# The future is here today with TruProtect.

## **TruProtect Ceiling Tiles**

Finding solutions to problems is how TruProtect originated. They are also the same problem solving skills that led to the development of the new ceiling tiles. Many office buildings have dropped ceilings with tiles made of mineral fiber or fiberglass. These tiles are porous, collect dust, have minimal insulation and sound proofing qualities, and make a complete mess when installing and replacing. Surely there had to be a better product!

Enter TruProtect's new ceiling tiles to solve these problems. Each tile is the original TruProtect with with a durable paint coating that is visually appealing. Without the hassle of remodeling, a building can now add the benefits of TruProtect. Heat and cold from the attic or plenum are stopped from entering the work space. Noise from the floor above or below no longer irritates employes. Rooms are brighter because light is reflected off the tiles. Pipes may leak, but moisture will not soak into these tiles avoiding ugly discoloration and mold.

Where can TruProtect ceiling tiles be used to great advantage? Practically anywhere! Use them anywhere you want to control temperature and sound.

Residences

home gyms

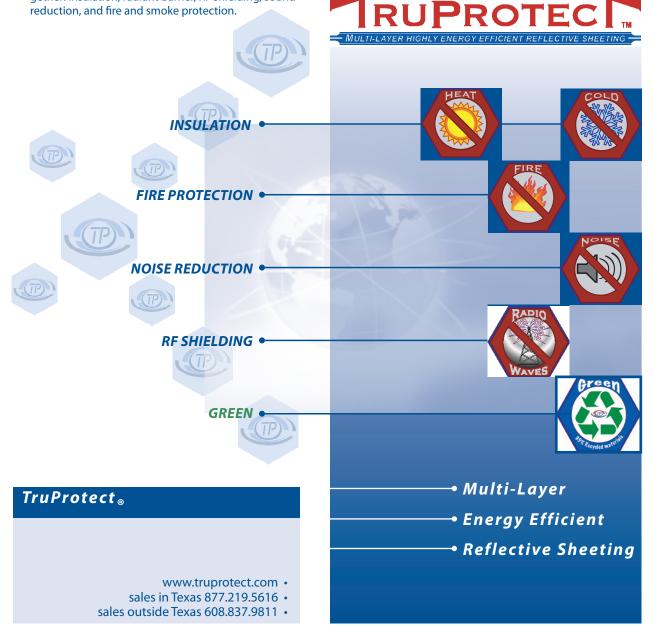
home offices

home media centers

#### **Commercial buildings**

- offices
- restaurants
- schools
- warehouses
- theaters
- board rooms
- churches
- government buildings
- studios
- SCIF facilities

• TruProtect is the only product that brings it all together: insulation, radiant barrier, RF shielding, sound reduction, and fire and smoke protection.





## **One-Stop Shopping**

It's hard to understand how great the new TruProtect ceiling tiles are without understanding the qualities of the original product, which is the core of the ceiling tile. There are numerous products available for insulation, radiant barrier, fire protection, and mold and mildew, but now, all of these qualities can be found in one product.

*Insulation*. The original 1/2" thick TruProtect sheet has an R-factor of 1.61, extrapolated to 6.

**Radiant Barrier**. Test results show that TruProtect has a 98% reflectance, meaning that only 2% of applied heat is transferred to the other side of TruProtect. With a test margin of error of +/- 2, the results indicate that TruProtect completely stops the transference of heat and cold.

*Fire Resistance*. After testing in a tunnel with an 1860°F flame drawn through at 125 feet per minute, TruProtect received a Class A rating for flame spread and smoke generation.

**Noise Reduction**. A single half-inch sheet of Tru-Protect achieved a Sound Transmission Loss (STC) rating of 19, a Noise Reduction Coefficient of .6, and a Ceiling Attenuation Class of 38.

**Environmentally Friendly**. TruProtect watches out for the environment because it is made from 65-70% recycled materials, and buildings with TruProtect require less energy to heat and cool, saving natural resources.

*Installation.* The original TruProtect can be installed with nails and roofing washers or simply with adhesive. No safety gear is required for the installation of TruProtect ceiling tiles. Nothing could be easier!

## **TruProtect Ceiling Tiles**

Start with TruProtect, color to match interior design, and the result is an unbeatable product.

Up until now, ceiling tiles have been beneficial because . . . well, because they hide ugly pipes, and that's about all. With TruProtect ceiling tiles, any building can have the benefit of insulation, sound protection, and light reflection.

The temperature extremes that radiate down from roofs or unairconditioned spaces will be stopped by TruProtect's radiant barrier and insulation. With an R-factor of 6 and a radiant barrier of 98%, the temperature controlled air in rooms will require less energy to stay within a desirable comfortable range. Energy savings may be from 10-25%.

The half-inch ceiling tile with its nine noise reflectors has an STC rating of 19, a NRC rating of .6, and a CAC rating or 38, which has important implications. It means that sound in the room will stay in the room, and sound outside of the room will stay outside of the room.



In a side-by-side comparison of TruProtect ceiling tiles (left) with conventional ceiling tiles, TruProtect looks brighter and cleaner.

TruProtect's ceiling tiles combined with TruProtect panels applied to walls will keep sound in or out, depending on the need. The noise from movie sound-tracks or a loud stereo will stay in media rooms. Discussions in doctor's offices, conference rooms, or executive suites can remain confidential. Sounds from noisy cars or machinery can be kept out of rooms.

For security to block wireless communication from entering or exiting, TruProtect ceiling tiles provide an excellent solution when combined with its 4'x8' panels in walls.

With a busting strength of 400 lb for the 1/2" and 900 lb for the 1", TruProtect's ceiling tiles are strong and durable. No more flaking and cracking which happens with conventional tiles.

The covering for the ceiling tiles comes in an assortment of colors, ranging from bright white to black. This expansive range of choices should meet all needs.

TruProtect ceiling tiles come in 2'x2' and 2'x4' width and in 1/2" or 1" inch thickness.

ASTM C 1363-97: Thermal Performance Test	Thermal resistance Rs – 1.61 (hr.ft.sq.)/Btu Conductance Cs – 0.62 Btu/hr.ft.sq.F
ASTM E903: Hemispherical Spectral Reflectance	81.5 % Solar Reflectance
ASTM E408-71: Total Emittance Test	.02 Emittance: .98 Reflectance
ASTM E84-04: Surface Burning Characteristics	Class A Fire Rating: Flame Spread Index=25 Class A Smoke Rating: Smoke Developed Index=20
ASTM E90: Sound Transmission Loss Test	Thickness ½": STC – 19; OITC – 15
	Total assembly thickness 8": STC – 51; OITC – 35
ASTM D-3273-94: Resistance to Growth of Mold	TruProtect scored a perfect 10
NRC: Noise Reduction Coefficient	0.6 for both 1/2" and 1" thicknesses
CAC: Ceiling Attenuation Class	38 for 1/2" and 43 for 1" thick