Lighting Conditions on Tile Installations

Wash Lighting

For many years, tile industry professionals have been well aware of the uncontrollable effects of “wash lighting” on ceramic tile walls. In the fields of interior design and lighting design, two specific terms are used to describe the effects most commonly produced from wash lighting. Wall grazing is a lighting condition meant to highlight and enhance changes in texture and depth, producing dramatic shadows and emphasizing variations. Light fixtures are placed 6 to 24 inches from the wall and then angled downward. Wall washers as well as track lighting are most often used to produce the effects of wall grazing. Wall grazing is most commonly used to accentuate walls made of brick or stone. It can be a tile installer’s nightmare, taking the smallest of imperfections or irregularities and highlighting them, causing the entire installation to look like a poor quality tile job.

Wall washing is a lighting condition meant to smooth out rough uneven surfaces, reduce the appearance of texture and produce a soft non-glare illumination. Lighting fixtures are placed 3 to 4 feet from the wall and evenly from each other. Florescent lighting, and low voltage incandescent lighting can be used to produce wall washing effects. Wall washing minimizes imperfections and minor irregularities in tile installations, giving the impression of a flat, level, and neatly tiled wall.
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Color Perception

“The color of the grout on my new tile floor looks different than the color I picked on the grout chart when I was at the store.” Although improper mixing, incorrect mix water content, type of tile, temperature and humidity can all contribute to the final drying color of the grout, the most common cause of undesirable grout color is lighting. Lighting can dramatically affect the way we perceive color in terms of tint, hue, darkness and intensity. One type of light can make a sample of beige grout appear pink, while another can cause the exact same sample to look closer to brown or khaki, and still another can cause it to resemble a cream or ivory color. Lighting can even change the way colors seem to match and harmonize with each other. This phenomenon is known as “metamerism”. A grout color that was selected for the purpose of complementing the tile color when viewed in a different light source may result in an undesirable clash of colors or peculiar looking combination.

Precautionary Action

Whether the tile installation is on a wall or floor, the combination of the type of lighting used, the lighting placement and the position or angle of the lighting can produce dramatic differences in terms of color, shading, texture and overall appearance of the tile and grout. Whenever possible, remodeling plans should always include lighting elements and how these choices will impact the total success of the project’s design. To eliminate any concerns regarding these effects, pre-installation meetings are a necessity with discussions to include any existing lighting fixtures that will remain as well as any new fixtures and their desired placement. Creating a “sample board” or mockup of the planned installation and viewing in different light sources will help to prevent an unexpected color scheme and help meet the customer’s expectations. Happy tiling!