



CRITICAL LIGHTING ISSUES WITH TILE INSTALLATIONS

The TCNA Handbook should be reviewed for changes annually in relationship to the following:

Interior Walls and Floors:

Use of wall-washing and cove type lighting, where the lights are located either at the wall/ceiling interface, or mounted directly on the wall, are popular techniques for producing dramatic room lighting effects. When proper backing surfaces, installation materials and methods, and location of light fixtures are not carefully coordinated, this type of lighting will accentuate irregularities in the installation by casting shadows on the tile surface joints. Similar shadows may be created from side lighting interiors walls and floors when light shines at an angle through windows and doors.

The following conditions can exacerbate the effect of the wall-washing on walls and floors.

- Floor and wall substrate not within tolerances
- Thin-set or adhesive application of tile or stone
- Materials that are subject to inherent irregularities, such as warpage

Exterior Walls and Floors:

When natural or artificial light shines on exterior walls and floors at a flat angle, almost parallel to tile surfaces. Normal and acceptable inconsistencies in the tile tilework can be highlighted and exaggerated by shadows under these conditions.

Tips to minimize the effects:

- It is recommended that the lighting be moved at least 24 inches from the wall; preferably to the center of the room.
- Have the permanent lights installed before the tile installation, or place your temporary lights directly above the installation area.
- Instruct the contractor and other trades to strictly follow ANSI and TCNA preparation and tolerance requirements for walls and floors.
- Use large beating block and properly "beat-in" tiles to obtain the most level surface.

- Make an early inspection of the installation using light directly against the tile. If multiple rooms are to be tiled, inspect the first room and obtain approval before proceeding to the next room.