



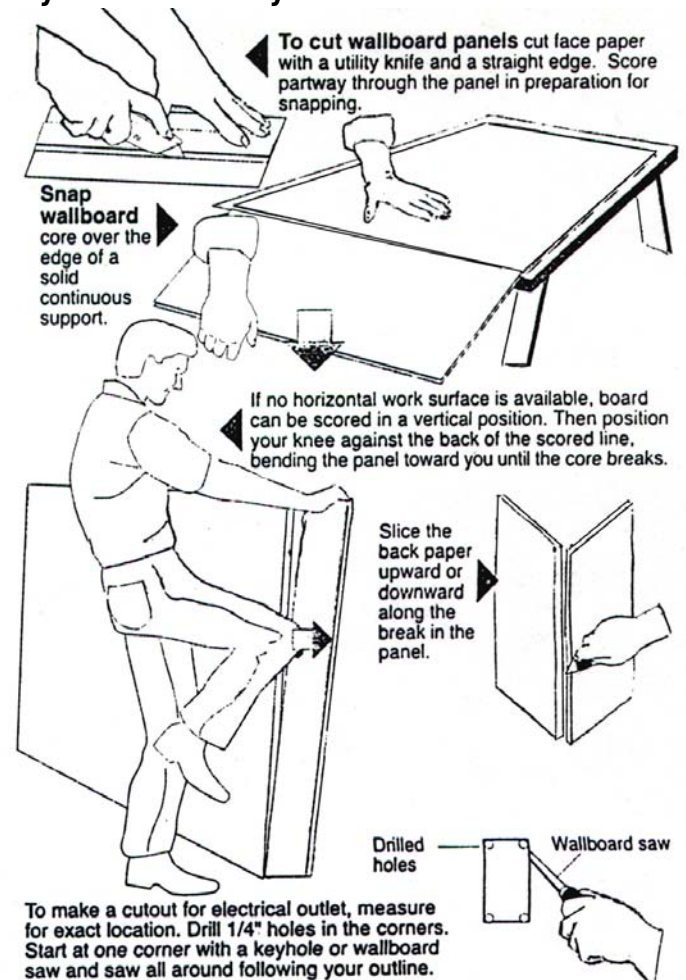
## DRYWALL INSTALLATION

Drywall is the ceiling and wall material used for about 90% of all new home interiors. It is also used frequently for repair or remodeling of plaster walls. Drywall is made from gypsum, and comes in sheets from 4' x 8' to 4' x 16', with a paper coating on both sides. It is a fairly simple, inexpensive material to use, and with a few pointers you can get some very good results with little or no experience.

The first thing to remember about using drywall is that accurate measuring is very important. To cut drywall to the size you need, use a **utility knife**, with a **straight edge** as a guide. Since drywall cuts easily, very little physical strength is required. The drywall doesn't need to be cut all the way through; you cut through the paper and into the drywall on one side, snap the drywall along your cut, and then cut through the paper on the other side with your knife (*see illustration*). A **surform plane** can be used to smooth a rough-cut edge. To make a small hole or cut-out in the center of a sheet (i.e., for a switch or outlet), a **drywall saw** or **key-hole saw** works well.

After cutting the drywall to the size and shape you need, it's time to attach it to the wall. You can use three different methods: nails, glue, or screws. Some people still utilize drywall nails, but most find that drywall screws are quicker, easier and less likely to back out or vibrate loose. Although glue can be used by itself, it's a slow method, so glue is more frequently used in combination with nails or screws to attach the drywall more securely.

Both screws and nails need to be sunk slightly below the surface, so they can be covered later with plaster to conceal them. With nails, you'll have a small dimple or crater around the head from the hammer strike; and with screws, you'll have a small hole where the head has been driven into the drywall. (Screws are best installed with a specially designed **drywall screw gun** or a **drill with a Phillip's screwdriver bit**.) Space your nails or screws about 8" on center throughout the sheet of drywall, driving them into the wood studs or framing and keeping them about 1/2" away from the edges of the sheet. Finish by lightly run the edge of a putty knife across the surface to check that none of the nail or screw heads extend above the drywall; if you get the "chattering" noise of metal on metal, drive the head deeper into the drywall.



(continued)

After you fasten the sheets to the walls, you'll need to hide the seams and nail heads. The joints between sheets of drywall should be covered with a layer of tape and several coats of a plaster-like material known as "**joint compound**." It takes three thin layers of regular joint compound on top of the tape to achieve the correct finish; if you use a "light" version, two coats may be sufficient. **You can't cover the joints properly in one coat, nor can you rush the process.** Each coat must dry completely (about 24 hours) before the next one is applied.

Apply **drywall tape** over each seam – either paper tape embedded in a layer of joint compound, or self-adhesive fiberglass mesh tape. Fold the tape along the center spine and apply it to inside corners the same way that you do joints, placing half the tape on each wall of the corner. (A **corner taping blade** can make this job easier.) To protect outside corners and give you a straight edge, nail metal "**corner bead**" in place, and then coat the edges with joint compound to make them blend in. You don't need to tape over nail or screw heads, but each one should be covered with the three coats of joint compound.

After taping, apply the first layer of joint compound over all the joints and over each nail or screw head, using a 10-inch or wider putty knife (better known as a "**taping blade**") to apply a thin coat of compound – just enough to cover the tape. After this coat is dry, apply another thin coat, a bit wider than the first. When this second coat is dry, sand it to remove any irregularities, using a damp **drywall sponge** or drywall screen on a **hand-held drywall sander**. You can also use an **electric drywall sander** made especially for this purpose; a shroud attached to a power vacuum will reduce the amount of dust you'll need to clean up later. (*Don't use a regular electric sander for this job, because plaster dust will ruin its motor in short order!*) You'll save a lot of work if you take care to make the joints as smooth as possible while the compound is wet. Don't count on heavy sanding later – that's the hard way.

After sanding the second coat, apply the third coat as before, a bit wider yet. You may need to sand lightly after this final coat, also. Then, wipe all dust off the walls with a damp rag. Cover the wall with one coat of **PVA primer**, followed by a coat of a **high-pigment water-base primer** (like Kilz™) before painting or installing wallpaper.

Patience is the key to making the job turn out nicely. You can't rush the taping process, and you need to let each layer of joint compound dry fully before applying the next. If you take your time, you'll develop your skills as you go and have a finished project that you will be proud of.

