LODHA

BUILDING A BETTER LIFE

Policy No.	33
Date W.E.F.	15.4.2015
Revision No	3
Revision Date	30.04.2018
Pages	1 of 6

Piped Gas Provision policy

1. Piped gas is a desired service and also makes the building safer. Lodha should make all efforts to provide it.
2. However, in MMR, Mahanagar Gas Limited (MGL) has a monopoly (has in 2015) and their service standards are quite poor.
3. In general, MGL insists that:
    a. They will start laying of lines only after 50%+ occupancy has been reached for a residential development.
    b. They are happy to provide immediate connection to commercial users like restaurant.
4. In view of the above, following process shall be followed:

No.	Issues	Residential (<=120 m)	Residential (>120 m)	Commercial (office, retail, etc.)
1	Whether to promise piped gas or not	Yes, if MGL has a supply network within 2 kms. radius of the site at time of start of sales for a given MP, else No. If promised, to be made clear in agreement that supply will commence in 24 months after PDL since supply provider is keen to start supply only once building is significantly occupied. If piped gas supply is not operational within 24 months of PDL of the said building, the amount will be refunded to customers and upon such refund, the Owner/developer shall have no further obligation in relation to the provision of piped gas *<incorporate in agreement >.*	Yes, if MGL has a supply network within 2 kms. radius of the site at time of start of sales for a given MP, else No. If promised, to be made clear in agreement that supply will commence in 24 months after PDL since supply provider is keen to start supply only once building is significantly occupied. If piped gas supply is not operational within 24 months of PDL of the said building, the amount will be refunded to customers and upon such refund, the Owner/developer shall have no further obligation in relation to the provision of piped gas *<incorporate in agreement >.*	Yes, if MGL has a supply network within 2 kms. radius of the site at time of start of sales for a given MP, else no. If promised, to be made clear in agreement that supply will commence in upto 24 months after PDL since dependency on 3rd party provider. If piped gas supply is not operational within 24 months of PDL of the said building, the amount will be refunded to customers and upon such refund, the Owner/developer shall have no further obligation in relation to the provision of piped gas *<incorporate in agreement >.*
2	If piped gas is promised as per 1., what work is to be done by Lodha	**Prior to OC**: Leaving design provision in infra and building for the line to be laid + execute internal piping from proposed meter location to hob. Have provision for gas cylinder in kitchen. **Post OC**: Once building is ~50% occupied (say 12months after PDL), MGL to be approached to put in the infrastructure. If they refuse	**Prior to OC**: Assume that piped gas is part of our regular MEP scope and execute as follows: a. Appoint D&B contractor who has compliance with MGL standards. b. Have provision for gas cylinder in kitchen. c. Get all works which can be done without MGL involvement (eg. horizontal and vertical piping, internal piping in kitchen	**Prior to OC**: Internal pipeline (if MGL is not willing to do it prior to OC) **6 months prior OC**: MGL to be asked to lay network. If they refuse (generally they will not), line to be put in using private contractor (see a. below) such that piped gas is operational at site within 3 months after OC. No gas bank provision to be made if piped gas is promised as per 1.

		(generally they will not), line to be put in using private contractor (see a. below) such that piped gas is operational at site within 20 months from date of PDL.	from proposed meter location to hob) d. When OC is about to be obtained, approach MGL for the execution of their scope (eg. meter in each unit, entry of line into unit)	
3	When to start liaising with MGL	12 months before estimated OC (resp: Procurement (MEP Package)	Within 6 months of start of sales	12 months before estimated OC (resp: Procurement (MEP Package)
4	Collection of piped gas costs from customers	If promised as per 1. to be collected at time of possession payment.	If promised as per 1. to be collected at time of possession payment.	If promised as per 1. to be collected at time of possession payment.

a. If Lodha is getting work done through private contractors, the norms attached as *Annexure A* (which are based on international standards which MGL accepts) should be followed – if these norms are being followed, no further reference/confirmation from MGL is required in relation to the non-MGL scope.
b. The contractor appointment should be such that the contractor is responsible Design and Building, including for:
    i. Detailed design, to be approved by our MEP team
    ii. Shop drawing submission
    iii. Technical submissions, if any, to MGL
    iv. All material procurement and execution
    v. Testing and commissioning of the system as per British Standards

Note: any coordination with MGL shall be done by Procurement (MEP Package).

c. Once works are completed and prior to final testing & Commissioning by procurement, Procurement (MEP Package) should coordinate with MGL for a site visit and try to get them to takeover the infrastructure as soon as possible.

5. Agreement with MGL to provide gas and takeover/maintain infrastructure shall be coordinated by Procurement (MEP Package).

	Locating of the routing	**Type of routing material to be used**	**Safety precautions to be taken**
Routing from tapping point outside site to covered area (like building ground floor / parking podium)	01. Gas Metering and Regulating Station (MRS) to be located at the entry point to plot/ nearest to plot boundary. The approximate size of MRS for multi building projects shall be 3500 mm X 2000 mm X 2500 mm. 02. Service Regulators (SR) to be located near to each building/Tower as per MGL approved Design. 03. Tap off from MGL main pipe line to MRS shall be by MGL. 04. MRS room to be naturally ventilated by louvers/perforated facade with 50% open area. 05. Pipe from MRS to SR and then to building foot print/podium to be buried with minimum depth of 1000mm and with 300mm clearance between any other services. 06. Location and area for MRS shall be as per MGL guidelines and approval to be obtained.	HDPE/MDPE with Electro Electro Fusion joints	01.The distance between fencing and the wall of nearest building / structure shall not be less than two (2) meters. 02. Minimum 300 mm clearance to be provided for gas pipes from any other services. 03. Identification label along with buried gas pipe shall be provided. 04. All buried PE pipes to be protected with inverted 'C' section of RCC/Precast material . 05. Adequate ventilation to be provided for receiving station depending upon size. Natural ventilation with 50% open louvers is preferred.
Horizontal routing within the building.	01. Vertical piping from ground floor to top most podium/car parking floor shall be routed at location which avoids the mechanical damages. However, metal framing/ bollard to be provided around the gas piping. 02. The shaft/riser in which the gas risers are installed shall be naturally ventilated with minimum 50% open area/as recommended by MGL. The facade treatment with louvers/perforated mesh shall be by architect. 03. Horizontal Looping :- Horizontal looping is preferred at high level of top most parking floor. If the same is not possible for any other reason then pipe can be buried in RG area at the top most level.	01. GI pipes class B/C with welded Joints- Exposed piping.	01. Ensure adequate ventilation for exposed pipes. 02. Ensure suitable protection from mechanical damages by providing metal framing/ bollard around the gas piping. 03. For high rise building expansion loop in riser at every 10 floors /as per design calculations should be provided to compensate the pipe expansion/contraction, seismic and building sway

	04. Pipes can also be buried at Ground floor if the building doesn't have any parking floor above ground.	02. PE pipes with Electro Electro Fusion Joints - Buried Piping.	movement 04. Anchor and Guide Support shall be properly located in the riser to allow pipes to compensate for thermal expansion/contraction, column shortning and building sway movement. . 05. All exposed pipes to be painted with yellow colour enamel paint . 06. Warning sign to be provided for gas pipe running in car park, basement and inside building. 07.Seismic vendor/consultant to be appointed for buildings more than 150M.
Vertical routing to each floor	01. Riser routing is preferred in utility/service ledge adjacent to kitchen minimum piping length from riser to kitchen. 02. The shaft/riser in which the gas risers are installed shall be naturally ventilated with minimum 50% open area/as recommended by MGL. The facade treatment with louvers/perforated mesh shall be by architect	01. GI pipes class B/C with welded Joints- Exposed piping.	01. Ensure adequate ventilation for exposed pipes and proper protection from mechanical damages by providing metal framing/ bollard around the gas piping. 03. MGL has no objection to route the Gas riser along with other MEP services a. Ventilation Ducts & Vacuum pipe operate at sub atmospheric pressure. B. Services' containing oxidizing or corrosive fluids However a minimum 300mm separation shall be provided with other services for maintenance.

	03. Riser Isolation Valve (RIV) to be provided at the bottom of each riser at 1.5 M above from floor level. PE pipe connection to GI pipes to be extended to 0.5 M above finished level and same shall be protected with RCC guard.		03. For high rise building expansion loop in riser at every 10 floors /as per design calculations should be provided to compensate the pipe expansion/contraction, seismic and building sway movement 04. Anchor and Guide Support shall be properly located in the riser to allow pipes to compensate for thermal expansion/contraction, column shortning and building sway movement. . 05. All exposed pipes to be painted with yellow colour enamel paint 06. Seismic vendor/consultant to be appointed for buildings more than 150M.
Meter Point	01. Gas meter for each unit (Flat) is preferred on the wall whose external side is open to atmosphere with minimum length of uncontrolled inlet pipe to kitchen. Gas meter can also be installed in Dry Balcony next to kitchen. 02. A Meter Control Valve (MRV) is fitted immediately upstream of the meter enable the internal pipe work inside the property to be isolated from the upstream gas supply network for maintenance and safety. The location of valve shall be easily accessible.	01. Copper Pipe	01. Ensure adequate ventilation for exposed pipes and proper protection from mechanical damages by providing metal framing/ bollard around the gas piping. 02. Lateral extending from Riser at right angles must extend 400mm and 750 mm before passing through a wall for up to 8 floors and 18th floors respectively. 03. For the floors above 18th floors a stainless steel flexible hose shall be fitted to horizontal branch off.

Connection from meter to appliance in kitchen	01. Exposed Piping :- Pipe from gas meter to the burner can be first dropped exposed (service ledge) up to counter height and then routed inside the kitchen just above the counter to install Emergency shut off valve. 01. Concealed in Dry Wall/False Ceiling :- If the gas pipe is routed in dry wall/concealed areas a shut-off solenoid valve shall be provided in the line at the inlet to the gas meter interfaced to gas leak detector installed below the ceiling. Gas leak detection panel to be installed below the counter/at suitable location	01. Copper Pipe	01. Emergency shut off valve shall be provided inside kitchen near to burner to shut off the gas supply in case of any emergency.