

# Rittling Classroom Cabinetry

Installation, Operations and Maintenance





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**IMPORTANT: Submittal**  
documentation, specific to each  
project, supersedes the general  
guidelines contained within this  
manual.

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# Introduction

This Installation and Operation Manual is designed for the proper installation and maintenance of the classroom cabinetry exclusively designed for operation in conjunction with unit ventilators. The cabinetry can be easily installed as step-by-step instructions with illustrations are provided.

While no two installations are the same, this manual provides the best installation procedure for the most typical scenarios found in the field. The manual covers the full product scope of classroom cabinetry:

- Steel top components
- Laminate top components
- No top components

Along with the different style tops, installation instructions are provided by component:

- Storage Cabinet
- Fill Section
- Corner Fill Section
- Utility Compartment
- End Panels

This guide has been created to cover all installation possibilities. It will be the responsibility of the installing contractor to determine which sections of this manual apply and the order of installation of components (storage cabinets, fill sections, utility compartments and end panels) that best suits the particular project. In those cases where a section does not apply, simply omit the procedure and proceed to the next section that is pertinent to the installation.

## Receiving and Handling

Upon receipt of the individual classroom cabinetry components, inspect all boxes for any sign of shipping damage. Immediately report any damage to the shipping company.

Review bill of lading to ensure that all items listed have been received. If any items are missing, notify the shipping company.

If laminate top cabinetry is included on shipment, take necessary steps to protect the laminate top from warping or expanding due to high humid environments. Store the laminate top cabinetry in a climate controlled environment until it is installed.

## Storage procedure

**NOTE – Prolonged storage of the storage cabinets and the shelving components prior to installation is strongly discouraged by the manufacturer. Laminate tops are heat and moisture sensitive.**

If cabinets and components must be stored for any given amount of time, special care must be taken when dealing with laminate tops. They are to be stored by laying them flat and in a climate-controlled environment.

**NOTE – It is highly recommended to store the laminate tops in a climate controlled environment. Failure to follow this recommendation may void any warranty or claims.**

## Preparation for installation

Read through the installation guide prior to installing any of the cabinetry. Create a plan of attack as to how the shelving components will be installed in the room. See the “Overall Installation Order” for suggested installation order.

Remove all debris and other obstructions away from areas where shelving components are to be installed. Verify that the floor and wall are flat, smooth and level.

Remove the shelving from the packaging and inspect for any damage or missing parts. See the installation section for each cabinetry component for a complete list of items that should be included with cabinetry component. If any damage is discovered or any items are missing, contact your manufacturer’s representative.

**NOTE - Keep original packaging as it may be used to protect painted parts during the installation or it can be used to ship items back to the manufacturer, if necessary.**

## Preparation for installation

**NOTE – The tools and supplies listed below encompass the entire product line. Some items may not be required for your installation.**

- Drill
- Screw gun
- No. 2 Phillips bit for screw gun
- 3/8” nut driver for screw gun
- 7/32” socket or bit for screw gun
- Flathead Screwdriver
- 7/16” deep socket and ratchet
- Contractor Level
- Tape Measure
- 3/16” Allen Key
- 3/16” Drill Bit and 5/32” Drill Bit
- Rubber Mallet
- Chalk-line (Recommended)
- Wall and Floor fasteners with corresponding drill bit
- Metal cutting Equipment (for trimming Steel Filler pieces)
- Wood cutting Equipment (for trimming Laminate filler pieces)
- File (for de-burring Filler pieces)

# General information

Classroom cabinetry is composed of the following components:

## Standard Cabinets

Cabinets are fabricated from furniture-quality cold-rolled steel and come fully assembled with the exception of 28" deep cabinetry. Tops for 28" deep models are to be field installed following the installation instructions outlined in this guide. Bottom and back of cabinets are fabricated using 18-GA steel and are gusseted for support and strength. Side panels are also fabricated with 18-GA steel and formed to provide vertical support and rigidity. Each side panel has multiple shelf support hooks that allow for 8" of vertical adjustment. Every shelf for cabinets from 2ft to 5 ft is fabricated with 14-GA steel. Cabinet base supports are fabricated using 16-GA steel, and have (4) 5/16" diameter (2 per side) leveling legs that allow for 1" of vertical adjustment. Vertical adjustment is done while the cabinet is in place from above. Included with all cabinets is a heavy gauge adjustable wall mounting bracket that is applied to the bottom of the cabinet and fastened to mounting surface. The cabinet tops are attached to the mounting surface via a field installed 16-GA wall strip. All cabinets are supplied with a front steel alignment bar to provide positive horizontal alignment of all cabinets and accessories. Cabinets have fully adjustable kick plates. Prior to powder coating, each cabinet is cleaned and phosphatized. Powder coat finish is 2 to 3 mils thick, and is baked at 400 degree F for 10 minutes. Color is selected to match the unit ventilator.

Cabinets are available in 2, 3, 4 and 5 ft lengths as standard. Each cabinet may have a solid steel top, steel top with radiation grille, steel top with draftstop, solid laminate top, laminate top with radiation grille, laminate top with draftstop and no top. Each length can be provided in various depths: 16 5/8", 19 5/8", 21 7/8" and 28". Doors are not provided as standard but may be ordered as an option with and without locks.

## Steel Tops

Steel tops for storage cabinets are fabricated from 16-GA furniture-quality, cold-rolled steel with full length stiffeners for maximum strength and support. Tops are sanded before being phosphatized and painted with a textured powder coat finish. Color is selected to match the unit ventilator.

## Laminate Tops

Laminate tops are made from 1" thick furniture grade particleboard, except where noted, with plastic laminate covering the top and all edges. The front bullnose on all storage cabinet tops are made from a hard wood for added strength. Tops are the same length as the respective cabinet and are factory installed. The laminate style and color are selected by the architect.

## Sliding Doors

Sliding doors are fabricated from 18-GA furniture quality cold-rolled steel. Doors are easily removed without tools. Simply lift the door up, then pull the bottom away from the track and lower the door out of the cabinet. Optional key lock is available. Doors are powder coated to match the cabinet color.

## Draftstop Cabinet Features

In addition to standard cabinet features, draftstop cabinets are equipped with an aluminum bar grille inlet at the back of the cabinet top. This inlet allows supply air to be drawn from the window or wall area down behind the cabinet and into the Unit Ventilator. The bar grille has pencil proof louvers, and is powder coated to match the cabinet top. Inlet air volume is controlled with the adjustable hinge damper.

Draftstop tops are available for both steel top and laminate top. On laminate tops the draftstop portion is provided loose for field installation

## Radiation Cabinet Features

In addition to the standard cabinet features, radiation cabinet tops are equipped with an aluminum bar grille outlet and a slotted toe plate to allow for auxiliary finned tube radiation to be used behind the cabinet. The bar grille has pencil proof louvers, and is powder coated to match the cabinet top.

Radiation tops are available for all steel top and laminate top cabinetry except utility compartments. On laminate tops the radiation portion is provided loose for field installation.

## Filler Sections

Filler sections are fabricated using furniture quality cold-rolled steel. Filler tops and are either 16-GA steel or 1" thick laminated particleboard. Front panels are fabricated from 16-GA steel. Filler sections are to be cut by the installer to fulfill the requirements of the installation. Field cut edges are to be supported by double wall trim angle, which are supplied, on the front and top of the filler section. Filler section is attached to standard cabinets or other accessories with factory supplied hardware, and are powder coated to match cabinets or unit ventilators.

Fill Sections are provided as 18" or 24" wide as standard. They can be provided in several depths: 16-5/8", 19 5/8", 21-7/8" or 28", and may have a solid steel top, laminate top or no top provided.

## Utility Compartments

Utility compartments are fabricated using furniture-quality cold-rolled steel. Utility compartment tops are made using 16-GA steel or 1" thick laminated particle board, while the front panel is always made using 16-GA steel. Utility compartments are assembled at the factory for quick installation in the field. However, if necessary, the utility compartment can be disassembled if the need arises due to piping interferences. Utility compartments are attached to standard cabinets, unit ventilators, or other accessories with factory supplied hardware and are powder coated to match the cabinets or unit ventilator.

Utility compartments are provided as 12" wide as standard. They can be provided in several depths: 16-5/8", 19-5/8", 21-7/8" or 28", but are only available with a steel top.

## End Panels

End panels are fabricated using furniture-quality cold-rolled steel. End panels are fabricated using 16-GA steel and are attached to standard cabinets, unit ventilators, or other accessories with factory supplied hardware and are powder coated to match the cabinets or unit ventilator.

End panels are provided as 1" and 6" wide as standard. They can be provided in several depths: 16-5/8", 19-5/8", 21-7/8" or 28" to match the cabinetry depth. End panels may be used on laminate top

**NOTE - All cabinetry components including: storage cabinets, utility compartments, fill sections and end panels ship with their own hardware kits.**

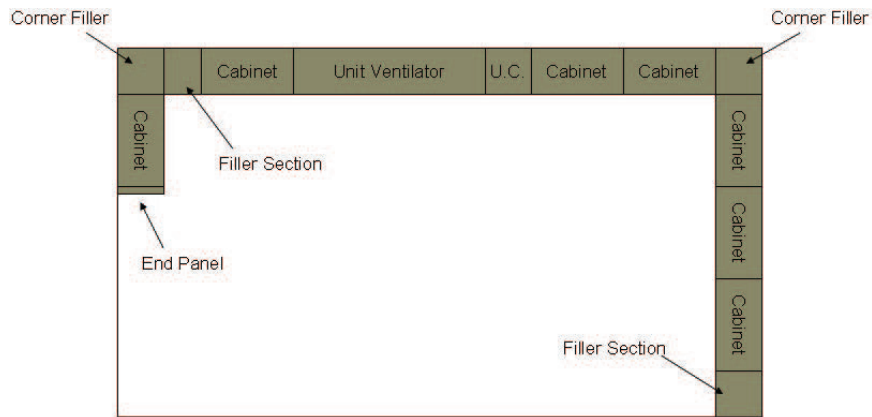
# Overall installation order

Typically the shelving components are installed in a specific order to make as easy an installation as possible. Below is an overall guide recommending which components should be installed first. If needed, adjust these steps as necessary.

**NOTE - Do not start to install units based on the Overall Installation Order section. Refer to the specific instructions for each component before starting.**

## Typical Layout

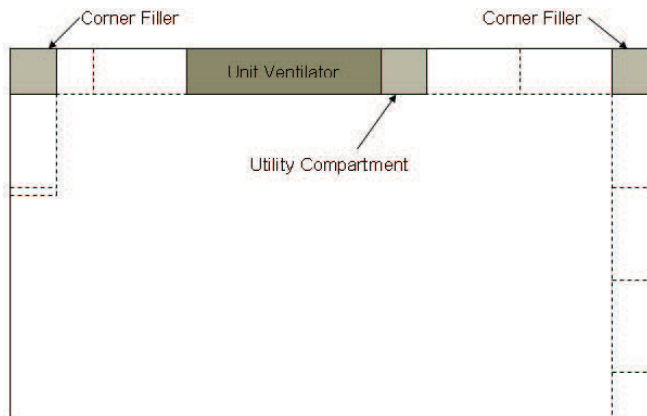
The diagram below shows a typical layout of cabinets with utility compartments, corner fillers, and filler sections used as well.



## Phase 1

Before installing any cabinetry, the unit ventilator should be installed. The Utility Compartments are typically installed on the piping side of the unit ventilator. This may be on the left or right side. The height of unit ventilator will determine the height of all the cabinets to be installed.

Also install the corner fillers where applicable. Be sure that the height of these top panels, are at the same height as the previously installed unit ventilator.

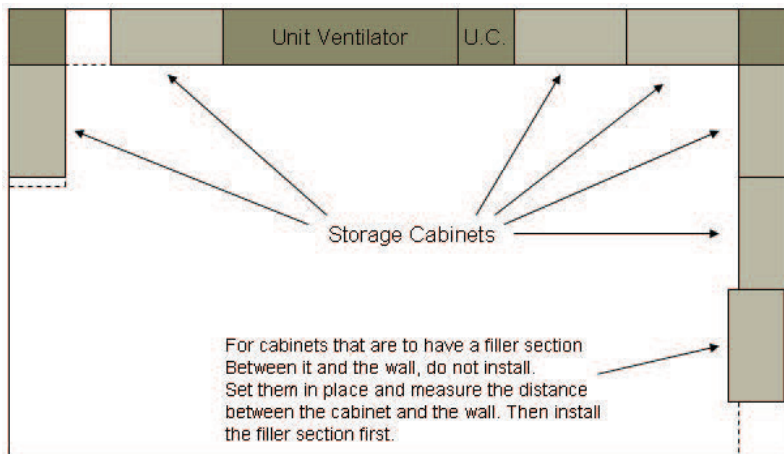




## Phase 2

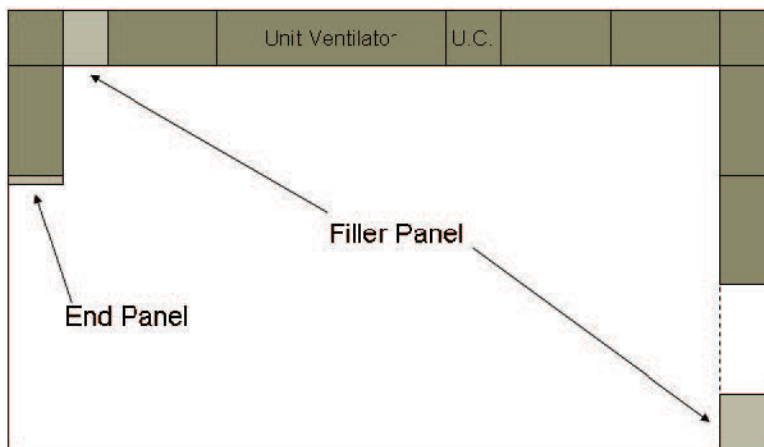
Install all the cabinets in their respective locations. Start at the Unit Ventilator or Utility Compartment first, and work away from it. Then start installing cabinets at the corner fillers, and work away from them.

Be sure to adjust the height of each cabinet so they are at the same mounting height as the previously installed components.



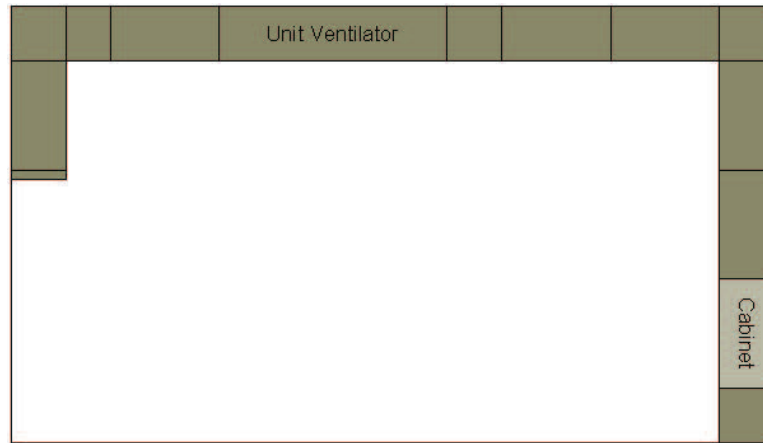
## Phase 3

Install the filler panels and end panels where applicable. Be sure to install filler panel tops, at the same height that was originally measured for the utility compartments in Phase 1.



**Phase 4**

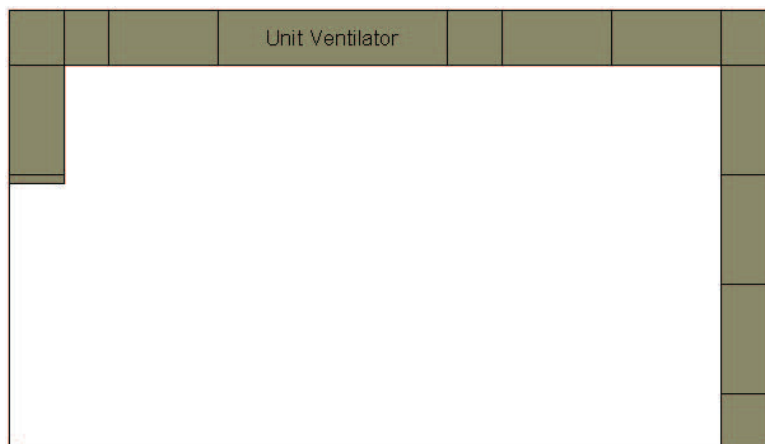
Finally, install any cabinets that have a filler section between it and an adjacent wall.



Double check to verify each cabinet is level and at the same height as the cabinets or accessory adjacent to it. Adjust the kick plates under each component to make contact with the floor.

**Final Result**

Shown below is the end result after all cabinetry has been installed.



Clean the components as necessary and dispose of the packaging.

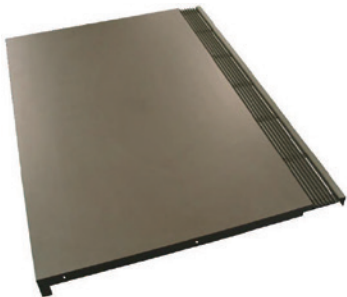
# Shelving components



**Storage Cabinets with doors**



**Storage Cabinets no doors**



**Radiant Top**



**Solid Top**



**Draftstop Top**



**Cabinet Shelf**



**Leveling Legs**



**Rear Block Off Plate**



**Adjustable Wall Mount Bracket**



Utility Compartment



End Panel Front



Rear



Leveling Legs



End Panel Kick Plate



Corner Filler


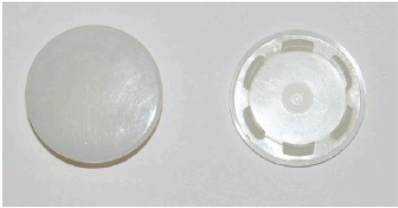
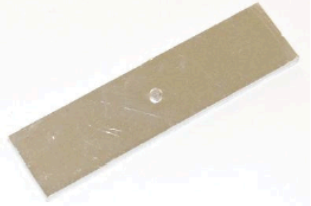



Filler Section

# Hardware packs

Hardware kits are provided with each classroom cabinetry component (storage cabinets, utility compartments, fill sections and end panels). The hardware kits may include fasteners that are not required for the installation. Listed below are the hardware kits and the hardware included in each kit. In each installation section later in the manual, the quantity and hardware required will be specified.

**NOTE - The manufacturer does not supply any hardware to attach any component to the floor or wall. This hardware is to be field supplied.**

Part	Usage	Part	Usage		
 <p>#14 3/4" Long Sheet Metal Screws</p>	Cabinets	x	 <p>7/8" Hole Plug</p>	Cabinets	x
	Fillers	x		Fillers	
	Utility Comp.	x		Utility Comp.	
	End Panel	x		End Panel	
Part	Usage	Part	Usage		
 <p>Alignment Bar for Steel Tops</p>	Cabinets	x	 <p>3/8" Wood Dowel-Pins for Laminate Tops</p>	Cabinets	x
	Fillers	x		Fillers	x
	Utility Comp.	x		Utility Comp.	
	End Panel			End Panel	

There ARE only (3) different hardware packs available. They are as follows:

**Hardware Pack #1  
All Storage Cabinets**

- (4) #14 x 3/4" long sheet metal screws
- (1) aluminum alignment bar
- (2) 3/8" diameter x 1 1/2" long wooden dowel pins
- (10) 7/8" diameter white plastic hole plugs

**Hardware Pack #2  
All Filler Sections**

- (10) #14 x 3/4" long sheet metal screws
- (1) aluminum alignment bar
- (2) 3/8" diameter x 1 1/2" long wooden dowel pins

**Hardware Pack #3  
Utility Compartments  
and End Panels**

- (4) #14 x 3/4" long sheet metal screws
- (1) aluminum alignment bar

**NOTE - It is not recommended by the manufacturer to use different hardware, which may cause joints and seams not to be as tight as designed.**

## Installing the wall strip

1. Measure the overall height of the unit ventilator, which should already be installed. Draw a reference line around the room where cabinets are to be installed at 1-1/16" lower than the height of the unit ventilator. Using a chalk line is best, but whichever method you choose, be certain the line is level as this will be the guideline for all of the units. Check the line in various locations with a level.
2. With assistance from a coworker, hold the wall strip with the top at the same height as the chalk line and mark the hole locations with a pencil or marker.



3. Using the appropriate drill bit, drill into the wall at the marked locations, and use the appropriate fasteners (supplied by others) to mount the wall strip to the wall.



4. Repeat this process to mount wall strip wherever cabinets or other components are to be installed. Trim the sections accordingly when necessary. When mounting wall strips in corners, leave approximately 1/2" between the end of the wall strip and the perpendicular wall.

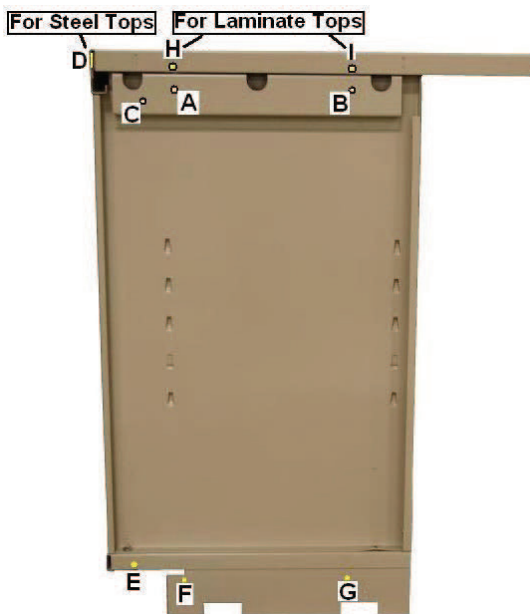
**CAUTION-** To ensure that the wall strips are being mounted evenly, often check them with a level as they are being installed. Measuring the top height from the floor, may not give you an accurate measurement when compared to the unit ventilator if the floor is not completely level.

## Utility compartments

1. Unpack the Utility Compartment which will include.
  - (1) Utility Compartment
  - (1) Hardware Pack #3 (See Hardware section for list of items)

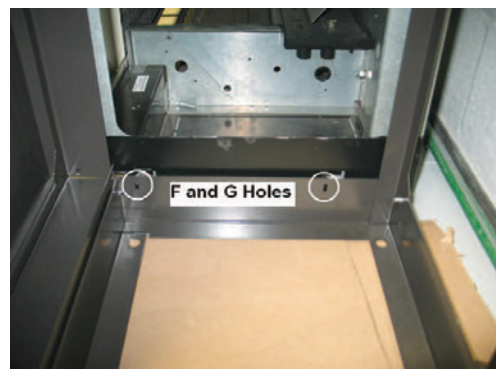
**NOTE - Remove the end panel from the unit ventilator (if one has been installed), as well as the front access panel.**

2. Set the Utility Compartment assembly next to the unit ventilator, hanging the rear lip of the top panel onto the wall strip. Adjust the leveling legs using a flat head screwdriver so the top and front panels of the Utility compartment are even and flush with that of the unit ventilator.



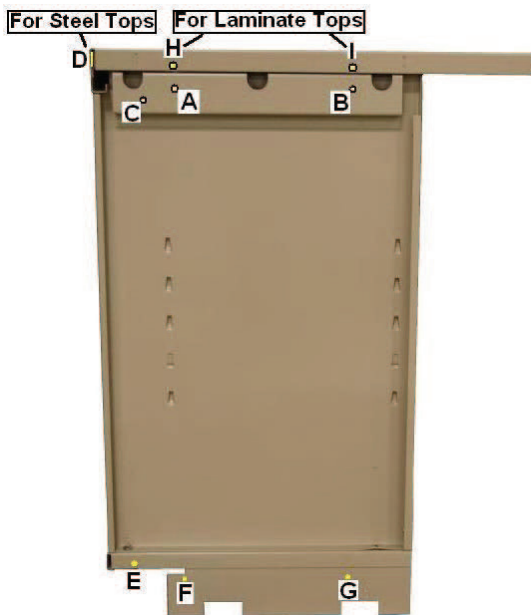
**NOTE – Some unit ventilators, may not be equipped with the proper mounting hole locations to accommodate the Utility Compartment, as the design has recently undergone changes. If this is the case, there are two options to mount the Utility compartment to the unit ventilator.**

- A. Attaching the utility compartment to the unit ventilator requires (4) points: F, G, H and I. Some unit ventilators will have existing holes that line up to our hole locations H and I on the top panels of the utility compartments. You may be able to use these locations to attach the top panel of the utility compartment to the unit ventilator from the inside of the end pocket on the unit ventilator. Hole locations F and G should already exist on the unit ventilator.



- B.** If hole locations H and I are not provided on the unit ventilator, align the top surface of the utility compartment with the unit ventilator. Ensure that the utility compartment is level and aligned properly on the top surface and the front surface. Transfer hole locations A and B onto the unit ventilator using a marker. Remove the utility compartment and use a 3/16" drill bit to drill the mounting holes into the unit ventilator at each location. Replace the utility compartment and continue.

Insert (2) #14 Sheet Metal Screws x 3/4"L through the side flange of the top panel on the utility compartment into the unit ventilator at hole locations A and B.



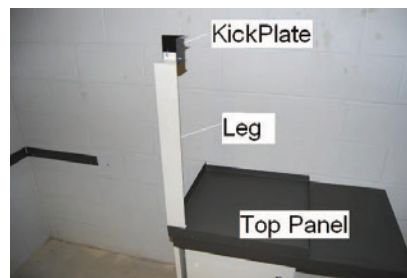
Also insert (2) #14 Sheet Metal Screws x 3/4"L through the base of the utility compartment into the unit ventilator at hole locations F and G.



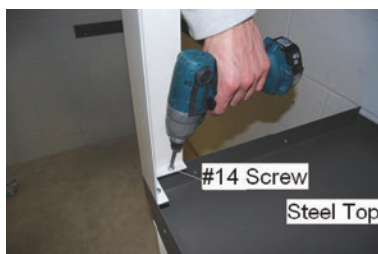


## Corner fillers

1. Unpack the corner filler which will include:
  - (1) Top panel\
  - (1) Corner filler leg
  - (1) Kick Plate
  - (1) Hardware Pack #2
 (See Hardware section for list of items)



2. Set the top panel upside down on a table or workbench and attach the corner filler leg to the top panel using (2) #14 Sheet Metal Screws x 3/4"L. Make sure the leg is lined up properly with the top panel before tightening these screws.



3. Hang the flanges of the steel top panel onto the wall strip that was previously installed. If installing a laminate top, rest the top on the wall strip and transfer the mounting holes from the wall strip onto the top panel using a marker. Then use a 5/32" drill bit to drill holes approximately 1/2" deep. Now use (2) #14 Sheet Metal screws to fasten the top panel to the wall strip making sure the panel is flush into the corner of the walls.



4. Attach the corner kick plate to the leg making sure the leg is being set to a height which makes the Top Panel even. Use a level to set the height of the leg accurately before tightening the kick plate to the leg.
5. Using a level vertically, adjust the position of the leg to make it perpendicular to the floor and then transfer the holes of the kick plate onto the floor using a marker.
6. Remove or shift the corner filler assembly, and drill holes into the floor at the marked locations so that fasteners can be used to attach the floor angle to the floor (fasteners supplied by others).



7. Replace the corner filler assembly and attach the kick plate to the floor adjusting the height of the filler if necessary to make sure it is level. Use the level again to be certain that the leg is perpendicular to the floor before tightening the kick plate to the floor.

## Storage cabinets

- Unpack the cabinet which will include:
  - Storage Cabinet (Steel Top, Laminate Top or No-Top)
  - Adjustable Wall Mount
  - Hardware Pack #1 (See Hardware section for list of items)
  - Block Off Plate (Draftstop Top Only)
  - Cabinet Shelf

**NOTE - Save the protective bag to set over the cabinet after installation to protect it from any other work that will happen in the area. Also, verify (4) leveling legs are installed at the bottom of the cabinet.**

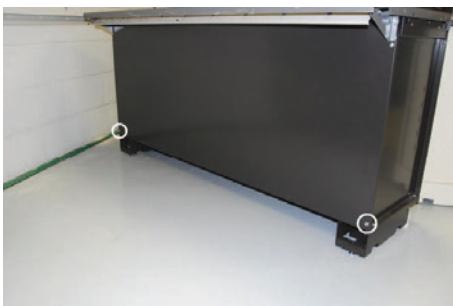
- Depending on which component the storage cabinet will be mounted, different mounting holes will be used.

Component	Hole Locations
Unit Ventilator	A, B and E
Cabinet (Steel)	A, B, D and E
Cabinet (Laminate)	A, B, E, H and I
Utility Compartment	A, B, D and E
Filler Section (Steel)	A, B, C, D and E
Filler Section (Laminate)	A, B, C, E, H and I
Corner Filler Section (Steel)	A, B, C and E
Corner Filler Section (Laminate)	A, B, C, E, H, and I
End Panel	A, B, F and G

**NOTE – Some unit ventilators, may not be equipped with the proper mounting hole locations to accommodate the Storage Cabinets, as the design has recently undergone changes. If this is the case, you may need to mark the appropriate hole locations onto the unit ventilator and drill the holes manually using a 3/16” drill bit.**

If installing the cabinet next to an unit ventilator remove the end panel, if provided. Also remove the front access panel from the side of the unit ventilator that the storage cabinet is being attached.

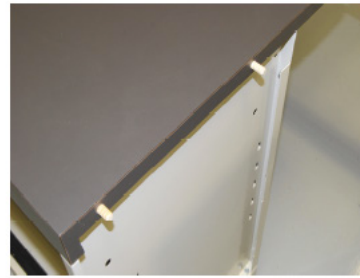
- If a block off plate is to be used, install it to the back of the storage cabinet by removing the rear lower screws that hold the side panels to the base of the cabinet.



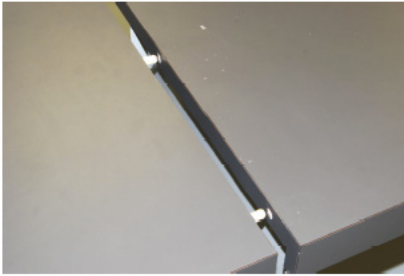
- Separate the two pieces of the adjustable wall mount bracket, and attach the shorter part of the bracket to the lower rear of the cabinet on the side that will be away from the unit ventilator. The other part of the bracket will be installed once the cabinet is fastened to the adjacent component.



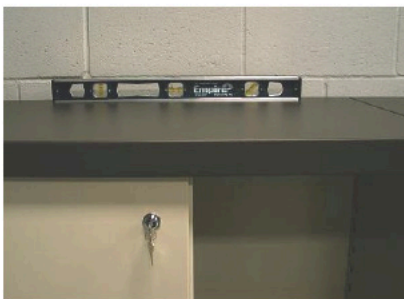
5. Slide the cabinet into place next to the adjacent component and lift the back of the cabinet to hang the rear lip onto the wall mount strip (Note – lifting the unit will not be required for a solid laminate top because it sits on top of the wall strip). Before pushing the cabinet up against the adjacent component, install either an alignment bar in location D for Steel Tops, or (2) wooden dowel pins in locations H and I for Laminate Tops. It may be necessary to tap the dowel pins in using a hammer.



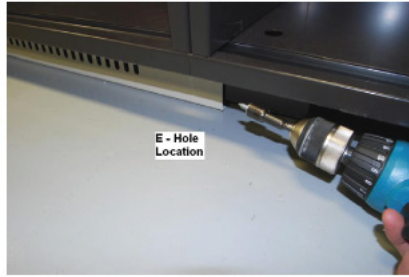
6. Slide the cabinet up against the component lining up the alignment bar or dowel pins to fit into the adjacent component. Sometimes it may be necessary to adjust the leveling legs to the approximate final height before sliding the cabinet up against the component to help ease the installation of the alignment bar or dowel pins.



7. Using a level and a flathead screwdriver, adjust the leveling legs from the inside of the cabinet making the unit level, as well as even with the adjacent component. Hold the level against the front of the cabinet to ensure that it is perpendicular to the floor on both sides.



8. Use a drill or impact gun with a 3/8" nut driver bit to install the screws from within the cabinet at locations A and B. For any components that require hole location E to be used, install this screw first from under the front lip of the cabinet, then move to other locations to attach the cabinet.



9. Adjust the leveling legs as necessary to ensure that all 4 legs are making contact with the floor.

10. **FOR SOLID LAMINATE TOPS ONLY** – Using a Drill and 5/32” drill bit, drill a hole on the underside of top panel for the mounting holes on the wall strip. Only drill about 1/2” deep. Then use (1) #14 Sheet Metal Screw x 3/4” to fasten the top panel to the wall strip on the open side of the cabinet. You only have to do one side as access to the other side is not possible. Be sure that the back of the top panel is flush against the wall.



11. With the cabinet in place, attach the second part of the adjustable wall mount bracket to the cabinet with the bolt and washer that was supplied with the bracket. Hold the bracket against the wall to transfer the hole location to the wall using a marker. Drill a hole into the wall using the appropriate drill bit.



12. Using the appropriate fasteners (supplied by others), attach the wall mount bracket to the wall.



13. Loosen the screws that hold the floor skirt to the cabinet and allow the skirt to make contact with the floor. Re-tighten the screws to set the skirt in place.



14. Now that the cabinet is completely installed, plug the (10) holes on the inside of the cabinet with the hole plugs that have been supplied with the hardware pack.



15. **FOR DAMPER** – use a slim reach through the bar the desired position. middle or at either accommodate the **DRAFTSTOP TOPS ONLY – ADJUSTMENT** – to adjust the screw driver or Allen key to grill and pull the damper to There are slots located in the end of the damper to tool for adjustment.



16. For No-Top installations (Laminate provided by alternate source) – Place Laminate Top in position and attach to side panels with appropriate Hardware. (not supplied) Use 4 Wood screws through each corner of the cabinet.

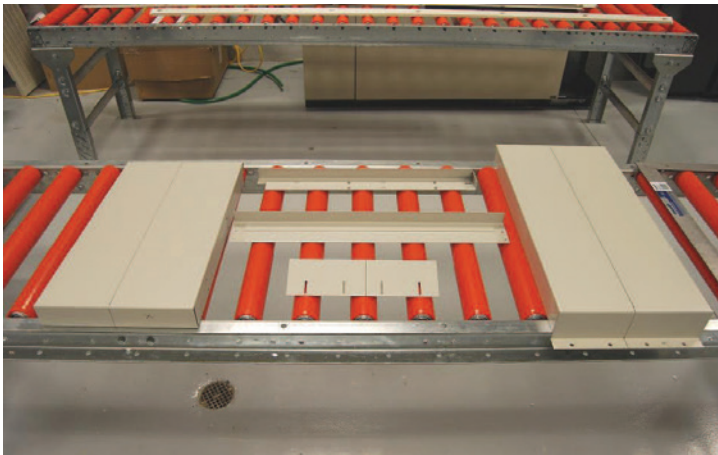
**NOTE - Consult the laminate supplier as to what hardware should be used to fasten the Laminate top to the Storage cabinet as they may need to be pre-drilled.**

## Filler section – Steel top

1. Unpack the filler sections. Filler sections are generally packaged two assemblies per box.
  - (2) Top panels (steel top)
  - (2) Front panels
  - (4) Front F-channels
  - (2) Top Left F-channels
  - (2) Top Right F-channels
  - (2) Front skirts
  - (2) Wall mounting angles
  - (4) Hardware Pack #2 (See Hardware section for list of items)

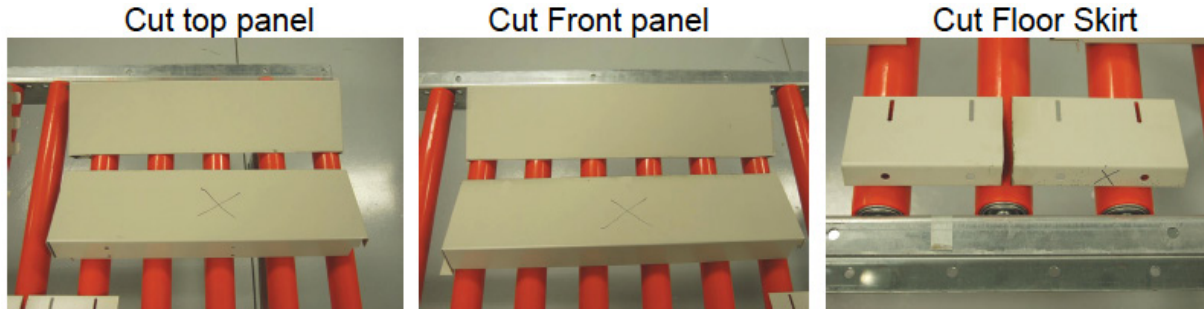
**NOTE - For filler section with steel tops, you will use the alignment bar and not use the wooden dowel pins. Inversely with a Laminate Top, you will use the dowel pins and not the alignment bar.**

2. Inspect the filler pieces for any damage that may have occurred during shipment. Identify the components and verify that you have all the necessary parts.
3. Measure the space in which the filler section is to be installed. Trim the front panel, Top Panel, and Floor skirt to 1/4" less than required length. (i.e. if space is 8" wide, cut pieces to 7-3/4" wide). Mark the pieces with a pencil or marker and mark the side of the part which will not be used.



4. Using a cutoff tool or other available metal cutting equipment, trim the front panel, top panel and floor skirt to the required dimension. Make sure to cut either the right or left side depending on what is required. If the filler will be mounted between a cabinet and the wall, the cut edge should be on the side going to the wall. Otherwise, cut whichever side you feel is necessary for the application.

Be sure to de-burr the cut edge. This will allow the part to slide into the F-channel as well as help to avoid injury.



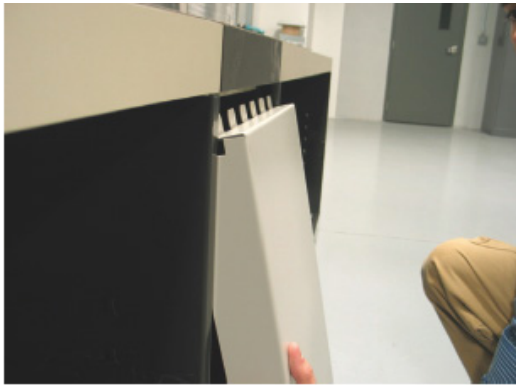
Steps 5a - 9a are for Fillers being mounted between a cabinet and the wall. The adjacent cabinet should be removed after the space is measured allowing access

5. (a) The cut edge of the filler, should go towards the wall. Starting with the Top panel and Top F-channel, slide the cut edge of the top panel into the F-channel. Mark the wall at the height of where adjacent cabinets are mounted and hang the rear lip of the Top Panel on the previously installed wall-strip. Using a level, hold the top panel so it is horizontal and even with the markings on the wall, then transfer the holes of the F-channel onto the wall.
6. (a) Using the necessary fasteners (not supplied) attach the Top Panel and Top F-channel to the wall. Hang the rear lip of the Top panel onto the wall-strip.
7. (a) Insert the cut the front F-channel. panel, into the slots of Floor skirt to the the appropriate the Floor skirt may be is not required in all transfer the holes to fasten the skir edge of the Front Panel, into Insert the fingers of the Front the Top Panel. Attach the bottom of the Front panel at height. (In some applications, fastened to the ground. This installations. If required, the floor with a marker and now.(hardware not supplied))
8. (a) Slide the adjacent cabinet back into its position, hanging the rear lip onto the wall strip. (The alignment bar or dowels will not be used for this part of the installation).
9. (a) From within the cabinet, using (3) #14 Sheet Metal Screws, fasten the top panel, and front panel of the Filler to the cabinet at hole locations A, B and E. Ensure the panels are flush and the floor skirt is making contact with the floor.



**Steps 5b – 8b are for Fillers being mounted between two cabinets or between a cabinet and another component.**

5. (b) Insert the cut edge of the Top Panel into the appropriate Top F-Channel (left or right) and do the same with the cut edge of the Front Panel into the front F-Channel.
6. (b) Starting with the Top Panel/Top F-Channel, set them in place hanging the rear lip of the top panel into the wall-strip, and from within either adjacent component, use (2) #14 Sheet Metal Screws to fasten the Top Panel to the adjacent components at hole locations **A and B**.
7. (b) With the Side Panel/Front F-channel, insert the fingers of the front panel into the slots of the top panel and hold the front at the appropriate height. Hold the skirt in place, and fasten it to the Front Panel so that is making contact with the floor.



8. (b) From within the adjacent component, use (2) #14 Sheet Metal Screws to fasten the Front panel to the adjacent component at hole locations **C** (on F-channel side only) and **E**. If there are components on either side of the Filler, fasten the Side Panel from both sides.

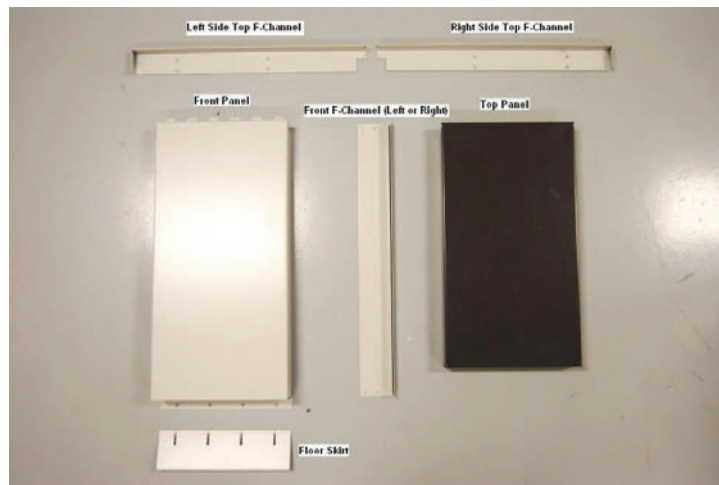


## Filler section – Laminate top

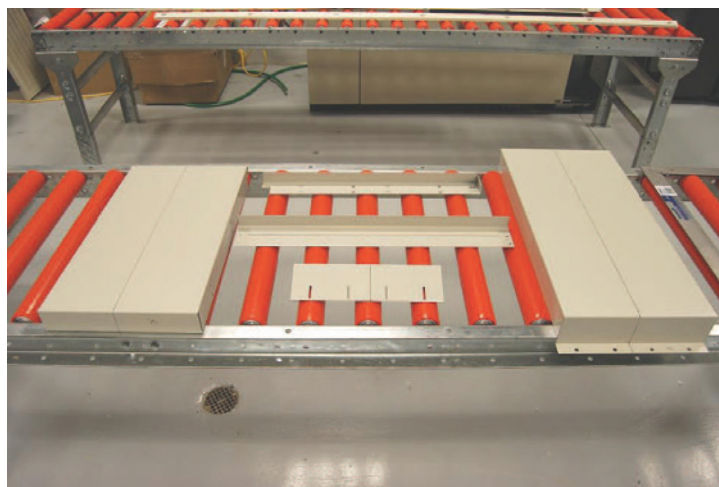
1. Unpack the filler sections. Filler sections are generally packaged two assemblies per box.
  - (2) Top panels (laminate top)
  - (2) Top Panel U-Frame
  - (2) Front panels
  - (4) Front F-channels
  - (2) Front skirts
  - (2) Wall mounting angles
  - (4) Hardware Pack #2 (See Hardware section for list of items)

**NOTE - For filler section with steel tops, you will use the alignment bar and not use the wooden dowel pins. Inversely with a Laminate Top, you will use the dowel pins and not the alignment bar.**

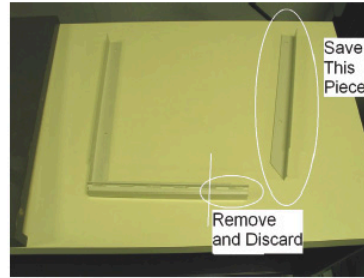
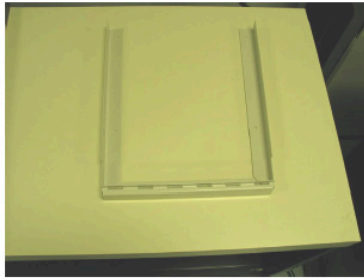
2. Inspect the filler pieces for any damage that may have occurred during shipment. Identify the components and verify that you have all the necessary parts.



3. Measure the space in which the filler section is to be installed. Mark the front panel, Top Panel, and Floor skirt to 1/4" less than required length. (i.e. if space is 8" wide, mark each piece to 7-3/4" wide). Mark the pieces with a pencil or marker and mark the side of the part which will not be used.

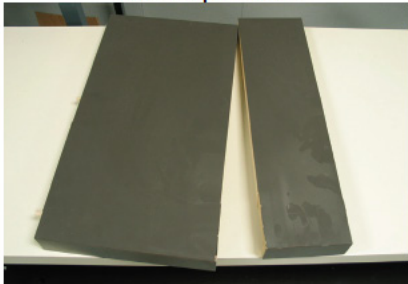


- Starting with the Top panel – Mark the U-Frame to the correct dimension and remove the side part of the U-frame (by bending it back and forth until it separates) on the side of the top panel that is to be cut down. Then cut the slotted section down at the marked location.

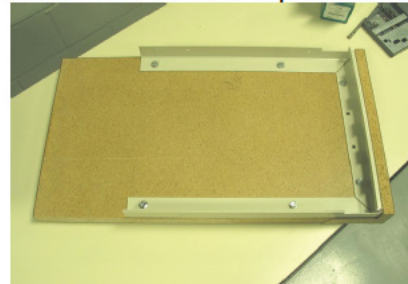


Also cut the Top panel down using a circular saw. Then attach only the “L” section of the cut down U-frame by pre-drilling holes with a 5/32” drill bit. Hold the slotted edge against the inside of the front lip as shown in the picture below. The side that was separated off will be used later on.

Cut Top Panel



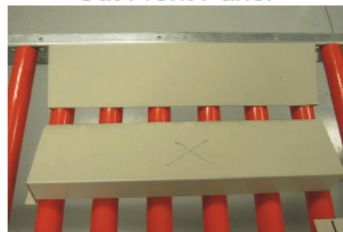
Underside of Laminate Top with U-frame



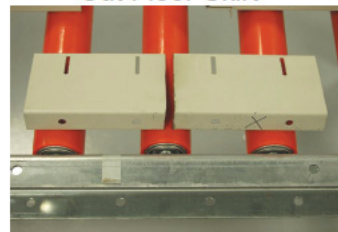
- Using a cutoff tool or other available metal cutting equipment, trim the front panel, and floor skirt to the required dimension. Make sure to cut either the right or left side depending on what is required. If the filler will be mounted between a cabinet and the wall, the cut edge should be on the side going to the wall. Otherwise, cut whichever side you feel is necessary for the application.

**Be sure to de-burr the cut edges. This will allow the part to slide into the F-channel as well as help to avoid injury.**

Cut Front Panel



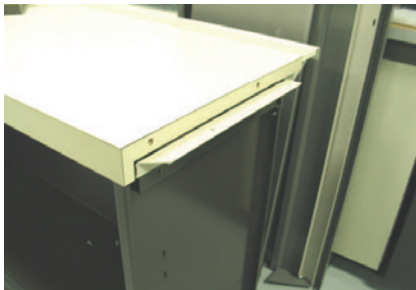
Cut Floor Skirt



**Steps 6a - 10a are for Fillers being mounted between a cabinet and the wall. The adjacent cabinet should be removed after the space is measured allowing access to the wall for mounting components of the Filler.**

- (a) The cut edge of the filler, should go towards the wall. Starting with the side of the U-Frame that had been snapped off, mount it to the wall at the same height as the wall strip, which was previously installed. Use a level to ensure the piece is being mounted horizontally.
- (a) Set the top panel onto the Wall Strip and Section of the U-frame. Make sure that it is sitting level, then from underneath the top panel, transfer the hole locations of the U-frame section onto the underside of the top panel and pre-drill holes using a 5/32” drill bit. Be sure to only drill approximately 1/2” deep so not to penetrate the other side of the panel. Then set the Top panel into position and attach is using the provided #14 Sheet Metal Screws x 3/4” long

8. (a) Insert the cut edge of the Front Panel, into the front F-channel. Insert the fingers of the Front panel, into the slots of the Top Panel. Attach the Floor skirt to the bottom of the Front panel at the appropriate height. (In some applications, the Floor skirt may be fastened to the ground. This is not required in all installations. If required, transfer the holes to the floor with a marker and fasten the skirt now.(hardware not supplied))
9. (a) Slide the adjacent cabinet back into its position. (The dowels will not be used for this part of the installation)
10. (a) From within the cabinet, using (3) #14 Sheet Metal Screws, fasten the top panel U-frame, and front panel of the Filler to the cabinet at hole locations A, B and E. Ensure the panels are flush and the floor skirt is making contact with the floor.



**Steps 6b – 10b are for Fillers being mounted between two cabinets or between a cabinet and another component.**

6. (b) Start by attaching the snapped off section of the U-frame onto the Cabinet that will be on the cut edge of the filler at hole locations A and B.
7. (b) Set the top panel in place by inserting the 2 wooden dowel pins into the adjacent cabinet at locations H and I and slide the top panel onto the pins. You may need to use a hammer to lightly tap the top panels together. From within the adjacent component, use (2) #14 Sheet Metal Screws to fasten the Top Panel U-frame, with the top panel attached to the adjacent component at hole locations A and B. Then from underneath the top panel, attached the snapped off section of the U-frame to the top panel by pre drilling holes with a 5/32" drill bit at the necessary locations of the U-frame section.
8. (b) Insert the cut edge of the Front Panel into the appropriate Front F-Channel

9. (b) Holding the Front Panel/Front F-channel, insert the fingers of the front panel into the slots of the top panel and hold the front at the appropriate height. Then hold the skirt in place, and fasten it to the Front Panel so that is making contact with the floor.



10. (b) From within the adjacent component, use (2) #14 Sheet Metal Screws to fasten the Front panel to the adjacent component at hole locations C (on F-channel side only) and E. If there are components on either side of the Filler, fasten the Front Panel from both sides.

## End panel

1. Unpack the End Panel. End Panels are generally packaged two complete assemblies per box.  
 (2) end panels  
 (2) side skirts  
 (2) hardware Pack #3 (See Hardware section for list of items)

The alignment bar is not needed to install the End Panel.

**NOTE - The End Panel is only to be installed on either a Storage Cabinet or a Utility Compartment. This component is not made for attachment to a filler section or corner filler section.**

For both applications, you will use hole locations A, B, F and G to attach the End Panel to the respective component.

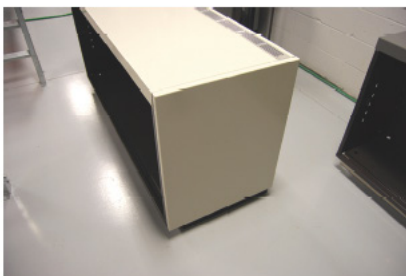
2. Start by holding the End panel in place and screwing in (2) #14 Sheet Metal Screws through locations A and B from within the cabinet or utility compartment. (It is recommended to do this with the help of a co-worker)



3. Slide the side floor skirt in between the lower portion of the end panel and the storage cabinet facing the lower flange towards the cabinet. Push the floor skirt in until the front is even with the legs of the cabinet and line up the mounting holes from the end panel.



4. With the remaining (2) #14 Sheet Metal Screws, attach the lower portion of the end panel and the side floor skirt to the cabinet. Be sure that the Floor skirt is making contact with the floor.



# Maintenance

## **Cleaning the Classroom Cabinetry Components**

- Clean the classroom cabinetry components using only non-abrasive cleaning products.
- To prevent damaging the laminate tops, avoid chlorine bleach products.
- Remove any dirt or debris which may fall into the door tracks.

## **Storage Cabinets**

- To prevent damage to the adjustable shelf, do not store more than 150 lbs on any shelf.
- Avoid storing objects with sharp corners against the walls of the storage cabinets. Sharp objects may cause deep scratching of the powder coated finish.
- Avoid storing objects that extend past the depth of the adjustable shelves. Storing objects that extend too far off the adjustable shelves may cause damage to the shelving doors, if present.
- Do not force the doors to close. Forcing the doors to close could cause damage to the articles stored in the storage cabinet, the storage cabinet doors or the shelving.

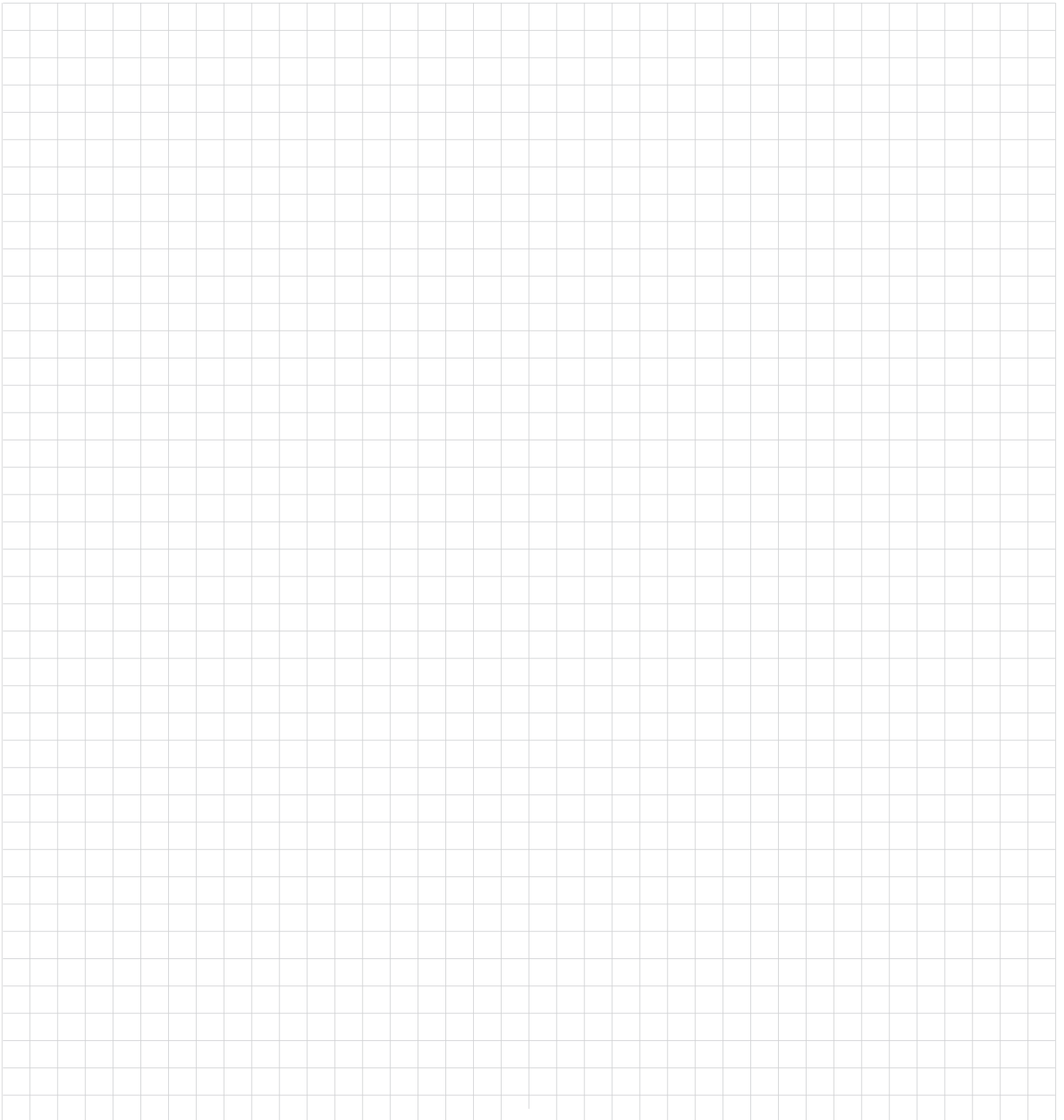


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always the  
best climate

Always the best climate for

# SMART IDEAS



The brand with the best indoor climate solutions.

## FOUR COMPLEMENTARY PRODUCT LINES

The broad and clearly structured portfolio from the Zehnder Group is split into four product lines. Consequently, we can provide the right product, the perfect system and the matching service for all types of projects - from new builds to renovations, single- or multiple- family homes, as well as commercial projects. This variety ensures that our wealth of experience is continuously expanding, providing tangible added value to our customers on a daily basis.



### Decorative radiators

Our individual decorative radiators for living and bathrooms not only make a home warmer but also more attractive. Created by renowned designers, they impress with excellent functionality.

## NUMBERS THAT SPEAK FOR THEMSELVES

MANUFACTURER OF THE

**1<sup>ST</sup>**

STEEL RADIATOR IN THE WORLD

**121**

YEARS OF INNOVATIVE TRADITION

AROUND

**3,000**

EMPLOYEES

FOUNDED IN

**1895**

REPRESENTED IN COUNTRIES

**19**

**1,800,000**

TONNES OF CO<sub>2</sub> SAVED SINCE 2005

## WARRANTY

Zehnder guarantees its products to be free from defects in material and workmanship for a period of two years from date of shipment from our factory.

Should there be any defects in the good(s), the purchaser should promptly notify Zehnder. Upon receipt of written consent from Zehnder, the purchaser shall return the defective good(s) to the factory for inspection with freight prepaid. If inspection shows the goods to be defective, Zehnder will at its discretion repair or replace the said item(s).

Defects arising from damage due to shipment, improper installation, negligence or misuse by others are not covered by this warranty.





### Comfortable indoor ventilation

Our comfortable indoor ventilation is energy-efficient and provides a healthy indoor climate. It promotes the well-being of the occupants and increases the value of the property.



### Heating and cooling ceiling systems

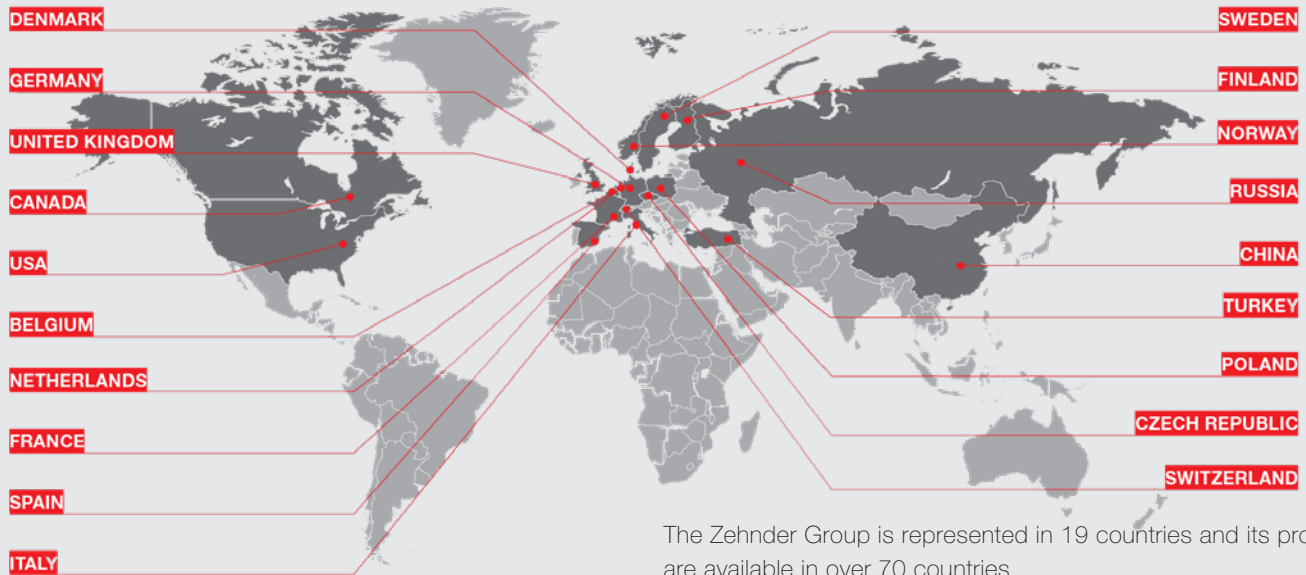
Zehnder heating and cooling ceiling systems are convenient and energy-efficient for heating and cooling. They are perfectly attuned to the relevant environment.



### Clean air solutions

Clean air solutions from Zehnder reduce the level of dust in the air, create a healthier working climate and reduce the amount of cleaning required.

## BEST CLIMATE IN THE WORLD



This warranty is extended only to the original purchaser from Zehnder.

**IMPORTANT:** Approved submittal documentation, specific to each project, supersedes the general guidelines contained within this document.

**zehnder**

The Zehnder brand offers excellent indoor climate solutions within the sectors of decorative radiators, clean air solutions, comfortable indoor ventilation and heating and cooling ceiling systems.

