

## PVC-U Conduit

### Material

PVC-U is flame retardant and self-extinguishing. It is a 100% recyclable material.

Our PVC-U products are manufactured from an average of 80% recycled plastic, with some extruded products produced from 100% recycled material. The index at the back of the catalogue details the recycled content by individual product.

### Installation

The properties of PVC-U make it an all insulated system and the use of a separate earth cable is essential.

### Joint sealant

- Solvent cement MSC is a slow acting solvent cement especially formulated for watertight conduit fittings.

In accordance with COSHH Regulations, details of our solvents are entered in The National Poison Centre computer records. Health & Safety data sheets are available from our Technical Team or on the technical page of the Marshall-Tufflex website: [www.marshall-tufflex.com](http://www.marshall-tufflex.com)

## MT Supertube

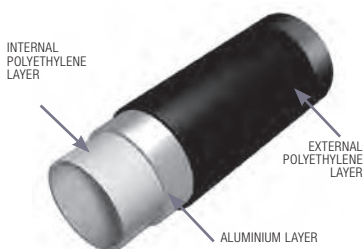
### General information

MT Supertube provides LSOH polyethylene-coated aluminium cable protection for installation where halogen free products are a requirement.

### Material

**Conduit:** A seamless aluminium tube sandwiched between two layers of extruded LSOH polyethylene.

**Fittings:** LSOH polycarbonate or cast metal with paint finish. (black or white).

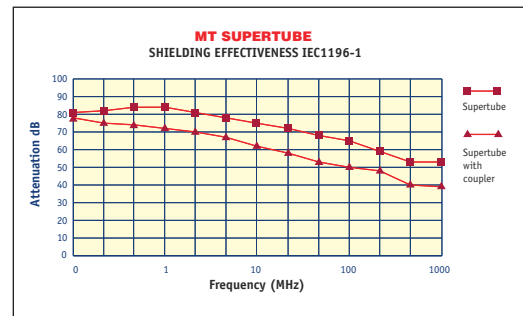


### Shielding effectiveness

Shielding effectiveness (attenuation in dB) measures the ratio between the external environment field strength and the field strength after passing through any material. This is recorded in a logarithmic scale.

Shielding effectiveness	
Attenuation in dB	Field strength reduction
6	2
20	10
40	100
60	1000
80	10000

MT Supertube multi layer conduit systems absorbs and reflect emitted radiation from sources of interference, where an attenuation of 80dB would reduce the resultant field within MT Supertube by a factor of 10,000. (See tables.)



The graph above shows that the shielding effectiveness of MT Supertube is highly effective throughout the entire frequency range and will provide protection from interference for data, telecoms and signal cables.

Mechanical		MT Supertube & MT Supertube FR	MT Supertube & MT Supertube FR
Tube reference		22010/22003	22505/22503
Outside diameter	(mm) OD	20	25
Internal diameter	(mm) ID	15.5	20
Wall thickness	(mm) W	2.25	2.5
Minimum bend radius	(8 x dia)	160	200
Weight per metre	(g)	145	184
Lengths	(m)	100/3	50/3
Suspension distance (maximum)	Horizontal (mm)	1000	
	Vertical (mm)	1200	

Mechanical	MT Supertube	MT Supertube FR
Electrical breakdown resistance	20,000 V	20,000 V
Temperature range °C	-45 +120	-45 +289
Thermal expansion coefficient	2.0 x 10-6mm/m/K	2.0 x 10-6mm/m/K
Thermal conductivity	0.45 W (mK)	0.45 W (mK)
Earth bonding/continuity test results	<0.05 Ω	<0.05 Ω
Standards	EN 61386-21	EN 61386-21
	IEC 601196-1	IEC 601196-1

**WARNING NAIL PENETRATION:** MT Supertube FR Plus complies with the current requirements for BS 7671, BS 8436 and BS EN 61386. Screening to ENIEC 1196-1.

## MT Supertube FR Plus performance

Fire Performance				
Oxygen Index	BS EN ISO 4589-2	46.5%		
Flammability Temperature (Temperature Index)	BS EN ISO 4589-3	289°C		
Elemental composition	Lassaigne Sodium	Nitrogen	Negative	
		Fusion	Chloride	Negative
			Bromide	Negative
			Fluoride	Negative
			Sulphur	Negative
Smoke Density	Low Smoke			

Conduit Performance (BS EN 50086.1.2)	
Cold temperature impact test	Heavy gauge performance
Compression	Low compression
Resistance to flame propagation	Pass

TECHNICAL INFORMATION

