

# AD•AS

furniture solutions  
of universal design

## APPROACH SYSTEM INSTALLATION INSTRUCTIONS

### Parts Included:

- 1 Approach motorized counter lift
- 1 Safety bar with control buttons
- 2 Counter support brackets
- 1 Large mounting bracket
- 2 Small mounting brackets

### Hardware bag with:

- 2 Pushbutton assemblies
- 8 1/4" x 2" hex head lag screws
- 8 1/4" - 20 x 1" button head cap screws
- 12 1/4" spring washers
- 4 1/4" - 20 lock nuts
- 4 5/16" - 18 x 1" button head cap screws
- 4 5/16" spring washers

### Other Items Needed:

- Ground Fault Circuit Interrupt Power Supply Level
- Tape Measure
- 7/16" Socket Wrench
- 5/32" and 3/16" Hex Key Wrench
- Drill and 1" Drill Bit
- Phillips Head Screwdriver
- #8 fasteners suitable for your counter material

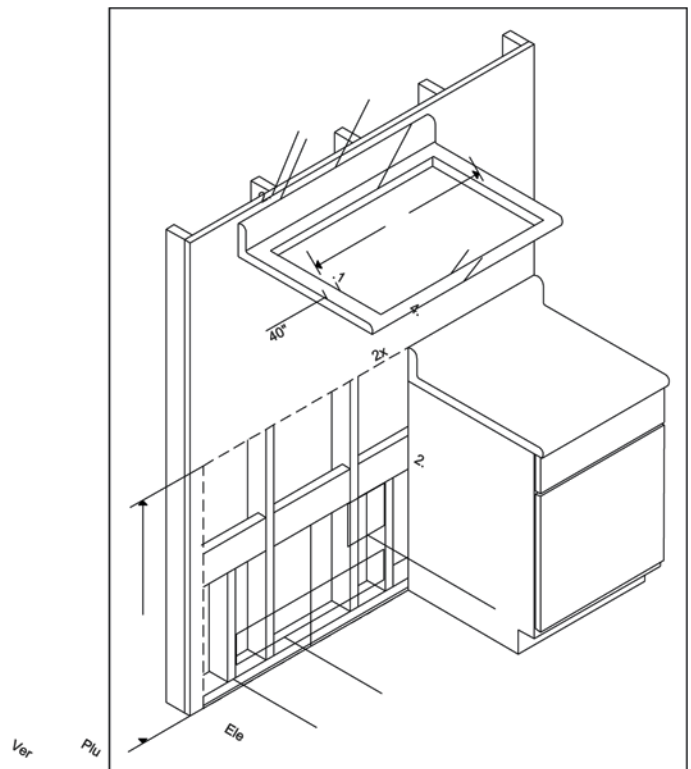
### Pre-assembly Considerations

1- The ADAS Approach system is designed for installation in both new construction and renovation situations. The system is designed to move counters, sinks and cooktops through 8" of vertical travel. It accommodates counters from 36" to 48" wide, and can hold sinks and cooktops with install cutouts up to 31" wide. The standard unit fitted with a counter 1-1/2" thick has a minimum height of 28" and a maximum height of 36" from the finished floor.

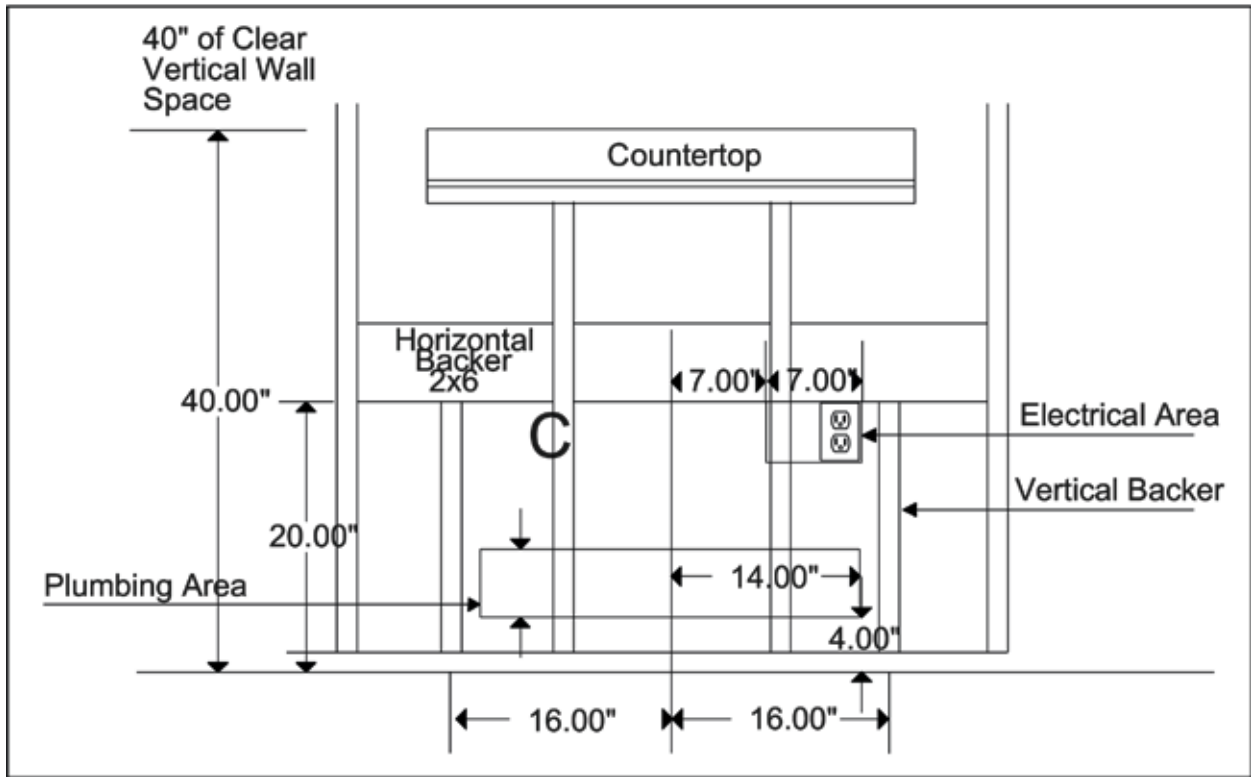
2- We recommend a three-sided valance underneath the adjustable portion of the counter. This valance or fascia is necessary to attach the UP/DOWN control buttons and conceal the underside of a sink basin or cooktop. The sides of the valance should extend beneath the countertop to avoid creating a gap between the adjacent fixed counters and the adjustable counter in its highest position. Refer to the Valance Construction section for suggestions on valance design.

3- The Approach system requires mounting to at least three wall studs. In some instances, it may be necessary to install 2" x 6" horizontal backer and 2" x 4" vertical backer between studs.

Locate horizontal backer 20" high from finished floor, and locate vertical backer 16" on center from centerline (see figure 2). The counter must be positioned to allow at least 1/8" clearance throughout the range of height adjustment on each side of the moving counter section including the wall. See Pre-install Figure 1.



Pre-install Figure 1



Pre-install Figure 2

4- The Approach system must plug into a GFCI 110V outlet, located lower than 20" from the finished floor and from 7" to 14" to the right of centerline. See Pre-install Figure 2 for the electrical location.

5- The Approach for the Sink or Cooktop accommodates sink or cooktop cutouts up to 31" wide. If using a sink, we recommend a shallow basin sink (5" - 6" in depth) with drains located in the rear of the basin in order to provide maximum knee clearance space for seated users. The Approach Drain Kit (sold separately) includes a flexible drain line, and requires a minimum 10" vertical distance between the trap connection and drain branch outlet. The location of the trap may be changed or modified to suit requirements of each installation, with installation done in compliance with building code. Supply lines are not provided, but should be flexible to accommodate vertical travel.

Drain and supply lines must exit the wall no higher than 9" from the finished floor and no more than 14" from center line. See figure 2 for plumbing location.

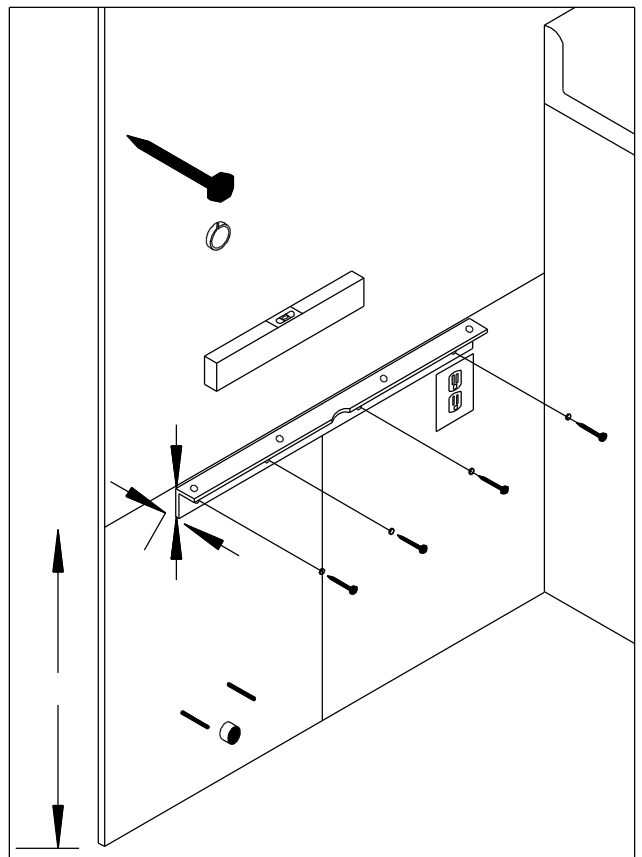
**Installation Instructions**

**Step 1**

Uncrate the package, remove the safety bar and the motorized counter lift. Remove the large mounting bracket from the motorized lift.

**Step 2**

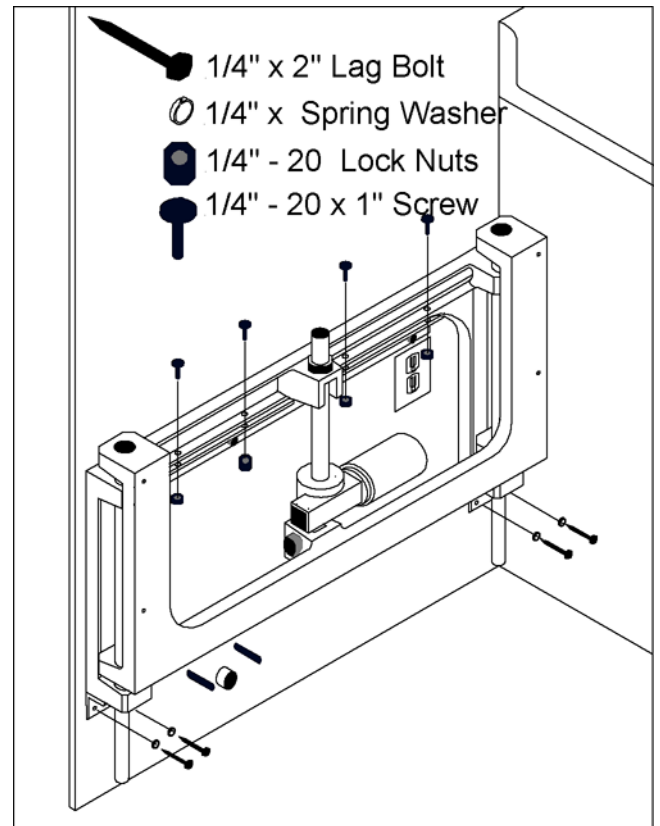
Attach the large mounting bracket to the wall with the top edge 22-1/2" from the finished floor, level, and on center. The 2" leg of the bracket lays flat against the wall with the 1-1/2" leg on top, forming the shelf to rest the system on. Use four 1/4" x 2" lag bolts and four 1/4" spring washers to securely mount the bracket to the horizontal backer and/or studs.



Step 2

### Step 3

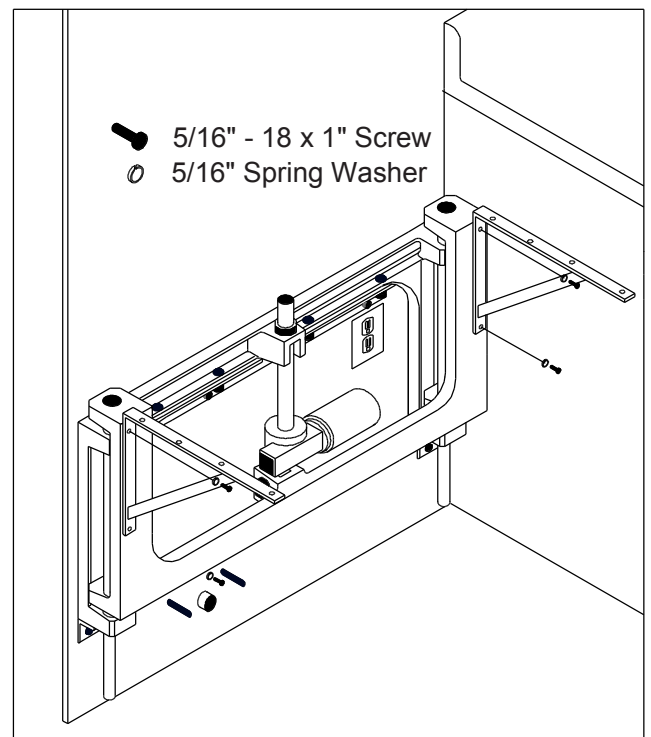
Set the motorized system on the large mounting bracket and secure using four 1/4" - 20 screws and four 1/4" - 20 lock nuts. Next, use four 1/4" x 2" lag bolts and four 1/4" spring washers to securely attach the two small mounting brackets to the vertical Backer and/or studs. The system must realign to compensate for curves in the wall that may be present. Do this by loosening the four 1/4" - 20 screws attaching the small mounting brackets to the wall, and retighten the four 1/4" - 20 screws to the system.



Step 3

### Step 4

Attach the two counter support arms to the front of the system using four 5/16" - 18 screws and 5/16" spring washers.



Step 4

### Step 5

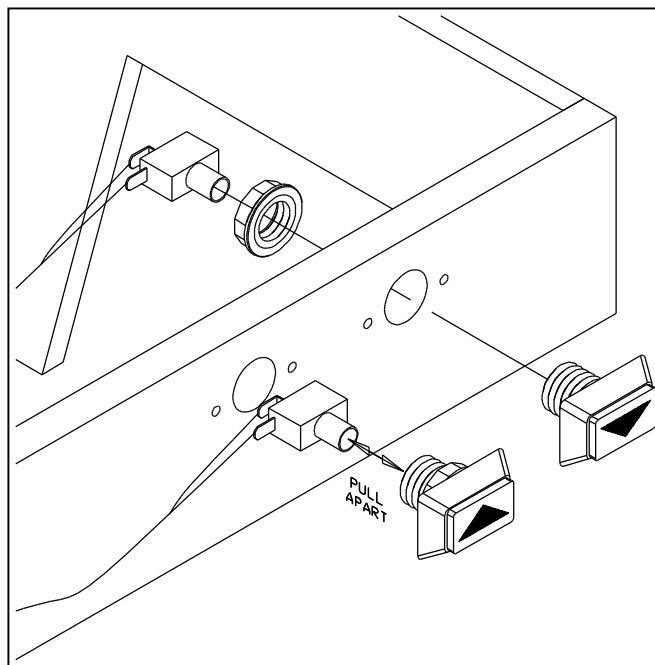
Position the moveable counter section with valance over the counter support brackets (refer to “Suggested Valance Design” section for ideas on how to construct a valance). Allow at least 1/8” clearance throughout the range of height adjustment on each side of the moving counter section including the wall. When the counter is positioned properly, attach the counter to the support brackets using #8 fasteners suitable for your counter material (not provided).

### Step 6

Always unplug the system from the GFCI wall outlet when installing or adjusting the UP/DOWN buttons or Safety Bar.

Install the pushbuttons in the desired location on the right side of the fascia or valance mounted to the moveable counter section.

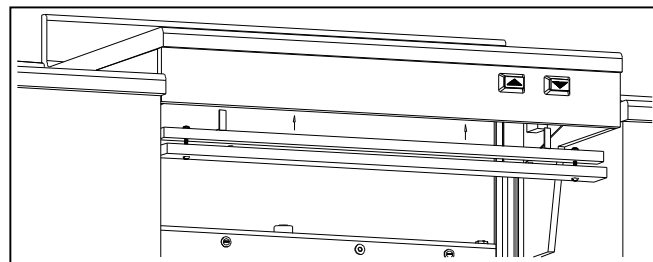
The pushbuttons require 2” minimum clear space behind the pushbutton mounting holes. Use the buttons mounting template provided to drill mounting holes in the valance. With the system unplugged from the wall, unsnap and separate the UP/DOWN buttons. Grasp the white plastic at the rear of the button and pull apart with a firm side-to-side rocking motion. Insert the front half of the buttons into the drilled holes in the valance and screw hand tight. Insert the switch and the white plastic rear section of the UP/DOWN buttons, making sure the UP switch is



Step 6

### Step 7

Attach the safety bar assembly inside the front face of the valance. Make sure the safety bar protrudes sufficiently below the valance to shut off when it meets an object in the downward travel.



Step 7

### Step 8

Always unplug the system from the GFCI wall outlet when installing or adjusting the UP/DOWN buttons or Safety Bar. Plug the 3-pin modular connector from the UP/DOWN buttons into the corresponding modular jack on the unit’s control box. Next, plug the 2-pin modular connector from the Safety Bar into the corresponding modular jack on the unit’s control box. Secure the control wires to the bottom side of the counter.

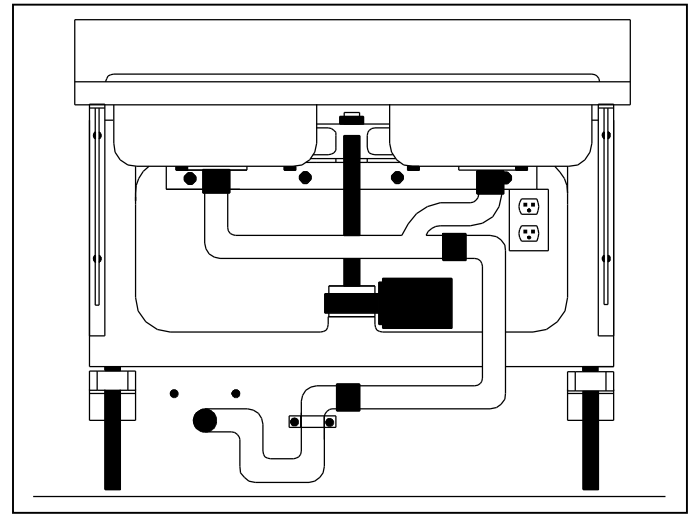
**Note: Failure to use GFCI 110V outlet may result in injury. If a GFCI 110V outlet is not present, or if you are unsure of the type of outlet present, contact a qualified electrician to have one installed.**

Plug the motor into the Ground Fault Circuit Interrupt 110V outlet. Raise and lower the unit to check for proper clearance. If the unit does not move when the DOWN button is pressed, adjust the screws in the safety bar and check the modular plugs for proper connection.

## Step 9

**(Sink Model Only)** The **Approach Drain Kit** is required for proper installation of a sink. Install the sink according to manufacturer instructions. Route PVC drain plumbing to the rear of the sink for improved knee clearance. Attach the flexible drain line (supplied with the **Approach Drain Kit**) using plumber's dope for Flexible PVC Pipes to PVC Pipes (ASTM D2564).

Mark the length of flexible drain line needed; making sure the drain line is long enough to reach from the P-trap to the upper drain branch when the unit is in its highest position. Also, make sure the flexible drain line does not form a second P-trap when the unit is in its lowest position. Cut the drain line to length, and attach it to the P-trap with plumber's dope for Flexible PVC Pipes to PVC Pipes (ASTM D2564). Attach the spiral clamps (supplied with the **Approach Drain Kit**) to the flexible drain line where it connects to the PVC drain branch and the PVC P-trap. Use hose Step 9 straps and secure the flexible drain line to reduce pressure on the rigid PVC plumbing..



Step 6

## Operating Notes

Always unplug the system from the GFCI wall outlet when installing or adjusting the UP/DOWN buttons or Safety Bar. When installed and adjusted correctly, the Safety Bar engages after minimal contact with a foreign object. Adjust the Safety Bar sensitivity by tightening or loosening the bolts on the safety bar. Downward travel of the counter system is prevented when the Safety Bar is engaged, but the system will continue to have power in the up direction. The motorized counter lift has multiple power cutoff systems for safety. If it loses partial or complete power, check the following:

Power UP, no power DOWN	Safety Bar is engaged or disconnected.	Disengage Safety Bar, adjust sensitivity if necessary. Check for proper connection of Safety Bar 2-pin modular plug to 2-pin modular jack.
No Power UP, no power DOWN	Thermal override in motor engaged.	Wait 30 minutes with no power to system, allow the motor to cool. Thermal override will reset itself.
No Power UP, no power DOWN	UP/DOWN operating buttons disconnected.	Check for proper connection of UP/DOWN buttons 3-pin modular plug to 3-pin modular jack.
No Power UP, no power DOWN	Safety Circuit Breaker in ADAS control box tripped.	Reset circuit breaker on side of ADAS control box.
No Power UP, no power DOWN	Ground Fault Circuit Interrupt outlet tripped.	Reset GFCI outlet, contact qualified electrical service person.

**SUGGESTED VALANCE CONSTRUCTION**

This suggested valance design is intended to house the UP/DOWN control buttons and conceal the underside of the counter, sink, or cooktop. The dimensions are calculated for an Approach for the Sink model with the minimum counter height of 28" and the maximum counter height of 36". The dimensions may change to accommodate varying sink drain branches, different heights of adjacent side counters, and different minimum and maximum height adjustment ranges. The sides of the valance must extend beneath the countertop far enough to avoid creating a gap between the adjacent fixed counters and the adjustable counter in its highest position. Selected building material should be strong enough to support the structure.

The cabinet doors are recommended to allow quick and easy access to plumbing and electrical power connections, and attach it to the P-trap with plumber's dope for Flexible PVC Pipes to PVC Pipes (ASTM D2564). Attach the spiral clamps (supplied with the Approach Drain Kit) to the flexible drain line where it connects to the PVC drain branch and the PVC P-trap. Use hose Step 9 straps and secure the flexible drain line to reduce pressure on the rigid PVC plumbing..

