

RECOMMENDED SPECIFICATION:  
**Levels of Gypsum Board Finish**



**PULL OUT  
SECTION**



## The Finishing and Decorating of Gypsum Board Surfaces

For many years contract documents describing how gypsum board walls and ceilings should look prior to final decoration with paints and other wallcoverings have included nonspecific terms such as “industry standards” and “workmanlike finish.” And, for as many years, wall and ceiling contractors have tried to fulfill their obligations by providing the finish conditions envisioned but not truly described.

As a means of resolving a common problem, four major trade associations concerned with the manufacture, erection, finish, and decoration of gypsum board wall and ceiling systems have developed an industry-wide *Recommended Specification on Levels of Gypsum Board Finish*. This document is intended to assist specifications writers, architects, contractors, and building owners to more precisely describe the finish of walls and ceilings prior to the application of paints and other wallcoverings, to encourage competitive bidding of suitably finished surfaces, and to enhance the appearance of the final decorative treatment and thereby enlist a satisfied client.

The finish of gypsum board walls and ceilings for specific final decoration is dependent on a number of factors. A primary architectural consideration is the location of the surface and the degree of decorative treatment desired. Painted and unpainted surfaces in warehouses and other areas where appearance is normally not critical may simply require the taping of wallboard joints and “spotting” of fastener heads. Blemish-free, smooth, monolithic surfaces often intended for painted and decorated walls and ceilings in habitated structures, ranging from single-family dwellings through monumental buildings, require additional finishing prior to the application of the final decoration.

Other factors to be considered in determining the level of finish of the gypsum board surface is (1) the type and angle of surface illumination (both natural and artificial lighting), and (2) the paint and method of application, or the type and finish of wallcovering material, specified as the final decoration. Critical lighting conditions, gloss paints, and thin wallcoverings require a higher level of gypsum board finish than do heavily textured surfaces which are subsequently painted or surfaces which are to be decorated with heavy grade wallcoverings. Once all of the factors have been evaluated, specifications can be written in specific terms and responsible contractors are better prepared to present their most competitive bid.

The accompanying consensus document is presented by the **Association of the Wall and Ceiling Industries-International (AWCI)**, **Ceilings & Interior Systems Construction Association (CISCA)**, **Gypsum Association (GA)**, and **Painting and Decorating Contractors of America (PDCA)** as a guide. The members of these international trade organizations are dedicated to providing the best possible job for the most reasonable cost. By incorporating the appropriate sections of this recommended specification into the project documents, the architect, general contractor, and building owner can better anticipate the final appearance of the decorated wall and ceiling system.

## RECOMMENDED SPECIFICATION:

### Levels of Gypsum Board Finish

I. **Scope.** This recommended specification describes various levels of finish of gypsum board surfaces prior to the application of specific types of final decoration. The recommended level of finish of gypsum board wall and the ceiling surfaces varies with the final decoration to be applied and can also be dependent on their location in a structure and the type of illumination striking the surface. Each recommended level of finish is described with typical applications.

II. **Terminology.** The following definitions are applicable to this document.

#### **Accessories:**

Metal or plastic beads, trim, or moulding used to protect or conceal corners, edges, or abutments of the gypsum board construction.

#### **Critical Lighting:**

Strong sidelighting from windows or surface-mounted light fixtures. **syn** severe lighting. See “comments” section of this document.

#### **Joint Photographing:**

The shadowing of the finished joint areas through the surface decoration. **syn** telegraphing.

#### **Primer/Sealer:**

A paint material formulated to fill the pores and equalize the suction difference between gypsum board surface paper and the compound used on finished joints, angles, fastener heads, and accessories, and over skim coatings. See “comments” section of this document.

#### **Skim Coat:**

A thin coat of joint compound over the entire surface to fill imperfections in the joint work, smooth the paper texture, and provide a uniform surface for decorating.

#### **Spotting:**

To cover fastener heads with joint compound.

#### **Texture:**

A decorative treatment of gypsum board surfaces.

#### **Texturing:**

Regular or irregular patterns typically produced by applying a mixture of joint compound and water, or proprietary texture materials including latex base texture paint, to a gypsum board surface previously coated with primer/sealer. See “comments” section of this document.

III. **Levels of Finish.** The following levels of finish are established as a guide for specific final decoration.

#### **Level 0:**

**No taping, finishing, or accessories required.**

*This level of finish may be useful in temporary construction or whenever the final decoration has not been determined.*



#### Level 1:

All joints and interior angles shall have tape embedded in joint compound. Surface shall be free of excess joint compound. Tool marks and ridges are acceptable.

*Frequently specified in plenum areas above ceilings, in attics, in areas where the assembly would generally be concealed, or in building service corridors and other areas not normally open to public view. Accessories optional at specifier discretion in corridors and other areas with pedestrian traffic.*

*Some degree of sound and smoke control is provided; in some geographic areas this level is referred to as "fire-taping." Where a fire resistance rating is required for the gypsum board assembly, details of construction shall be in accordance with reports of fire tests of assemblies that have met the fire rating requirement.*

#### Level 2:

All joints and interior angles shall have tape embedded in joint compound and one separate coat of joint compound applied over all joints, angles, fastener heads, and accessories. Surface shall be free of excess joint compound. Tool marks and ridges are acceptable.

*Specified where water resistant gypsum backing board (ASTM C630) is used as a substrate for tile; may be specified in garages, warehouse storage or other similar areas where surface appearance is not of primary concern.*

#### Level 3:

All joints and interior angles shall have tape embedded in joint compound and two separate coats of joint compound applied over all joints, angles, fastener heads, and accessories. All joint compound shall be smooth and free of tool marks and ridges. Note: It is recommended that the prepared surface be coated with a primer/sealer prior to the application of final finishes. See painting/wallcovering specification in this regard.

*Typically specified in appearance areas which are to receive heavy or medium texture (spray or hand applied) finishes before final painting, or where heavy grade wallcoverings are to be applied as the final decoration.*

*This level of finish is not recommended where smooth painted surfaces, or light to medium weight wallcoverings, are specified.*

#### Level 4:

All joints and interior angles shall have tape embedded in joint compound and three separate coats of joint compound applied over all joints, angles, fastener heads, and accessories. All joint compound shall be smooth and free

of tool marks and ridges. Note: It is recommended that the prepared surface be coated with a primer/sealer prior to the application of final finishes. See painting/wallcovering specification in this regard.

*This level should be specified where light textures or wallcoverings are to be applied, or economy is of concern.*

*In critical lighting areas, flat paints applied over light textures tend to reduce joint photographing. Gloss, semi-gloss, and enamel paints are not recommended over this level of finish.*

*The weight, texture, and sheen level of wallcoverings applied over this level of finish should be carefully evaluated. Joints and fasteners must be adequately concealed if the wallcovering material is lightweight, contains limited pattern, has a gloss finish, or any combination of these features is present. Unbacked vinyl wallcoverings are not recommended over this level of finish.*

#### Level 5:

All joints and interior angles shall have tape embedded in joint compound and three separate coats of joint compound applied over all joints, angles, fastener heads, and accessories. A thin skim coat of joint compound, or a material manufactured especially for this purpose, shall be applied to the entire surface. The surface shall be smooth and free of tool marks and ridges. Note: It is recommended that the prepared surface be coated with a primer/sealer prior to the application of finish paint. See painting specification in this regard.

*This level of finish is recommended where gloss, semi-gloss, enamel, or nontextured flat paints are specified or where severe lighting conditions occur.*

*This highest quality finish is the most effective method to provide a uniform surface and minimize the possibility of joint photographing and fasteners showing through the final decoration.*

#### IV. Comments:

**Critical (Severe) Lighting Areas.** *Wall and ceiling areas abutting window mullions or skylights, long hallways, or atriums with large surface areas flooded with artificial and/or natural lighting are a few examples of critical lighting areas. Strong sidelighting from windows or surface-mounted light fixtures may reveal even minor surface imperfections. Light striking the surface obliquely, at a very slight angle, greatly exaggerates surface irregularities. If critical lighting cannot be avoided, the effects can be minimized by skim coating the gypsum board surfaces, or by decorating the surface with medium to heavy textures, or by the use of draperies and blinds which soften shadows. In general: gloss, semi-gloss, and enamel finishes highlight surface defects; textures hide minor imperfections.*

**Manufacturer Recommendations.** The recommendations of individual manufacturers of gypsum board, joint tapes and compounds, accessories, primer/sealers, wallcoverings, adhesives, texture materials, and paints may vary from what is recommended herein and as such are not a part of this recommended specification.

**Primer/Sealer.** Applied as a first coat to the entire prepared gypsum board surface with brush, roller, or spray, prior to decoration. Where final appearance is critical, the application of an appropriate primer/sealer will minimize most decorating problems.

**For finish paints:**

A good quality, white, latex primer/sealer formulated with higher binder solids, applied undiluted, is typically specified for new gypsum board surfaces prior to the application of texture materials and gloss, semi-gloss, and flat latex wall paints.

An alkali and moisture resistant primer and a tinted enamel undercoat may be required under enamel paints. Consult with the finish paint manufacturer for specific recommendations.

**For wallcoverings:**

White, self-sizing, water base, "universal" (all purpose) wallcovering primers have recently been introduced into the marketplace for use on new gypsum board surfaces. These products are claimed to make drywall strippable, bind poor latex paint, allow hanging over glossy surfaces and existing vinyls, hide wall colors, and to be water washable.

**Texturing.** Texture material is applied by brush, roller, spray, or trowel, or a combination of these tools, depending on the desired result. Textured wall surfaces are normally overpainted with the desired finish; overpainting of textured ceiling surfaces may not be deemed necessary where an adequate amount of material is applied to provide sufficient hiding properties. A primer/sealer may not be required under certain proprietary texture materials; consult with the manufacturer of the texture material for specific recommendations.

**Tool Marks and Ridges.** A smooth surface may be achieved by lightly sanding or wiping joint compound with a dampened sponge. Care shall be exercised to ensure that the nap of the gypsum board facing paper is not raised during sanding operations. For additional information on the finishing of gypsum board surfaces consult ASTM Standard C840.

**V. Resources:**

Designers and specifiers are encouraged to consult the following reference documents:

ASTM C840, *Standard Specification for Application and Finish of Gypsum Board*, American Society for Testing and Materials, Philadelphia, PA.

GA 216, *Recommended Specifications for the Application and Finishing of Gypsum Board*, 1989, Gypsum Association, Washington, D.C.

GA 505, *Glossary of Gypsum Board Terminology*, 1989, *ibid*

*Master Painters Glossary*, Painting and Decorating Contractors of America, Fairfax, Virginia.

Contact one of the following associations for additional assistance or copies of this recommended specification:

**Association of the Wall and Ceiling Industries—International**

1600 Cameron Street  
Alexandria, Virginia 22314-2705  
Telephone: (703) 684-2924

**Ceilings & Interior Systems Construction Association**

104 Wilmot Road, Suite 201  
Deerfield, Illinois 60015-5195  
Telephone: (708) 940-8800

**Gypsum Association**

810 1st Street, N.E., Suite 510  
Washington, D.C. 20002  
Telephone: (202) 289-5440

*Western Regional Office*

2481 North Oakmont Drive  
Flagstaff, AZ 86004-7428  
(602) 527-8466

**Painting and Decorating Contractors of America**

3913 Old Lee Highway, Suite 33B  
Fairfax, Virginia 22030  
Telephone: (703) 359-0826

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