DRYWALL CONTRACTORS ASSOCIATION OF NEVADA



Representing Nevada, Arizona, and California

5 Levels of Drywall Finish and 5 Levels of Paint Finish Commercial - 2017

Customer Service Booklet

This booklet contains information *compiled and summarized* by the DCAN on this topic over the past 20 years. This information is meant to provide the facts in a concise manner related to the 5 Levels of Drywall and Paint Finish. The booklet highlights the need to consider the Texture Type, Paint Sheen, Paint Color, and Paint Type prior to determining what Level of Drywall Finish to Specify. Generally speaking, the Paint Finish Level should not exceed the Drywall Finish Level. The Booklet also covers Evaluation Guidelines for Drywall and Paint Finish, along with a section on Finishing Interior Concrete.

The Levels and procedures outlined in this booklet are the result of meetings with manufacturers and subcontractors. These procedures work. They are not meant to needlessly increase the cost of construction, rather they are meant to do the job correct the first time in a manner consistent with manufacturer and industry requirements.

Index:

- 1. DCAN 5 Levels of Drywall and Paint Finish 2017
- 2. **Attachment 1** Gypsum Association GA-214-2015 Recommended Levels of Finish For Gypsum Board, Glass Mat, and Fiber Reinforced Gypsum Panels
- 3. Attachment 2 Westpac Drywall Hand Texture Information
- 4. Attachment 3 Drywall Finishing Council 5 Levels of Paint Finish

DCAN 5 Levels of Drywall Finish

Multiple industry organizations have published versions of the 5 Levels of Drywall Finish. The most widely used and referenced document on this topic is the "Recommended Levels of Finish for Gypsum Board, Glass Mat and Fiber Reinforced Gypsum Panels" produced by the Gypsum Association (See Attachment 1 - Gypsum Association GA-214-2015).

DCAN agrees with the information contained in the GA 214 document, however we are including specific requirements on priming prior to texture. In summary, DCAN is requiring (not just recommending) a drywall prime coat prior to texture application for large spanning ceilings on Level 3 applications, and for all areas for a Level 4 or Level 5 Drywall Finish. This is discussed detail below.

Hand Texture versus Machine Applied Comments:

Hand Textures such as Skip Trowel and Santa Fe have become popular in residential construction and are gaining popularity in the commercial segment of the market. These textures provide good "hide" over the drywall, especially when compared to a smooth wall finish. They are also typically easier to patch than machine applied texture (knockdown, orange peel, etc.) and offer an aesthetic look that is pleasing to many building owners and patrons. Please consult with your drywall subcontractor if you are interested in a hand texture, or you can refer to a document produced by Westpac Materials titled "Drywall and Hand Texture Information" (See Attachment 2).

Additionally, to apply a Skip Trowel or Santa Fe texture, the applicator is basically applying a coat of joint compound to the majority of the drywall surface prior to painting. As mentioned above, this process increases hide, therefore DCAN considers drywall finished to a Level 3 then Hand Textured, to be a Level 4 Drywall Finish. This is a huge benefit to owners who want to paint with darker colors which require a Level 4 Drywall Finish.

Drywall Primer:

The drywall face paper and joint compounds have different porosity and absorption rates. This variance can cause machine applied textures, or paint, to dry differently over the face paper versus the joint compound, which may lead to joint photographing and other issues. Additionally, hand textures, particularly skip trowel finishes, applied over unprimed drywall, are very difficult to finish because the moisture is sucked out of the texture coat as it is being applied, which causes finish deformations, etc. For these reasons, joint compound manufacturers have recommended the use of a drywall primer prior to texture.

DCAN has researched this carefully and determined that **for a Level 3 Drywall Finish**, a **drywall texture primer will only be required in large spanning ceiling areas. For a Level 4 or 5 Drywall Finish**, a **primer is required on all walls and ceilings prior to texture.** These requirements are based on years of experience and owner complaints when Level 4 Paint Finish (darker tones and sheens other than flat) are applied over Level 3 Drywall Finish.

Interior Concrete Comments:

Many commercial contractors are asked to finish interior concrete walls and ceilings. It is important to know the pH Level of the concrete prior to finishing. There are numerous problems associated with finishing or painting over high pH concrete (pH > 8). Concrete primer products like Westpac Materials *Hot Crete*, or other manufacturer approved products, can be specified and used for concrete up to pH 13 to mitigate problems associated with high pH concrete.

DCAN 5 Levels of Drywall Finish Summary Chart

As shown in the Summary Chart below, increased Levels of Drywall Finish require more coats of joint compound and additional steps, such as priming before texture, and a skim coat after texture. These additional steps require more time in the schedule and cost more to install.

Drywall Level of Finish	Joints	Corners	Nails and Screws	Texture	Prime or Skim prior to Texture	
Level 1 - Fire Tape	Joint Tape Embedded	Joint Tape Embedded	None	None	N/A	
Level 2	Taped embedded and wiped smooth - 1 Coat	1 Coat	1 Coat	None	N/A	
Level 3	2 Coats Joint Compound	2 Coats	2 Coats	Heavy Pattern Only or Hand Texture	Texture Primer Required on Large Span Ceilings only	
Level 4 with Hand Texture	2 Coats Joint Compound	2 Coats	2 Coats	Skip Trowel or Santa Fe or other full cover	Texture Primer Required before Skip Trowel Texture. Santa Fe Hand Texture does not require texture primer.	
Level 4 with Machine Texture	3 Coats Joint Compound	3 Coats	3 Coats	Heavy to Light Pattern - Orange Peel etcok	Texture Primer Required	
Level 5 Smooth Wall	3 Coats Joint Compound	3 Coats	3 Coats	Any texture Pattern Smooth Wall ok	Machine Applied: Texture Prime Required and Skim Coat after Texture. Smooth Wall: Skim Coat after finishing drywall.	

Please refer to GA-214-2015 for a complete discussion of each Level of Drywall Finish.

It is imperative that the proper Level of Drywall Finish be specified in accordance with the Level of Paint Finish Selected.

Evaluation Guidelines for Level of Drywall Finish: Drywall shall be evaluated from a minimum distance of 5' away, perpendicular from the surface and viewed at any angle - see GA 214 at page 4 Inspection Criteria. This is the industry standard. Drywall is not to be evaluated by getting up close with lights shining down walls or ceilings. This process is helpful to locate imperfections but is not an industry standard evaluation method to evaluate completed work.

Job Schedule and Environment Comment: DCAN has published an Industry Recommended Job Schedule for Drywall and Paint. This booklet covers temperature range, dry times, ventilation, and other factors that should be considered when determining the job schedule. Rushing the drywall finishing and paint process may save up front but often has adverse effects on the quality of the finished product. Please refer to DCAN Industry Recommended Job Schedule for Drywall and Paint Booklet for a detailed discussion on this topic.

DCAN 5 Levels of Paint Finish

In 2004 DCAN met with multiple paint manufacturers and developed the 5 Levels of Paint Finish. This project was undertaken to create information to assist general contractors and subcontractors in properly specifying Levels of Paint Finish, in connection with Levels of Drywall Finish, to deliver high quality products to their customers. It is imperative that all parties understand that Levels of Drywall and Paint Finish must be specified together, and that the Level of Paint Finish cannot exceed the Level of Drywall Finish specified. For example, you cannot specify a Level 3 Drywall Finish then apply a Level 4 Paint Finish without taking a chance of encountering problems. A Level 3 Drywall Finish goes with a Level 3 Paint Finish, Level 4 Drywall with a Level 4 Paint Finish, etc. This is important.

Since then, several industry associations have published versions of the 5 Levels of Paint Finish. In our opinion, the best one, aside from the DCAN document, is the "Recommended Levels of Paint Finish Over Gypsum Board" produced by the Drywall Finishing Council (See - Attachment 3).

DCAN agrees with the information contained in the Drywall Finishing Council Document with the exception of the Level 3 Paint Finish requirements and a minor exception to the Level 4 Paint Finish Requirements. Additionally, DCAN and the paint manufacturers we have spoken with, feel it necessary to include comments and requirements on paint types (i.e. flat, eggshell, semigloss, gloss, etc.) with respect to the Level of Paint Finish selected, along with some job sequencing information and suggestions on back rolling (running a paint roller over surface after spray application). All of these items are discussed in detail below.

Drywall Completion Systems versus Paint Primer Comment: The use of products like Westpac's Prep Coat prior to texture and Westpac's Smooth Coat after texture, or a skim coat of joint compound after texture, are part of the drywall specification and are not considered paint primers. Paint primers are to be used in accordance with the paint specification per manufacturer's recommendations after the drywall scope of work is complete.

Additionally, DCAN recommends the use of a **low solid, penetrating paint primer** (versus PVA sealer type primers) for Level 4 or Level 5 paint finishes, particularly when applied over hand textures. Low solid, penetrating primers strengthen the bond of the joint treatment and texture which assists in mitigating drywall and paint system compatibility issues when masking products are removed from the painted surface.

Wall Paper Comments:

The installation of Wall Coverings typically requires the use of a primer and sizing/glue to adhere the Wall Covering to the drywall surface. When applied, these products can saturate the drywall face paper and joint treatment products. When low permeable or non-permeable Wall Coverings are applied to the saturated drywall surfaces, moisture is effectively trapped, or sandwiched between the drywall surface and the Wall Covering. This trapped moisture leads to issues like halo's around drywall fasteners (screws), drywall tape joints swelling, and wall covering seams blistering as moisture is attempting to migrate out from underneath the Wall Coverings.

If you are specifying or working with a low permeable or non-permeable wall covering, please consult with the wall covering manufacturer as to what primer, sizing, or glue they require to install their product over drywall. When you make this inquiry, please mention specifically your concern regarding trapped moisture so you can make sure to have the correct products called out to mitigate these issues. It is also helpful to make sure to have good ventilation on site and heat to assist drying in colder temperatures when installing the Wall Covering.

Note: If you have installed non permeable Wall Coverings and are having the issues described above, please obtain a properly calibrated moisture meter and test the surfaces in question. It is likely they have moisture exceeding 10%. As these surfaces dry, some of the swelling issues etc. may go away to some extent, so please bear this in mind prior to removing Wall Coverings and attempting repairs.

Paint Touch Up versus Drywall Repair Comment: Paint manufactures use the term "touch up" to mean that the paint will be able to blend over minor dings, etc. when the core of the drywall is not exposed, and the repair is in a small area (1" x 1" or so). Once an actual hole is made in the wall, or some other excessive damage occurs, then this is no longer considered touch up and moves into drywall repair, which typically requires that the entire wall or ceiling in question be repainted corner to corner.

Level 3 Paint Finish Summary:

- Minimum Level of Drywall Finish Required: Level 3
- **Drywall Texture:** Heavy pattern only such as knockdown or Hand Texture see Levels of Drywall Finish above.
- Paint Type: Must be flat paint only.
- Paint Color: Must have a Light Reflective Value (color) > 75. If you have LRV < 75 you need to specify a Level 4 or Level 5 Drywall and Paint Finish.
- **Paint Grade: Production Grade** this is typically the least expensive paint.
- Application:

One coat of Primer and One Coat of Finish Paint or Two Separate Coats of Finish Paint. Paint should be applied 6-8 mils wet and dry to 2-3 mils.

Note: Level 3 flat paint with LRV>75 has been successfully applied in **one coat with Cross-Hatch** (left to right then up and down or vice-versa) with no primer for years in the Las Vegas market, however some manufacturers do not approve this method of application (see manufacturers specification to make this determination). If paint is not self-priming, then 2 separate wet coats must be applied. Should be applied 6-8 mils wet and dry to 2-3 mils.

Back rolling is recommended after spray application. Back roll assists with later touch up and helps paint lay down / cover in a more uniform manner.

• **Patching / Touch Up:** Paint with LRV > 75 should be able to touch up if final coat was back rolled or roller applied.

If LRV < 75, you need a Level 4 Paint Finish. This will not touch up and will need corner to corner repaint.

Level 4 Paint Finish Summary:

- Minimum Level of Drywall Finish Required: Level 4
- **Drywall Texture** Heavy to light patterns or Hand Textures acceptable. **Smooth Wall not an acceptable application.** See Levels of Drywall Finish above.

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- **Paint Type**: Flat paint only (Level 4 can now have color as long as paint is flat. Eggshell, semi-gloss, gloss, require Level 5 Finish).
- Paint Color: Must have a Light Reflective Value (color) > 50. If you have an LRV < 50 you need to specify a Level 5 Drywall and Paint Finish.
- **Paint Grade: Professional Grade** this is better and more expensive paint than the Level 3 Production Grade.

DCAN and the paint manufacturers we have spoken with do not recommend tinting Level 3 Production Grade Paint a darker color and using it in a Level 4 application.

• Application:

Must be two separate wet coats of paint. 4 wet mils per coat, dry to approximate 1.5 mils per coat. (Note: Sherwin Williams Requires Level 5 Paint Finish for all paint that is not flat with LRV > 75 - See Level 5 requirements following).

Can be one coat of primer and one coat of top coat, or two coats of top coat material (see manufacturer's paint specification to make this determination).

Sequence: DCAN recommends the production coat (1st coat) be applied, then the final coat (2nd coat) be rolled at the pre-final stage (or at minimum back rolled for spray applications). This sequence allows for all trade damage, etc. to be patched prior to the 2nd coat of paint, therefore the 2nd coat of paint will serve as corner to corner touch up and will not be subject to large amounts of patching that does not blend in. Yes this costs more to do, but it is the correct process to avoid problems.

Back roll required for spray application on Level 4 Finish for touch up purposes. If you do not back roll, touch up will be difficult without another spray application.

 Patching / Touch Up: Professional Grade Paint with an LRV > 50 with a back roll or roller application on the final coat, may be able to achieve minor touch up, however major trade damage with multiple patches, etc. will require corner to corner repaint - See Sequence comments above.

If an LRV < 50, you need a Level 5 Paint Finish. This will not touch up adequately and will need corner to corner repaint.

Level 5 Paint Finish Summary:

- **Minimum Level of Drywall Finish Required: Level 5** (Note: Level 5 Paint Finish may be applied over Level 4 Drywall Finish as long as the Paint has an LRV > 50 and the drywall is not a smooth wall finish).
- **Drywall Texture:** Any texture pattern including Smooth Wall ok See Levels of Drywall Finish above.

• **Paint Type:** Any Sheen

• **Paint Color:** Any Color

• Paint Grade: Professional Grade:

Use a high quality manufacturer recommended Level 5 paint. Do not tint inexpensive paint a dark color on a Level 5 Finish.

• Application:

Must have a manufacturer recommended primer. It is important to make sure the correct primer is used. Certain top coats require certain primers to perform properly. Note: Drywall Texture Primers such as Prep Coat and Smooth Coat are not paint primers. The painter needs to use the proper paint primer once the drywall subcontractor is complete.

Must have two separate wet top coats of paint. 4 wet mils per coat, dry to approximate 1.5 mils per coat. This is in addition to the primer above. Consult with your paint representative on what they recommend to achieve a Level 5 Paint Finish. Do not use Level 3 production paint tinted a dark color.

Sequence: DCAN requires the primer and production coat (1st coat) be applied, then the final coat (3rd coat) be rolled at the pre-final stage (or at minimum back rolled for spray applications). This sequence allows for all trade damage etc...to be patched prior to the final coat of paint, therefore the final coat of paint will serve as corner to corner touch up and will not be subject to large amounts of patching that does not blend in. Yes this costs more to do, but it is the correct process to avoid problems.

Back roll required for spray application on Level 5 Finish for touch up purposes. If you do not back roll, touch up will be difficult without another spray application.

• Patching / Touch Up: Professional Grade Paint with darker colors will require corner to corner repaint for trade damage, etc. See Sequence comments above.

Levels of Paint Finish Summary Chart

Paint	Grade / Quality	Number of Coats	Touch Up	Sheen	Colors
Level 1	Paint Primer or Wall Covering Primer	1	N/A	N/A	N/A
Level 2	Production Grade	1	No	Flat Only	White
Level 3	Production Grade	1 Cross- Hatch or 2	Yes	(Self Priming) Flat on Walls / Ceilings	White Off White (LRV > 75)
Level 4	Professional Grade	2	No Corner to Corner	Flat Paints Only Recommended. See Manufacturer specifications for other sheens.	White Medium Colors (LRV 50-75)
Level 5	Premium Grade	3	No Corner to Corner	Any Available	Any

Please refer to the Drywall Finishing Council's document entitled "Recommended Levels of Paint Finish Over Gypsum Board" for a complete discussion of each Level of Paint Finish and terminology, etc.

It is imperative that the proper Level of Drywall Finish be specified in accordance with the Level of Paint Finish selected.