

DOI vs Gloss: What's the difference?



First impressions matter. One of the first things customers notice when entering facilities is the floor. Maintaining commercial concrete floors' aesthetic appeal is important, especially in high-traffic areas.

Gloss Measurement



A traditional way to describe the appearance of a floor's surface is based on visual perception.



A glossmeter focuses a bright light source onto the floor at a particular angle – this is called the “incident” beam. It then measures the amount or intensity of light reflected from the floor, or the “reflected” beam.



Glossmeters only collect reflected light in a very narrow range. Light deflected outside that range by roughness or other imperfections is not measured. Gloss indicates the “brightness” of a reflected image. Two different floors can have the same reading but look very different to the eye.

Distinctness-of-Image (DOI) Measurement



Unlike Gloss, DOI measures how much light scatters or spreads out instead of a narrow-angle range.



A DOI meter uses the same focused light source but has multiple sensors arranged to capture the distribution of reflected light across a broad angular range (+/- ~7 degrees).



The width and shape of the reflected light distribution measure how surface imperfections scatter the incident light and how sharp a reflection appears. DOI indicates the “clarity” of a reflected image. It helps create a complete picture of a floor's reflective quality instead of just one area.

Out with the old and in with the new!

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