

LEDGEWALL™ CLIMBING PANELS

SPECIFICATIONS AND FRAMING SUGGESTIONS

DESCRIPTION:

Ledgewall climbing panels are carefully designed pre-finished panels for climbing surfaces. They are suitable for traversing walls (sideways climbing up to eight foot height with no necessity for ropes or harnesses) or belayed top-roped climbing (climbing with rope and harness where the safety rope passes through an anchor at the top of the wall and is controlled through a friction device by a belayer standing at the foot of the climb.) The panels are engraved with an attractive pattern that suggests a rough rock surface and finished with two coats of epoxy-based paint in a dark gray color.

Each panel has sixty-four threaded attachment points for climbing holds that are configured to provide maximum adjustability and avoid interference with standard 16" center framing. The panels are made of highest quality materials to provide high strength, long life and ease of installation.

MATERIALS:

- PANELS: Premium waterproof MDO plywood with an incut sculpted surface, drilled, fitted with threaded inserts and finished.
- INSERTS: Sixty-four high quality tee-nuts, 3/8 x 16 (industry standard for removable handholds)
- FINISH: All sides and edges coated with high quality epoxy-based paint - front and edges double coated.
- FEATURES: Pre-installed inserts and prefinished panels for ease of installation. Available as modular pre-framed units for simple bolt-together construction or as separate panels for application to customer designed framing. Special engraved texture for durable, attractive rock-like appearance and good frictional properties.

Installation:

Suggested Materials Per each 4'x8' LedgeWall™ Panel

- 5 - 10' x 2"x4"s or 2"x6"s (frame; use 2"x6" if not directly attached to existing wall.)
- 16 - Pre-drilled angle brackets (e.g.. Simpson A-34)
- 1 - 4' x 1" x 4" (baseboard if desired)
- 100 - 2" Deck screws, coarse thread (attach panels)
- 50 - 11/2" Coarse thread screws (attach angle brackets to frame)
- 50 - Additional fasteners to attach angle brackets to existing wall (e.g. "Tap Con" screws for masonry, deck screws for wood, etc.
- 1 - Flush trim router bit (to trim panels to size, after attaching)
- 3-4 pounds of 8d & 10d common nails.

Add the local price of these items for budgeting, per panel sheet.

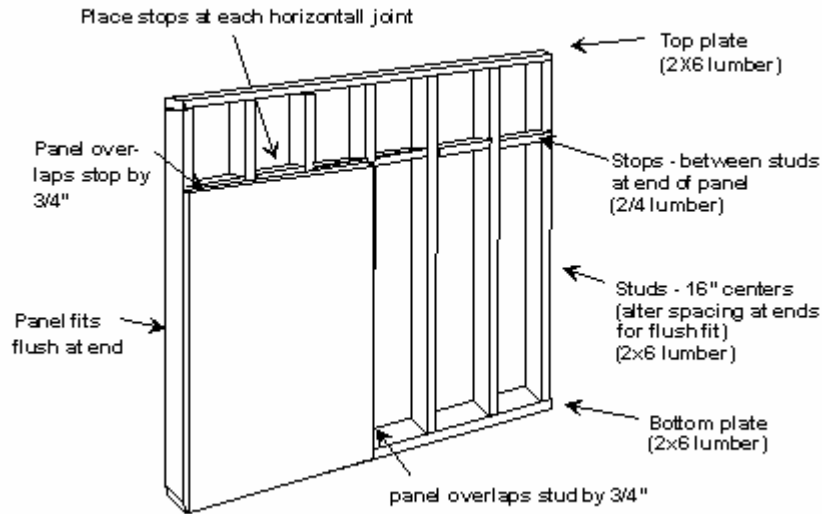
Construction Notes

Ledgewall Panels are designed to be mounted on 2x4 or 2x6 framing at standard 16" centers. They can be mounted either vertically or horizontally depending on requirements. The framing must be securely mounted to the back-up wall with appropriate fasteners and angle-iron brackets. Panels should be mounted to the framing with construction adhesive and 2" construction screws on 6" centers.

It is best to provide vertical and horizontal angles in the climbing wall to present different and interesting challenges to the climbers. Overhangs, corners, roofs and aretes can be constructed using the framing techniques shown on the previous page. The framing must be carefully constructed to fit the panels with special attention to the corners where panels meet and accommodating the thickness of panels where they overlap. To make full use of Ledgewall panels it is best to design in 4-ft. increments, and this generally insures good "climbable-sized" areas as well. When constructing overhanging sections, note that where different-angled sections of wall meet up there will be triangular or odd-shaped areas that have to be filled with odd shaped sheathing. It is best to plan carefully for minimum wastage and also for full backup of sheathing joints.

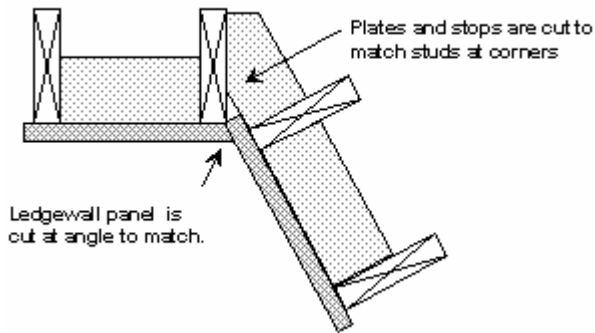
1. LedgeWall panels are designed for bouldering and top roped walls. These panels will not withstand lead climbing or belay points directly attached without careful reinforcement. Please have a qualified engineer review all belay system designs.
2. Please be aware that the angle (slab, vertical or overhanging) of the wall will significantly affect the forces on the panels. Overhanging designs will generate considerably more stress on the panels and their framing. You should design your wall construction accordingly.
3. Framing to be 2"x4" if attached to an existing wall. Use 2"x6" if free standing.
4. Frame for 16" on center. Remember to adjust end frames to fit the 4'x8' panels.
5. Angle brackets can be placed every two feet.
6. Blocking to be placed every 4 feet, one at bottom, one middle, and one to catch top edge. The decision to use single or double blocking where two separate sheets join is up to the local builder. We recommend doubling in the case of overhanging angles.
7. Panels are usually attached with drywall screws every 6 inches. Pre-drilling is at the choice of your builder; we recommend it where single blocking is used under an area where two panel edges join.
8. Paint material is an epoxy reinforced deck enamel, standard color dark gray mixture of ½ Black, ½ Battleship Gray. Typically we bevel any exposed edges with a router and do a final touch up after all construction is completed.

BASIC FRAMING

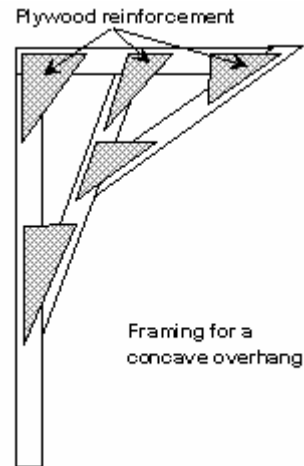
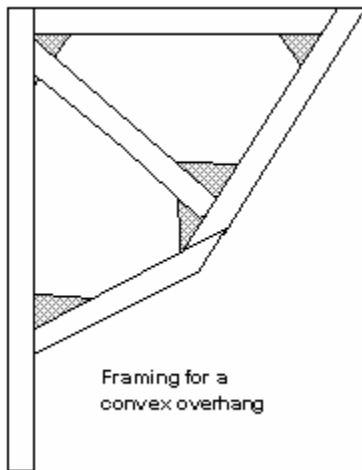
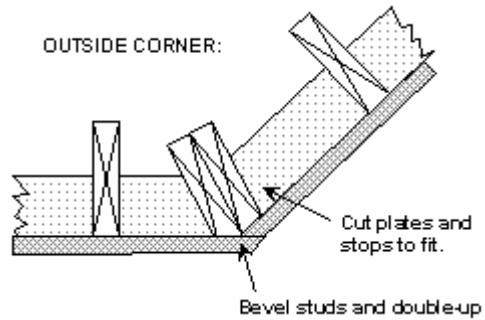


Basic framing for a 10 foot high wall. 8 foot wall is simpler (no need for stops).

INSIDE CORNER:



OUTSIDE CORNER:

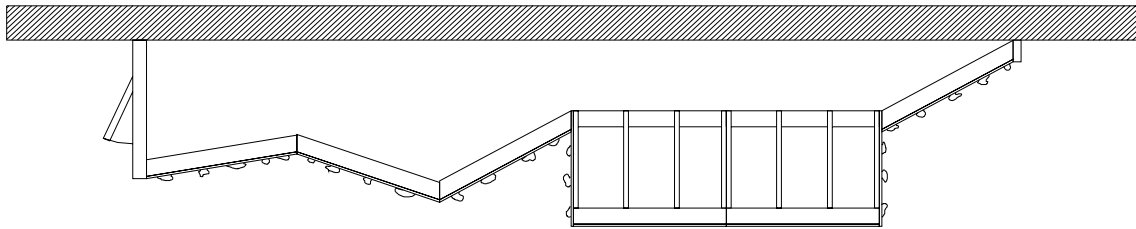


Ledgewall Modules™

The simplest way to build traversing (sideways climbing) walls is to use Ledgewall Modules. These are versatile pre-framed units that simply bolt together to form serpentine walls up to 10 feet high. Because of their unique construction, Ledgewall Modules fit together with attractive joints into a variety of configurations including various angles of overhangs and different sized low roof structures. They can even be used to form the walls for a bouldering cave.

The diagram below shows a small Ledgewall Module installation. It is a plan view of a simple serpentine bouldering wall built with 6 Ledgewall Modules, featuring an 8 foot wide 20° overhanging section and a framed wall and door at one end so that the inside space can be used as a storage closet. Ledgewall modules can be used as well to construct free-standing units and peninsulas, and to convert racquetball courts into dramatic bouldering courts.

Brewer's Ledge sells pre-framed modules in many different configurations to create a limitless variety of traversing and bouldering walls. If you have the time and talent, you can make your own modules using Ledgewall Panels and local framing materials. Brewer's Ledge can provide licensed drawings and construction details.



LedgeWall™ Warranty

1. WHO IS COVERED?

This warranty may only be enforced by the original purchaser of the LedgeWall™ panels or modules ("Original Purchaser").

2. ORIGINAL PURCHASER OBLIGATIONS.

- a. The Original Purchaser assumes full responsibility that of the LedgeWall™ panels or modules purchased meets the specifications, capacity and other requirements of the Customer.
- b. The Original Purchaser assumes full responsibility for the condition and effectiveness of the operating environment in which of the LedgeWall™ panels or modules are to function including spatial considerations.

3. HOW LONG IS THE WARRANTY?

According to the following schedule, Brewer's Ledge Inc. warrants to the Original Purchaser of the LedgeWall™ panels or modules that under normal maintenance of the LedgeWall™ panels or modules will be free from any defect in materials or workmanship.

- (1) One year parts and labor

4. WHEN DOES THE WARRANTY BEGIN?

Warranty begins from date of delivery to Original Purchaser

5. WHAT IS NOT COVERED.

- a. Normal wear and tear is excluded from this warranty.
- b. No warranty shall be provided in the event of damage to the LedgeWall™ panels or modules incurred by negligence by the Original Purchaser. The sale of instructional materials to the Original Purchaser by Brewer's Ledge Inc. related to the assembly and break-down of the LedgeWall™ panels or modules does not imply any warranty against Original Purchaser negligence and does not void this exclusion. Brewer's Ledge Inc. reserves the sole right to determine the origin of damage as related to this provision.

6. LIMITATION OF DAMAGES AND IMPLIED WARRANTIES.

- a. Except as provided herein, Brewer's Ledge Inc. makes no express warranties; implied warranty of merchantability or fitness for a particular purpose is limited in its duration to the duration of the written limited warranties set forth herein.
- b. In no case shall Brewer's Ledge be liable for any special, incidental, or consequential damages based on breach of warranty, breach of contract, negligence or any other legal theory. Such damages include but are not limited to, loss of profits, loss of use of the equipment or any associated equipment, the cost of capital, the cost of substitute equipment, facilities or services, downtime, the claims of third parties, including customers, and injury to property.

This limitation does not apply to claims for personal injury where such limitation would be a violation of the applicable law. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

7. TERMS OF WARRANTY

The terms and conditions of this warranty are applicable as between Brewer's Ledge and Original Purchaser to the sale of the LedgeWall™ panels or modules to Original Purchaser.

8. STATE LAW RIGHTS

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

LedgeWall™ Maintenance

The LedgeWall™ panels and modules are constructed of the highest-grade plywood and framing materials. They will last for years. However a little maintenance will keep your wall looking new and inviting to use.

1. PAINTING

LedgeWall™ panels and modules come from the factory pre painted. Both the color and paint are have been carefully chosen to maximize wear and hide the discoloration and marks that come from climbing.

At the factory, oil-based deck enamel is used, 50% Black and 50% Battleship Grey. Paint to re-coat may be purchased from Brewer's Ledge. See the price list below. If purchased locally, make sure to use high quality deck enamel and follow the manufacturer's instructions on the can.

Take advantage of the unique surfacing to custom paint your panels while maintaining the texture for climbing. Schools might consider making murals or custom logos to accent a gym, and commercial facilities may want to boost their image or customize their environment.

2. EXTERIOR PROTECTION

If the LedgeWall™ panels and modules are to be positioned outside, remember to coat the edges and any exposed wood. It is important with exterior use to ensure that any edges have been lightly rounded to optimize paint adhesion and protection against moisture.

3. DAMAGE REPAIR

Damage to the LedgeWall™ panels and modules can be repaired using stock auto body repair materials. Carefully fill the damaged area and sand lightly to remove any sharp edges before repainting. Make sure to follow the manufacturer's instructions on the container.

4. RESETTING TEE-NUTS

Occasionally tee nuts may become loose. Typically this happens when a hold is over tightened or the bolt is allowed to become "cross threaded" when a hold is moved to a new position. If a tee nut becomes loose, you have two main options.

Using a long 3/8" bolt and washer passing through a small piece of 2x3 or 2x4 stock, and a large wrench, carefully thread the bolt to sufficiently engage the loose tee nut. Push or tap it out of the panel. Turn the tee nut ¼ turn, and re tighten the bolt to draw the tee nut back into the panel's wood. The idea is to re-engage the tee nut prongs in new wood to reset the tee nut.

Alternatively, you can detach the panel from its wooden frame and repair any stripped tee nuts.

5. CLEANING HOLDS

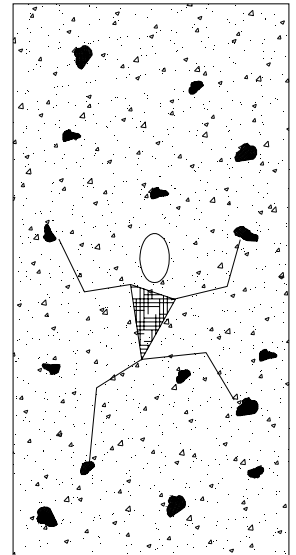
Climbing holds will get dirty with use. Cleaning holds will encourage use and appearance. Remove the holds and wash in a commercial dishwasher, or wash in a home dishwasher multiple cycles, or pressure wash in a milk crate, or soak in a cleaner such as Simple Green®. Holds can be washed repeatedly and will look close to new when done. **Clean holds make a difference!!**

LedgeWall Paint (fob Boston, MA: shipped ground only)	\$ 39.00 gallon
Replacement Tee Nuts (Packet of 12)	\$ 9.00 doz.

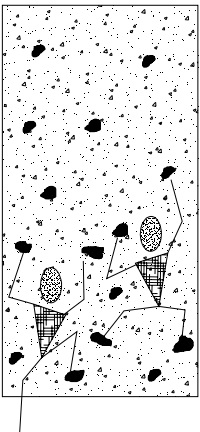
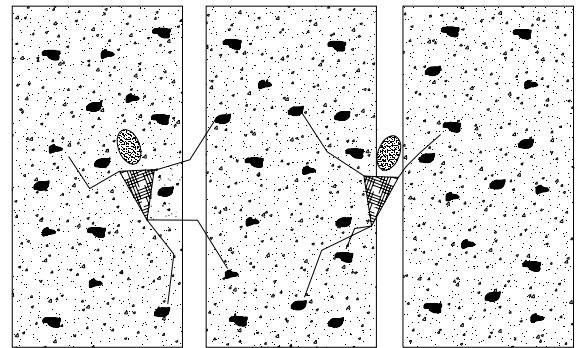
LedgeWall™ Route Setting

The rocks or grips that are bolted onto the LedgeWall Panel are called “holds” by climbers. A series of holds set up for climbers to follow are called a “route”. There are 15 holds per LedgeWall Panel. Each hold has one side with an incut or positive grip and each hold can be oriented so that the positive edge is on the top, the bottom, or to one side.

In general it is best to sprinkle holds over the surface fairly evenly with the most positive surface facing up, especially near the center of the panel. Footholds are very important, so make sure there is a good line of holds near the bottom of the wall.



An important part of LedgeWall Panel climbing is stretching out to reach another panel as the climber traverses along the wall. These moves are easier if the holds near the sides are oriented so that they are easy to use. Turn the upper holds so that the positive edge faces somewhat inward, towards the middle of the wall, and face the lower holds outward, towards the edge of the panel.



Little kids like to climb too, but sometimes its hard for them to reach the holds, and often they don't want to climb too high. Make sure there are good holds low enough for little kids to reach.

The colorful LedgeWall holds do more than give a cheerful appearance to the wall. The colors can be used to set a “route” along the wall for greater challenge. As climbers get more experience and become stronger, they enjoy doing the “red route” or the “yellow route” especially if you set the routes to have a theme. One route might emphasize difficult balance moves, for example, while another might promote stretching or strength moves. Route setting is a fun activity that is a bit of an art. We encourage you to experiment by changing holds around periodically to give variety to your LedgeWall installation. You don't have to move them all – moving just a few hold can make a big difference.

Tighten the holds very firmly with the special wrench provided. Over time, the holds may loosen up, so check them periodically to make sure they are tight.

LEDGEWALL MAT HANGING KIT

Contents of kit:

- (2) lag bolts, 3/8 x 3/4"
- (2) bolt hangers
- (2) steel accessory carabiners
- Instructions (this page)

The LedgeWall Mat Hanging Kit provides a convenient way to hang LedgeWall floormats onto traversing panels for storage, protection of the wall and holds, and as a barrier to unauthorized use.

LedgeWall mats to be used with this kit are provided with sewn loops for hanging. The hanging kit must be installed after the wall is installed, since different situations call for various mounting heights. If the mats are hung close to the floor, they are easy to remove without a stepstool or ladder, but hanging them somewhat higher gives an added measure of security. If even more security is required, the carabiners may be replaced with padlocks.

Installation:

- Choose how high you want the hangers to be. The bolt hole should be at least 83" above the floor. At this height, the bottom of the six foot long LedgeWall mat will be about 2" above the floor. As noted above, you can make the hangers higher if you want.
- Carefully measure and mark the chosen height on each panel, 1" in from each edge of the panel. A chalk line is a convenient way to mark the height on a whole line of panels at once.
- Drill a 5/16" hole at each hanger position and mount the hanger using the lag bolt.
- Hang the mats from the carabiners. You can either leave the carabiner on the hanger, or on the mat when you take the mat down, whichever seems more convenient.



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