

From: Douglas Roberts AIA [<mailto:doug@jhwarch.com>]
Sent: Saturday, May 17, 2014 11:55 AM
To: Shaw, Derek@DGS; Corelis, Dennis@DGS
Subject: RE: 15-DAY PUBLIC COMMENT PERIOD - 11B 705

I have one more thing to add to my email sent last Monday.

Please check the LRV for the specified Federal Safety yellow. I have a book of colors from Dunn Edwards, and all the yellows in that range are around 60% LRV. One cannot achieve 70% contrast with Safety Yellow as one of the colors, even with pure white or pure black. For consistency, you either must delete the contrast requirement, or at least lower it substantially, or delete the safety yellow requirement. You can't have both.

-Douglas Roberts, AIA

From: Douglas Roberts AIA [<mailto:doug@jhwarch.com>]
Sent: Monday, May 12, 2014 8:20 PM
To: 'derek.shaw@dgs.ca.gov'; 'dennis.corelis@dgs.ca.gov'
Subject: 15-DAY PUBLIC COMMENT PERIOD - 11B 705

Mr. Shaw, Mr. Corelis,

The 2013 CBC changed a lot of requirements regarding detectable warnings in 11B-705, so I'm grateful to see some clarification is proposed. Even so, it goes way, way, beyond the 2010 ADA Standards 705, and don't see why we need to do that – are the sight impaired in California unique compared to those that function well under the ADA standards in the rest of the country? Do California's additional regulations truly increase accessibility? Regardless, I am pleased to see the Express Terms attempt to fix some problems, most notably establish the percentage of contrast required, add some construction sensibility regarding *approximating* the Fed standard yellow and edge distance tolerance. More revision is necessary.

1. There's a lot of language and even a formula to determine 'contrasting color', but even with the proposed revisions, it's still not workable. The true LRV of paving is not known until the paving is on the ground and cured, and will likely vary greatly over time. Even concrete grey will vary widely from supplier to supplier, and changes over time with weather, dirt, mold, texture, site placement, etc. Similarly, AC paving starts out very black, but can fade a lot, especially if the wear surface is allowed to expose much of the aggregate. And, under bright sunlight, the contrast will be different than under nighttime lighting and light sources. If we are going to have a contrast requirement, the code should establish both the percent contrast number and list *assumed* LRV's for basic and usual types of paving, perhaps in a small table, to make it achievable. Historically, the code gives many standard numbers to various materials in generic uses to avoid cumbersome and expensive field testing, understanding that actual installations function in a range, but the range is built into the requirement. In the case of paving, I'm sure no manufacturers or suppliers have tested LRV's for their products. Large jobs that are able to do pre-testing might be able to establish some numbers, but even those

numbers would not be reliable over time. The end result is that the mandated yellow is the only color a designer can rely on to meet code every time.

2. What's the point of such a high contrast (70%)? A sight-impaired person will walk over the bumps and feel the texture – that's the *point* of the domes, right? We use contrasting colors where we don't have anything else to establish edges, like signs or stair treads. A lower contrast might be appropriate here, if one is necessary.
3. We designer-types appreciate the effort to use a contrasting color to help us arrive at more aesthetically pleasing solutions, but the Express Terms *mandate* safety yellow essentially everywhere detectable warnings are used –I can't think of another place I would use a detectable warning. (Street crossings are not mentioned in the new language, but I think they're pretty well covered in "hazardous vehicular areas".) I'll agree Yellow is in common use, but that's only because most designers have thrown up their hands in frustration, and do the quickest, easiest thing. Yellow plastic panels are kept in stock by the manufacturers, so if it's left to the contractor, that's what you'll get, too. Do sight impaired people read yellow better than other colors? If they do, why allow anything else? I presume yellow is for *everyone else* – *not* the blind - as a warning about the bumpy surface (it's certainly not for the color-blind guide dogs...). If yellow is not about *accessibility*, then we should delete the yellow mandate, and go back to simply having a contrast – or *not*.
4. The Express Terms, thankfully, delete the 1" black stripe for yellow panels, but it's still inconsistent. If yellow is OK in all situations with no contrast required, what about the most common use that *doesn't* have much of a contrast: yellow on light grey concrete?
5. I appreciate the attempt to modify the 'black stripe' requirement, but might a narrow contrasting stripe be seen by a sight impaired person as an edge of a stair where there is none? Given that there's almost no way prior to construction to establish 70% contrast will be achieved, a stripe will be the easiest way to do it, and the default from the truncated dome manufacturers. Is this really what we want?
6. *Sound on cane contact* functionally mandates plastic panels, but is it really necessary? It's not in the ADA Standards. Right now, I cannot specify a precast concrete truncated dome panel set in concrete because I cannot rely on the *sound on cane contact* being sufficiently different. But there are lots of concrete and ceramic tile units out there providing adequate warning to the sight impaired.
7. I think truncated domes dimensions should match the ADA tolerances, not just overlap them, so we can share products with the rest of the country. Frankly, one bumpy pattern in the walk surface is pretty much like another, and if they're all the same, all the better.
8. There is some confusion out here in the design world, even among CASp's, about what constitutes a "*hazardous vehicular area*". Is a parking lot where a car occasionally goes by 'hazardous'? Or does there need to be more traffic? Is a 'vehicular area' simply hazardous by virtue of it being a *vehicular* area? DSA has interpreted it that way on my past projects. However, the new language, and a CASp I know, suggest that you can

have a vehicular area that is not 'hazardous'. As it is, we're left to use what we assume will be the attorneys' definition in a wrongful death suit rather than common sense.

9. Finally, some clarity on the proper location of truncated domes panels would be appreciated. As I understand it, they are intended to provide a warning at the edge of a relative "safe zone", where vehicles, etc, cannot go under normal circumstances, short of jumping a curb or something. However, I see them placed at the edge of broad walkways flush with parking lot driveways (our local Costco in Sand City), and nothing to keep cars from crossing onto the walk – no curb, no bollards, etc. A blind person has an expectation of safety behind the truncated domes, but in many applications, there is no safe zone. The code should help out the designers and building officials a bit more in this regard. Many applications now make no sense. In the Costco example, they spent a lot of money applying truncated domes to hundreds of feet of flush walkway, and it serves no real benefit except to rattle one's grocery cart.

Thanks for all your diligent efforts to get this right,

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