

Installation TIPS AND TIME SAVERS



1. INSTALLATION BASICS

2. INSTALLATION TYPES

- 2.1 **Max**
Maximum strength, easy
- 2.2 **Norm**
One person installation
- 2.3 **Archie**
Architectural design, no fasteners
- 2.4 **Adhesive**
Strong, fast, no visible fasteners

3. INSTALLATION OPTIONS

- 3.1 **Maximum and moderate load**
High strength and normal load installation
- 3.2 **Installation template for HangUps**
New template, easier installation
- 3.3 **Stack-N-Lock**
Easy installation on HangUps
- 3.4 **Splice-N-Seam**
Add to panel length
Strong butt joints between studs

4. DESIGN CHOICES

- 4.1 **Screw caps**
- 4.2 **Top panel design**
- 4.3 **Edge trim design**
 - Ucap
 - No Ucap
 - Molding

5. MAINTENANCE AND REPAIR

- 5.1 **Scratches**
- 5.2 **Surface refinishing**
- 5.3 **Cleaning**
- 5.4 **Damage and Breakage**
- 5.5 **Dents**

6. FABRICATION

- 6.1 **Cutting**
- 6.2 **Tru-Grip straight edge cutting clamp**
- 6.3 **Adhesives**

7. PREFAB PANELS

- 7.1 **Panelization**
Add sales with cut-off and waste
- 7.2 **Prefab installation**
Quick installation tips

8. DISPLAY

- 8.1 **Kerf**
- 8.2 **Painting**

9. DESIGN DRAWINGS

- 9.1 **Garage storage ideas**
- 9.2 **Scale tempate**

10. ACCESSORY OPTIONS

- 10.1 **storeWALL brackets**
Wall cabinet and tool rack installation



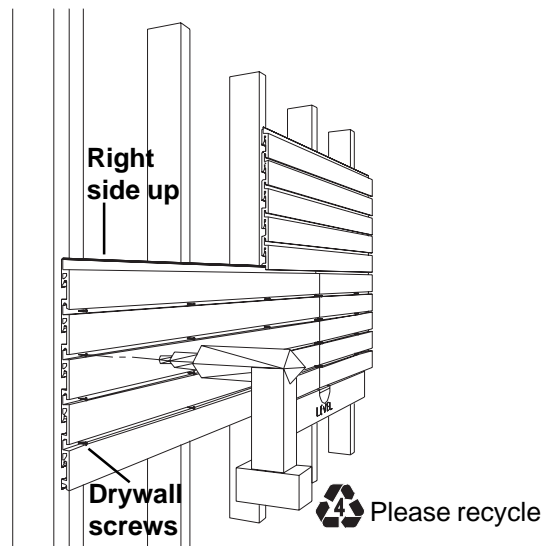
1. INSTALLATION BASICS

- StoreWALL is waterproof and can be installed outdoors or inside.
- StoreWALL can be installed on wood or metal studs, drywall, concrete block or any secure building material.
- StoreWALL is installed from the bottom panel to top panel.
- Install storeWALL panels right side up:
Single tongue = UP
1/4" slot = FRONT
1" slot = BACK
Double tongue = DOWN
- Maximum load holding is achieved using a screw at every slot anchored into every stud or other blocking.
- Use #6 or #8 bugle head drywall screws at least 1-1/4" long.
- Periodically check that the installation is plumb and square.
- Test load holding prior to completion of installation.
- StoreWALL can be drilled, sawn, sanded, nailed, screwed or glued.
- Use panels from the same carton for color and grain match.
- Stains can be wiped clean with common household cleaners, or solvents from glass cleaner to acetone.
- Scratches, nicks or abrasions can easily be repaired.

For more information, please contact us:

phone 414 224 0878
 phone toll free 866 889 2502
 fax 414 224 6055
 email info@storewall.com
 web www.storewall.com

mail 1699 N Astor
 Milwaukee WI 53202



This manual has been developed to assist installers and fabricators with storeWALL materials. The suggestions are the result of the combined experience of many installers.

The instructions are based on information which is, in our opinion, reliable. Because installer and fabricator skill, quality of equipment and conditions of the installation are beyond our control the suggestions are provided with out guarantee. Prospective users must determine the suitability of the information and the proposed installation before utilizing a procedure.

StoreWALL does not make any warranties, express or implied, including the merchantability and fitness for purpose, with respect to any suggestion or product data.

Normal safety and health precautions practiced in any fabricating environment should be used when installing or fabricating storeWALL.

MSDS for storeWALL is available.
 Call us toll free at
 866 889 2502.

2. INSTALLATION TYPES

For detailed MAX, NORM and ARCHIE installation procedures, see the storeWALL installation sheet.

The installation sheet is available on the storeWALL web site - www.storewall.com/technical/install.htm

Download and print the Adobe Acrobat version for the best print quality.

2.1 MAX Installation

Maximum load capacity and easy installation.

Secure the first panel by driving screws, through the slot of the panel front, directly into studs or blocking.

TIP: No predrilling or countersinking is necessary. The screw head will flush up with the slot surface.

TIP: See Screw Caps - pre-paint or cover screw heads with matching cover caps.

TIP: See Splice-N-Seam - for butting panels between studs and adding to panel lengths.

TIP: See Maximum and Moderate load - for capacity and installation options.

2.2 NORM Installation

If your working alone and would like to layout the wall before securing to studs, you'll need a second pair of hands. If they're not available, use NORM. This is a variation of the Max installation. HangUps™ hold panels in place. When the wall is laid out to your satisfaction, complete the installation with screws.

TIP: Stack-N-Lock feature

The rear slot allows the panel to be placed over the HangUps™ and then lowered 1/4" to "lock" into place.

2.3 ARCHIE Installation

The architectural installation has no visible fasteners or screws. A template is used to speed HangUp™ installation and accuracy. HangUp™ position accuracy is important for strength.

TIP: See Installation Template for HangUps™.

TIP: Stack-N-Lock feature

The rear slot allows the panel to be placed over the HangUps™ and then lowered 1/4" to lock into place.

TIP: See Splice-N-Seam for butting panels between joists and adding to panel lengths.

TIP: See Maximum and Moderate load - for capacity and installation options.



2.4 ADHESIVE Installation

This is an architectural wall with no visible fasteners. Installation is quick. Use a power brad nailer to hold panels in place while the adhesive sets. When working alone use NORM to hold the first panel in place.

The correct adhesive is critical for this installation. See Adhesives: Polyurethane glues for more information.

Step 1. Mark the desired location of the BOTTOM of the first storeWALL panel. Strike a level line 13" up from the BOTTOM mark. This is the baseline for the first row of HangUps™.

Step 2.

Attach 2 storeWALL HangUps™ per panel. Use #6 or #8 bugle head drywall screws at least 1-5/8" in length. The HangUps™ should be anchored to studs or blocking. Align the bottom of each HangUp™ so that it sits on top of the level line.

Step 3.

Apply adhesive to either the panel back (installation over drywall) or to exposed studs. Position the first panel on the storeWALL HangUps™.

TIP: Stack-N-Lock feature

The rear slot allows the panel to be placed over the HangUps™ and then lowered 1/4" to "lock" into place.

Step 4.

Secure the first panel by brad nailing directly through the panel front at each panel slot directly into studs or blocking.

Step 5.

Repeat steps #3 and #4 to secure the second panel (making sure that the Stack-N-Lock tongue and groove mate properly).

- For each panel, use a minimum of 2 brad nails at every stud. To increase bonding, brad nail panel at every slot AND every stud.
- The adhesive does not develop a bond quickly so it's important that the panel is adequately secured to the wall (reinforce with screws where necessary) to allow the adhesive to set. Allow 24 hours before applying any load to the panel.
- Test load holding prior to completion of installation. If you require maximum load holding strength, make certain that panels are screwed directly into every slot AND every stud.
- An option for longer walls - stagger the panels in a 'running bond' pattern.
- For butt joints - panels should meet at studs and fastened with adhesive and brads.

TIP: See Splice-N-Seam for butting panels.

TIP: See Adhesives - Polyurethane glues for adhesive information.

3. INSTALLATION OPTIONS

3.1 MAXIMUM AND MODERATE LOAD



StoreWALL has extremely high strength. Utilization of this strength depends on how securely storeWALL is fastened to your wall.

Maximum capacity:

Use maximum strength when shelf capacities require loads of 100 pounds or more.

When installing over wood studs use screws of 1-1/4" in length. Screw through storeWALL at every slot and every stud (16", or less, on center). If you are installing over dry wall, add the wall thickness to the screw length. You can add to installed strength with adhesives (see Adhesives: Polyurethane glues).

Moderate capacity:

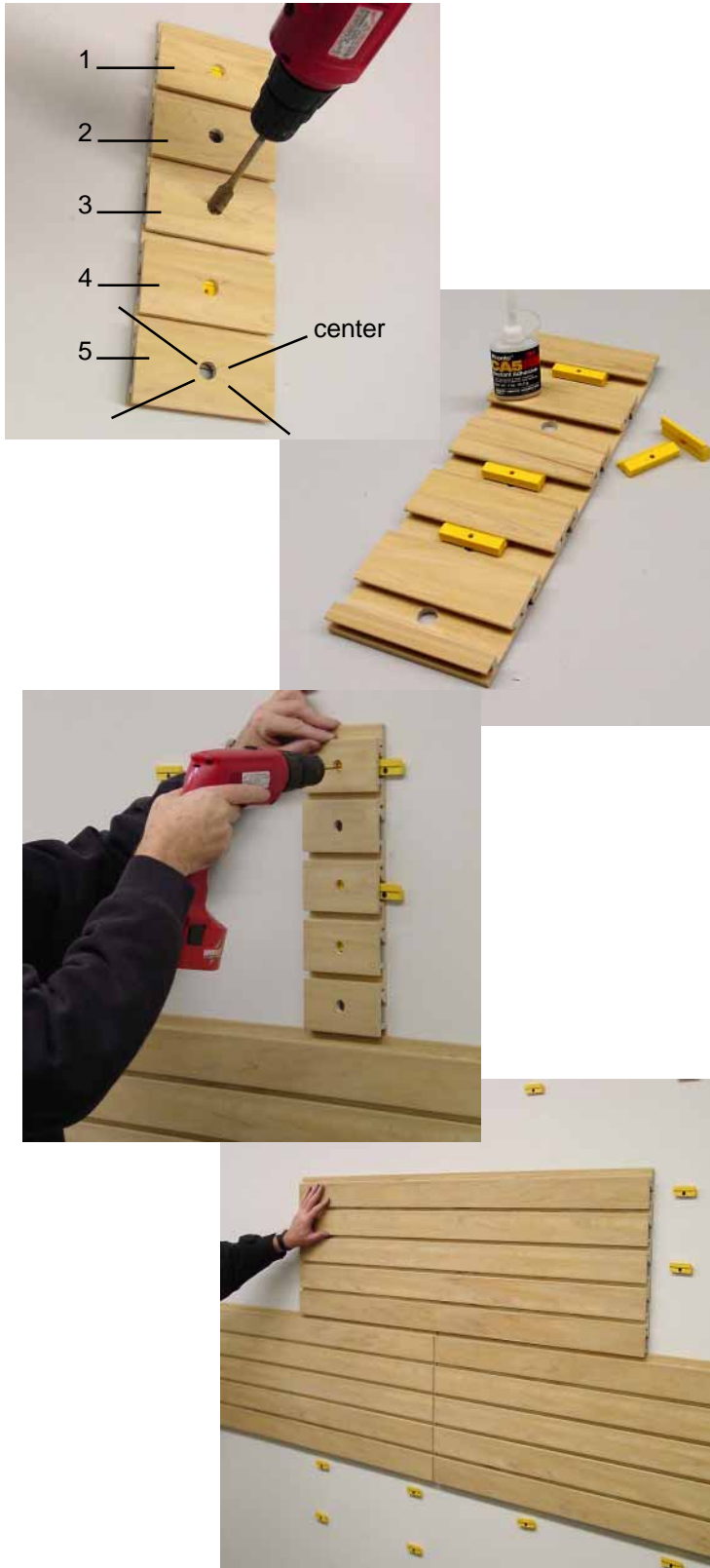
An example of average is 20 pounds at a single point (ie. a shelf bracket, a hook, etc.).

Most storage and display installations have moderate load requirements. Installation is fast.

Use two screws, or HangUps™, at each stud for each storeWALL panel. The screw should be long enough for penetration 1 inch into the stud (Add 1/4" for the HangUp, or storeWALL slot, plus any wall surface such as dry wall).

For higher strength installation using HangUps™, install a HangUp™ at every slot and every stud.

- Use #6 or #8 bugle head drywall screws.
- Always determine the suitability of the wall by testing load capacity of the installation.
- The capacity of your installation depends on many factors. Screws, adhesives, structural members of the wall and the skill of the installer contribute to the strength.



3.2 INSTALLATION TEMPLATE FOR HANGUPS™

Use a template to install HangUps™ quickly and accurately. HangUps™ glued in place to create pilot holes for HangUp™ screws. There is an 'A' template for installing the first storeWALL panel HangUps™. There is a 'B' template for upper panels.

Template instructions:

Cut 2 - 5" to 6" sections of storeWALL.

With a 1/2" to 1" spade bit, drill holes in the center of slats #1, #3 and #5 of both storeWALL sections.

- To find center, mark an X with a straight edge from the corner of the slats.
- You may find it useful to drill holes in each slat for better visibility of your wall marks for stud locations.

In storeWALL section A, superglue a HangUp™ in slots #3 and #5.

In storeWALL section B, superglue a HangUp™ in slots #1 and #3.

Modify Archie installation instructions:

Step 3.

Place the template on the first row of HangUps™ in the template slot #1. Drill pilot holes at slots #3 and #5. Screw HangUps™ to the wall using the pilot hole guides.

- A self centering Vix bit can increase speed and accuracy of pilot holes.

Step 4.

Mount first storeWALL panel on the HangUps™.

Step 5.

Set the #B Template on the storeWALL panel installed in step #4. Drill pilot holes at slats #1 and #3. Screw HangUps™ to the wall using the pilot hole guides. Repeat Step 5 until you reach your wall height.

Step 6.

Lock the top panel in place by securing with screws.

- For higher load capacity use a HangUp™ at every slot and every stud.
- For strength, position HangUps™ accurately.

3.3 STACK-N-LOCK

Installing storeWALL on HangUps™ is easy. Place the storeWALL panel against the wall. Move the panel up or down to match HangUps™ with the back panel slot. The panel will drop 1/4" and lock on to the HangUp™.

3.4 SPLICE-N-SEAM

Butt the joints anywhere:
Strong butt joints can be made between joists or anywhere.

Add to panel length:
Stretch a panel to reach a stud or a corner. Dowel a connecting piece of storeWALL to increase the panel length. This is an efficient way to add to your panel by using left over 'cut off' pieces.



StoreWALL dowels with barbed sides - 1/4" x 1-1/4" long.



Step 1
Use storeWALL pilot hole as a drill guide. Drill to 5/8" - 3/4" depth (half of the dowel length). Put dowel in hole. Barbed sides hold the dowel tightly in place. For a looser fit ream the hole.

Step 2
Push panels together. Assemble the two pieces with a 'push' fit, or use a wooden block and hammer to 'seat' the joint.

TIP: 3 dowels are adequate for most installations.

TIP: Set the dowels with a dab of super glue.



TIP: The joint can be reinforced from the back side by running a bead of superglue down the seam and allowing it to set (5 min).



4. DESIGN CHOICES

4.1 SCREW CAPS

When using the Max or Norm installation coordinate the screw with your storeWALL color. Here are 3 alternatives:

Paint-

Select a matte enamel paint color. Dip screw head in paint. Place the screw in a Styrofoam block to dry.

Pro-Dec Products -

Plastic press-on covers for screws in 64 colors. Use Tap-Caps for Phillips head screws and Square-Drive Tap-Caps for square-drive screws.

www.pro-dec.com

phone 281 240 0924

FastCap -

Self adhesive cover caps available in PVC and wood color choices. The caps are 9/16" in diameter. There are 52 caps per sheet. A mini box is 5 sheets. A standard box is 20 sheets.

www.fastcap.com

phone 888 443 3748

Pro-Dec and FastCap are available through local Cabinet Shop Hardware Distributors.



4.2 TOP storeWALL PANEL DESIGN

When installing the top storeWALL panel you are faced with a design decision. Leave the top tongue in place or remove the tongue. Both options look good.

To remove top tongue and finish the panel cut the tongue with a table saw. Sand with 80 grit paper. Wipe down with acetone.

TIP: See Maintenance and Repair - Scratches for acetone information.

4.3 EDGE TRIM DESIGN OPTIONS

Ucap:

- The Ucap can be used for top, bottom, edge trim, inside corners and outside corners.
- Top trim: cut off tongue of top panel for a snap fit.
- Edge trim: leave fasteners at the edge of the panels loose, install Ucap edge trim, tighten loose fasteners.
- Inside Corners and Outside Corners: Use Ucap either singly or in pairs.
- Ucap is 8'-2" long to allow for cutting 45 degree mitres.
- When cutting Ucap, use a fine tooth saw and/or a wooden backing block.
- When using Ucap as face trim, cut off the back leg and attach with a PVC compatible adhesive (super glue is fast and effective).

TIP: For inside corners, butting the wall panels into each other makes a satisfactory installation.

TIP: For outside corners, mitre cutting and joining the panel creates a dramatic design.

No Ucap option:

StoreWALL with no edge treatment is attractive.

StoreWALL is a solid core finish. The exposed edge is a High-Tech design effect.

When installing storeWALL into a finished corner use No Ucaps.

TIP: For an attractive installation and speed, avoid scribed corners. Keep a 1/16" to 1/8" gap between storeWALL and the finished corner.

Molding:

Alternative edge caps can be used. Install storeWALL as the No Ucap option. Butt conventional moulding, aluminum angle, or other trim, against the storeWALL edges.

You are at the trade show and a fork lift just drove over your display. Fortunately, it can be repaired.

Scratches cleaned and removed

Scratches and stains



5. MAINTENANCE AND REPAIR

5.1 SCRATCHES

Scratches can be refinished. Stains can be removed. Vandalism can be wiped away. Acetone can refinish, repair and clean storeWALL. It acts as a mild solvent to fill in or remove surface blemishes. Wet a paper towel and wipe down the area for repair. StoreWALL will retain the matte finish.

- First, test your technique on a scrap piece of storeWALL or a panel back.
- Acetone is flammable and an industrial chemical. Review the Material Safety Data Sheet (MSDS) before use.
- Acetone can be found in small quantities at drug stores (finger nail polish remover). Larger containers are available at paint stores.

5.2 SURFACE REFINISHING

StoreWALL finish can be refreshed with buffing pads. We have good results with Scotch-Brite pads.

5.3 CLEANING

Use consumer available cleaners with storeWALL. Most industrial cleaners can be used with storeWALL (test scrap or a panel back). Disinfectants and bleaches can be used.

5.4 DAMAGE AND BREAKAGE

Fast, permanent repairs can be made with superglue. Apply glue sparingly and hold parts together to set.

- Thin viscosity superglue is the fastest setting.

5.5 DENTS

A heat gun (or hair dryer) can be used to expand or "pop out" dents.

- Use moderate temperatures. Test your technique on scrap or a panel back.



Break repaired and as strong as the original

6. FABRICATION

6.1 CUTTING

StoreWALL cuts easily using any traditional wood working tool. You will get good results using conventional saw blades, drills, routers, etc. The cleanest cuts are achieved with a 32 tooth, or larger, carbide blade (triple chip). Blades normally used for cutting MDF (Medium Density Fiber board) and laminates work well. Treat storeWALL like any prefinished material:

- cut "good side up" on a table saw
- cut "good side down" with a Skilsaw / radial arm saw / sabre saw.

6.2 TRUE-GRIP STRAIGHT EDGE CUTTING CLAMP

The 24" Tru-Grip straight-edge/clamp (CT24C) is ideal for cross-cutting storeWALL panels on site. It is usually available at any good hardware store.

Pricing ranges from \$25.00 to \$35.00.

There are knock-offs for 10% - 20% less . . . but are not worth it.

(If you can't find a Tru-Grip source, call us at 866 889 2502.)



Tru-Grip straight edge with width adjustment and clamp.

6.3 ADHESIVES

A. Cyanoacrylates (super glue):

Use super glue for damage repair and display fabrication. Super glue is fast and high strength. It quickly repairs trade show exhibit and freight damage.

Super glue is usually available in three viscosities (thin, medium and gap filling). Thin viscosity is fast setting. Gap filling is slowest. I recommend medium viscosity for most applications.

- Shelf life of these glues are 6 months (12 months if kept refrigerated).
- Hobby/craft stores are a good source for medium size projects.



Saw cuts are quick and clean. This cut is with storeWALL "good side down" for a perfectly clean face edge.

6.3 ADHESIVES (continued)

B. Polyurethane glues:

Most polyurethane based glues ("Gorilla Glue") work well with storeWALL. The high strength adhesive is excellent for wall panel installation and exhibit fabrication.

The polyurethane glues require minimal but consistent clamping pressure to be effective. They tend to foam from the joint as they cure. This foam is easily removed when dry and has a favorable "gap-filling" effect with storeWALL wood grains.

Scotch-Seal #560 Polyurethane Adhesive Sealant:

Scotch-Seal #560 has high tensile strength (which results in substrate failure prior to glue line failure), high elasticity (accommodates unequal coefficients of expansion/contraction) and the ability to create high strength bonds between dissimilar materials (plastics, aluminum, steel, wood etc).

#560 adhesive is economical, easy to work with (standard 1/10 gal cartridge), and has simple cleanup (I use paper towels and paint thinner). It is currently available in Grey and Black. The Grey is a match to storeWALL's weathered grey panel.

Scotch Seal 560 Stock #'s

62-5487-5230-2 Grey 1/10 gal cartridge 12/per case
62-5488-5230-0 Black 1/10 gal cartridge 12/per case

3M Customer Response phone: 800 362 3550.

Scotch-Seal #560 and most cartridge based polyurethane adhesives have a usable life of 24 hours once the cartridge is opened. Anticipated adhesive yield using the recommended 1/4" to 3/16" bead will be approximately 7 to 8 8' panels (56 to 64 sq ft) per cartridge.

Cartridge based polyurethane adhesives are readily available at most hardware and building materials suppliers. A good polyurethane glue will have a high solids content and have a 5% or less solvent content. Polyurethane glues with a high solvent content (above 5%) will have significantly less holding power.

The best bonds are formed over raw/unfinished materials. The adhesive does not develop a bond quickly so it's important that the panel is adequately secured to the wall (reinforce with screws where necessary) to allow the adhesive to set. I recommend at least 24 hours before applying any load to the panel. To ensure the best bond possible over drywall/gypsum type products make sure that the wall is flat (a wavy wall will require a larger bead size to ensure that there is adequate adhesive contact), dry and dust free.

To ensure the best bond over wooden studs lay a 1/4" to 3/16" bead of adhesive on the studs, position the storeWALL panel over studs and secure with 5/8" to 1" brads or drywall screws (every slot AND every stud).

StoreWALL can be applied directly to concrete, concrete block, brick and other semi-porous walls using appropriate adhesives and anchoring techniques (masonry screws). Often it is easier to simply 'fir-out' the wall (with 2 x 2's, 1 x 3's, etc. as 'studs') and install storeWALL.

- When building a wall more than 60" tall make sure to adequately reinforce the bottom panel to support the weight of the wall until the adhesive sets.
- When using a 'running bond' pattern, seam and secure panels over studs when possible.
- If seaming between studs (see: Splice-N-Seam), make sure that there is adequate blocking and pressure to hold the panel against the wall while the adhesive sets.

Additional Installation questions?
Please call toll-free 866 889 2502

7. PREFAB PANELS

7.1 PANELIZATION

An excellent use for project 'cut off'. Prefab panels can use widths from 8" up. Install prefab panels on the side of upper, lower and floor standing cabinets. Make prefab panels for back of door storage.

An all-purpose work bench storage panel is 30" high x 48" wide, 2 - 4' wide storeWALL panels. Make a prefab panel for fast installation.

Instructions

Make a back-of-door panel, 24" wide x 60" tall. Other sizes use similar fabrication steps.

Cut 4 - 24" wide storeWALL panels.
Place on 'gluing table', face down.
Align panels.

Use medium viscosity (or gap filling) superglue at tongue and grooves.

Place weights at glue joints.

When glue has set, use superglue to adhere Ucap to both sides of assembly.

- At the tongue and grooves, it is important to maintain panel contact for stronger bonds.
- For quicker fabrication of several prefab panels make an L frame for a setup guide.
- Back braces can be added to large prefab wall sections used in free standing exhibits.

7.2 PREFAB INSTALLATION

Installation on hollow core door.

Attach 2 HangUps™ with screws and adhesive (see Adhesive: Polyurethane) to the door. These should be located to hang near the top of the fabricated panel. Attach 2 HangUps™, with screws and adhesive, to be located near the bottom of the fabricated panel.

- Adhesive will create the load capacity. The screw secures the HangUp™ for the adhesive to cure. The lower HangUps™ hold the storeWALL panel to eliminate movement as the door is opened and closed.
- StoreWALL can be screwed directly to the door. Use adhesive to firmly secure the panel and door (see Adhesive: Polyurethane).

Just 2 to 4 HangUps™ or screws create a surprisingly strong installation. Position the fasteners to distribute weight evenly. The simple installation will handle most storage load requirements.



8. DISPLAY

8.1 KERFING

This is a simple process which allows storeWALL to be used with a wide variety of profiles and extrusions to create free standing display and storage systems. For most profiles, including CornerForms from Walls+Forms, I recommend 4 Kerfs per panel (both sides and both ends) using a 1/8" width blade, set 1/2" from the fence and approximately 1/8" above the table.

TIP: Other profiles might require thinner blades and different saw settings.

Please refer to the storeWALL KERF brochure or, call us toll free at 866 889 2502 for additional information.

The Kerf brochure is on the storeWALL web site - at the navigation bar go to Technical > Fabrication 'the Kerf'.
www.storewall.com/technical/kerf.htm

See instructions

For a free standing display kiosk
At the navigation bar go to
Commercial Use > How To.

www.storewall.com/commercial/howto.htm



8.2 PAINTING

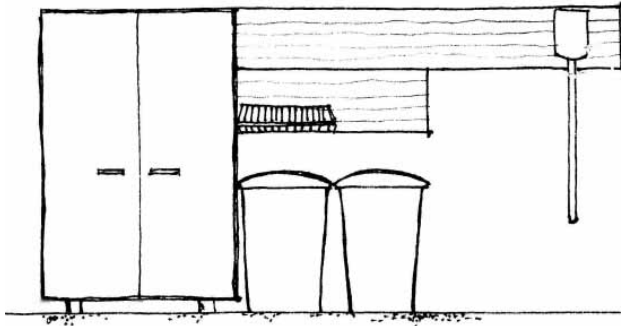
StoreWALL can be painted with finishes compatible with rigid PVC



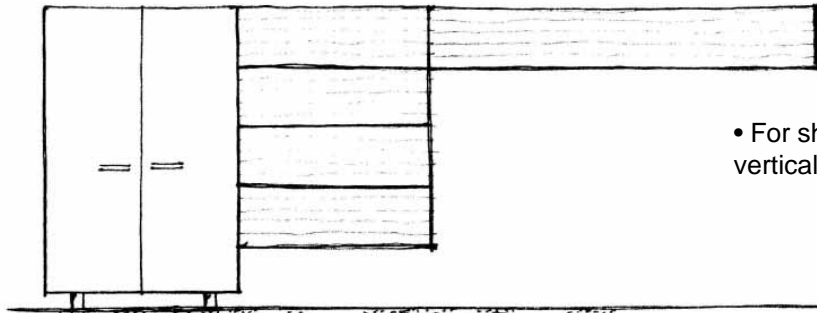
These modular displays use prefab panels and 3/4" CornerForm connectors.

9. DESIGN DRAWINGS

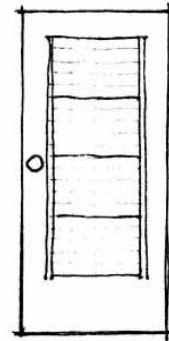
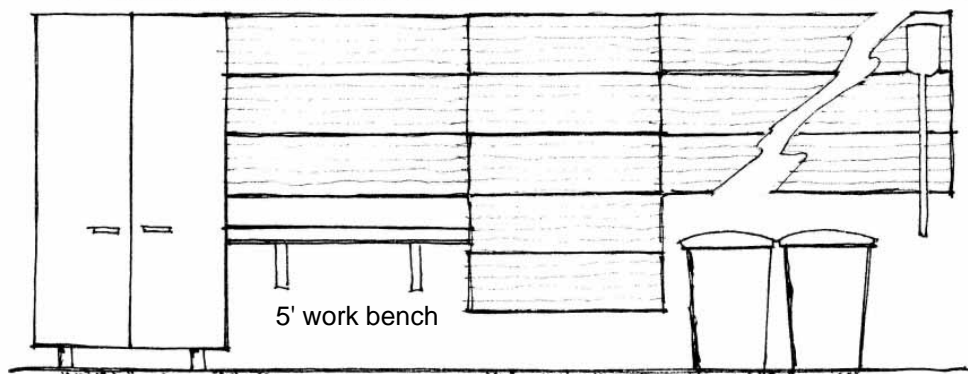
9.1 GARAGE STORAGE IDEAS



- For garden tools, shovels, brooms and equipment with long handles a horizontal storeWALL panel is installed. Handles cover much of the wall surface.
- Plan for recycling containers and trash cans. StoreWALL is not needed behind the containers.



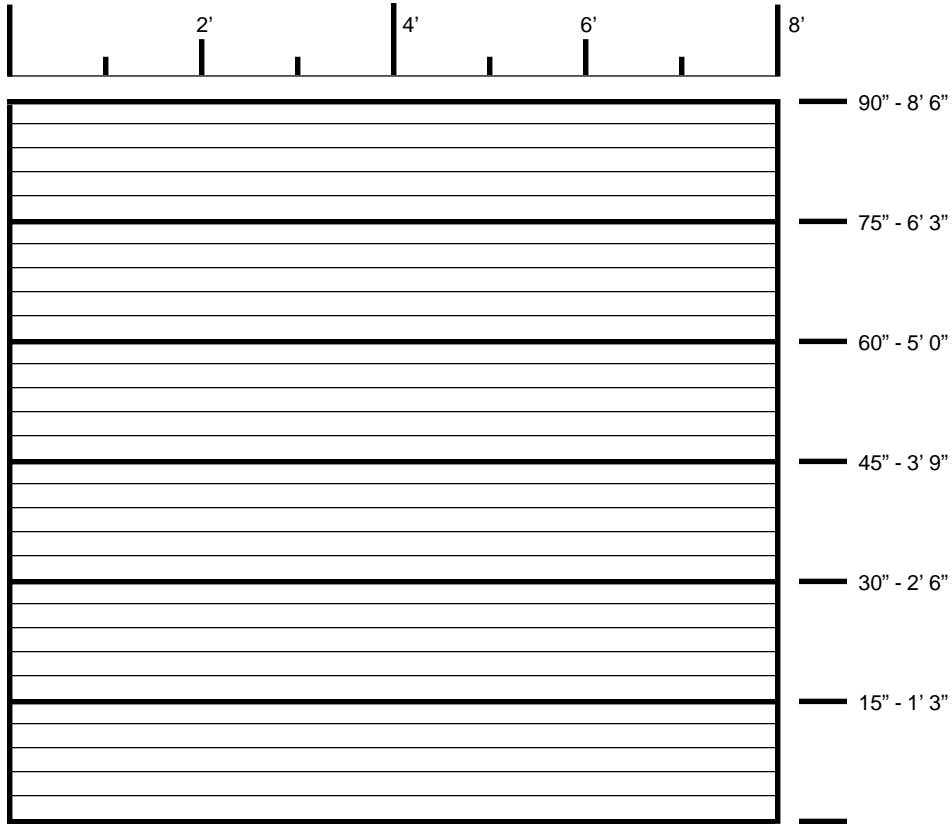
- For shelves and baskets install storeWALL to create vertical storage.



Back of door
prefab storage
panel.

- Use storeWALL cut off and make prefab storage panels for the sides of cabinets and backs of doors.

9.2 SCALE TEMPLATE



storeWALL™ HEAVY DUTY Scale template 1/2" = 1'

10. ACCESSORY OPTIONS

10.1 storeWALL BRACKET

Any accessory that installs on a wall will install on storeWALL. Use the SWB bracket and install large wall cabinets or screwdriver racks.

The SWB is a storeWALL adapter bracket. It comes with the bracket, bolt and lock washer. See The Accessories Group price sheet for pricing.



Left - The storeWALL bracket (SWB).

Below - Bracket installation is the same for large wall cabinets and small accessories.



Below - a few examples of the SWB bracket and storeWALL accessories.

