

Evaluating Treated Interior Gypsum Panel Surfacesⁱ

Evaluating treated interior gypsum panel products is a somewhat subjective exercise that can be normalized by utilizing a consistent assessment process. The evaluation methods used should be discussed prior to contract execution to ensure that the project documents accurately reflect the expectations of the building owner and the wall and ceiling contractor. All participants should review GA-214,ⁱⁱ ASTM C840ⁱⁱⁱ and GA-216^{iv} prior to beginning the evaluation process.

Evaluation

During the evaluation process, surfaces should be illuminated using lighting fixtures that create a level of light which is equivalent to that anticipated during final occupancy. Light fixtures specified for final occupancy should be used when possible. While panel finishing crews may use intense lights during the surface finishing operation, that same level of light is not appropriate for the evaluation process as it is generally not representative of final lighting conditions.

Any temporary inspection lights used should replicate the location, positioning, and intensity of final light fixtures. Lay-in ceilings and any other fixtures or fittings that will impact the final environment should be installed to the extent possible. Walls that will be washed or flooded with light during occupancy should be evaluated using lights that replicate the occupancy conditions.

Temporary light should not create harsh side lighting conditions. Flashlights or hand-held work lights should not be used to evaluate surfaces as either may show irregularities in a finished surface that will not be visible when the area is occupied for final use under normal lighting conditions.

Walls should be viewed at a distance of not less than five feet perpendicular from the evaluated surface. Ceilings should be viewed from the floor in a standing position.

In a circumstance where the required five-foot perpendicular viewing dimension is unachievable - for example, in a corridor - the viewing distance may be appropriately reduced to accommodate the narrow area; however, the viewing angle should not be modified. The evaluated surface should still be viewed at a perpendicular angle.

The visual evaluation should focus on identifying tool marks, pitting, ridges, over-sanded areas, and mis-aligned or wavy trim and accessories. Surfaces being evaluated should not be touched or rubbed. If a mock-up has been incorporated into the project, the quality of the evaluated areas should be objectively compared to it.

Do not use a straight edge to evaluate surfaces. All surfaces should be smooth, but not necessarily flat. A slight build-up of joint treatment over joints and accessory flanges is an inherent characteristic of the finishing process and is to be expected. Fastener heads should be hidden, and surfaces should be free of blemishes when examined at a perpendicular angle under normal occupied lighting conditions.

Painted or textured surfaces should be judged twice: first, before any coating such as paint, primer, or pre-texture primer is applied and, second, after the coating has been applied and allowed to dry. Because the type of primer applied, and the application method used, can impact the final appearance of the primed surface, manufacturer's information should be reviewed prior to primer application.

Level 5 Finish and Evaluation

If a Level 5 finish, as described in GA-214 and ASTM C840, is being evaluated prior to final decoration, it may be possible to see gypsum panel paper, treated joints, filled voids and spotted fasteners immediately after the applied skim coat of joint compound has dried. With a Level 5 finish, transition areas where the gypsum panel facing material and the joint treatment meet should be smooth but may not be flat. There is no specific, defined mil thickness that constitutes a skim coat.

A Level 5 finish should be incorporated on surfaces in areas that are susceptible to “joint banding” such as hallways, corridors, large walls, and radius surfaces; areas subjected to artificial or naturally occurring critical light; harsh parallel or side lighting; or surfaces to be finished with deep tone coatings or coatings of any sheen other than flat. Additional information on Level 5 finishes is available in GA-214 and ASTM C840.

ⁱ This document is to be used to evaluate interior gypsum panels that have been finished with joint treatment materials in accordance with GA-214, ASTM C840 and GA-216.

ⁱⁱ GA-214-2015, *Recommended Levels of Finish – Gypsum Board, Glass Mat & Fiber-Reinforced Gypsum Panels*, Gypsum Association, Silver Spring, MD, 2015, www.gypsum.org

ⁱⁱⁱ ASTM International C840-19, *Standard Specification for Application and Finishing of Gypsum Panel Products*, West Conshohocken, PA; ASTM International, 2019. www.astm.org

^{iv} GA-216-2016, *Application and Finishing of Gypsum Panel Products*, Gypsum Association, Silver Spring, MD, 2016, www.gypsum.org