



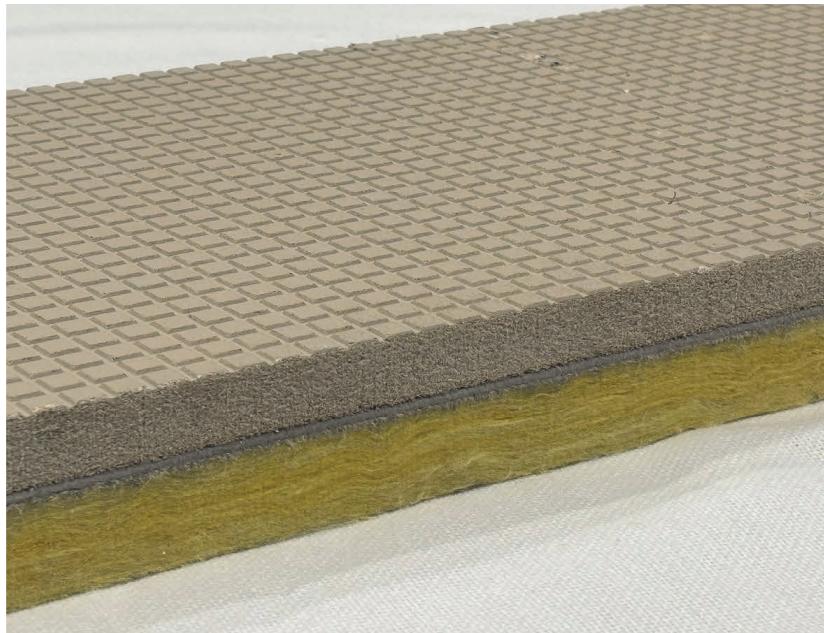
Serine Tile

Serine composite ceiling tile is designed to address the issue of speech privacy and noise transmission through suspended tile and grid ceiling systems.





Serine Tile



The problem

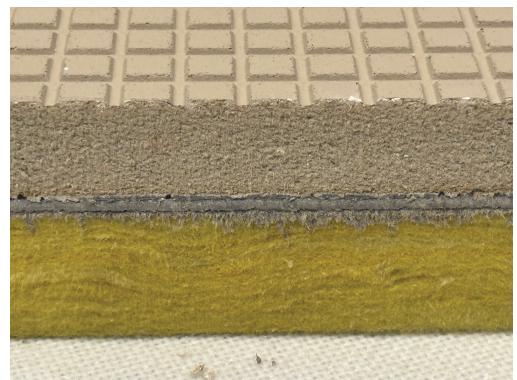
Commercial buildings may be constructed with partition walls that terminate below a suspended ceiling system. This creates a situation where noise can easily transfer through the suspended ceiling tile and grid system into (or out of) a building space. These noises can impact comfort, privacy and speech confidentiality (HIPAA Regulation), occupant concentration, productivity and more.



The solution

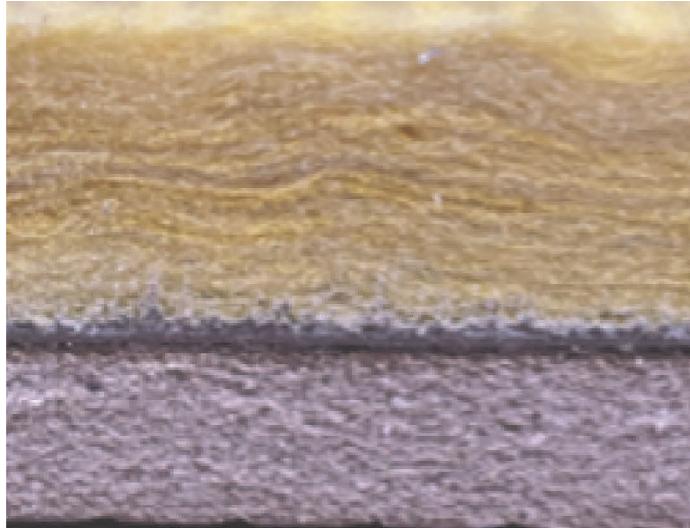


Serine composite ceiling tile with mass loaded vinyl (MLV) and fiberglass insulation provides superior sound absorption and blocking of unwanted noise transmission through the plenum cavity (space between the ceiling and overhead floor or roof structure). The Designer's selected acoustic tile is laminated with MLV and a fiberglass insulation layer to provide unsurpassed sound absorption while the layer of Mass loaded vinyl barrier and decoupler reduces both airborne and impact noise transmission. Serine tile with fiberglass insulation also improves space comfort and thermal efficiency during heating and cooling seasons due to the fiberglass insulation R Value of 4.5.





Serine Tile



Fiberglass Insulation Version



Gypsum Board Version

The optional gypsum board layer adds mass to further reduce noise transmission through the composite tile system.

As required by CODE the composite Serine ceiling tile has been evaluated by an IAS accredited laboratory for life safety fire performance.

Product Fire Classification: per ASTM E84, Flame Spread / Smoke Development:

- Class A (0/5) - Armstrong Cortega Tile, MLV barrier, 1" fiberglass
- Class A (0/0) - Armstrong Cortega tile, MLV barrier, ½" gypsum board
- Reference selected ceiling tile Mfr. datasheet for fire classification, NRC and CAC rating.

Thermal Insulation: per ASTM C518

- Fiberglass insulation version - R Value 4.5 @ 75°F MT.

Note: Custom panel component materials are available.

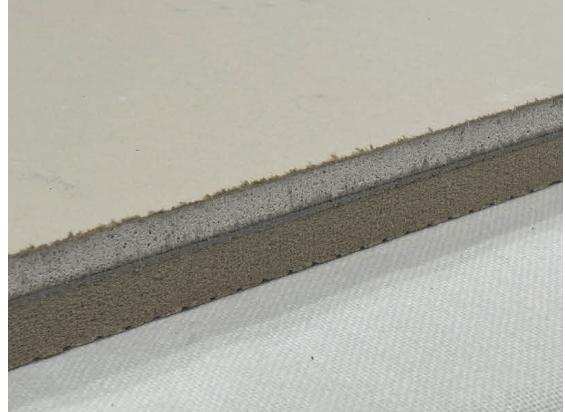
The Serine Tile Project Steps

- ✓ The Architect or designer selects a ceiling tile (Class A rated) to suit project requirements in either 2 x 2' or 2 x 4' lay in ceiling panel and the grid system (15/16" or 9/16")
- ✓ The Architect or designer selects either the 1" fiberglass sound absorber and thermal insulation or an alternate gypsum board added mass layer.
- ✓ The MLV sound barrier, decoupler, and either the fiberglass insulation or gypsum board are laminated to complete the composite lay in tile system. Panels are sized to fit standard 15/16" or narrow 9/16" grid systems.

Installation details:

- ✓ The weight of Serine composite tile system without a project specific ceiling tile weight are as follows:

- Fiberglass insulation version – 4.5 lbs. for 2 x 2' size, 9 lbs. for 2 x 4' size.
- Gypsum board version – 10.5 lbs. for 2 x 2' size, 21 lbs. for 2 x 4' size.
- The weight of the selected ceiling tile must be added to selected Serine panel type and size for the total panel weight required to design the ceiling suspension system.



Other major noise leaks:

Recessed ceiling fixtures, including lights, speakers, exhaust units, and combination light and exhaust units, are pathways for noise transmission through the ceiling system. SPI's Patented SafeLite® UL Certified ceiling fixture covers provide documented sound blocking performance to address these common conditions.



SafeLite®

Patented, UL Listed Fixture Cover



Recessed lights, speakers, exhaust fans etc. provide pathways for noise transmission

SafeLite non-combustible, Class A rated fixture covers comply with CODE requirements for return air plenum space. They also provide an R value of 5.2 to reduce energy losses and greenhouse gas emissions. They are also UL Certified for fire rated assemblies for 1 to 3 hour fire ratings.

Sustainable SafeLite covers are made of natural materials with a minimum of 70% recycled content contributing to LEED credits. SafeLite is produced to fit virtually any size recessed fixture and installation is quick and easy.

Learn more at [SafeLite | SPI](#)



SPI provides a complete range of sound absorbing and noise blocking products. Learn more at [Acoustical Insulation Products | SPI](#)