



The Wonders of Wonderboard

A Ceramic Tile Contractor Shares His Knowledge of the Ways and Means of Cementitious Backer Units



Sloppy cuts can be avoided by using either a four-inch diamond blade on a high-speed grinder, or a masonry blade loaded on a circular saw.

Story and Photos by
David Hart

I love greenboard. Especially if it's at least six years old and used in a shower or bathtub surround.

Why? Because I'm a full-time ceramic tile contractor specializing in residential remodeling. Greenboard doesn't last very long in areas exposed to water on a continual basis, so I make a good part of my living tearing out rotted drywall

that was installed in showers and tub surrounds. Simple as that.

By the time the homeowner gets around to calling me, water has found its way through the grout or through pin holes in caulking and around the tub spout and diverter handle. The greenboard is wet, crumbly and worthless. The two-by-four studs have started to rot, the insulation is a moldy, smelly mess, and it's a safe bet water has found its way to-and even through-the ceiling below the bathroom.

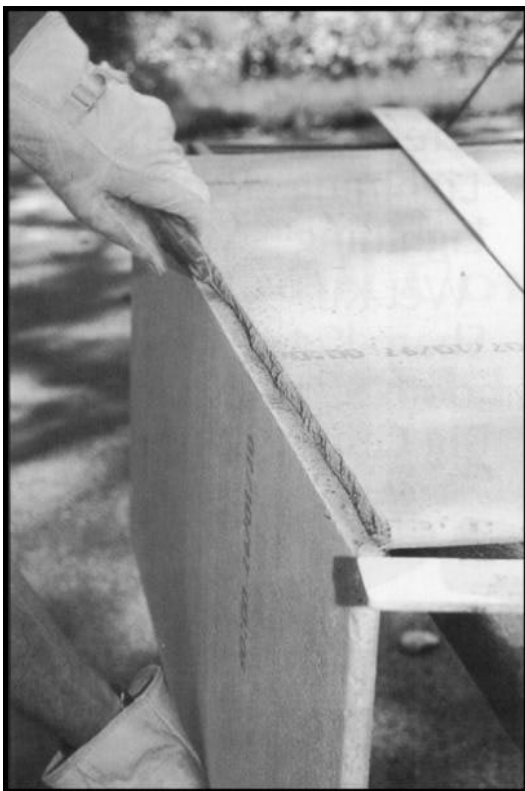
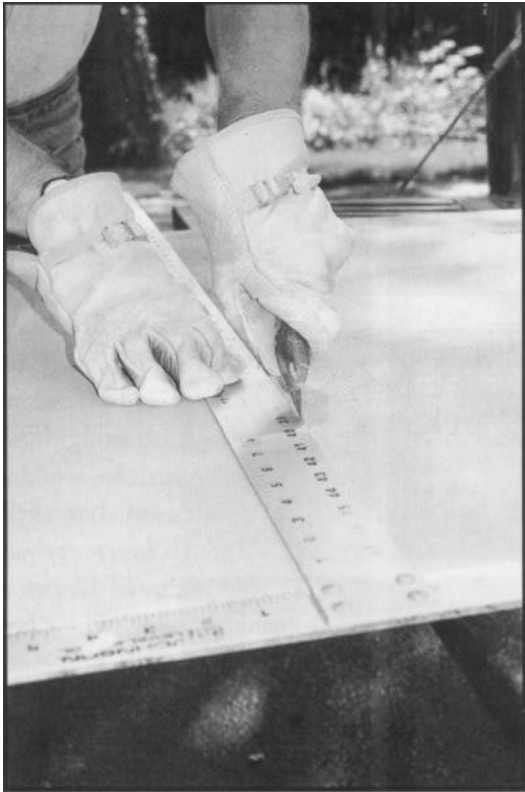
I give them the usual pitch. Repairs are usually for naught, I

say. Why rip out part of the tile and wallboard when the rest of it is probably on its death bed as well? You can pay me now or pay me later.

**Why rip out part of the
tile and wallboard when the
rest of it is probably on its
death bed as well?**

Besides, the tile won't match, and the job will look like a repair. Finding a perfect match to six- or 10-year-old tile is just about impossible. Why pay a couple hundred bucks for a repair when you can pay a little bit more and get a brand new tile installation, complete with a wallboard that won't deteriorate like standard greenboard?

Durock®, Wonderboard and the rest of the cementitious backer units are indeed more expensive and a quite a bit more difficult to work with than a half-inch thick sheet of drywall,



Softer backerboards like Durock can be cut with a standard utility knife. Simply cut through the fiberglass mesh on one side, snap the board and cut the rough the mesh on the other side. Clean up the rough edges with a knife.

but the extra expense and time are worth it in the long run. They last.

In 12 years of tearing out old tile and rotten drywall, I've never seen a tile installation over cement backer boards fail, and I've never had a customer question the virtues of these products. Never. Why should they? They've seen what can happen to greenboard installed in showers.

In fact, nowadays most tile contractors that specialize in residential remodeling use cement backer boards exclusively,

The Cost Factor

The extra expense associated with these products is one factor that keeps so many drywall contractors from using them. It shouldn't.

A typical 3-by-5 sheet of CBU costs about \$10. That works out to about 66 cents per square foot. A 32-square-foot sheet

**A typical 3-by-5 sheet of
CBU costs about \$10. That
works out to about 66 cents
per square foot.**

of greenboard costs around \$8, or 25 cents per square foot. That's quite a difference, but in reality the total cost of the job doesn't increase that much.

Hey, you're not using CBUs throughout that 200-square foot master bathroom. It only needs to be installed in areas that are going to be exposed to water. These backer boards are made for wet areas including showers, tub surrounds and whirlpool decks, which are only a small portion of the total area of a bathroom.

In other words, installing a CBU in some areas of a bathroom

will only serve to add a few more dollars to the total cost of a job.

Explain to the homeowner or general contractor the virtues of Durock® or Wonderboard. It tells them that you care about your work, even 10 years after any workmanship guarantees expire. More than likely, you will get that autograph on the bottom line of your proposal even if your price is a few dollars higher than the other bids.

The Fear Factor

Most drywall contractors I have talked to say the main reason

they shy away from CBUs is because they're hard to work with. Some are, but they are far from impossible to cut, hang and tape. In fact, a few backer boards, particularly Durock®, are quite easy to work with, particularly if you have the proper tools.

I shied away from these products when I first took the plunge and started my own tile contracting business. I was used to working with greenboard, but after I tore enough rotten drywall out of eight-year-old homes to fill a

dump-truck, I had a quick change of heart. With a little practice, I became comfortable with using CBUs on every job. I haven't purchased a sheet of greenboard in years.

**Explain the product's virtues;
you will get that autograph on
the bottom line of your
proposal even if your price is
higher than the other bids.**

CBU products come in a variety of sizes, including 32-by-5, 3-by-5, 3-by-4 and even 4-by-8. The largest size is just about impossible for one person to handle, but at about two pounds per square foot, the smaller sheets are easy to manage.

Cut, Hang and Tape

There are several ways to cut CBUs. But for smooth, straight and clean cuts, I prefer a four-inch, dry cut diamond blade loaded on a Makita grinder. This combination cuts Durock® and Wonderboard like the cliched hot knife through butter.

Yes, carbide-tipped scoring tools work just fine, and I even use a utility knife regularly, but nothing can beat the versatility of

a dry-cut diamond blade. These high-speed blades cut circles, L-shapes and any other type of complex cut you might need or run across on a jobsite. Standard hand tools can't achieve these types of cuts. And the dry-cut diamond blades are very sturdy and last for years.

I've used my diamond blade to cut some things that I proba-

bly shouldn't have, but the blade has lasted for about three years. In fact, the diamond blade probably has that many more years of life left in it. If you do not want to purchase a

I insist the hanger leave the joints untaped. That way, I can run a piece of mesh tape along the joints and then mud them with a layer of thin-set mortar.

Smooth or Rough Side

Take a look at a sheet of Durock. It's got two sides; one is as smooth and slick as an ice rink, the other side is as rough as an asphalt highway. Ask 10 tile contractors which side should face out, and you're likely to get 10 different answers-or at least 10 different reasons.

I prefer the smooth side. It's easier to cut, it's easier to draw pencil lines on and it seems to hold mortar and glue just as well as the rough side. I'm convinced that as long as the tile is installed properly, it doesn't matter which side is facing out.

Marty Duffy, marketing communications manager for USG Corporation, said it depends on the application: "We recommend the smooth side for mastic (pre-mixed tile glue) installations and the rough side for thin-set mortar installations?"

Don't know what the tile installer on your jobsite wants? I say hang it smooth side out.

Other backerboards are similar in appearance and texture on both sides. They, of course, leave little room for doubt as to which side should face out.

four-inch grinder and diamond blade, which can add up to \$150 or more, who not try a masonry blade on a circular saw?

Those blades are quite a bit bigger than a four-inch diamond blade, so they can not cut tight curves like a smaller blade can. They do, however, work very well on L-shapes and narrow

If you insist on using a standard utility knife or carbide-tipped scoring tool, stick with the softer backerboards such as Durock®. I can usually get a dozen or more straight cuts out of one knife blade.

The sharper the blade's edge, the better it will cut. Simply mark your measurement and score through the layer of fiberglass mesh that holds these backerboards together. Break the board at the cut and slice through the mesh on the other side. Then, clean up and rough edges along the cut with the knife. It's pretty similar to cutting drywall.

There are some CBUs that are more dense and more rigid than others. In order to get a clean, workable cut, those backerboards have to be carved with a high-speed diamond

At about two pounds per square foot, the smaller sheets are easy to manage.

blade. Scoring tools and standard utility knife blades just simply won't give the smooth edges that are necessary for a workable installation.

That's one reason I'm such a big fan of USG's Durock®. It's lighter than most backerboards, and it's not as dense as other CBUs. That makes it easier to cut, easier to carry up a flight or two of stairs and easier to hold in place for attachment to the studs.

Inch-and-a-half galvanized roofing nails are best for attaching CBUs, because regular drywall nails will rust and deteriorate too easily in areas exposed to water on a regular basis.

Screws are even better, but regular drywall screws also will rust. That is why it's a good idea for you to use galvanized deck screws instead of the regular drywall screws. And, it's also wise to run a bead of glue along the stud behind the backerboard for extra holding power.

In showers, I like to hold the CBU off the shower pan about two inches. Too many drywall installers simply just lay the

It's a good idea for you to use galvanized deck screws instead of regular drywall screws.

Durock® right on the shower floor when they nail it to the wall. That just won't do. Water sits in the shower pan under the floor tile and wick up the backerboard. The soluble salts and other chemicals leach through the grout joints and leave ugly stains.

Wet wallboard also is prone to mildew, which will show through grout joints. In bathtub surrounds, install Durock® or Wonderboard just like greenboard.

I always insist that the wallboard hanger leave the joints untaped. That way, I can just run a piece of mesh tape along the joints and mud them with a layer of thin-set mortar. Nothing beats a thin layer of latex-fortified thin-set as a taping compound over the CBU. I'm sure most tile contractors would rather tape their own joints, particularly those of us who rely on strong long-term relationships with our customers.

What about standard drywall mud? Regular drywall com-



A four-inch diamond blade on a high-speed grinder is the best way to cut cementitious backer units. The tool can make any kind of complex cut.

ound is just too unstable to provide a good base in a wet area. If you do insist on taping your own joints, it would be advised to use a compound that will stand up to moisture over a long period of time.

Remember when you last used a new or unfamiliar product? It took awhile to master it, but with a little practice and the right tools, you figured it out. Isn't it time you learned how to work with cement backerboards? Your customers will be glad you did. 🛠️

About the Author

David Hart of Centreville, Va., is a free-lance writer who writes mostly about fishing but makes a living installing ceramic tile and marble.