



GRAF UNDER GROUND STORM WATER TANKS



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To select your system you need to know the following:

1. Detention or retention?
2. Required volume of system?
3. Discharge flow rate or orifice size?
4. Depth of invert level or legal point of discharge?

Graf Fast Facts

Graf brings 50 years' experience to the world wide rainwater and storm water management industry.

All tanks are patented meaning Graf's unique features and designs are only available from Graf.

German award winning design – sold in over 60 countries.

All tanks are suitable for car loading when installed with the Car Telescopic shaft and lid.

Ground water stable.

Full sized 600mm manhole, easy access to filter and tank maintenance.

Suitable for either storm water retention or detention.

Tanks made from recyclable materials.

Supplied as a complete system.



Reece Product Quality Guarantee

All products enjoy a product replacement warranty.
For full warranty details visit
www.reece.com.au/productquality

Graf Underground Systems

As the urban environment continues to grow, the need for effective storm water management is becoming more and more important.

Many councils and local authorities now require a detention tank to capture and hold rainwater on the property and slowly release it back into the storm water network to ensure flash flooding of storm water drains does not occur. The council or local authority will usually nominate the amount of water to be detained and the flow rate back into the storm water system.

With a national focus on water savings by collecting rainwater the installation of a retention system allows for both the detention of water to meet local requirements plus the benefit of rain water harvesting – a quality filtration system enables clean quality rainwater to be collected in the Graf Platin Tank.

Sized and set up correctly the tank will detain the specific amount of water required by the council before letting it drain slowly back into the storm water network. It will also provide the retention of a suitable amount of rainwater for use by the



property owner. Thus replacing the need to buy an additional rainwater tank. The property owner can use this retained water for flushing toilets, filling washing machines and watering gardens.

Due to its shallow excavation and strong construction, the Graf Platin underground tank it is ideally suited as either a detention tank or a retention tank system.

Graf Storm Water Management

- Unlimited capacity
- Suitable for detention and retention
- Variable flow control
- Reduce risk of flooding on public storm water drains
- Easily set up to meet the specifications of the site requirement



Graf Platin

Shallow Excavation

Finally a system that offers all the advantages of a traditional water tank without taking up vital space in your property. The innovative Platin tank range by Graf is specifically designed for storage underground.

- Minimum installation, which translates into short installation times, lower costs and less angle of repose
- Suitable for lawn or garden installation or for car loading (with Type B lid)
- Small footprint = less digging
- Groundwater stable
- Designed to prevent flotation
- Internal seamless joins
- Award winning German design, made in Australia
- Fully accredited to AS4766 and ANZS 1546.1
- Suitable for storm water retention/detention and rainwater harvesting
- Suitable for pedestrian or car loading



Full sized lockable manhole

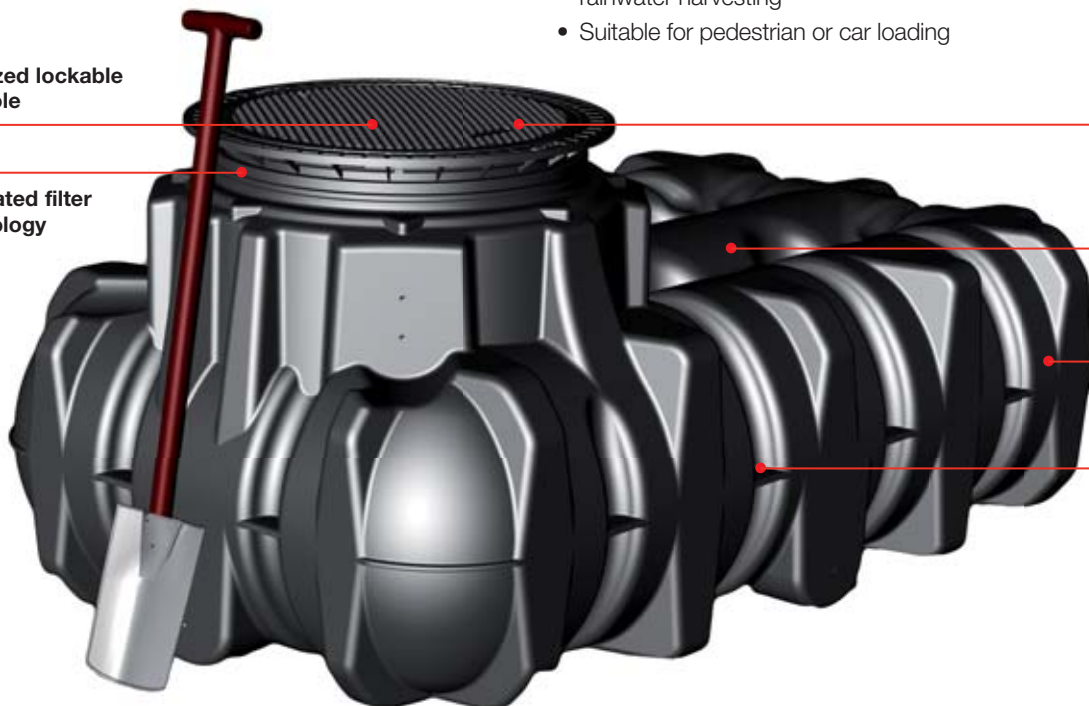
Integrated filter technology

Attractive tank cover

Suitable for vehicle loading

Groundwater stable

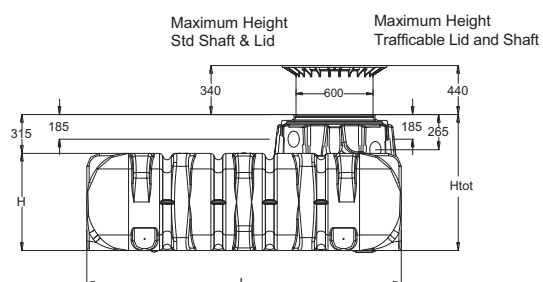
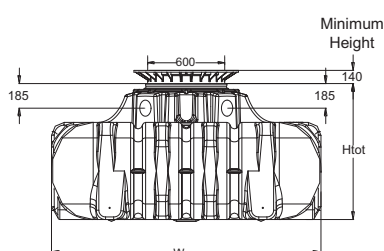
Minimal installation depth



Technical Data

Graf Platin Tank	1500 Litres	3000 Litres	5000 Litres	6000 Litres (2 x 3000L tanks)	10,000 Litres (2 x 5000L tanks)
Weight	82 kg	180 kg	250 kg		
L	2100 mm	2450 mm	2890 mm		
W	1250 mm	2100 mm	2300 mm		
H	700 mm	735 mm	950 mm		
Htot*	1015 mm	1050 mm	1265 mm		
Minimum Hole Size (L x W x H)	2300 x 1450 x 1155mm	2650 x 2300 x 1190mm	3090 x 2500 x 1405mm	2650 x 4900 x 1190mm	3090 x 5300 x 1405mm

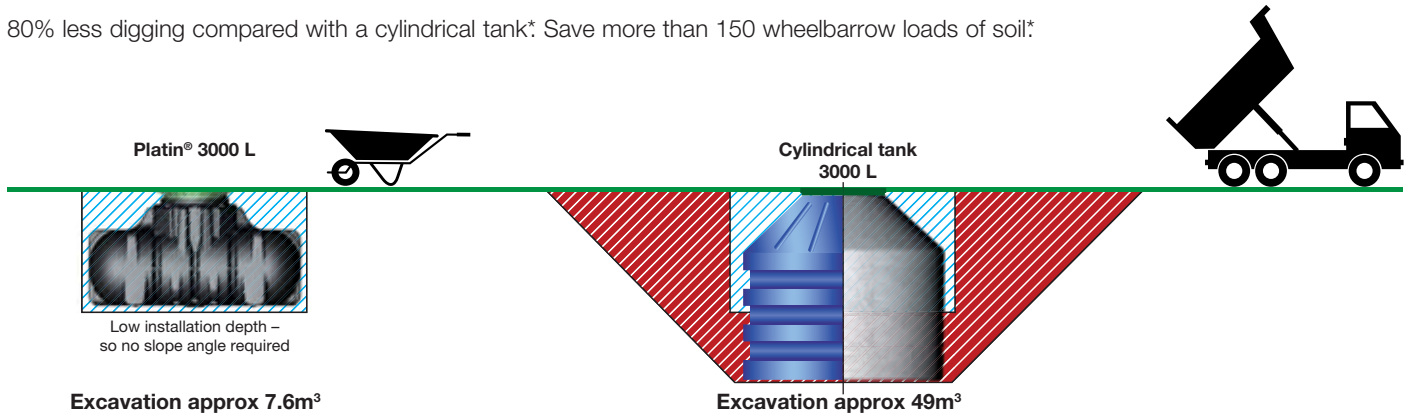
* Htot = total height



Graf Platin

Less digging. Less work. Fewer costs

80% less digging compared with a cylindrical tank*: Save more than 150 wheelbarrow loads of soil!



*Based on a vertical, cylindrical tank with a useable volume of 3000 ltr, a height of 1.90m and a diameter of 2.20m. Calculation of excavation is under consideration of a ditch bottom of 10cm, a sideways distance of 50cm and a slope with 45° gradient.

Filters



Minimax Filter System

Designed with a minimal height offset between the inlet and outlet, this is a great option where there is minimal fall in the storm water pipes. This mosquito proof filter provides over 95% water yield.

- Roof areas up to 350 sqm
- Standard 100mm connections
- Optional spray cleaning unit (reduces maintenance requirements)
- Filter insert mesh width 0.35mm

Plumbing is a minimum 305mm below the surface.

Minimax Filter Package Includes:

- Filter and Housing
- Inlet & Outlet Adaptors
- Rodent Guard
- 2 Spanfix Collars for easy connection
- Emergency Storm Water Overflow Siphon
- Inlet calming pipe which takes incoming water right to the base of the tank.

Shafts and Lids



Telescopic shaft and lid (standard)

This standard shaft and lid is specifically designed for non-vehicle loading which makes it ideal for general garden use. The shaft can be adjusted from 140mm to 340mm and tilted up to 5° to make installation to finished ground level easy. Includes a tough, long lasting child proof lockable PE lid.

Maximum weight: 150kg



Telescopic shaft and lid (Car – Type B)

Designed specifically to cope with the weight of passenger vehicles, this shaft can be adjusted from 140mm – 440mm and tilted up to 5° to sit flush with the ground level. Includes a child safe cast iron lid.

Maximum weight: 3.5 tonnes Gross Vehicle Mass

Detention Tank

Storm water detention systems play an important role in the reduction of storm water flow during rainfall events and help reduce strain on the public storm water network, particularly in built up areas.

Detention systems usually consist of a tank volume which is used for the temporary storage of storm water in the event of heavy rainfall, and a controlled flow device to limit the incidence of localised flooding by controlling the rate of water flow into the storm water system. A trash grate is highly recommended to avoid blockage of the controlled flow outlet. Please note the

emergency overflow will operate if the tank ever exceeds its maximum level. The detention tank water discharges slowly into the storm water network until it is completely empty and remains available once more as a temporary storage tank for the next rainfall event.

Inlet water pipe

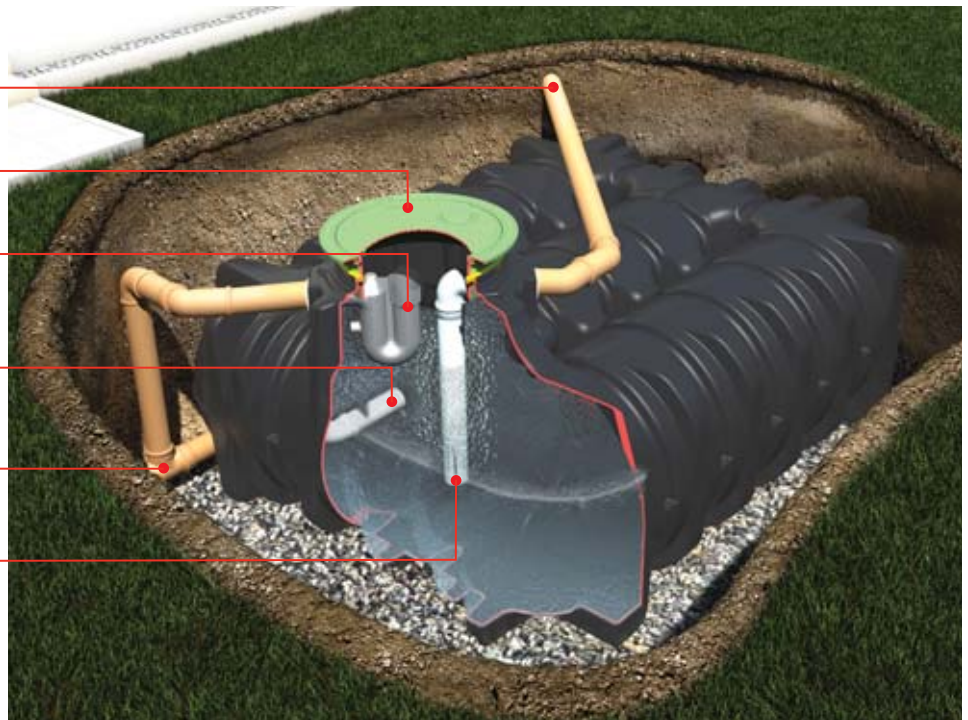
Telescopic shaft and lockable manhole

Emergency storm water overflow

Controlled flow outlet

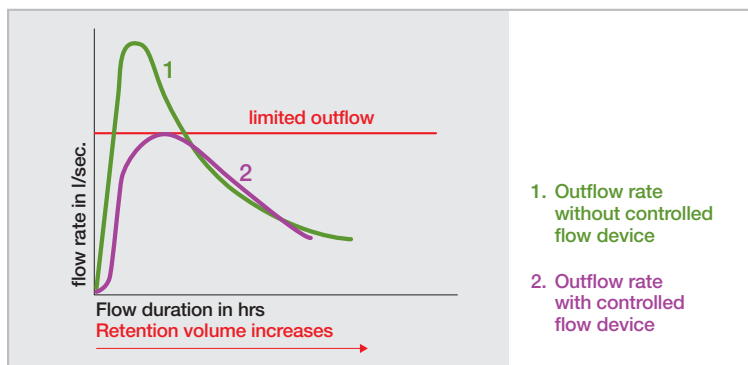
Connection to storm water

Inlet calming pipe



Please note: Trash grate may be required with detention tank (refer p10)

Detention Tank Outflow Rate



Tanks/Packages

Detention Tank Product Range

1909116	Graf Storm Water Detention Tank Std	1500L
1909118	Graf Storm Water Detention Tank Std	3000L
1909120	Graf Storm Water Detention Tank Std	5000L

1909126	Graf Storm Water Detention Tank Car	1500L
1909128	Graf Storm Water Detention Tank Car	3000L
1909130	Graf Storm Water Detention Tank Car	5000L

1909122	Graf Storm Water Twin Detention Tanks Std	6000L
1909124	Graf Storm Water Twin Detention Tanks Std	10,000L

1909132	Graf Storm Water Twin Detention Tanks Car	6000L
1909134	Graf Storm Water Twin Detention Tanks Car	10,000L

*Drilled orifice size will depend on the "required outlet flow rate". This is the controlled flow outlet shown in the drawing opposite.

Detention Standard Package

Includes:

- Graf Platin Tank
- Std Telescopic Lid & Shaft
- PVC controlled flow outlet*
- Interconnect tank seal – red x 1

Detention Car Package

Includes:

- Graf Platin Tank
- Car Telescopic Lid & Shaft
- PVC controlled flow outlet*
- Interconnect tank seal – red x 1

Twin Detention Standard Package

Includes:

- 2 x Graf Platin Tank
- 2 x Std Telescopic Lid & Shaft
- PVC controlled flow outlet*
- Interconnect tank seal – red x 3

Twin Detention Car Package

Includes:

- 2 x Graf Platin Tank
- 2 x Car Telescopic Lid & Shaft
- PVC controlled flow outlet*
- Interconnect tank seal – red x 3



Retention Tank

The Graf retention system is a combination of detention and rainwater harvesting. The system works much like the detention tank however in this case, the rainwater is harvested and used by the property owner for their own needs in addition to the authorities required detention volume of the site.

For example, rainwater harvesting can be used for:

- Watering gardens
- Flushing toilets
- Washing machines
- Cleaning

The use of rainwater means that up to 50% of drinking water can be saved, and up to 85% of water can be saved for commercial properties.

available for temporary storage. Following the rainfall event, the position of the outflow prevents the detention tank from being completely emptied, while the usable volume remains in the tank.

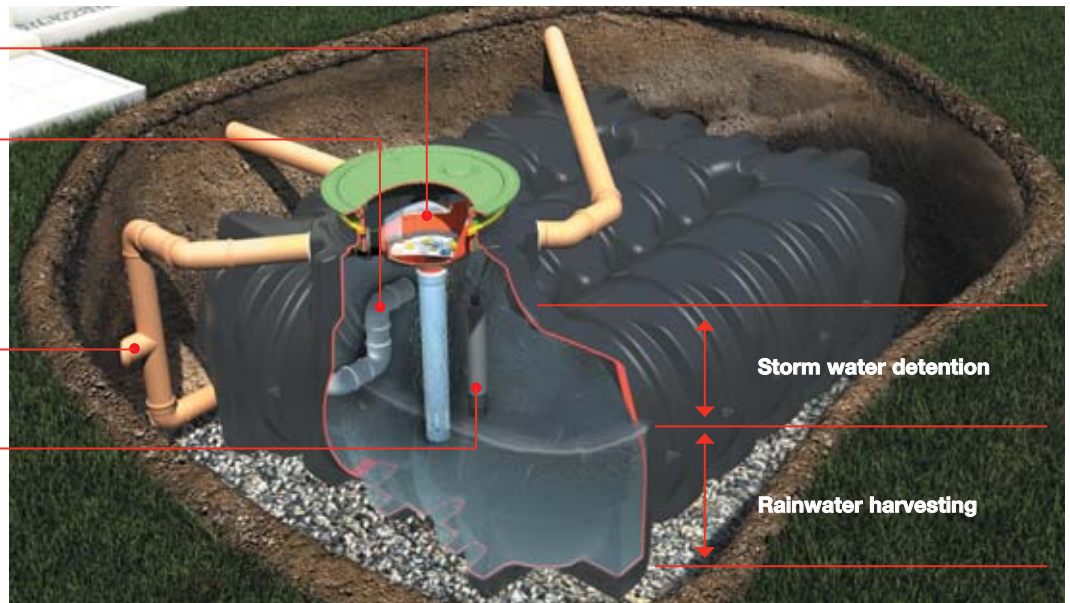
The retention tank is designed so that the rainwater first fills the retention (rain harvesting) capacity. When the capacity is full, the outflow is activated and the detention capacity also becomes

Graf Minimax Filter

Controlled flow outlet

Connection to storm water

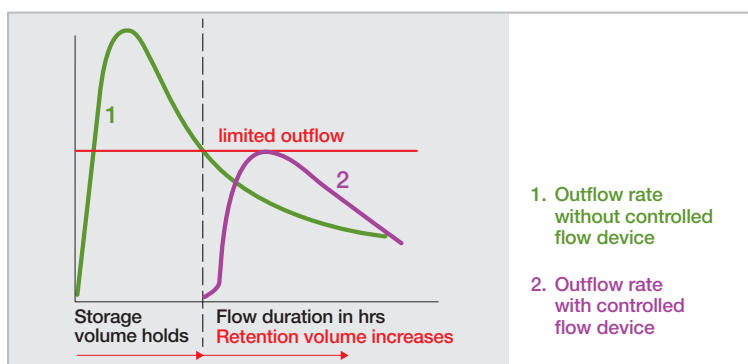
Pump



Please note: Graf Minimax filter removes the requirement for a trash grate

The volume distribution (detention volume/retention volume) can be individually manufactured according to your specifications.

Retention Tank Outflow Rate



Tanks/Packages

Retention Tank Product Range

1909115	Graf Storm Water Retention Tank Std	1500L
1909117	Graf Storm Water Retention Tank Std	3000L
1909119	Graf Storm Water Retention Tank Std	5000L
1909125	Graf Storm Water Retention Tank Car	1500L
1909127	Graf Storm Water Retention Tank Car	3000L
1909129	Graf Storm Water Retention Tank Car	5000L
1909121	Graf Storm Water Twin Retention Tanks Std	6000L
1909123	Graf Storm Water Twin Retention Tanks Std	10,000L
1909131	Graf Storm Water Twin Detention Tanks Car	6000L
1909134	Graf Storm Water Twin Detention Tanks Car	10,000L

*Drilled orifice size will depend on the “required outlet flow rate”. This is the controlled flow outlet shown in the drawing opposite.

Retention Standard Package

Includes:

- Graf Platin Tank
- Std Telescopic Lid & Shaft
- Minimax Filter Package
- Interconnect tank seal – red x 1
- DWV pipe with cap and drilled orifice

Retention Car Package

Includes:

- Graf Platin Tank
- Car Telescopic Lid & Shaft
- Minimax Filter Package
- Interconnect tank seal – red x 1
- DWV pipe with cap and drilled orifice

Twin Retention Standard Package

Includes:

- 2 x Graf Platin Tank
- 2 x Std Telescopic Lid & Shaft
- Minimax Filter Package
- Interconnect tank seal – red x 3
- DWV pipe with cap and drilled orifice

Twin Retention Car Package

Includes:

- 2 x Graf Platin Tank
- 2 x Car Telescopic Lid & Shaft
- Minimax Filter Package
- Interconnect tank seal – red x 3
- DWV pipe with cap and drilled orifice



Accessories

A range of accessories are available to meet council or site specific requirements. Other accessories are available on request e.g. Class D lid.

Stainless Steel Flow Controlled Outlet

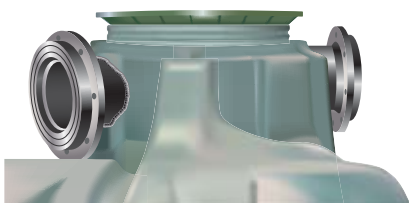
1909135



- Stainless steel, pushes into rubber ringed 110mm pipe
- Fully adjustable from 1L per second to 6.5L per second
- Fitted and set per engineers specification

Graf Retention/Detention Poly Weld Flange 150-300mm

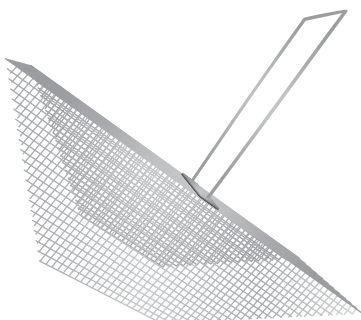
1909136



- Various sizes available: 150mm – 225mm – 300mm
- Other sizes upon request
- Fully PE welded stub flanges with galvanised backing rings

Graf Retention/Detention Trash Grate

1909137



- Protects outlet from being blocked by debris
- Galvanised maximesh
- Easy removal and maintenance
- Handle accessible from manhole – no requirement to enter tank

Graf Grated Lid Class B For Car Package

1909138



- Fully galvanised class B grate
- Allows for full access to tank
- Adjustable between 140mm and 440mm
- Lockable 600mm manhole
- Suitable for surface water intake
- Trash grate may be required
- Only use with detention

Graf Grated Lid For Standard Package

1909139



- Fully galvanised class B grate
- Allows for full access to tank
- Adjustable between 140mm and 440mm
- Lockable 600mm manhole
- Suitable for surface water intake
- Trash grate may be required
- Only use with detention

Graf Extension Riser 400mm

1908906



- For use with any of the telescopic dome shafts to increase the height of the lid
- Ideal for areas with low storm water pipes, areas prone to freezing and where an existing hole is too deep
- The optional extension riser is for use with any of our telescopic dome shafts to increase the height of the lid. Ideal for areas with low storm water pipes, areas prone to freezing and where an existing hole is too deep. Always refer to installation instructions when using this item.

Vada V75-S Pump & Rain2main Package

9501386



Coupled with the Vada Rain2Main, the Vada V75-S pump is the premium automatic rainwater control system. The V75-S is designed for many years of reliable service where absolute silence, high pressure and solid reliability are required. The Vada V75-S pump sits inside the tank while the Vada Rain2Main component is mounted outside the tank. If the tank is empty, the Vada Rain2Main will revert to mains supply.

- 24 month warranty
- Maximum working pressure: 500 KPa

Applications:

Supply toilet(s), washing machines, garden taps, sprinklers and irrigation systems

9501393

Vada Rain2Main Wall Mount Accessory Kit

For use with the V75-S submersible pump for remote mounting of the Rain2Main Unit

Should your installation have different requirements, please contact your nearest Reece branch regarding other pump options.



Don't risk it, use a licensed plumber.™

Reece. Works for you.™

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