

How to Install Suspended / Drop Tiles

1 Installing New or Replacing Old Ceiling Tiles

1.1 Prepare Grid

1.1.1 Install Ceiling Grid

Ceilume ceiling tiles can be installed in an approved ceiling suspension system using standard 15/16 in. (often called 1 in.) face T-bar grid. Many 0.030 in. thick Signature styles can also be used in slimline 9/16 in. drop ceiling grid.

Install grid in accordance with manufacturer's instructions. Center to accommodate border tiles (see Section 1.3.2) and lighting.

Check building codes as required.



1.1.2 Clean Ceiling Grid

Thoroughly clean your room and T-bar grid. Remove contaminants (dust, oil, old paint, etc.), then wipe down with a damp rag to dissipate static electricity, which attracts dust to the T-bar. **Even brand-new grid should be thoroughly cleaned.**

1.2 Install EZ-On Grid Covers or Strips (If Applicable)

EZ-On Grid Covers and Decorative/Smooth Strips are designed to cover the T-bar in drop ceiling tile installations. **Strips must be installed before you install ceiling tiles.** EZ-On Grid Covers can be installed before **or** after tiles are in place. Please see the instructions included with those accessory products for installation.

1.3 Install Ceiling Tiles

1.3.1 Before You Begin

Ceiling tiles may come out of the box with a bit of a static electricity charge, which can attract dust and debris from construction and remodeling projects. We **strongly** advise all sawing, drilling, sanding, and sweeping be finished, and the room thoroughly cleaned before installing tiles.

Don't worry, our tiles don't create dust of their own, and once installed any static charge will dissipate.

1.3.2 Install Tiles

To install new ceiling tiles, simply pop them into place in your ceiling grid.

In all likelihood, your ceiling will have some less-than-full-size grid squares (usually around the perimeter of the room). These areas require one of our border tile styles, which have a shallow or minimal pattern that lends itself to trimming and installing in these smaller areas. To install, measure partial grid squares, cut tiles to size with scissors or snips, and place trimmed pieces into the grid.

2 Refacing Existing Ceiling Tiles

If keeping the acoustic and thermal properties of your existing ceiling is important, and the previously installed tiles are in good (if not beautiful) condition, most 0.030 in. thick Signature styles can be used for refacing.

2.1 Install EZ-On Grid Covers or Strips (If Applicable)

EZ-On Grid Covers and Decorative/Smooth Strips are designed to cover the T-bar in drop ceiling tile installations. **Strips must be installed with an empty ceiling grid, so tiles will need to be uninstalled and then reinstalled.** EZ-On Grid Covers can be installed with tiles in place. Please see the instructions included with those accessory products for installation.



2.2 Install New Ceiling Tiles Below the Old

2.2.1 Before You Begin

Ceiling tiles may come out of the box with a bit of a static electricity charge, which can attract dust and debris from construction and remodeling projects. We **strongly** advise all sawing, drilling, sanding, and sweeping be finished, and the room thoroughly cleaned before installing tiles. Don't worry, our tiles don't create dust of their own, and once installed any static charge will dissipate.

2.2.2 Install Tiles

To install, simply slide your new refacing ceiling tiles (with their features projecting down into the room) under existing tiles, and then reset the pairs back into the grid.

In all likelihood, your ceiling will have some less-than-full-size grid squares (usually around the perimeter of the room). These areas require one of our border tile styles, which have a shallow or minimal pattern that lends itself to trimming and installing in these smaller areas. To install, measure partial grid squares, cut tiles to size with scissors or snips, and place trimmed pieces into the grid.

3 Lighting

3.1 Recessed Lights

Grid-mounted recessed lights work well with Ceilume ceiling tiles. Simply choose a tile design that has sufficient flat area in the middle to fit the light opening and trim ring, and use a light that comes with a grid-suspension bracket that supports the weight of the light by the T-bar grid and not by the tile.

Measure the fixture to determine the size of the opening needed for the light and trim ring, make a simple cutting template, mark the location of the opening on the tile, and cut the hole. Then pop tile into place in your grid, position your light fixture above it, and finish with the trim ring.

Coffered ceiling tiles like Madison and Westminster may require additional steps to install with recessed lights. Please feel free to contact us if you require assistance.

3.2 Transluminous® Panels Beneath Light Fixtures

Translucent, Frosted, and Clear panels can be used beneath light fixtures or throughout the entirety of an installation for a fully-illuminated ceiling effect. Translucent and Frosted panels obscure the area above your suspended ceiling grid, whereas Clear panels, while not “window clear”, provide full visibility to everything above them.

For best results:

- Install panels at least 6 in. below light fixtures
- Use LED fixtures to extend the life of Transluminous® Panels
- Pair Translucent and Frosted panels with AcoustoTherm® Backpanels to obscure dust and shadows caused by debris accumulation on top of panels

4 Insulation

4.1 Soniguard™ Drop Ceiling Insulation

Soniguard™ is a fiberglass-free insulation that is pre-cut for easy installation. To install, simply drop ceiling tiles and pieces of insulation into the grid in pairs: one piece of Soniguard™ (two pieces for 2 ft. x 4 ft. ceiling panels) resting on top of one ceiling tile.

4.2 AcoustoTherm® Backpanels

AcoustoTherm® Backpanels nest above drop-out ceiling tiles, creating an insulating and sound-dampening pocket of still air. Backpanels can also be used in lighting applications to obscure dust and shadows caused by debris accumulation. To install, drop ceiling tiles and backpanels into the grid in pairs: one backpanel (two backpanels for 2 ft. x 4 ft. ceiling panels) on top of one ceiling tile.

4.3 Rolled and Batt Insulation

If you are using rolled or batt insulation in combination with Ceilume ceiling tiles, attach it to the surface above the drop ceiling. Do not install rolled or batt insulation directly on the grid or tiles as the weight may cause the tiles to bow.

5 Temperature Warning

As a guideline, Ceilume ceiling tiles and panels are not affected by ceiling temperatures up to 120°F. In some installations involving halogen lights, metal heat registers, or heat sources (stoves, ovens, etc.), localized ceiling temperatures can be much higher than anticipated. Please contact us for advice if your installation has any of these special conditions.

6 Fire Sprinkler Systems

Before using Ceilume ceiling tiles in buildings with overhead fire sprinkler systems, the first and most important step is to consult local building and fire officials to make sure that the intended use conforms with appropriate local codes. Fire ratings, approvals, certifications, and compliance documents can be found on our website.

We offer three (and **only** three) safety tested and approved methods of installation. If you have ceiling sprinklers, you **must** install tiles in one of the following ways.

6.1 Drop-Out Ceiling Tiles Beneath Sprinklers

Per IAPMO UES Evaluation Report 310, all Feather-Light and Signature styles are suitable for use beneath Quick Response (QR) and Standard Response (SR) sprinkler systems rated with an activation temperature of 135°F or above, in Light Hazard and Ordinary Hazard Group I occupancies and where allowed by local safety authorities. (*Note: Of the 0.030 in. thick Signature styles, Ceilume only recommends using Oxford and/or Fleur-de-lis ceiling tiles in drop-out installations. Contact us for more information.*) When exposed to heat from a developing fire, these drop-out tiles soften, distort, and fall from the ceiling grid. Heat from the growing fire activates the sprinkler, which, unimpeded by the tiles, can perform its intended function.

Suspension systems for drop-out installations must:

- Support all tile edges
- Provide no more than 0.375 in. horizontal edge support
- Comply with ASTM C635, Heavy-Duty Classification (16 pounds per lineal foot)

AcoustoTherm® Backpanels, Soniguard™ Drop Ceiling Insulation, EZ-On Grid Covers, and Uplift Prevention Clips are also listed for use with Ceilume ceiling tiles in these installations.

6.2 Ceiling Tiles with Sprinkler Penetrations

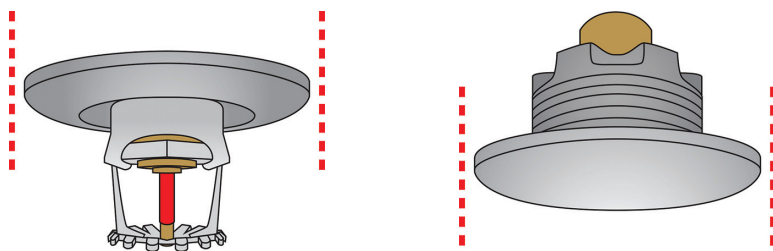
6.2.1 Restraining-Type Trim Ring/Escutcheon/Cover Plate Warning

Never use a trim ring/escutcheon (pendant sprinkler) or cover plate (concealed sprinkler) at a sprinkler penetration without an appropriately-sized hole (see Section 6.2.2) or mineral fiber backing panel (see Section 6.2.3).

6.2.2 Ceiling Tiles with Oversized Holes

When sprinklers penetrate through ceiling tiles and you are not using a refacing style with a mineral fiber backing panel (see Section 6.2.3), per IAPMO UES Evaluation Report 310, sprinklers must be located a maximum of 3 in.

below the ceiling grid, and sprinkler-penetration holes must be at least **0.25 in. larger** in diameter than sprinkler trim rings/escutcheons/cover plates (or the sprinkler itself if no trim ring/escutcheon/cover plate is being used).

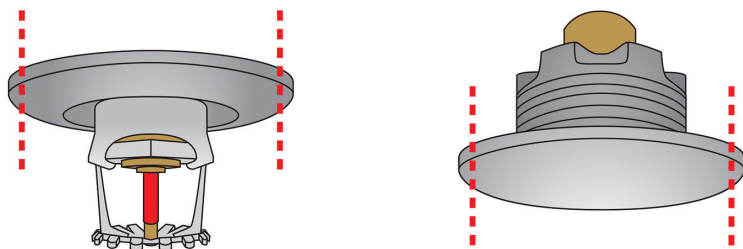


An appropriately-sized hole saw can be used to cut clean, smooth, and neat sprinkler-penetration holes. Run the saw in reverse in order to keep tile material from binding.

6.2.3 Refacing Ceiling Tiles with Mineral Fiber Backing Panels

Most 0.030 in. thick Signature styles can be used as refacing tiles (see Section 2) in conjunction with mineral fiber backing panels. (*Note: Feather-Light 0.013 in. thick ceiling tiles cannot be used as refacing tiles.*) In those locations where sprinklers penetrate through ceiling tiles, cut holes in both the refacing tiles and the mineral fiber backing panels, slide the refacing ceiling tiles (with their features projecting down and into the room) under the mineral fiber backing panels, and then resettle the new pairs back into the grid.

If you are using a refacing style with a mineral fiber backing panel above it, per IAPMO UES Evaluation Report 310, sprinklers must be located a maximum of 3 in. below the ceiling grid, and sprinkler-penetration holes must be **0.25 in. smaller** in diameter than sprinkler trim rings/escutcheons/cover plates.



An appropriately-sized hole saw can be used to cut sprinkler-penetration holes through both mineral fiber backing panels and Ceilume tiles. When cutting the holes in your Ceilume tiles, run the saw in reverse in order to prevent tile material from binding.

6.3 Rectifying Fire Sprinkler Non-Compliance

If you find yourself in a situation where sprinklers are penetrating through Ceilume ceiling tiles, the corresponding holes are not large enough, and you are not using a refacing style with a mineral fiber backing panel, there are two acceptable remedies:

1. Enlarge penetration holes per IAPMO UES Evaluation Report 310 (see section 6.2.2).
2. Use a refacing style with a mineral fiber backing panel (see section 6.2.3).