# Gas pipe laid on the ground, attached to fences / walls, or buried in the ground

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While auditing gas installations, OTR gas inspectors and APA contractors who provide couple, light and checks are finding an increasing number of gas pipes being installed incorrectly.

In the case of the APA contractors, they may not connect the new gas meters which can inconvenience and sour the home occupier's first experience with gas and cause embarrassment to gasfitters who will have to return and rectify their work.

# Underground gas pipes

Consumer piping in the ground shall have sufficient depth or be covered in such a way to protect the pipe from physical damage.

The depth of cover shall be in accordance with Table 5.4.3, except where suitable means of protection are used. In no case shall the depth of cover be less than 300 mm.

Pipework in the ground shall be located where it is not liable to mechanical damage or shall be physically protected.

**NOTE:** Means of cover or provision of extra protection include encasement, bridging or design to withstand higher loads.

| Location                                 | Minimum depth of cover, mm |
|--|----------------------------|
| Roadways (including trafficable areas on | 450                        |
| private property)                        |                            |
| Private property (non-trafficable areas) | 300                        |

## Table 5.4.3 — Depth of cover for consumer piping

# Quality of bedding / backfill

Bedding material should not adversely affect the pipe or coating. All bedding or backfill within 75 mm of the pipe should be free from stones or other materials



#### 5.4.4 Quality of bedding and backfill

Bedding material and backfill shall-

- (a) be of a type and grade which will not have an adverse effect on the pipe or pipe coating; and
- (b) within 75 mm of the pipe, be free of stones or other materials which could damage the pipe or pipe coating.

NOTE: In some ground conditions it may be necessary to use sand for bedding and backfilling to comply with the requirements of this Clause.

Trenches should be compacted in a manner that the gas pipes are not damaged, and subsidence is minimised.

#### 5.4.5 Consolidation of bedding and backfill material

Bedding and backfill material shall be consolidated in a manner so as-

- (a) not to damage the consumer piping; and
- (b) to minimize subsequent trench subsidence.

## Above ground gas pipes

Support of gas pipes shall be fit for purpose and compatible with the pipe to prevent corrosion. The spacing of supports is set out below. See table 5.8.2

| SPACING | OF SU | JPPORTI | ING DEV | VICES |
|---------|-------|---------|---------|-------|
|---------|-------|---------|---------|-------|

| Nominal<br>size of pipe<br>DN | Vertical or horizontal run spacing, m |                                   |                                    |                    |  |  |
|-------------------------------|---------------------------------------|-----------------------------------|------------------------------------|--------------------|--|--|
|                               | Steel pipe                            | Copper or<br>stainless steel pipe | Semi-rigid<br>stainless steel pipe | Multilayer<br>pipe |  |  |
| 8                             | 2                                     | 1                                 | _                                  | _                  |  |  |
| 10                            | 2                                     | 1.5                               | _                                  | _                  |  |  |
| 12                            | -                                     | -                                 | 0.5                                | 0.75               |  |  |
| 15                            | 2                                     | 1.5                               | 0.5                                | 1                  |  |  |
| 18                            | _                                     | 1.5                               | _                                  | _                  |  |  |
| 20                            | 2.5                                   | 1.5                               | 0.5                                | 1.25               |  |  |
| 25                            | 2.5                                   | 2                                 | 0.5                                | 1.5                |  |  |
| 32                            | 3                                     | 2.5                               | 0.5                                | 2                  |  |  |
| 40                            | 3                                     | 2.5                               | -                                  | 2                  |  |  |
| 50-65                         | 3                                     | 3                                 | _                                  | 2                  |  |  |
| 80-200                        | 4                                     | 4                                 | _                                  | _                  |  |  |

Above ground pipes require to be at least 50mm clear of the finished ground level. Laying on foundations (horizontal surfaces) is not acceptable as debris and damage can still occur. Composite pipe in particular cannot withstand the same accidental damage that might occur.

#### 5.3.7 Above-ground piping not to touch the ground

Consumer piping shall not be laid on the ground.

Consumer piping above the ground shall be at least 50 mm clear of the finished ground level.

# Attach to fences or walls

Fences are not to be used to support piping, as they can be subject to movement, although if it a sound brick wall then it would be generally deemed suitable.

## 5.3 LOCATION OF CONSUMER PIPING

### 5.3.1 Prohibited locations

Consumer piping shall not be installed in any of the following locations:

(a) Attached to a fence.

#### NOTES:

- Local building regulatory authorities may have additional restrictions for the location of consumer piping.
- 2 A brick wall in sound condition used as a fence is generally deemed suitable.
- 3 Refer also to Paragraph K5 in Appendix K.

For more information, contact the OTR using the details below.

# Contact the Office of the Technical Regulator for more information

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