Getting Into Sophisticated Ceilings

Wall and Ceiling Contractors Should Take a Long, Hard Look at Upgrading Their Ceiling Business Approach

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A major factor in the recent growth of the ceiling industry has been the successful implementation of a variety of materials and production techniques—many borrowed directly from other industries. The result has been a greater range of products, visually exciting designs and increased flexibility for contractors.

Conventional ceiling boards and acoustical tile ceilings continue to dominate industry sales. Linear panel ceilings, screens, baffles, three-dimensional light diffusing panels, mirrored panels and coffers—ranging from contemporary to classical designs—are all gaining an increasing market share.

Several factors account for this new direction in the marketplace. Today, building owners, architects and designers recognize the need for more distinctive buildings—buildings that make an identifiable design statement.

As a result, manufacturers are now offering a wider selection of ceiling profiles, sizes, colors, finishes and textures. Continued on page 10
Escalating cleaning, maintenance, and replacement costs on low first-cost ceilings have created growing demand for higher quality, reduced maintenance ceilings materials. In addition, many of these higher first-cost materials, such as linear aluminum panels with baked-on finishes, have the lowest life cycle costs.

High interest rates and rising costs of new construction have prompted more rehabilitation and remodeling of aging but structurally sound buildings. Ceiling manufacturers have responded with contemporary and classical panels which can be installed in or to existing suspension systems. Gone are the days when contractors can count on maximum profits merely by installing ceiling grid and lay-in acoustical panels. Today, to be a winner in a changing environment, successful contractors must keep abreast of the latest product developments, and master the finer points of installation.

Linear Ceiling Systems

In the last three years, use of linear ceiling systems has been increasing at a 25% compound rate in the U.S. marketplace. These systems offer designers a distinctive contemporary appearance together with a wider selection of colors and finishes than available in most other materials.

Originally developed in Northern Europe, linear ceilings have been manufactured in the United States for about a decade. Leading manufacturers include Alcan, Hunter Douglas, Donn Products and Levolor Lorentzen. Few of the systems offered by these manufacturers are so sophisticated or complex that a contractor should shy away from a serious consideration.

Linear ceilings, consisting of 2- to 8-inch wide panel modules in custom lengths, provide a wide range of elegant appearances that can be designed in various ways. Simple snap-in installation of most linear panels allows rapid assembly. Once installed, these ceilings are practically maintenance-free.

The advantages of linear ceilings include the following:

- They can be formed easily to both concave and convex curves.
- Linear ceilings can be ordered in a rainbow of colors and metallic finishes unavailable in many mineral-type panels.
- Some manufacturers’ linear ceilings are suitable for both interior and exterior applications. Aluminum panels are non-corrosive.
- High-impact panels are available to stand up in high-traffic locations.
- Linear ceilings can be coordinated with existing lighting and sprinkler systems.

As with traditional ceilings, good workmanship and proper care are required during linear ceiling installation. Therefore, contractors should assign their more skilled mechanics to linear ceiling projects. Two of the most common flaws in the installation of linear ceilings are oil canning, a visual distortion in the linear panels which can result when carriers are misaligned, putting the linear panels under stress. Also when two panel ends do not abutt squarely, unsightly splice joints may occur.

In order to avoid unnecessary problems, contractors should take advantage of the many services offered by manufacturers. Sales reps are available to consult with ceiling contractors and answer specific questions. At least one manufacturer packages installation instructions with every order, has installation detail sheets available on request and conducts periodic one-day workshops which cover many of the finer points of linear ceiling systems and their installation.

Renovation Systems

The popularity of linear ceilings has resulted in the introduction of several renovation systems for the designers...
who want to convert exposed T grid ceilings to linear panels.

Renovation systems consist of two basic components—renovation profiles and linear panels.

The renovation profiles consist of slim formed aluminum which fastens easily to the ceiling grid. With one of the systems, only a pair of pliers is necessary to fasten the renovation profile permanently to the “T-bar.” Once installed, linear panels, running perpendicular to the profile, snap-in to pre-formed lugs on the renovation member.

**Renovation systems offer several advantages to both architect and contractor:**

- An economical way of converting ceiling tile to linear panels.
- A way to avoid messy demolition. Existing ceiling board can remain in place thus enabling a ceiling to retain much of its acoustical value after linear panels are installed.
- Renovation systems can be installed in many spaces in a single day, even in occupied spaces with minimal disturbance to personnel.

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**Screen Ceiling Systems**

Screen ceilings have also gained greater recognition in recent years. Today, many designers and owners are opting for a “different kind of look” without having to invest significant sums of money in new lighting, sprinklers and other ceiling apparatus. Screen systems are currently available in steel, aluminum, wood and plastics. Screens can be a very economical solution for an open ceiling design. Used in a renovation, they can enable a designer to decorate and conceal without having to alter or replace existing lighting, sprinkler, and air distribution. Screen ceilings are particularly effective in shopping malls and other applications where natural or artificial light from above can be interchanged.

In many cases, it’s possible to create interesting visual effects with light that store planners use to attract customers to merchandise.

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**Baffle Ceiling Systems**

Baffles are often specified for their distinctive appearance and excellent
sound control. Like screen ceilings, baffles are very popular in renovation work because minimal changes are required with illumination and HVAC apparatus. Ideal for areas such as cafeterias, auditoriums, corridors, and open offices, baffles are available in wood, plastics, fabric covered fiberglass and metal fiber—which can be perforated for acoustical control.

### Suspension Systems

Two recent developments have enabled low cost, exposed T-grid ceilings to be more attractive. The first, an exposed grid suspension with a channel-shaped bottom flange, creates a dark reveal at the center line of the T. This tends to camouflage the intersection of main T’s and cross runners. Lok Products and Donn Products are two manufacturers who offer this type of suspension system.

The second is an exposed T system available in over 100 colors and a wide range of finishes. This system, the Levolor Color Grid, introduces style and color into low budget ceilings. The same finishes are also available in Levolor’s linear ceilings and window blinds, simplifying interior color coordination.

### Integrated Ceiling Systems

Today, many manufacturers are offering ceilings designed to coordinate with lighting, air distribution and acoustical controls. These integrated ceiling systems offer a “one-stop shop approach” for the architect or contractor, and are designed to meet both aesthetic and functional needs of a ceiling.

The integrated ceiling system has taken on greater complexity in recent years. Linear ceiling manufacturers, for example, are now offering custom lighting fixtures, air diffusers, and access doors which are tailored specifically to the shape and profile of their ceilings.

With the rise of the integrated ceiling systems, ceiling contractors need better knowledge of the functional components of the ceiling.

They must be able to interface with designers, building owners, and operators and be able to provide a full-service ceiling which will include proper illumination, air distribution, and

### Modified Panels

Manufacturers of mineral and glass fiber ceiling panels and tiles, such as Armstrong, Conwed, and Celotex, are offering reveal edged and reveal face panels to achieve small square, rectangular, and linear patterns. They have also introduced panels with muted integral colors as well as fabric-covered units.

Architects, designers, and contractors are developing a track record with the ceiling industry’s “new technologies.” Manufacturers are already obtaining feedback on the performance of their new and modified products. These comments will serve as guidelines for future products development and improvement assuring that the ceiling industry meets changing needs of the building community.