



FIRE COMPLIANCE REPORT: SPRAY BOOTHS & DIVIDERS

Primary Material: 650gsm High-Tenacity Reinforced PVC

Vision Panels: 0.5mm / 0.75mm Fire-Rated Clear PVC

Compliance Focus: Building Fire Codes & Self-Extinguishing Standards

1. CORE MATERIAL: 650GSM REINFORCED PVC

The Hazard: High-Flashpoint Environments

Spray booths are high-risk zones where atomized paints and solvents create a potentially flammable atmosphere. Standard dividers can act as a secondary fuel source, accelerating the spread of fire throughout a facility.

The Envirazone Solution: Self-Extinguishing Engineering

Our 650gsm PVC is not merely "fire-resistant"; it is engineered to be self-extinguishing. This means that while the material may char when in direct contact with a flame, it will not support combustion or propagate a fire once the ignition source is removed.

- **Official Fire Rating:** Certified to DIN 4102 B1 and NFPA 701 (Method 2). These are the global benchmarks for building fire codes regarding flexible structures.
 - **Thermal Stability:** The material remains stable in temperatures ranging from -30°C to +70°C, ensuring the enclosure maintains its physical barrier properties during the initial stages of a thermal event.
 - **Non-Drip Formulation:** The coating is specifically designed to avoid the production of flaming droplets, which is a critical requirement for meeting modern building fire safety codes for internal partitions.
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2. VISION PANELS: FIRE-RATED CLEAR PVC

The Problem: Structural Weak Points

Standard clear plastics used for windows often have lower melting points and higher flammability than the surrounding reinforced fabric, creating a "weak link" in the fire barrier.

The Envirazone Solution: Fire-Rated Transparency

Our vision panels (0.5mm and 0.75mm) are manufactured with the same fire-retardant additives as our heavy-duty opaque materials, solving the problem of structural fire failure.

- **Self-Extinguishing Clear PVC:** Even at thicknesses of 0.5mm and 0.75mm, the clear panels meet international fire safety requirements for flexible glazing.
- **Shrink Resistance:** These panels are UV-stabilized and heat-shrunk during production to ensure they do not pull away from the 650gsm frame during temperature fluctuations, maintaining the booth's seal.
- **High Clarity (Optical Class 1):** Provides distortion-free monitoring for safety officers without compromising the fire-rated integrity of the booth.

3. BUILDING CODE & COMPLIANCE DATA

Component	Specification	Fire Code Compliance	Safety Feature
Main Body	650gsm Reinforced PVC	DIN 4102 B1 / NFPA 701	Self-Extinguishing
Standard Window	0.5mm Clear PVC	M2 / FR Certified	Anti-Static & FR
Heavy-Duty Window	0.75mm Clear PVC	M2 / FR Certified	High Impact & FR

4. OPERATIONAL SAFETY & MAINTENANCE

- **Mould & Fungal Resistance:** Both the 650gsm body and the clear panels are treated with anti-fungal agents. This prevents the biological rot that can compromise the chemical bonds of the fire-retardant additives over time.

- **Solvent Resistance:** The high-gloss finish on the 650gsm PVC allows for easy removal of overspray and chemical residues, ensuring the fire-retardant surface remains clean and effective.
 - **Weld Integrity:** All seams are High-Frequency (HF) Welded, creating a molecular bond that ensures the fire barrier remains intact even under the mechanical stress of high-pressure ventilation.
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Envirazone Technical Support

Official Fire Compliance Verification | Spray Booth Standards | info@envirazone.co.uk