

The most common complaint with gypsum board systems is the board joints “photographing” through the final decoration. Miscommunication between what the building owner/designer expects and what the applicator will provide is often overlooked. The NWCB has published a document that clearly spells out 5 separate levels of finish and established procedures (Refer to NWCB Technical Document 300-301.)

Framing

Gypsum wallboard is the most popular, least expensive, non-combustible, quality wall and ceiling system. The foundation of a quality gypsum wallboard system is a straight, true and stable framing system. The gypsum wallboard application follows the framing to which it is attached. If the framing members are warped or misaligned, the gypsum wallboard will not be straight and true. Framing members should be plumb and level to within 1/8 inch in 8 feet. The attachment surface of any framing member shall not vary more than 1/8 inch (3mm) from the plane of the faces of adjacent framing members. In addition, wood framing members shall be of the proper grade for the intended use and conform to DOC Voluntary Product Standard PS 20 American Softwood Lumber Standard. The moisture content of wood framing should be below 19%. The NWCB recommends a deflection criteria of L/240 for gypsum wallboard.

Joints

A slight visible build up over joints is inherent, under certain conditions and is acceptable when joint compound is applied as tight as possible and sanded or sponged to provide a smooth surface feathered into the gypsum board surface. There are several types of joint and topping compounds, refer to each manufacturer for their intended use. Topping compounds should not be used for embedding joint tape.

Procedures

First, it is important that the walls and ceilings be damp mopped, sponged or brushed to remove loose dust, which can “fuzz” up or photograph through the paint system. If the surfaces are to be *any* combination of a **smooth finish, gloss decoration, dark colors, subjected to strong side lighting**, the total surface should receive a trowel-applied skim coat of joint compound or a product designed for the purpose of achieving a level 5. The skim coat fills small blemishes and provides a uniform porosity to the entire wallboard surface. Next, the surfaces should receive a primer containing a high percentage of solids, minimum 24% solids by volume for glossy surfaces. If sprayed, the primer must be back rolled.

LEVEL 5 GWB finish

A proprietary material manufactured for the purpose of achieving a level 5 finish does not eliminate the need for a paint primer, unless specifically stated by the manufacturer.

After the primer paint is applied, blemishes often become visible that were not visible before. These should be touched-up and then judged to acceptance. Touch up for textured surfaces is not as critical as for smooth surfaces. **If the wallboard system is not judged until after the decoration is complete, the touch up of small blemishes may require the total retexturing and or redecoration of the wall or ceiling.**

Judging

A gypsum wallboard application should be judged from a normal viewing distance under normal lighting conditions. A normal viewing distance is approximately 4 feet or greater from the subject wall. Ceilings should be viewed from a stand-ing position. Normal lighting may be artificial or natural daylight that lights the subject area during the hours of use. Normal lighting may be soft or harsh and may be perpendicular or parallel to a wall or ceiling surface. Parallel lighting is the most critical lighting condition. Short (1/2 hour or less) periods of critical light should not be used to judge surfaces. Extremely critical, temporary light, such as flood lights, are used by drywall finishers and painters during their work, but should not be used to judge the finish product.

One should not be able to see EYE CATCHING discrepancies and/or blemishes from a normal viewing distance and with normal light. Drywall application and finishing is somewhat skill intensive and perfection cannot and should not be expected.

Most common mistakes are:

- A failure to clearly specify a particular level of GWB finish
- Over sanding joints and “fuzzing” the gypsum face paper
- Failure to wipe down walls & ceiling immediately prior to painting
- Improper environmental conditions during application and finishing of gypsum panels (refer to NWCB #301)

If a spray applied texture is specified, it is recommended to be applied after a prime coat of paint. After acceptance of the texture application, the surfaces may need to be re-primed followed by a final coat of paint. All painting should follow PDCA and/or MPI recommendations.