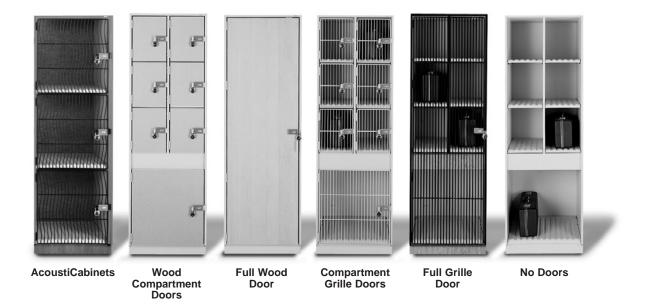


# **Assembly Instructions**

# **Cabinet Storage Products**

(UltraStor®, AcoustiCabinets®, Adjustable Shelf, Cover Panels, Closure Panels)



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Visit the Instrument Storage web page at wengercorp.com for more information.

Note: Please read and understand these instructions before proceeding.

Note: If you need additional information, contact Wenger Corporation using the information below.

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# Important User Information

#### General

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The information in this manual is subject to change without notice and does not represent a commitment on the part of Wenger Corporation. Wenger Corporation does not assume any responsibility for any errors that may appear in these instructions.

In no event will Wenger Corporation be liable for technical or editorial omissions made herein, nor for direct, indirect, special, incidental, or consequential damages resulting from the use or defect of these instructions. The manufacturer reserves the right to change this product at any time.

The information in this document is not intended to cover all possible conditions and situations that might occur. The end user must exercise caution and common sense when assembling or installing Wenger Corporation products. If any questions or problems arise, call the Wenger Corporation at (800) 4WENGER (493-6437) or +1-507-455-4100 worldwide.

#### Manufacturer

The Cabinet Storage Products are manufactured by:

Wenger Corporation 555 Park Drive Owatonna, MN 55060 (800) 4WENGER (493-6437) • +1 (507) 455-4100 wengercorp.com

#### Intended Use

- This product is designed to store musical instruments and garments.
- This product is intended for indoor use in normal ambient temperature and humidity conditions – it must not be exposed to prolonged outside weather conditions.
- This product is intended to be assembled, installed and used only as described in these instructions.

#### Warranty

Warranty information is available at wengercorp.com.

# Safety Precautions

Throughout this document you may find cautions and warnings which are defined as follows:

- WARNING: Failure to follow the instruction could result in serious injury or damage to property.
- CAUTION: Failure to follow the instruction could result in minor injury or damage to property.

Read and understand all of these safety instructions before any assembly, installation or use.

### **ACAUTION**

Make sure anyone assembling, installing or using this product has read and understands these instructions.

# **ACAUTION**

Failure to comply with Warnings and Cautions in this document can result in damage to property or serious injury.

### **ACAUTION**

It is unsafe for only one person to assemble or move the cabinets.

### **ACAUTION**

Do not hang anything from cabinet doors or shelves.

### **ACAUTION**

Always wear safety glasses and gloves when assembling or installing the cabinets.

### **ACAUTION**

Assemble and install the cabinets only on flat, solid surfaces.

### **AWARNING**

Make sure the cabinets are securely attached to walls or adjoining cabinets after assembly is complete.

### **AWARNING**

Do not stand or walk on the top of any cabinet. 38" (973 mm) cabinets with work surface tops have a maximum load capacity of 250 lb (113 kg) for evenly distributed loads.

All other cabinets have a top maximum load capacity of 50 lb (23 kg).

# Required Tools

- Open-end wrenches: 1/4", 3/8", 7/16", 1/2"
- Screwdrivers: flat head, phillips head
- 5/32" Hex bit
- 7/16" Wrench

- Cordless drill with 3/16" and 3/8" bits and sockets
- Plastic mallet
- · Non-marring clamps
- Carpenter's level
- Carpenter's square

- Tape measure
- Utility knife
- Impact driver
- Pencil
- Power saw (if installing closure panels)

#### **NOTICE**

To save assembly time, it is recommended to have more than one of each type of screwdriver on hand.

# Wall Fasteners - Not Supplied

Because materials and construction of walls can vary, fasteners for attaching the cabinets to the structure are not provided.

The installer must choose the appropriate fastener and follow the manufacturer's instructions.

### **AWARNING**

Inferior or improperly installed fasteners could cause the cabinets to tip over.

Determine the construction of the walls.

If cabinets are attached to the wall and adjacent cabinets:

no attachment to the floor is required for standard installation.

For seismic, peninsula or island configurations, cabinets would be attached to the floor.

See the "Secure Cabinets" procedures for more information.

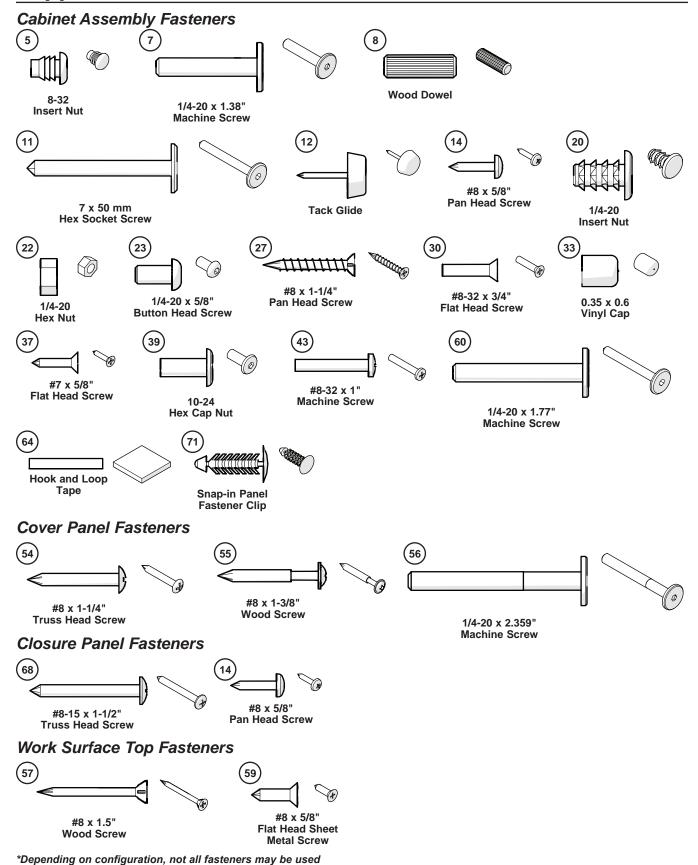
#### **Cabinet Fastener Guidelines:**

- If the wall is wood stud-and-drywall construction, attachment should be by lag screws (1/4" minimum)
- If the wall is metal stud-and-drywall construction, attachment should be by toggle bolt (1/4" minimum)
- If the wall is concrete block construction, attachment should be by concrete screw (Tapcon) or toggle bolt (1/4" minimum)
- If the wall is poured concrete construction, attachment should be by concrete screw (Tapcon) or wedge-type concrete anchors

#### NOTICE

Each wall connection must be rated for a minimum of 500 lb (227 kg) of tension. Other fasteners may be used if the connection strength requirement is met.

# Supplied Hardware



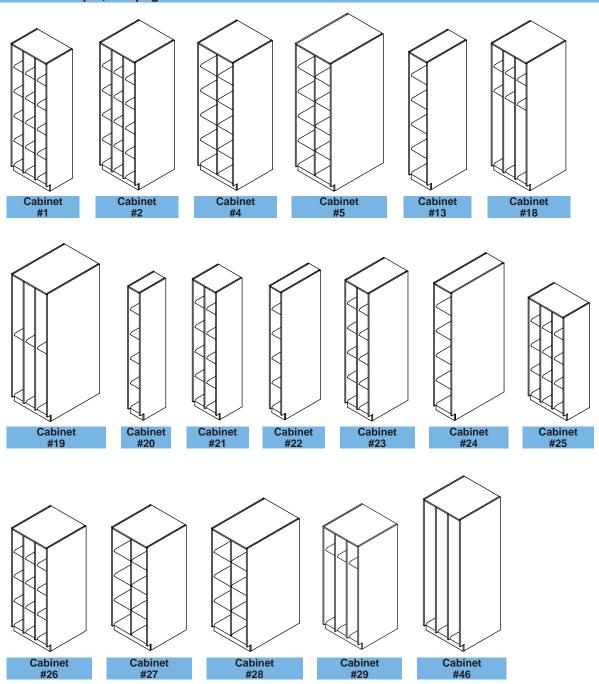
### **Cabinet Identification**



Locate the individual cabinet to be assembled and go the indicated page for instructions. Cabinets are grouped according to similar assembly procedures.

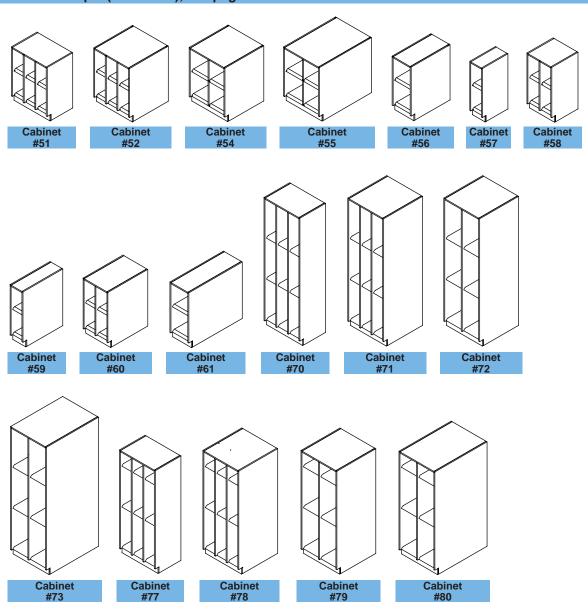
Doors, backing, end panel installation and cabinet placement will be addressed separately.

#### Cabinet Group 1, see page 12

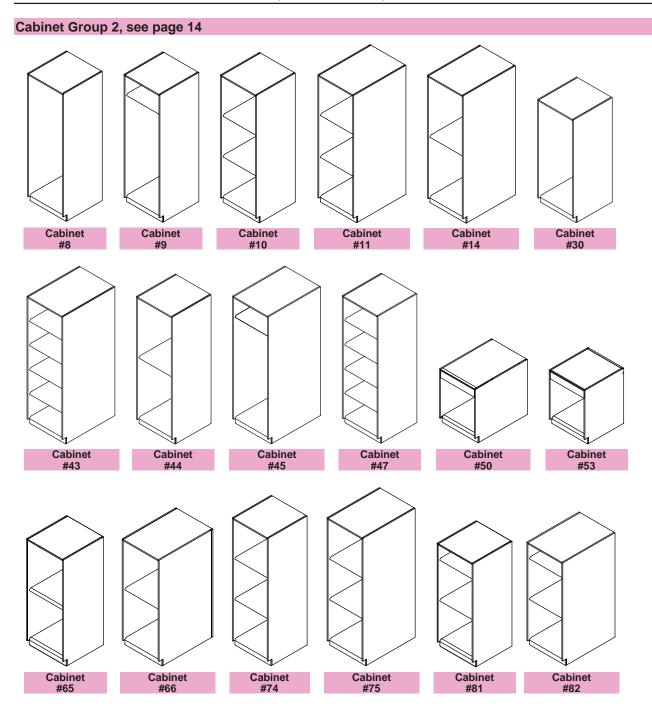


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### Cabinet Group 1 (continued), see page 12

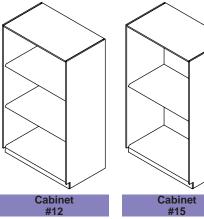


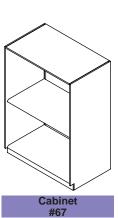
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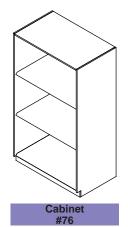


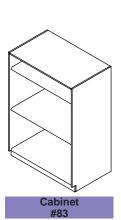
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# Cabinet Group 3, see page 16

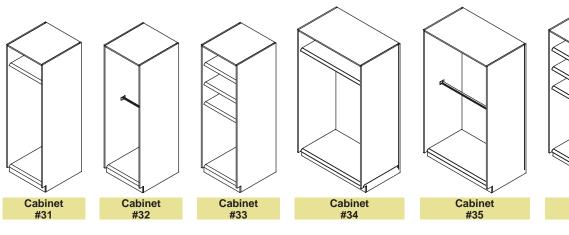








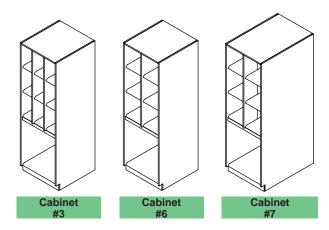
### Cabinet Group 4, see page 18



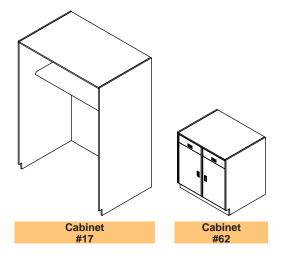
Continued on the following page

Cabinet

### Cabinet Group 5, see page 20



#### Cabinet Group 6, see page 22



### Before Installation

#### Overview

- Assembly and installation should be performed by skilled technical persons, and only after carefully studying these instructions.
- It is suggested that the cabinets are setup in a space that is large enough to safely handle the cartons, pieces, finished cabinets, and dunnage.
- Inspect the condition of the wall and floor where the cabinets will be located. If the wall is not straight, establish a reference line so that the fronts of all cabinets will line up. Also, determine the highest point on the floor, which will establish the leveled height of each row of cabinets.
- Build only one cabinet at a time, to avoid intermixing parts. Build each according to these instructions for the specific model.
  - Do not start installing doors until all cabinets are assembled and in their final location, leveled and secured to adjacent walls and cabinets.
- After all cabinets are in place, distribute the door cartons and door hardware sets to each cabinet.
   Assemble and hang the doors one at a time according to the instructions.
   Then clean off any fingerprints, dirt, and dust, using a clean rag and mild spray cleaner or acetone.

#### Before You Begin

Keep the Packing List with the cabinet, for reference until the unit is completely assembled.

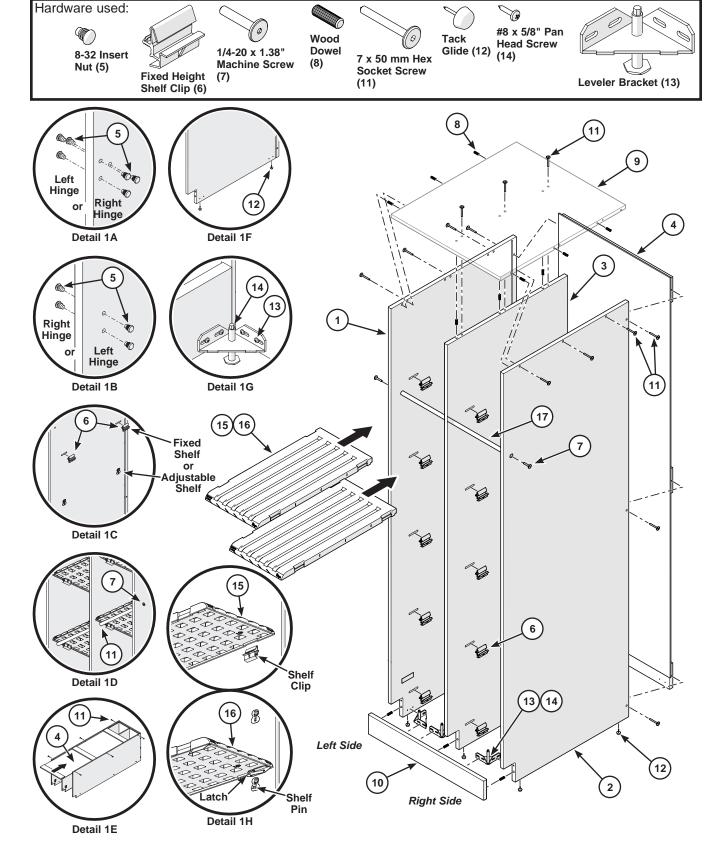
- Read the complete assembly procedure before beginning the assembly.
- The cabinet carton is marked with the cabinet number as shown in "Cabinet Identification".
- Hardware packs may contain extra fasteners that are not required on all cabinets.
- Because of the variety of possible wall surfaces, wall fasteners are not included.
   Have your maintenance personnel recommend an appropriate type for safe, secure attachment and have the fasteners available before assembling the cabinet.
- At least two people (preferably four) are required to assemble the cabinet and set it upright.

### Installation Procedures

- Identify which cabinet is being assembled.
   Refer to "Cabinet Identification", the cabinet carton and any installation drawings.
- 2. Assemble the cabinet according to "Assembly" on pages 12-24.
- 3. Level the cabinet according to "Level Cabinets" on pages 25-26.
- 4. If the cabinet has doors, attach them according to "Attach Doors" on pages 27-37.
- 5. If the cabinet is an AcoustiCabinet, attach the backing material according to "Attach Backing" on page 38.
- Secure cabinets to the structure walls or secure them together according to "Secure Cabinets" on pages 39-46.
- 7. Install optional cover panels to the exposed cabinet ends according to "Finished Back Kit" and "Cover Panel Installation" on pages 47-49.
- 8. Install top closure panels to close empty spaces behind cabinets according to "Closure Panel Installation" on page 50.
- 9. For Cabinets 50-62, attach work surface tops according to "Work Surface Tops" on page 55.

# Assembly - Group 1

Cabinets 01, 02, 04, 05, 13, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 46, 51, 52, 54, 55, 56, 57, 58, 59, 60, 61, 70, 71, 72, 73, 77, 78, 79, 80



# Assembly - Group 1 (continued)

#### Pre-Assembly

#### NOTICE

For panel orientation: the left side panel (1), right side panel (2) and any center panels (3) have a notch in the bottom front corner. The side panels also have a groove in the rear to receive the back panel (4).

1. Install door mounts.

#### Skip this step if doors will not be installed.

- Per each compartment, lay the panels flat.
   For a left side door hinge, lay with the left surface up.
   For a right side door hinge, lay with the right surface up.
- b. See Detail 1A. Install door hinge mounts. Use a plastic mallet to pound 8-32 insert nuts (5) into the holes (three per hinge mount) located toward the front edge of each panel.
- c. See Detail 1B. Install door striker plate mounts. Turn the panels over, use a plastic mallet to pound 8-32 insert nuts (5) into the holes (two per striker plate mount) located toward the front edge of each panel.
- Install shelf clips

For fixed height shelves only, adjustable height shelf clips are pre-installed.

- See Detail 1C. Per each compartment, turn the panels so their inside surface is up.
- Push fixed height shelf clips (6) (two clips in each panel side/four per shelf) into the inside surface of both compartments (side or center panels).
- c. Turn any center panels over and repeat on the other side.

#### NOTICE

Panels can be large and difficult to keep aligned when attaching together with screws. To assist, "peg" the panels first by inserting wood dowels to fit snugly into 5/16" diameter holes in the panels. They may need to be tapped into place.

- 3. Insert wood dowels (8) into:
  - The left and right side edges of the top panel (9)
  - the top edge and notch of any center panels (3)
  - the backside of the bottom front stretcher panel (10).

#### Panel Assembly

- 1. Turn the left and right side panels (1) and (2) on edge, with the front edges down. With wood dowels (8), peg the side panels to the top panel (9).
  - Attach the side panels to the side edges of the top panel (9) with 7 x 50 mm hex socket screws (11).
- 2. Cabinets 05, 19, 24 only. See Detail 1D.

Attach one tube (17) to both the left and right side panels (1) and (2) with one 1/4-20 x 1.38" machine screw (7) on each side. The tube will slide through any center panels.

- 3. Peg any center panels (3) to the top panel (9) and attach them with 7 x 50 mm hex socket screws (11).
- 4. Attach the back panel (4).
  - a. **See Detail 1E.** The bottom stretcher panel overlaps the bottom edge of the back panel.
  - b. With the three rear stretcher panels facing up, slide the back panel into the groove on the side and top panels.
- 5. Attach the sides of the rear stretcher panels to both side panels, using 7 x 50 mm hex socket screws (11).
- 6. Turn the cabinet assembly to face the front edges up.
- Check that the cabinet assembly is square and tighten all screws.

#### Attach Glides and Levelers

- See Detail 1F. Tack glides help protect corners and edges while moving the cabinet into place.
   Push or hammer plastic tack glides (12) into the bottom edge of the side and any center panels, about 2" (51 mm) from the corners.
- 2. With wood dowels (8), peg the front stretcher panel (10) to the notch in the side panels and any center panels.
- Attach leveler brackets.
  - a. See Detail 1G. Attach leveler brackets (13) to the inside of all four corners of the cabinet using #8 x 5/8" pan head screws (14). The leveler brackets attach to the inside of both side panels and to the front or rear stretcher panels.
  - If there are center panels, attach only one leveler bracket to the left-front side of the right-most center panel. Attach the other side to the front stretcher panel.
  - c. After the leveler brackets are attached, screw the levelers in so the plastic glides extend slightly further than the bottom of the levelers.

#### Install Upper Shelves

- 1. Tip the assembled cabinet upright.
- 2. Recheck that the cabinet is square.
- 3. Recheck and tighten all hex-socket screws.
- See Detail 1H. Starting at the top of the cabinet, snap in the upper levels of shelves.

Do not install Shelves in 38" (973 mm) tall cabinets.

- For fixed height shelves (15), snap each shelf down into the shelf clips at each corner.
- b. For adjustable height shelves (16), flip the shelf pin down the in each corner at the desired shelf height and slide the shelf onto the shelf clips until the latch clicks. To remove a shelf, pull out on the latch and slide the shelf out.
  - Wider shelves may have a latch on each side.

#### NOTICE

To simplify leveling, do not install any lower levels of shelves yet.

#### Final Cabinet Adjustment

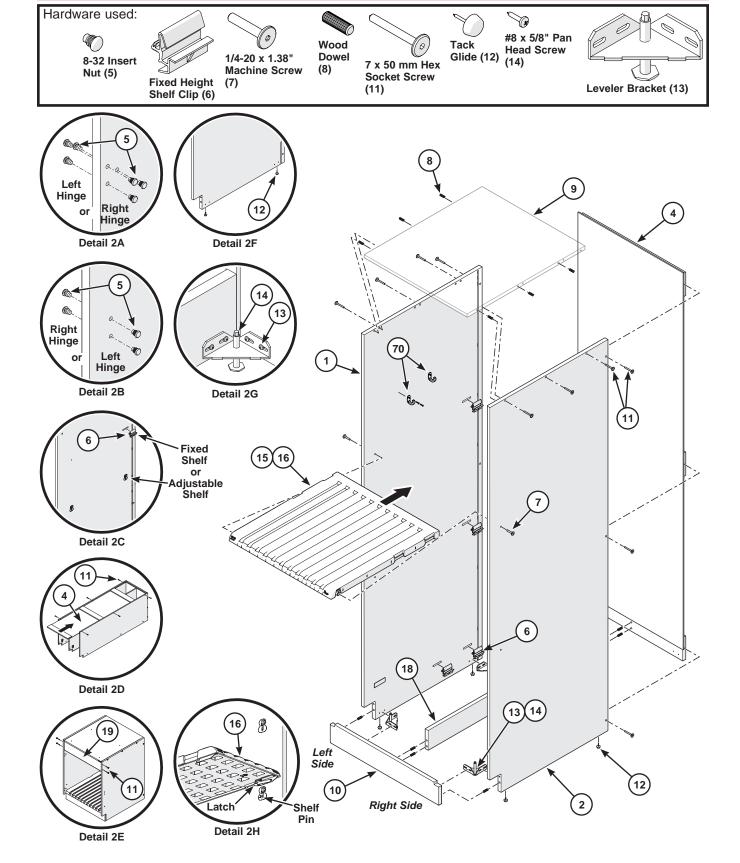
- Slide the assembled cabinet to the intended location.
- Level the cabinet using a 1/4" socket or wrench on the leveler brackets, see the "Leveling Cabinets" procedures.
- 3. Install the remaining shelves into the lower levels.

#### Final Cabinet Bank Assembly

- 1. Assemble, position and level any remaining cabinets.
- 2. After all cabinets in the bank have been positioned:
  - Attach the cabinet doors, see the "Attach Doors" procedures.
  - Secure the cabinets, see the "Secure Cabinets" procedures.

# Assembly - Group 2

Cabinets 08, 09, 10, 11, 14, 30, 43, 44, 45, 47, 50, 53, 65, 66, 74, 75, 81, 82



# Assembly - Group 2 (continued)

#### Pre-Assembly

#### NOTICE

For panel orientation: The left side panel (1) and right side panel (2) have a notch in the bottom front corner. The side panels also have a groove in the rear to receive the back panel (4).

Install door mounts.

#### Skip this step if doors will not be installed.

- a. Per each compartment, lay the panels flat.
   For a left side door hinge, lay with the left surface up.
   For a right side door hinge, lay with the right surface up.
- See Detail 2A. Install door hinge mounts.
   Use a plastic mallet to pound 8-32 insert nuts (5) into the holes (three per hinge mount) located toward the front edge of each panel.
- c. See Detail 2B. Install door striker plate mounts. Turn the panels over, use a plastic mallet to pound 8-32 insert nuts (5) into the holes (two per striker plate mount) located toward the front edge of each panel.
- Install shelf clips.

# For fixed height shelves only, adjustable height shelf clips are pre-installed.

- See Detail 2C. Per each compartment, turn the panels so their inside surface is up.
- Push fixed height shelf clips (6) into the back inside surface of both compartments.
   Bottom shelf requires two clips in each panel side/four per shelf and upper shelves require one clip in each panel side/two per shelf).

#### NOTICE

Panels can be large and difficult to keep aligned when attaching together with screws. To assist, "peg" the panels first by inserting wood dowels to fit snugly into 5/16" diameter holes in the panels. They may need to be tapped into place.

- 3. Insert wood dowels (8) into:
  - The left and right side edges of the top panel (9)
  - the backside of the bottom front stretcher panel (10).

#### Panel Assembly

- Turn the left and right side panels (1) and (2) on edge, with the front edges down. With wood dowels (8), peg the side panels to the top panel (9).
  - Attach the side panels to the side edges of the top panel (9) with 7 x 50 mm hex socket screws (11).
- 2. Attach the back panel (4).
  - a. **See Detail 2D.** The bottom stretcher panel overlaps the bottom edge of the back panel.
  - b. With the three rear stretcher panels facing up, slide the back panel into the groove on the side and top panels.
- Attach the sides of the rear stretcher panels to both side panels, using 7 x 50 mm hex socket screws (11).
- 4. Turn the cabinet assembly to face the front edges up.
- With wood dowels (8), peg the cross stretcher panel (18) to the bottom rear stretcher panel, then peg the front stretcher panel (10) to it.
- 6. With wood dowels (8), peg the front stretcher panel (10) to the notch in the side panels.

7. Cabinets 50 and 53 only. See Detail 2E.

Attach top front stretcher panel.

- Place the top front stretcher panel (19) underneath the top panel and between the side panels.
- b. Attach the sides of the top front stretcher panel to both side panels, using 7 x 50 mm hex socket screws (11).
- Check that the cabinet assembly is square and tighten all screws.

#### Attach Glides and Levelers

- See Detail 2F. Tack glides help protect corners and edges while moving the cabinet into place. Push or hammer plastic tack glides (12) into the bottom edge of the side and any center panels, about 2" (51 mm) from the corners.
- 2. Attach leveler brackets.
  - a. See Detail 2G. Attach leveler brackets (13) to the inside of all four corners of the cabinet using #8 x 5/8" pan head screws (14). The leveler brackets attach to the inside of both side panels and to the front or rear stretcher panels.
  - After the leveler brackets are attached, screw the levelers in so the plastic glides extend slightly further than the bottom of the levelers.

#### Install Upper Shelves and Hooks

- 1. Tip the assembled cabinet upright.
- 2. Recheck that the cabinet is square.
- 3. Recheck and tighten all hex-socket screws.
- See Detail 2H Starting at the top of the cabinet, snap in the upper levels of shelves.

#### Do not install shelves in Cabinets 50 and 53.

- a. For fixed height shelves, rest the shelf on the rear shelf clips and attach the front support tubes to the side panels using with one 1/4-20 x 1.38" machine screw (7) on each side.
- For adjustable height shelves (16), flip the shelf pin down the in each corner at the desired shelf height and slide the shelf onto the shelf clips until the latch clicks.
   To remove a shelf, pull out on the latch and slide the shelf out.

Wider shelves may have a latch on each side.

#### NOTICE

Cabinets 10 and 11 have two upper shelves; Cabinet 14 has only one upper shelf, in the middle.

To simplify leveling, do not install any lower levels of shelves yet.

5. Cabinets 8, 9, 30 and 45 only.

Install two brass hooks (70) to the inside surface of the left side panel (1) with the included brass screws. Use two screws per hook, pilot holes indicate the locations.

#### Final Cabinet Adjustment

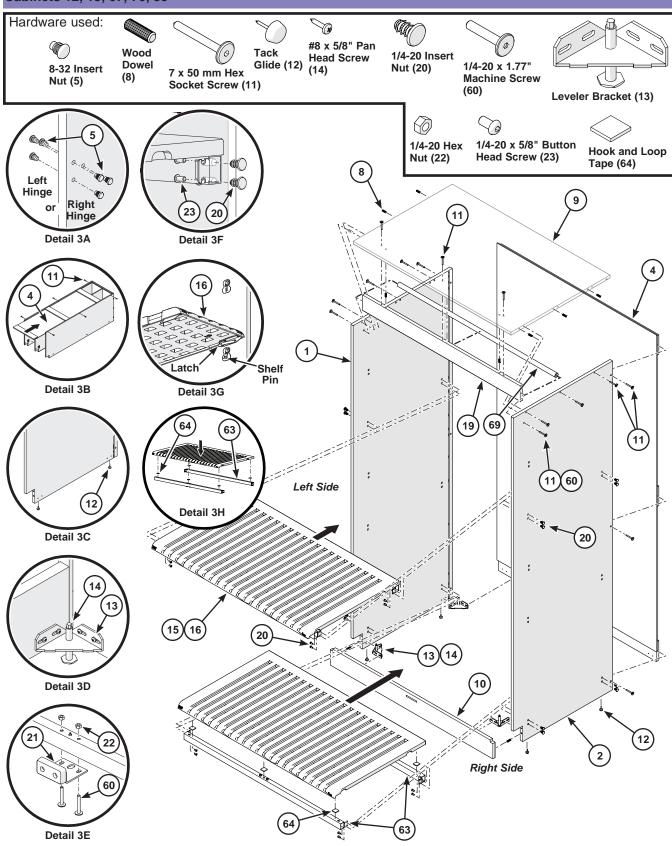
- 1. Slide the assembled cabinet to the intended location.
- Level the cabinet using a 1/4" socket or wrench on the leveler brackets, see the "Leveling Cabinets" procedures.
- 3. Install the remaining shelves into the lower levels.

#### Final Cabinet Bank Assembly

- 1. Assemble, position and level any remaining cabinets.
- 2. After all cabinets in the bank have been positioned:
  - Attach the cabinet doors, see the "Attach Doors" procedures.
  - b. Secure the cabinets, see the "Secure Cabinets" procedures.

# Assembly - Group 3

Cabinets 12, 15, 67, 76, 83



# Assembly - Group 3 (continued)

#### Pre-Assembly

#### NOTICE

For panel orientation: the left side panel (1) and right side panel (2) have a notch in the bottom front corner. The side panels also have a groove in the rear to receive the back panel (4).

1. Install door mounts.

#### Skip this step if doors will not be installed.

- Per each compartment, lay the panels flat.
   For a left side door hinge, lay with the left surface up.
   For a right side door hinge, lay with the right surface up.
- b. See Detail 3A. Install door hinge mounts. Use a plastic mallet to pound 8-32 insert nuts (5) into the holes (three per hinge mount) located toward the front edge of each panel.

#### 2. See Detail 3E (Cabinets 12, 15 and 67 only).

There are holes in each side panel that will be used later for shelf support bar screws (two per each shelf support bar end in each side panel).

Use a plastic mallet to pound 1/4-20 insert nuts (20) into these holes.

#### NOTICE

Panels can be large and difficult to keep aligned when attaching together with screws. To assist, "peg" the panels first by inserting wood dowels to fit snugly into 5/16" diameter holes in the panels. They may need to be tapped into place.

- 3. Insert wood dowels (8) into:
  - The left and right side edges of the top panel (9)
  - the backside of the bottom front stretcher panel (10).
  - The top of the top front stretcher panel (19).

#### Panel Assembly

 Turn the left and right side panels (1) and (2) on edge, with the front edges down. With wood dowels (8), peg the side panels to the top panel (9).

Attach the side panels to the side edges of the top panel (9) with 7 x 50 mm hex socket screws (11).

- 2. Attach the back panel (4).
  - a. **See Detail 3B.** The bottom stretcher panel overlaps the bottom edge of the back panel.
  - b. With the three rear stretcher panels facing up, slide the back panel into the groove on the side and top panels.
- 3. Attach the sides of the rear stretcher panels to both side panels, using 7 x 50 mm hex socket screws (11).
- 4. Turn the cabinet assembly to face the front edges up.
- 5. Fixed Height Shelf Cabinets 12, 15 and 67 only. Attach the front stretcher panel (10).
  - With wood dowels (8), peg the front stretcher panel (10) to the notch in the side panels.
  - b. Attach top front stretcher panel.
    - Place the top front stretcher panel (19) underneath the top panel and between the side panels.
    - Attach the sides of the top front stretcher panel to both side panels, using 7 x 50 mm hex socket screws (11).

# Adjustable Height Shelf Cabinets 76 and 83 only. Attach the top tube (69) to both side panels using

1/4-20 x 1.77" machine screws (60).

Check that the cabinet assembly is square and tighten all screws.

#### Attach Glides and Levelers

 See Detail 3C. Tack glides help protect corners and edges while moving the cabinet into place.

Push or hammer plastic tack glides (12) into the bottom edge of the side and any center panels, about 2" (51 mm) from the corners.

- 2. Attach leveler brackets.
  - a. See Detail 3D. Attach leveler brackets (13) to the inside of all four corners of the cabinet using #8 x 5/8" pan head screws (14). The leveler brackets attach to the inside of both side panels and to the front or rear stretcher panels.
  - After the leveler brackets are attached, screw the levelers in so the plastic glides extend slightly further than the bottom of the levelers.

#### Install Upper Shelves

- Tip the assembled cabinet upright.
- 2. Recheck that the cabinet is square.
- 3. Recheck and tighten all hex-socket screws.
- See Detail 3E. If doors will be installed, attach a bumper assembly (21) To the center two holes under the front shelf support bar using 1/4-20 x 1.77" machine screws (60) and 1/4-20 hex nuts (22).
  - For Double Full-Length Doors: attach the bumper assembly the front of the bottom shelf.
  - For Double Compartment Doors: attach the bumper assembly to the front of every shelf.
- See Detail 3F

#### Fixed Height Shelf Cabinets 12, 15 and 67 only.

Using two 1/4-20 x 5/8" button head screws (23) on each side, attach the fixed height shelves (15) into the insert nuts installed in "Pre-Assembly Step 2".

#### See Detail 3G

Adjustable Height Shelf Cabinets 76 and 83 only. Starting at the top of the cabinet, flip the shelf pin dow

Starting at the top of the cabinet, flip the shelf pin down in each corner at the desired shelf height and slide the adjustable height shelves (16) onto the shelf clips until the latch clicks.

To remove a shelf, pull out on the latch and slide the shelf out. Wider shelves may have a latch on each side.

#### NOTICE

To simplify leveling, do not install the lower shelf yet.

#### Final Cabinet Adjustment

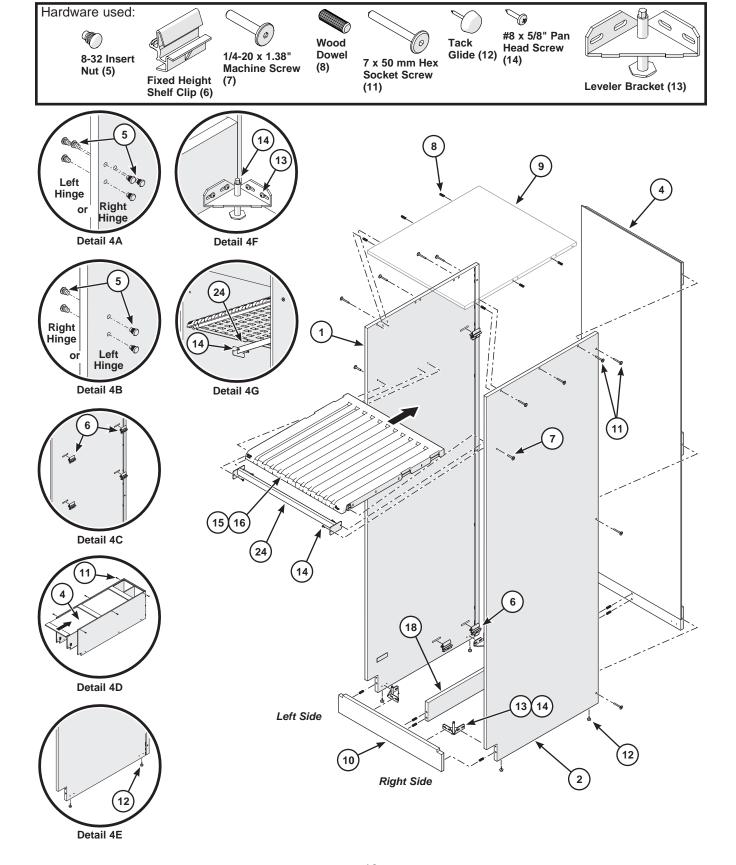
- 1. Slide the assembled cabinet to the intended location.
- Level the cabinet using a 1/4" socket or wrench on the leveler brackets, see the "Leveling Cabinets" procedures.
- 3. Install the Lower Shelf.
  - See Detail 3F. Using two 1/4-20 x 5/8" button head screws (23) on each side, attach shelf support bars (63) into the bottom screw inserts installed in "Pre-Assembly Step 2".
  - b. See Detail 3H. Peel the backing from one side of the hook and loop strips (64) and attach them to the shelf support bars (three on the front bar and two on the back bar). Do not separate the strips. Remove the remaining strip backing and place the shelf against the back panel (4) while pressing it onto the shelf supports.

#### Final Cabinet Bank Assembly

- 1. Assemble, position and level any remaining cabinets.
- 2. After all cabinets in the bank have been positioned:
  - a. Attach the Cabinet Doors, see the "Attach Doors" procedures.
  - b. Secure the cabinets, see the "Secure Cabinets" procedures.

# Assembly - Group 4

Cabinets 31, 32, 33, 34, 35, 36



# Assembly - Group 4 (continued)

#### Pre-Assembly

#### NOTICE

For panel orientation: the left side panel (1) and right side panel (2) have a notch in the bottom front corner. The side panels also have a groove in the rear to receive the back panel (4).

1. Install door mounts.

#### Skip this step if doors will not be installed.

- Per each compartment, lay the panels flat.
   For a left side door hinge, lay with the left surface up.
   For a right side door hinge, lay with the right surface up.
- b. See Detail 4A. Install door hinge mounts. Use a plastic mallet to pound 8-32 insert nuts (5) into the holes (three per hinge mount) located toward the front edge of each panel.
- See Detail 4B. Install door striker plate mounts.
   Turn the panels over, use a plastic mallet to pound 8-32 insert nuts (5) into the holes (two per striker plate mount) located toward the front edge of each panel.
- Install shelf clips.

# For fixed height shelves only, adjustable height shelf clips are pre-installed.

- See Detail 4C. Per each compartment, turn the panels so their inside surface is up.
- b. Push fixed height shelf clips (6) into the back inside surface of both compartments. Bottom shelf requires two clips in each panel side/four per shelf and upper shelves require one clip in each panel side/two per shelf).

#### NOTICE

Panels can be large and difficult to keep aligned when attaching together with screws. To assist, "peg" the panels first by inserting wood dowels to fit snugly into 5/16" diameter holes in the panels. They may need to be tapped into place.

- 3. Insert wood dowels (8) into:
  - The left and right side edges of the top panel (9)
  - the backside of the bottom front stretcher panel (10).

#### Panel Assembly

- Turn the left and right side panels (1) and (2) on edge, with the front edges down. With wood dowels (8), peg the side panels to the top panel (9).
  - Attach the side panels to the side edges of the top panel (9) with 7 x 50 mm hex socket screws (11).
- 2. Attach the back panel (4).
  - See Detail 4D. The bottom stretcher panel overlaps the bottom edge of the back panel.
  - b. With the three rear stretcher panels facing up, slide the back panel into the groove on the side and top panels.
- Attach the sides of the rear stretcher panels to both side panels, using 7 x 50 mm hex socket screws (11).
- 4. Turn the cabinet assembly to face the front edges up.
- Cabinets 31, 32 and 33 only. With wood dowels (8), peg the cross stretcher panel (18) to the bottom rear stretcher panel, then peg the front stretcher panel (10) to it.
- With wood dowels (8), peg the front stretcher panel (10) to the notch in the side panels.
- Check that the cabinet assembly is square and tighten all screws.

#### Attach Glides and Levelers

- See Detail 4E. Tack glides help protect corners and edges while moving the cabinet into place.
   Push or hammer plastic tack glides (12) into the bottom edge of the side and any center panels, about 2" (51 mm) from the corners.
- 2. Attach leveler brackets.
  - a. See Detail 4F. Attach leveler brackets (13) to the inside of all four corners of the cabinet using #8 x 5/8" pan head screws (14). The leveler brackets attach to the inside of both side panels and to the front or rear stretcher panels.
  - b. After the leveler brackets are attached, screw the levelers in so the plastic glides extend slightly further than the bottom of the levelers.

#### Install Upper Shelves

- 1. Tip the assembled cabinet upright.
- Recheck that the cabinet is square.
- 3. Recheck and tighten all hex-socket screws.
- 4. See Detail 4G. If the cabinet has a hanger bar (15).
  - Align the hanger bar tabs with the holes in the middle of both side panels.
     The flat surface of the bar (with holes) should face toward the front of the cabinet.
  - Attach the hanger bar, using two #8 x 5/8" pan head screws (14) on each side.

#### NOTICE

When installing the hanger bar or upper shelf support bracket, loosening the screws in the top panel may help to prevent scratching the side panels.

5. Starting at the top of the cabinet, snap the upper levels of fixed height shelves (15) down into the shelf clips.

Rest the shelf on the rear shelf clips and attach the front support tubes to the side panels using with one 1/4-20 x 1.38" machine screw (7) on each side.

#### NOTICE

To simplify leveling, do not install the bottom shelf yet.

#### Final Cabinet Adjustment

- Slide the assembled cabinet to the intended location.
- Level the cabinet using a 1/4" socket or wrench on the leveler brackets, see the "Leveling Cabinets" procedures.
- 3. Install the remaining shelves into the lower levels.
- Cabinets 34, 35 and 36 only, see the illustration on page 16. Install the lower shelf.
  - a. See Detail 3F. Using two 1/4-20 x 5/8" button head screws (23) on each side, attach shelf support bars (63) into the bottom screw inserts installed in "Pre-Assembly Step 2".
  - See Detail 3H. Peel the backing from one side of the hook and loop strips (64) and attach them to the shelf support bars (three on the front bar and two on the back bar). Do not separate the strips.
     Remove the remaining strip backing and place the shelf against the back panel (4) while pressing it onto the shelf supports.

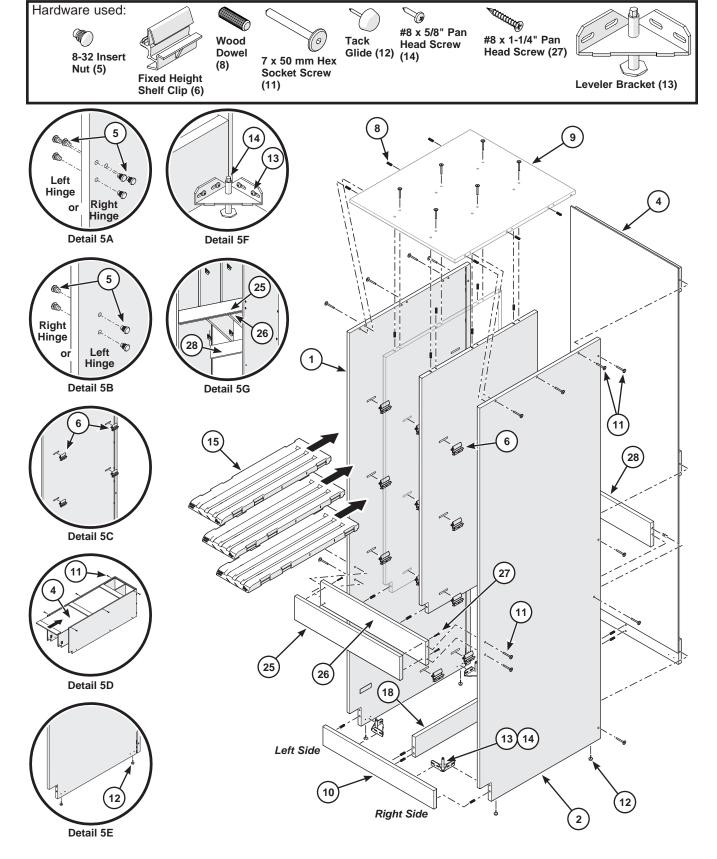
#### Final Cabinet Bank Assembly

- 1. Assemble, position and level any remaining cabinets.
- 2. After all cabinets in the bank have been positioned:
  - a. Attach the Cabinet Doors, see the "Attach Doors" procedures.
  - b. Secure the cabinets, see the "Secure Cabinets" procedures.

# Assembly - Group 5

### Cabinets 03, 06, 07

Hardware used:



# Assembly - Group 5 (continued)

#### Pre-Assembly

#### NOTICE

For panel orientation: the left side panel (1), right side panel (2) and any center panels (3) have a notch in the bottom front corner. The side panels also have a groove in the rear to receive the back panel (4).

1. Install door mounts.

#### Skip this step if doors will not be installed.

- Per each compartment, lay the panels flat.
   For a left side door hinge, lay with the left surface up.
   For a right side door hinge, lay with the right surface up.
- See Detail 5A. Install door hinge mounts.
   Use a plastic mallet to pound 8-32 insert nuts (5) into the holes (three per hinge mount) located toward the front edge of each panel.
- See Detail 5B. Install door striker plate mounts.
   Turn the panels over, use a plastic mallet to pound 8-32 insert nuts (5) into the holes (two per striker plate mount) located toward the front edge of each panel.
- 2. Install shelf clips.
  - See Detail 5C. Per each compartment, turn the panels so their inside surface is up.
  - Push fixed height shelf clips (6) (two clips in each panel side/four per shelf) into the inside surface of both compartments (side or center panels).
  - c. Turn any center panels over and repeat on the other side.

#### NOTICE

Panels can be large and difficult to keep aligned when attaching together with screws. To assist, "peg" the panels first by inserting wood dowels to fit snugly into 5/16" diameter holes in the panels. They may need to be tapped into place.

- 3. Insert wood dowels (8) into:
  - the left and right side edges of the top panel (9)
  - the top edge and notch of any center panels (3)
  - the backside of the bottom front stretcher panel (10).

#### Panel Assembly

- Turn the left and right side panels (1) and (2) on edge, with the front edges down.
  - With wood dowels (8), peg the side panels to the top panel (9).
  - b. Attach the side panels to the side edges of the top panel (9) with 7 x 50 mm hex socket screws (11).
- 2. Peg the center panels (3) to the top panel (9).
  - a. Peg the closure panel (26) to the center panels (3).
  - Peg the inside rear stretcher panel (28) to the inside of both side panels in front of the groove along the cabinet back (about halfway down).
  - Attach the center panels (3) to the top panel (9) with 7 x 50 mm hex socket screws (11).

Do not attach the closure panel (26) or the inside rear stretcher panel (28) with screws yet.

- 3. Attach the back panel (4).
  - See Detail 5D. The bottom stretcher panel overlaps the bottom edge of the back panel.
  - b. With the three rear stretcher panels facing up, slide the back panel into the groove on the side and top panels.

 Align and clamp the filler panel (25) with the closure panel (26) so the pilot holes in the filler panel face the closure panel. Both panels should be flush along all edges.

#### NOTICE

The filler panel (25) is not used on cabinets with a full-length cabinet door installed.

- 5. See Detail 5G. Attach the filler panel (25) to the closure panel (26) using four #8 x 1-1/4" pan head screws from the back side (inside of the cabinet) until the heads of the screws are nearly flush with the back surface and the filler panel is tight against the closure panel.
- 6. Attach the closure panel (26), the sides of the rear stretcher panels and inside rear stretcher panel (28) to both side panels, using 7 x 50 mm hex socket screws (11).
- With wood dowels (8), peg the cross stretcher panel (18) to the bottom rear stretcher panel, then peg the front stretcher panel (10) to it.
- 8. With wood dowels (8), peg the front stretcher panel (10) to the notch in the side panels.
- 9. Turn the cabinet assembly to face the front edges up.
- Check that the cabinet assembly is square and tighten all screws.

#### Attach Glides and Levelers

- See Detail 5E. Tack glides help protect corners and edges while moving the cabinet into place.
   Push or hammer plastic tack glides (12) into the bottom edge of the side and any center panels, about 2" (51 mm) from the corners.
- 2. Attach leveler brackets.
  - a. See Detail 5F. Attach leveler brackets (13) to the inside of all four corners of the cabinet using #8 x 5/8" pan head screws (14). The leveler brackets attach to the inside of both side panels and to the front or rear stretcher panels.
  - After the leveler brackets are attached, screw the levelers in so the plastic glides extend slightly further than the bottom of the levelers.

#### Install Upper Shelves

- 1. Tip the assembled cabinet upright.
- 2. Recheck that the cabinet is square.
- 3. Recheck and tighten all hex-socket screws.
- Starting at the top of the cabinet, snap the upper levels of fixed height shelves (15) down into the shelf clips.

#### NOTICE

To simplify leveling, do not install the bottom shelf yet.

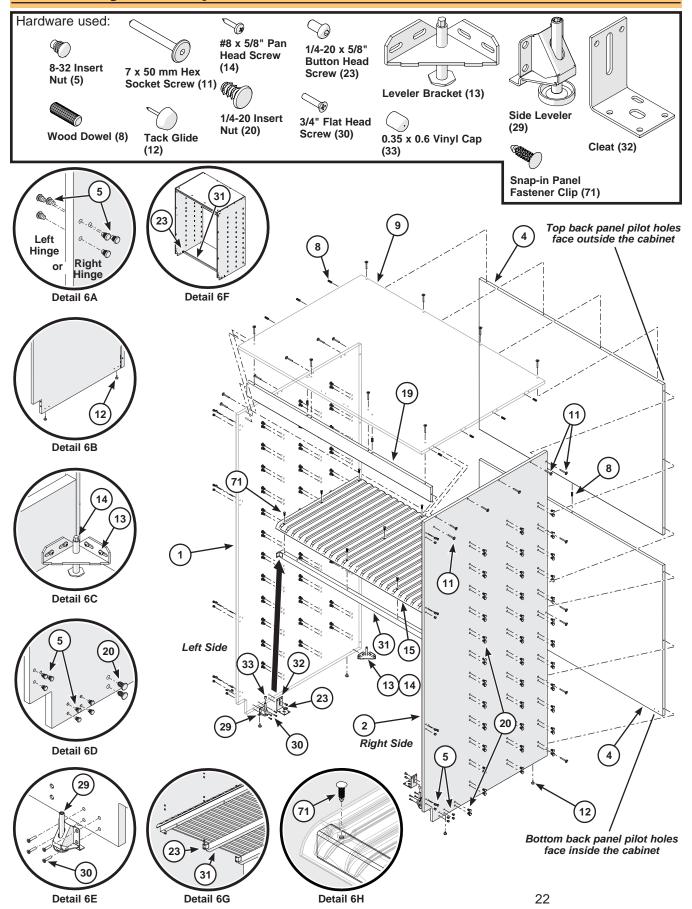
#### Final Cabinet Adjustment

- 1. Slide the assembled cabinet to the intended location.
- Level the cabinet using a 1/4" socket or wrench on the leveler brackets, see the "Leveling Cabinets" procedures.
- 3. Install the remaining shelves into the lower levels.

#### Final Cabinet Bank Assembly

- 1. Assemble, position and level any remaining cabinets.
- 2. After all cabinets in the bank have been positioned:
  - a. Attach the cabinet doors, see the "Attach Doors" procedures.
  - b. Secure the cabinets, see the "Secure Cabinets" procedures.

# Assembly - Group 6 Cabinet 17



### Assembly - Group 6 Cabinet 17 (continued)

#### Pre-Assembly

#### NOTICE

For panel orientation: The left side panel (1) and right side panel (2) have a notch in the bottom front corner.

- Lay the right side panel (2) flat with the outside surface up.
  The dowel holes do not go through to the outside surface.
- 2. Install door mounts.

Skip this step if doors will not be installed.

**See Detail 6A.** Install door hinge mounts. Use a plastic mallet to pound 8-32 insert nuts (5) into the holes (three per hinge mount) located toward the front edge of each panel. These will later be used for door hinges.

- See Detail 6D. Pound 8-32 insert nuts (5) into the holes (three per hinge mount) located toward the front edge of each panel. These will later be used for side levelers.
- There are seventy two holes in the side panel that will be used for the shelf support bar.
   Pound 1/4-20 insert nuts (20) into all of these holes.
- See Detail 6D. Pound 1/4-20 insert nuts (20) into the two holes located at the bottom of the side panel. These will later be used for cleats.
- See Detail 6B. Tack glides help protect corners and edges while moving the cabinet into place.
   Push or hammer plastic tack glides (12) into the bottom edge of the side panel, about 4" from the corners.
- See Detail 6E. Attach a side leveler (29) towards the front of the panel using 3/4" flat head screws (30) into the insert nuts from Step 3.
- 8. Repeat steps 1 through 7 on the left side panel (1).

#### NOTICE

Panels can be large and difficult to keep aligned when attaching together with screws. To assist, "peg" the panels first by inserting wood dowels to fit snugly into 5/16" diameter holes in the panels. They may need to be tapped into place.

- 9. Insert wood dowels (8) into:
  - The left and right side edges of the top panel (9)
  - the top of the top front stretcher panel (19).
- 10. Attach the sides of the top front stretcher panel (19) to the top panel (9) using 7 x 50 mm hex socket screws (11).

#### Panel Assembly

- Turn the left and right side panels (1) and (2) on edge, with the front edges down.
  - a. With wood dowels (8), peg the side panels to the top panel (9).
  - Attach the side panels to the side edges of the top panel (9) and the top front stretcher panel (19) with 7 x 50 mm hex socket screws (11).
- With wood dowels (8), peg the two back panels (4) together and attach them to the side and top panels with 7 x 50 mm hex socket screws (11).

#### NOTICE

The pilot holes at the top of the top back panel face outside of the cabinet and the pilot holes at the bottom of the bottom back panel face inside of the cabinet.

- For support, temporarily attach one shelf support bar (31)
   To the bottom of both side panels with 1/4-20 x 5/8"
   button head screws (23) into the insert nuts from step 5.
- Attach leveler brackets.
  - a. **See Detail 6C.** Attach leveler brackets (13) to the inside back corners of the cabinet using #8 x 5/8" pan head screws (14). The leveler brackets attach to the inside of both side panels and to the rear stretcher panels.
  - After the leveler brackets are attached, screw the levelers in so the plastic glides extend slightly further than the bottom of the levelers.

#### Level the Cabinet

- 1. Tip the assembled cabinet upright.
- Check that the cabinet assembly is square and tighten all screws.
- 3. Detach the shelf support bar (31) From the bottom of the side panels and set the 1/4-20 x 5/8" button head screws (23) aside.
- 4. Attach cleats (32).

#### NOTICE

To keep the cabinet square, maintain the same distance between both side panels at the front of the cabinet as it already exists at the rear of the cabinet.

- Attach one cleat (32) to each side panel using the screws from step 3 in the slotted hole of each bracket into the insert nuts.
  - Depending on available space, one or two screws may be used.
- Anchor the cleats to the floor using appropriate fasteners (not supplied).
- Apply one 0.35 X 0.6 Vinyl cap (33) to each post of all four levelers.

#### Install Shelf

- Attach the fixed height shelf (15) at the required height into the insert nuts in the side panels using two 1/4-20 x 5/8" button head screws (23) at the end of each shelf support bar (31).
- Attach the remaining shelf support bar (31) removed in Step 3 above.
  - a. Align the bar (31) With the insert nuts in the side panels underneath the middle of the shelf.
  - Attach the both ends of the bar to the insert nuts in the side panels using two 1/4-20 x 5/8" button head screws (23).
- See Detail 6H. Secure the fixed height shelf (15) to the shelf support bar (31) using twelve snap-in panel fastener clips (71).

#### Final Cabinet Adjustment

- 1. Slide the assembled Cabinet to the intended location.
- Level the cabinet using a 1/4" socket or wrench on the leveler brackets, see the "Leveling Cabinets" procedures.
- 3. Install the remaining shelves into the lower levels.

#### Final Cabinet Bank Assembly

- 1. Assemble, position and level any remaining cabinets.
- 2. After all cabinets in the bank have been positioned:
  - a. Attach the cabinet doors, see the "Attach Doors" procedures.
  - b. Secure the cabinets, see the "Secure Cabinets" procedures.

# Assembly - Group 6 Cabinet 62

#### Assembly

#### NOTICE

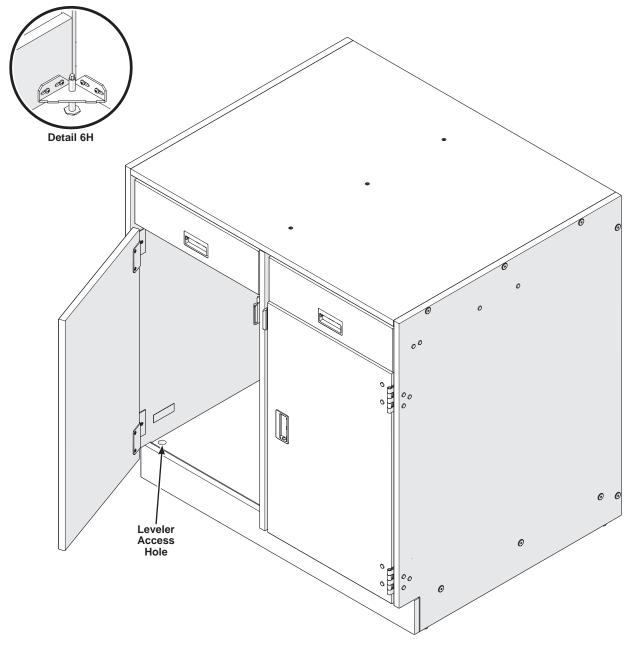
Cabinet 62 ships fully assembled.

#### Final Cabinet Adjustment

- 1. Slide the cabinet to the intended location.
- 2. Check that the cabinet assembly is square and tighten all screws.
- 3. See Detail 6H. Level the cabinet using a 1/4" socket or wrench on the leveler brackets, see the "Leveling Cabinets" procedures.
- 4. Snap the plugs in the round leveler access holes in the bottom shelves.

#### Final Cabinet Bank Assembly

- 1. Assemble, position and level any remaining cabinets.
- 2. After all cabinets in the bank have been positioned:
  - a. Attach the cabinet doors, see the "Attach Doors" procedures.
  - b. Secure the cabinets, see the "Secure Cabinets" procedures.



### Level Cabinets

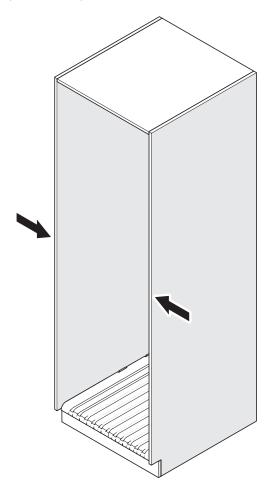
### **NOTICE**

For proper door alignment, follow these instructions carefully. Do not try to level the cabinets to match soffits.

Do not try to plumb the cabinet to match adjacent walls.

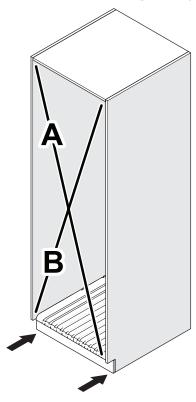
- Move the assembled cabinets to be within a few inches of their final location according to the layout drawings and adjust them to be level with each other.
- 2. a. Check the level of the entire floor where the cabinets will be installed.
  - b. Determine the highest point of the floor in that area.
  - c. The cabinet installed at this highest location will be the reference for all other cabinets to be leveled against.

3. Adjust the levelers on one side until the front edges of the cabinet side panels are plumb (side-to-side).

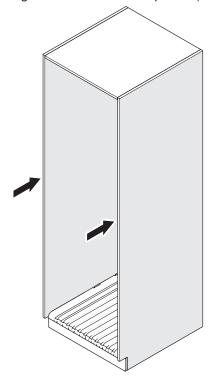


# Level Cabinets (continued)

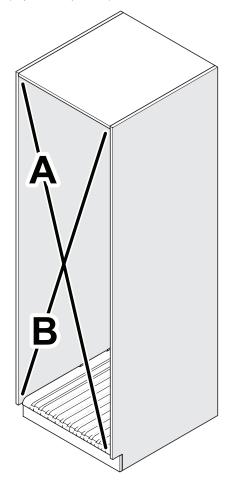
4. Measure A and B with a tape and adjust the front levelers until A=B [+1/32" (+1 mm)].



5. Adjust both front levelers equally until the front edges of the cabinet are plumb (front-to-back).



6. Recheck that A=B. Readjust if necessary (repeat steps 3-5).

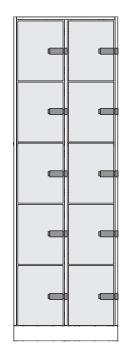


- 7. Adjust the levelers on the adjacent cabinet so it will line up with the top of the highest cabinet.
- 8. Repeat steps 3-7 for the remaining cabinets.

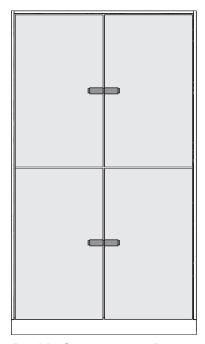
# Attach Doors - Description

**Door Identification**Wood and grille door variations are available for the cabinet models.

To attach the doors, refer to the appropriate instructions on the following pages. Skip this procedure for cabinets without doors.



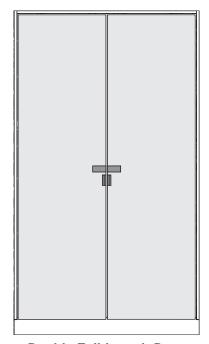
**Individual Compartment Doors** (Page 30)



Double Compartment Doors (Page 34)



Single Full-Length Door (Page 32)



**Double Full-Length Doors** (Page 36)

# Attach Doors - AcoustiCabinet Doors Only



This applies to AcoustiCabinets only.

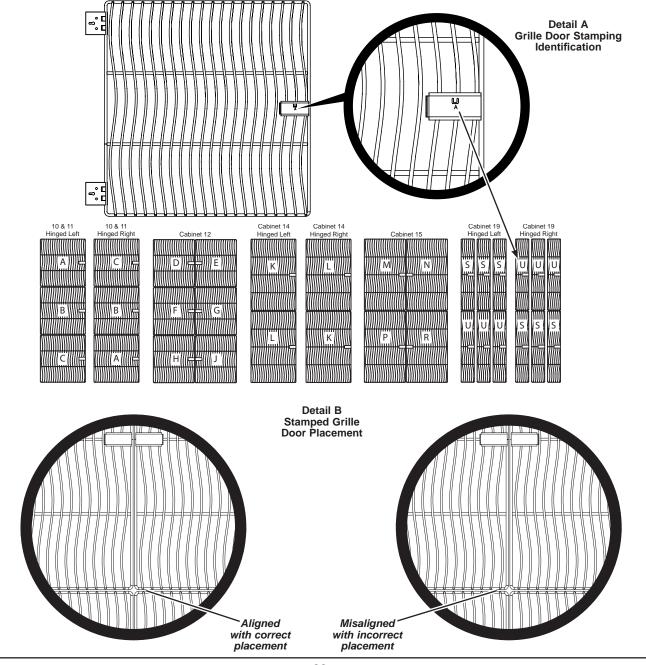
### AcoustiCabinet Compartment Door Configurations

#### NOTICE

This only apples to AcoustiCabinets 10, 11, 12, 14, 15 and 19.

To identify the compartment door configuration:

- 1. **See Detail A.** To ensure proper grille door placement, some grill doors are stamped with a letter on the lock housing as shown below.
- 2. **See Detail B.** Follow the diagram below for correct grille door placement.
- 3. To attach the doors, see the following pages.



# Attach Doors - Grille Doors

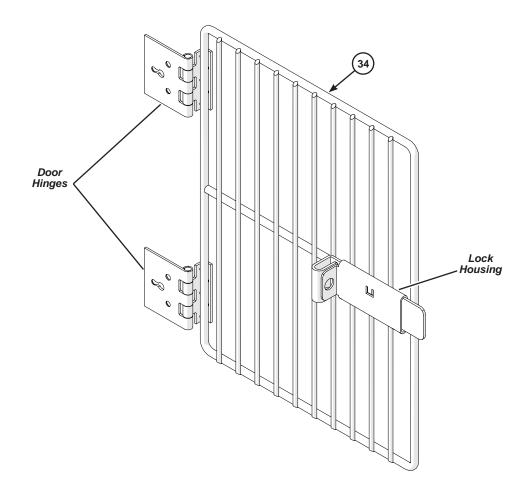


This applies to grille doors only.

### **Grille Doors**

Hinges and lock housings are already welded to grille doors (34).

They only need to be attached to wood doors (35).



# Attach Doors - Individual Compartment Doors



Detail D

This procedure details individual compartment doors only, refer to page 27.

A left side hinge is shown. For a right side hinge, the images would be mirrored.

This step uses Fasteners: (O) #7 x 5/8" Flat 8-32 Insert 3/4" Flat Head 10-24 Hex Cap #8-32 x 1" Head Screw (37) Nut (5) Screw (30) Nut (39) Machine Screw (43) (30) Detail A Detail B 39 Detail C "G" facing outward for grille doors
"W" facing outward for wood doors

Wood door shown

# Attach Doors - Individual Compartment Doors (continued)

#### Individual Compartment Doors

#### **NOTICE**

The cabinet must be properly leveled before attaching doors or they will not fit properly.

#### NOTICE

For easiest installation, start with the lowest doors and work upward.

To attach each compartment door:

1. Install door hinges.

For wood doors (35) only (separate procedure for grille door)

- a. **See detail a.** Install door hinge mounts. In the front face of the door, use a plastic mallet to pound 8-32 insert nuts (5) into the holes (two per hinge) located toward the rear edge.
- b. Attach one hinge (36) to the inside (back face) of each wood door using 3/4" flat head screws (30) into each set of installed insert nuts.
- 2. Attach door.
  - a. **See Detail B.** Hold the door in position on the cabinet. Attach each hinge to the side or center panel using 3/4" flat head screws (30) into each set of installed insert nuts.
  - b. **For wood doors (35) only.** Secure each hinge to the back edge of the door using one #7 x 5/8 flat head screw (37).
- 3. Attach lock housing.

For wood doors (35) only (separate procedure for grille door)

- a. See Detail C. Insert the lock housing (38) posts into the two holes in the front face of the door.
- b. Insert 10-24 hex cap nuts (39) into the holes from the back face of the door and tighten them onto the lock housing posts.
- c. Snap a card holder (40) onto the lock housing.
- 4. Attach door striker.
  - a. **See Detail D.** Attach a strike plate (41) (See orientation below) and a door stop (42) to the side or center panel using two #8-32 x 1" machine screws (43) into each set of installed insert nuts.
  - Strike plate (41) orientation.
     Grille Door "G" faces outward
     Wood Door "W" faces outward.
- 5. Cabinet leveling may require slight adjustment to ensure proper door fit.

# Attach Doors - Single Full-Length Doors

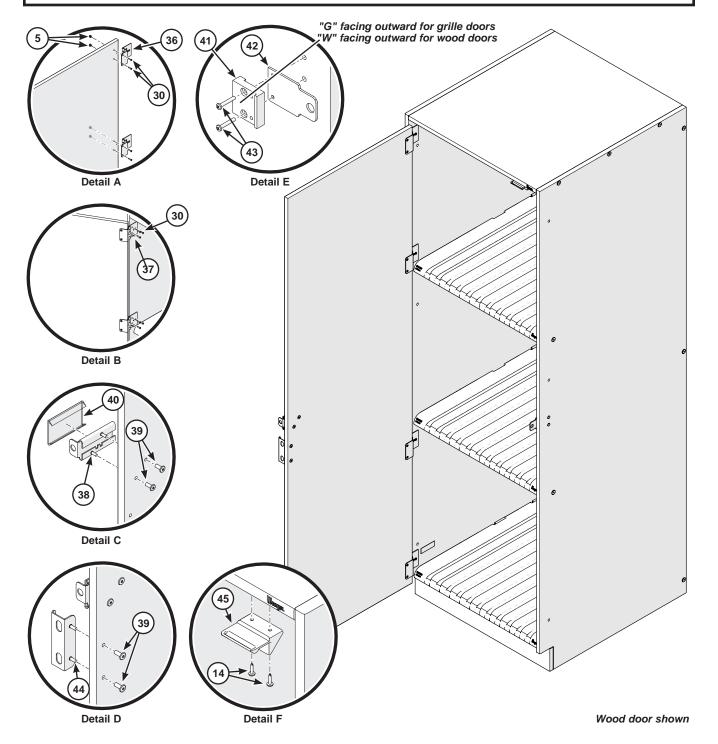


This procedure details single full-length doors only, refer to page 27.

A left side hinge is shown. For a right side hinge, the images would be mirrored.

This step uses Fasteners:

8-32 Insert #8 x 5/8" Pan 3/4" Flat Head #7 x 5/8" Flat Head Screw (37) Head Screw (37) Cap Nut (39) Screw (43)



# Attach Doors - Single Full-Length Doors (continued)

#### Single Full-Length Doors

#### **NOTICE**

The cabinet must be properly leveled before attaching doors or they will not fit properly.

#### NOTICE

For easiest installation, start with the lowest doors and work upward.

To attach the doors:

1. Install door hinges.

For wood doors (35) only (separate procedure for grille door)

- a. See Detail A. Install door hinge mounts.
  - In the front face of both doors, use a plastic mallet to pound 8-32 insert nuts (5) into both sets of holes (two per hinge) located toward the rear edge.
- b. Attach two hinges (36) to the inside (back face) of both wood doors using 3/4" flat head screws (30) into each set of installed insert nuts.
- 2. Attach door.
  - a. See Detail B. Hold the door in position on the cabinet.

Attach each hinge to the side panel using 3/4" flat head screws (30) into each set of installed insert nuts.

To help hold the door in place, insert the first screw into the rear-most hole in the side panel. Place the slotted hole of the hinge onto the screw and rotate it to align the other two holes. Tighten all three screws.

- b. **For wood doors (35) only.** Secure each hinge to the back edge of the door using one #7 x 5/8 flat head screw (37).
- 3. Attach lock housing.

#### For wood doors (35) only (separate procedure for grille door)

- a. See Detail C. Insert the lock housing (38) posts into the two holes in the front face of the door.
- b. Insert 10-24 hex cap nuts (39) into the holes from the back face of the door and tighten them onto the lock housing posts.
- c. Snap a card holder (40) onto the lock housing.
- 4. Attach door handle.

#### For wood doors (35) only (grille doors do not have handles)

- a. See Detail D. Insert the door handle (44) posts into the two holes in the front face of the door.
- b. Insert 10-24 hex cap nuts (39) into the holes from the back face of the door and tighten them onto the door handle posts.
- 5. Attach door striker.
  - a. **See Detail E.** Attach a strike plate (41) (See orientation below) and a door stop (42) to the side panel using two #8-32 x 1" machine screws (43) into each set of installed insert nuts.
  - b. Strike plate (35) orientation.

Grille Door "G" faces outward

Wood Door "W" faces outward.

- 6. Attach door catch.
  - a. **See Detail F.** Attach a door catch (45) to the underside of the top panel, at the handle side of the door, using two #8 x 5/8" pan head screws (14).
- 7. Cabinet leveling may require slight adjustment to ensure proper door fit.

# Attach Doors - Double Compartment Doors



This procedure details double compartment doors only, refer to page 27.

This step uses Fasteners:

8-32 Insert Nut (5)

8-32 Insert Screw (30)

8-32 Insert Nut (5)

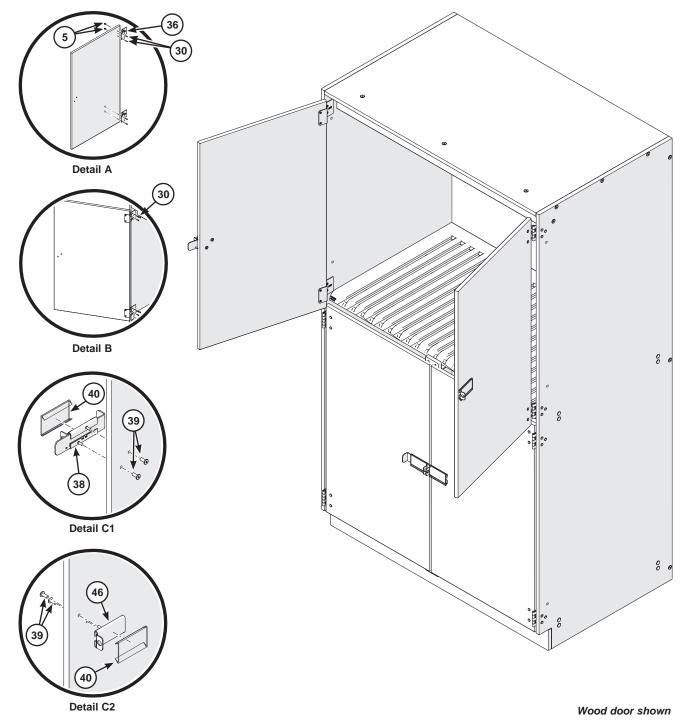
8-32 Insert Screw (30)

8-32 Insert Screw (37)

8-32 Insert Head Screw (37)

8-32 Insert Nut (39)

8-32 Insert Nut (39)



# Attach Doors - Double Compartment Doors (continued)

#### **Double Compartment Doors**

#### **NOTICE**

The cabinet must be properly leveled before attaching doors or they will not fit properly.

#### NOTICE

For easiest installation, start with the lowest doors and work upward.

To attach the doors:

1. Install door hinges.

For wood doors (35) only (separate procedure for grille door)

a. See Detail A. Install door hinge mounts.

If the cabinet has two double compartments, each door will have three hinges If the cabinet has three double compartments, each door will have two hinges.

In the front face of both doors, use a plastic mallet to pound 8-32 insert nuts (5) into the sets of holes (two per hinge) located toward the rear edge.

- b. Attach the hinges (36) to the inside (back face) of the doors using 3/4" flat head screws (30) into each set of installed insert nuts.
- 2. Attach doors to both sides of each compartment.
  - a. **See Detail B.** Hold the left side door in position on the cabinet.

Attach each hinge to the side panel using 3/4" flat head screws (30) into each set of installed insert nuts.

To help hold the door in place, insert the first screw into the rear-most hole in the side panel. Place the slotted hole of the hinge onto the screw and rotate it to align the other two holes. Tighten all three screws.

- b. Repeat for the right side door.
- c. **For wood doors (35) only.** Secure each hinge to the back edge of the door using one #7 x 5/8 flat head screw (37).
- 3. Attach a lock housing and card holder housing to each compartment.

For wood doors (35) only (separate procedure for grille door)

- a. See Detail C1. Insert the lock housing (38) posts into the two holes in the front face of the left or right door.
- b. **See Detail C2.** Insert the card holder housing (46) posts into the two holes in the front face of the opposite door.
- c. Insert 10-24 hex cap nuts (39) into the holes from the back face of the doors and tighten them onto all of the housing posts.
- d. Snap a card holder (40) onto both housings.
- e. Closing the doors and latching the slide lock aligns holes in the housings for installing a padlock.
- 4. Cabinet leveling may require slight adjustment to ensure proper door fit.

# Attach Doors - Double Full-Length Doors



Detail D

This procedure details double full-length doors only, refer to page 27.

This step uses Fasteners: The state of the s 8-32 Insert Nut (5) #7 x 5/8" Flat #8 x 5/8" Pan 3/4" Flat Head #8-32 x 1" Machine Screw (43) 10-24 Hex **Head Screw Head Screw** Screw (30) Cap Nut (39) (37)Detail A Detail B Detail C 0 0

Wood door shown

Detail E

## Attach Doors - Double Full-Length Doors (continued)

### **Double Full-Length Doors**

### **NOTICE**

The cabinet must be properly leveled before attaching doors or they will not fit properly.

#### NOTICE

For easiest installation, start with the lowest doors and work upward.

To attach the doors:

1. Install door hinges.

For wood doors (35) only (separate procedure for grille door).

- a. See Detail A. Install door hinge mounts.
  - In the front face of both doors, use a plastic mallet to pound 8-32 insert nuts (5) into the four sets of holes (two per hinge) located toward the rear edge.
- b. Attach four hinges (36) to the inside (back face) of both wood doors using 3/4" flat head screws (30) into each set of installed insert nuts.
- 2. Attach doors to both sides of each compartment.
  - a. **See Detail B.** Hold the left side door in position on the cabinet.
    - Attach each hinge to the side panel using 3/4" flat head screws (30) into each set of installed insert nuts.
    - To help hold the door in place, insert the first screw into the rear-most hole in the side panel. Place the slotted hole of the hinge onto the screw and rotate it to align the other two holes.
    - Tighten all three screws.
  - b. Repeat for the right side door.
  - c. **For wood doors (35) only.** Secure each hinge to the back edge of the door using one #7 x 5/8 flat head screw (37).
- 3. Attach lock housings.

For wood doors (35) only (separate procedure for grille door)

- a. See Detail C. Insert the card holder housing (46) posts into the two holes in the front face of both doors.
- b. Insert 10-24 hex cap nuts (39) into the holes from the back face of the doors and tighten them onto the lock housing posts.
- c. Snap a card holder (40) onto both lock housings.
- 4. Attach door handles.

For wood doors (35) only (grille doors do not have handles)

- a. See Detail D. Insert the door handle (44) posts into the two holes in the front face of both doors.
- b. Insert 10-24 hex cap nuts (39) into the holes from the back face of the doors and tighten them onto the door handle posts.
- c. Closing the doors aligns holes in the handles for installing a padlock.
- 5. Attach door catches.
  - a. **See Detail E.** Attach door catches (45) to the underside of the top panel at the handle side of the door using two #8 x 5/8" pan head screws (14).
- 6. Cabinet leveling may require slight adjustment to ensure proper door fit.

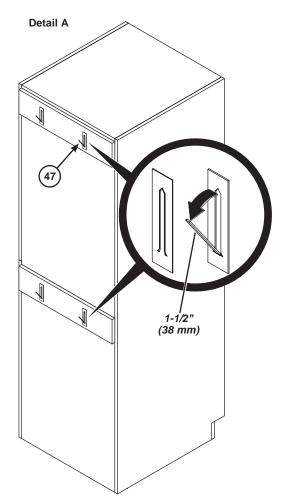
## Attach Backing - AcoustiCabinets Only

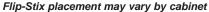
# STOP

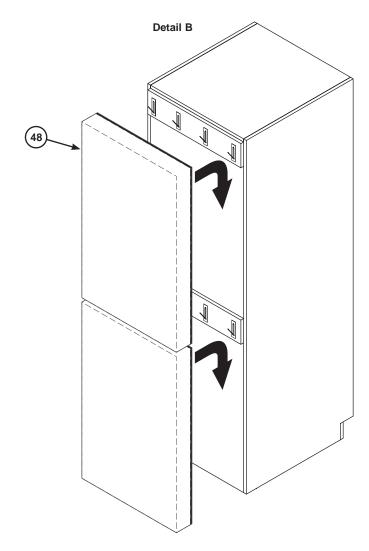
This applies to AcoustiCabinets only.

To attach the sound absorptive material to the back of the AcoustiCabinets:

- See Detail A. Flip-Stix® (47) are used to hold the sound absorptive material in place.
   The Flip-Stix are already attached to the rear stretcher panels on the back of all AcoustiCabinets.
   The quantity of Flip-Stix installed on the cabinet will vary by cabinet design.
   On each Flip-Stix, pull the top tab out approximately 1-1/2" (38 mm).
- 2. Unroll and "fluff-up" the sound absorptive material.
- 3. See Detail B. Attach the sound absorptive material (48) to the back of the cabinet by placing it over all of the Flip-Stix approximately 2" (51 mm) above the desired final location with the opening in the plastic barrier facing toward the top of the cabinet.
- 4. Pull down on the sound absorptive material to secure it into place on the Flip-Stix and pulling it level. The Flip-Stix are intended to penetrate the inside plastic and the insulation only, not the outside plastic barrier.







## Secure Cabinets - UltraStor



This procedure is for securing UltraStor Cabinets, for AcoustiCabinets refer to page 43. For standard installations only, contact Wenger Corporation for seismic installation instructions.

### Connect Cabinets Together

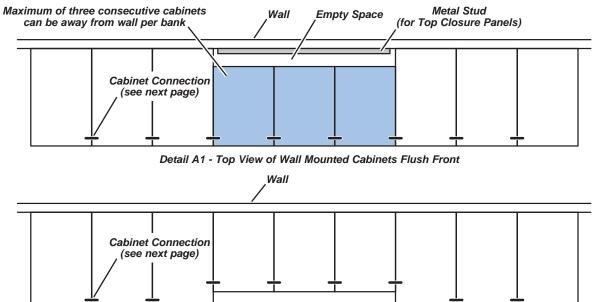
1. Depending on cabinet height, there are two to three holes at the front of the side panels for securing the cabinets together.

See Detail A1. These holes are positioned to align the fronts of the cabinets to be flush.

A maximum of three consecutive cabinets can be away from the wall per bank.

See Detail A2. If different depth cabinets are to be aligned at the back, new 3/8" (10 mm) holes will need to be drilled. Use the holes in the shallowest cabinet as the template for the adjacent cabinet.

2. Top closure panels will be added to close off any empty space behind cabinets not flush with the back wall. See the "Closure Panel Installation" procedure.

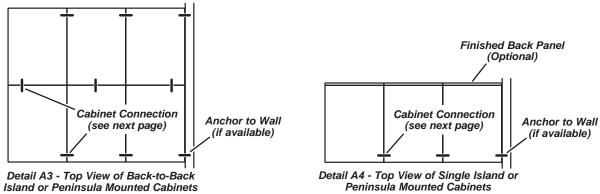


Detail A2 - Top View of Wall Mounted Cabinets Flush Back

3. Depending on cabinet height, there are two to three holes at the front of the side panels for securing the cabinets together.

See Detail A3. For back-to-back island or peninsula configurations, adjacent cabinet backs must also be secured together as shown on pages 42 and 46.

See Detail A4. For single island or peninsula configurations, an optional finished back panel kit is available. See the assembly instructions included with the kit.



## Secure Cabinets - UltraStor (continued)

### Connect Cabinets Together (continued)

3. Install trim strips. See Detail B1 and B2.

Detail B1

- a. Using the attached adhesive tape, stick two trim strips (49) to the side panel of one cabinet.
- b. Attach the longer strip to be 1/8" (3 mm) back from the front edge and flush with the top of the cabinet.
- c. Attach the shorter strip to be 1/8" (3 mm) back from the front edge of the bottom front stretcher panel (49) and flush with the floor.

This will hold the strips in position until the cabinets are connected together.

Connect adjoining cabinets. See Detail C.
 Depending on cabinet height, there are two to three holes in the side panels for securing the cabinets together.

### **NOTICE**

These holes are positioned to align the fronts of the cabinets. If different depth cabinets will be aligned at the back, new holes will need to be drilled (see previous page).

See Detail B. Position the adjoining cabinet to align these holes and to fit against the trim strips of the previous cabinet. b. Use a plastic mallet to pound 1/4-20 insert nuts (20) from one side of each hole and attach them with 1/4-20 x 1.77" machine screws (60) through the other side. **Detail C** 20 1/8" (3 mm) back

Cabinet doors and shelves are not shown for clarity

Detail B2

## Secure Cabinets - UltraStor (continued)



Cabinets must either be secured to a back wall or back-to-back with adjacent cabinets. For cabinets not flush with the back wall, see "Closure Panel Installation" on page 50. See below for securing to a back wall, see the next page for securing back-to-back.

## **AWARNING**

In addition to the sides of the cabinets being secured, the cabinet backs must also be attached to either a back wall, to adjacent cabinets in an island formation or to the floor.

## **AWARNING**

Inferior or improperly installed fasteners could cause the cabinets to tip over.

### Secure Cabinets to Back Wall

Because materials and construction of walls can vary, fasteners for attaching the cabinets to the structure are not provided. The installer must choose the appropriate fastener and follow the manufacturer's instructions. See "Cabinet Fastener Guidelines" for more information.

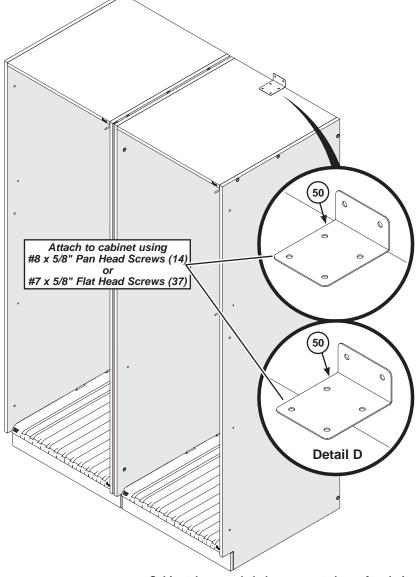
### **NOTICE**

At least every 5th cabinet must be secured to the back wall.

### **NOTICE**

Make sure all the cabinets are secured together before attaching them to the back wall.

- 1. See Detail D.
  - Cabinets as far away as 2" (51 mm) from the back wall can be attached using UltraStor wall brackets (50).
  - The brackets have extra holes for the best fit on the top of the cabinet.
  - For taller cabinets, secure the bracket to the cabinet using #8 x 5/8" pan head screws (14).
  - For shorter cabinets that will have a work surface top installed, secure the bracket to the cabinet using #7 x 5/8" flat head screws (37).
- Instead of using the bracket, holes may be drilled through both the back panel and top rear stretcher 2" to 3" (51 to 76 mm) down from the top of the inside.
- 3. Attach the wall bracket or cabinet back to the wall surface.



## Secure Cabinets - UltraStor (continued)



Cabinets must either be secured to the floor or back-to-back with adjacent cabinets. See below for securing back-to-back, see the previous page for securing to a wall.

## **AWARNING**

In addition to the sides of the cabinets being secured, the cabinet backs must also be attached to either a back wall, to adjacent cabinets in an island formation or to the floor.

## **AWARNING**

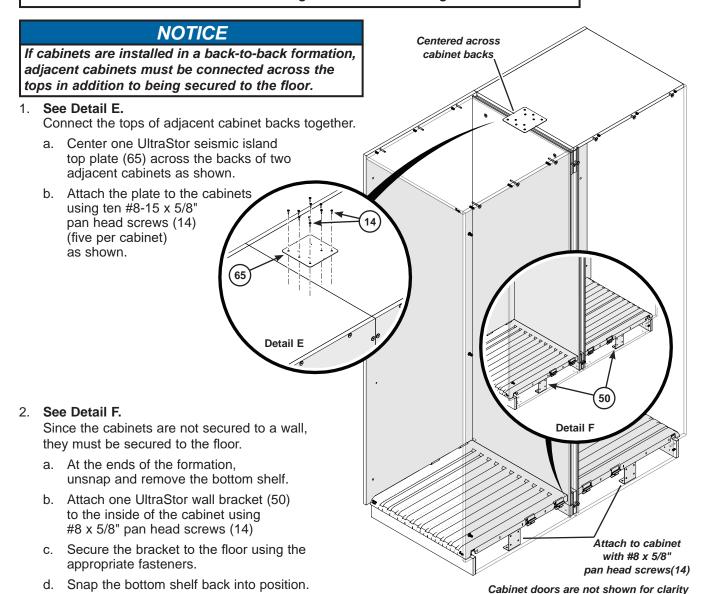
Inferior or improperly installed fasteners could cause the cabinets to tip over.

#### Secure Cabinets Back-to-Back

Because materials and construction of walls can vary, fasteners for attaching the cabinets to the structure are not provided. The installer must choose the appropriate fastener and follow the manufacturer's instructions. See "Cabinet Fastener Guidelines" for more information.

### **NOTICE**

Make sure the cabinet sides are secured together before attaching them back-to-back.



## Secure Cabinets - AcoustiCabinets



This procedure is for securing AcoustiCabinets, for UltraStor Cabinets refer to page 39. For standard installations only, contact Wenger Corporation for seismic installation instructions.

### Connect Cabinets Together

1. Depending on cabinet height, there are two to three holes at the front of the side panels for securing the cabinets together.

#### See Detail A1

These holes are positioned to align the fronts of the cabinets to be flush.

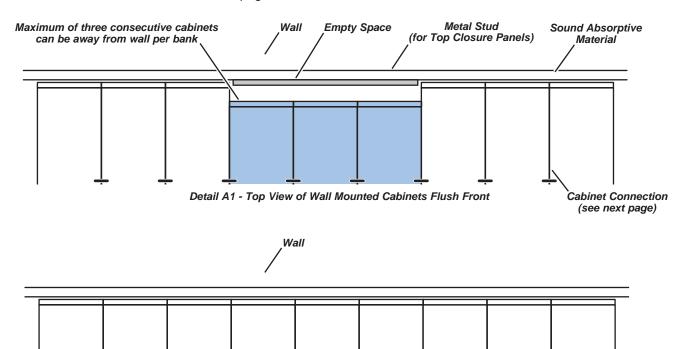
### **NOTICE**

A maximum of three consecutive cabinets can be away from the wall per bank.

#### See Detail A2

If different depth cabinets are to be aligned at the back, new 3/8" (10 mm) holes will need to be drilled. Use the holes in the shallowest cabinet as the template for the adjacent cabinet.

2. Top closure panels will be added to close off any empty space behind cabinets not flush with the back wall. See "Closure Panel Installation" on page 50.



Detail A2 - Top View of Wall Mounted Cabinets Flush Back

Cabinet Connection (see next page)

## Secure Cabinets - AcoustiCabinets (continued)

### Connect Cabinets Together (continued)

- 3. Install trim strips. See Detail B1 and B2.
  - a. Using the attached adhesive tape, stick two trim strips (49) to the side panel of one cabinet.
  - b. Attach the longer strip to be 1/8" (3 mm) back from the front edge and flush with the top of the cabinet.
  - c. Attach the shorter strip to be 1/8" (3 mm) back from the front edge of the bottom front stretcher panel (49) and flush with the floor.

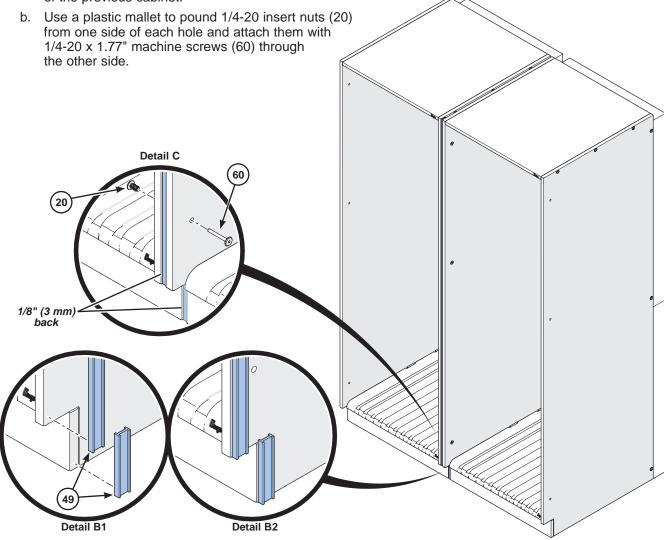
This will hold the strips in position until the cabinets are connected together.

Connect adjoining cabinets. See Detail C.
 Depending on cabinet height, there are two to three holes in the side panels for securing the cabinets together.

### **NOTICE**

These holes are positioned to align the fronts of the cabinets. If different depth cabinets will be aligned at the back, new holes will need to be drilled (see previous page).

a. **See Detail B.** Position the adjoining cabinet to align these holes and to fit against the trim strips of the previous cabinet.



## Secure Cabinets - AcoustiCabinets (continued)



Cabinets must be secured to a back wall and also be at least 2-1/2" (64 mm) away from the wall to allow space for the sound absorptive material.

For cabinets farther than 2-1/2" (64 mm) from the back wall, see "Closure Panel Installation" on page 50.

See below for securing to a back wall, see the next page for securing back-to-back.

## **AWARNING**

In addition to the sides of the cabinets being secured, the cabinet backs must also be attached to a back wall.

## **AWARNING**

Inferior or improperly installed fasteners could cause the cabinets to tip over.

### Secure Cabinets 2-1/2" (64 mm) from Back Wall

Because materials and construction of walls can vary, fasteners for attaching the cabinets to the structure are not provided. The installer must choose the appropriate fastener and follow the manufacturer's instructions. See "Cabinet Fastener Guidelines" for more information.

### **NOTICE**

Make sure all the cabinets are secured together before attaching them to the back wall.

#### 1. See Detail C.

Attach the wider tabbed surface of the AcoustiCabinet wall bracket (51) to the top edge at the back of the cabinet using #8 x 5/8" pan head screws (14) in the front four holes.

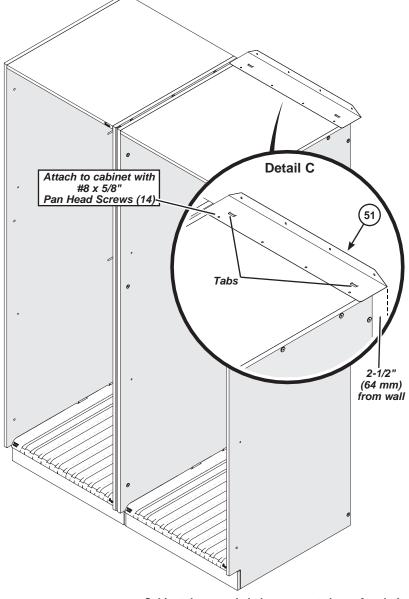
- The tabs should be flush with the cabinet and all open areas at the top of the cabinet should be covered by the bracket.
- On narrower cabinets, the bracket can be trimmed or the tabs can be flattened to overlap with adjacent brackets.

### **NOTICE**

To maintain spacing from the wall, a bracket must be attached to every cabinet.

- Position the cabinets with the mounting brackets against the wall.
- 3. Attach the wall brackets to the wall surface.

The brackets allow the recommended 2-1/2" (64 mm) spacing between the cabinet and the wall.



## Secure Cabinets - AcoustiCabinets (continued)



Cabinets must either be secured to the floor or back-to-back with adjacent cabinets. See below for securing back-to-back, see the previous page for securing to a wall.

## **AWARNING**

In addition to the sides of the cabinets being secured, the cabinet backs must also be attached to either a back wall, to adjacent cabinets in an island formation or to the floor.

## **AWARNING**

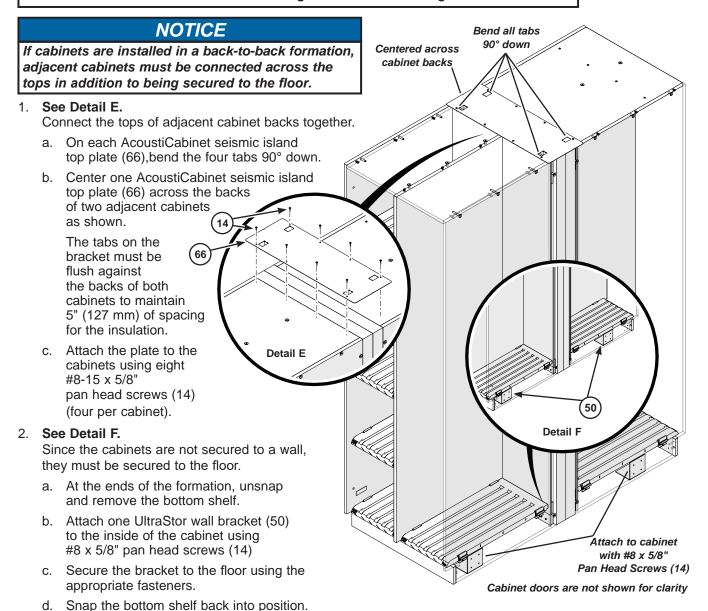
Inferior or improperly installed fasteners could cause the cabinets to tip over.

#### Secure Cabinets Back-to-Back

Because materials and construction of walls can vary, fasteners for attaching the cabinets to the structure are not provided. The installer must choose the appropriate fastener and follow the manufacturer's instructions. See "Cabinet Fastener Guidelines" for more information.

### NOTICE

Make sure the cabinet sides are secured together before attaching them back-to-back.



## Finished Back Kit Installation



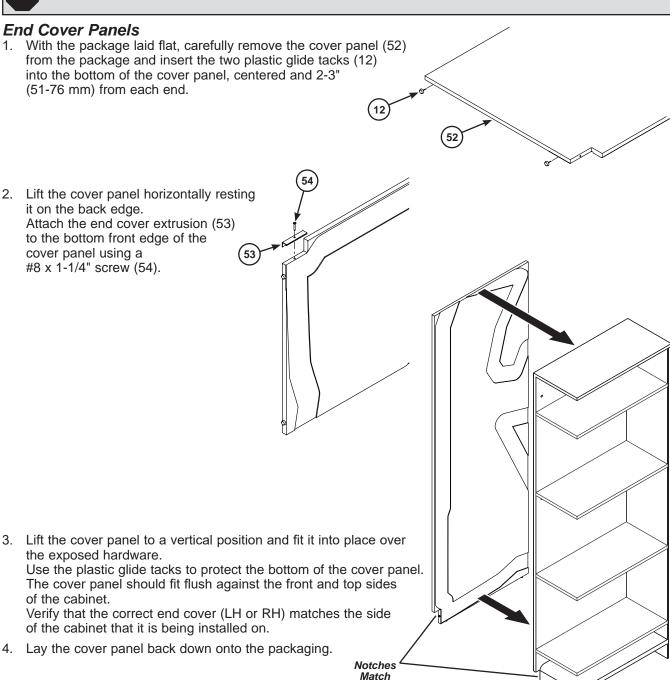
Finished back panels are to be installed after all side cover panels are installed.

After the following "Side Cover Panel Installation" procedure is complete,
refer to Finished Back Kit for Cabinet Storage Products Assembly Instructions 250B093.

## Side Cover Panel Installation



Use this procedure to add a smooth finished panel to an exposed cabinet side.



## Side Cover Panel Installation (continued)

## End Cover Panels (continued)

5. Using the 3/16" drill bit, drill twelve holes (nine holes for 68" [1727 mm] tall cabinets) into the side panel of the cabinet to be covered.

#### **NOTICE**

Do not drill into a shelf or cross member. Measure before drilling so that the hole is 1-2" (25-51 mm) from the nearest horizontal surface to allow clearance for tools.

#### **Top Row**

Drill a hole 2-3" (51-76 mm) down from the top and 2-3" (51-76 mm) back from the front of the cabinet.

Drill the second hole 2-3" (51-76 mm) down from the top and 24-26" (610-660 mm) (14-16" [336-406 mm] for 19-1/4" [489 mm] deep cabinets) from the front of the cabinet.

Drill a third hole 2-3" down from the top and evenly spaced horizontally between the first two holes.

#### **Bottom Row**

Drill a hole 7-8" (178-203 mm) up from the bottom and 2-3" (51-76 mm) back from the front of the cabinet.

Drill the second hole 7-8" (178-203 mm) up from the bottom and 24-26" (610-660 mm) (14-16" [336-406 mm] for 19-1/4" [489 mm] deep cabinets) from the front of the cabinet.

Drill a third hole 7-8" (178-203 mm) up from the bottom and evenly spaced horizontally between the first two holes.

#### Middle Rows

Drill two rows (1 row for 68" [1727 mm] tall cabinets) evenly spaced between the top and bottom rows. Use the same vertical spacing as the top and bottom rows.

6. Raise the cover panel into position covering the cabinet side panel and flush with the front edge as in step 3.

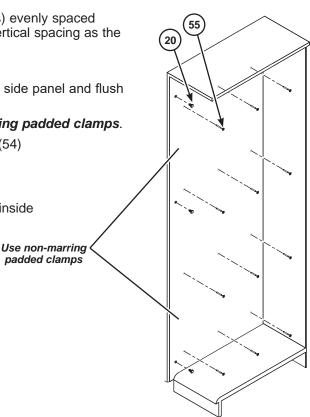
7. Clamp securely in position using at least two *non-marring padded clamps*.

8. Insert all twelve of the supplied #8 1-3/8" wood screws (54) (nine are used on 68" [1727 mm] cabinets).

Do not over-torque or strip out the screws.

Tighten securely and remove the clamps.

9. Insert 1/4-20 insert nuts (20) into the open holes at the inside front edge of the cabinet side panel.



Cabinet shelves are not shown for clarity

## Side Cover Panel Installation (continued)

#### Center Cover Panels



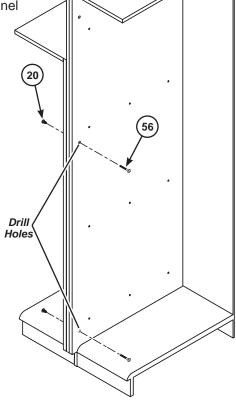
Use the following steps ONLY when a smaller cabinet is adjacent to a larger cabinet with a cover panel in place on the larger cabinet.

- 1. Install the cover panel using the procedures in "End Cover Panels".
- 2. Align both cabinets to the desired configuration. If the cabinets are different depths, they may be aligned to be flush with the front as shown or flush with the back.

#### **NOTICE**

Do not drill into a shelf or cross member. Measure before drilling so that the hole is 1-2" (25-51 mm) from the nearest horizontal surface to allow clearance for tools. It may be necessary to move a hole and drill completely through the smaller cabinet side panel, cover panel and larger cabinet side panel simultaneously.

- 3. Drill two connecting holes through the cover panel and attached cabinet side panel (drill three holes if the cabinets are both over 68" [1227 mm] tall) using the 3/8" drill bit through the holes already in the smaller cabinet.
- 4. If there is not enough room in the compartment for a drill, it may be necessary to mark the holes using a pencil through the connecting holes in the smaller cabinet side panel, move the smaller cabinet, drill the holes through the cover panel and larger cabinet side panel, re-position the smaller cabinet and connect them all together.
- 4. Connect the cabinets together using 1/4-20 x 2.359" machine screws (55).
- Plug the hole at the other end with the plugs (56) that were included with the cabinet.
- 6. Use of trim strips (49) between the smaller cabinet and the cover panel is required (trim strips are included with cabinet).



Cabinet shelves are not shown for clarity

## Closure Panel Installation



Use this procedure to close off open spaces between cabinets.

### Before You Begin

Read and understand this procedure before starting the assembly. Remove all items from the shipping carton. Each kit contains:

- One 8' x 4' (2438 x 1219 mm) closure panel (62)
- Two 2" x 4" x 8' (51 x 102 x 2438 mm) metal studs (61)
- Three 8' (2438 mm) PVC extrusion strips (67) (to cover variations in the perimeter of the space being closed off)
- Screws
  - #8 x 1-1/4" truss head screws (67) (to attach wood panels)
  - #8 x 5/8" pan head screws (14) (to attach metal studs)

Because materials and construction of walls can vary, fasteners for attaching the cabinets to the structure are not provided. The installer must choose the appropriate fastener and follow the manufacturer's instructions. See "Cabinet Fastener Guidelines" for more information.

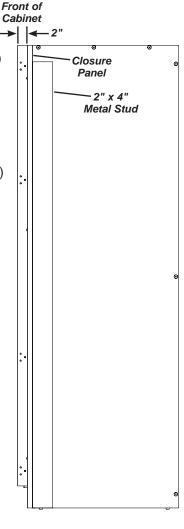
### **Required Tools**

- Pencil
- Carpenter's square
- Tape measure
- Circular saw
- Hacksaw
- Drill with phillips head bit or screwdriver

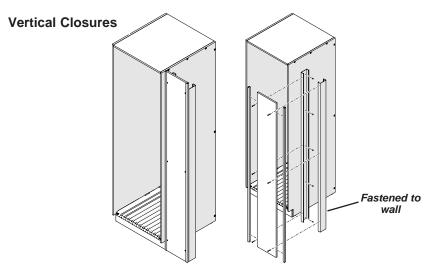
#### Planning the Installation

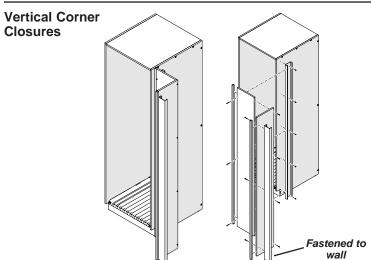
- 1. Be sure the cabinet(s) are in their desired location and are level and square before installing the closure panels.
- 2. A closure panel kit includes a panel which is 8' long x 4' (2438 x 1219 mm) wide. For smaller spaces, the panel will be cut to size.

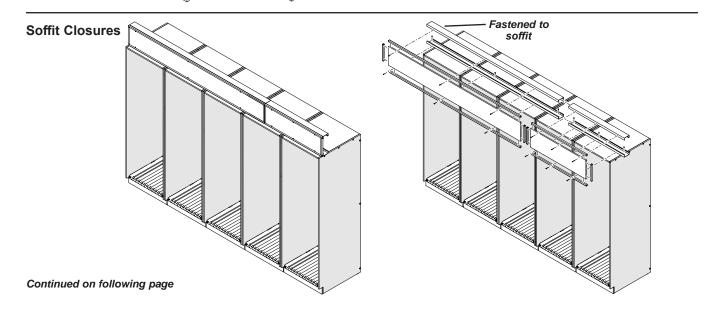
  Wenger Corporation does not recommend using the closure panels to fill spaces larger than 32" (813 mm) wide except in the situations shown in these instructions.
- 3. If one side panel abuts a wall, appropriate fasteners will need to be purchased to attach the metal studs to the structure.
- 4. Closure panels alongside cabinets should be installed set back 2" (51 mm) from the front of the cabinet (flush with the face of the toe-kick area). Soffit panels should likewise be set back 2" (51 mm) from the front of the cabinet.
  - The top edge of all vertical closure panels should be installed flush with the top of the cabinet.
- 5. The illustrations on the following pages show the normal locations where the 3/4" x 8' (19 x 2438 mm) pvc extrusion strips are used. However, they can be installed on any edge of the closure panel(s) where desirable for a more finished appearance.
- 6. The assembly procedure shows a typical installation of a vertical closure panel between a cabinet and the wall. The procedure for other situations is similar. Refer to the appropriate illustration and follow the step-by-step procedure.



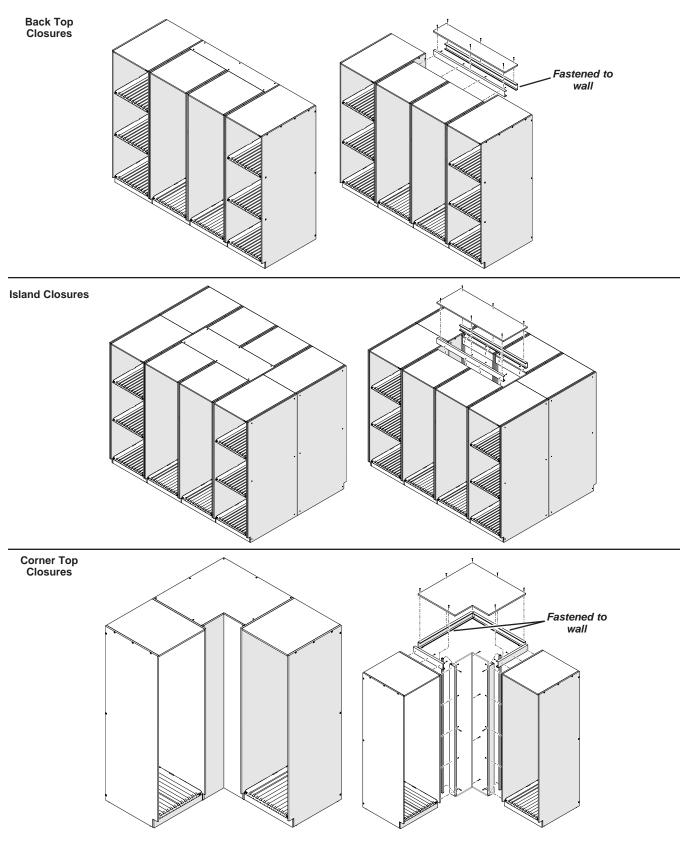
## **Closure Panel Configurations**







## Closure Panel Configurations (continued)



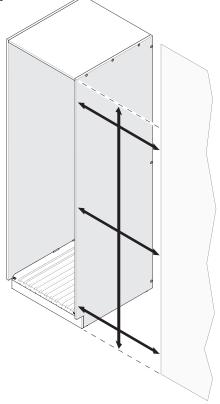
## Closure Panel Assembly

Vertical closure assembly is shown, the procedure is similar for all closure types.

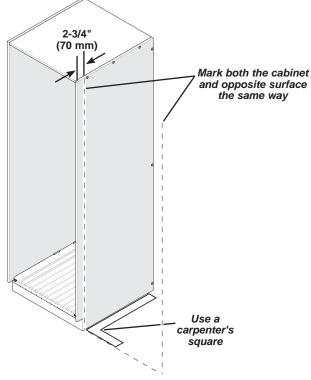
Measure the size of the opening to be filled.
 Make several measurements as the opening size may vary.

## **AWARNING**

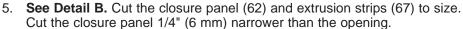
Do not stand or walk on the top of any cabinet. Cabinet top maximum load capacity is 50 lb (23 kg).



2. Mark the location of all metal studs (61) (2-3/4" back from the front of the cabinet).

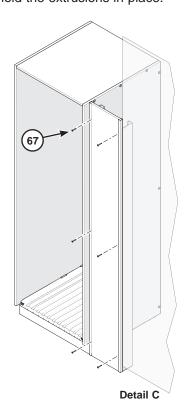


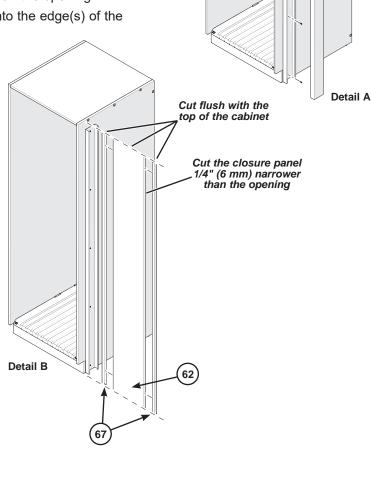
- Closure Panel Assembly (continued)
  3. See Detail A. Cut the 2" x 4" x 8" metal studs (61) to size (vertical studs to 81" [2057 mm]).
- 4. **See Detail A.** Attach the metal stud to the marked locations 3" (76 mm) down from the top of the cabinet.
  - a. Attach one stud to the cabinet using five #8 x 5/8" pan head screws (14).
  - b. Attach the other stud to the adjacent structure or cabinet using the appropriate fastener and follow the manufacturer's instructions. See "Cabinet Fastener Guidelines" for more information.



6. See Detail B. Slip the extrusion strips to fit onto the edge(s) of the closure panel.

7. See Detail C. Attach the closure panel to the metal studs using six #8 x 1-1/4" truss head screws (67). Loosely tighten the screws. Push the extrusions out against the cabinet or structure, then finish tightening the screws to hold the extrusions in place.





(76 mm)

## Work Surface Tops (Cabinets 50-62 Only)

#### Wall Mount Installation

- 1. Align the work surface on the top of the cabinet with 1/2" (13 mm) overhang to the front and 1" (25 mm) to the side where appropriate.
  - Position the rounded corner facing traffic areas or as shown on the installation drawings.
  - Attach from the underside using #8 x 1.5" wood screws (57) through the pilot holes in the cabinet tops.
- 2. For Cabinet 62, insert the drawers into drawer glides.

#### Island Installation

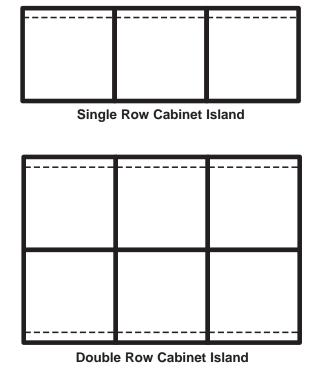
- 1. **See Detail A.** Align the work surface on the top of the cabinets with 1/2" (13 mm) overhang to the front and 1" (25 mm) to the side where appropriate. For single row cabinet islands, align for 1/2" to 1" overhang on the backside.
  - Position the rounded corners to traffic areas or as shown on the installation drawings. Attach from the underside using #8 x 1.5" wood screws (57) through the pilot holes in the cabinet tops
- 2. For a single row island installation attach the cabinet connector bracket (58) to the back of the cabinet and to the underside of the work surface using #8 x 5/8" flat head sheet metal screws (59). Place finished back panel over bracket.
- 3. For double row cabinet island installation attach the cabinet connector bracket (58) using #8 x 5/8" flat head sheet metal screws (59) to the sides of the two outer cabinets on both ends of the island and to the underside of the work surface. Place finished end cover panel over bracket.

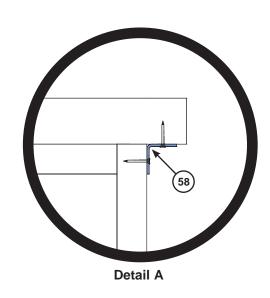
## **AWARNING**

Do not stand or walk on the top of any cabinet.

38" (973 mm) cabinets with work surface tops have a maximum load capacity of 250 lb (113 kg) for evenly distributed loads.

All other cabinets have a top maximum load capacity of 50 lb (23 kg).





### Cabinet Maintenance

### Cleaning

For removal of mild stains and mild scuff marks, the polyester wood panels and polyester shelves may be cleaned using an all-purpose household cleaner, or just simple mild soap and water.

For heavier scuff marks, ink stains, felt pen and magic marker stains, or other tough stains; use a non-abrasive cleaner, or an industrial all-purpose cleaner. Ammoniated or vinegar-based glass cleaners also work well for these stains.

Do not use harsh abrasive cleaners, as permanent damage could occur to the panel surface. Be sure to quickly remove all cleanser residues with water and wipe dry with a soft cloth.

### **Humidity Control**

To insure longevity of panel performance, maintain the relative humidity between 25% - 55% at the permanent installation site.

## Cabinet Compartment Labeling

Visit the Storage Products web page at wengercorp.com for detailed instructions and videos.