



METAL SHEETS VS UPVC SHEETS

COMPARISON

	METAL SHEETS	
In case of fire	Not inflammable. But potentially dangerous to life - risk of multiple burn injuries from intensely hot debris of GI sheets	Self extinguishing. Negligible risk to life from charred sheets
Applications	Very limited	Wide range of applications in both exterior as well as interiors. Aesthetically superior
Thermal Insulation	Poor	Good
When subjected to impact and falling objects	Develops dents	High impact resistance. Does not shatter easily
Resistance to Acid & Alkalies	Poor	Excellent
Workability with tools	Involves more labour and effort	Can be cut, drilled or worked with standard carpentry tools

	ASTM METHOD	METAL SHEETS	
Tensile strength at yield	D-638	53700 psi	4500 - 6500 psi
Tensile strength at break	D-638		39-53 MPa
Density	D-1505	7.5 - 7.89 g/cm ³	1.3 - 1.5 g/cm ³
Young Flexural Modulus psi	D-790	29x10 ⁶	49x10 ⁴
Thermal Conductivity	C-177	89 W/(m. K)	0.14 - 0.28 W/(m. K)
Hardness (Rockwell)		95	118
Coefficient of linear expansion m/m/°C	C-696	16x10 ⁻⁶	10 ⁻⁵
Specific Heat Capacity kJ/kg K	C-351	0.62	1.3
Rain Drumming Sound (Decibels)	C-351	55dB	27dB
Electrical Resistance (Decibels)	C-351	Nil	10 ¹⁵
Weight Per Sq. Metre		2mm - 22 kg 1.5mm - 15 kg	2mm - 4.5 kg 1.5mm - 3.7 kg