

TDP T4 – Fire Testing Device for Roofs

Measurement method	Determination of the performance of roofs exposed to external fire – Test 4 in two stages incorporating incendiary device, wind and supplementary radiant heat in accordance with DIN CEN/TS 1187
Heating unit	<ul style="list-style-type: none"> ▪ Radiant panel, framed by stainless steel; outer dimensions (W x H) 915 mm x 915 mm ▪ Consisting of four individual square surface radiant heater elements, each 300 mm x 300 mm, fed with propane ▪ Equipped with four ignition electrodes
Burner	<ul style="list-style-type: none"> ▪ Burner lance; length of 2300 mm ▪ Fed with city gas ▪ With needle valve, pressure reducer and gas supply hose
Sample holder	<ul style="list-style-type: none"> ▪ Mobile sample carrier trolley; stainless steel ▪ Semicircular sample cover; opening on the top; stainless steel; with fireproof observation window; slewable ▪ Metal sample holding frame
Measuring and control unit	<ul style="list-style-type: none"> ▪ Consisting of 3 units ▪ Gas mixing system; generate fuel gas/air mixtures; gas supply of radiant panel ▪ Electrical control cabinet/gas control panel with touch screen for control of radiant panel and ignition electrodes ▪ Control panel; Rittal electronic box; for control of individual device components
Sample dimensions	(W x H) 840 mm x 840 mm (± 10 mm)
Software	Integrated touch panel HMISTU855; touch panel screen 5 "7 color; analog; for automatic and manual control of all individual components
Instrument dimensions	<ul style="list-style-type: none"> ▪ Measuring and control unit (W x D x H) 1000 x 1000 x 1950 mm³ ▪ T4 (W x D x H) 2350 x 1700 x 2750 mm³
Power supply*	<ul style="list-style-type: none"> ▪ Input: 3x 400V 50Hz (3,5A/1,5kVA) ▪ Supply: 5x 2.5mm² (16A)
Media supply*	Water for cooling the Schmidt-Boelter heat flux meter
Gas supply*	<ul style="list-style-type: none"> ▪ Propane; required pressure: 300 mbar ▪ City gas (55.2% hydrogen, 27.4% natural gas, 17.4% nitrogen)

* to be provided by the user