

INDUSTRIAL ENGINEERING SERVICES

Flat No. 16, 2nd Floor N. No: 139, O. No.48, Vellalar Street Ayanavaram, Chennai – 600 023.

E-Mail: safeins@Rediffmail.com

T.C.No.: 001/IES/LPGRS/2011

Date:15.11.2025

CERTIFICATE OF SAFETY LPG RETICULATION SYSTEM

1. Name of Installer : M/s. RITHIKA GAS TECH

2. Address : NO: 92/93 (79/3)
SOLAI STREET AND LANES,
AYANAVARAM,
CHENNAI-600 023.

3. Location of the installation:

Project Name

M/S. Sreshta Cityscapes Private Limited
Sreshta Narayanan
No:185/99A,
Royapettah High Road Flyover,
Mylapore, Chennai – 600 004

Number of flats

: 30 Units

District

: Chennai. -600 004

4. Description of facilities of the installation

A) MANIFOLD:

1. Manifold : 2 set
2. Manifold and its size : 25 mm-MS Schedule 40 pipe 15 X 2=30 Cylinders.
3. Cylinder size : 14.2 kg Capacity,
4. Stacking of Cylinder : One Way system
5. Manifolding Lug spacing : 8 inches
6. Manifolding Clamping : Adequate
7. Pressure Gauge : Certified and calibrated by the supplier 2 unit
Range-0 to 10 bar-4" dial.
8. Excess Flow check value : installed along with 2nd stage SAFETY REGULATOR-OVER
PRESSURE SHUT OFF SYSTEM,
9. Fire Safe design valve : installed
10. Luds welding : Adequate
11. Manifold pipe : 1 " inch Seamless - Schedule -40 certified

B) GAS BANK ROOM

1. Location : Located away from building-5 m.
2. Ventilation : Adequate front side ventilation given, all two sides proper Ventilation given.
3. Doors : opening from outside made out of metal fabrication as per given Design.
4. Roofing : Concrete Roofing –Non flammable material.
5. Electrical Fittings : No electrical fitting given.
6. Gas bank internal flooring : 6 inch above finished floor level.
7. Access : Available
8. Safety Signage : “No smoking” “Gas bank shed “highly inflammable available.
9. Main isolation valve : Provided outside the gas bank room. Easily accessible to general Public.
10. Painting : All signages are painted including gas bank as per codes

PRESSURE CALCULATION

- 1) LPG Cylinder Pressure : 5 to 6 bar pressure
- 2) Cylinder to stage -1
Pressure reducing station-1
Auto change over. : Inlet pressure –minimum 1 bar to 10 bar pressure PRS-1 outlet Pressure-1.5 bar.
- 3) Number of PRS-1 : One unit.
Stage -2 : Pressure reducing station – 2
Inlet Pressure-1.5 bar
Outlet Pressure-0.7 bar.
Over pressure shut off system
- 4) Header & Riser pipeline Pr: input 40 milli bar.output 28 to 30 millibar
- 5) Kitchen internal : input 40 milli bar.output 28 to 30 millibar

SAFETY FEATURES:

1. Gas bank : Location is safe from main building access is ok. fire extinguisher 10 kg DCP is mounted close to gas bank-ok
Safety signages as mentioned above are installed.
2. Stage -1 Regulation : inlet pressure 4 to 5 bar. Outlet pressure 1.5 bar. Pressure regulation Station reduces the pressure and also activates auto change over System.
4. Stage -2 Regulations : Pressure inlet-.40milli bar-pressure outlet 28 to 30 millibar
Under Pressure activates. If the set pressure drops below 14 millibar
Pressure regulation station -3 ensure safety.

PIPELINES

1. Size and specification of pipelines : Manifold pipe-MS seamless sch-40 seamless pipe:25 mm
MS Seamless C Class-Jindal brand.
riser pipeline 16 mm.

Header pipeline branched to connect 15 mm riser
Pipeline. Pipeline Pressure from gas bank outlet-0.7
Bar. Riser pipeline pr min-28 to 30 millibar

2. Kitchen internals : Composite pipeline 16 mm .pipeline pressure inside
Kitchen 28 to 30 millibar.

PIPELINE TESTING PROCESS

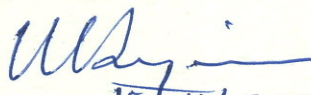
- a. Manifold : 25.32 kg/cm² Nitrogen test. With certified pressure gauge.
- b. Total no.of manifold tested : Two
- c. Size of the manifold : 15 x 2
- d. Pipeline Gas Bank : 6 bar-Initial with air later with nitrogen and purging.
- e. Internal kitchen composite pipe : 1bar to 750 mbar pressure.

This is to certify that the design details with drawing submitted by **M/s. RITHIKA GAS TECH** has been inspected observed that as per design/drawing the installation is executed and working principle towards safety is provided.

Cylinder pressure is regulated at three different stages and ensures a safe process to reach kitchen hot plate (stove), the pressure calculations offered should work towards LPG reticulation system.

It's recommended that all the guidelines given in the **OSID 162** and **IS 6044** for **LPG gas cylinder storage installation** had to be followed.

INSPECTED & CERTIFIED BY


Name: Er. V. Nagarajan B.E, DIS.,
Designation: Chartered engineer and safety auditor

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CREDENTIAL

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APPROVED AUDITOR BY THE CHIEF INSPECTOR OF FACTORIES, CHENNAI AND DIRECTOR
GENERAL OF FACTORY ADVICE AND LABOUR INSTITUTE, MUMBAI.
COMPETENT PERSON APPROVED BY PESO, NAGPUR.