STRUCTURES & INTERIORS · ROOFS

D-Roof

L6 Layer · The building

Strain-gauge sensors under or on top of any roof turn it into a protected zone, with a completely invisible appearance.



KEY BENEFITS

01 **Close the forgotten entry**
Roofs, dormers and parapets get the same protection as the fence line.

02 **The roof keeps its look**
Nothing is added to the skyline; the sensors are under the finish.

03 **Early warning**
The alarm comes while the intruder is still on the roof.

HOW IT WORKS

01 **Roof sensors**
Strain-gauge strips lie under the tiles or roof panels.

02 **Pressure change**
An intruder stepping onto a protected section changes the load.

03 **Processor**
About 15 kg above the cover weight raises the alarm; dry contact or RS485 out.

04 **Control centre**
The D-FENCE computerised control centre and D-Command Control are notified.

SPECIFICATIONS

Installation	Under or on top of any type of roof; invisible appearance
Strip length	Customised to the roof; max. 6 m per unit
Cover weight	Up to 350 kg (higher to customer specification)
Cover height / design	To customer specification
Length of system zone	Up to 36 m
Minimum trigger force	Usually 15 kg above the static weight of the cover
Dry contact	N.O. & N.C., 1A@48VDC
Power supply	12 VDC
Communication output	RS485 serial interface
Operating temperature	+72 °C to –25 °C (162 °F to –13 °F)
Storage temperature	+80 °C to –55 °C (176 °F to –67 °F)
Corrosion	Anti-corrosion treatment to MIL-T-152; all parts stainless steel
Humidity	95%
Transients / EMI	MIL-STD-9094; MIL-STD-461, 462

False alarm rate (catalogue)	Less than 1 per km per 3 months
MTBF (sensor)	4.7 × 10⁸ h
MTTR	30 min
Warranty	10 years on the sensors

TENDER SPECIFICATION TEXT

1. GENERAL

The system shall be D-Roof by D-FENCE Electronic Fencing and Security Systems Ltd. (ISO 9001:2015 certified quality management), or an approved equivalent that meets every requirement in this section.

2. FUNCTION

Strain-gauge sensors under or on top of any roof turn it into a protected zone, with a completely invisible appearance.

3. THE SYSTEM SHALL PROVIDE

- **Any roof:** Under or on top of tiled, flat or panel roofs.
- **Invisible:** The sensors disappear under the tiles or roof panels.
- **Pre-alarm:** The intruder is reported on the roof, before he reaches a window or hatch.
- **Made to the roof:** Strip length customised, max. 6 m per unit; covers up to 350 kg.
- **Weight-based:** Usually 15 kg above the static weight of the cover triggers the alarm.
- **Control-centre ready:** Dry contact N.O. / N.C. and RS485 to the D-FENCE control centre.

4. TECHNICAL REQUIREMENTS

- **Installation:** Under or on top of any type of roof; invisible appearance
- **Strip length:** Customised to the roof; max. 6 m per unit
- **Cover weight:** Up to 350 kg (higher to customer specification)
- **Cover height / design:** To customer specification
- **Length of system zone:** Up to 36 m
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- **Humidity:** 95%
- **Transients / EMI:** MIL-STD-9094; MIL-STD-461, 462
- **False alarm rate (catalogue):** Less than 1 per km per 3 months
- **MTBF (sensor):** 4.7 × 10⁸ h
- **MTTR:** 30 min
- **Warranty:** 10 years on the sensors

5. DETECTION SEQUENCE

1. **Roof sensors:** Strain-gauge strips lie under the tiles or roof panels.
2. **Pressure change:** An intruder stepping onto a protected section changes the load.
3. **Processor:** About 15 kg above the cover weight raises the alarm; dry contact or RS485 out.
4. **Control centre:** The D-FENCE computerised control centre and D-Command Control are notified.

6. SUBMITTALS

Before installation, the contractor shall submit the manufacturer's datasheet, the installation instructions and the zone layout for approval.