

ASK ROY

Mounting photo-eyes at 24 inches?



Q: An auto repair shop would not allow us to mount photo-eyes at 4"-6" off the floor, and they told us to raise them to 24". They claimed that photo-eyes at a low level create a fire hazard because combustible gases are heavy and collect down at floor level. What do you know about this?

ROY: I've never heard of a fire code that mandates raising the photo-eyes because of flammable situations. Check your local fire code to be sure, but I suspect that the auto repair shop is incorrect.

When there are flammable fumes at a location, an operator with a NEMA 7/9 modification is typically installed. These operators have intrinsic modules that lower the control voltage to the point where it cannot produce enough spark to cause ignition. But this should not affect the photo-eyes. Again, check your local fire code to be certain.

Q: But what if they continue to object to the photo-eyes at 6"?

ROY: I hear this objection, too. An installer called me last week while he was installing a CDO at a fire station. The fire chief objected to the 6" height, wanting the photo-eyes placed at the same height as a fire truck's bumper.

If a commercial customer objects to photo-eyes, you can offer some options. As an alternative to photo-eyes, all commercial door operators can be wired for constant pressure. In the case of the auto repair shop, this may be the best solution. Just contact the operator manufacturer for instructions on how to wire the operator for constant pressure.

Monitored door-sensing edges are another acceptable UL 325 alternative to photoelectric eyes. Sensing edges provide protection from the header to the floor.

Another option is to install an approved light curtain. Light curtains come in many heights and will protect the opening

for the height of the light beam. For example, a 36" light curtain will protect the opening from the floor up to 36" high. This complies with the 6" rule and will protect the fire truck's bumper.

Q: Our techs sometimes see commercial door operator safety violations. To properly red-tag them, I feel that we would need to leave them in a non-operative condition until the safety violation is addressed. But this is not realistic for many reasons.

Plus, disabling the operator would only infuriate our customers. They would just call another company. So what should we do when we find a commercial door operator that's not in compliance with UL 325?

ROY: You cannot disable an operator and leave it non-functional. The operator is owned by the users, so it is their responsibility to make the system safe.

If you identify a hazardous condition and the owner refuses to update the operator with the appropriate safety measures, then you should make sure the owner (or authorized person) signs a document that clearly notes his refusal to accept the proper safety measures. This isn't a foolproof way to protect yourself, but it can be helpful.

In short, familiarize yourself with any codes or laws applying to repairs in your market, and that includes UL 325. In this business climate, you may feel that you need to take every job. But for liability reasons, you sometimes may need to walk away. You can't let your customer put your entire company at legal risk. ■



In the door industry for 45 years, Roy Bardowell is arguably the industry's most experienced CDO (Commercial Door Operator) technician and trainer. He holds a CDDC and, in 2017, he received IDA's Jerry R. Reynolds Volunteer Service Award.