DRYWALL

HANGING DRYWALL...
SAFETY TALK

Basic Construction Safety

- #1: Drink plenty of water and watch for dehydration!
- When you are tired - Rest!
- 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.
- Fill out an Incident Report any time the First Aid Kit is opened.
- Keep a name tag on at all times.
- Use Common Sense! Keep an eye on your own safety and the safety of others.
- Concentrate -- especially if you are on a ladder or roof.
- Watch for trip hazards wherever you are going.
- Help keep the site safe by picking up and moving things that are in the way.
- If you see something unsafe tell your House Leader or a Staff Member.
- Hardhats are required to be worn at all times through the completion of drywall lids.

Lifting and Carrying

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

Ladders

- 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.
- Use the right size ladder and place it on a solid footing.
- Never lean an A-frame ladder against anything, always use it fully opened.
- Never stand on the top step or back side of a ladder.
- Don’t stretch out too far – take the time to move the ladder with your work!
- Get someone to steady your ladder if needed.
- Only one person on a ladder at a time.
- The 4 to 1 rule
  For every 4 feet of height, move extension ladders one foot away from the wall.

Power Tools

- Make sure you know how to use a power tool and don’t disable safety features.
- Make sure power cord is unplugged before performing any tool maintenance.
- Wear safety glasses when using power saws and other power tools that create flying debris.
- Take off gloves when working with saws.
- Watch fingers near moving parts and tie back long hair.
- Use a push stick when using the table saw.
- Watch the power cord when cutting and don’t carry a power tool by its cord.
- Get help when cutting long pieces of material.
- Secure all loose clothing.
**Drywall Safety**

- Always cut away from yourself when cutting drywall.
- Always carry drywall sheets vertically with a minimum of two people.
- When using a Rotozip wear eye protection and a dust mask.
- Be careful around drywall lifts and ask for operating instructions.

**Key things to remember**

- Non-paper board is for wet walls only. NOT Ceilings.
- Use soffit board for exterior porch lids.
- Use only screws on ceilings.
- Make certain all nails and screws are properly set.
- Verify all small closets are completed.
- Bed top edges of all walls in caulk.
- Verify water heater platform faces are drywalled.

**Efficient material usage**

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

**Efficient use of volunteers**

- One lift team to install soffit board at all exterior locations. When finished move to inside lids.
- One lift team to begin interior lids.
- As teams complete lids move them to hanging exterior walls and finally interior walls.
- One lift team to install garage lid (send lift inside when lid is completed) and have team complete walls.
- One team to install both bathrooms (the whole room).
- One team to install closets (ceiling and walls).

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.
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:

- **Soffit board** (Brown edge label and face - 4x12) for exterior ceilings.
- **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.
  - 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).
  - Type X Fire Rated Board (says type x on end label, is 5/8” thick and has white face paper – 4x12) 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 ½ inch from that measurement and cut it. Split the difference (¼” on each side). Minor gaps are acceptable since all joints and corners will be covered with tape, drywall mud and texture to create a uniform surface.
  - **Never cut sheetrock on the pile, always move it off to the side first. Otherwise, you will delay others who need sheets from the pile.**
  - To cut drywall score the paper on the front side of the sheet using a utility knife and a T-square.
    a. With the piece standing vertically, gently tap behind the scored line with your knee to break the gypsum.
    b. Fold the pieces at the break and cut the paper from the back of the sheet.
    c. Use a Surform Plane (drywall rasp) to smooth any jagged edges.
  - **Nail or screw drywall every 8” for a total of 7 nails or screws per each 48” wide sheet. Draw a line along the stud with the 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. 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, upper portion of exterior walls, lower portion of exterior walls, upper portion of interior walls, and lower portion of interior walls. **Have a separate crew do the garage ceiling and walls while the other work is being done.**
  - On 9’ high walls, use 54” wide sheets.
- 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 to push the bottom sheets up against the upper sheets.
- For full walls less than 12’ 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 sheets.

- Always put breaks above openings, never at the edge.

- Stagger all butt joints by at least 24”.

- Avoid joint breaks next to outlets, switches, or edges of windows and doors.

There are two methods that can be used to cut the openings in the drywall for electrical boxes and other penetrations.

1. Transfer measurements of the center of each penetration from the wall/ceiling to the sheet of drywall, and then tack the sheet in position. Plunge a roto-zip at the center mark, and enlarge the opening to the size of the penetration. Always set the depth of the roto-zip bit to the thickness of the sheetrock plus 1/8” Only leaders should use the roto-zip.

- Make cuts as close as possible to boxes.
• Only experienced Leaders should use the Roto-zip for cutting drywall around fixtures.

2. 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 either a roto-zip or a drywall saw before installing the drywall.

   This method helps keep the air cleaner as no dust is falling from the ceiling.

An alternate to sawing to remove sheetrock from over doorways is as follows.
• 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.
• 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.
• Hit the sheetrock in the middle of the “X” to break the pieces free.
• As needed, smooth the edges with a drywall rasp.

   *Whenever practical cut with a knife and snap the sheetrock instead of sawing, as this also decreases the amount of dust in the air.*

• **Nail top and bottom plates every 8”**. That means two more nails in between every stud. See the following picture. This helps to secure the top of the wall, makes the bottom straighter, and makes installing the baseboards easier.

• 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. Do the same procedure on window openings and the scuttle hole.

• Wrap scuttle hole and windows with drywall. Install either the top and bottom sills or the sides first. Then install the other two pieces in between the first two pieces. Use shims if needed to level and plumb the window sill, header and sides.

   *We do not install corner bead, it will be done by the finishers.*

• **Do not wrap any door openings with drywall unless specifically instructed otherwise. Closet doors will be wrapped with door jamb material.**

• 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 finishers will install 1/2 x 1 corner bead on the top edges of all four sides provide a smooth surface to later attach the lid gasket. 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.
- **Put the access cover back in place be textured.** This is the ideal place for it to be textured, and not accidentally thrown out.

- When installing drywall around the tubs, be sure to run the edge of the sheets up to, but not over the tub flange.

**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 left. Cut all of 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.*