

# Smart meter installations in domestic new build premises

Guidance to create successful smart meter installations in domestic new build premises.

*Smart meters are used to measure electricity or gas usage and send this information directly to the energy supplier of a building. Smart meters should be installed in all new homes as standard, and people expect smart meters to be present in their new property as they provide access to tariffs and services that help reduce energy usage and save money. This guidance provides advice on how to make sure your building can have a smart meter installed.*

*To note: smart meters are provided free of charge by the utility supplier.*

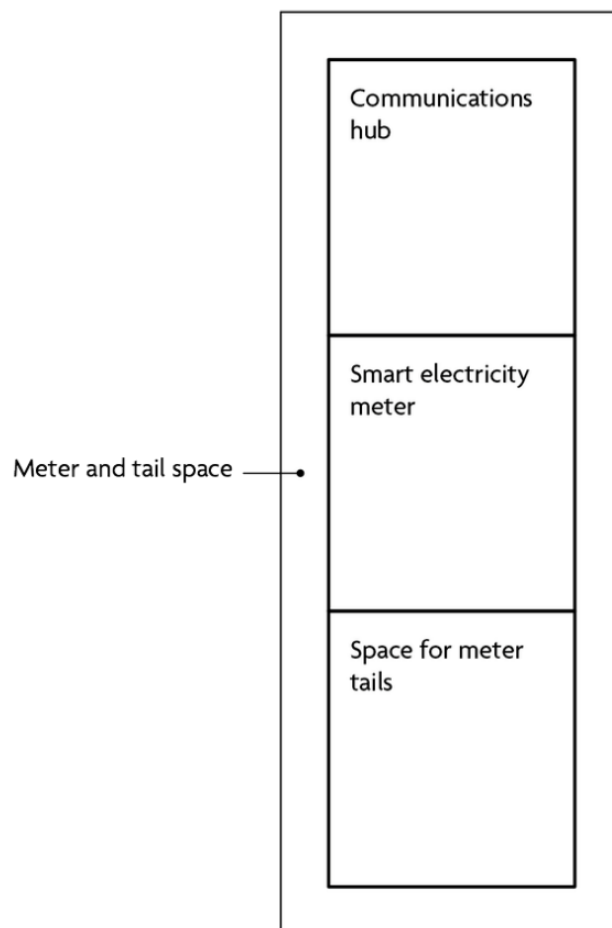
## **Who is this Guidance for?**

- *Those responsible for building design.*
- *Those responsible for site management and the choice of metering locations.*

---

## Smart meters

- 1.1. Within a given electricity 'meter and tail space', you should ensure two key items can be installed:
  - i. **Smart electricity meter**: measuring electricity usage in the house.
  - ii. **Communications hub**: a device to connect the smart gas and electric meters to the Data Communication Company's network and to allow smart meters and in-home displays to communicate with each other.
- 1.2. Additionally, **space for meter tails** should be left under the smart electricity meter.

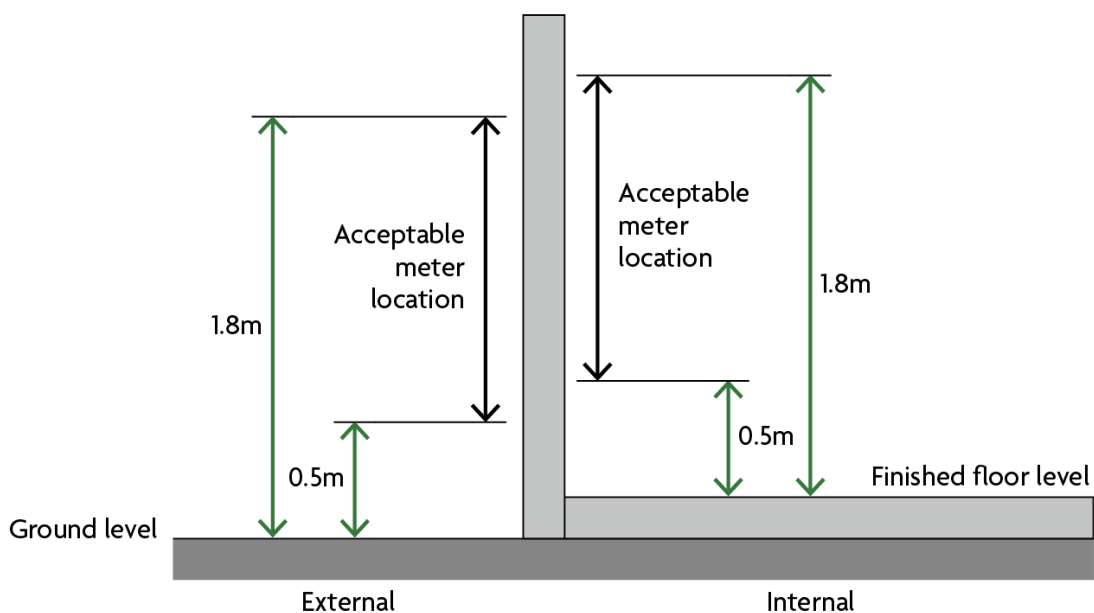


**Diagram 1.1 – Common arrangement for items within a 'meter and tail space'.** (Not to scale, for illustrative purposes only)

## Location of Smart Meter Installations

### Principles for design

- 1.3. For small plots, you should engage with utilities providers to ensure the correct positioning of meter points (as laid out below).
  - 1.4. You should consider appropriate metering locations early in the design process (as laid out below).
  - 1.5. In buildings with flats, you should position meters in the flat or close to the front door of the individual property and to each other.
- 1.6. You should install both gas and electricity smart meters in a location that is both of the following: (Diagram 1.2)
- (a) readily accessible
  - (b) located between 0.5m and 1.8m above the
    - (i) finished floor for internal meters / flats
    - (ii) ground level for external meters.

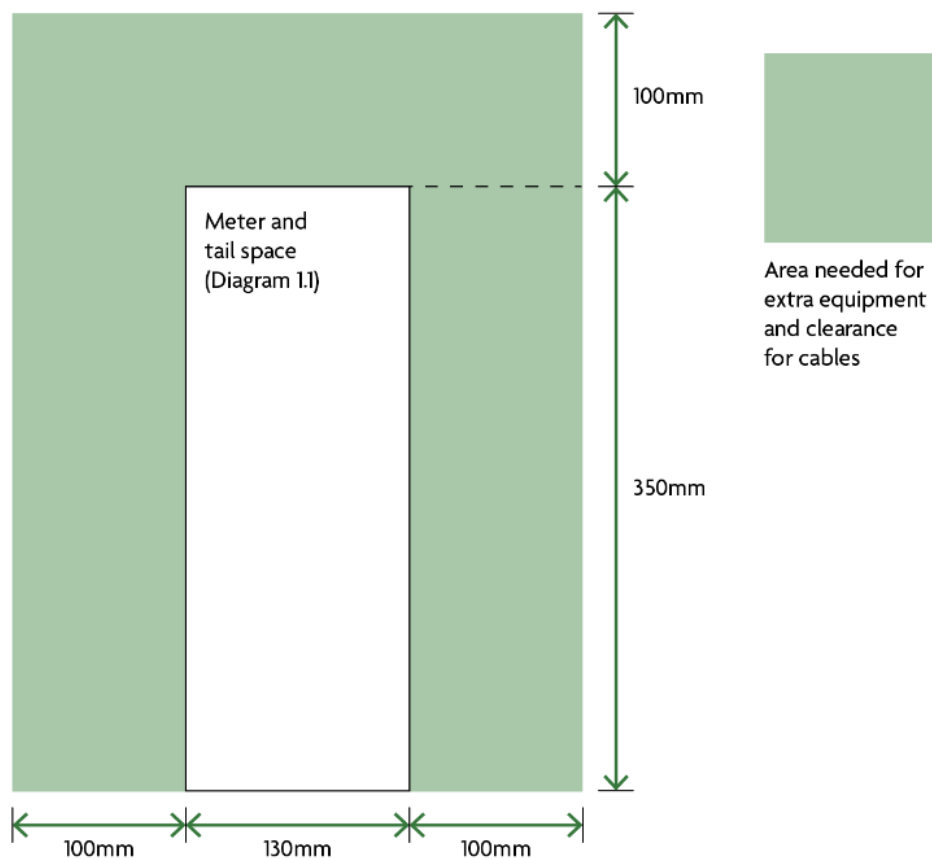


**Diagram 1.2 - Acceptable meter location.** [Not to scale, for illustrative purposes only]

---

## Spacing around Smart Electricity Meter

- 1.7. These spacing demands apply to all domestic properties including houses and flats.<sup>1</sup>
- 1.8. You should provide spacing around the smart electricity meter<sup>2</sup> to ensure all extra equipment and cables can be installed as shown in Diagram 1.3. This space cannot overlap between meter installations of other electric meters. A gas meter should not be installed in this space.



**Diagram 1.3 - Minimum space requirements for smart electricity meter installation.** (Not to scale, for illustrative purposes only)

- 1.9. You should ensure that no other equipment is placed in the meter space, other than that defined in industry guidance<sup>3</sup>.

---

<sup>1</sup> N.B. In flats, meters should not be installed in a central meter room where possible.

<sup>2</sup> As opposed to sub-metering arrangements.

<sup>3</sup> Energy Networks Association: Engineering Recommendation G87.

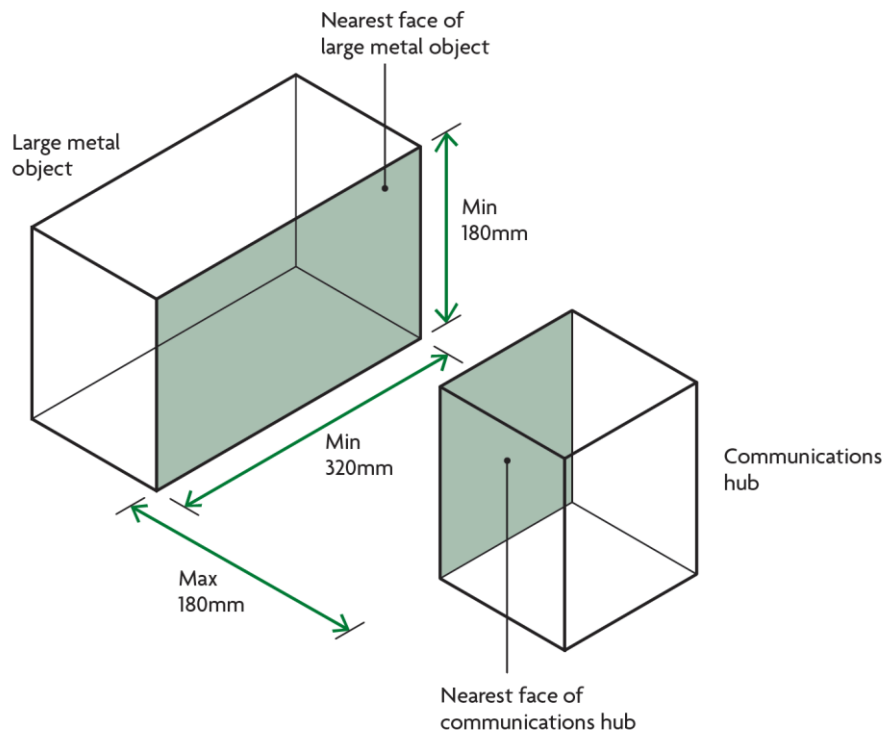
- 
- 1.10. You should ensure there is no permanent obstruction in front of an installed meter. Enough space should be provided for a utility supplier to install and maintain equipment safely.
  - 1.11. Special spacing considerations may be given by the utilities supplier. You should follow all additional guidance given.

---

## Materials Blocking Signals to the Communications Hub

- 1.12. You should make sure that the smart meters work correctly by checking that the site of installation of the communications hub is:
- in a location that will not act as a Faraday cage (i.e. not surrounded by metal on all sides).
  - in a location free from large metal objects (for example: metal trunking; metal meter enclosures; foil backed plaster board etc)<sup>4</sup>.

An item is considered a large metal object if the face of the object (of minimum dimensions: 180mm x 320mm) nearest the communications hub is within 180mm of any face of the communications hub (Diagram 1.4).



**Diagram 1.4 – Specifications for an object to be considered a metallic obstruction.** [Not to scale, for illustrative purposes only]

---

<sup>4</sup> As defined in DCC (2018) [Communications Hub Supporting Information](#)

---

## Logistics and Co-ordination

- 1.13. You should discuss metering arrangements with the utilities supplier. There should be the expectation that all gas and electricity meters installed in the building will be smart. The installation of smart meters is a joint responsibility for the energy suppliers and the developer.
- 1.14. You should discuss the order of installation and commissioning of the gas and electricity meters with utility providers prior to work beginning on site. In particular, utilities suppliers may wish to connect the electricity and gas smart meters to the communications network at the same time.
- 1.15. You should confirm with the utilities supplier that the meters are operating in 'Smart Mode' before handing the property over to the customer. This will avoid repeated visits from the utilities supplier and consumer inconvenience.
- 1.16. Meters can only be installed by Meter Operators or utilities suppliers. If meters are to be installed using units assembled off-site, engagement should be undertaken directly with the Meter Operator or utilities provider, or through an appropriate broker.

## Safety

- 1.17. You should ensure any installations comply with safety regulations.