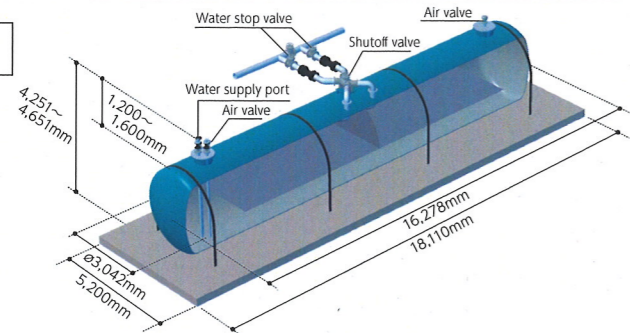


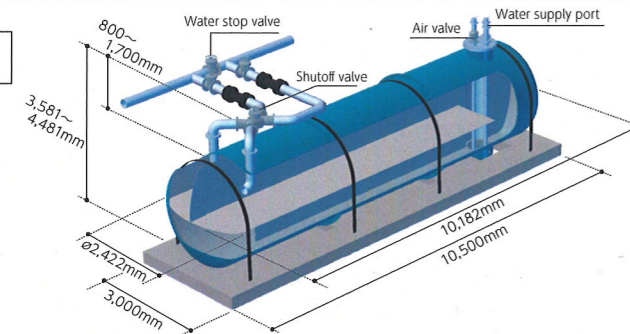
**AP100**



Type	Prefabricated earthquake-proof drinking-water tank
Model	AP100
Place of installation	Type I: Locations without vehicle entry, such as parks and housing areas Type II: Locations of vehicle entry
Shape	Cylindrical steel tank
Inner water pressure	Normal pressure: 0.74MPa
Capacity/Dimensions	100kL / Outer diameter: 3,042mm, Length: 16,278mm, Thickness: 19mm
Material	Carbon steel (SS400)
Coating	Inside: Epoxy (min. 0.3mm thickness) Outside: FRP (min. 1.8mm thickness)
Burial depth	1,200mm ~ 1,600mm
Standard outlets	Water conduit: two Manway / Water discharge port: one each
Option	Emergency shutoff valve, water pump

Certified by the Fire Equipment and Safety Center of Japan (敷-09001)

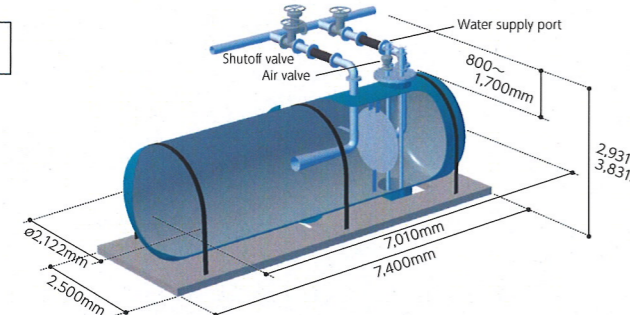
**AP40**



Type	Prefabricated earthquake-proof drinking water tank
Model	AP40
Place of installation	Type I: Locations without vehicle entry, such as parks and housing areas Type II/ III: Locations of vehicle entry
Shape	Cylindrical steel tank
Inner water pressure	Normal pressure: 0.74MPa
Capacity/Dimensions	40kL / Outer diameter: 2,422mm, Length: 10,182mm, Thickness: 9mm
Material	Carbon steel (SS400) or Stainless steel (SUS304)
Coating	Inside: Epoxy (min. 0.3mm thickness) Outside: FRP (min. 1.8mm thickness)
Burial depth	800mm ~ 1,700mm
Standard outlets	Water conduit: two Manway / Water discharge port: one each
Option	Emergency shutoff valve, water-supply pump

Qualified by the Fire Equipment and Safety Center of Japan (敷-10001-1)

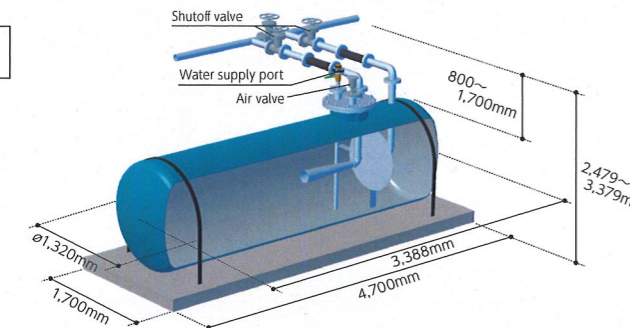
**AP20**



Type	Factory-produced earthquake-proof drinking water tank
Model	AP20
Place of installation	Type I: Locations not entered by cars, such as parks and housing areas Type II/ III: Locations in which a vehicle load is expected
Shape	Cylindrical steel pressure tank/ Horizontal
Inner water pressure	Normal pressure: 0.74MPa
Capacity/Dimensions	20kL / Outer diameter: 2,122mm, Length: 7,010mm, Thickness: 9mm
Material	SS400 or SUS304
Coating	Inside: Epoxy resin (0.3mm thick or more) Outside: FRP (1.8mm thick or more)
Burial depth	800mm ~ 1,700mm
Standard outlets	Water conduit/ Maintenance hatch/ Water supply port: one
Option	Emergency shutoff valve, fire pump, water-supply pump

Qualified by the Fire Equipment and Safety Center of Japan (敷-12001)

**AP5**

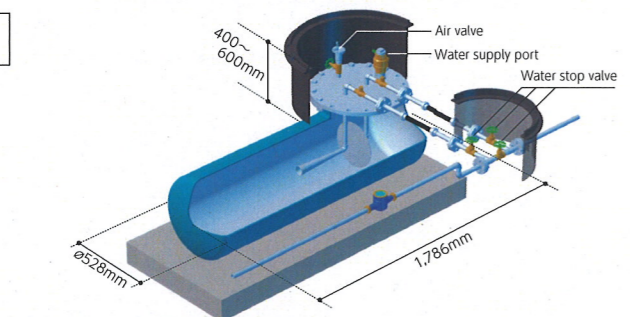


Type	Factory-produced earthquake-proof drinking water tank
Model	AP5
Place of installation	Type I: Locations not entered by cars, such as parks and housing areas Type II/ III: Locations in which a vehicle load is expected
Shape	Cylindrical steel pressure tank/ Horizontal
Inner water pressure	Normal pressure: 0.74MPa
Capacity/Dimensions	5kL / Outer diameter: 1,320mm, Length: 4,388mm, Thickness: 8mm
Material	SS400 or SUS304
Coating	Inside: Epoxy resin (0.3mm thick or more) Outside: FRP (1.8mm thick or more)
Burial depth	800mm ~ 1,700mm
Standard outlets	Water conduit with a supply port/ Maintenance hatch: one
Option	Emergency shutoff valve, fire pump, water-supply pump

Qualified by the Fire Equipment and Safety Center of Japan (小敷-11001)

Certified by the Japan Water Works Association (Patent pending)

**AP-03**



Type	Water circulating storage tank
Model	AP-03
Place of installation	Assembly halls, houses, etc.
Shape	Cylindrical steel pressure tank/ Horizontal
Inner water pressure	0.74MPa (Pressure test: 1.75MPa)
Capacity/Dimensions	330L / Outer diameter: 528mm, Length: 1,786mm, Thickness: 1.5mm
Material	Stainless steel (SUS430J1L/SUS304)
Coating	Inside: None Outside: FRP (1.0mm thick or more)
Burial depth	400mm ~ 600mm
Standard outlets	Manual pump
Option	Diaphragm pump

Certified by the Japan Water Works Association (Z-345)

(Patent pending)

※Please contact us for products other than the above.

# For Securing a Lifeline of Water in the Case of an Earthquake AQUA in PIT Series

Circulation Storage Water Tanks

Earthquake-proof Drinking-water Tanks







# For Securing a Lifeline of Water in the Case of an Earthquake or Water Suspension

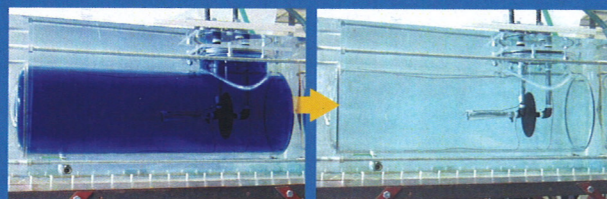
## AQUA in PIT – Water Circulating Storage Tank

TAMADA AQUA in PIT SERIES

AQUA in PIT is a water storage tank that is directly connected with water supply pipes so that water can circulate constantly. Unlike a conventional water tank that only stores water, AQUA in PIT works as a part of water supply pipes, and can supply water for drinking and firefighting in the case of a disaster to save people's lives.

### Supplying Fresh Water

AQUA in PIT series has unique structure to achieve effective water flow. AP-03, AP5 and AP20 have a tapered pipe and a disc. AP40 and AP100 are equipped with a divider plate inside. These devices help water circulation efficiently. In our experiment using AP-03, AP5 and AP20, 3.6 times as much as tank capacity could replace 99% of water inside. As for AP40 and AP100, the water was replaced by supplying three times the volume of tank capacity water. You can select a tank from our product line based on the amount of water needed at the site.



Water replacement trial - water was replaced in 20 minutes. (colored water was used for better observation)  
\*The experiment was conducted using a half-size model at a flow rate of 10 l/min produced by means of a circulation system, which was developed jointly with Kanazawa University. (Patent pending)

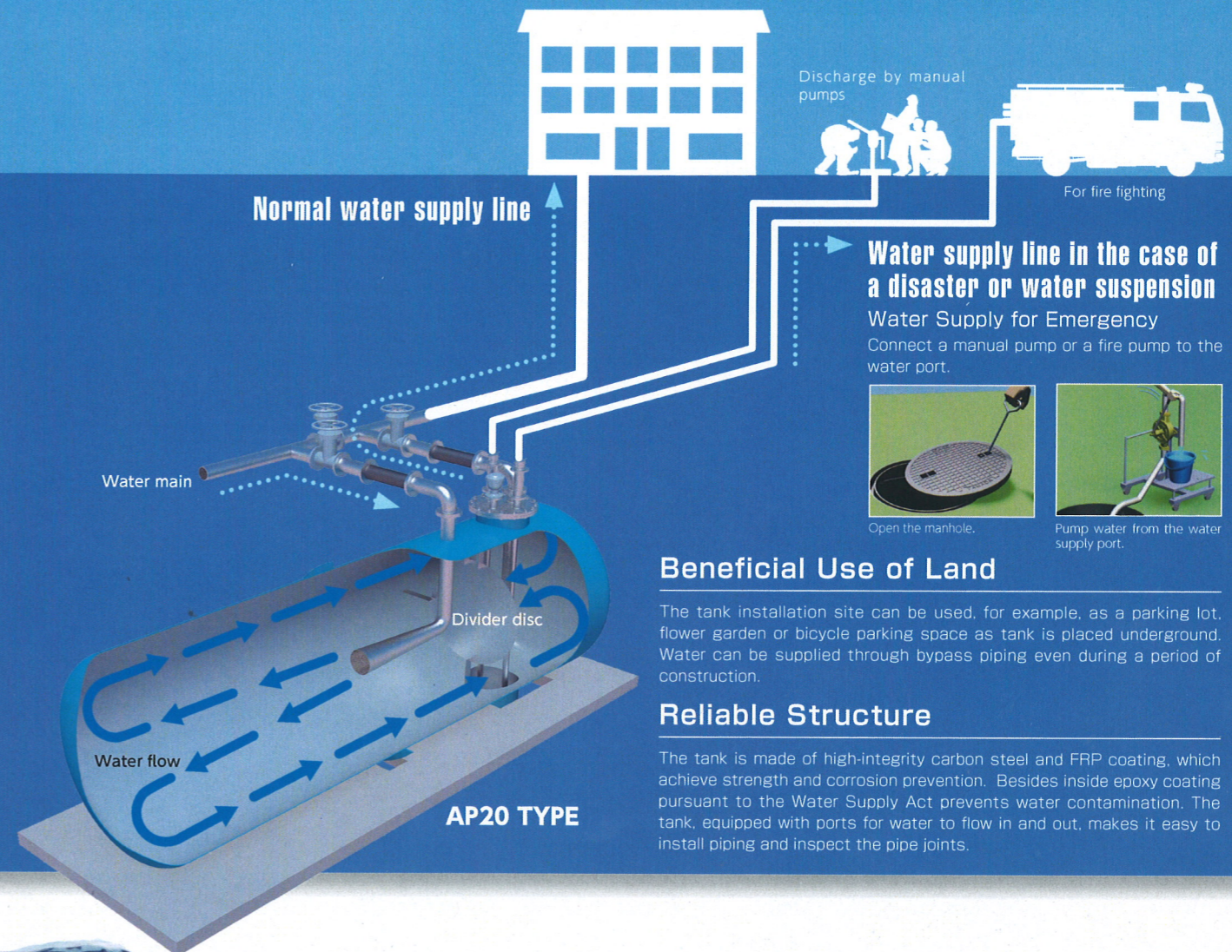
### Reliable Safety

Because the AQUA in PIT tank is buried underground, it is very safe in the case of a disaster. Moreover, it has a high pressure resistance; AP-03 and AP5 have passed the pressure test at 1.75MPa, and AP20, AP40 and AP100 withstood the test at 1.23MPa according to the certifying parties.

#### Problems of Conventional Water Supply Systems of Apartment Buildings

Indirect supply system (Roof-top water tanks): Water tank, usually placed on a rooftop, which is connected to water supply pipe has the advantage of water being supplied in the case of a water suspension; however, it has the disadvantage of the tank being in danger of falling down.  
Direct supply system: Water is pressurized by pumps, which are connected to water pipes, in order to supply to the whole building. This system has become more popular because it does not need roof-top tank; however, it has the disadvantage that water supply will be lost instantly in the case of a water suspension.

### Normal water supply line



**Water supply line in the case of a disaster or water suspension**  
Water Supply for Emergency  
Connect a manual pump or a fire pump to the water port.



### Beneficial Use of Land

The tank installation site can be used, for example, as a parking lot, flower garden or bicycle parking space as tank is placed underground. Water can be supplied through bypass piping even during a period of construction.

### Reliable Structure

The tank is made of high-integrity carbon steel and FRP coating, which achieve strength and corrosion prevention. Besides inside epoxy coating pursuant to the Water Supply Act prevents water contamination. The tank, equipped with ports for water to flow in and out, makes it easy to install piping and inspect the pipe joints.

## Five Types Available for Demands

### AP100 TYPE

The largest type with a capacity of 100kl is suitable for large facilities such as hospitals, collective housing, evacuation sites (community halls, schools, or parks), factories, open spaces, etc.

Storage of drinking water for 11,000 people for three days

### AP40 TYPE

The medium-sized type with a capacity of 40kl is suitable for medium-sized facilities such as hospitals, collective housing, evacuation sites (community halls, schools, or parks), factories, open spaces, etc.

Storage of drinking water for 4,400 people for three days

### AP20 TYPE

The medium-sized type with a capacity of 20kl is suitable for medium-sized facilities such as hospitals, collective housing, evacuation sites (community halls, schools or parks), factories, open spaces, etc.

Storage of drinking water for 2,200 people for three days

### AP5 TYPE

The medium-sized type with a capacity of 5kl is suitable for collective housing, buildings, small public facilities, assembly halls, etc.

Storage of drinking water for 580 people for three days

### AP-03 TYPE

The small-sized type, with a capacity of 330l, is suitable for houses, small assembly halls, etc. Certified by the Japan Water Works Association (Z-345)

Storage of drinking water for 36 people for three days

