

Installation Guide

In-Wall *Rear Projection* SMART Board™ Interactive Whiteboard

Registration Benefits

If you register your SMART product, we'll notify you of new features and software upgrades.

Register online at www.smarttech.com/registration.

Keep the following information available in case you need to contact Technical Support:

Serial Number _____

Date of Purchase _____

FCC Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Trademark Notice

SMART Board, Notebook, DVIT, LinQ, X-Port, smarttech and the SMART logo are trademarks or registered trademarks of SMART Technologies ULC in the U.S. and/or other countries. Windows and Windows NT are either registered trademarks or trademarks of Microsoft Corporation in the U.S. and/or other countries. Macintosh is a trademark of Apple Computer Inc., registered in the U.S. and other countries. NEC is a trademark of NEC Corporation. All other third-party product and company names may be the trademarks of their respective owners.

Copyright Notice

© 1992–2008 SMART Technologies ULC. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system or translated into any language in any form by any means without the prior written consent of SMART Technologies ULC. Information in this manual is subject to change without notice and does not represent a commitment on the part of SMART.

Portions of the software that ships with this product are copyrighted by Intel Corporation.

Portions of the software that ships with this product are copyrighted by ParaGraph, a business unit of Vadem. CalliGrapher® Copyright© 1997–2005 ParaGraph, a business unit of Vadem.

Patent No. US5448263; US6141000; US6326954; US6337681; US6741267; US6747636; US6803906; US6919880; US6947032; US6954197; US6972401; US7151533; US7184030; US7236162; CA2058219; EP1297488; ES2279823; CN1310126; and DE60124549. Other patents pending.

Important Information

Please read this manual carefully before installing, setting up and using the In-Wall *Rear Projection* SMART Board™ interactive whiteboard.

WARNING



The projector behind the screen is a high brightness light source. Don't look directly into the beam of light. Prevent children from staring directly into the beam of light.

WARNING



To reduce the risk of fire or electric shock, don't expose this product to rain or moisture.

CAUTION



Don't remove the protective cover from the rear surface of the SMART Board interactive whiteboard until you have completely installed it in the wall opening. If this cover is accidentally removed, don't leave any fingerprints on the rear surface. If you do smudge the rear of the screen, spray a soft cloth with alcohol-free glass cleaner, and then gently and carefully dab the surface until the marks are removed. Don't spray the cleaner directly onto the rear of the screen.

Never, under any circumstances, apply isopropyl alcohol, water or acetone to the rear surface of the interactive whiteboard. These fluids could damage the diffusion coating, resulting in a permanent deterioration in display quality.

CAUTION



If your interactive whiteboard includes a mirror stand, be very careful if you have to move or adjust the mirror stand after you've removed the cross braces. Don't apply pressure to any part of the screen opening and in particular to the upper corners.

Avoid pushing the mirror stand because excessive pressure may cause it to lose its square shape. If you do move or adjust the stand, either lift it from the bottom or push it at the bottom.

CAUTION



If your interactive whiteboard includes an NEC VT676 projector, please note that this projector has been designed for use under normal operating conditions only. Normal operating conditions are defined as product use that does not exceed eight hours per day and 260 days per year. Exceeding these operating conditions could cause projector damage. Damage caused by such extended use is not covered by the product warranty.

Other Precautions

For operating safety and to avoid damage to the interactive whiteboard and its parts, please read the following information carefully.

- Move the interactive whiteboard and its components with care.
- If you transport the interactive whiteboard over a distance, completely repackage it using the original packaging. This packaging was designed with optimal shock and vibration protection. If the original packaging is no longer available, pack all components with as much padding as reasonably possible to ensure that they are not exposed to excessive vibration or shock.

- Clean the interactive whiteboard surface regularly so dust doesn't build up on the surface and adversely affect the operation of the interactive whiteboard.
- The interactive whiteboard uses digital cameras that are located inside the screen frame. Don't allow excess glass cleaner to flow into the crack between the frame and the writing surface, because the cleaner could damage these cameras.
- Avoid setting up and using the interactive whiteboard in an area with excessive levels of dust, humidity or smoke.
- Avoid exposing the interactive whiteboard to extreme heat or cold. The operating temperature range is from 41°F to 85°F (5°C to 29°C) with up to 80% humidity (non-condensing). The shipping and storage range is from 14°F to 95°F (-10°C to 35°C) with up to 80% humidity (non-condensing).
- If possible, unplug the unit before thunderstorms. However, don't touch the unit or the unit's power plug during a thunderstorm, as there is a risk of electrical shock.
- Unplug the unit if you won't use it for an extended period.
- Use safe practices when you're plugging in the power cable. For example, make sure your hands are dry, and don't insert the plug into a dusty power outlet. Unplug the power cable before you install or service any components.
- This product has a three-wire grounding-type plug, which will only fit into an AC grounding-type power outlet. Make sure an AC power outlet is near the interactive whiteboard and remains easily accessible during use. If the power outlet can't accommodate the plug, have your electrician replace the obsolete power outlet. Don't circumvent the safety features of the grounding-type plug. Don't modify the power cable.
- Handle the power cable carefully and avoid excessive bending. Route the power cable so it's unlikely to be walked on or pinched by items placed upon or against it. If you must run a cable over the floor, lay it in a flat, straight line and secure it to the floor with tape or a cable management strip of contrasting color.
- If your SMART product requires replacement parts, use parts that are specified by SMART Technologies.

If your interactive whiteboard includes a mirror stand:

- Move the mirror stand with care. Avoid quick stops, excessive force and movement over uneven surfaces that could overturn the stand.
- Lock the casters after you set up the mirror stand so that it remains stationary while in use.

Important Information	i
Other Precautions	i
Overview	1
Preparing to Install Your Interactive Whiteboard	3
Removing the Mirror Stand from the Pallet (2876 and 2976 only)	3
Installing SMART Board Software	3
Creating the Wall Opening	5
Dual Installation.....	7
Installing Your Interactive Whiteboard	9
Attaching Mounting Brackets to the Interactive Whiteboard	9
Install the Interactive Whiteboard in the Wall Opening.....	10
Creating a Wall Opening for the Cables.....	13
Mounting the Pen Tray on the Wall	14
Installing the Mirror Stand (2876 and 2976 Only).....	16
Connecting the Cables	19
Setting up the Projector	21
Installing a Projector.....	21
Installing the VT676 Projector into the Mirror Stand (2876 and 2976 only).....	21
Making Fine Adjustments to the Projected Image.....	24
Using the Interactive Whiteboard	29
Configuring SMART Board Software	29
Starting SMART Board Software.....	29
Calibrating the Cameras	29
Orienting SMART Board Software	30
Starting the System Components.....	30
Shutting Down the System Components	30
Maintaining the Interactive Whiteboard	33
Cleaning the Interactive Whiteboard	33
Cleaning the Projector.....	34
Cleaning a Filter	34
Replacing the Projector Lamp and Filter in an NEC VT676 Projector	35
Appendix A: Specification Drawings	37
1710 Front and Side Views	37
1710 Wall Opening.....	38
1810 Front and Side Views	39
1810 Wall Opening.....	40
1910 Front and Side Views	41
1910 Wall Opening.....	42
2876 Views.....	43
2876 Distance from the Exterior Wall.....	44
2876 Wall Opening.....	45

2976 Views.....	46
2976 Distance from the Exterior Wall.....	47
2976 Wall Opening.....	48
Waste Electrical and Electronic Equipment Regulations	49
Customer Support	51
Training	51
Contacting SMART Technical Support.....	51
General Inquiries.....	51
Warranty.....	51
Registration.....	52
Sending Feedback.....	52
Obtaining More Information on SMART Products.....	52
Index	53

Overview

You can use your interactive whiteboard to do everything you can do at a computer workstation—open files, conference with others, create new documents or edit existing ones, play video clips, and so on—simply by touching the interactive whiteboard. You can also write over applications in digital ink using your finger or a pen tray pen, and then save your notes in SMART Notebook™ software for future reference and distribution.

The In-Wall *Rear Projection* SMART Board interactive whiteboard is designed to be set into the wall of a customized meeting room or classroom. Your projector casts a computer image directly onto the screen from a rear projection room and because the image on the screen is rear projected, you can stand in front of the interactive whiteboard without casting a shadow.

The interactive whiteboard uses DVIT™ (Digital-Vision Touch) technology for touch and tool recognition. This technology uses specialized digital cameras to track the position of a pen tray tool or your finger and to communicate that position to a computer.

The current models of In-Wall *Rear Projection* SMART Board interactive whiteboards are:

- 1710 (66" diagonal (167.6 cm) screen)
- 1810 (71" diagonal (180.3 cm) screen)
- 1910 (84" diagonal (213.4 cm) screen)
- 2876 (71" diagonal (180.3 cm) screen with a mirror stand and a projector)
- 2976 (84" diagonal (213.4 cm) screen with a mirror stand and a projector)

NOTE: You can use any projector with the 1710, 1810 or 1910 interactive whiteboard. The 2876 and 2976 interactive whiteboards include an NEC VT676 projector.

You will need to create a wall opening and install the interactive whiteboard into this opening. The In-Wall *Rear Projection* SMART Board interactive whiteboard is designed for use with a computer and a projector, so you'll need a projection room behind the interactive whiteboard to house the projector and the computer. However, you can locate the computer in the same room as the screen if that location is more convenient.

The installation process varies slightly if you have a model that comes with a mirror stand. However, the major steps for all installations include:

- preparing to install the interactive whiteboard (page 3)
- creating the wall opening (page 5)
- installing the interactive whiteboard (page 9)
- connecting the cables (page 19)
- setting up the projector (page 21)

This guide also includes information on using (page 29) and maintaining (page 33) your interactive whiteboard, and specification drawings for each model (pages 37 to 48).

NOTE: For more information on using the various tools and applications included with SMART Board software, see the *SMART Board software online Help*.

Note for 1710, 1810 and 1910 Owners

The size of your projection room will vary, depending on the distance required by your projector to project an image of the appropriate size. For example, with an 1810, you might need to place the projector 8' to 12' (2.4 m to 3.7 m) from the screen. If the distance required by the projector is longer than your room, you can install one or two mirrors to project the correct image size onto the screen. For more information, see the instructions supplied with your projector, or consult your local reseller.

Note for 2876 or 2976 Owners

Both the 2876 and the 2976 include an NEC VT676 projector with a custom short-throw lens.

You'll have to install the mirror stand (page 16) and install the projector into the mirror stand (page 21). You must install the stand a short distance from the rear of the interactive screen.

- For the 2876, the *maximum* distance between the lower cabinet of the mirror stand and the wall surface upon which you mount the interactive whiteboard is 3 1/4" (8.3 cm).
- For the 2976, you must allow *at least* 15" (38.1 cm) between the lower cabinet of the mirror stand and the wall surface upon which the interactive whiteboard is mounted.

If you have a 2876 and you construct a room to house the mirror stand, make it approximately 4' (1.2 m) deep to provide room for projector maintenance access.

If you have a 2976 and you construct a room to house the mirror stand, make it approximately 5' (1.5 m) deep to provide room for projector maintenance access.

You'll find some cleaning instructions for the VT676 projector on page 34. However, you should also read the *NEC VT676 User's Manual* that's supplied with your projector for full details on use, care and cleaning.

Preparing to Install Your Interactive Whiteboard

Before you install the screen in the wall opening, complete the following tasks:

- remove the mirror stand from the pallet (2876 and 2976 only)
- install SMART Board software

Removing the Mirror Stand from the Pallet (2876 and 2976 only)

If you ordered a 2876 or 2976 interactive whiteboard, you also received an NEC VT676 projector and a mirror stand. Follow the instructions below to remove the mirror stand from the pallet.

To remove the mirror stand from the pallet

1. Remove the two wing nuts on the rear brackets that hold the unit to the pallet.
2. Remove the bolts that hold the brackets to each corner of the pallet. To do this, use one of the two 9/16" combination wrenches that you'll find on the right side of the mirror stand with the other hardware.
3. Roll the mirror stand down the pallet ramps.

Installing SMART Board Software

Before you install and connect your interactive whiteboard, you need to install SMART Board software. SMART Board software contains the tools you need to control any computer application and write over it. For complete details on this software, refer to the *SMART Board software online Help*.

CAUTION Don't connect the SMART USB adapter cable to the computer until after you've installed SMART Board software.



If you do this by accident, the *Found New Hardware* wizard appears. Click the **Cancel** button in the wizard, unplug the SMART USB adapter cable from the computer and then install SMART Board software.

To install SMART Board software

- Insert the SMART Board software CD into your CD drive.
- Follow the on-screen instructions.

If the installation program doesn't start automatically, navigate to the installation folder on the CD, double-click the **setup.exe** file, and follow the on-screen instructions.

Creating the Wall Opening

To install your In-Wall *Rear Projection* SMART Board interactive whiteboard, you need to create a rectangular opening in your wall and finish it with wood stud framing. The wall opening must have vertical studs running from the floor to the ceiling.

CAUTIONS



If you're not sure how to create an opening in your wall, consult with a professional familiar with the structure of your room.

Use appropriate tools to create the opening.

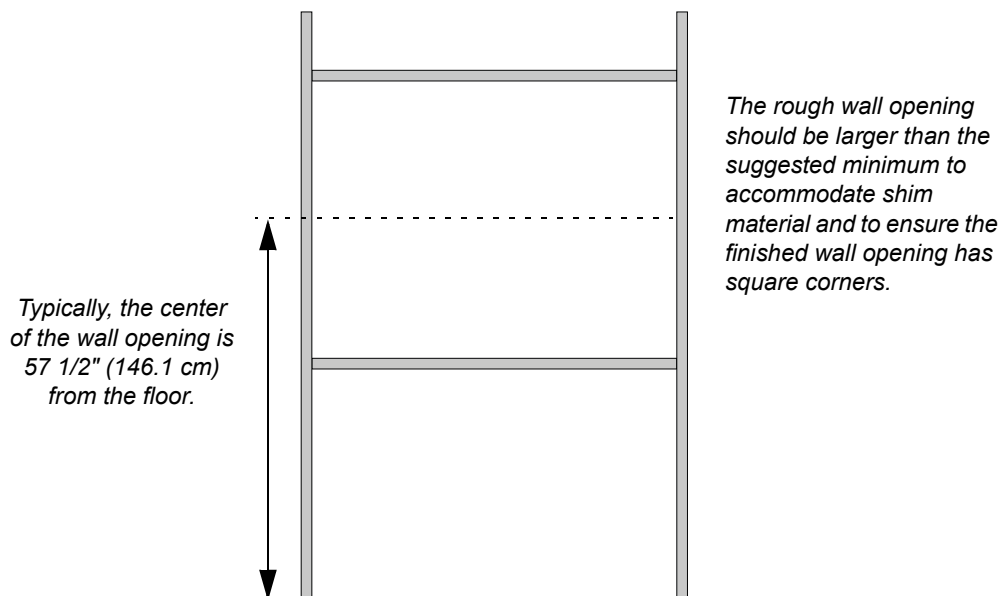
If you're installing a 2876, your wall thickness can't be greater than 3 1/4" (8.3 cm). Otherwise the optics of the mirror stand will adversely affect the projected image.

NOTE: If you're constructing a room to house the projector and its stand, ensure you make the room deep enough to provide access for projector maintenance.

- If you have a 2876 and you construct a room to house the mirror stand, make it approximately 4' (1.2 m) deep to provide room for projector maintenance access.
- If you have a 2976 and you construct a room to house the mirror stand, make it approximately 5' (1.5 m) deep to provide room for projector maintenance access.

You'll find the dimensions and specifications for your model in Appendix A on page 37. While the dimensions in this section are the suggested minimum, you should make your opening slightly larger to accommodate shim material, thereby ensuring that your finished opening has right-angled corners.

The optimal height from the floor to the center of the wall opening is 57 1/2" (146.1 cm).



NOTE: Most measurements in this guide assume that your wall opening, and therefore the middle of the screen, is at this height. For the 2876 or 2976, if you place the screen at a different height, you'll have to raise or lower the mirror stand so that the center of the projected image is aimed at the center of the screen. In particular, the vertical center of the image should align with the center of the screen.

CAUTION



Don't remove the protective cover from the rear surface of the interactive whiteboard until you've completely installed it in the wall opening.

To create the wall opening

1. Select an appropriate location for the opening. While this may be dictated by the location of the projection room, an ideal site is a central area that is visible from all parts of the room, at a comfortable height for writing. The optimal height of the wall opening, as measured from the floor to the center of the wall opening, is 57 1/2" (146.1 cm).
2. Cut a rough hole through the wall at the appropriate height that, when finished with wood stud framing, has the following *minimum* dimensions:
 - **For a 1710**, the finished wall opening must measure at least 53 7/8" W × 43 1/4" H (136.8 cm × 110.0 cm)
 - **For an 1810**, the finished wall opening must measure at least 57 7/8" W × 46 1/4" H (147.0 cm × 117.5 cm)
 - **For a 1910**, the finished wall opening must measure at least 68 5/8" W × 54 3/8" H (174.3 cm × 138.1 cm)
 - **For the 2876**, the finished wall opening must measure at least 57 7/8" W × 46 1/4" H (147.0 cm × 117.5 cm)
 - **For the 2976**, the finished wall opening must measure at least 68 5/8" W × 54 3/8" H (174.3 cm × 138.1 cm)

IMPORTANT

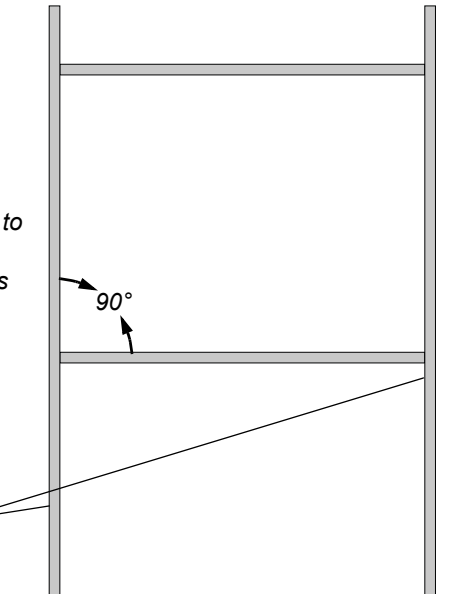


While these dimensions represent the minimum size for the opening, you should make your opening 1/4" (0.6 cm) larger to accommodate shim material and to ensure that your finished opening has right-angled corners.

3. Frame the wall opening with vertical and horizontal wood framing.

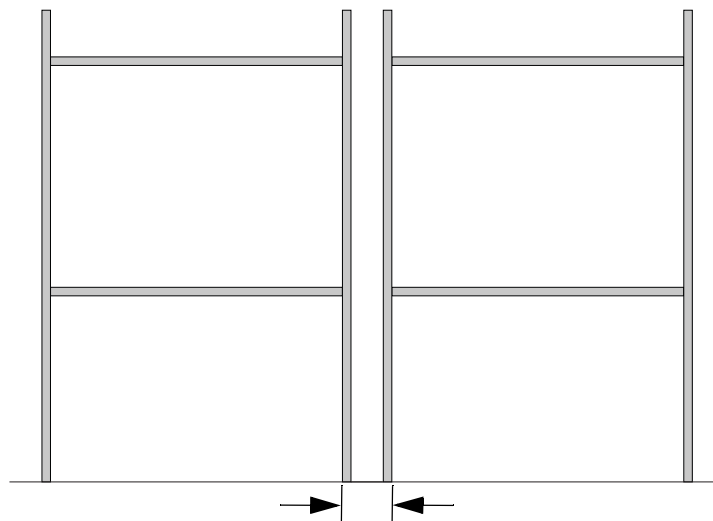
The rough wall opening should be larger than the suggested minimum to accommodate shim material and to ensure the finished wall opening has square corners.

The rough wall opening must have vertical studs running from the floor to the ceiling.



Dual Installation

If you want, you can install two in-wall units side by side. When you do this, you must leave a small space between the interactive whiteboards. This space should be slightly greater than 1/4" (0.6 cm), which means you must leave approximately 3 3/4" (9.5 cm) between the two wall openings.



Leave approximately 3 3/4" (9.5 cm) between the two wall openings.

Installing Your Interactive Whiteboard

In this section, you'll:

- attach mounting brackets to the interactive whiteboard (this page)
- install the interactive whiteboard into the wall opening (page 12)
- create a wall opening for the cables (page 13)
- mount the pen tray assembly on the wall (page 14)
- (2876 or 2976 only) install the mirror stand in the projection room (page 17)

IMPORTANT



When you install the interactive whiteboard, make sure you can also remove it from the wall opening, in case you need to service it later.

CAUTION



Don't remove the protective cover from the rear surface of the SMART Board interactive whiteboard until you have completely installed it in the wall opening. If this cover is accidentally removed, don't leave any fingerprints on the rear of the screen. If you do smudge this surface, spray a soft cloth with alcohol-free glass cleaner, and then gently and carefully dab the surface until the marks are removed. Don't spray the cleaner directly onto the rear of the screen.

Never, under any circumstances, apply isopropyl alcohol, water or acetone to the rear surface of the interactive whiteboard. These fluids could damage the diffusion coating, resulting in a permanent deterioration in display quality.

Attaching Mounting Brackets to the Interactive Whiteboard

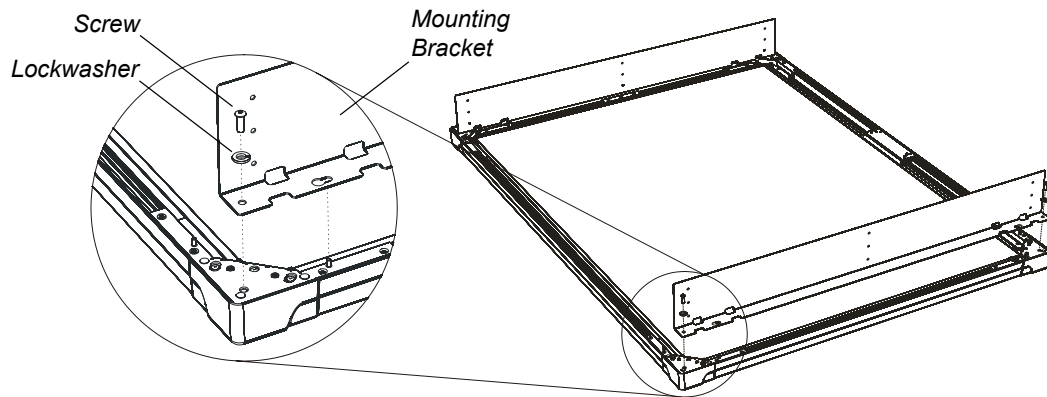
Before you can mount the interactive whiteboard into the opening in your wall, you must attach the L-shaped mounting brackets to both sides of the SMART Board interactive whiteboard.

The short side of the "L" (the narrow flange) attaches to the frame of the interactive whiteboard, while the long side (the wide flange) projects from it. When you install the unit into the opening, you'll secure the long side (wide flange) of the bracket to the vertical wood framing.

Before you complete the following procedure, obtain the four hex screws, the four split lockwashers and the 3/16" hex key from the accessory kit. You'll also need the two mounting brackets.

To attach the mounting brackets to the interactive whiteboard

1. Place foam or a soft cloth onto a smooth, flat surface upon which you can rest the frame of the interactive whiteboard.
2. Carefully place the interactive whiteboard face down on the foam or soft cloth. Take care to not bend the interactive whiteboard.
3. Position each L-shaped mounting bracket against the frame, as shown below. Align the screw hole and post in each corner of the frame with the screw hole and keyhole in the bracket.



4. Slip each of the four screws through a split lockwasher, and then insert them into the appropriate bracket holes at the top and bottom of each bracket.
5. Tighten all screws with the supplied hex key so that the mounting brackets are securely attached to the frame of the interactive whiteboard.

Install the Interactive Whiteboard in the Wall Opening

When you have attached the mounting brackets to the interactive whiteboard, you can install it into the wall opening. You'll need the No. 10 wood screws from the accessory kit and a Phillips® No. 2 screwdriver (not supplied).

NOTE: You'll have screws left over when you've finished the installation.

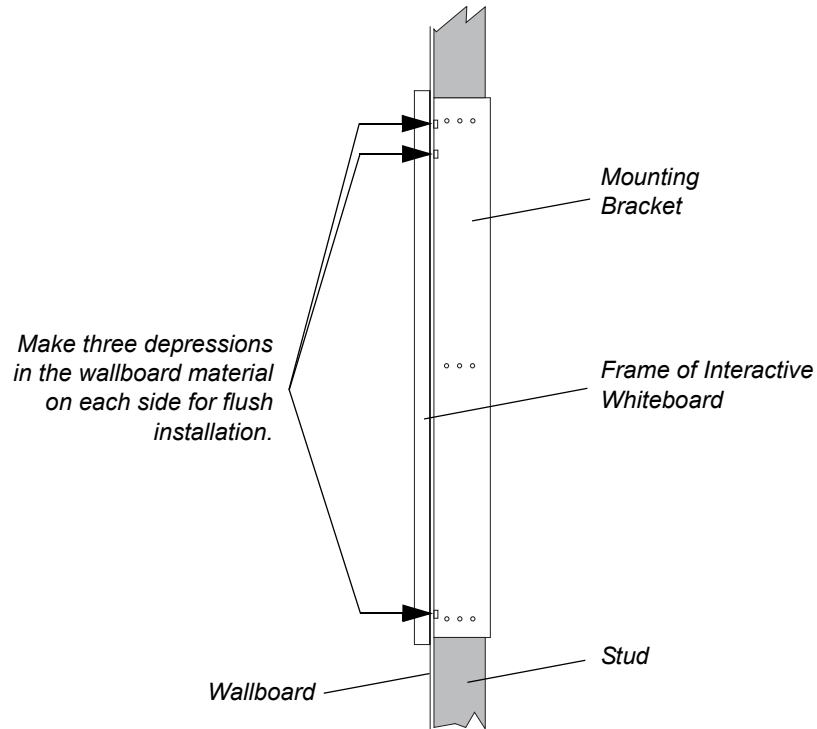
For a perfectly flush fit, you can make shallow depressions or indentations in the drywall or wallboard material at the edge of the wall opening. These indentations will accommodate the screw heads and posts that protrude from the rear of the frame. When the unit is installed, you won't see these indentations, because the frame will cover them. To achieve this flush installation, make three depressions on each side (six in total), with each depression approximately 1/2" (1.3 cm) in diameter and 3/8" (1.0 cm) deep.

IMPORTANT

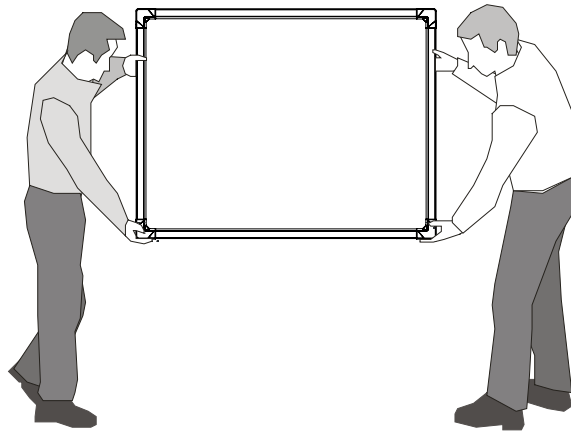


Before you install the interactive whiteboard into the wall, check that the wall is even.

If you fit a large interactive whiteboard into an uneven wall, it is important that you don't flex the interactive whiteboard by forcing it to fit flush with the wall. The interactive whiteboard has to be flat (not twisted or warped) for its digital cameras to work correctly.



For safety, lift the interactive whiteboard with the assistance of another person. You and your assistant should stand at either side of the screen, supporting its weight at the bottom corners while balancing the top with your other hand. Your assistant should continue to hold the interactive whiteboard in place while you secure the mounting brackets to the wood framing.



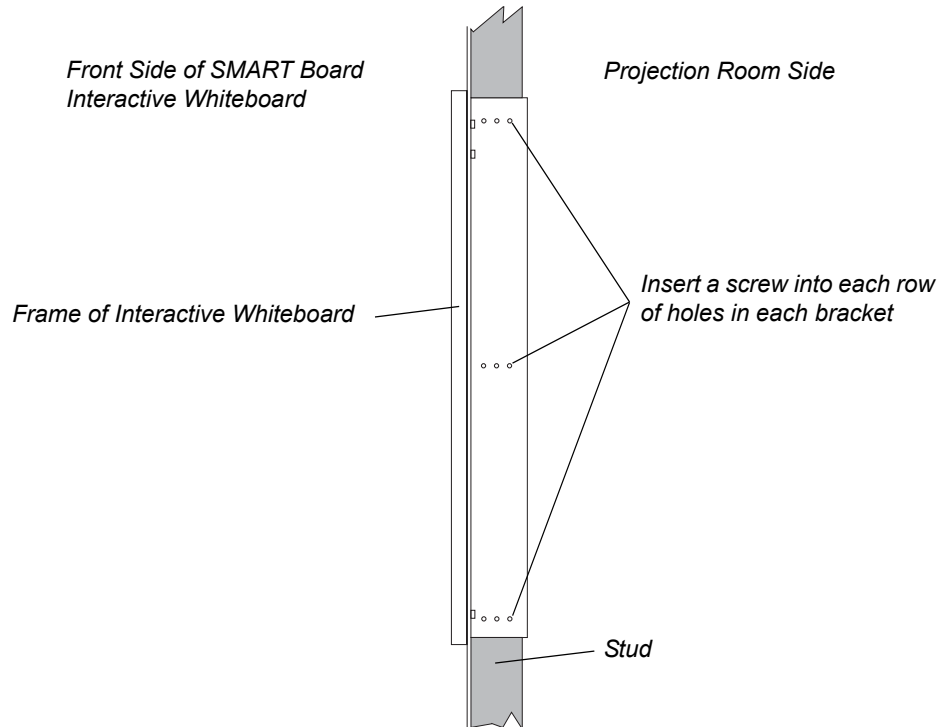
To install the interactive whiteboard in the wall opening

CAUTION



If you're installing the interactive whiteboard in an uneven wall, never push the interactive whiteboard to ensure it is flush with the wall. Instead, allow the interactive whiteboard to hang naturally, and then insert the screws, as this will ensure that the interactive whiteboard is flat.

1. Lift the SMART Board interactive whiteboard with the mounting brackets attached, and place it into the prepared wall opening. Shim as necessary.
2. From the projection room side, insert one screw through the top row of holes in each mounting bracket.
3. From the projection room side, insert one screw through the middle row and another through the lower row of holes in each mounting bracket and into the vertical wood framing.
4. From the projection room side, if possible, insert an additional screw through each row of holes in each mounting bracket.



5. Remove the covering from the rear surface of the interactive whiteboard.

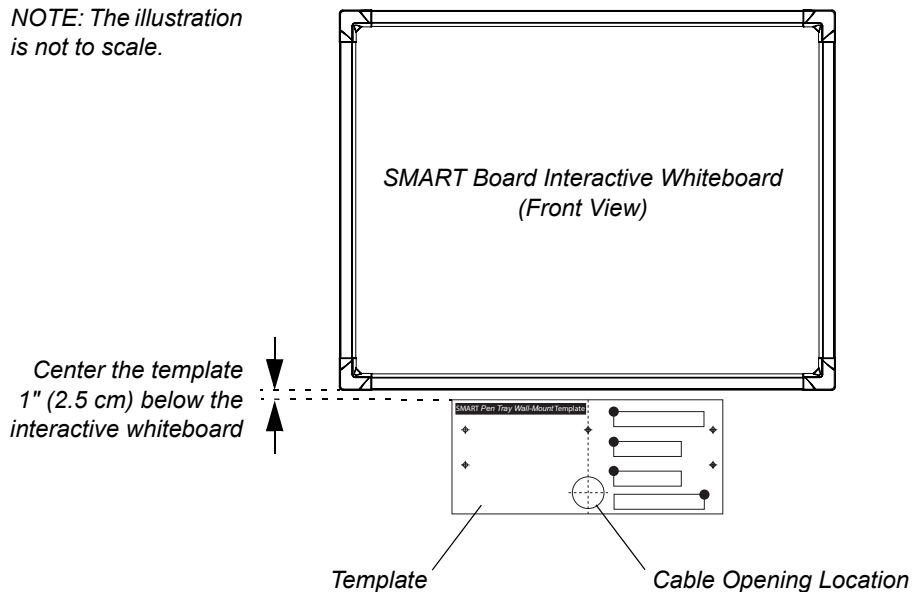
Creating a Wall Opening for the Cables

To create an opening in the wall for the cables, you'll need the *SMART Pen Tray Wall-Mount Template* from the accessory kit. You'll also need a measuring tool, a level and the appropriate tools for creating a wall opening.

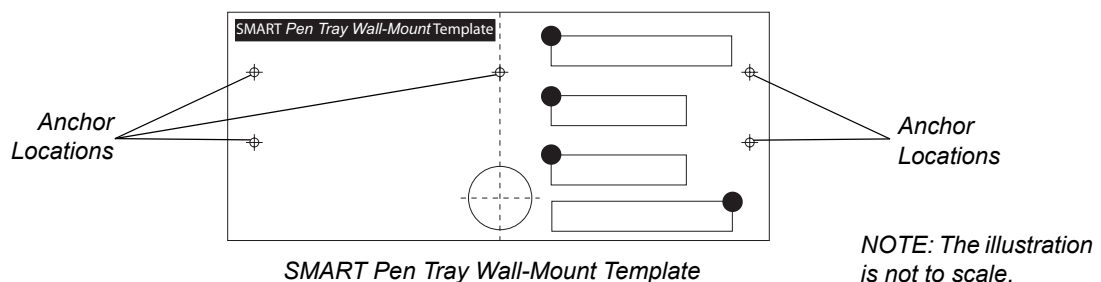
To create a wall opening for the cables

1. Position the top edge of the *SMART Pen Tray Wall Mount Template* 1" (2.5 cm) below the bottom edge of the interactive whiteboard frame, making sure the template is level and aligned with the center of the interactive whiteboard.

NOTE: The illustration is not to scale.



2. Use the template to mark the center of a 2 3/8" (6.0 cm) diameter hole for the cables on the wall, as well as five drywall anchor locations. Later, you will use these drywall anchor locations to attach the pen tray to the wall.



NOTE: The locations for these screws probably won't be at the wall studs. However, if they are, you can use a No. 8 × 1 1/2" wood screw (not supplied) or a self-drilling metal screw (not supplied) without a drywall anchor at each location.

3. Remove the template.
4. Create a hole in the wall for the cables using the appropriate tool.
5. Insert a plastic grommet into each side of this wall opening.

Mounting the Pen Tray on the Wall

When your interactive whiteboard is in place, you need to attach the pen tray to the wall.

To perform this procedure, you'll need the following items from the accessory kit:

- five E-Z insert drywall anchors
- five No. 8 × 1 1/4" screws
- the pen tray, with its wall-mount bracket and the IR receiver attached (they're inside a bag for protection from electrostatic discharge)
- the USB adapter or 20' (6.1 m) serial cable (if you ordered it)
- the wireless keyboard
- four pens
- the eraser barrier and the eraser

You'll also need a Phillips No. 2 screwdriver (not supplied).

To mount the pen tray

1. Using a Phillips No. 2 screwdriver, insert the drywall anchors into the marked locations. You made these marks when you were creating the wall opening for the cables.

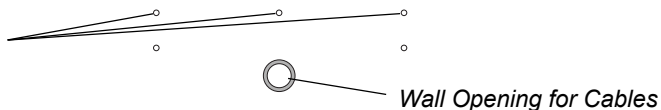
NOTE: The marked locations probably won't be at the wall studs. However, if they are, you can use a No. 8 × 1 1/2" wood screw (not supplied) or a self-drilling metal screw (not supplied) without a drywall anchor at each location.

2. Partially insert a screw into each of the top three drywall anchors using the Phillips screwdriver. Leave at least 1/8" (0.3 cm) of the screw protruding, so you can hang the pen tray mounting bracket.

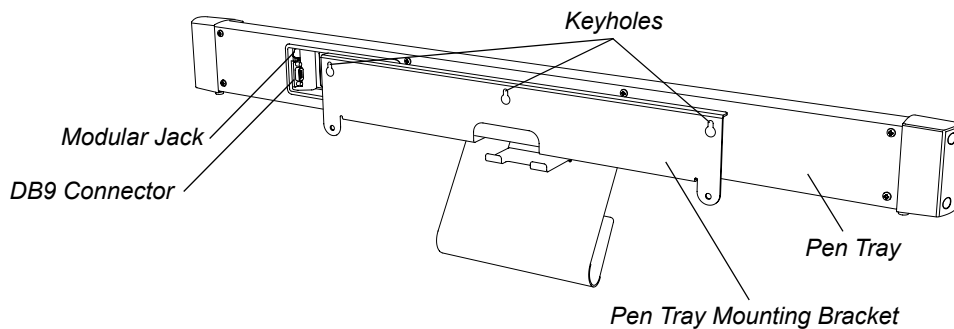
NOTE: The illustration is not to scale.



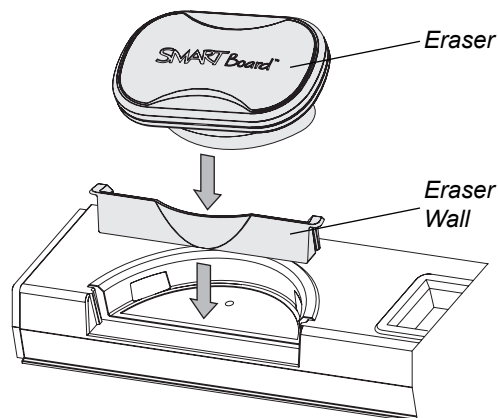
Insert a screw into the top three drywall anchors. Leave at least 1/8" (0.3 cm) of the screw protruding.



3. Connect the modular communication cable to the modular jack at the back of the pen tray.
4. The procedure for connecting the pen tray to your computer varies, depending on whether you're connecting the pen tray to a USB or serial connector on your computer. Your interactive whiteboard comes with a SMART USB adapter cable. However, you can order an optional DB9-to-DB9 serial cable if you need to connect to a serial connector on your computer. Either:
 - connect one end of the supplied USB adapter to the DB9 connector at the back of the pen tray
 - if you ordered the DB9 serial cable, connect it to the DB9 connector at the back of the pen tray
5. Slide the three keyholes in the pen tray mounting bracket onto the protruding screws on the wall.



6. Try to move the pen tray to check its stability. If it moves too freely, take it off the wall, tighten the screws slightly, and then return it to the wall.
7. Using the Phillips screwdriver, insert screws into the two holes in the mounting bracket underneath the pen tray. These screw locations line up with the drywall anchors that you inserted earlier.
8. Ensure the IR receiver is in its slot. If the computer is in the projection room, feed the IR receiver cable through the wall opening for the cables. Run this cable to the computer but don't connect it. You will connect this cable to the computer later.
9. Snap the eraser wall into place. Put the eraser and the four pens in their appropriate slots on the pen tray. Place the wireless keyboard on the keyboard bracket.



10. Slide the other ends of the communication cable and the USB adapter through the wall opening for the cables. You connected both of these cables to the pen tray earlier.

Installing the Mirror Stand (2876 and 2976 Only)

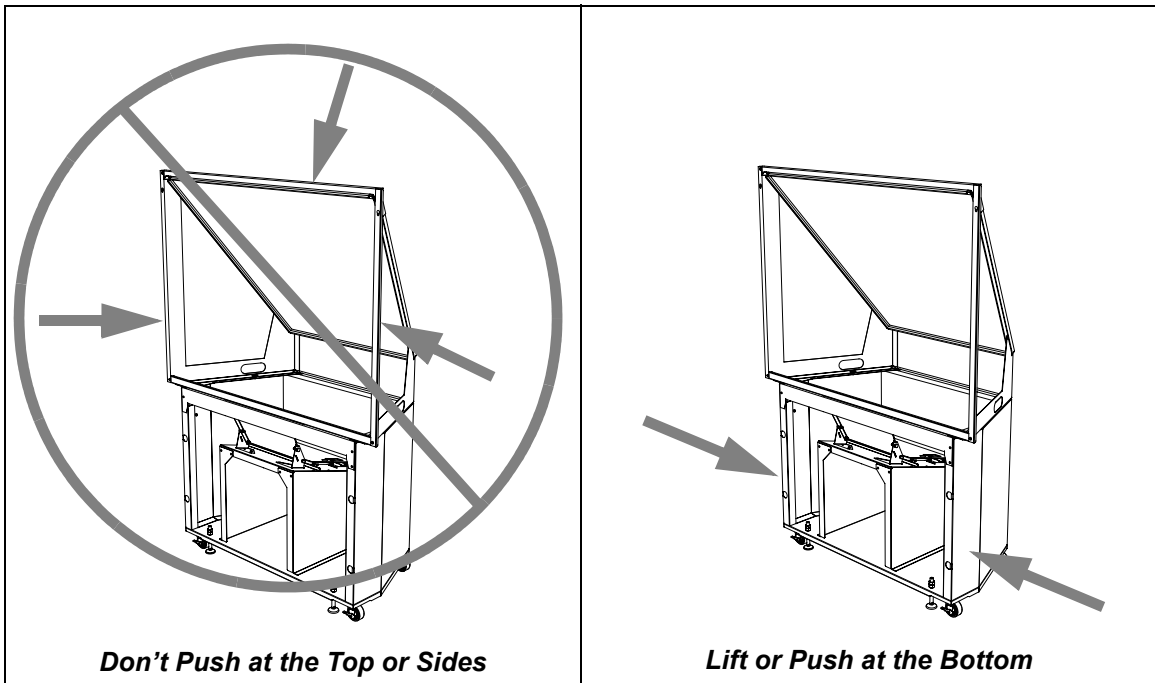
If you're installing a 2876 or a 2976, you need to install the mirror stand in the projection room behind the interactive whiteboard.

CAUTION



Be very careful if you have to move or adjust the mirror stand after you've removed the cross braces (page 17). Don't apply pressure to any part of the screen opening and in particular to the upper corners.

Avoid pushing the mirror stand because excessive pressure may cause it to lose its square shape. If you do move or adjust the stand, either lift it from the bottom or push it at the bottom.



The optimal position for your mirror stand depends on your model of interactive whiteboard.

- For the 2876, the *maximum* distance between the lower cabinet of the mirror stand and the wall surface upon which you mount the interactive whiteboard is 3 1/4" (8.3 cm).
- For the 2976, you must allow *at least* 15" (38.1 cm) between the lower cabinet of the mirror stand and the wall surface upon which the interactive whiteboard is mounted.

You'll also need to consider the thickness of your wall when you position the mirror stand.

When the mirror stand is in place, you must align its opening horizontally and vertically with the interactive whiteboard. To do this, adjust the leveling legs, which are raised above the casters for shipping. Once all the legs are adjusted, the casters should be approximately 1/2" (1.3 cm) above the floor.

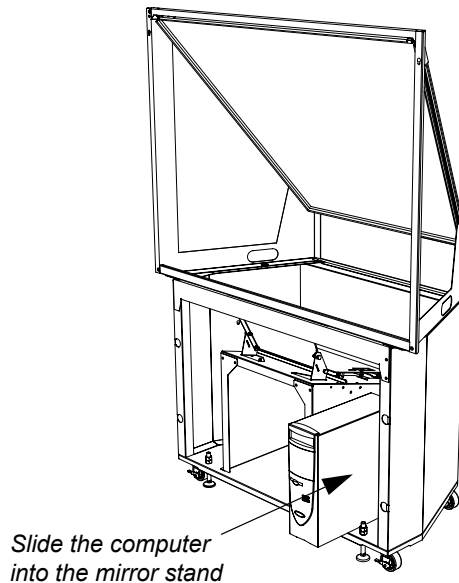
NOTE: If you didn't install the interactive whiteboard at the recommended height (page 10), position the mirror stand so the center of the projected image is aimed at the center of the screen.

You may have to readjust the leveling legs as you position the mirror stand. First, raise the stand to the approximate height by adjusting the front legs, followed by the back legs. Finally, level the mirror stand by making fine adjustments on the legs until the stand is perfectly level.

To adjust the legs, you'll need a 1/2" (1.3 cm) flat or adjustable wrench, or you can use the 9/16" wrench that comes with the mirror stand. You'll also need two 15/16" flat or adjustable wrenches for the leveling process.

To install the mirror stand

1. Wheel the mirror stand into the projection room and remove the cross braces from the screen opening.
2. Remove the strap at the front of the mirror stand. You'll have to position the mirror to adjust the projected image when you set up the projector.
3. If you want the computer to be in the projection room, slide it into the mirror stand.

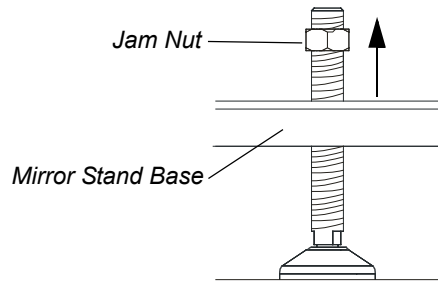


NOTE: For ease of use, ensure you can access the computer's power switch and drives. If you have limited access at the front of the mirror stand, slide the computer into the mirror stand with the front of the computer facing the rear of the mirror stand.

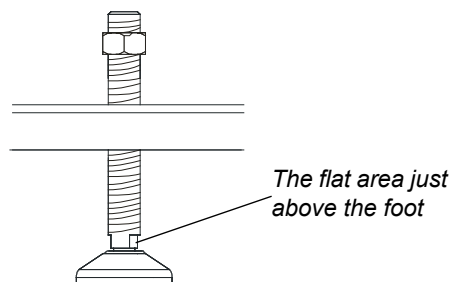
4. Align the opening of the mirror stand horizontally with the installed screen. Using the wall brackets as your guide, lift or push at the bottom sides to center the mirror stand between the brackets.
 - For the 2876, the *maximum* distance between the lower cabinet of the mirror stand and the wall surface upon which you mount the interactive whiteboard is 3 1/4" (8.3 cm).
 - For the 2976, you must allow *at least* 15" (38.1 cm) between the lower cabinet of the mirror stand and the wall surface upon which the interactive whiteboard is mounted.
5. Align the mirror stand vertically behind the installed screen by adjusting the leveling legs.

Raise the mirror stand so that the front opening is the same distance from the top edge of the screen as it is from the bottom edge. Depending on your installation, the leveling legs may raise the casters approximately 1/2" (1.3 cm) from the floor.

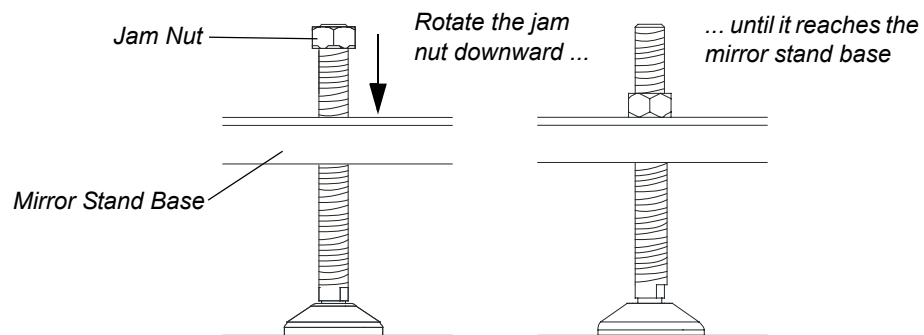
- i. Raise the jam nut on the leveling leg.



- ii. Using a 1/2" flat or adjustable wrench, grip one leveling leg in the 1/2" (1.3 cm) flat area just above the foot.



- iii. Rotate the wrench and leg until the mirror stand reaches the appropriate height.
iv. Rotate the jam nut downward until it reaches the mirror stand base. Tighten it with a 15/16" flat or adjustable wrench.

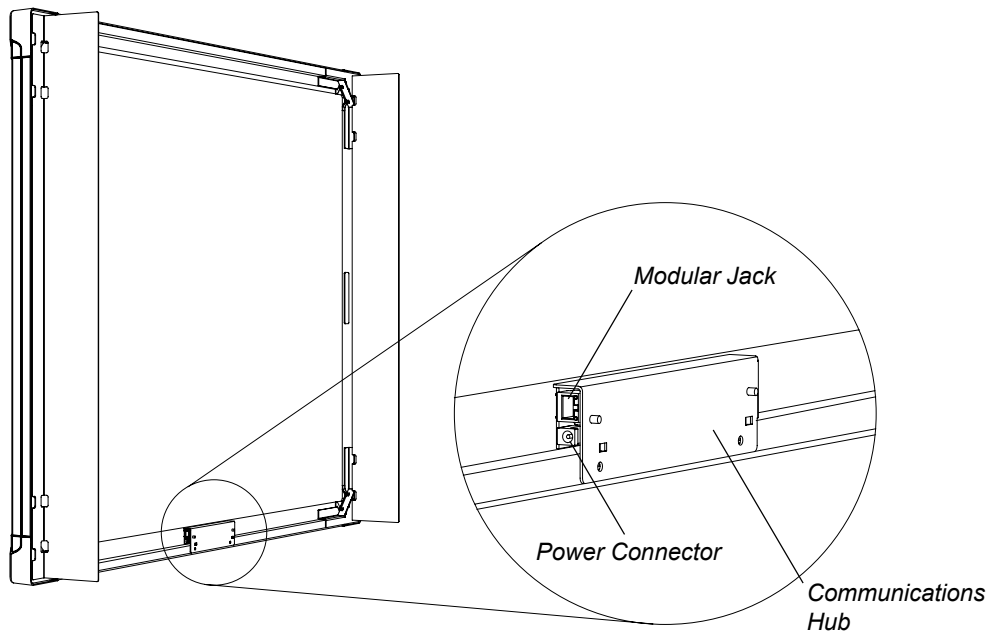


Connecting the Cables

To enable communication between all the components in your In-Wall *Rear Projection* SMART Board interactive whiteboard, you must connect the appropriate cables to the computer and the interactive whiteboard. You also need to connect the interactive whiteboard to the supplied power supply.

To connect the cables

1. If you haven't done so already, shut down your computer before connecting any cables.
2. Connect one end of the modular cable to the interactive whiteboard's communications hub (see the illustration below). You've already connected the other end of this cable to the pen tray.
3. Connect the power supply cable to the interactive whiteboard's communications hub. This cable is in your accessory kit.



4. Connect the power cable to the power supply cable.
5. Connect the other end of the power cable to a power outlet.
6. The next step of these instructions depends on whether you're connecting the pen tray to a USB or serial connector on your computer. Your interactive whiteboard comes with a SMART USB adapter cable that connects to a USB connector on your computer. However, you can order an optional DB9-to-DB9 serial cable if you need to connect to a serial connector on your computer.

- To connect the computer using the SMART USB adapter cable, connect the USB adapter to a USB connector on the computer. You previously connected the other end of this adapter when you mounted your pen tray to the wall (page 14).

CAUTION



Don't connect the SMART USB adapter cable to the computer until after you've installed SMART Board software (page 3).

- To connect the computer using the optional DB9 serial cable, connect the serial cable to a DB9 serial connector on the computer. You previously connected the other end of this cable when you mounted your pen tray to the wall (page 14).

NOTE: If your serial cable has a power port on the back of the DB9 connector, you don't need to use it. Power is supplied to the pen tray through its power supply. However, you won't damage anything if you connect the power supply to this port.

7. Attach the two PS/2 connectors from the IR receiver to the computer's keyboard and mouse connectors.

NOTES

- You can increase the length of the USB or serial cable by using a serial extension cable (not supplied).
- You can increase the length of the PS/2 cable by using two 6' (1.8 m) extension cables.

Setting up the Projector

This section of the guide provides general guidelines for installing any projector (see below). However, if you have a 2876 or a 2976, this section also includes detailed instructions on installing an NEC VT676 projector.

After you've installed the projector and aligned its image with the center of the screen, you can then make fine adjustments to the projected image (page 24).

Installing a Projector

The following general guidelines will help you install your projector. For specific information, see the manufacturer's instructions supplied with your projector.

To install a projector

1. Set the computer's screen resolution to match the projector's optimal resolution.
 - For information on your projector's optimal resolution, see the instructions supplied with your projector.
 - For information on how to change your computer's screen resolution, see the instructions supplied with your operating system.
2. Place the projector on a projector platform or stand:
 - if you're not using a mirror, point the lens of the projector at the center of the screen.
NOTE: To help center the image on the interactive whiteboard, place the projector *squarely* on its stand, perpendicular to the screen.
 - if you're using a mirror, point the lens of the projector towards the center of the mirror.
3. Connect the projector to the computer and to a power outlet by following the instructions supplied with your projector.
4. If you're using one or two mirrors to project the correct image size onto the screen, adjust them so that you have a square image on the screen.
5. If the image is reversed when you look at it from the front, switch the projector to rear-projection mode. For information on how to switch to rear-projection mode, see the instructions supplied with your projector.

Installing the VT676 Projector into the Mirror Stand (2876 and 2976 only)

You must install the VT676 projector inside the mirror stand, and then connect it to the computer.

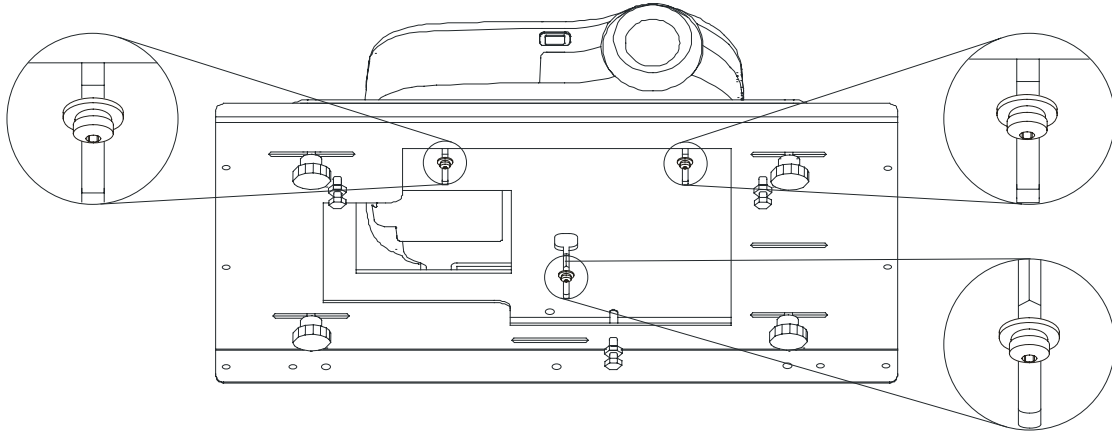
CAUTION



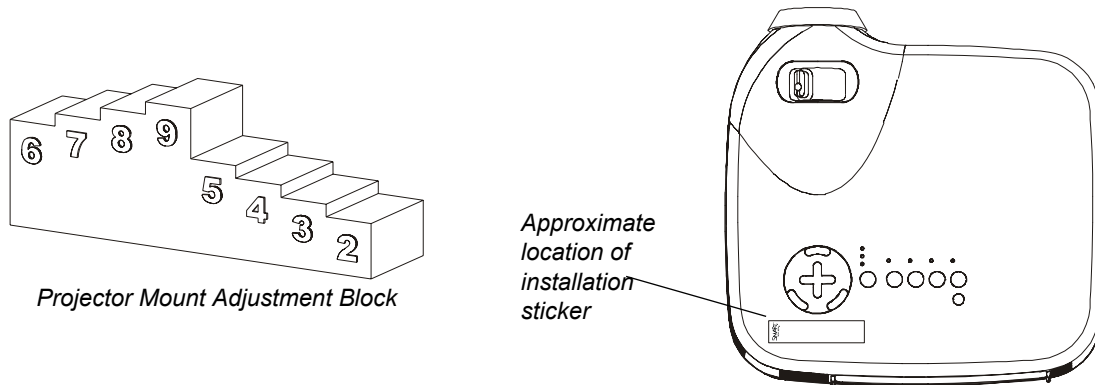
Never touch the rear of the screen or brush against it. If you do smudge this surface, lightly spray alcohol-free glass cleaner onto a soft cloth and dab the affected area to remove the marks. Never apply isopropyl alcohol, water or acetone, as these fluids will damage the diffusion coating and permanently reduce the display quality.

To install the VT676 projector into the mirror stand

1. Lift the projector into the cabinet. Lower it onto the projector plate so that the security screws go through the keyhole slots. Carefully allow the projector to slide backwards until it comes to a halt.
2. Tighten the three security screws using the TORX® key in the accessory kit.

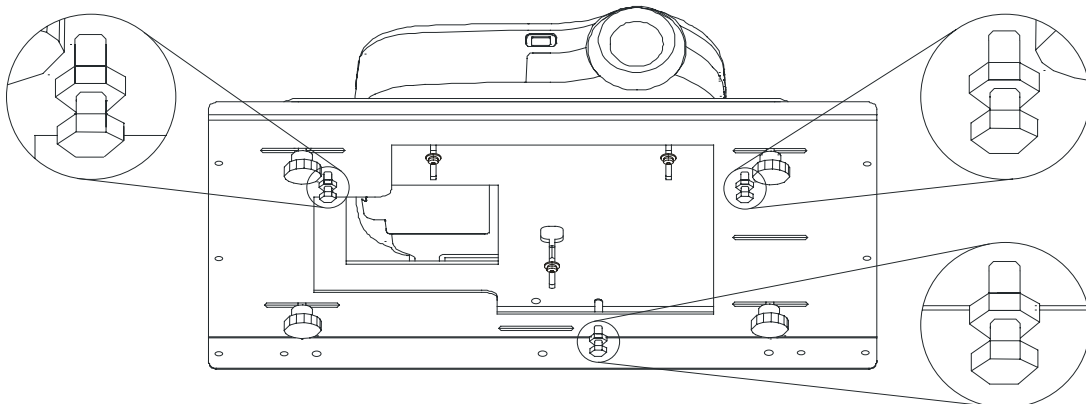


3. Locate the projector mount adjustment block in the kit supplied with the projector. Also, look at the top of the projector to find the optimum installation position sticker.

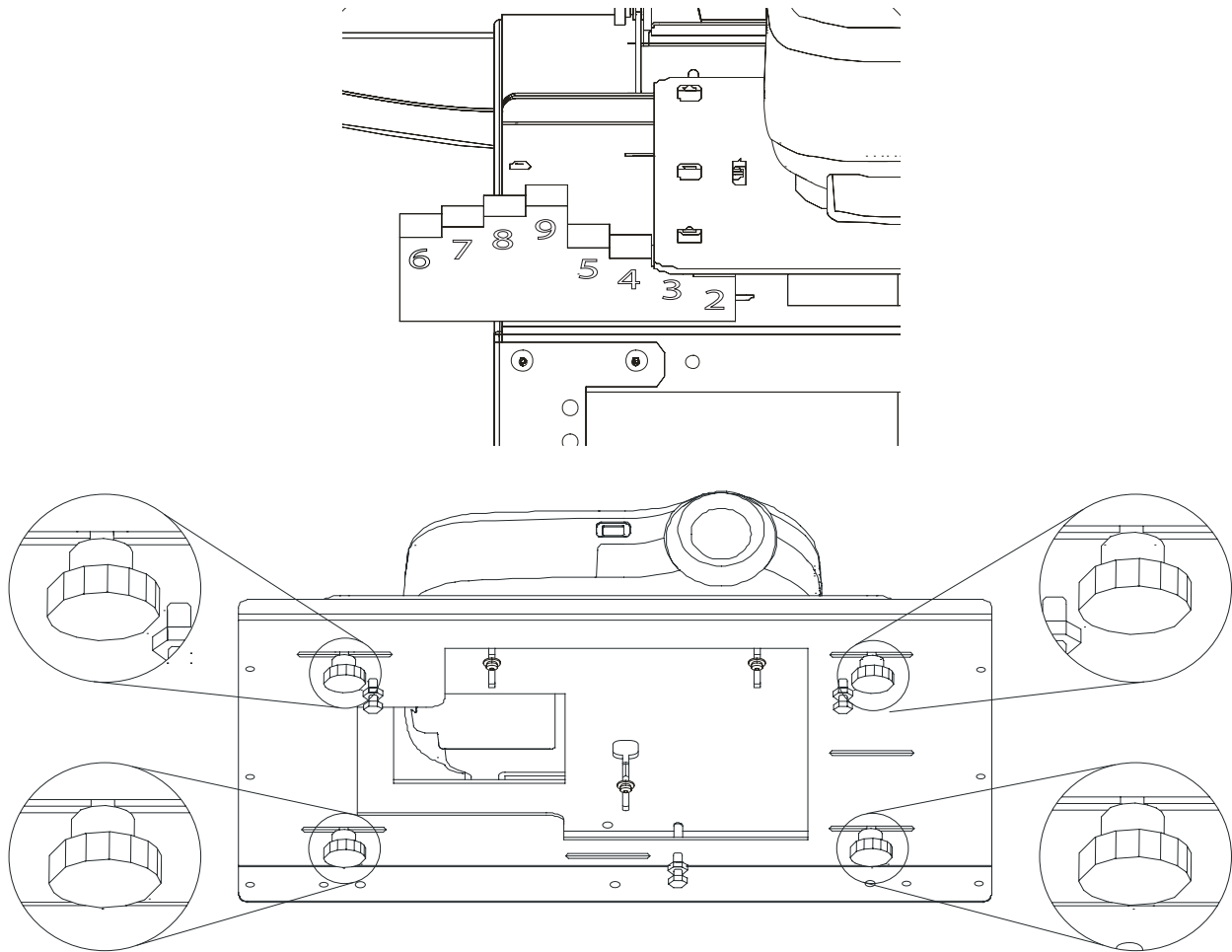


NOTE: The installation sticker displays two settings. Use the 3000i setting.

4. Using the 7/16" nut driver that shipped with the projector, loosen the three locking bolts indicated below.



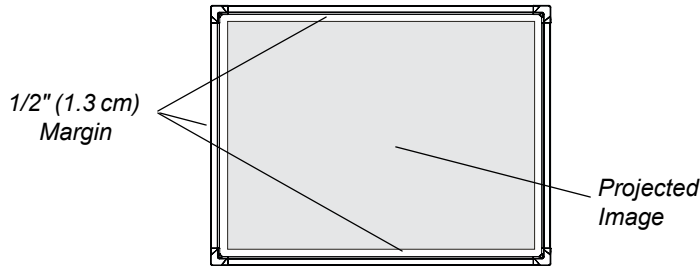
- Slide the projector mount adjustment block under each corner of the projector plate and adjust the projector plate to the optimum installation position as indicated on the sticker. To adjust the projector plate, loosen or tighten the knob in each corner.



- Using the 7/16" nut driver, tighten the three locking bolts that you loosened in step 3.
- Attach the projector's RGB cable to the Computer 1 IN connector on the projector's connection panel.
- Connect the projector's power cable to the power adapter and connect the adapter to the AC IN socket on the projector's connection panel.
- Connect the other end of the RGB cable to the computer.
- Connect the other end of the power cable to a power outlet.

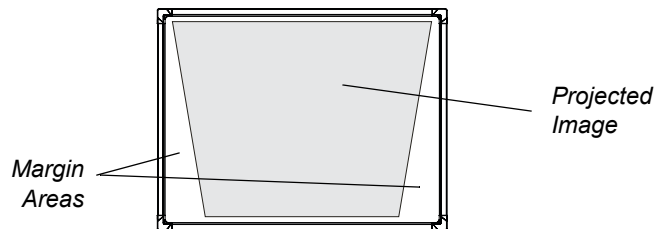
Making Fine Adjustments to the Projected Image

When you've properly positioned the projector or the mirror stand, you can make fine adjustments to obtain a correctly projected image on the interactive whiteboard. An aligned image fits squarely on the interactive screen with a margin of about 1/2" (1.3 cm) on all sides.



This section of the guide provides general guidelines for adjusting the projected image from any projector (see below). However, if you have a 2876 or a 2976, this section also includes detailed instructions on adjusting the projected image from an NEC VT676 projector (page 25).

NOTE: A keystone image occurs when the edges of your image are not parallel. Your projector may have a feature for automatically correcting this issue. However, don't use this feature. If the edges of your projected image are not parallel, correct it using the methods detailed on the following pages.



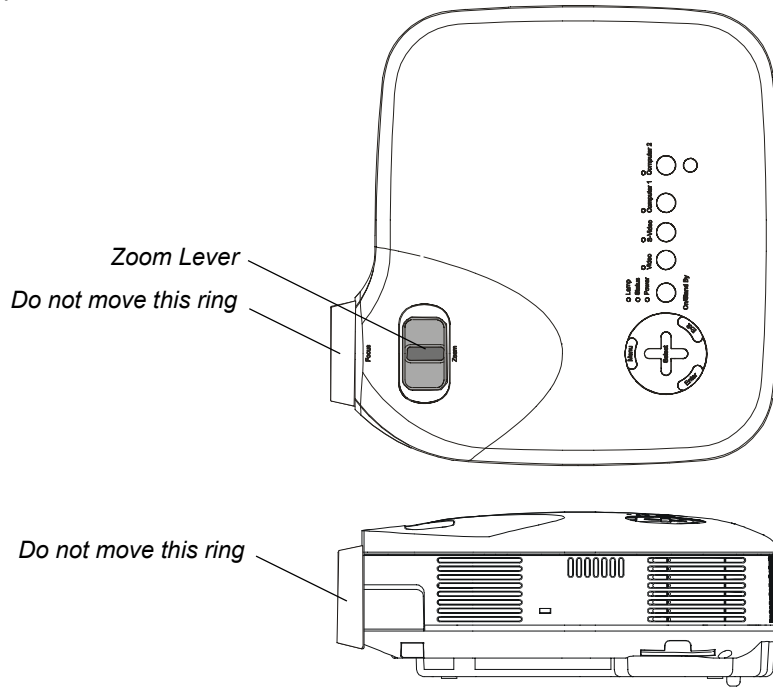
To align and adjust the projected image

1. If the left and right edges of your projected image are not parallel, raise or lower the projector at the front or back until the edges are parallel.
2. If the top and bottom edges are not parallel, turn the projector slowly until the edges are parallel.
3. Adjust the projected image using small, slow movements until you're satisfied with the image.
 - Correct the image size by moving the projector forwards or backwards until the image correctly fills the interactive screen.
 - Correct the image's horizontal and vertical position by adjusting the height and position of the projector platform or stand.
 - Create a clear image by adjusting the projector's focus function.

NOTE: The method for changing the projected image depends on your projector. For more information, see the instructions supplied with your projector.

To align and adjust the projected image on the 2876 or the 2976

1. To focus the image, adjust the Zoom lever on the projector which has been modified for this purpose.



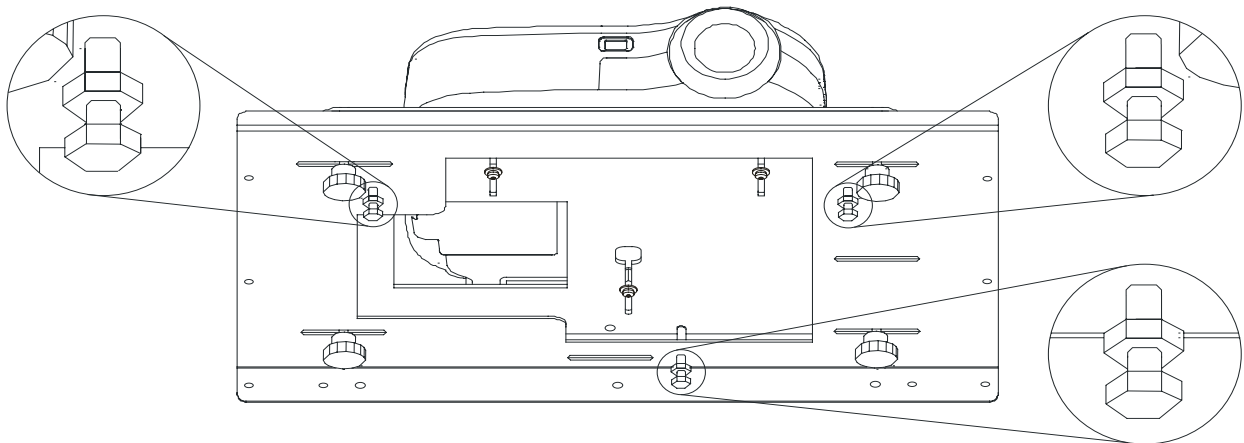
CAUTION



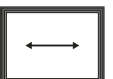
Don't adjust the ring that surrounds the short-throw, customized projector lenses, even though the *NEC VT676/670/575/470/47 User's Manual* states that you should use this ring to obtain the best focus. You must disregard this information.

Rather, use the Zoom lever on the projector. Again, contrary to the *NEC VT676/670/575/470/47 User's Manual*, the Zoom lever will not adjust the image size on the screen.

2. Using the 7/16" nut driver, loosen the three locking bolts identified in the figure below.



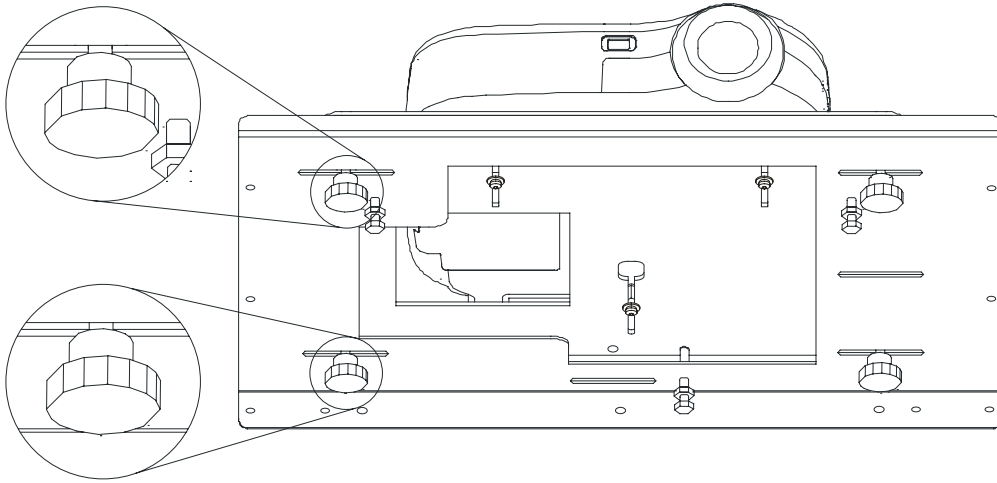
3. To adjust the image laterally, slide the projector to the left or right.



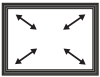


4. To adjust roll:

- i. Tighten or loosen the knobs on the left of the projector plate until you have the required roll adjustment. Adjust these knobs by the same amount or else you will change the vertical adjustment of the image.

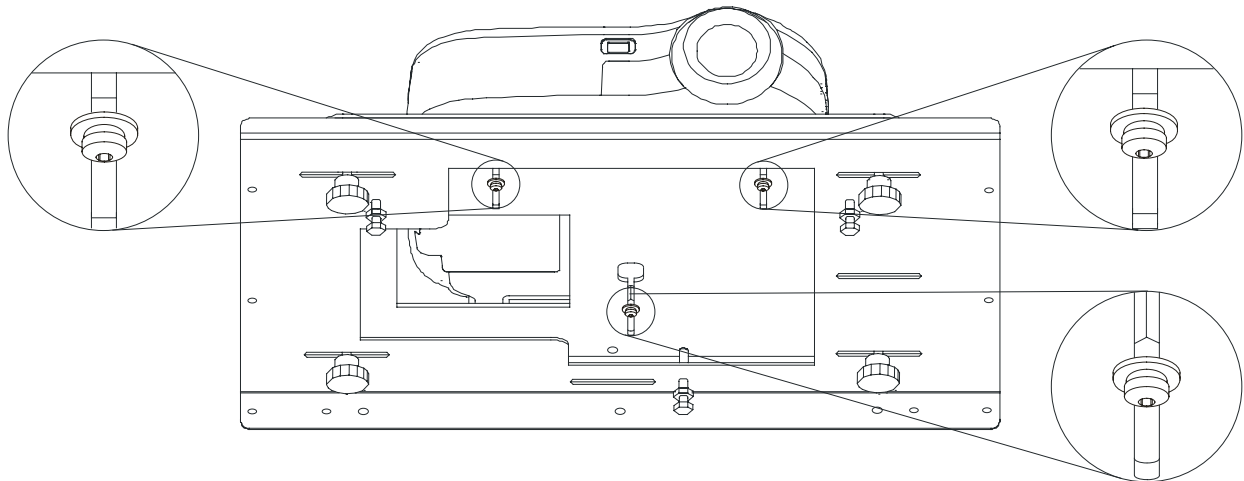


- ii. If you can't tighten the knobs on the left of the projector plate, adjust the roll by loosening the knobs on the right of the projector plate



5. If you need to make large changes to the image size, you should move the mirror stand closer to or farther from the interactive whiteboard. However, to make small changes to the image size:

- i. Loosen the three security screws in the projector plate using the TORX key in the accessory kit.

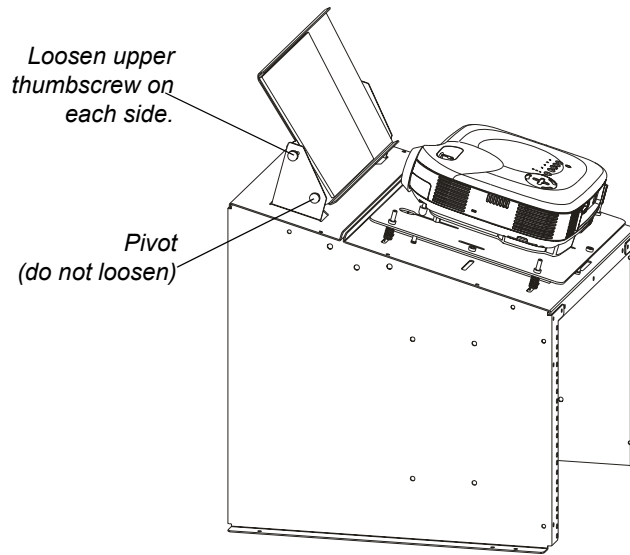


- ii. Slide the projector backward or forward.
- iii. When your image is the correct size, tighten the security screws.

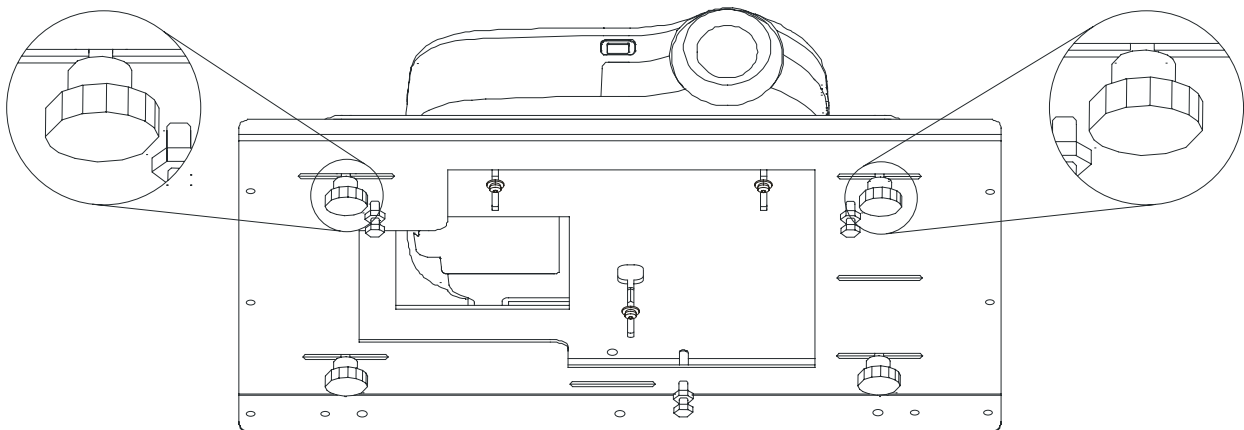
6. To move the image up or down:



- i. Loosen the upper thumbscrews on both sides of the small mirror.



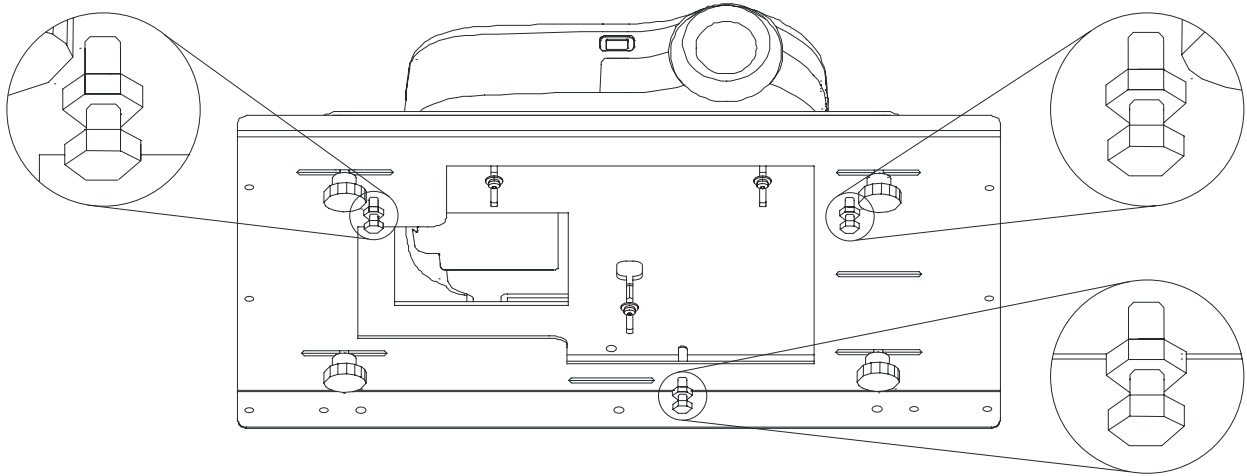
- ii. Gently push the mirror away from you to lower the image, or pull it towards you to raise the image.
- iii. When the mirror is in position, there should be minimal keystone error. If there is a significant keystone error, re-adjust the small mirror, even if this places the image too high or too low on the screen. Tighten the thumbscrews.
- iv. If the image is still too high or too low, tighten or loosen the knobs at the front of the projector plate until you have the required vertical adjustment. Adjust these knobs by the same amount or else you will change the roll adjustment of the image.



If you can't tighten the front knobs any further, you can change the vertical adjustment by loosening the knobs at the rear of the projector plate

- v. If the image is still too high or too low, adjust the mirror stand's feet to raise or lower the image to the correct position (page 18).

7. Using the 7/16" nut driver, tighten the three locking bolts that you loosened in step 2.



Using the Interactive Whiteboard

When your interactive whiteboard is installed, you need to:

- configure SMART Board software
- start SMART Board software
- calibrate the cameras
- orient the interactive screen

This section also includes instructions on setting up your interactive whiteboard and basic information on using SMART Board software. However, you should refer to the *SMART Board software online Help* for detailed information on using all the software features.

Configuring SMART Board Software

After you install SMART Board software and connect the interactive whiteboard, your screen becomes fully interactive. However, sometimes SMART Board software can't locate the port that your interactive whiteboard is connected to. If your screen isn't touch sensitive, configure the port in SMART Board software. If your interactive whiteboard is connected with a USB adapter, you'll have to disconnect the USB connector from your computer, and then reconnect it. For more information, see the *SMART Board software online Help*.

Starting SMART Board Software

Start SMART Board software to access a wide range of software tools, such as Notebook software, SMART Video Player, the SMART Keyboard and the Floating Tools.

When you start SMART Board software, the **SMART Board** icon appears in your system tray (Windows computers) or in the Dock (Macintosh computers). Press this icon to view a menu of all available software tools. For more information on using the tools in SMART Board software, see the *SMART Board software online Help*.



- For Windows operating systems, select **Start > Programs > SMART Board Software > SMART Board Tools**.
- For Macintosh computers, open the SMART Board Software folder and select **SMART Board Tools**.

Calibrating the Cameras

Each digital camera in the interactive screen is calibrated to recognize the position of a pen tray tool or your finger on the screen's surface and to send this information to SMART Board software. The software then interprets the information as mouse clicks or digital ink in the appropriate location.

If the cameras become misaligned for any reason, you may notice gaps in your writing or an area of the screen may become unresponsive to your touch. Fortunately, this problem is easily fixed by performing a simple calibration procedure. For more information, see the *SMART Board software online Help*.

Orienting SMART Board Software

Although SMART Board software assigns a default orientation, you may want to perform an orientation to ensure the greatest possible level of accuracy as the computer accurately tracks your contact with the screen. For more information, see the *SMART Board software online Help*.

NOTE: You can start the orientation by pressing and holding both pen tray buttons simultaneously.

Starting the System Components

Your system consists of the interactive whiteboard, the projector and the computer. Your interactive whiteboard is always ready to use but you may have to start the other components.

To start up the projector

If you purchased a projector separately from your interactive whiteboard, start up the projector following the manufacturer's instructions supplied with your projector.

If you received an NEC VT676 projector with your interactive whiteboard, start up the projector as follows:

1. If you have not done so already, connect the projector's power cable to a power outlet and turn on the projector's Main Power switch.
2. Press and hold the **POWER ON** button on the projector's remote control for a minimum of two seconds.

To start up the computer

1. Turn on your computer.
2. When the computer desktop appears on the interactive whiteboard, touch the screen.
 - If the pointer appears and it tracks the movement of your finger, your interactive whiteboard is ready to use.
 - If the pointer appears but it doesn't track the movement of your finger, you must configure the COM port. For more information, see the *SMART Board software online Help*.

Shutting Down the System Components

Depending on your system preferences, you may choose to shut down your computer when the interactive whiteboard isn't in use. Similarly, you may choose to put the projector into standby mode or shut it down when it's not in use.

CAUTION



If your interactive whiteboard includes an NEC VT676 projector, please note that this projector has been designed for use under normal operating conditions only. Normal operating conditions are defined as product use that does not exceed eight hours per day and 260 days per year. Exceeding these operating conditions could cause projector damage. Damage caused by such extended use is not covered by the product warranty.

To shut down the computer

1. Close any open computer programs.
2. Shut down the computer.

To put the projector into standby mode

If you purchased a projector separately from your interactive whiteboard, put the projector into standby mode by following the manufacturer's instructions supplied with your projector.

If you received an NEC VT676 projector with your interactive whiteboard, put the projector into standby by following the instructions below.

1. Press the **POWER OFF** button on the projector's remote control.
The *Power Off* message appears.
2. Press the **POWER OFF** button on the projector's remote control to confirm.

To shut down the projector

Shut down the projector following the manufacturer's instructions supplied with your projector.

CAUTION

Don't unplug the projector's power cable or turn off the projector's Main Power switch until the fans have stopped and the Power indicator glows orange. Wait several minutes for the projector's fans to cool the lamp.

Maintaining the Interactive Whiteboard

This section includes instructions on cleaning the In-Wall *Rear Projection* SMART Board interactive whiteboard. This section also explains how you can clean an NEC VT676 projector and replace its projector lamp and filter.


Cleaning the Interactive Whiteboard

After writing on the screen, you may notice marks that appear to be scratches. These marks are plastic residue that's left when someone presses a pen very hard on the screen. Remove these marks with your thumbnail, and then clean the area with whiteboard cleaner.

Avoid using abrasive erasers that may scratch the surface.

Periodically dust your In-Wall *Rear Projection* SMART Board interactive whiteboard. If your unit has a mirror stand, dust the stand and the mirrors using a soft cloth. If you need to, use a standard, alcohol-free glass cleaner.

Avoid using cleaning materials that may scratch the surface.

CAUTION	Don't touch the rear of the screen. If you do smudge this surface, spray alcohol-free glass cleaner lightly on a soft cloth, and then gently dab the rear surface until the marks are removed. Don't spray the glass cleaner directly onto the rear of the screen.
	Don't, under any circumstances, apply isopropyl alcohol, water or acetone to the rear surface of the interactive whiteboard. These fluids could damage the diffusion coating, resulting in a permanent deterioration in display quality.

The cameras are well protected from dust and dirt, so you should only clean the lenses occasionally. When you do so, don't spray glass cleaner directly onto the lens. Instead, spray the cleaner onto a cotton-tipped swab and rub it gently on the lens. If you allow excess glass cleaner to flow into the crack between the frame and the screen, the fluid could damage the cameras.

If there is permanent marker ink on your screen, you can remove it by completely covering it with the ink from a dry-erase marker (but *not* a low-odor marker), and then wiping the screen with a soft cloth. If any trace of the original permanent ink remains, spray the area with standard, alcohol-free glass or whiteboard cleaner, and wipe clean.

You can also use whiteboard cleaner, such as Expo[®] Board Doctor. To remove permanent ink with this product, cover the ink with the solvent, let it dry, and then erase the ink.

Cleaning the Projector

Clean the projector and its lens periodically.

If you purchased a projector separately from your interactive whiteboard, clean the projector and its lens following the manufacturer's instructions supplied with your projector.

If you have a 2876 or a 2976, clean your NEC VT676 projector and lens following the instructions below.

To clean an NEC VT676 projector

1. Shut down the computer and the projector (see page 31).
2. Wipe the projector's casing with a damp cloth. If this is insufficient, use a mild detergent, but don't use a strong detergent or a solvent, such as alcohol or thinner.
3. Carefully wipe the lens with lens paper.

CAUTION



Be careful not to scratch or mark the lens.

Cleaning a Filter

After every 100 hours of operation, a "Please Clean Filter" message appears on the bottom of the screen.

To clean the filter

1. Clean the filter with a vacuum, as described on page 48 of the *NEC VT676 User's Manual*.
NOTE: If the projector room is dusty, clean the filter more often, but be careful not to touch the rear surface of the screen.
2. To clear the "Please Clean Filter" message, reset the filter usage meter as follows.
 - i. Press the **Menu** button on the projector remote control.
 - ii. Press the down arrow to highlight the **Default** option.
 - iii. Press the **Enter** button.
 - iv. Press the down arrow to highlight the **Clear Filter Usage** option.
 - v. Press the **Enter** button.
A message appears asking for confirmation.
 - vi. Select **Yes** and press the **Enter** button.
 - vii. Press the **Exit** button twice to close the menu.

Replacing the Projector Lamp and Filter in an NEC VT676 Projector

When the lamp nears the end of its natural life, a message appears prompting you to replace it. If the lamp reaches the end of its natural life, the projector automatically goes into Standby mode and stays in Standby mode until you replace the lamp.

CAUTIONS



Only replace the projector lamp with the NEC VT75LPE lamp. These lamps are available from NEC or SMART. Don't use any other lamps.

Never touch the rear of the interactive screen. If you do smudge this surface, lightly spray alcohol-free glass cleaner onto a soft cloth and dab the affected area to remove the marks. Never apply isopropyl alcohol, water or acetone, as these fluids will damage the diffusion coating and permanently reduce the display quality.

You can view the remaining lamp time as a percentage of its expected life and the length of time the lamp has been in use.

To view the lamp hour meter

1. Press the **Menu** button on the projector remote control.
2. Press the down arrow to highlight the **Information** option.

The *Information* sub-menu displays the remaining lamp time as a percentage of its expected life and the length of time the lamp has been in use.

3. Press the **Exit** button to close the menu.

To replace the projector lamp and filter

1. Shut down the computer and the projector (see page 31).

CAUTION



After you shut down the projector, wait at least one minute before you unplug it.

2. Disconnect all of the cables from the projector.
3. Using a pencil, mark the projector plate with the current position of the three screws that attach the projector to the plate.
4. Loosen *but do not remove* these three security screws using the TORX key in the accessory kit. Carefully allow the projector to slide backwards until it stops.

NOTE: Do not change the position of the four height adjustment knobs.

5. Reach into the cabinet, slide the projector forward, lift it off the plate and remove it from the cabinet
6. Set the projector on a flat surface.

WARNING



Do not touch or replace the projector lamp (which will be very hot) for at least an hour after turning off the projector.

7. Replace the lamp according to the instructions on page 50 of the *NEC VT676 User's Manual*.

8. Replace the projector filter according to the instructions on page 48 of the *NEC VT676 User's Manual*. You'll receive this filter with your replacement lamp.
9. Lower the projector onto the projector plate so that the screws go through the keyhole slots. Carefully allow the projector to slide backwards until it comes to a halt.
10. Slide the projector forward until the three screws are in the three marked positions you made in step 3. Tighten the three screws using the TORX key.
11. Connect all of the projector's cables.
12. Start up the projector and the computer (see page 30).

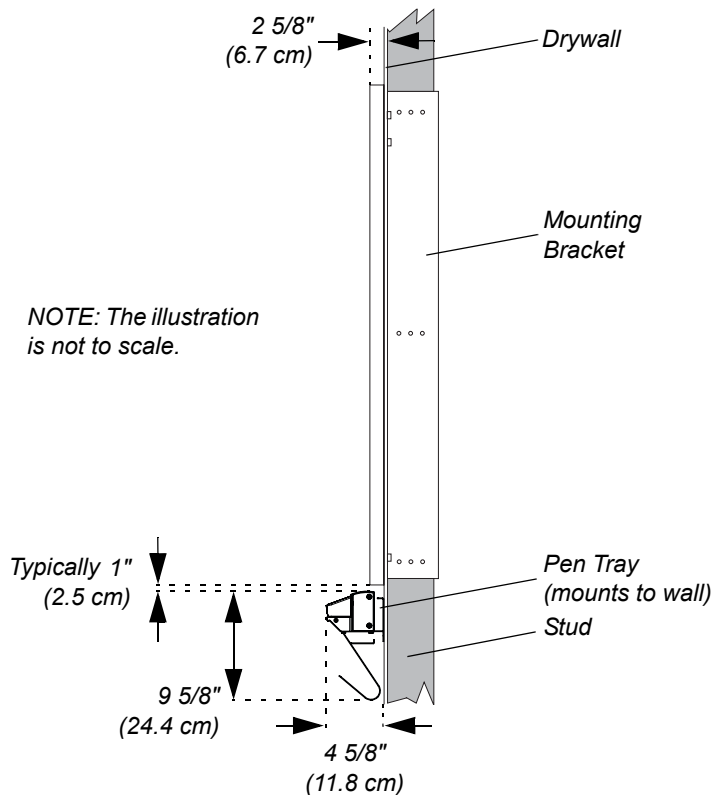
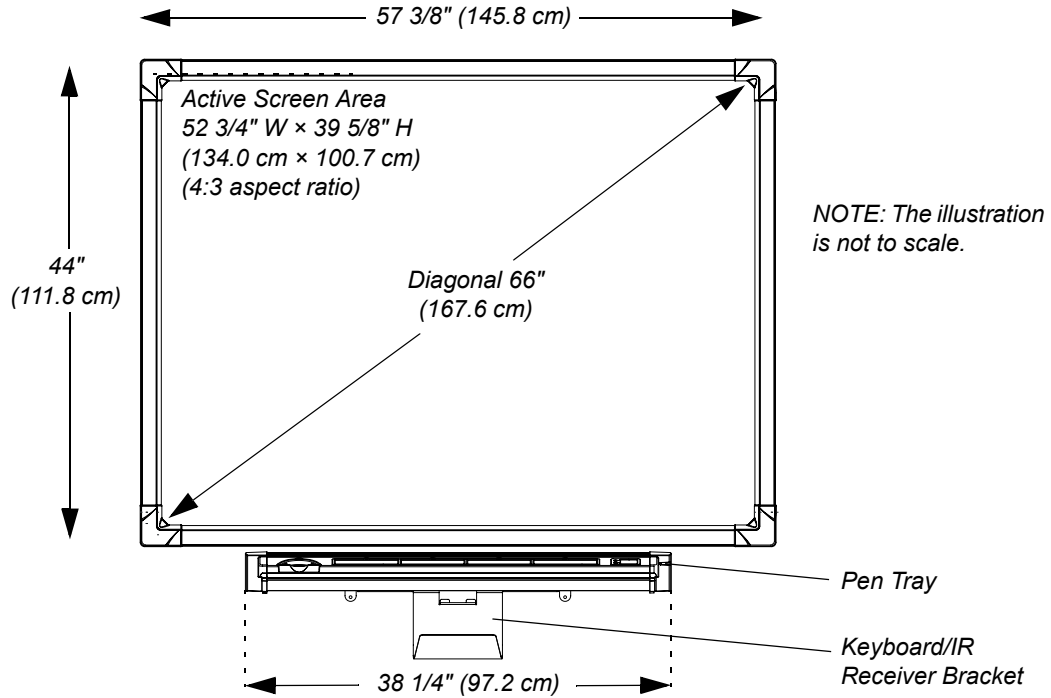
To clear the lamp hour meter

1. Press the **Menu** button on the projector remote control.
2. Press the down arrow to highlight the **Default** option.
3. Press the **Enter** button.
4. Press the down arrow to highlight the **Clear Lamp Hour Meter** option.
5. Press the **Enter** button.
A message appears asking for confirmation.
6. Select **Yes** and press the **Enter** button.
7. Press the **Exit** button twice to close the menu.

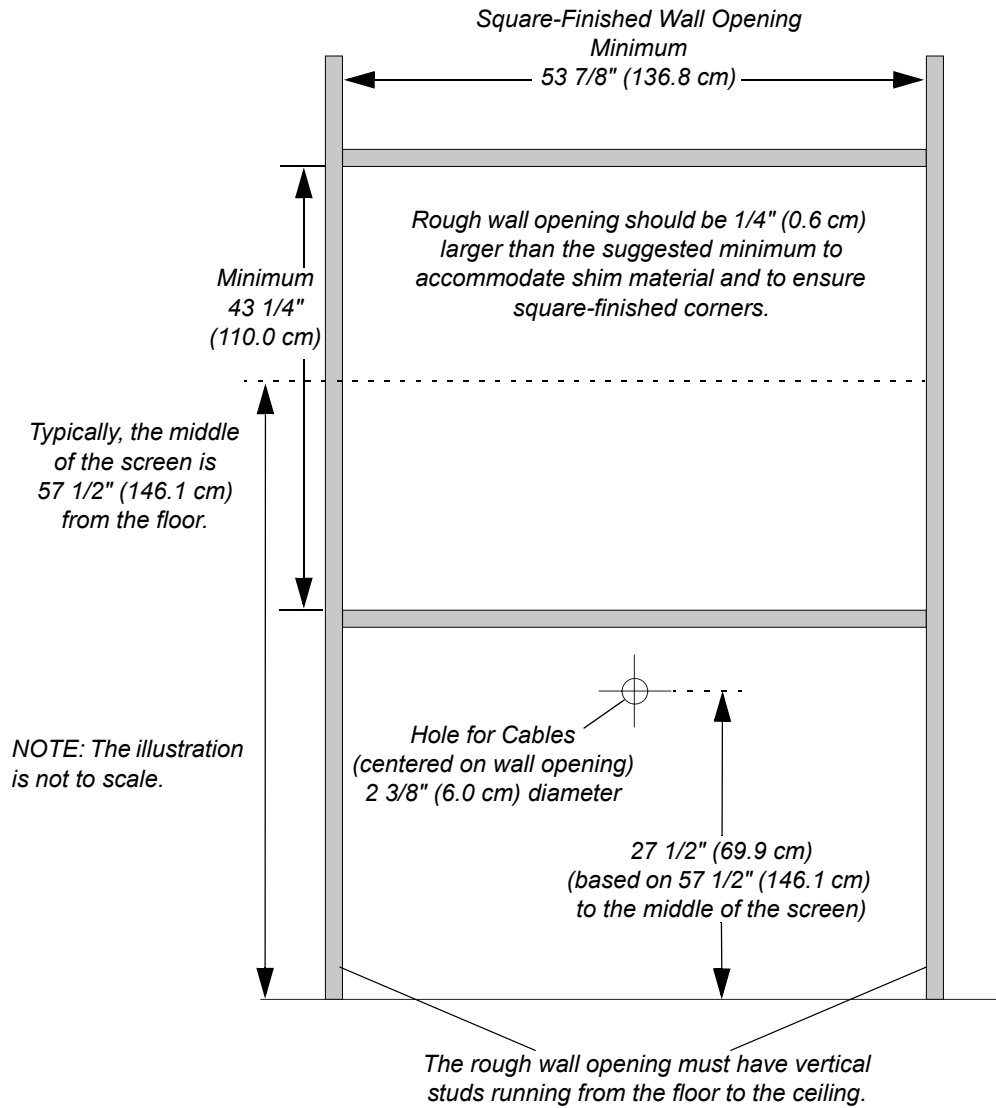
Appendix A: Specification Drawings

NOTE: All dimensions within this chapter are $\pm 1/8"$ (0.3 cm).

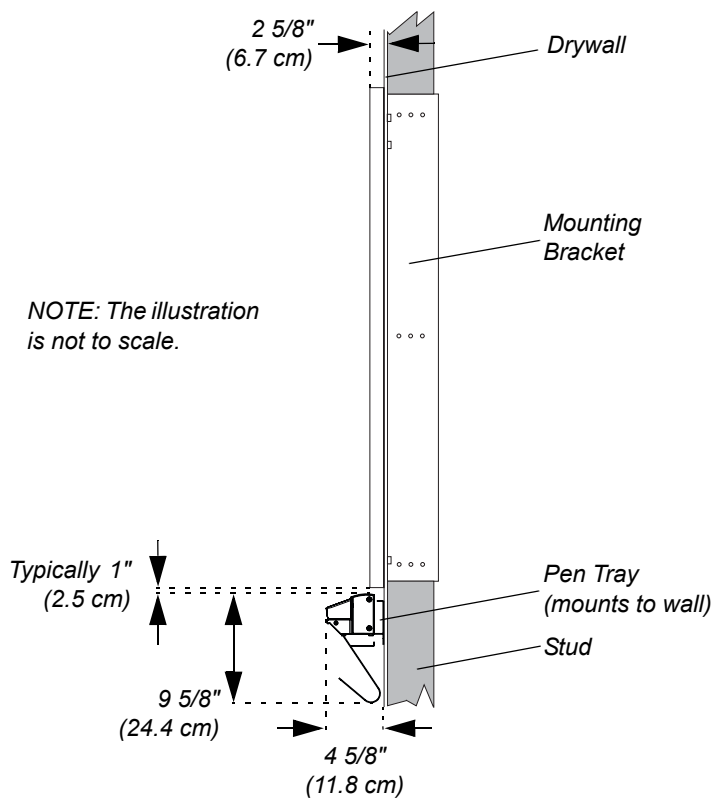
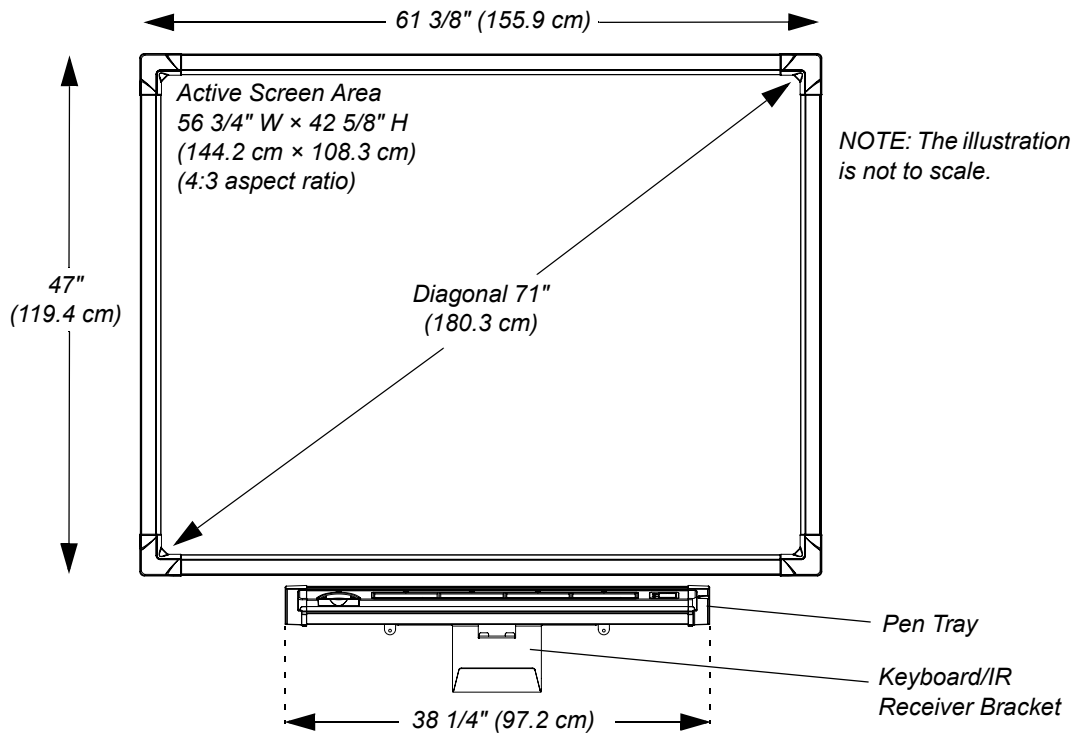
1710 Front and Side Views



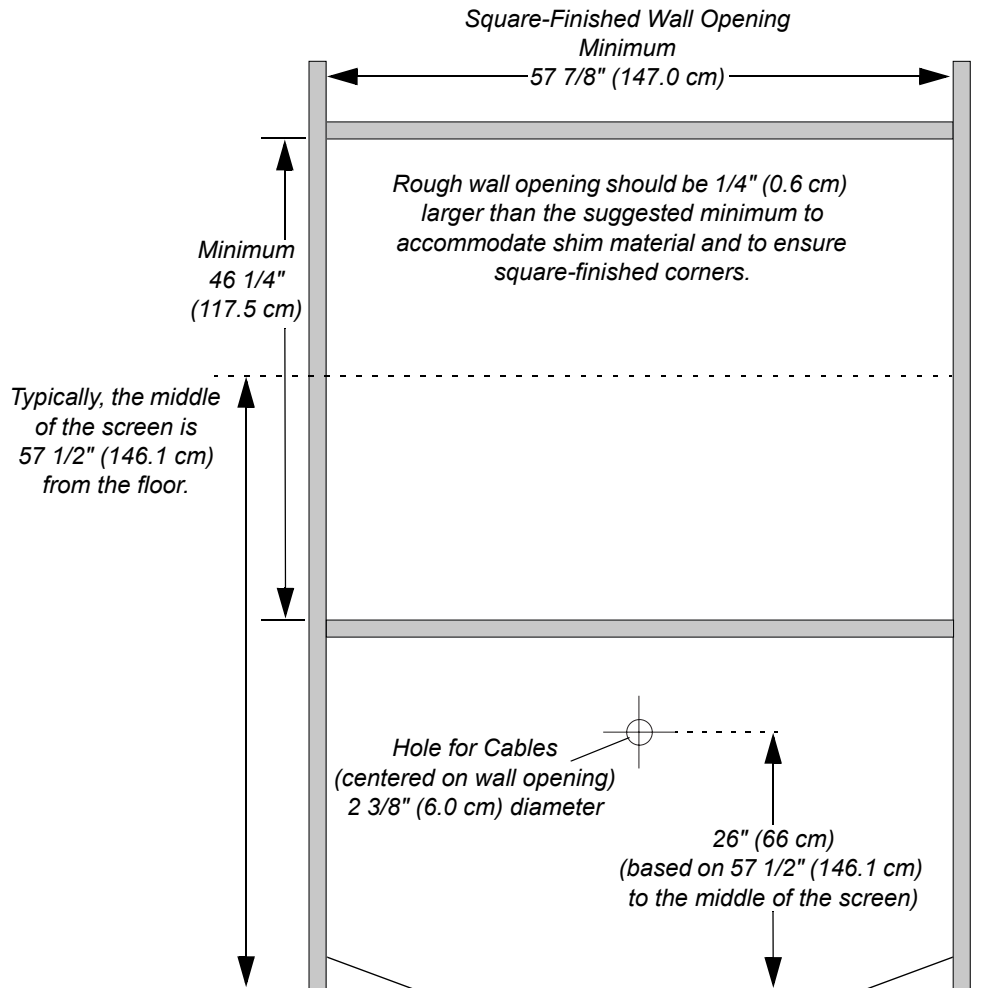
1710 Wall Opening



1810 Front and Side Views



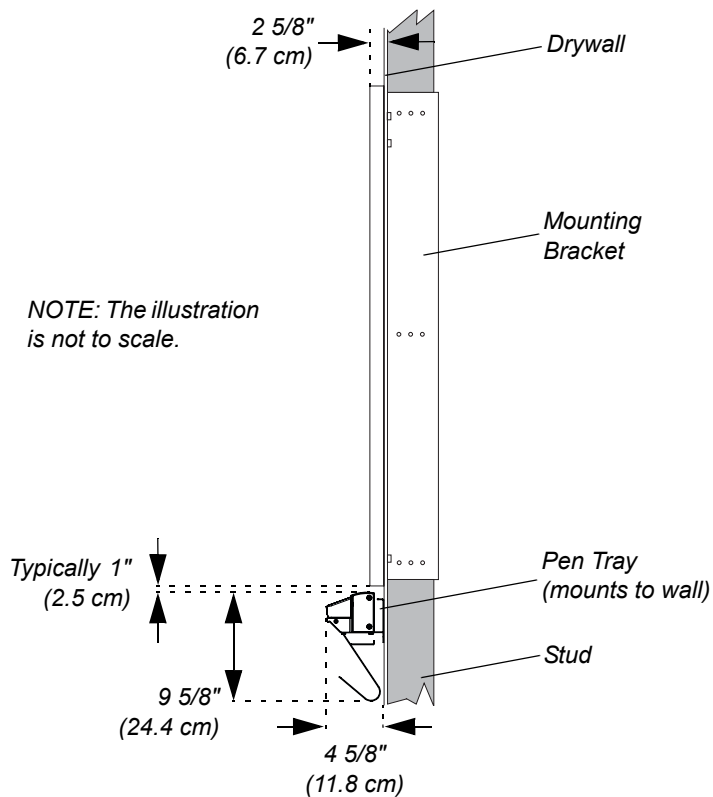
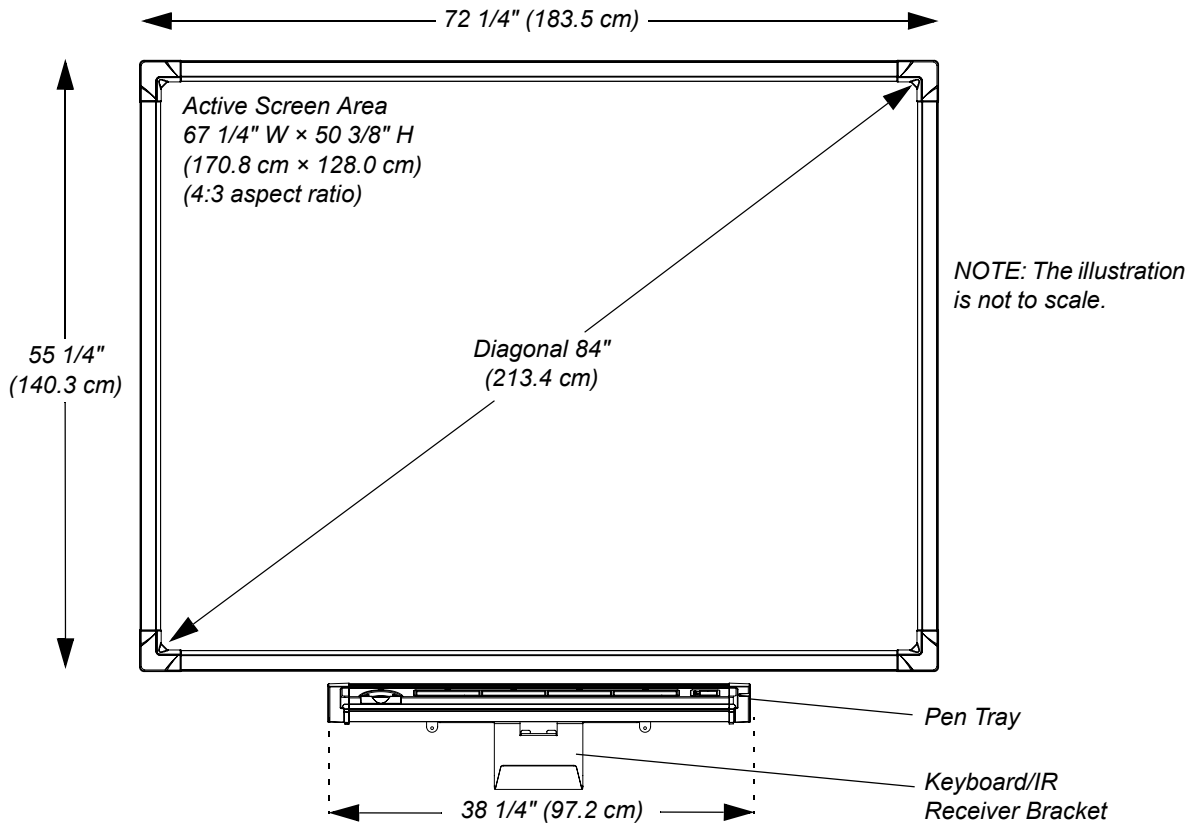
1810 Wall Opening



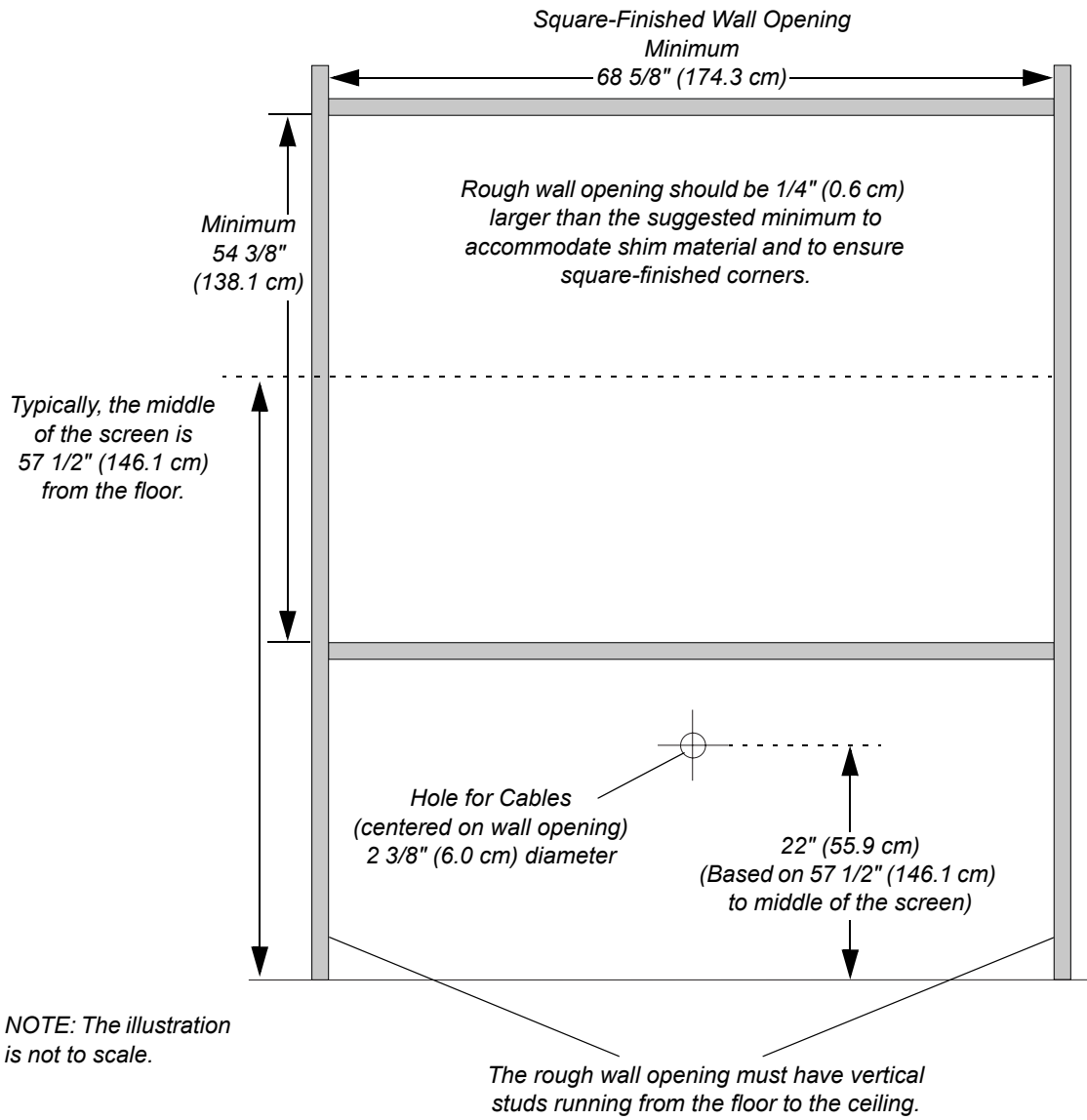
NOTE: The illustration is not to scale.

The rough wall opening must have vertical studs running from the floor to the ceiling.

1910 Front and Side Views



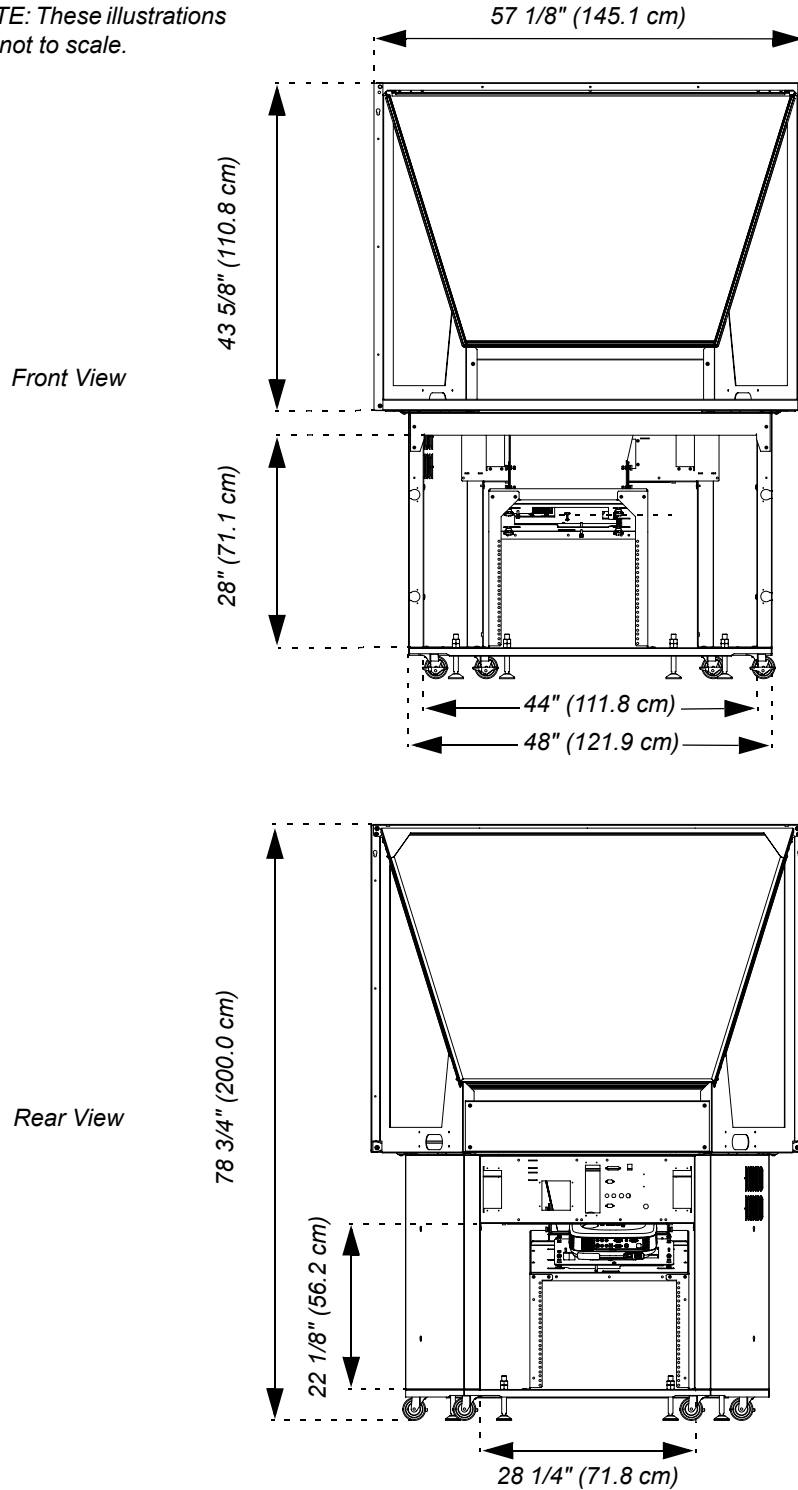
1910 Wall Opening



2876 Views

The figure below does not show the 1/2" (1.3 cm) gap between the casters and the floor. The levelling legs have a $\pm 1/2"$ (1.3 cm) range of adjustment. If you adjust these legs, make a corresponding adjustment to the height of the wall opening for the screen.

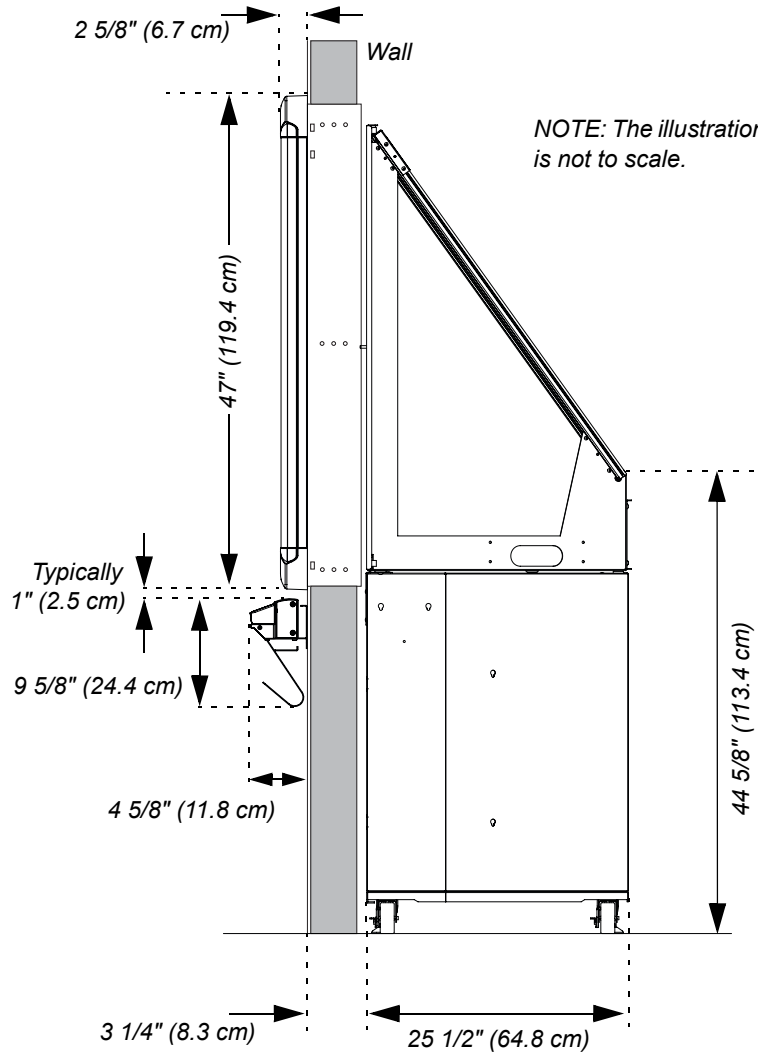
NOTE: These illustrations are not to scale.



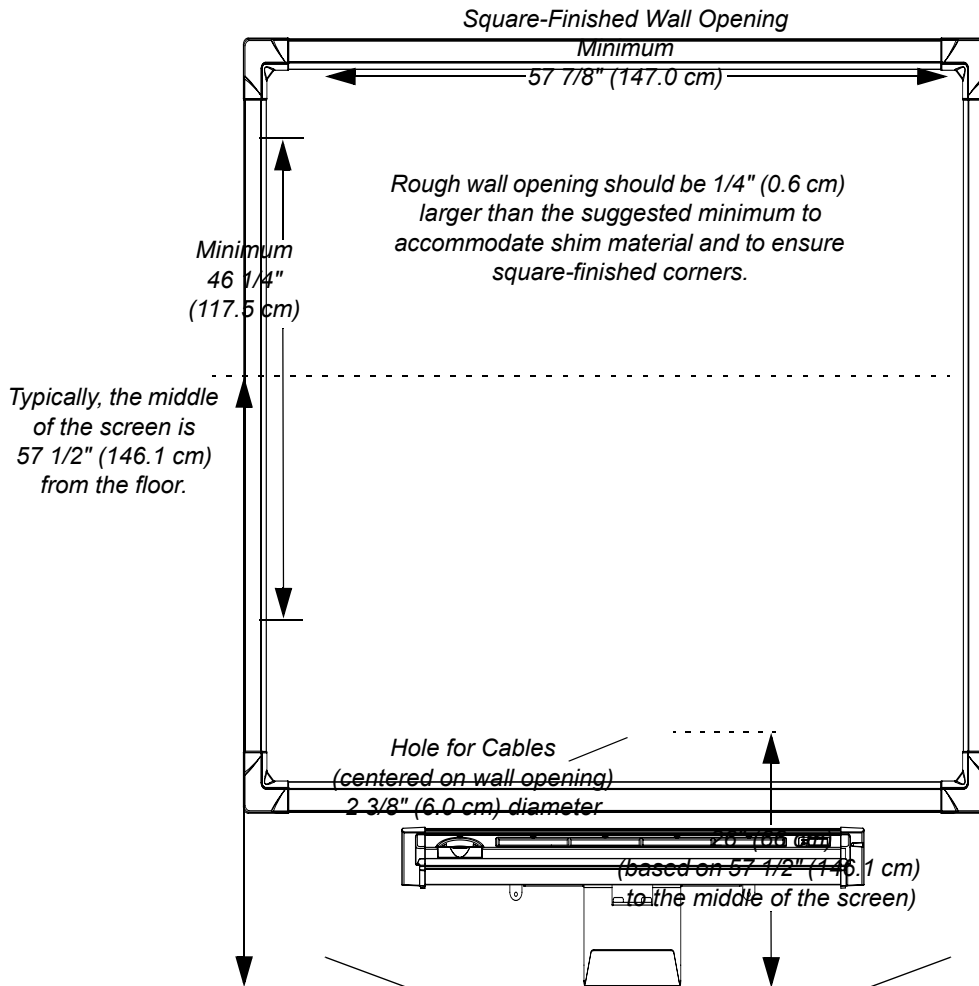
2876 Distance from the Exterior Wall

The maximum distance between the lower cabinet of the mirror stand and the wall surface upon which you mount the interactive whiteboard is 3 1/4" (8.3 cm).

If you construct a room to house the mirror stand, make it approximately 4' (1.2 m) deep to provide room for projector maintenance access.



2876 Wall Opening



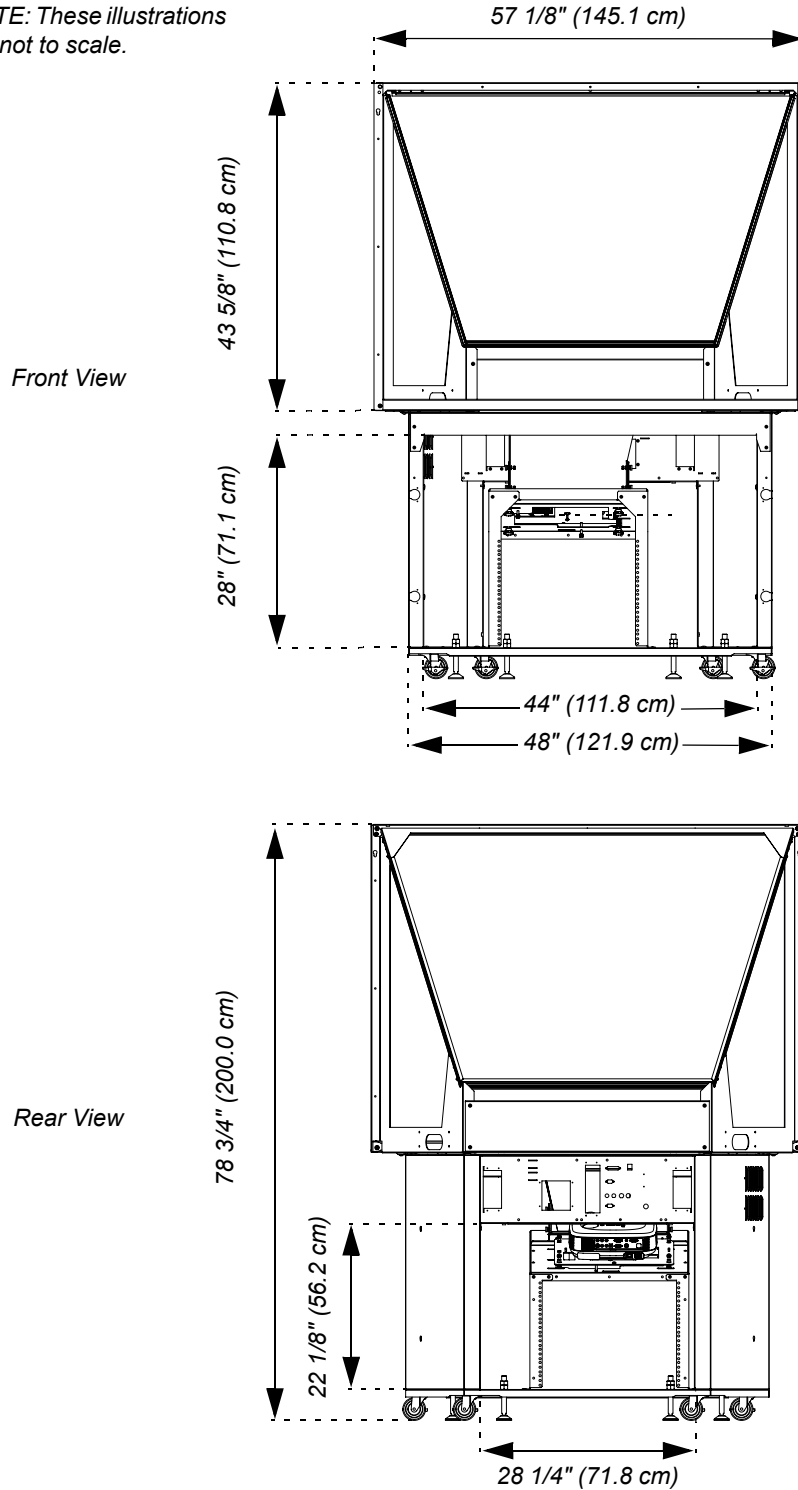
NOTE: The illustration is not to scale.

The rough wall opening must have vertical studs running from the floor to the ceiling.

2976 Views

The figure below does not show the 1/2" (1.3 cm) gap between the casters and the floor. The levelling legs have a $\pm 1/2"$ (1.3 cm) range of adjustment. If you adjust these legs, make a corresponding adjustment to the height of the wall opening for the screen.

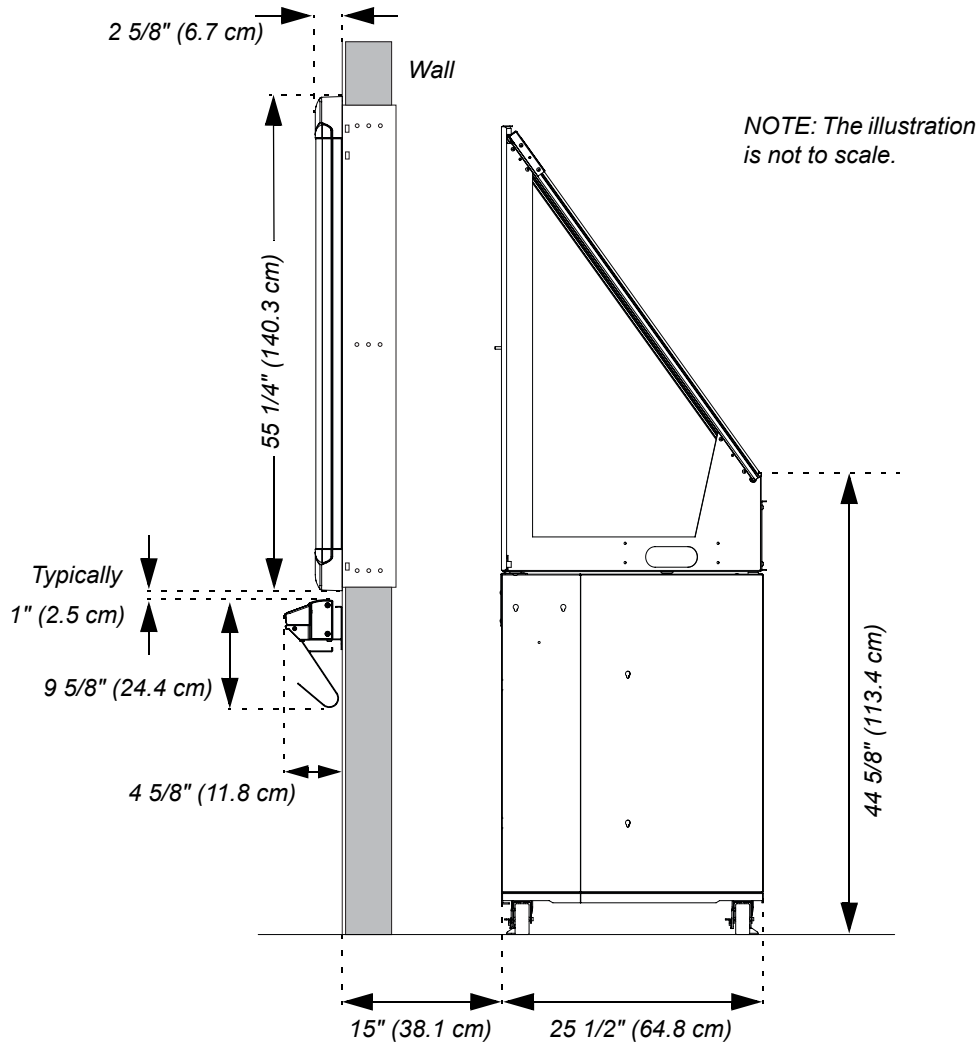
NOTE: These illustrations are not to scale.



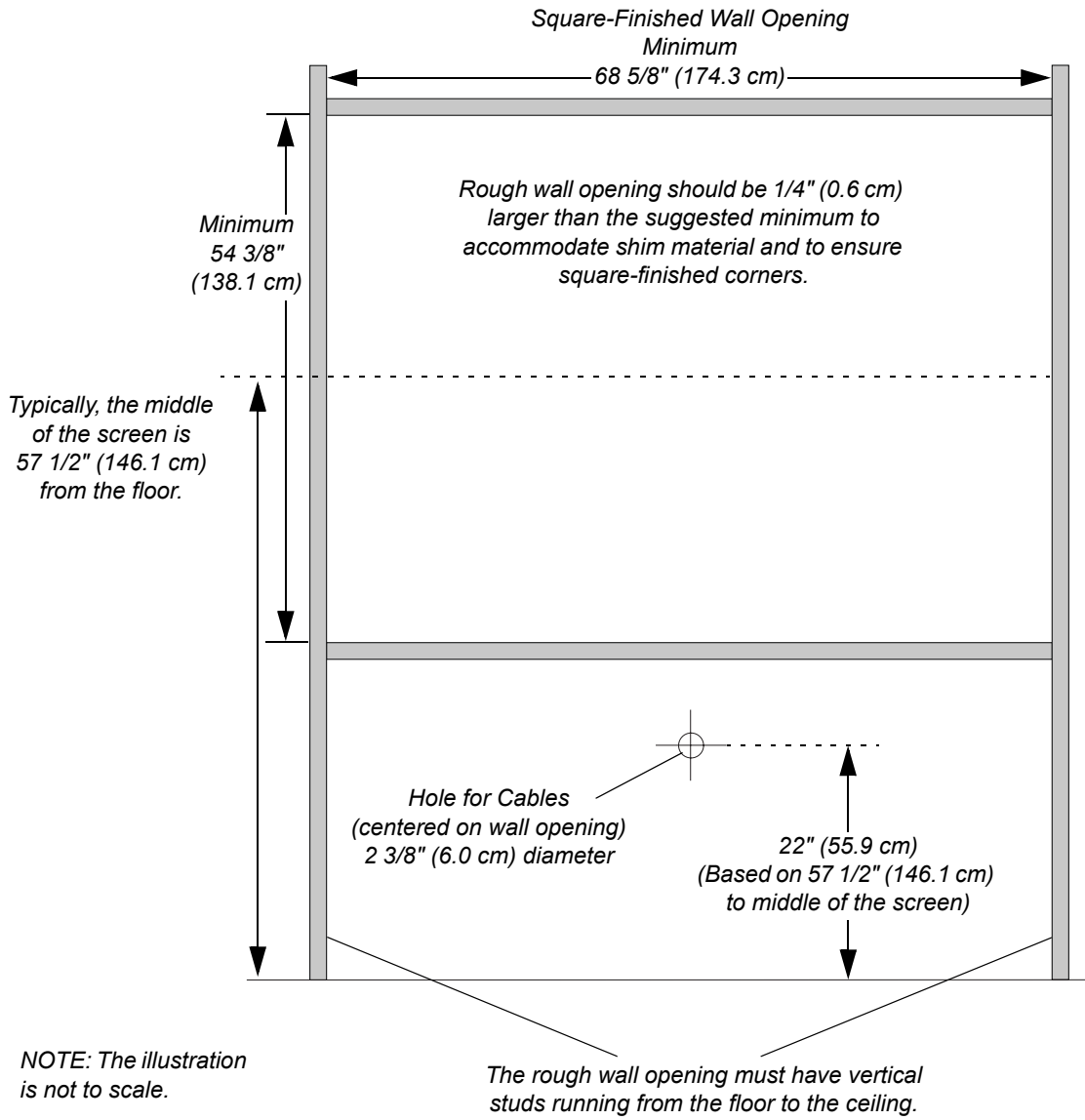
2976 Distance from the Exterior Wall

You must allow at least 15" (38.1 cm) between the lower cabinet of the mirror stand and the wall surface upon which the interactive whiteboard is mounted.

If you construct a room to house the mirror stand, make it approximately 5' (1.5 m) deep to provide room for projector maintenance access.



2976 Wall Opening



Customer Support

Online Support

Visit www.smarttech.com/support to view and download user's guides, "how-to" and troubleshooting articles, software and more.

Training

Visit www.smarttech.com/trainingcenter for training materials and information about our training services.

Contacting SMART Technical Support

SMART Technical Support welcomes your call. However, if you experience difficulty with your SMART product, you may want to contact your local reseller first. Your local reseller may be able to resolve the issue without delay.

All SMART products include online, telephone, fax and e-mail support:

Telephone: +1.403.228.5940 or
Toll Free 1.866.518.6791 (Canada/U.S.)
(Monday to Friday, 5 a.m. – 6 p.m. Mountain Time)

Fax: +1.403.806.1256

E-mail: support@smarttech.com

Website: www.smarttech.com/support

When you phone Technical Support, it will be helpful if you have access to your interactive whiteboard during the call. The support representative may ask you for the following information:

- the serial number of the unit
- the version of the software that's causing the problem and the version of your computer's operating system (if applicable)

General Inquiries

Address: **SMART Technologies**
1207 – 11 Ave SW, Suite 300
Calgary, AB T3C 0M5
CANADA

Switchboard: +1.403.245.0333 or
Toll Free 1.888.42.SMART (Canada/U.S.)

Fax: +1.403.228.2500

E-mail: info@smarttech.com

Warranty

Product warranty is governed by the terms and conditions of SMART's "Limited Equipment Warranty" that shipped with the SMART product at the time of purchase.

Registration

A User Registration card was included with your interactive whiteboard. to help us serve you, fill in and mail this card to SMART Technologies, or register online at www.smarttech.com/registration.

Sending Feedback

You can help us improve our technical documentation by e-mailing your comments to TechnicalDocumentation@smarttech.com.

Obtaining More Information on SMART Products

Visit www.smarttech.com/support to:

- download PDF versions of our user guides, installation instructions, and more
- read technical bulletins, FAQs, and tips
- troubleshoot a problem

Waste Electrical and Electronic Equipment Regulations

Waste Electrical and Electronic Equipment (WEEE) regulations apply to all electrical and electronic equipment sold within the European Union.

When you dispose of any electrical or electronic equipment, including SMART products, we strongly encourage you to contact your local WEEE recycling agency for recycling and disposal advice.

Your SMART product required the extraction and use of natural resources for its production. It may contain hazardous substances. By disposing of electrical and electronic equipment appropriately, you lower the impact of these substances upon health and the environment and reduce the pressure on natural resources. Recycling agencies can reuse or recycle most of the materials from your product.

Please think about how you intend to dispose of any product that has a WEEE symbol or accompanying WEEE guidelines.



If you need more information on the collection, reuse and recycling of electrical and electronic equipment, please contact your local WEEE recycling agency.

Alternatively, contact your local reseller or SMART Technologies for information on the environmental performance of our products.

Index

Numerics

2876/2976
Adjusting the Image 25
Cleaning the Projector 34
Mirror Stand Installation 21
Replacing the Projector Lamp and Filter 35

A

Adjusting the Mirror Stand Legs 18
Aligning the Projected Image 24

C

Calibrating the Cameras 29
Cleaning
Interactive Whiteboard 33
Cleaning the Projector 34
Connecting the Projector 21
Contacting SMART Technologies 51

D

Distance from the Exterior Wall
2876 44
2976 47
Dual Installation 7
DVIT Technology 1

I

Image
Adjusting for 2876/2976 25
Alignment 24
Inserting in Wall Opening 10, 12
Installation
Dual Units 7
Mirror Stand 16, 21
Mounting Brackets 10
Pen Tray 14
Projector 21
SMART Board Software 3
Wall Opening 10, 12

M

Mirror Stand
2876/2976 16
Adjusting the Legs 18
Installing the Mirror Stand 16
Installing the VT676 into the Mirror Stand 21

P

Pen Tray 14
Projector
Cleaning 34
Installation 21
Replacing the Lamp and the Filter 35

R

Rear-Projection Mode 21

S

SMART Board Software 3
SMART Board Tools 29
Specification Drawings
1710 37
1810 39
1910 41
2876 43
2976 46
Starting SMART Board Tools 29
Starting the Computer 30
Starting the Projector 30

T

Technical Support 51

W

Wall Opening
1710 38
1810 40
1910 42
2876 45
2976 48
Creating 5



SMART Technologies

1207 – 11 Avenue SW, Suite 300
Calgary, AB T3C 0M5
CANADA

www.smarttech.com/support
www.smarttech.com/contactsupport
Support +1.403.228.5940
Toll Free 1.866.518.6791 (Canada/U.S.)

99-00479-03 REV B0