

Sustainability - Restoring Acoustical Ceilings Written by Richard Zimmerman; Architect, Examiner.com

If you're like millions of other office or store workers, you look up to see an acoustic tile ceiling. And like millions of others, you may be looking up at a ratty, dirty, stained acoustic tile ceiling. While the condition of that dingy gray-white expanse may not seem like a green priority, restoring that ceiling can be a sound sustainability initiative. Let this architect tell you how. *1. Acoustical ceilings are the second largest bacterial sponge next to carpeting.

Restoration of acoustic tile ceilings can work much better than any of the three other options typically available to the user or owner: replacement, repainting and cleaning. Replacement of an old acoustic tile ceiling system has the first obvious drawback of substantial cost. Furthermore, replacement puts all of the existing ceiling materials in the waste stream, often meaning in a landfill.

The least expensive remedy is usually chemical cleaning of the ceiling. Using such products as bleaches, peroxides and other strong cleansers, cleaning may offer moderate relief for a particularly dirty ceiling. However, cleaning typically has a uniform impact, meaning that after cleaning the darkest ceiling areas still remain noticeably darker than the lightest areas. The ceiling may have a mottled overall appearance. Water stains may also not be entirely removed.

*2. Our ceiling cleaning system utilizes eco-friendly enzyme based cleaners for disinfecting and deodorizing.

Repainting an existing acoustic tile ceiling also has its drawbacks. If painting is made quick and easy, meaning spray-painting of the entire ceiling in place, then tiles become stuck to tees and the entire ceiling appears as coated and unnatural. If painting is done more judiciously and methodically, then the costs begin to rise. Painting may also reduce the acoustic properties of the ceiling by as much as 30%, and may affect the ceiling's fire-resistivity rating. Finally, paint odor may cause difficulties for occupants.

Ceiling restoration is priced roughly comparably to ceiling repainting, yet offers significant advantages. Like repainting, restoration applies a uniform coating of uniform color that returns ceiling tiles and tees to like-new appearance. Unlike repainting, however, restoration preserves the acoustic and fire-resistive properties of the original ceiling. *3. ProCoustic in ultra-white offers a brighter natural reflective coating, helping to go from dull/tired to a brighter/whiter atmosphere.

In beginning the restoration, the ceiling system in question should be complete, stable, flat and unbroken. Any damaged or broken tiles should be replaced; any damaged tees should be repaired or replaced. Proper masking and protection of walls, floors and furniture are essential. Water stains are then primed, and any areas of grease or other contaminants that might affect bonding of the restoration coating are cleaned. *4. We have the capabilities to solidify the surface structure.

The restoration coating is then applied to ceiling tiles, supporting tee systems and such accessories as speaker plates and diffusers. Restoration is achieved through spray application of a product emitting low VOCs and having high light dispersion and refraction. The particular restoration coating to be used is typically specified by the original ceiling system-manufacturer as properly suited to, and ideal for, the ceiling in question. The coating is non-toxic, and safe for spray application (even in laboratory or healthcare applications).

The life of a restored ceiling is roughly eight years — equal to the expected service life of a new ceiling, and greater than that of a cleaned or repainted ceiling. *5. Since 1996, we've been properly maintaining these investments for generations to come.

* The five addendums are added by Pete Oechsner Jr. SMS