

DRYWALL

Hanging Drywall 108
 General Instructions 113
 Scuttle Hole 114
Water Heater Loop 114
Final Details 114

Safety Talk

Basic Construction Safety

1. Drink plenty of water and watch for dehydration!
2. When you are tired - Rest!
3. Know where the First Aid Kit is - if you are hurt see your House Leader or Site Host immediately. Our Accident Procedure is in the Site Host book, please follow it.
4. Fill out an Incident Report any time the First Aid Kit is opened.
5. Keep a name tag on at all times.
6. Use Common Sense! Keep an eye on your own safety and the safety of others.
7. Concentrate -- especially if you are on a ladder or roof.
8. Watch for trip hazards wherever you are going.
9. Help keep the site safe by picking up and moving things that are in the way.
10. If you see something unsafe tell your House Leader or a Staff Member.
11. Hardhats are required to be worn at all times through the completion of drywall lids.
12. Either prescription or safety glasses should be worn at all times when creating dust.
13. Dust masks should be worn at all times when creating dust.
14. Please refrain from using ear buds on site, as they caused distraction and are a safety hazard.
15. Do not use cell phones or other electronic devices while working as they create safety hazards.

Lifting and Carrying

1. Bend your knees and lift with your legs not your back.
2. If something is too heavy, get help - don't hesitate to ask!
3. Make sure you can see over what you are carrying.
4. When carrying something longer than 8 feet have a person on each end.

Ladders

1. At the beginning of each day inspect all ladders for any structural defects that would make them unsafe. If any defects are found, mark the ladder(s) and set it aside for the Site Supervisor's disposition.
2. Use the right size ladder and place it on a solid footing
3. Never lean an A-frame ladder against anything, always use it fully opened.
4. Never stand on the top step or back side of a ladder.
5. Don't stretch/lean too far – always keep your belt buckle between the ladder uprights - take the time to move the ladder with your work!
6. Get someone to steady your ladder if needed.
7. Only one person on a ladder at a time.
8. The 4 to 1 rule: For every 4 feet of height, move extension ladders one foot away from the wall.

Power Tools

1. Make sure you know how to use a power tool and don't disable safety features.
2. Wear safety glasses when using power saws and other power tools that create flying debris.
3. Make sure power cord is unplugged before performing any tool maintenance.

4. Take off gloves when working with saws.
5. Watch fingers near moving parts and tie back long hair.
6. Secure all loose clothing (shirt cuffs, nail pouches, etc.)
7. Watch the power cord when cutting and don't carry a power tool by its cord.
8. Get help when cutting large/long pieces of material.

Drywall Safety

1. Always cut away from yourself when cutting drywall.
2. Always carry drywall sheets vertically with a minimum of two people.
3. Be careful around drywall lifts and ask for operating instructions.
4. For safety and straighter cuts always use sharp blades when cutting drywall.
5. All shop vacs used for dust collection must have air filter system and removable dust bag to reduce the amount of airborne dust.

Key Things to Remember

1. Non-paper board is for wet walls only. NOT Ceilings.
2. Use soffit board for exterior porch lids.
3. Use only screws on ceilings.
4. Make certain all nails and screws are properly set.
5. Verify all small closets are completed.
6. Bed top edges of all upper wall sheets in caulk to prevent air leakage.
7. Verify water heater platform faces are drywalled.

Efficient Material Usage

Drywall:

1. Joints of top pieces and lower pieces should never fall on the same stud.
2. For full walls less than 12' always use a full sheet of drywall.
3. Use smaller scrap pieces for closets, short walls, etc.
4. On walls longer than 12' break drywall over doors or windows – NEVER at their edges.

Efficient use of volunteers: For Traditional Method

1. One lift team to install soffit board at all exterior locations. When finished move to inside lids.
2. One lift team to begin interior lids.
3. As teams' complete lids move them to hanging exterior walls and finally interior walls.
4. One lift team to install garage lid (send lift inside when lid is completed) and have team complete walls.
5. One team to install both bathrooms (the whole room).
6. One team to install closets (ceiling and walls).
7. Each crew needs at least one experienced person to cut and fit the sheets in place. Use less experienced people to complete the nail pattern. Ceiling crews especially should do this to keep moving. Split up all the experienced people evenly with the new volunteers and homeowners.

For Flat Stack Method

1. One team in garage to cut and install.

2. Cut team in main area to cut all non-garage sheets to required length (dimensions Provided by teams 1-4).
3. Teams 1 through 4 located in bedrooms to cut out penetrations and install sheets.

Hanging Drywall

Sheetrock is the trademark name of a manufactured panel made out of gypsum plaster encased in a thin cardboard. Sheetrock is also used generically for any drywall product. It is also called drywall or gypsum wallboard or plasterboard. Sheetrock is usually 1/2" or 5/8" thick and 4' x 8' or 4' x 12' in size. The panels are nailed or screwed onto the framing and the joints are taped and covered with a joint compound.

We use four types of sheetrock for different applications:

1. Soffit board (Brown edge label and face - 4x12) for exterior ceilings.
2. Paper-less board (4x8) is made mildew & moisture resistant for use in the bathrooms, and on laundry room and kitchen wet-walls. Install on walls only. Never use paper-less board on any ceiling. Always complete the bathroom before other wet walls.
3. Ceiling Board (Yellow and red edge label and white face paper – 4x12) is to be used for all other interior areas (including bathroom and laundry closet ceilings).
4. Type X Fire Rated Board (says type x on end label, is 5/8" thick and has white face paper) is required on all garage surfaces.

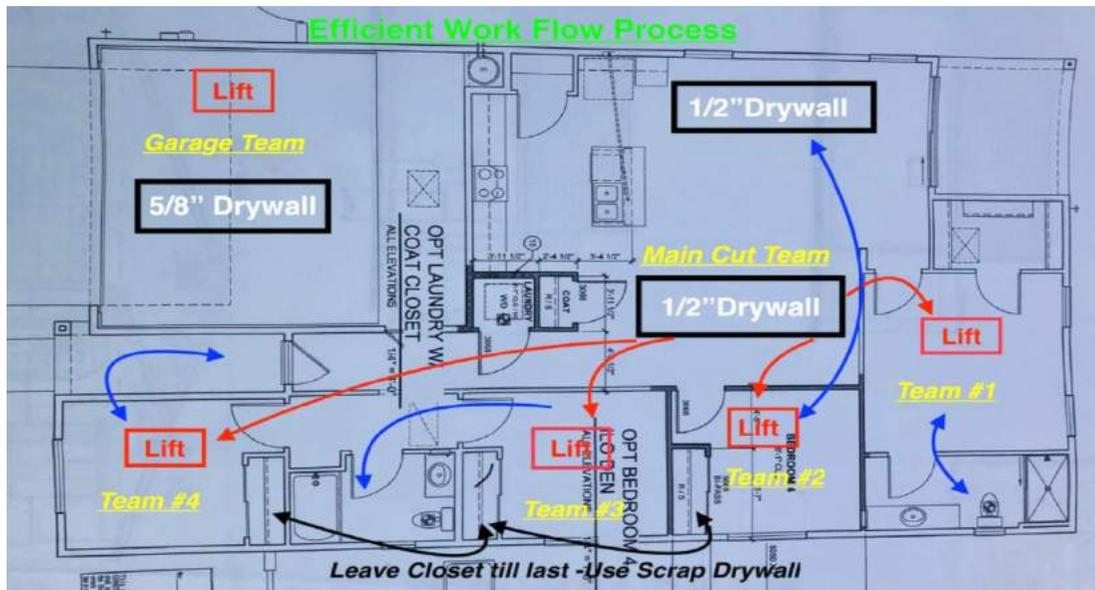
Always carry drywall sheets vertically so that they can't sag and break. Use at least two people.

When measuring drywall that fits in between two walls find the actual distance, subtract 1/4" from that measurement and cut it. Always install sheet tight on left side. Minor gaps are acceptable since all joints and corners will be covered with tape, drywall mud and texture to create a uniform surface.

To cut drywall, score the paper on the front side of the sheet twice using a utility knife and a T-square. Fold the pieces at the break and cut the back paper.

Flat Stocking Drywall Material:

Important Note: If you decide to use this method instead of our traditional method of installing drywall, you need to inform your Site Supervisor ahead of time. They need to know, so they can set up the flat stocking of the drywall material when it's delivered to the site.



Efficient Drywall Workflow Process:

1. 1/2" Drywall material will need to be stocked in two piles in the main living room area. This will give you a central area to cut the lengths of drywall to circulate to each room.
2. 5/8" Drywall material will need to be stocked in the garage. Make sure drywall is stocked closer to one (inside) side of the garage. This will allow you more room to install your ceiling lids on the opposite (outside) side.

The method described here is limited by the number of volunteers and leaders present.

1. You will need 6 - 8 leaders, one leader leading an install group in each specific room and two in the cutting room (living room).
2. A total of 25 volunteers would be ideal. The group of 25 will need to be placed throughout the house in groups of 4 in each specific room. If there is a lack of volunteers/groups on site then limit your teams to just a couple of rooms.

Example; The master bedroom will have four volunteers and one leader in the room. Each individual room will follow the same model with the exception of the living room. The living room will be the main cut area with the "CUT Team".

General Procedure:

- The "CUT Team" will consist of two experienced leaders and two volunteers.
- They will only cut straight sections from the piled-up sheetrock.
- They will deliver these cut sections to each appropriate room from which that section of drywall was requested. They will also keep track of left-over pieces for use in small areas.
- An "Install Team" will consist of one experienced leader and four volunteers. They will be responsible for a specific room as assigned.
- Each Install Team will call out their required drywall section size for their room to the CUT Team.
- The CUT Team will cut the sheet of drywall and deliver it to the appropriate room for the Install Team who will cut out any required cut-outs (e.g. vents) and install the sheet.
- This will repeat for each room that has an Install Team present.

- This rotation should start at the master bedroom and flow to each team in each major room. The garage team is the only team/room that the cut team will not cut for.

Example:

1. Team One (master bedroom) will measure the total length of their first ceiling lid area (typically beginning at the outside wall location). They will subtract $\frac{1}{4}$ " inch off this total length measurement.
2. Team One will Call Out to the CUT Team their measurement.
3. While waiting for their sheetrock to be cut. Team one can measure all the cut-outs (vents and boxes) that will need to be cut in their sheetrock.
4. Once the sheetrock is delivered mark and cut out all necessary vents and boxes. Make sure the cut-out holes are as close and snug as possible.
5. Next, set the cut sheet on the lift and install. Do the install completely (install all screws required). This can be done with two installers so the other two can measure for the next sheet and start repeating the process until the room ceiling is completely done.
6. The team then installs all the upper sheetrock on the walls in the room, using the same basic procedure. *An EnergyStar air barrier requirement is that before attaching the upper sheet on any wall, we must run a bead of caulk along the top plate, and then bed the sheetrock in it.*
7. Once upper walls are completed. Move to the next room and repeat all the same procedures.

Leave lower wall sheetrock to be installed once all lids in the house are completed. Leave small areas (closets) till last, so you can use any scrap material that may fit.

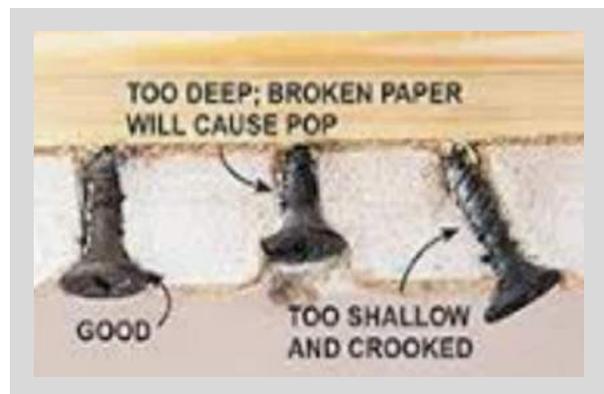
The sole purpose for this process is to get a large volume of work completed safely and efficiently by keeping the flow of work moving smoothly. **DO NOT RUSH ANY OF THIS WORK!**

Regardless of which method you use, the following rules apply.

The standard pattern for attaching drywall is a nail or drywall screw every 8" (a total of 7 nails or screws per each 48" wide sheet). Verify per plans/with site super any special circumstances for your house.

Draw a line on the sheetrock along the truss or stud with a T-square or use the marking jig to help locate where to nail. Nails or screws on the edges should be within 1" of the seam to be covered by drywall tape.

- a. Use only screws on ceilings.
- b. Walls can be done with screws or nails, but it should be consistent throughout.
- c. Make certain all nails and screws are properly set (see photo at right).
- d. REMOVE any nails or screws that do not hit framing.



Ceilings are also known as "lids".

An EnergyStar air barrier requirement is that before attaching the upper sheet on any wall, we must run a bead of caulk along the top plate, and then bed the sheetrock in it

Installation order: Install porch lids, interior lids, the upper portion of exterior walls, the lower portion of exterior walls, the upper portion of interior walls, and the lower portion of interior walls. Have a separate crew do the garage ceiling and walls while the other work is being done. Hang drywall on the ceiling perpendicular to the direction the trusses are running.

Hang drywall on the walls horizontally. Make sure the top wall sheets are pushed tight against the ceiling and ***remember to bed the top edge in a bead of caulk.***

Use toe lifts (shown below) to push the bottom sheets tightly up against the upper sheets.

For walls less than 12' long always use a single, full sheet of drywall.

Butt joint- (1) The junction where sheets of drywall meet on the 4-foot edge. (2) To place materials end-to-end or end-to-edge without overlapping.

Always try to put the cut edges of the sheets against the wall and the factory edges together at the joint.

DO NOT PIECE SCRAPS, use full sheets and cut to fit.





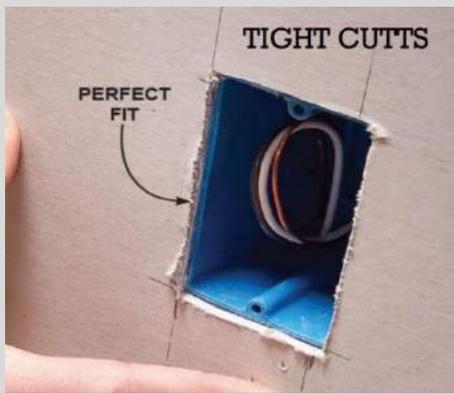
Always put breaks above openings, never at the edge.



Stagger all butt joints by at least 24".



Avoid joint breaks next to outlets, switches.



Make cuts as close as possible to the boxes.

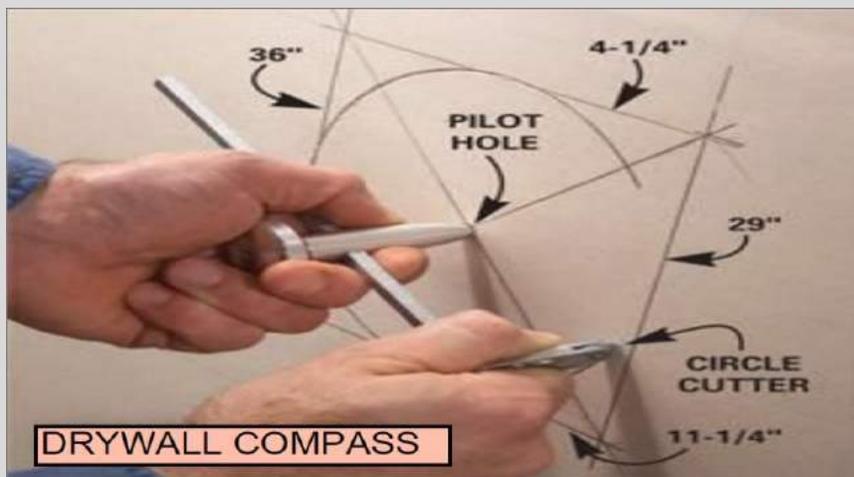
Transfer the full measurements of each penetration from the wall/ceiling to the sheet of drywall. Always take these measurements from the same edges (top or bottom, left or right).

Cut out the openings with a drywall saw before installing the drywall.

Use a drywall compass to cut out circular openings.

Cut out window openings with a drywall saw.

Using a drywall saw and compass helps keep the air cleaner as much less dust is put into the air.



Do the following to remove sheetrock from over doorways as less dust is created than with a saw:



1. From the back side make a nail hole in each corner. Then score along the three edges of the frame with a utility knife and score an "X" across the entire opening.
2. From the front side, nail-off the three edges of the frame. Then score along the three edges of the frame with a utility knife (using the corner holes to guide you) and score an "X" across the entire opening.
3. Hit the sheetrock in the middle of the "X" to break the pieces free.

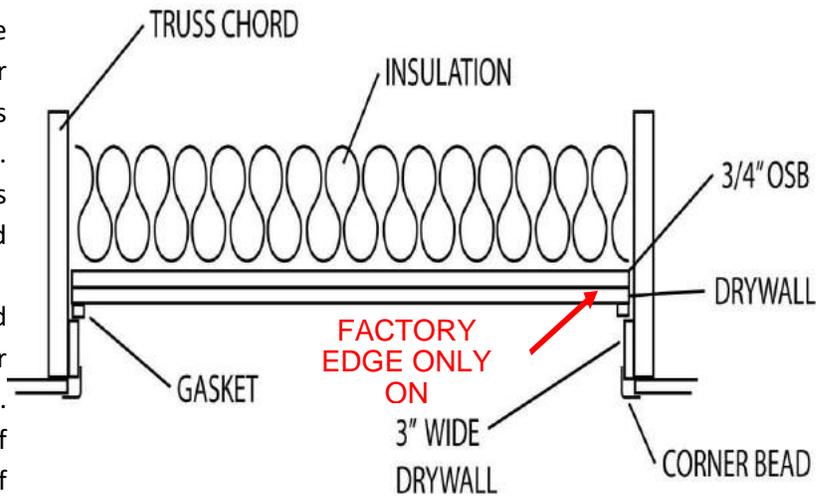
General Instructions

1. As needed, smooth the edges with a drywall rasp.
2. Nail top and bottom plates every 8". That means two more nails in between every stud. This helps to secure the top of the wall, makes the bottom straighter, and makes installing the baseboards easier
3. On exterior corners, run the drywall up to the edge of the studs, NOT BEYOND. By doing this you allow room to properly install the corner bead (see picture). Do the same procedure on window openings and the scuttle hole.
4. Wrap scuttle hole and windows with drywall. Install either the top and bottom sills or the sides first. Always use the factory finished edge of sheet against the window frame. Then install the other two pieces in between the first two pieces. Use shims if needed to level and plumb the windowsill, header and sides.
5. We do not install cornerbead; it will be done by the finishers.
6. Do not wrap any door openings with drywall unless specifically instructed otherwise. Closet doors will be wrapped with door jamb material.
7. When installing drywall around the tubs, be sure to run the edge of the sheets **UP TO, BUT NOT OVER** the tub flange.



Scuttle Hole

1. Install 2-3" wide pieces of sheetrock inside the scuttle hole flush with the lower edge of the frame, to serve as the ledge for the lid to sit on. The top edge of these pieces must be the factory finished edge.
2. Cut the attic access cover and back it with a 3/4" piece (or two 1/2" pieces) of OSB. Attach three thicknesses of blue foam on top of this, if the scuttle is in a conditioned space.
3. *Put the access cover back in place be textured.* This is the ideal place for it to be textured, and not accidentally thrown out.



Water Heater Loop

Instead of cutting out an opening in the middle of a sheet for the water heater loop, try doing what is shown in the picture to the right. Cut all the way across the sheet, even with the bottom of the pipe, and then make two small u-shaped openings in the bottom of the top piece to slip over the pipe. This usually results in a much neater and easier to tape finish job.



Final Details

In order to make sure nail/screw heads are properly recessed, run a metal edge (a speed square or putty knife works well) over them. If you hear a clicking sound or feel a bump as you are doing this, you will need to further recess the fasteners.



Please be very thorough doing this recess check as the protruding heads damage the finisher's tools.

Also install additional fasteners as needed next to screws or nails driven too deep.