
Upgrading the Finished Appearance of Gypsum Board Walls:

There's more to it than meets the eye

Material provided by Untied States Gypsum Company



The finished results of a room treated with surface preparation and joint compound matched with the gypsum panels.

There are many ways to upgrade the finish appearance of interior gypsum board walls. And the good news for drywall contractors and builders is that most upgrades can be accomplished quickly and cost effectively.

The payoff for virtually any upgrade is a superior looking interior wall surface—a value enhanced home or office environment, and potentially higher profits—for both the contractor and builder.

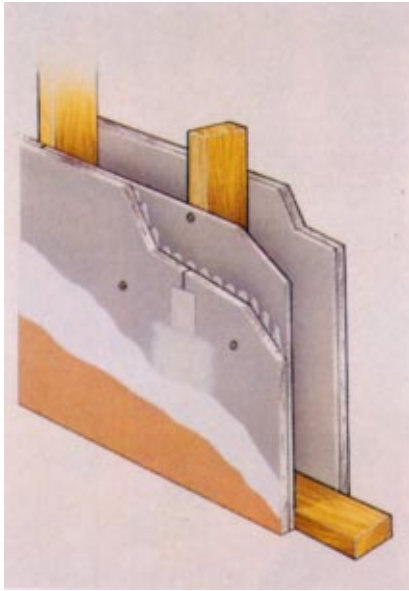
There are three basic means of improving drywall surface appearance. You can:

- upgrade the quality of the gypsum board panel;
- upgrade the methods of attaching panels to framing; and
- upgrade the quality of surface preparation and finish systems.

Panel Upgrades

Of the three methods, the first—upgrading the quality of the panel—can be the most expensive. But it can also be the most effective. The most basic panel upgrade is to go from a standard 1/2" thickness to a 5/8" thickness. The thicker 5/8" board delivers a stronger, flatter surface. It also resists nailpops more effectively and provides improved impact resistance, resulting in enhanced long-term durability and better appearance.

Double-layer construction is another upgrade alternative. Though not a common construction practice, installing two layers of gypsum board, rather than one, is an outstanding means of achieving a superior drywall surface. Double-layer gypsum board construction follows the same principles flooring contractors



Above, double-layer drywall construction is an excellent means of achieving a superior drywall surface. This double-layer assembly features a 3/8" Sheetrock Gypsum Panel base layer screw-attached to studs using 1-1/4" Type W screws; a 1/2" Sheetrock Gypsum Panel face layer adhesively applied onto base and reinforced with 1-1/2" Type G screws; Sheetrock Joint Tape; taping and topping coass of Sheetrock All Purpose Joint Compound; and a Sheetrock First Coat prime coat.

Below, standard 1/2" Sheetrock Gypsum Panels stacked on the jobsite, ready for installation.



employ when they install two layers of plywood as a subfloor (a very common practice). The benefits are obvious. Double-layer construction provides superior strength, durability and improved appearance.

The illustration at right shows a typical double-layer drywall assembly, using Sheetrock brand Gypsum Panels, from United States Gypsum Company. The 3/8" base panel is screw-attached to studs using 1-1/4" Type W screws spaced 16" o.c. on walls and 12" o.c. on ceilings. After the base panel joints are treated, the 1/2" face panels can be adhesively applied onto the base layer and reinforced with 1-1/2" Type G screws.

This type of double-layer assembly yields the finest surface appearance possible in drywall construction. However, double-layer drywall construction is rarely employed solely for the sake of appearance. Rather, it is much more commonly used in steel framed construction to meet fire code restrictions. Until recently, double-layer construction was, in fact, the only way to achieve a two-hour drywall fire-rating. That, however, is no longer the case, thanks to the recent introduction of Ultracode Gore 3/4" Sheetrock Gypsum Panels from United States Gypsum Company. Ultracode Gore panels are an integral component in the first single-layer gypsum board assembly to provide a two-hour fire rating. The system also, incidentally, offers contractors another means of improving finished appearance. Ultracode Gore's inherent strength and outstanding crack resistance provide an exceptionally good-looking and long-lasting finished wall surface.

Another United States Gypsum Company panel product—SW Edge Gypsum Panels—offers contractors one other very effective means of upgrading finished surface appearance. The panels, available in 3/8", 1/2" and 5/8" thicknesses, have a special tapered-and-rounded edge design which minimizes ridging and beading. The design helps create a flatter, stronger joint that can provide dramatically improved aesthetics, especially in critical light conditions.

Application of SW Edge panels is essentially the same as that for conventional gypsum panels. The only difference is that the V-groove between the two tapered edges is pre-filled with

Sheetrock Setting-Type (Durabond) or Lightweight Setting-Type Joint Compound (Easy Sand). The result is a stronger, smoother joint, and with the SW Edge contour, no more joint compound is required than with conventional edges.

Attachment Upgrades

Nailing is the most widely used means of attaching gypsum board panels to wood framing, and it is a perfectly acceptable means. However, there are alternatives which can serve to improve finished

appearance.

The most obvious attachment upgrade is to replace nails with screws. Screws provide two basic benefits. First, since they are held in place mechanically, the problem of nail pops is minimized. And second, since fewer screws are required per panel, there are fewer heads to spot and fewer potential surface imperfections. According to the 4th Edition of the Gypsum Construction Handbook, just published by United States



One means of improving drywall appearance is to upgrade the method of attachment. The most basic upgrade is to replace nails with screws. Screws deliver better holding power, minimizing the problem of nail pops.

Gypsum Company, nails should be spaced a maximum of 7" o.c. for ceilings and 8" o.c. for walls. Screws need to be spaced a maximum of 12" o.c. for both walls and ceilings—that's as much as a one-third reduction in the number of fasteners needed per panel.

Using adhesive in addition to screws or nails is another basic attachment upgrade. A single bead of drywall stud adhesive applied to wood framing improves strength and greatly reduces the number of fasteners required. Again, by reducing the number of fasteners you reduce the number of heads to spot and the potential for surface imperfections. Adhesive also helps minimize nail pops. Additional labor required to apply adhesive is minimal, and whatever extra is required can be compensated for by the reduced number of fasteners needed per panel.

Surface Preparation Systems

A recommended specification recently developed jointly by four leading industry trade associations (Association of the Wall and Ceiling Industries, Ceilings and Interior Systems Construction Association, Gypsum Association and the Painting and Decorating Contractors of America) establishes several different



Left, Sheetrock Gypsum Panels are attached and ready for decorating. Joints have been rapped and treated with Sheetrock All Purpose Joint Compound (Plus 3); fastener heads have been spotted with the joint compound. The walls were then covered with a prime coat of Sheetrock First coat, which minimizes decorating problems such as “joint banding” and “photographing.” The photo on page 18 shows the finished results of this process.

levels of gypsum board finish.

The levels run the gamut from simply taping the wallboard joints and “spotting” fastener heads to a full treatment, including taping and embedding joints; applying up to three coats of joint

compound overall joints, angles, fastener heads and accessories; and application of a skim coat of joint compound over the entire surface.

Which level should be used on any given project is dependent upon a number of factors. The most basic consideration is the location and visibility of the

wall and ceiling surface. Areas which are not highly visible, such as attics, building service corridors and warehousing areas generally require only very basic treatment. However, achieving smooth, blemish-free surfaces for high visibility areas requires much more involved finishing procedures.

Other factors which need to be considered include: the type and angle of surface illumination and the type of decorative finish being used (paint, wallcoverings, textures, etc.). Critical

lighting conditions, both natural and artificial, highlight even minor surface imperfections and therefore necessitate upgraded levels of gypsum board surface preparation. Likewise, gloss paints, thin wallcoverings and light textures require more careful surface treatment than do heavy grade wallcoverings and coarse textures, which tend to hide minor irregularities.

In addition to upgrading the level of gypsum board treatment, finished results can also be upgraded through product

selection. Simply put, higher quality treatment products yield higher quality finished results.

When selecting joint compound, for



Top, a contractor installs U.S. Gypsum Company's Ultracode Core 3/4" Sheetrock Gypsum Panel. Ultracode Core panels are part of the first single-layer drywall assembly to provide a two-hour fire rating. And because of the panel's inherent strength and outstanding crack resistance, Ultracode Core functions as an effective aesthetic upgrade.

Below, selection of joint treatment is an important consideration. Sheetrock Lightweight Setting-Type Joint Compound (Easy Sand) offers some unique benefits which can contribute to superior appearance. It combines the best features of setting type compounds with the sanding ease of a drying type all-purpose ready-mixed compound.





Spray textures enhance appearance by adding aesthetic interest and concealing minor imperfections in the drywall surface. The texture seen in these photos was achieved through the use of United States Gypsum Company's Spray Texture Finish.

instance, a number of factors should be taken into account, including job conditions, types of tools being used, crew preferences, types of available joint systems and compatibility of compounds and panels.

Two compounds from United States Gypsum Company can contribute significantly to overall wall appearance on a wide range of projects. Sheetrock Lightweight All Purpose Joint Compound (Plus 3) delivers several benefits compared to conventional-weight all purpose compounds. It weighs up to 35% less; it requires one less coat over metal bead and trim; and it sands with the ease of a topping compound. Sheetrock Lightweight Setting Type Joint Compound (Easy Sand) combines the best features of a setting type compound with the sanding ease of a drying type all-purpose ready-mixed compound. It allows for one day joint finishing and provides low shrinkage and outstanding crack resistance. As the name implies, it also sands very easily. Both products help ensure better-look-

ing finished results.

The prime coat is another important product selection. A high-quality prime coat such as USG's Sheetrock First Goat is specially formulated to equalize both porosity and surface texture differences between gypsum panel face paper and finished joint compound. As a result, it minimizes decorating problems such as "joint banding" and "photographing" and ensures a better looking finished appearance.

No matter what treatment and finishing products are used, be sure they are compatible with the type of drywall selected. For example, United States Gypsum Company's WR panel joints should be finished with setting type compounds only and SW Edge panels require a prefill of setting type joint compound.

Decorating Options

Gypsum board walls can, of course, be decorated in a variety of ways. The most commonly used decorating materials are paint, wallcoverings and texture finishes.

Paint is by far the most widely used drywall decorating material. However, it is also the material least likely to hide minor surface imperfections. And that is an important consideration, especially in light of current construction and decorating trends toward increased lighting, both natural and artificial, which serve to highlight even slight wallboard imperfections.

An alternative to eliminating all surface irregularities is to apply a texture finish which produces a deliberately irregular surface. Besides hiding surface imperfections, textures add considerable design interest.

A wide range of texture products are available, and they deliver a wide range of textured looks. United States Gypsum Company produces a variety of products, each designed to capture slightly different design effects. Aggregated textures, such as Imperial QT Texture Finish, are spray-applied and are available in a range of texture finishes, from fine to coarse. These textures are best suited to ceilings and other surfaces which are not subject to contact. Other textures such as USG Spray Texture Finish and Sheetrock Wall and Ceiling Texture (Tuf-Tex) are suitable for both ceilings and walls and can also be used to create a variety of textured patterns.

One final finishing upgrade worth considering is veneer plaster. Veneer

plaster combines the benefits of plaster surface, including superior strength, abrasion resistance and improved aesthetics, with the easy-installation features of conventional drywall. Best of all, the total in-place cost for a high-quality veneer plaster system such as USG's Diamond Veneer Plaster is only slightly higher than the cost of typical drywall and significantly lower than traditional plaster.

Whether it's through the use of up-

graded panels, superior attachment methods or improved finishing and decorating options, better-looking gypsum board walls deliver benefits for everyone. For the drywall contractor, they are a means of offering builders a value-added product; for builders, the improved wall quality and appearance can be used as a very effective marketing tool; and owners will be able to enjoy improved interior aesthetics for years to come.