

FIRE-RATED SERVICE DUCTS

Fire-rated service ducts are specially designed to **withstand high temperatures** and **prevent the spread of fire and smoke** through building services such as **electrical cabling, and plumbing**. They are tested and certified to maintain their structural integrity, insulation, and cable functionality for a specified period—typically 30, 60, 90, or 120 minutes.

In the event of a fire it is vital to the safety of the building occupants that electrical systems and services remain functioning until all personnel have escaped. Such systems will therefore require protection from fire for a specified period of time and may include:

In addition to protection from fire outside the duct, it is vital that any fire within the duct is contained. For example: if cable sheathing ignites due to an electrical overload.

- Electrically operated fire alarms
- Emergency escape route lighting
- Electrically operated extinguishing systems
- Smoke extraction vent systems
- Power supply for fire service elevators in high-rise buildings
- Water mains to sprinkler systems

A suitably designed duct will:

- Prevent the propagation of fire from one building compartment to another
- Assist in maintaining escape routes
- Ensure the continuing operation of other services within a common service shaft
- Reduce damage to localised areas
- Contain smoke and toxic fumes from burning cables



Why are fire-rated service ducts critical in large buildings?

1. Safeguarding critical Infrastructure

In commercial and industrial buildings, ducts often house essential services like data cables and power lines. Fire-rated ducts protect these systems, ensuring business continuity and emergency response capabilities.

2. Containment of fire and smoke

In the event of a fire, service ducts can act as pathways for flames and toxic smoke to travel between floors and rooms, just like ventilation ducts. Fire-rated ducts contain the fire within its origin compartment, reducing the risk of it spreading rapidly.

3. Protection of escape routes

Stairwells, corridors, and lobbies must remain smoke-free to allow safe evacuation. Fire-rated ducts help preserve these escape routes by preventing smoke infiltration.



Applications

- High-rise buildings
- Hospitals and care homes
- Underground car parks
- Airports and transport hubs
- Laboratories and cleanrooms

Products used for Service ducts

PROMATECT®-L500,
PROMATECT®-H, PROMACOL®-S,
Promat-Kleber® K84

Products used for cable ducts

PROMATECT®-LS, PROMATECT®-H,
SUPALUX®, Promat-Kleber® K84

WHY CHOOSE FOR A PROMADUCT® SOLUTION?

1. Ensure life-safety continuity with new EN 1366-11 compliant solutions

PROMADUCT® cable ducts are tested to the latest EN 1366-11 standard, ensuring electrical systems maintain functionality during fire. This is vital to support evacuation systems, fire-fighting equipment, alarms, emergency lighting, and building safety infrastructure – protecting lives and property.

2. Certified for all critical cable types: power, control, data & fiber

Whether you are routing power cables, signal/control cables, communication/data lines, or optical fibre, PROMADUCT® ensures they are protected against fire-induced failure. Our systems are verified to prevent short circuits or cable damage that would compromise building safety or emergency response.

3. Tested service features: access doors, inspection openings, and ventilation bricks

PROMADUCT® cable ducts don't just meet fire resistance – they also offer functionality. Service doors, inspection panels, and ventilation bricks are fully tested and certified within the fire-rated system, supporting routine maintenance or ventilation needs without compromising protection.

4. Flexible installation: 2- and 3-sided self-supporting ducts

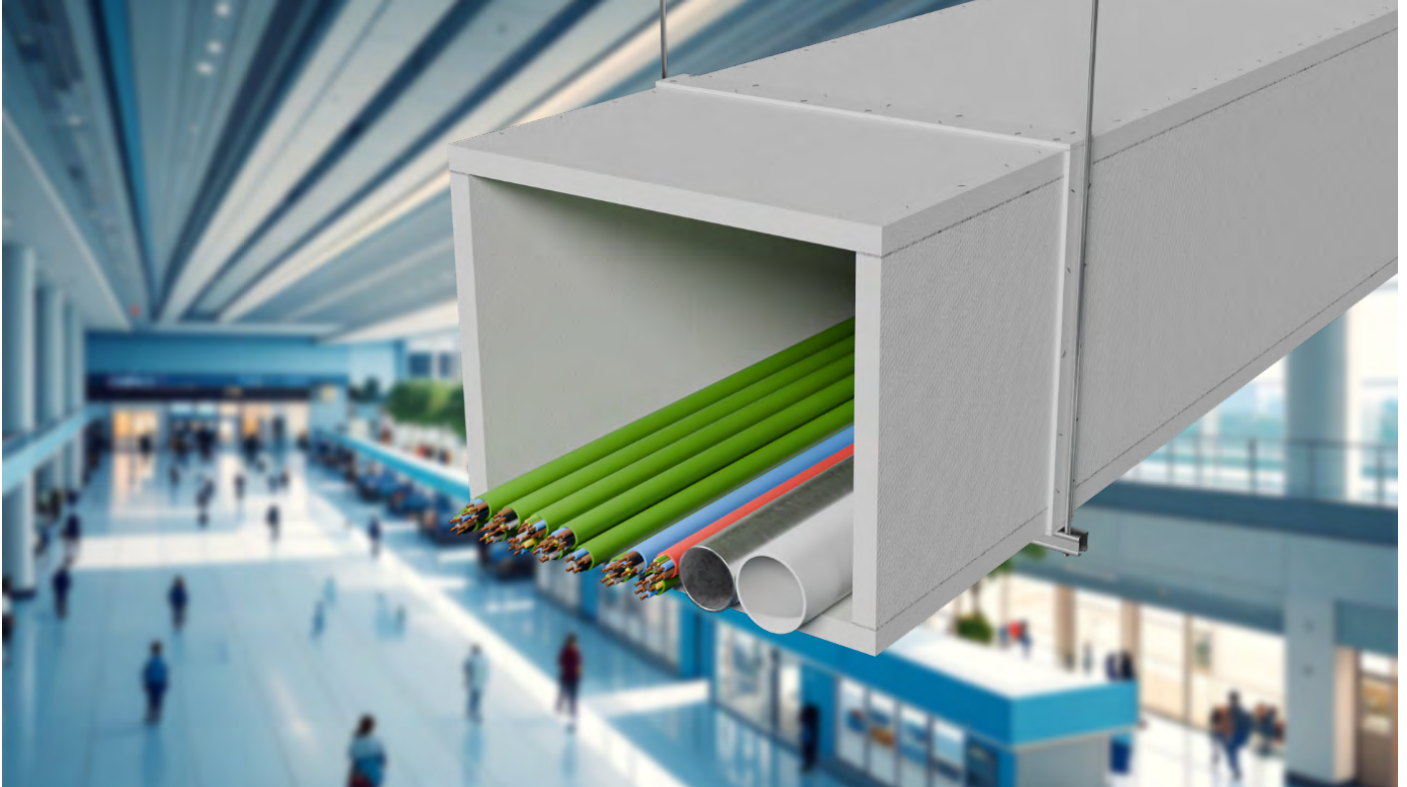
PROMADUCT® cable ducts are tested and approved for both 2-sided and 3-sided self-supporting applications. This allows for easy adaptation in corridors, shafts, or surface-mounted installations – offering design flexibility and simplified integration into existing building structures.

5. Durable, long-life cable protection – even in harsh environments

PROMADUCT® boards are moisture-resistant, mechanically robust, and officially certified for 25 years durability (with >30 years proven performance in real buildings). Your cable protection system remains reliable for decades – even in basements, plant rooms, or areas with high service density.



Service ducting (bales and pipes combined)



Cable ducting (electrical cables and data networks)

