FIRE SAFETY SOLUTIONS

Detection, Suppression and Compliance

Unity Fire Safety supplies and commissions kitchen fire suppression, gas leak detection, fire alarm and extinguisher systems across Pune and Maharashtra — procured from certified manufacturers, installed with authorised partners, documented for statutory approval.

WHY IT MATTERS

The Risk Is Real. The Law Is Clear.

30s
For a grease fire to enter the exhaust duct and become uncontrollable

370°C
Typical grease fire temperature — well beyond water or dry powder control

2×
Mandatory inspections each year under the Maharashtra Fire Prevention Act 2006

WHO WE ARE

A Single Point of Supply for Fire Safety Systems

Unity Fire Safety is the fire safety division of Unity Enterprises, an MSME-registered proprietary firm established in Pune in 2017. We supply wet chemical kitchen suppression systems, commercial and industrial gas detection equipment, fire detection components and extinguishers to hospitality, healthcare, institutional and industrial clients.

We procure directly from certified manufacturers, hold stock on fast-moving items, and execute installation and commissioning together with a fire agency licensed by the Directorate of Maharashtra Fire Services — so the certificate your statutory approval depends on is issued by the authority entitled to issue it.

- MSME / Udyam registered proprietary firm
- GST registered, PAN-India invoicing
- Registered GeM supplier for government tenders
- Products carrying PESO, CIMFR / CMRI and BIS approvals
- Kitchen systems certified to UL 300 / UL 1254
- Installation and commissioning through a licensed fire agency
- Free site survey and written system specification

WHAT WE SUPPLY

Four Product Lines. One Supplier.

01
Kitchen Fire Suppression
Pre-engineered wet chemical systems for commercial cooking lines — automatic detection, discharge over appliance, plenum and duct, with simultaneous gas shut-off. UL 300 / UL 1254.

02
Gas Leak Detection
LPG, combustible, toxic and oxygen detection. Field transmitters with multi-zone panels, hooters, solenoid shut-off and optional GSM alerting. PESO and CIMFR approved.

03
Fire Detection & Alarm
Smoke and heat detectors, manual call points, response indicators, hooters, conventional and addressable panels — supplied to end clients and licensed agencies.

04
Extinguishers & Signage
ABC powder, CO_2, water, foam, clean agent and Class K wet chemical units, with AutoCAD layouts, evacuation plans and photoluminescent signage.

WHO WE SUPPLY

End Clients, Facilities and the Trade

Hotels & Restaurants | Hospitals & Nursing Homes | IT Parks & Corporates | Malls & Retail | Factories & MIDC Units

Warehouses & Godowns | Schools & Hostels | Fire Contractors & Agencies

HOW IT WORKS

Automated. In Seconds. Every Time.

1 Detect
Heat sensing cable in the hood breaks down at 185 °C and signals the control panel.

2 Cut Gas
LPG / PNG valve closes automatically; audio-visual alarm sounds at the same moment.

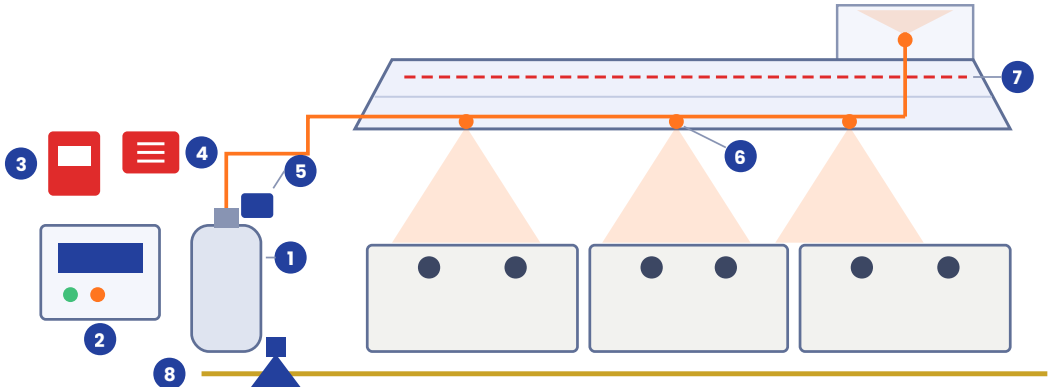
3 Discharge
Wet chemical agent sprays over the cooking surface, plenum and exhaust duct.

4 Suppress
Agent saponifies with hot oil, cutting oxygen and cooling below ignition temperature.

5 Resume
Wipe, recharge, reset — typically back in service within 2–4 hours.

SYSTEM LAYOUT

One Cylinder. Full Line Coverage.



1 Cylinder with valve & pressure gauge 2 Release control panel 3 Remote manual pull station 4 Audio-visual alarm
5 Electric actuator 6 Discharge nozzles 7 Heat sensing cable 8 Gas shut-off valve

SYSTEM SPECIFICATION

Wet Chemical Kitchen Suppression

Parameter	Specification
System type & standard	Pre-engineered wet chemical, automatic and manual actuation; equipment certified to UL 300 / UL 1254, designed to NFPA 17A / NFPA 96 practice
Cylinder & agent	Stainless steel, 9 to 30 L, sized to the cooking load; low-pH wet chemical agent, freeze point -7 °C, non-toxic on discharge
Detection	Linear heat sensing cable inside the hood, closes at 185 °C
Coverage	Appliance surface, hood plenum and exhaust duct; overlapping nozzle design allows the cooking range order to be shuffled
Gas shut-off	Mechanical or solenoid valve, actuated on discharge; remote manual pull station on the exit route
Service	Six-monthly inspection; pressure check, nozzle test, cable and actuator check with written certificate

WHERE WE INSTALL

Any Commercial Kitchen. Any Scale.

Hotels & Resorts | Restaurants & QSR | IT Park Cafeterias | Hospitals | Mall Food Courts | Cloud Kitchens

Hostels & Canteens | Institutional Messes

GAS LEAK MONITORING

Detect the Leak Before It Becomes a Fire

Complete gas detection systems for oxygen, toxic and combustible gases — field transmitters wired to multi-zone control panels, with hooter, solenoid shut-off and optional GSM alerting. Supplied from Indian manufacturers holding PESO and CIMFR / CMRI approvals.



MODEL CI-1100

Combustible Gas Transmitter — LED Indication

LPG, propane and methane monitoring for commercial and light industrial premises

- Detection range 0–100% LEL; alarms above 10% of the lower explosion limit
- Self-purging semiconductor sensor — no routine recalibration required
- SPDT alarm relay and SPST trouble relay; latching or self-restoring
- Cast aluminium flameproof enclosure, SS316 sensor housing, IP66
- 12–28 VDC / VAC · 120 × 90 × 90 mm · 1 kg · covers up to 900 sq ft

PESO CERTIFIED | CIMFR / CMRI | IP66 | IEC 60079-0 | IEC 61508

MODEL CI-2200

Digital Gas Transmitter — Display & 4–20 mA Output

Industrial monitoring with live concentration readout and plant integration

- Digital display in PPM, % LEL or % V/V; 4–20 mA analog plus RS485 digital output
- Accuracy ±2% of full scale; span and zero calibration functions
- Explosion proof and weather proof, cast aluminium alloy or SS316, IP66
- Best for plants, refineries, laboratories, PLC or SCADA integration

PESO CERTIFIED | CIMFR / CMRI | 4–20 mA | RS485 | IP66

Control Panels and Field Devices

2 / 4 / 8 Zone Panel

Microcontroller panel with 16×2 LCD, zone-wise fire, open and short indication, zone isolation, password protection and RS485 for repeater and mimic panels. 220 VAC / 24 VDC, battery backup, 1.8 mm CRCA housing, 272 × 346 × 96 mm.

Addressable Digital Panel

4–20 mA or RS485 input from field transmitters, 7-segment display or optional 4.3" LCD touchscreen and 7" HMI. Programmable 0–9999 in % LEL, PPM or % V/V. Channel capacity 2 to 32, ModBus optional.

Hooter & Shut-off

Combined audible and visual annunciation at minimum 85 dB, distinct from the fire alarm tone. Solenoid gas valve driven from the panel relay closes the supply on alarm. GSM module optional for SMS and voice alerts.

WHERE IT APPLIES

Commercial and Industrial Environments

Industrial Plants & Refineries | Gas Godowns & Distribution | Laboratories & Pharma | Chemical Storage

Boiler Rooms & Utilities | Commercial Kitchens | Hotels & Malls | Hospitals & Institutional

SECTION 03 · DETECTION & ALARM

Detectors, Call Points and Alarm Panels

Smoke Detectors
Photoelectric and optical, conventional and addressable, for offices, corridors, stores and guest rooms.

Heat Detectors
Fixed-temperature and rate-of-rise, where steam, dust or grease vapour would false-alarm a smoke sensor.

Manual Call Points
Break-glass and resettable types for exit routes, stair landings and lobbies.

Response Indicators
Remote indication for detectors above false ceilings or inside enclosed rooms.

Hooters & Sounders
Electronic hooters and hooter-cum-flashers for audible and visual evacuation alarm.

Conventional Panels
Zone-based fire alarm control panels with battery backup, from 2 zones upward.

Addressable Panels
Device-level identification for multi-floor and large-footprint buildings.

Cable & Accessories
FRLS and fire-survival cable, back boxes, EOL resistors, batteries and mounting accessories.

Which Detector for Which Area

Area	Recommended	Why
Office, corridor, guest room	Smoke detector	Early warning on smouldering fires before flame develops
Commercial kitchen	Heat detector	Steam and grease vapour cause constant false alarms on smoke sensing
Boiler room, plant room	Heat detector	High ambient temperature and dust make smoke detection unreliable
Gas bank, LPG manifold	Gas transmitter	Detects the leak before there is a fire to detect at all
Large open volume, atrium	Beam detector	Point detectors are impractical over long spans and high ceilings
Exit routes, stairwells	Manual call point	Lets a person raise the alarm on the way out

SECTION 04 · PORTABLE & TROLLEY MOUNTED

The Right Agent for the Right Class of Fire

Class	Fire involves	Correct agent	Never use
Class A	Wood, paper, cloth, general solids	Water, foam, ABC powder	—
Class B	Petrol, diesel, oil, solvents, paint	Foam, ABC powder, CO_2	Water jet
Class C	LPG, methane and other flammable gases	ABC powder — after isolating the gas supply	Water, foam
Class D	Combustible metals	Special powder, metal-specific	Water, foam, CO_2
Electrical	Live electrical equipment	CO_2, clean agent	Water, foam
Class K / F	Cooking oils and fats	Wet chemical	Water, CO_2, dry powder

Extinguishers supplied carry ISI marking under the applicable quality control order; certificate copies are provided with supply. Sizes: ABC powder 1–10 kg portable, 25 and 50 kg trolley · CO_2 2–9 kg, 22.5 kg trolley · water and foam 6 and 9 L · clean agent 2–9 kg · wet chemical 3, 6 and 9 L.

Refilling, Testing and AMC

Annual refilling
Discharged and time-expired units refilled, re-pressurised and returned with a service certificate and updated tag.

Hydraulic testing
Pressure testing of cylinders at the interval specified for the type, with test records for your compliance file.

AMC & audit support
Scheduled inspection, replacement of damaged units, and the documentation your Fire NOC or EHS audit will ask for.

OUR SERVICES

Survey. Procure. Install. Service.

Free Site Survey
We measure the cooking line or gas zone and issue a full specification, itemised BOQ and quotation — free of charge.

Procurement & Supply
Direct from certified manufacturers; stock held on fast-moving items, consolidated under a single GST invoice.

Installation
Site execution with our authorised licensed partner agency, who issues the statutory compliance certificate.

Documentation
Drawings, datasheets and certificates as a submission-ready file for Fire NOC, NABH and corporate EHS audits.

Maintenance & AMC
Six-monthly inspection, nozzle and pressure checks, detector calibration, agent recharge and refilling.

GeM Portal Supply
Registered GeM supplier — government hospitals, canteens and institutions supplied through tender routes.

DOCUMENTATION

Paperwork Your Audit Will Ask For

Compliance file
Drawings, datasheets, test certificates and manufacturer approvals compiled as a submission-ready set for Fire NOC, NABH and corporate EHS audits.

Service records
Written service certificate at every visit, with an updated tag on each unit and a maintained schedule for your records.

Warranty support
Manufacturer warranty passed through in full, with fault reporting, replacement parts and service calls coordinated by us.

Clear scope, clear responsibility
Under the Maharashtra Fire Prevention and Life Safety Measures Act, 2006, statutory compliance certificates for fire prevention and life safety installations are issued by agencies licensed with the Directorate of Maharashtra Fire Services. Unity Fire Safety handles procurement, supply, project coordination and site execution, and works with an authorised partner agency for installation certification — so your Fire NOC file is complete and issued by the correct authority. One point of contact, correct paperwork. We state this before quotation, not after.

CREDENTIALS

Registered. Certified. Accountable.

ESTABLISHED
2017
MSME / Udyam registered proprietorship

SYSTEM STANDARD
UL 300 / 1254
Kitchen suppression equipment certification

PRODUCT APPROVALS
PESO · CIMFR
Gas detection; BIS / ISI on extinguishers

INSTALLATION
Licensed Partner
Certified by an agency licensed with the Directorate

Particular	Detail
Brand	Unity Fire Safety
Legal entity	Unity Enterprises · Proprietorship
Proprietor	Chaitanya M. Sainkar
Established	2017
Udyam registration	UDYAM-MH-26-0677317
GSTIN	27DHGPS7949J1ZF
Office	B-211, Shoppers Orbit, Vishrantwadi, Pune 411015, Maharashtra
Service area	Pune, Pimpri-Chinchwad and Maharashtra; component supply pan-India

Commercial Terms

- Site survey and system specification — no charge
- Written quotation with itemised BOQ and make list
- Manufacturer warranty passed through in full
- GST invoicing; MSME payment terms supported
- Advance against order, balance on commissioning
- AMC quoted separately, annual or bi-annual
- Rate contracts available for multi-site groups

Approvals listed refer to certifications held by the manufacturers of the products supplied. Unity Fire Safety does not hold a Licensed Agency registration of its own; installation certification is issued by an authorised partner agency licensed with the Directorate of Maharashtra Fire Services. This profile is not a quotation — final specification and price follow a site survey.

UNITY FIRE SAFETY

CONTACT

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Book a Free Site Survey

OFFICE

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Send a floor plan, gas zone drawing or equipment list — or call and we will visit. Written specification, itemised BOQ and quotation, with no obligation.