rolls of mesh across deep units, start working with the back roll of mesh first, for better access.

**23.2** Using the zinc self-drilling screws and the clips, fasten one end of the mesh to the top starting wall. Pull on the other end of the mesh and fasten it down to each wall down the line again using the zinc self-drilling screws and clips. Try to put screws into corners of the mesh so it will stay tight. Fasten the mesh about every two feet or as needed to reduce any wavy appearance in the mesh. Secure it to bridging angle, front walls, perimeter bridging, and partition walls.



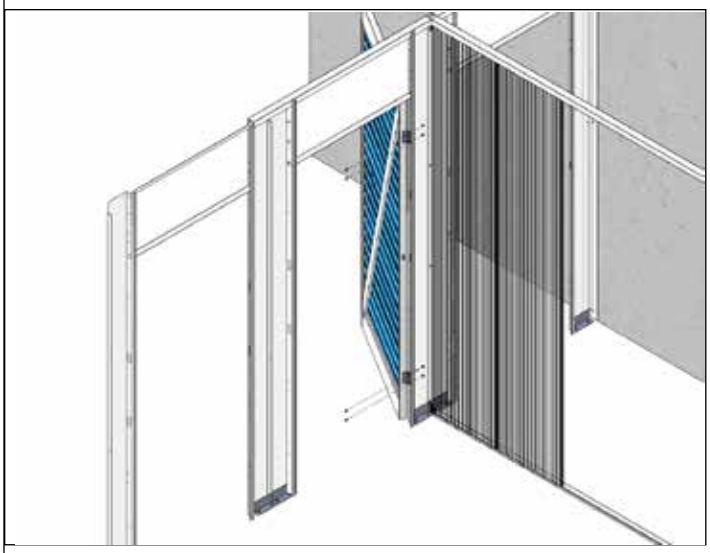
**WARNING: Don't climb on top of the wire mesh tops of the units. Falling through the mesh could result in injury and damage to the storage system.**

**NOTE: The wire mesh can be difficult to cut unless you have the right tool.**




**NOTE: Burglar bars and/or vertical support are included only if specified in the sales contract.**

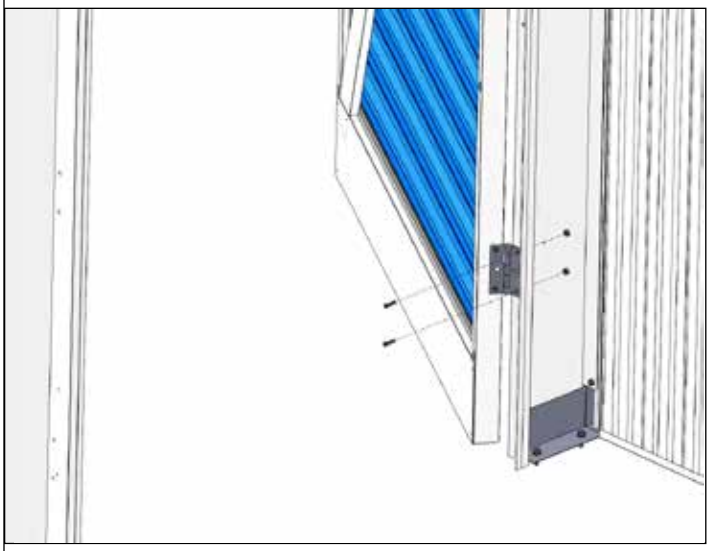
**23.3** Bright white and/or galvalume burglar bars may be provided to fill gap above corridor and/or partition panel. Gaps not to exceed 7", gaps smaller than 7" do not need burglar bars. Vertical support may be provided, see project plans for vertical burglar bar support installation detail if applicable.



## SECTION 24 INSTALL SWING DOORS

**NOTE: Swing doors can be installed to swing right or left. They will always swing into the corridor.**

**24.1** Depending on the layout, the height and width of the doors may vary. Position a door in the opening, ensuring that the door fills the opening.



**24.2** With the door held in an open position, insert the four #8 screws through the hinges and into the door jamb, securing with the provided #8 nuts. Check the door for correct operation.

**TO INSTALL ROLL UP DOORS, REFER TO THE TRAC-RITE MANUAL INCLUDED WITH THE DOOR HARDWARE.**

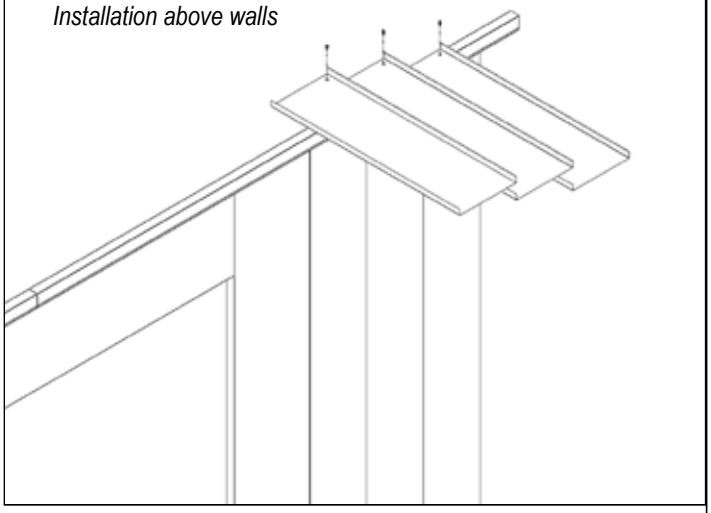
## SECTION 25 INSTALL FLUSH CORRIDOR CEILINGS

**NOTE: Before installing the ceilings, all work requiring access above the units should be completed and inspected.**

**25.1** Flush ceilings are typically installed above walls, but in rare instances may be installed between walls. Use a laser level or chalk lines to assemble a straight and level ceiling.

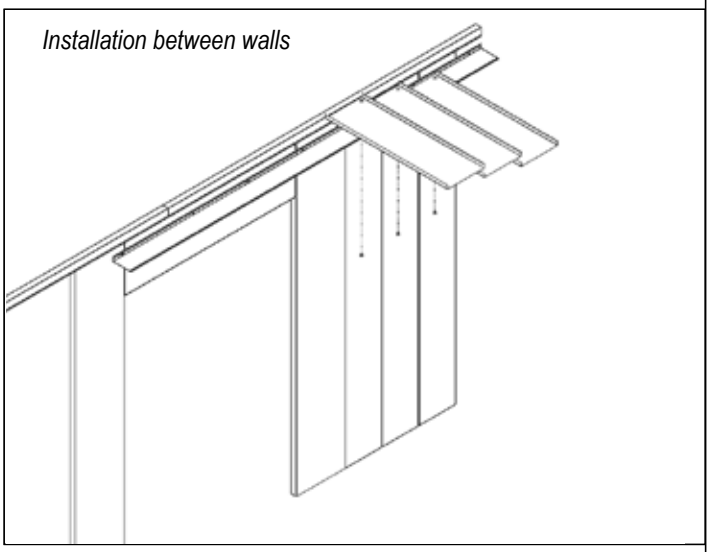
**25.2a (Above walls)** Place the ceiling panels square across the corridor, fastening each to the top track with a white self-drilling screw on each side. Trim the final panel to fit the space, and conceal the cut end with trim, if needed.

*Installation above walls*

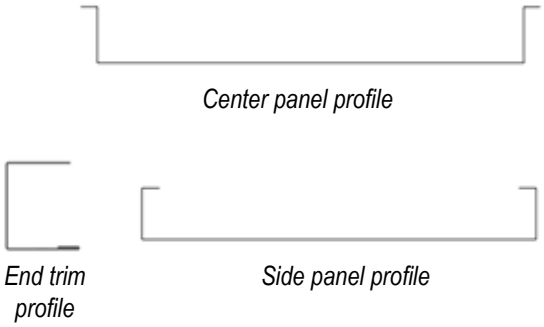


**25.2b (Between walls)** Install side trims on corridor walls, positioned a consistent height from the floor. The long side of the trim extends into the hall, with the short side facing up. In buildings with sloped floors, follow the slope of the floor in the direction of the hall, but ensure the ceiling is level across the width. Fasten trim with white self-drilling screws every 12 inches, to jambs and headers. Ensure that the height is correct and allows space for any swing doors to open completely, clearing any lights or sprinklers that will be installed later.

*Installation between walls*



*Typical soffit panel profiles*



*Center panel profile*

*End trim profile*

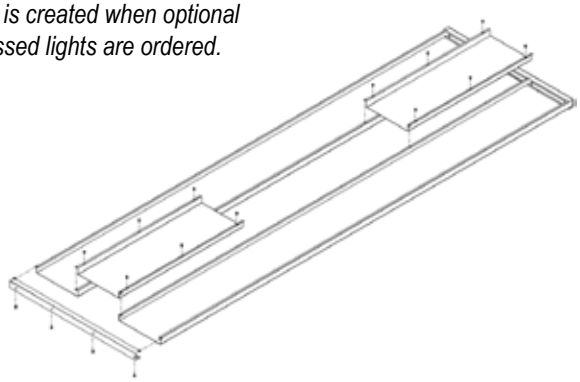
*Side panel profile*

## SECTION 26 INSTALL SOFFIT CORRIDOR CEILINGS

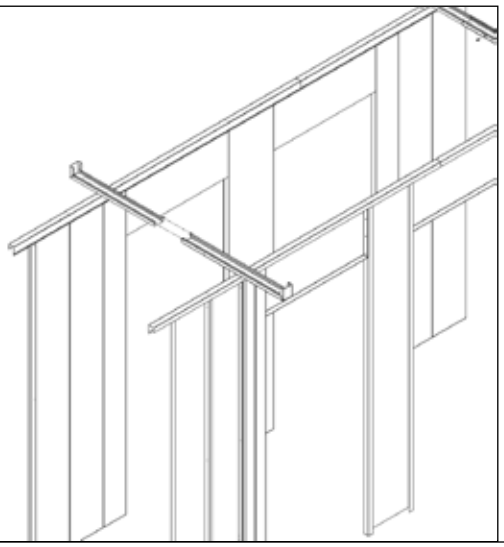
**NOTE: Before installing the ceilings, all work requiring access above the units should be completed and inspected.**

**26.1** Soffit ceilings may be installed between or above corridor walls. See the specific detail sheets for the project. Use a laser level or chalk lines to assemble a straight and level ceiling.

*The center space between panels is created when optional recessed lights are ordered.*

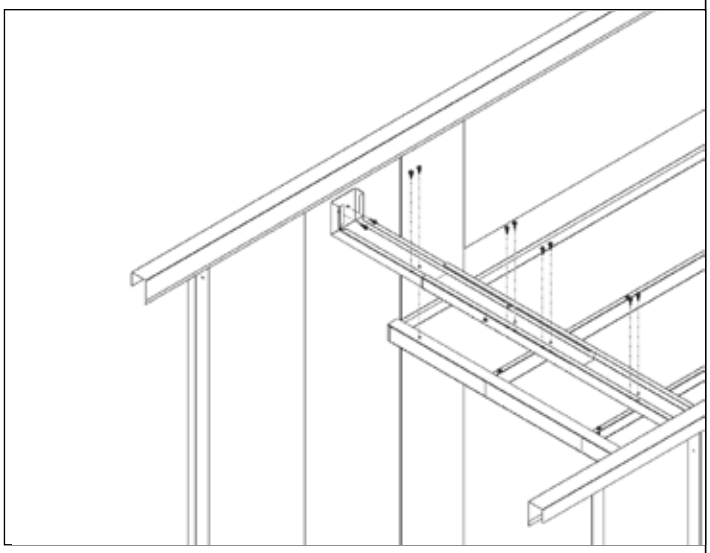


**26.2** Place a large piece of cardboard or other material on the floor to prevent the ceiling assembly from being scratched. Lay out and assemble the panels. The example shows an assembly for a 3' wide section with lights, but your layout may vary. See the plans for more detail. The end trim is fastened from the bottom, so that the trim will be flush to the telescoping supports when installed.

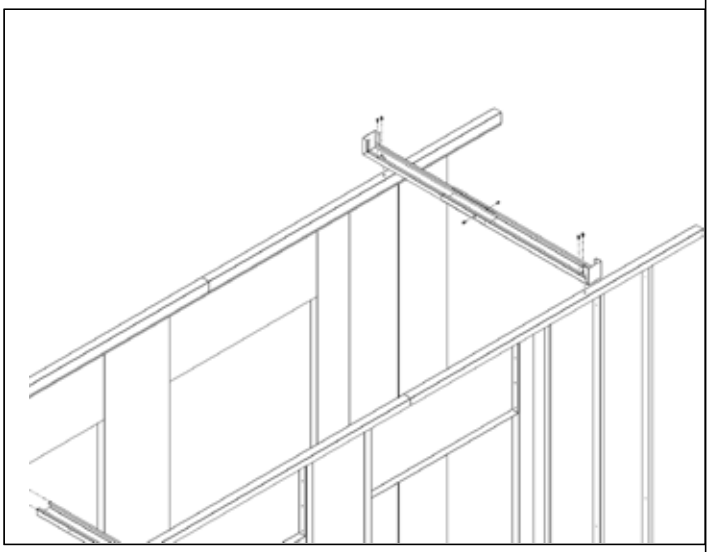


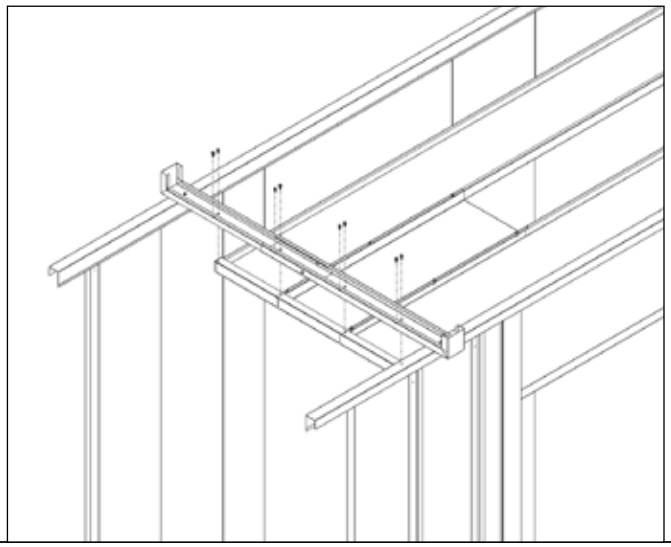
**26.3a (Above walls)** Assemble a telescoping ceiling support so that it can slide to fit above the width of the hall. Fasten the flange on one side of the support to the top track of the corridor wall. Square the assembly, and fasten the other side to the opposite wall. Where the sections of the support overlap, install one white self-drilling screw per side. Install supports with the bent flanges facing up, fastening with two white self-drilling screws per flange into the corridor walls.

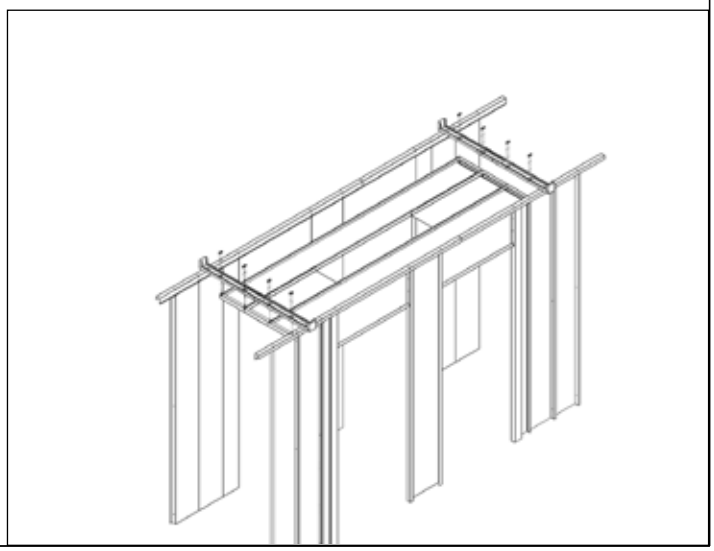
**26.3b** (Between walls) Assemble a telescoping ceiling support so that it can slide to fit the width of the hall. Fasten the flange on one side of the support to the corridor wall. Level/square the assembly, and fasten the other side to the opposite wall. Where the sections of the support overlap, install one white self-drilling screw per side. Install supports with the bent flanges facing up, fastening with two white self-drilling screws per flange into the corridor walls.

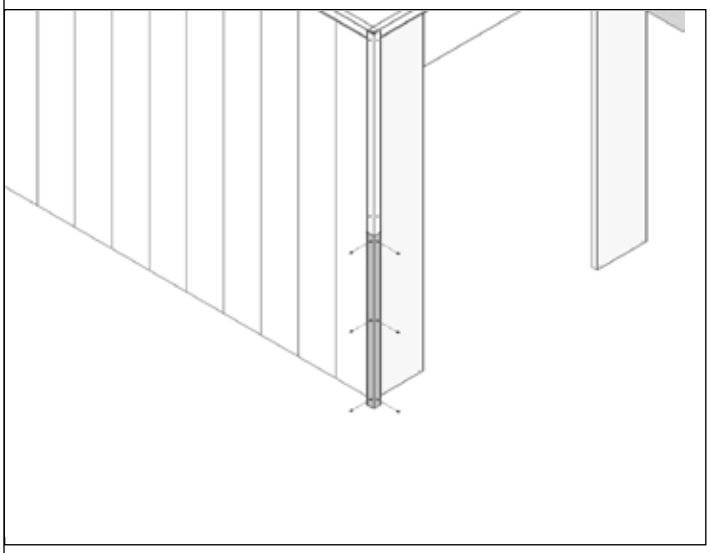


**26.4** Assemble and install an additional telescoping support, spaced so the center of the support lines up with the end of the panel subassembly. Lift the assembly into place, centered and square in the hall. Fasten from above, using white self-drilling screws through the support and end cap of the panel assembly so that the screw points are concealed.





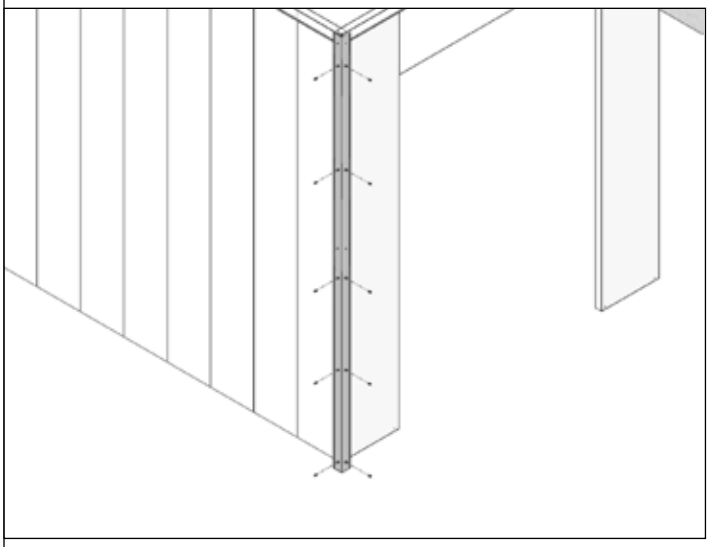




## SECTION 27 INSTALL DIAMOND PLATE CORNER, KICK PLATES AND JAMB GUARDS

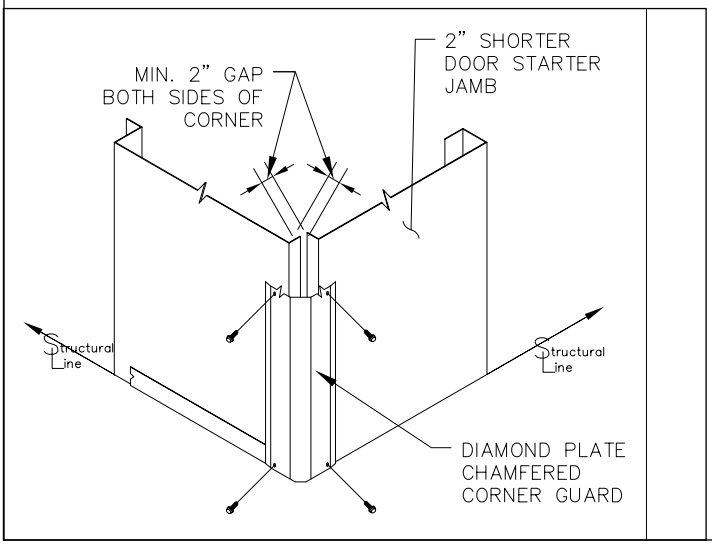
**NOTE: Heavy duty corner and baseboard trim is included only if ordered and specified on the sales contract.**

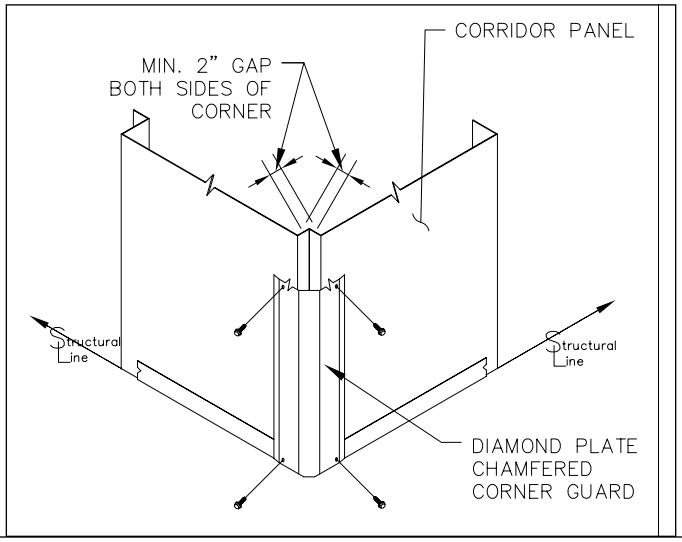
**27.1** Install the corner guards using Phillips wafer head screws, three per side, evenly spaced. For a neat appearance, fasteners should be used at a consistent distance and spacing from the corner. Locate per plans and diamond plate layout page.



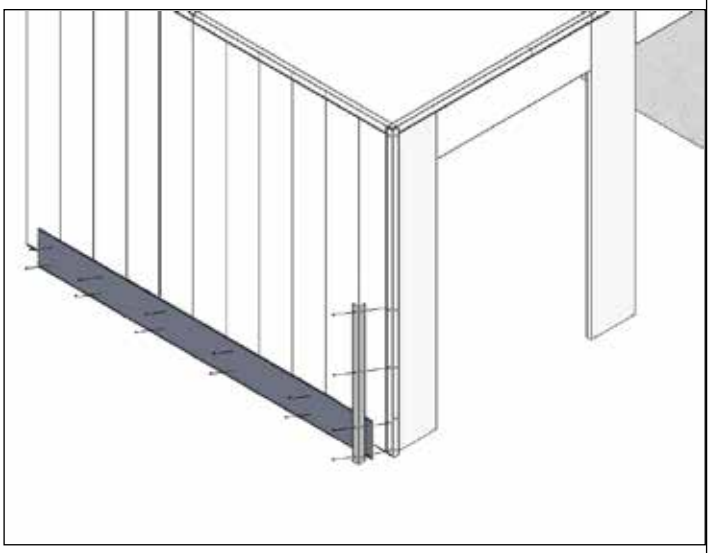
**27.2 Chamfered Corner Guards.** Standard bright white corner trim is not needed/provided underneath chamfered corner guards. Corridor panel should be left or trimmed 2 inches back from the corner. Starter jambs provided at these corners will be 2 inches smaller or may need to be cut back 2 inches. Installer to verify these are held back 2 inches from the corner. Locate per plans and diamond plate layout page.

If needed, trim kick plates to length to fit between corner guards. Ensure that no sharp edges protrude into the corridor. Locate per plans and diamond plate layout page.

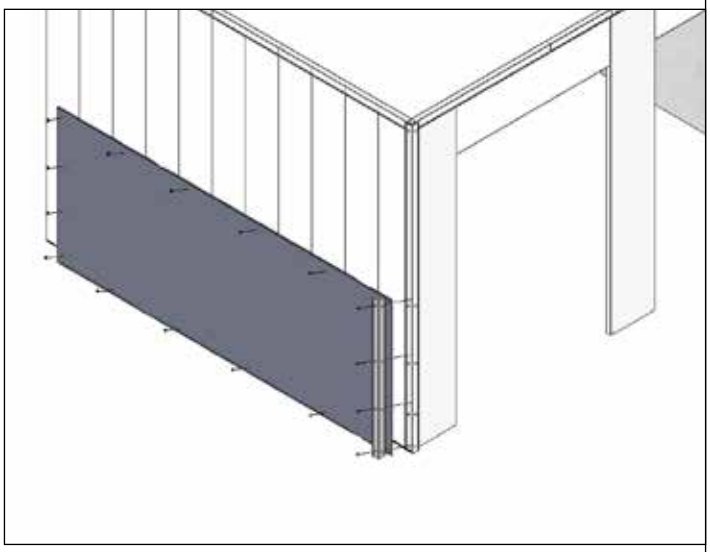


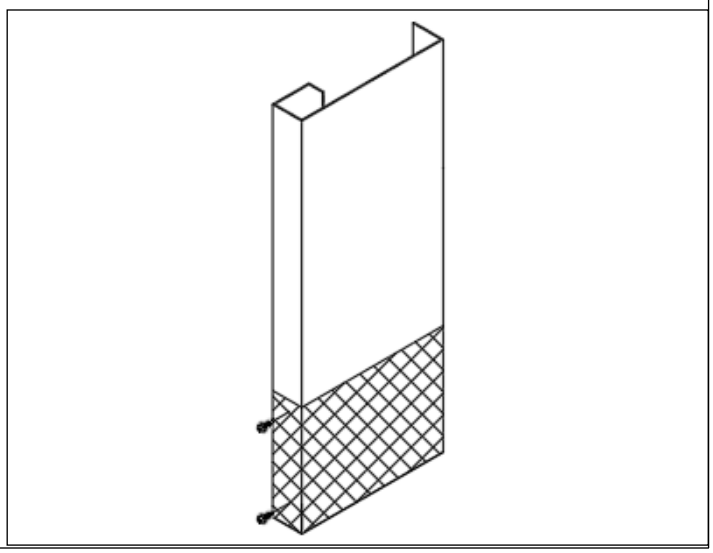
**27.3 1’-0” High Kick Plate.** Fasten the kick plates at each end and every 24” using Phillips wafer head screws. For a neat appearance, fasteners should be used at a consistent height. Locate per plans and diamond plate layout page.

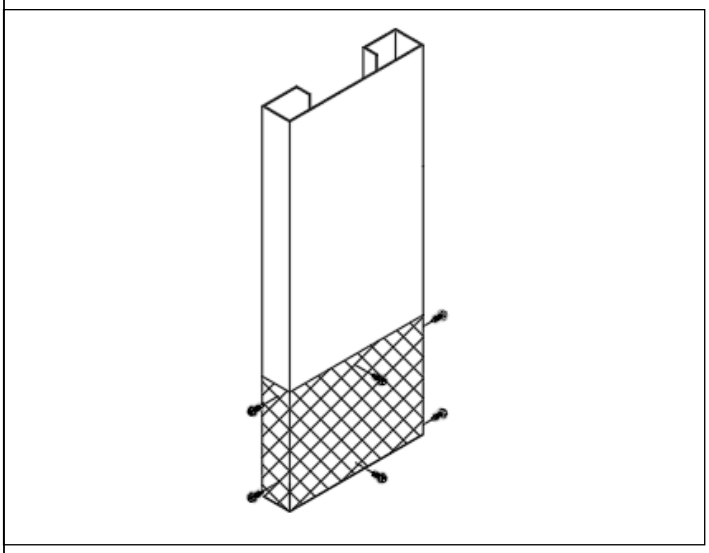


**27.4 4’-0” High Kick Plate.** Fasten the kick plates at each end and every 24” using Phillips wafer head screws. For a neat appearance, fasteners should be used at a consistent height. Locate per plans and diamond plate layout page.



**27.5 Starter Jamb Guards.** Install the starter jamb guards at the bottom of all starter jambs. Fasten the guard at the inside of the jamb using two Phillips wafer head screws. For a neat appearance, fasteners should be used at a consistent height. Locate per plans and diamond plate layout page.





**27.6 Double Jamb Guards.** Install the double jamb guards at the bottom of all double jambs. Fasten the guard at the inside of the jamb using two Phillips wafer head screws, on each side, as well as two in the middle of the jamb. For a neat appearance, fasteners should be used at a consistent height. Locate per plans and diamond plate layout page.

## 28. Prevent common mistakes!

Most mistakes causing delay and requiring the purchase of additional parts from Trachte could be prevented with careful planning and attention to instructions.

Here's a summary of common problems:

**Not enough partition panels:** When calculating how many panels are needed, TBS assumes that scraps of greater than a half panel can be used at the end of another wall. Plan ahead and use the remaining partial panels whenever you can. Minimize back lapping of panels.

**Not enough top/bottom track:** Most layouts require two or three different types of track. If track is used in the wrong place, there won't be enough. Use remnants from previous cuts whenever possible. Smaller remnants can be butted together as a bottom track, but a solid piece is preferred for top trim.

**Not enough screws:** Trachte includes a generous overage of self-drilling screws. If there's not enough to finish a job, check with other workers to see if any of the erectors has a large quantity in their toolbelt, toolbox, truck, etc. Additionally, note that ribbed panels are only screwed to the top/bottom track at the four corners, not on every rib.

**Running out of corner trims:** This is usually due to using corner trims to connect rigid rib partition walls. Use the starter trim for this purpose.

**The painted screws look dirty when installed:** A dirty or worn hex driver bit will mar the finish of the painted screws. Use a new, clean driver for the best appearance.

**The self drilling screws wobble or walk:** Magnetic driver bits are great when they are new, but they also tend to fill with metal shavings. Occasionally picking the shavings out of the bit will improve performance.

TBS TRACHTE
Building Systems

**For more information on Trachte self-storage systems, please contact us:**

**800-356-5824**
**trachte.com**

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