



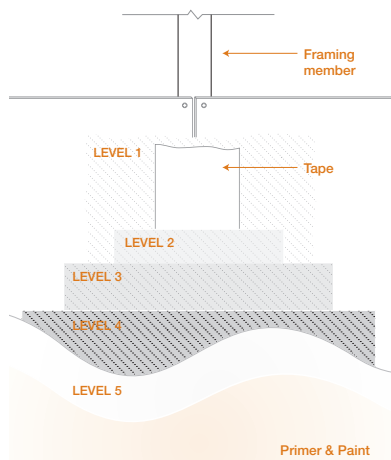
# Recommended Levels of Finish for Gypsum Wallboard

The intent of this document is to provide clarification and assist architects, designers, specifiers, and interior contractors in understanding the different levels of interior finish for gypsum wallboard prior to final decoration, where these levels of finish should be used, and what their limitations are. The levels of finish can range from “0” (no treatment) to “5” (multiple coats). Generally the higher the level (number), the better the concealment is. The architect/designer typically specifies the level(s) of finish for the project that may include different levels on the same project.

Additional reference standard for the finishing of gypsum wallboard can be found in the GA-214 (Gypsum Association). For judging the final decoration of a gypsum wallboard surface, please refer to TSIB Technical Bulletin 30.101

Because there are a number of primers, sealers, paints, methods of applications, job site conditions, adhesive tapes, etc., it is recommended that a mock-up panel (or room) be constructed, evaluated and accepted by all responsible parties for aesthetic appearance and durability before any production decorating is started (responsibility of the architect & general contractor). The mock-up should remain intact until the project is completed.

## Levels of Finish



## LEVELS OF GYPSUM WALLBOARD FINISH:

**Level 0:** No taping, finishing or accessories are required.

- Used in temporary construction or when final decoration or level has not been determined

**Level 1:** All joints and interior angles shall have tape “placed” in joint compound. Tool marks and ridges are acceptable.

- Fastener heads will need to be treated with one application of joint compound in fire-rated conditions; non-rated conditions require no treatment over the fastener heads.
- For use in areas concealed from the public view; i.e. plenums, attics, service corridors and mechanical rooms
- Paint or wallcovering not recommended over this level of finish
- No accessories required
- Where glass mesh tape is used, the glass mesh tape shall be adhered or attached to the wall (surface) and have one coat of setting type joint compound over the surface of the joint

**Level 2:** All joints and interior angles shall have tape “placed” in joint compound. The joint tape shall be embedded by wiping down the joint tape and removing the excessive joint compound immediately with a knife or trowel leaving a thin irregular coating of joint compound over the joint tape (known as the “Embedment Coat”). One coat of joint compound shall be applied over all fasteners heads and accessories. Tool marks and ridges are acceptable.

- For use in areas where visual aesthetics are not important, such as garages, storage rooms or a tile backer (non-wet areas)
- Paint or wallcovering not recommended over this level of finish

Flat joints	.....	.1 coat
Interior angles	.....	.1 coat
Fastener heads	.....	.1 coat
Accessories	.....	.1 coat

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**Level 3:** Embed tape into joint compound (as described for Level 2) for all joints and interior angles. One additional coat of joint compound shall be applied over all joints and interior angles. Two separate coats of joint compound shall be applied over all fasteners heads and accessories. All joint compounds shall be smooth and free of tool marks.

- The joints and fastener heads may appear “concaved”
- Minor ridging, tool and sanding marks may be noticeable
- Recommended for heavy textures or heavy grade wallcovering

Flat joints . . . . .	2 coats
Interior angles . . . . .	2 coats
Fastener heads . . . . .	2 coats
Accessories . . . . .	2 coats

**Level 4:** Embed tape into joint compound (as described for Level 2) for all joints and interior angles. Two additional separate coats of joint compound shall be applied over all flat joints. One additional coat of joint compound shall be applied over all interior angles. Three separate coats of joint compound shall be applied over all fasteners heads and accessories. All joint compounds shall be smooth and free of tool marks and ridges.

- Recommended for smooth surfaces, textures and wallcoverings
- Flat sheen paints are recommended over this level of finish
- Non-flat paints and deep tone colors are not recommended over this level of finish
- Important Caveat: When a final paint of non-flat or deep tone color has been applied, satisfactory results cannot be guaranteed with a level 4 gypsum wallboard finish. Through no fault of the gypsum wallboard or painting contractor, joint photographing is possible.

Flat joints . . . . .	3 coats
Interior angles . . . . .	2 coats
Fastener heads . . . . .	3 coats
Accessories . . . . .	3 coats

**Level 5:** Embed tape into joint compound (as described for Level 2) for all joints and interior angles. Two additional separate coats of joint compound shall be applied over all flat joints. One additional separate coat of joint compound shall be applied over all interior angles. Three separate coats of joint compound shall be applied over all fasteners heads and accessories. A coat of joint compound shall be applied to the prepared surface and immediately sheared, leaving a thin skim coat covering the surface. As an alternate to a skim coat, a material manufactured especially for this

purpose and applied in accordance with manufacturer’s recommendations may be used. The surface shall be smooth, and free of tool marks and ridges.

- Recommended for all interior sheens of paint
  - Recommended for surfaces specified to receive deep tone colors
  - Provides a smooth surface, not a flat surface
- |                           |         |
|---------------------------|---------|
| Flat joints . . . . .     | 3 coats |
| Interior angles . . . . . | 2 coats |
| Fastener heads . . . . .  | 3 coats |
| Accessories . . . . .     | 3 coats |
| Skim coat . . . . .       | 1 coat  |

**GENERAL NOTES:**

1. **Accessories:** Metal or plastic beads, trim, moldings or control joints used to protect, conceal or allow movement in the gypsum board assembly.
2. **Angles:** Interior/internal angles (less than 180° from plane of surface) are commonly finished using paper tape. External angles (greater than 180° from plane of surface) are commonly finished with a metal or plastic trim edge.
3. **Compound:** Setting type joint compounds must “set” before additional coats are applied. Pre-mix compounds must be fully “dried” before additional coats of compound are applied.
4. **Critical Lighting:** Strong side lighting from windows or surface-mounted light fixtures.
5. **Drywall Primer:** A paint material that is applied as the first complete coat in a painting assembly (typically applied by the painting contractor) and is formulated to be applied directly over new (untreated) gypsum wallboard, joint compound and even skim coats. The formulation of this primer should minimize the porosity difference between gypsum wallboard surface paper and the joint compound. Drywall primers are formulated to achieve different performance levels. The type of drywall primer used shall be determined by the performance level that is desired by the designer/architect and shall be specified in the painter’s scope of work.
6. **Environmental Control:** A minimum temperature of 50° F should be maintained prior, during, and after the application of the joint treatment is completed and the building is occupied (responsibility of the general contractor). Appropriate ventilation and air flow should be provided to allow effective drying of finishing materials. The potential for finishing and decorating problems is decreased when a suitable jobsite climate is maintained.

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7. **Flatness:** Gypsum panels must first be applied over a substrate that is within specified flatness criteria. Because the joints and fasteners need to be concealed with fill and finish coats of joint compound, it is impossible to achieve a finished surface that is a flat plane. Instead, the joints and fasteners are finished with graduated arcs designed to prevent recesses or ridges that result in distinct shadows in critical light. Straight edges, squares and levels shall not be used to determine if a level of finish has been achieved.
8. **Fuzzed Paper:** The area of the gypsum wallboard face paper that has been touched, scuffed, sanded or wiped with sandpaper or a trowel. Care shall always be exercised to ensure that the texture of the gypsum board face paper is not raised during sanding operations.
9. **Important Caveat:** When non-flat sheen paint is applied, satisfactory results cannot be guaranteed when applied over a gypsum wallboard level 4 finish. Through no fault of the gypsum wallboard or paint contractor, joint photographing is possible with non-flat sheens or deep tone colors.
10. **Inspection Criteria:** The normal viewing position shall be at a minimum distance of five feet from the surface and viewed at any angle. Inspection lighting conditions are described as those in place when the project is finished. This includes, but is not limited to; design lighting (e.g. wall washers, spots and floods, etc) and natural lighting. Consideration shall be given to window treatment and/or any other decorative finishes that could affect lighting and viewing.
11. **Joint Photographing:** The shadowing, banding or “photographing” of the gypsum wallboard joints through the final paint decoration is most readily visible when viewed at an angle under strong side lighting. This joint photographing is primarily caused from either slight texture variations between joint compound and the face paper or a porosity issue.
12. **Set:** The chemical and physical change in a setting type joint compound as it goes from a plastic, workable state to a rigid state.
13. **Skim Coat:** A thin coat of joint compound or a material manufactured especially for this purpose and applied in accordance with manufacturer’s recommendations shall be applied over the entire surface. A skim coat may be translucent, with joints and fastener heads visible. A

skim coat will help smooth the texture of the gypsum wallboard face paper and also aid in creating a more uniform surface in texture. There is no specific mil thickness that constitutes a proper skim coat.

14. **Surface:** The transition from compound to gypsum board and/or accessories can achieve a smooth surface by lightly sanding. Smooth surface in this document is describing the transition (feel/appearance), not a flat or a machine finish/surface. Depending on the application of the material, the surface may have a slight texture finish.
15. **Texture:** A decorative treatment of joint compound or paint applied over a prepared surface.
16. **Texturing:** Regular or irregular patterns typically produced by applying joint compound or a proprietary texture material to a properly prepared surface.

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