

Material Data : PVC-U

General Characteristics

The majority of REHAU Trench Cable Management products are manufactured from RAU PVC 1309. This is a tough, rigid material with excellent resistance to chemicals and ageing. REHAU Trench's PVC 1309 is lead and cadmium free and conforms to BS 476 and UL 94 V-O. This material also conforms to the requirements of reaction to fire according to the trunking standard BS EN 50085-2-1

Density	1.48g/cm ³
Coefficient of linear expansion	80 x 10 ⁻⁶ /°C
Impact resistance (notched DIN 53453)	2-4kJ/m ²
Dielectrical strength	>20kV/mm
Tensile strength (DIN 53455)	>50 N/mm ²
Insulation resistance according to BS 4678	
Vicat softening point	83°C

Chemical Resistance

RAU-PVC 1309 is resistant to most diluted and concentrated acids and alkalis and also to aqueous salt-solutions. It is resistant to mineral oils, vegetable oils, paraffin oils, alcohols, benzene, aliphatic hydrocarbons, and higher fatty acids. Unplasticized polyvinyl chloride swells or becomes soluble in esters, ketones, chlorinated hydrocarbons, carbon disulphide and other solvents and is therefore not resistant. See Chemical Resistance table for further information.

Weathering and Ageing Resistance

Because of its chemical structure, RAU-PVC 1309 possesses an inherent excellent resistance to ageing. Colour stabilisers used in recipes for Cable Management Products have a Wool scale light fastness of 8. This is the highest result achievable and represents permanent colour fastness.

Combustibility

Being a hydrocarbon with high chlorine content, RAU-PVC 1309 is difficult to ignite; it is also self-extinguishing.

Thermal Properties

RAU-PVC 1309 is a thermoplastic. The physical values therefore vary with changes in temperature.

Bonding

RAU-PVC 1309 can be bonded to itself and other materials quite simply using normal commercial adhesives for rigid PVC-U; a very good bond is achieved. The adhesive manufacturer's instructions should be observed.

For REHAU Trench LEH Cable Trunking

General Characteristics

REHAU LEH cable trunking is manufactured from RAU PCAB-648. This is a thermoplastic blend based on polycarbonate and ABS which combines the advantages of a polymer with a halogen free material and minimal release of toxic gases in the event of a fire.

Density	1.18g/cm ³
Coefficient of linear expansion	8x10 ⁻⁶ /°C

IZOD Impact strength	2600mpa
Dielectrical strength	35kV/mm
Vicat softening point	83°C
Halogen free according to VDE 0472 parts 813 & 815	

Combustibility

RAU-PCAB 648 is self extinguishing according to UL-94 VO at 1.5mm and 5VB at 2.5mm minimal release of toxic gases in the event of a fire.

VDE 0472 parts 813 & 815 Testing of Cable, Wires & Flexible cords
- Corrositivity of combustion gases and non halogen verification

Thermal Properties

RAU-PCAB is suitable for application range -25°C to +90°C.

Moulded Components

The materials used for moulded accessories are selected so their properties compliment those of the PVC-U trunking itself.

These material are as follows:-

RAU-PS - Polystyrene

RAU-ABS - Acrylonitrile-butadiene-styrene

RAU-SB - High impact polystyrene

RAU-POM - Polyacetal

Other Materials:-

Aluminium Products (SIGNO POL and Post)

Aluminium A1 Mg Si 0.5 according to BS 6063.