I’m having trouble with the joints in a wallboard job showing through several layers of low-sheen paint. What can I do and how do I avoid this problem in the future?

Don’t feel alone. This situation has caused much heartburn and finger pointing among wallboard finishers, wallboard manufacturers, painters and paint manufacturers. ASTM has attempted to address the problem (and continues to) in ASTM C840, which is the source material for the publication of several versions of the “Recommended Levels of Gypsum Board Finish” (most notably in the Gypsum Association’s GA-214). The Drywall Finishing Council also has published a document, “Recommended Levels of Paint Finish Over Gypsum Board,” to address this and other related problems. And the debate continues.

The crux of the problem is basically that a coat of properly applied paint is just over one one-thousandth of an inch thick (one mil), so it can’t hide variations in a wallboard surface but so much. The shinier the paint, the more light it reflects, and the more it exposes what the paint industry refers to as a “profile difference.” In this case, the profile of the bare wallboard is different from that of the joint treatment used on the joints. It is a not too well kept secret that cheap flat paint does a pretty good job of masking this profile difference, and generally is easier to touch up. But cheap flat paint is not very durable and doesn’t go as far as higher quality paint.

The trade-off is labor costs—it takes more labor to apply the several coats required to hide the substrate sufficiently and additional labor to constantly touch up a paint that has little, if any, durability. More durable, longer lasting paint is generally shinier (the shinier it is, the more abuse it will take) and though it often offers better hiding, it is also much more difficult to touch up. So, what may have been saved in labor when going from a cheap flat paint that hides the imperfections and touches up well to a better grade of paint that, though more durable, shows more of the substrate’s imperfections, should have been invested in the finishing of the wallboard.

And just exactly how does one predict all of this and thereby prevent further occurrences of an unsightly profile difference? Careful reading of the above mentioned documents explains that as the viewing conditions become more critical, the more work needs to go into both the wallboard finishing and the painting. In other words, a crummy paint job will spoil the appearance of fine wallboard finishing job, and a perfect paint job will not fix a sloppy wallboard finishing job. So to avoid this problem in the future, both a level 5 (premium) finish and a level 5 (premium) paint job should be done. A level 5 wallboard finish requires (BTW: the language used in ASTM C840 and GA 214 is still evolving on this very topic) that the entire wallboard surface be “skim coated” with joint compound in order to provide uniform texture and porosity of the substrate prior to painting. A level 5 paint finish requires a coat of the appropriate primer (they say drywall primer, I say read the label of the finish paint first) and two coats of the finish paint applied per the manufacturer’s recommendations.

Finally, how do we fix this problem once we’re there? If it can be done (and again it really depends on how well the wallboard finishing job is), you can sand the entire surface using 100 grit sand paper to provide a reasonably uniform surface, and repaint. You may get away with just applying another finish coat, but if you want to hedge your bets, it’s best to bite the bullet and use the appropriate primer, and then recoat.

If, on the other hand, the wallboard finishing job is marginal to begin with, you will find it necessary to skim coat over the sanded paint and then repaint. I suggest trying a test area with each of these methods before deciding which is the best remedy.

About the Author
Lee G. Jones is AWCI’s director of technical services. Send your questions to him in care of AWCI’s Construction Dimensions, or send your e-mail question to jones@awci.org.