# TDP T4 – Fire Testing Device for Roofs

For Determining the Performance of Roofs When Exposed to External Fire – Test 4 in Two Stages Incorporating Incendiary Devices, Wind and Supplementary Radiant Heat in Accordance with DIN CEN/TS 1187

## Information Obtained by TDP T4

- Flame spread on the roof surface
- Burnt length
- Burning/falling droplets
- Penetration of burning/glowing parts through the roof stucture
- Glowing behavior of the roofing
- Formation of holes in the roofing
- Radius of fire spread on flat roofs

For the building industry, fire behavior including flammability and flame spread is of major importance. With the TDP T4 testing device, the behavior of roofs when exposed to external fire loads can be determined.

The DIN CEN/TS 1187 standard specifies four test methods for determining the fire behavior of roofs when exposed to external fire. The TDP T4 allows for a test in accordance with test method 4.

This two-step method assesses the fire behavior of roofs using incendiary devices, wind and supplementary radiant heat. The fire is simulated via a burner lance and the radiant heat via a heater panel, consisting of four heater elements. The TDP T4 test evaluates the fire spread on the roof surface. In addition, it is determined whether and how fire penetrates the roof and the extent to which falling and burning materials are generated on the surface and/or underside of the roof.