Version 8 What you need to know about installing water meters

# Sydney WATER

# **Overview**

# What

- This guide explains:
- who installs a water meter
- how and where you get a water meter
- how and where you must install a water meter
- what to do if you can't install a water meter where we need it.

# Who

- This guide is for:
- licensed plumbers
- hydraulic consultants
- property developers.

This guide only covers water meters that we use to bill customers. It doesn't cover private water meters.

This guide doesn't cover water meters going onto units in a multi-level building. To know about this type of metering, read the <u>Multi-level</u> <u>individual metering guide.</u>

Why Installing a water meter in the right place helps us read and exchange it in the future.

# Contents

1.	Introduction	4
2.	Preparing for a water meter	4
	Which water services must have a meter?	4
	Who supplies the meter?	4
	Who installs the meter?	4
	Which meters have a backflow prevention device inside them?	5
3.	Getting a water meter	5
	When do you apply for a meter?	5
	How do you apply for a meter?	5
	How much does it cost?	6
	When do we install the meter?	6
	What if you need water straight away?	6
	Where can you collect a meter?	6
	How can you arrange delivery of a large meter?	6
	What do we supply when you collect a meter?	7
4.	Installing a water meter	7
	Where do you install the meter?	7
	What spacing do you need to allow?	8
	What if you can't install a meter in the correct spot?	11
	What if you need to install a meter behind a gate or door?	11
	How do you label multiple meters?	11
	What must you do when you install a data logger?	12
	What if we can't install a meter?	12
	What must you do when you install a privately owned meter?	12
5.	Positioning a water meter – diagrams	13
	Where do you install meters on drinking water services?	13
	Where do you install meters on drinking and recycled water services?	14
	How do you install a temporary recycled water bypass?	15

	Where do you install meters on a battle-axe block?	16
	Where do you install meters on homes with a right of way?	17
	Where do you install meters on an extended private water service?	19
	Where do you install meters on a dual occupancy?	20
	Where do you install meters on three homes?	23
	Where do you install meters on four or more homes?	25
	Where do you install meters in a community title complex?	26
	Where do you install meters on business properties?	27
6.	Moving or disconnecting a water meter	29
	What must you do when you move a meter?	29
	When should you disconnect a meter?	29
	How do you return a meter?	29
	When can you downsize a meter?	29
	What happens if you damage a meter or it is stolen?	30
7.	Definitions	31
8.	Change history	32

# 1. Introduction

This guide explains what you need to know about installing a water meter on a property. This is so we can:

- read and exchange the meter
- charge the property owner correctly for the water they've used.

# 2. Preparing for a water meter

#### Which water services must have a meter?

Any private water service that connects to our water supply must have a meter. This includes fire hose reels but generally doesn't include other fire systems.

Need advice on fire systems? Simply email connections@sydneywater.com.au.

#### Who supplies the meter?

We'll supply a meter free of charge unless it's for a unit in a multi-level building. You must buy meters for multi-level buildings from one of our <u>accredited metering suppliers</u>. We will supply the master meter for the building.

#### Who installs the meter?

This depends on the meter size and type of water service at the property.

Meter size	Who can install it
20 mm For a locked and tagged water service (like the one pictured on the next page)	Sydney Water
20 mm to 50 mm light duty For a standard water service	Sydney Water or a licensed plumber
50 mm to 300 mm heavy duty For a standard water service	Licensed plumber

#### What we do install

We install 20 mm to 50 mm light duty meters free of charge. We'll install a meter within five to ten business days of your request.

#### What we don't install

We don't install 50 mm to 300 mm heavy duty meters. If you're installing one of these, we can deliver one to you at the property. To arrange this, call 13 20 92 or pick one up from our <u>contractor</u>.

We don't install meters for each unit or extra meters in new multi-level buildings. We will install the master meter if it's 50 mm light duty or smaller.

### Which meters have a backflow prevention device inside them?

Only 20 mm and 25 mm meters have dual check valves inside them for backflow prevention. Meters larger than this don't have any backflow prevention devices inside them.

You must make sure any connection to our water main has appropriate backflow prevention.

Find out more about backflow prevention.

# 3. Getting a water meter

#### When do you apply for a meter?

You should apply for a meter two weeks before you need water on-site. This is because you must have a meter on the site **before** you start building.

#### How do you apply for a meter?

#### **Existing property**

To get a meter, simply apply for a water meter installation at <u>Sydney Water Tap in<sup>™</sup></u>.

When you apply, you have two choices:

- Ask us to install the meter we'll install it within 10 working days once we approve your application.
- Tell us you or your plumber will install the meter – you must apply for a connection approval letter at <u>Sydney Water Tap in<sup>TM.</sup></u> Once we approve your application, you or your plumber can collect the meter from our contractor.

#### New property

If you have a water service like the one in the picture, simply apply for a **water meter installation** at <u>Sydney Water Tap in<sup>TM</sup></u>.

When you apply, you must ask us to install the meter.

If you don't have one of these services, please call us on 13 20 92.



We must install meters for these locked and tagged services.

#### **Multi-level buildings**

We only supply or install the main meter on these properties.

To get this meter, simply apply for a water meter installation at <u>Sydney Water Tap in<sup>™</sup></u>.

If you need meters for the units or extra meters for the common areas, you can get them from our accredited supplier.

Find out more about meters in multi-level buildings.

### How much does it cost?

It doesn't cost anything to apply for a meter. When you ask us to install a 20 mm to 50 mm light duty meter, we'll do it free of charge.

#### When do we install the meter?

We'll install a drinking water meter within five to ten business days. If the property needs a recycled water meter, we'll install one when Building Commission NSW puts a **Recycled Water Final Plumbing Inspection** sticker in the electricity box.

### What if you need water straight away?

Just call us on 13 20 92 and we'll give you approval to remove the locking pin on the **drinking water service**. We'll then install a meter for you within five to ten business days.

You must never remove the locking pin from a **recycled water service**. We'll remove the locking pin when we install a meter. This will happen after Building Commission NSW puts a **Recycled Water Final Plumbing Inspection** sticker in the electricity box.

#### Where can you collect a meter?

If you're installing the meter, please collect it from our contractor:

#### Skilltech Unit S/10-16 South Street Rydalmere

They're open between 8.30 am and 4 pm Monday to Friday.

Our contractor will only issue meters to a licensed plumber or an authorised representative. When you collect a meter, you must show your plumber's licence or a signed authorisation letter from the plumber. The signed authorisation must be on the plumber's letterhead, have the licence number and the specific property details.

When you collect a meter, you must:

- tell our contractor where you're installing it on the property
- install it within two days.

If you're collecting:

- one 20 mm meter, you must show our contractor the water meter installation confirmation from Sydney Water Tap in<sup>™</sup>
- a larger meter or more than one meter, you must show our contractor the water meter installation confirmation and the drinking water connection approval letter from Sydney Water Tap in<sup>TM</sup>
- more than one meter, our contractor will mark them with street or unit numbers. Please make sure this matches the property when you install it.

If you need meters for units in multi-level buildings, you must buy them from one of our <u>accredited metering suppliers</u>. We'll supply the master meter for the building.

#### How can you arrange delivery of a large meter?

If the meter is larger than 50 mm light duty, we can deliver it to a licensed plumber at the property. Simply call us on 13 20 92 to arrange it.

### What do we supply when you collect a meter?

This depends on the size of the meter:

Meter size	What we supply
20 mm to 25 mm	The meter
	Two couplings
	Two washers
32 to 50 mm light duty	The meter
	Two oval flanges
	Two gaskets
	Four nuts
	Four bolts
50 mm to 300 mm heavy duty	The meter
	Two distance pieces for the inlet and outlet
	One gate valve
	One dirt box
	We don't supply the second gate valve, flanges, or bolts.

If you don't use all the parts, you must return them to our <u>contractor</u>. If you don't return them, we may not issue these parts to you in future.

# 4. Installing a water meter

### Where do you install the meter?

We need to access the meter to read it regularly so it's important that you install it in the right spot.

If you're laying a private water service, you should ensure the inlet riser is between 300 mm and:

- 1,000 mm inside the front property boundary
- 600 mm from the left or right property boundary.

You should also ensure that the inlet riser and outlet riser are:

- 300 mm from the ground (meters up to 50 mm light duty)
- parallel to the closest side boundary.

If you're installing meters close together, you must allow 300 mm between them.

You must not install the meter:

- more than 1.5 metres above the ground
- in an area we cannot regularly access such as inside a house or unit, in a ceiling space or under a kitchen sink.

Doing this might stop us reading, inspecting, or replacing the meter. If a meter is not installed to our specifications, you may incur a non-conformance notification.

If you need to install a booster pump, you must install it downstream of the meter. If this isn't practical, you must let us know by emailing <u>meters@sydneywater.com.au</u>.

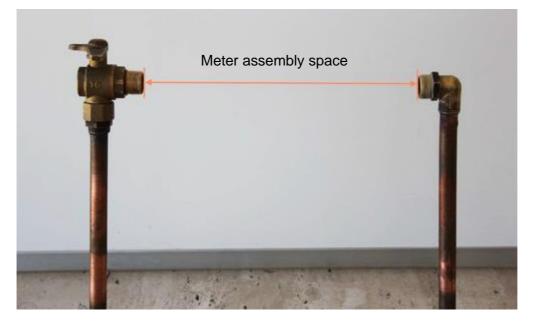
# What spacing do you need to allow?

The following diagrams and tables explain the distance you need to allow. This doesn't include the space for a separate backflow prevention device if the property needs one.

#### 20 mm to 50 mm light duty meters

You'll need to allow a space for the meter when you lay a private water service.

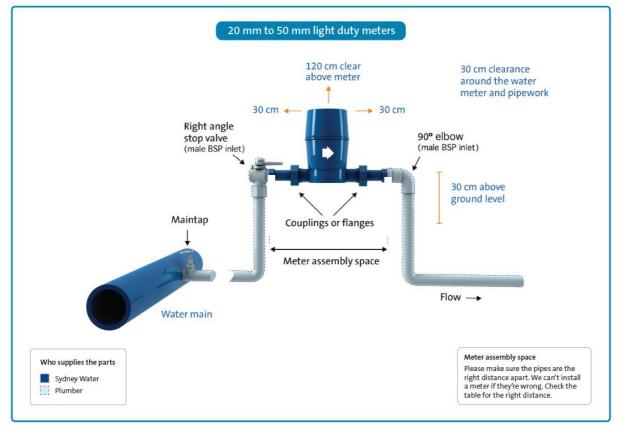
Meter size	Right angle stop valve	Elbow	Meter assembly space	
Drinking water				
20 mm	Male BSP thread	Male BSP thread	250 mm	
25 mm			295 mm	
32 mm			330 mm *	
40 mm	]		330 mm *	
50 mm light			330 mm *	
Recycled water				
20 mm recycled Female BSP thread		Female BSP thread	270 mm	
25 mm recycled			265 mm	
* This doesn't include the distance for the backflow prevention device.				



This is where you start and finish the measuring.



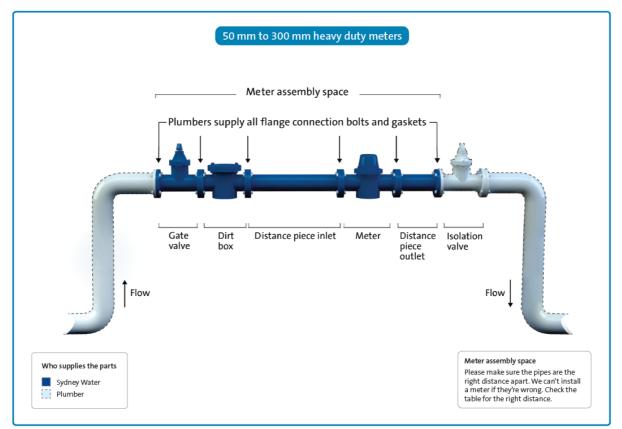
We can't install meters when the pipes aren't the right distance apart.



#### Meter clearance requirements

If you're installing a meter, doing it this way will help us access them.

#### 50 mm to 300 mm heavy duty meters



If you're installing a large meter, we'll give you more parts.

Meter size DN	Gate valve PN16	Dirt box	Distance piece inlet	Meter	Distance piece outlet	Meter assembly space
50 mm heavy	175 mm	208 mm	372 mm	311 mm	150 mm	1,216 mm
80 mm	203 mm	252 mm	396 mm	413 mm	240 mm	1,504 mm
100 mm	229 mm	260 mm	476 mm	483 mm	300 mm	1,748 mm
150 mm	267 mm	406 mm	762 mm	500 mm	450 mm	2,385 mm
200 mm	292 mm	428 mm	1,000 mm	520 mm	600 mm	2,840 mm
250 mm	330 mm	522 mm	1,250 mm	450 mm	750 mm	3,302 mm
300 mm	356 mm	580 mm	1,500 mm	500 mm	900 mm	3,836 mm

If you're installing one of these meters, you'll need to allow a minimum of 500 mm clearance around it. This is so we can exchange it in future.

All new gate valves on 80 mm or 100 mm meters will have a flange with four holes. You may find old ones have six holes. If you're exchanging one of these meters, you may have to replace the gate valve.

# What if you can't install a meter in the correct spot?

If you're unable to install a meter where we need it, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install it. You must include:

- a drawing or diagram of the proposed position
- the property address
- the account number if you have it
- why you need to put it in another position
- how we'll access it to read it regularly.

We'll let you know if your proposal is suitable within seven days.

If you don't install a meter in the correct spot or tell us about it, we may install a remote meter reading device. The device will allow us to read the meter from outside the property. If we do this, we'll charge the property owner extra for the remote reading service on their quarterly bill.

# What if you need to install a meter behind a gate or door?

If you're installing a meter behind a gate or door, you must lock the gate or door with an Abloy utilities access restricted lock. This is a lock that only you and authorised utilities can open.

You can only buy an Abloy utilities access restricted lock from <u>Integrity Locksmiths</u>. Simply call them on 1300 366 488 and they can:

- post one if you pay by credit card
- tell you where your local supplier is.

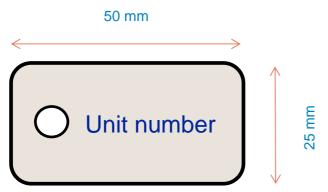
**Before you buy one, you must tell them you want a Sydney Water accessible lock.** This is because Integrity Locksmiths will key the lock so we can open it. They can also give other utilities access to the lock. Just let them know the utilities that need access **before** you buy the lock. You're responsible for the cost of the lock.

Please call us on 13 20 92 when you lock the gate or door with the Abloy utilities access restricted lock. We'll note this in our records as this will help us access the meter in future.

# How do you label multiple meters?

If you're installing more than one meter at a property, you must attach a label to the pipework of each meter. The label must be weatherproof and have the related unit or house number on it.

We recommend a metal tag with the unit or house number stamped on it.



If you're installing multiple meters, please label each one.

# What must you do when you install a data logger?

A property owner may want a data logger on their meter so they can have up-to-date information on their water use. If you're installing a data logger, you must email <u>meters@sydneywater.com.au</u> and include:

- the property address and account number if you have it
- the type of data logger you're installing.

You must let the property owner know that:

- the meter is still our property
- we need to access the meter regularly
- they must reconnect the data logger when we exchange the meter.

### What if we can't install a meter?

We'll install 20 mm to 50 mm light duty meters when the plumbing is set up correctly. We may not be able to do this if the:

- space for the meter is wrong
- risers are different sizes
- risers are made of polyethylene or galvanised iron instead of copper.

When this happens, we'll ask the property owner to call a licensed plumber. The plumber must fix the problem before we can install a meter. If a meter is not installed to our specifications, you may incur a non-conformance notification.

#### What must you do when you install a privately owned meter?

A property owner may install a private meter at their cost. They generally do this so they can:

- monitor the water different occupants use
- divide the water use charge fairly. (note Residential Tenancies Act limitations)

You must:

- check that the property has or will have a Sydney Water master meter
- buy the private meter
- install the private meter downstream of our meter.

We do not:

- read or calculate water use on private meters
- replace privately owned meters.

# 5. Positioning a water meter – diagrams

Where you install a meter may depend on the property type or the services available. These diagrams explain the most common variations. If you can't comply with these diagrams or would like information on an example we don't cover, please email <u>meters@sydneywater.com.au</u>.

# Where do you install meters on drinking water services?

Below is the most common way to install a meter onto a drinking water service. We have explained variations of this installation in other diagrams.

If you can't install the meter like this or like the other diagrams show, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install it.

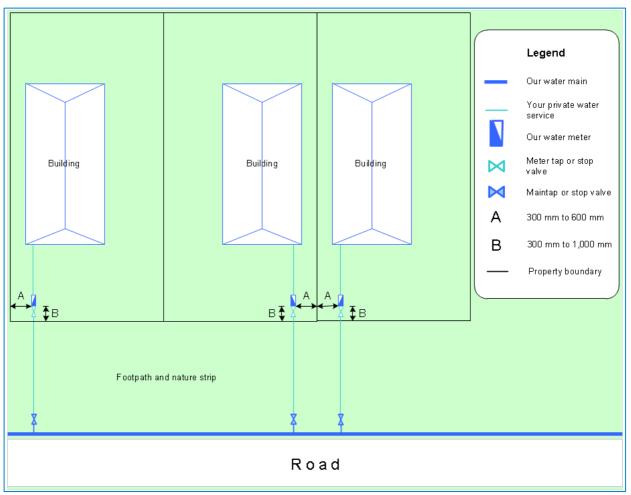


Diagram 1 – This installation is for any meter size and property type.

### Where do you install meters on drinking and recycled water services?

If you have these services, you must install the meters as pictured below.

If you can't install the meters like this, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install them.

To know what you need to include, see the section <u>What if you can't install a meter in the</u> <u>correct spot?</u>

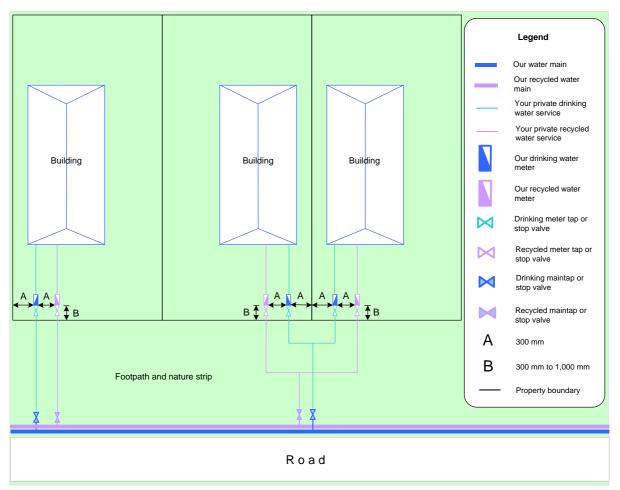


Diagram 2 – This installation is for any meter size and property type.

### How do you install a temporary recycled water bypass?

If you need to bypass the recycled water, you must do it as pictured below. The bypass must be downstream of the drinking water meter.

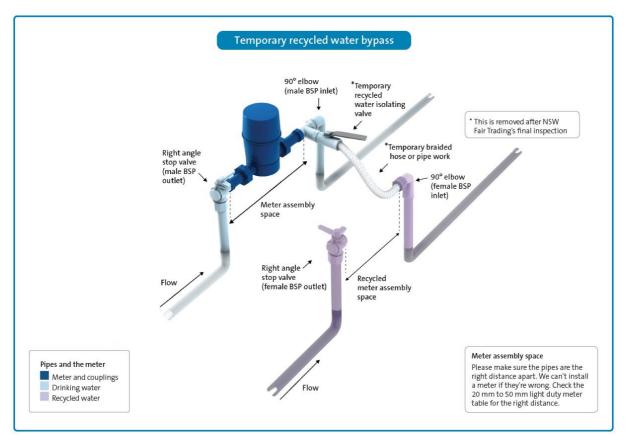


Diagram 3 – We'll install the recycled water meter after Building Commission NSW final inspection.

### Where do you install meters on a battle-axe block?

If you're installing meters on this type of property, you must install them like this.

If you can't install the meters like this, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install them.

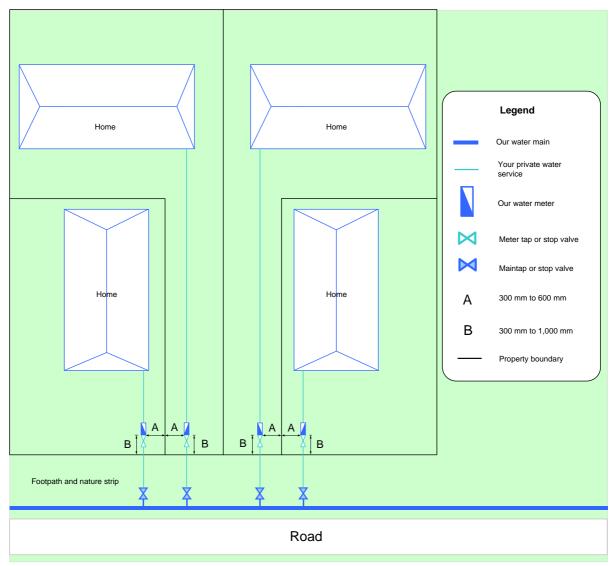


Diagram 4 – The meter must have a protective bollard when it's near a driveway.

# Where do you install meters on homes with a right of way?

These rules apply to properties that have three to eight torrens title lots with an easement for services. If you have less than three lots, you must follow one of the dual occupancy rules. If you have more than eight lots, you must build a water main extension for the homes.

The following are the most common variations of this property type.

#### Cul-de-sac right of way

This is how you must install the meters for this variation. You must allow 300 mm between the meters.

If you can't install the meters like this, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install them.

To know what you need to include, see the section <u>What if you can't install a meter in the</u> <u>correct spot?</u>

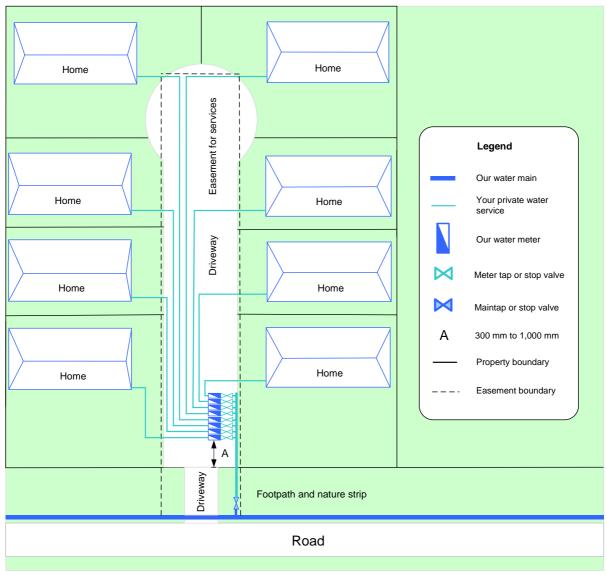


Diagram 5 – These look like normal houses, they just don't face a public road.

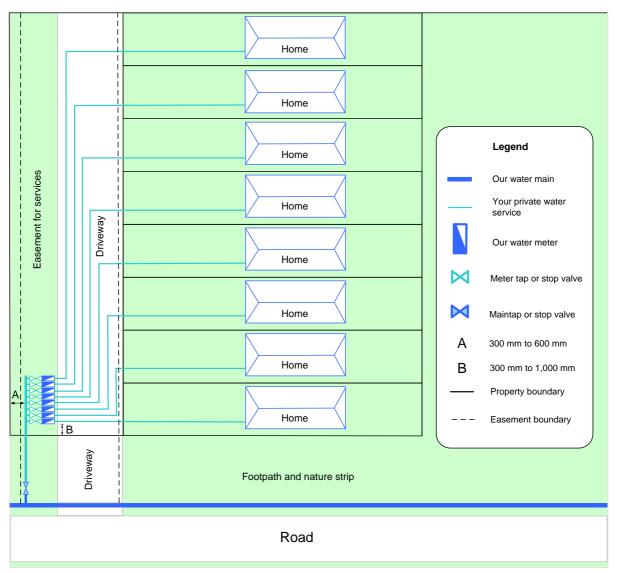
When the meters are this close to each other, you'll need to label them. To know how, see the section <u>How do you label multiple meters?</u>

#### Straight right of way

Below is how you must install the meters for this variation. You must allow 300 mm between the meters.

If you can't install the meters like this, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install them.

To know what you need to include, see the section <u>What if you can't install a meter in the</u> <u>correct spot?</u>



**Diagram 6 – Homes with a right of way have different metering rules to other properties.** 

When the meters are this close to each other, you'll need to label them. To know how, see the section <u>How do you label multiple meters?</u>

### Where do you install meters on an extended private water service?

If a property needs an extended private water service, you must:

- connect the private water service at least 1,800 mm from the end of our water main
- install the private water service inside a protective 100 mm PVC duct pipe. This prevents damage from traffic. The pipe may contain up to three 20 mm private water services.

If you have this type of service, you must install the meter as below.

If you can't install the meter like this, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install it.

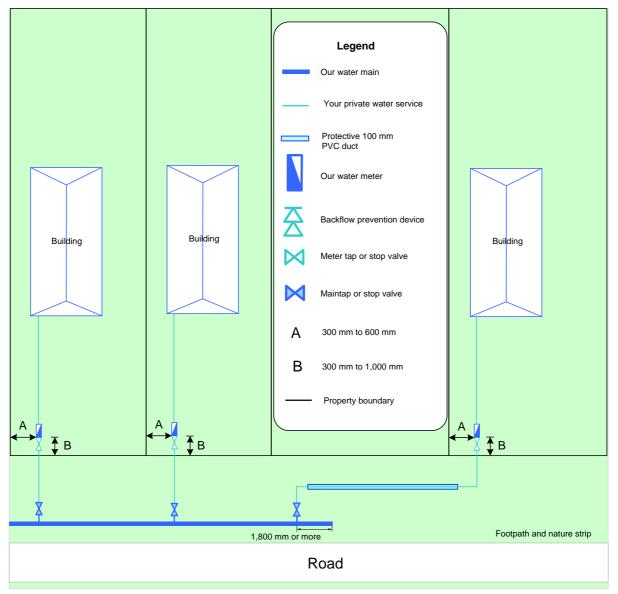


Diagram 7 – A property owner needs this service when they don't have a water main available.

### Where do you install meters on a dual occupancy?

There are three ways you can install meters on this type of property.

#### Two meters from two connections

Below is how you must install the meters from two connections. A property owner must do this if they plan to subdivide their property in future.

If you can't install the meters like this, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install them.

To know what you need to include, see the section <u>What if you can't install a meter in the</u> <u>correct spot?</u>

**The bill** – With this installation, there will be one water use charge on the front of the bill. The readings and use from the two meters are on the reverse side of the bill.

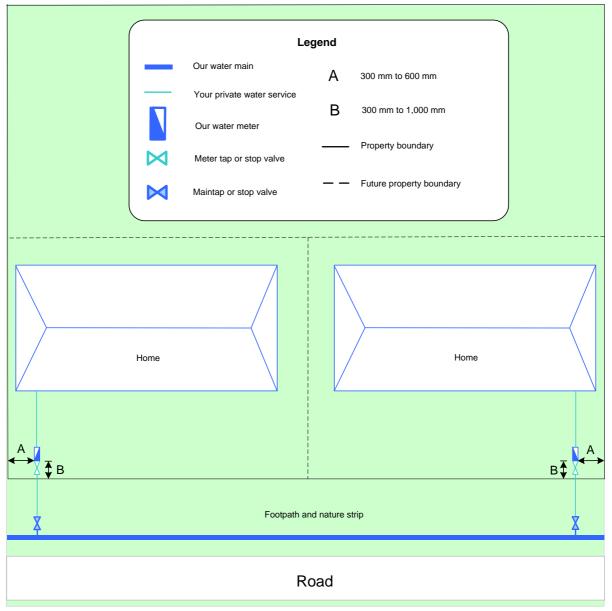


Diagram 8 – This is how to install the meters if the property owner wants to subdivide.

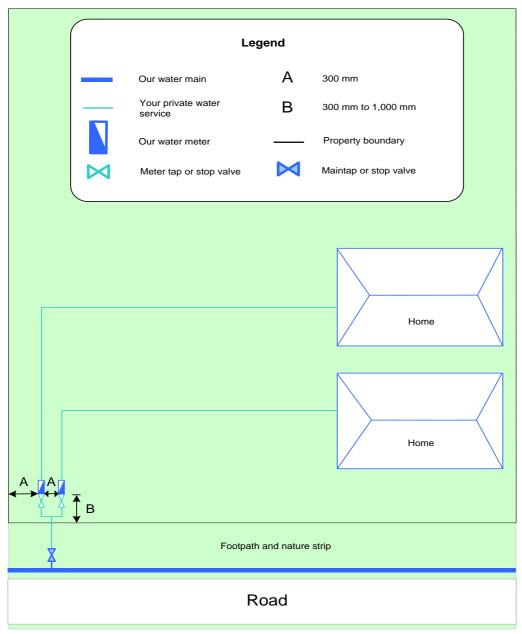
#### Two meters from one connection

This is how you must install the meters from one connection. A property owner must do this if they don't plan to subdivide their property but want to calculate the water use separately.

If you can't install the meters like this, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install them.

To know what you need to include, see the section <u>What if you can't install a meter in the</u> <u>correct spot?</u>

**The bill** – With this installation, there will be one water use charge on the front of the bill. The readings and use from the two meters are on the reverse side of the bill.





The property **must** have two connections if the owner wants to subdivide. If the property has this meter arrangement and the owner wants to subdivide, please email <u>connections@sydneywater.com.au</u> for advice.

#### One meter from one connection

This is how you must install the meter from one connection. The owner must do this if they don't plan to subdivide their property and are happy to have combined water use.

If you can't install the meter like this, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install it.

To know what you need to include, see the section <u>What if you can't install a meter in the</u> <u>correct spot?</u>

**The bill** – With this installation, there will be one water use charge on the front of the bill. The readings and use from the one meter are on the reverse side of the bill.

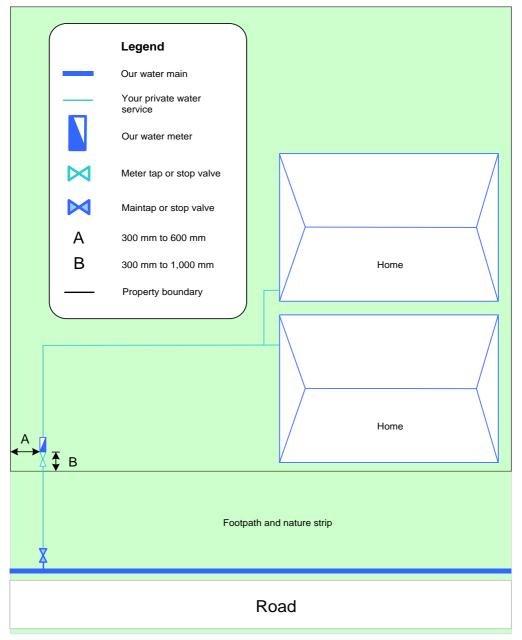


Diagram 10 – This is how to install the meter if the property owner has a house and a granny flat.

The property **must** have two connections if the owner wants to subdivide. If the property has this meter arrangement and the owner wants to subdivide, please email <u>connections@sydneywater.com.au</u> for advice.

# Where do you install meters on three homes?

There are two ways you can install a meter on this type of property.

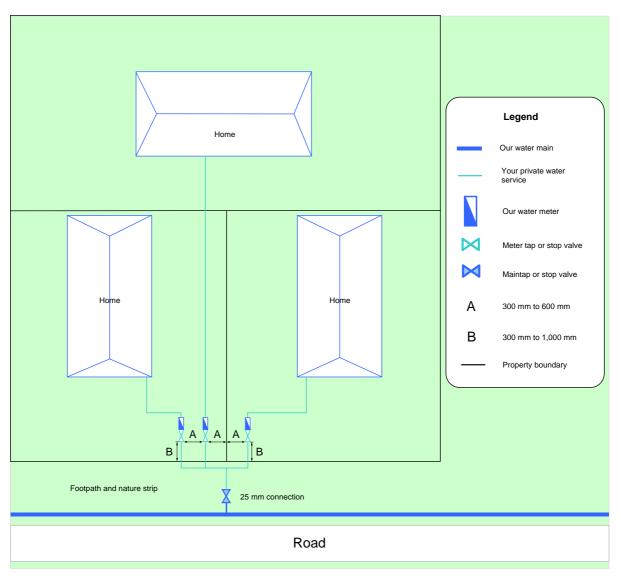
#### Three homes with one connection

If you're installing meters on this type of property, you must install a meter on each home.

You must not install the meter:

- more than 1.5 metres above the ground
- in an area we cannot regularly access such as inside a house or unit, in a ceiling space or under a kitchen sink.

If you can't install the meters like this, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install them.





#### Three homes with two connections

If you're installing meters on this type of property, you must install a meter on each home.

You must not install the meter:

- more than 1.5 metres above the ground
- in an area we cannot regularly access such as inside a house or unit, in a ceiling space or under a kitchen sink.

If you can't install the meters like this, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install them.

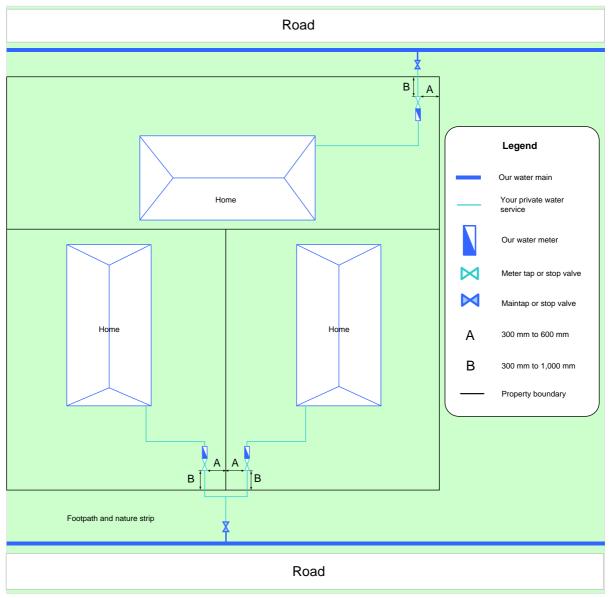


Diagram 12 – This type of property may be a residential strata complex or three homes on one lot.

### Where do you install meters on four or more homes?

If you have this type of property, you must install the meters in front of each home. The meters must be clear of the driveway.

From 31 March 2015, you must install a master meter instead of a bridging piece at the front of the property.

You must not install any of the meters:

- more than 1.5 metres above the ground
- in an area we cannot regularly access such as inside a house or unit, in a ceiling space or under a kitchen sink.

If you can't install the meters like this, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install them.

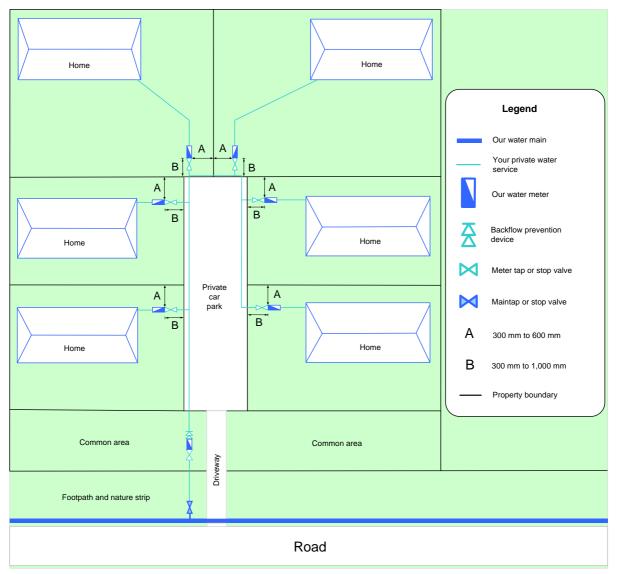


Diagram 13 – This type of property may be a residential strata complex or four or more homes on one lot.

### Where do you install meters in a community title complex?

If you have this type of service, you must install the meters as pictured below.

From 31 March 2015, you must install a master meter instead of a bridging piece at the front of the property.

If you can't install the meters like this, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install them.

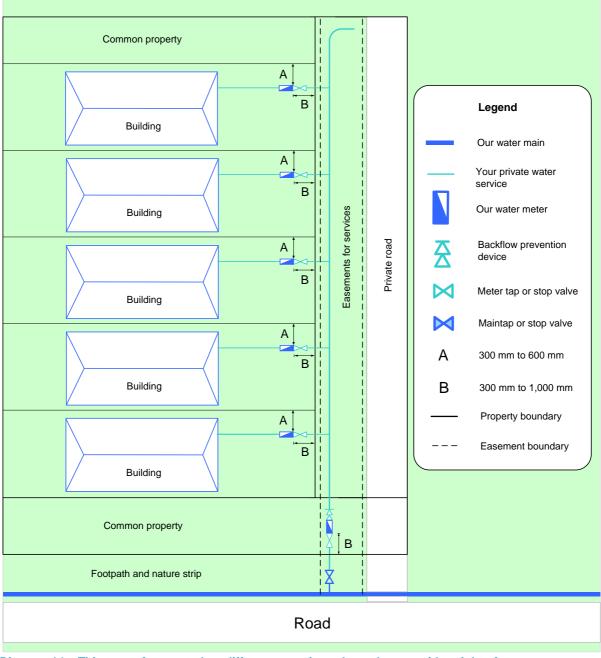


Diagram 14 – This type of property has different metering rules to homes with a right of way.

# Where do you install meters on business properties?

#### One lot with more than one building

If you have this type of property, you must install the meter as pictured below.

From 31 March 2015, each building must have the plumbing for a meter. You have the choice to install a meter on each building or not. If you install a meter on each building, the owner will get service charges for each meter on their bill.

You must not install any of the meters:

- more than 1.5 metres above the ground
- in an area we cannot regularly access such as inside a house or unit, in a ceiling space or under a kitchen sink.

If you can't install the meter like this, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install it.

To know what you need to include, see the section <u>What if you can't install a meter in the</u> <u>correct spot?</u>

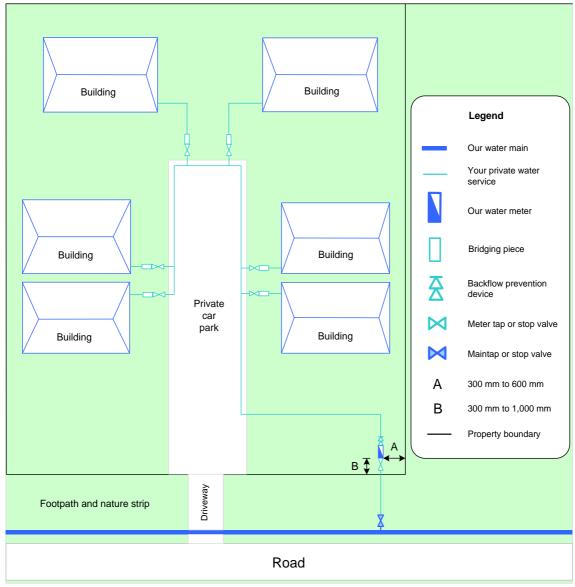


Diagram 15 – Each building must have a meter if the property owner wants to subdivide.

#### Strata complexes

If you have this type of property, you must install the meters as pictured below.

From 31 March 2015, you must install a master meter instead of a bridging piece at the front of the property.

You must not install any of the meters:

- more than 1.5 metres above the ground
- in an area we cannot regularly access such as inside a house or unit, in a ceiling space or under a kitchen sink.

If you can't install the meters like this, you must email <u>meters@sydneywater.com.au</u> and tell us where you propose to install them.

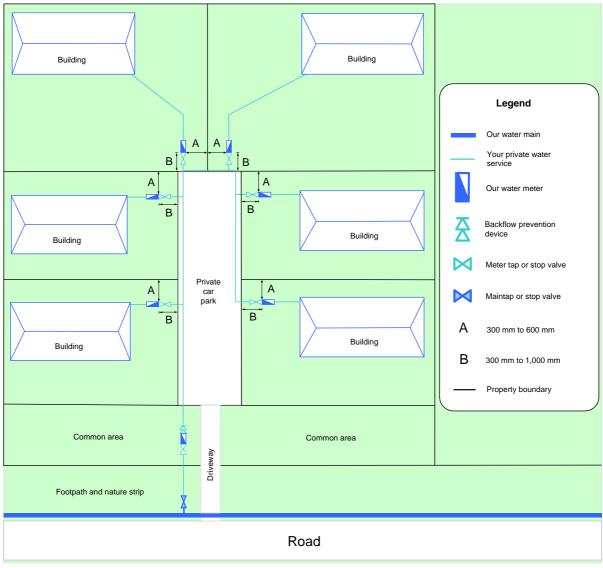


Diagram 16 – This type of property may be commercial or industrial units.

# 6. Moving or disconnecting a water meter

#### What must you do when you move a meter?

You may need to move a meter when it's in the way of a proposed fence or driveway. The property owner is responsible for the cost of moving the meter. If you need to move the meter more than 3,000 mm, you must apply for a new water connection at <u>Sydney Water</u> <u>Tap in<sup>TM</sup></u>. You must also apply to disconnect the old water service.

Before you move the meter, you must email meters@sydneywater.com.au and include:

- a drawing or diagram of the proposed position
- the property address
- the account number if you have it
- why you need to put it in another position
- how we will access it.

We'll let you know if your proposal is suitable within seven days.

### When should you disconnect a meter?

You're only allowed to disconnect a meter if you're disconnecting a water service. This may be when:

- the property is going to be vacant for a long time or permanently
- a fire has damaged the property
- you're installing a self-sufficient drinking water supply
- you need a larger meter for a new development.

You must apply for the disconnection at <u>Sydney Water Tap in<sup>™</sup></u>.

You must leave the meter connected to the old water service if the property owner is:

- renovating the property
- knocking down and rebuilding
- still using water at the property.

You must not reinstall a meter onto another property. This is because:

- our meter records will be incorrect
- we don't know who to charge for the water use.

### How do you return a meter?

You must apply to return the meter at <u>Sydney Water Tap in<sup>™</sup></u> or take the meter to:

#### Skilltech Unit S/10-16 South Street Rydalmere

Skilltech are open between 8.30 am and 4.00 pm Monday to Friday.

#### When can you downsize a meter?

A property owner may want to downsize their meter to reduce service charges on their bill. You can only downsize a meter if it's larger than 20 mm and the property doesn't need a large water service. You'll need to apply at <u>Sydney Water Tap in<sup>™</sup></u> and pay a fee.

# What happens if you damage a meter or it is stolen?

If you damage a meter or it is stolen, we'll replace it and may charge the property owner the replacement cost.

# 7. Definitions

Term	Definition	
Backflow prevention device	A one-way valve that stops water going back into the water supply.	
A horizontal or vertical pole that protects a meter from cars.		
Bridging piece	A temporary pipe that a plumber installs in the meter space.	
BSP British standard pipe thread.		
Community title complex	A complex of properties that share common property. Land and Property Information register these under a deposited plan. The common property may be vacant or have shared facilities.	
Data logger	A device that electronically measures water use.	
DN	Nominal diameter; we use this term to explain a meter size.	
Dual occupancy	Two dwellings on one block of land.	
Easement for services	A piece of land that a private property accesses water or electricity through. A private property typically needs one of these when it has no street frontage.	
Elbow	A pipe shaped like an elbow. This pipe is just after the meter on the customer or building side.	
Extended private water service	A private water pipe that goes further than usual to connect to our water main. These pipes may be a couple of metres long to several hundred metres long.	
Flange	A metal collar that adds strength to a pipe. They typically have bolt holes in them.	
Inlet riser	One of the pipes that comes out of the ground to connect the meter to the private water service. It's on the water main side of the meter.	
Locked and tagged water service	This is a locked and tagged water service. The developer puts these in when they subdivide a property.	
Lot	A title of property that the Land and Property Information register. It may be in a deposited or strata plan.	
Master meter	The first and main meter on a property. This type of meter must have a child or children meters (also known as check or sub meters). All a property's water goes through a master meter before the children meters.	
Multi-level building	A building that has more than a ground floor. It is not a house, townhouse or terrace house.	
Outlet riser	The other pipe that comes out of the ground to connect the meter to the private water service. It's on the building or customer side of the meter.	
PN16	The pressure rating of a pipe or fitting.	

Term	Definition
Private meter	A meter that a customer pays for and installs to measure all or part of a property's water use.
Private water service	A pipe that goes from the connection to our water main to the taps in a customer's property.
Right of way	A piece of land that connects a private property to public land. Property owners may or may not share them with other property owners. They are typically private roads.
Risers	Two pipes that come out of the ground and connect the meter to the private water service.
Strata complex	A type of property that the Land and Property Information register under a strata plan. A strata complex must have separate lots and common property.
Torrens title lot	A type of property that the Land and Property Information register under a deposited plan. A torrens title lot can have a home or a business building on it.
Valve	A device that allows you to control the flow of water. You will find a ball valve on smaller meters and a gate valve on larger ones.
Water meter	A device we use to measure a customer's water use.

# 8. Change history

Version	Key changes
1	This is the first guide we had about installing meters.
2	We have improved some of the information in this guide. We have moved it into the new customer guide template.
3	In November 2015, we changed the links from Quick Check agents to Sydney Water Tap in $^{\mbox{\scriptsize TM}}$ .
4	In June 2016, we deleted Skilltech's phone number from this guide. They were getting calls about meter installations and they shouldn't.
5	In January 2017, we updated the three diagrams – the 20 mm to 50 mm light duty meters, the 50 mm to 30 mm heavy duty meters and the temporary recycled water bypass. Proactive Graphics did these diagrams for us. We also removed the reference to 'Ask us to install a meter' because customers now only apply for a meter through <u>Sydney Water</u> <u>Tap in<sup>TM</sup></u> .
6	Got rid of links to the <i>Let's get connected</i> guide. We've removed this from our website so the links were broken.
7	Updated the measurements in the light duty meter section so they're the same as our new 'Measure the distance' page.
8	Repaired links, revised Section 4 What spacing do you need to allow, added stolen meters to Section 6 What happens if you damage a meter, minor other updates.