uPVC Profiles – Technical Data Sheet (TDS)

Product Description

RDV uPVC Profiles are engineered for superior durability, weather resistance, and long-term color stability. Manufactured using high-quality PVC resin, stabilizers, impact modifiers, and performance additives, these profiles deliver excellent mechanical strength, UV protection, and dimensional stability suitable for window, door, and architectural applications.

Technical Properties

Parameter	Value
Material Type	Unplasticized Polyvinyl Chloride (uPVC)
Density	1.38 – 1.46 g/cm3
Shore Hardness	Shore D 78 – 85
Tensile Strength	Above 45 MPa
Impact Strength	High, formulation-dependent
UV Stability	High UV-resistant formulation
Thermal Stability	Suitable for high-temperature climates
Color Stability	Long-term resistance to yellowing
Water Absorption	Negligible

Key Features

- High UV and weather resistance
- Superior impact and tensile strength
- Excellent thermal and acoustic insulation
- Long-term color and gloss retention

- Resistant to corrosion, rust, and termites
- High weld strength for durable fabrication
- Low maintenance and easy cleaning

Applications

- uPVC windows and doors
- Sliding and casement frames
- Architectural partitions
- Cladding and façade systems
- Louvers and ventilation profiles
- Custom extrusion applications

Packaging and Storage

Profiles should be stored horizontally on flat surfaces, protected from direct sunlight, dust, and moisture. Store in covered areas to maintain product quality.

Safety Information

uPVC Profiles are non-toxic and safe for handling. Use appropriate PPE during cutting or fabrication to avoid dust inhalation.