



Product Comparison CST vs MFT vs METAL Tiles

CHARACTERISTICS	"Aerolite" Lightweight Calcium Silicate False Ceiling Tiles MADE IN INDIA	"Knauf/USG/Amstrong" Mineral Fibre False Ceiling Tiles MADE IN CHINA	GI Metal False Ceiling Tiles
Humidity Resistance	100% RH	75% - 99%	Though the tile is physically unaffected by humidity, the fleece backing in perforated tiles starts to wilt with contact with atmospheric moisture.
Water Resistance	In case of contact with water, Aerolite does not loose its physical integrity. Being factory finished the surface paint does not peel off. However can be re-painted, if & when required.	In case of contact with water the ceiling tile starts warping, swelling and disintegrating. Cannot be re-painted. Patches remain visible.	Decolourisation, Rusting and Badsmell from the fleece backing.
Non-Combustibility	Non-combustible as per BS 476 Part 4. Tested and Certified by Central Building and Research Institute (CBRI) - Roorkee. DOES NOT EMIT SMOKE vide ASTM E-84	Incombustible (as per manufacturer's claims). However, as per data available on surface spread of fire, it is classified under "Class A" with a flame spread index of 25 & a smoke emission index of 50 as per ASTM E-84.	During fire the droplets of Paint/coating form and fall to the ground which is hazardous & tiles tend to warp & bend, which may result in collapse of the false ceiling. It can cause injury due to its sharp edges.
Fire Resistance	Class 0/ Class I under BS 476 Part VI & VII. Tested and Certified by CBRI - Roorkee.	Class 0/ Class I under BS 476 Part VI & VII.	Class 0/ Class I
Light Reflectance	Above 85%. Tested and Certified by National Physical Laboratory, New Delhi.	> 85%	< 77% In case of perforated surface less light reflectance
Sound Absorption (NRC)	NRC 0.15 to 0.75 in normal condition and High NRC 0.91 to 0.94 with glass wool backing.	0.10 to 0.75 Depending on Texture	0.10 to 0.70 (with glass wool backing)
Thermal Conductivity	0.048/W/M K C Having High Insulation Capability and helps to reduce A/C units running costs. Tested and Certified.	0.057/W/M K C	Being Metal, Thermal Conductivity is High. Hence more Electricity consumption is required to keep room cool.
Termite Resistance	Inorganic (Termite attack not possible.)	Organic Binder (Termite attack possible)	No Termite attacks. But due to water leak or condensation the fleece at the back develops Fungi & Algae
Size	595 mm x 595 mm with 15 mm Integral Densified Edges	595 mm x 595 mm/1195 x 16 mm & 20 mm Edges	595 mm X 595 mm & 595mm X 1195 mm
Edge	Densified Square Edged, Tegular Edged & Microlook Edged. 10 mm thick in the center and 15mm thick all around on edge resting portion with integral densified edge.	Square Edged, Tegular Edged & Microlook edged	Tegular Edged & Microlook Edged
Density	Avg 370 Kg/m ² 350 Kg/m ² Quadrant 450 Kg/m ² Edges	260-320 Kg/ m ²	90-100 Kg/ m ²
Weight	5 - 5.5 kg/m ²	3.8 kg/m ²	4.5 - 5 kg/m ²
Product	Available in a range of surface textures/designs & full Range offered is 100% RH & Non-combustible	Only limited range offered 99% RH	Only Limited Design.
Availability	Make in India & Available Across all over India	Imported from China. Long Lead Time	All across INDIA
Bio-Safe and Eco-Friendly	Aerolite is manufactured under Cooking System. Calcium Silicate Slurry is cooked at 850 degree Centigrade for 2½ hours, under constant stirring, which allows 100% cooking. This ensures uniform Matrix Property and makes the finished product Bio-Safe and Eco-Friendly has 48 - 52% recycled material out of which 18 - 20 % is Fly Ash Duly certified by GRIHA / IGBC . MADE IN INDIA under AatmaNirbhar Bharat Abhiyan	Available As per their own SAFETY DATA SHEET (Enclosed)	Available
		Causes	
		Respiratory tract irritation	
		Skin irritation	
		Delayed Effects	Cancer hazard, Lung damage.
		Eye irritation	
Guarantee	10 year Guarantee - Free from sag.	Data Not Available	Data Not Available

