



Fiberglass & Stainless Steel Grease Arrestor Manual

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Product Manual

Eclipse Grease Arrestor.

Fibreglass & Stainless Steel Construction

Fibreglass

Model Number	Capacity Lt
Eclipse GA1000F	1000
Eclipse GA1500F	1500
Eclipse GA2000F	2000
Eclipse GA3000F	3000
Eclipse GA4000F	4000
Eclipse GA5000F	5000

Stainless Steel

Model Number	Capacity Lt
Eclipse GA1000SS	1000
Eclipse GA1500SS	1500
Eclipse GA2000SS	2000
Eclipse GA3000SS	3000
Eclipse GA4000SS	4000
Eclipse GA5000SS	5000



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INTRODUCTION.

Eclipse manufacture a range of fibreglass & stainless steel grease arrestors. These devices are used for the removal of grease and food particles that are generated in the waste water of all commercial cooking and food preparation areas.

The Eclipse range includes fibreglass & stainless steel units which are able to be installed above or below ground.

Fibreglass grease feature built in fibreglass legs which are able to support the grease arrestors.

The choice of lids are:

Below ground installation.

The lids for in ground installation must comply with [AS 3996:2019 | Access Covers & Grates Requirements](#)

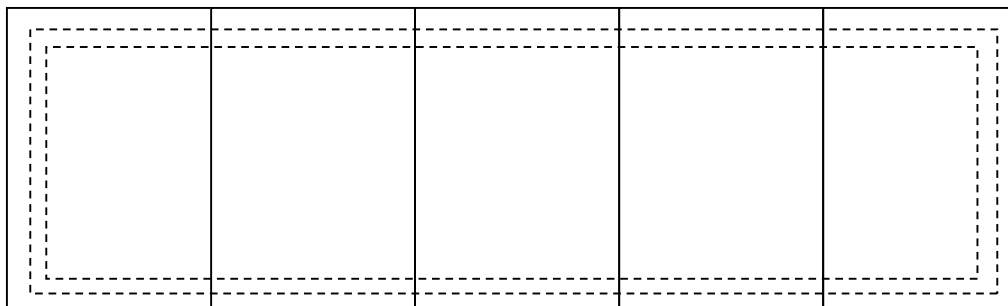
- 1) medium duty cast iron / concrete infill
- 2) heavy duty cast iron / concrete infill.

NB. Eclipse does not manufacture cast iron covers, these are available from many concrete products supply companies. Concrete lid manufacturers supply the relevant technical information on the installation of their products.

Arrangement of lids on the grease arrestors.

Lids are to be installed so that they cover the entire grease arrestor and are rated for the duty required.

The lids must be keyed into the surrounding concrete so that no load is applied to the walls of the fibreglass or stainless steel arrestor.



Lids extend past the sides of the grease arrestor by min100 mm

Above ground installation. removable lids with rubber gasket.
(replacement available from Eclipse)

The method of operation consists of two actions:

1. Food particles sink to the bottom of the arrestor due to gravity
2. Settlement. Oil and grease form a floating surface layer and are trapped by baffles. The effluent from the grease arrestor is via a submerged pipe about half the water depth.

APPLICATIONS.

Businesses types suitable for the Eclipse grease arrestors include:

Bakery	Kebabs
Boarding house	Motel
Butchers	Nightclub
Cafe	Nuts
Cafeteria	Pasta
Canteen	Patisserie
Cheese Cake Shop (made on premises)	Pavlova
Chicken shop (charcoal and fresh)	Pies
Child Care Centre	Pizzas
Clubs	Restaurant
Coffee shop	School Canteen (cooking)
Commercial kitchen	School Home Science
Community Hall	Seafood
Defence Force Mess	Service Station Forecourt
Delicatessen	Ship to Shore (galley Waste)
Dessert shop	Soup Kitchen
Doughnut Shop	Take away Foods
Fast food shop	Hotel
Fish and chip Shop	Yeeros (Yiros)
Hot Bread	Function Centre
large shopping centre with multiple food courts	Small shopping centre

Check with Water Corporation WA for grease arrestor sizing of your business

Further requirements.

An in floor bucket waste trap may be required if floor drains are in food preparation and or handling areas.
Check with local water authority for specifications / requirements for floor drains etc.

NOTE

All trade waste water must pass through the grease arrestor.

Specifications:

Fibreglass arrestor.

Tank material Fibreglass (minimum 8 mm thick) grey colour
 Internal Structure Fibreglass (minimum 8 mm thick)
 LID (above ground) Fibreglass (minimum 4 mm thick) grey colour

Volume Litres	1000	1500	2000	3000	4000	5000
Weight Kg	350	500	600	720	850	950
Weight lid kg	200	250	300	350	400	450

Lid for below ground

Cast iron (Manufactured by others)
 The weight of each lid section is stamped on the lids.

Plumbing fittings.

The arrestors are fitted with pvc connections of the following sizes.

INLET 100 mm SWD (150 mm for > 5000 litre arrestor)
 OUTLET 100 mm SWD (150 mm for > 5000 litre arrestor)
 VENT 100 mm SWD

Quality Control for the manufacture of the fibreglass tank.

Resin type: Isophthalate laminating resin conforms to the following criteria.

Test method		Min	Max
Cone and plate viscosity (Poise at 25 ⁰ C)	53-34-88	1.8	2.3
Brookfield viscosity, spindle 2 rpm	53-2-86	15	25
Gel time at 25 ⁰ C	53-10-86	10	15
Exotherm to peak	53-11-86	25	40
Visible test	visual	light blue colour with no lumps	

No laminating is carried out if ambient temperature exceeds 32⁰ C

All resin mixes are carried out by using measuring vessels to arrive at the correct ratio.

Above Ground Grease Arrestor Gas Tight Screw Type Lid

Stainless Steel.

Tank Material 3mm 316 stainless steel
 Internal Structure 3mm 316 Stainless steel
 LID (above ground) Gas Tight Screw Type Lid

Volume Litres	1000	1500	2000	3000	4000	5000
Weight Kg	410	515	690	840	985	1100

Lids for below ground

Cast iron (Manufactured by others)

The weight of each lid section is stamped on the lids.

Plumbing fittings.

The Stainless Steel arrestors are fitted with stainless steel flange or straight spigot connections of the following sizes.

INLET 100 mm SWD (150 mm for > 5000 litre arrestor)
 OUTLET 100 mm SWD (150 mm for > 5000 litre arrestor)
 VENT 100 mm SWD

Quality Control for the manufacture of the Stainless steel tank.

Stainless steel used conforms to AS/NZS 4673-2001

Stainless steel welding conforms to AS/NZS 1554.6

Leak testing carried out using penetrating die then air pressure testing to 20Kpa

INSTALLATION INSTRUCTIONS.

All pipe work installations should be carried out by a licensed plumber and comply with AS 3500.2 The arrestor should be located so as not to impede access to personal and consideration is given to the maintenance requirements.

Surcharge point.

The grease arrestor must not be used as a surcharge point. A gully or a reflux valve must be installed downstream of the arrestor if this is the case.

Outlet from the grease arrestor.

The outlet level must be a minimum of 100 mm below the inlet invert level.

Plumbing fittings and pipes.

PVC pipes are preferred but cast iron is acceptable. Copper pipes must not be used.

Rubber adaptors are available for retrofitting PVC pipe to other types of pipes.

Below ground installation of grease arrestor.

Prior to starting determine the lid design based on the lid manufacturers load ratings.

1. Dig a hole with at least 100 mm clearance around all sides.
2. Make provision for the inlet and outlet connections and the vent pipe.
3. Ensure the base is prepared to AS 3600 with a minimum 100 mm of concrete over compacted ground. Use 32 mPa concrete. Steel reinforcing may be necessary if the ground is sandy or otherwise unstable. A civil engineer should be consulted in these cases.
4. Fill the arrestor with water.
This is important as the arrestor will settle to its ultimate position and not put stress on the joints.
5. Connect all plumbing now
6. Fill in the sides with concrete to a minimum wall thickness of 100 mm and prepare the top area for the appropriate lid. Consult the lid supplier

for the specifications of the lid design. The lid should be supported by the concrete walls and no load should be put on the walls of the grease arrestor.

Above ground installation of Eclipse grease arrestor.

1. Site should be level and able to support the weight of the arrestor when full.
A minimum 100 mm thick concrete slab must be used on open ground. This slab should be a minimum 100 mm larger around all sides.
Refer to the dimension drawing of the model of the grease arrestor on page 10 for the relevant footprint.
2. The grease arrestor may be partially filled with water to stabilise it whilst plumbing connections are made. The arrestor is to be bolted to the floor using a minimum of 12 mm x 100mm galvanised Tru-Bolts or equivalent installed to the manufacturers specifications.
3. An access platform and stairs is required as per Australian Standards AS 1657. 2018 Fixed Platforms, Walkways, Stairways, Ladders

Protecting against accidental damage and vandalism

Steel bollards typically 100 mm dia. and 1300 mm high should be positioned so as to stop any possibility of damage from a motor vehicle etc.
If the chance of vandalism exists a fence or cage should be installed.

INTERNAL INSTALLATIONS.

Upon permission from the relevant health inspector the grease arrestor can be installed within the premises within a vented room.

Consideration should be given to cleaning and maintaining the unit.
A pump out line can be connected to the outside of the premises thereby making cleaning easier.

Venting the grease arrestor.

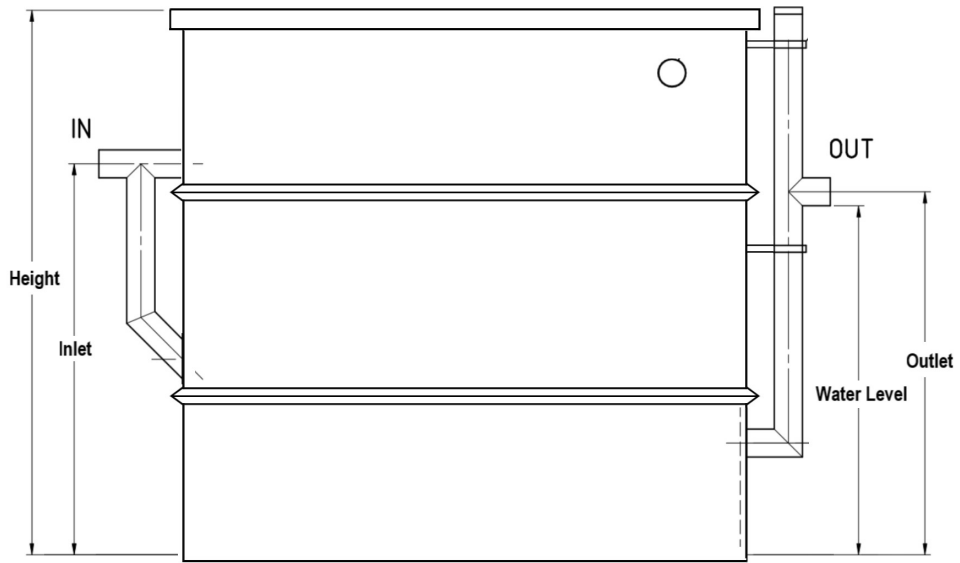
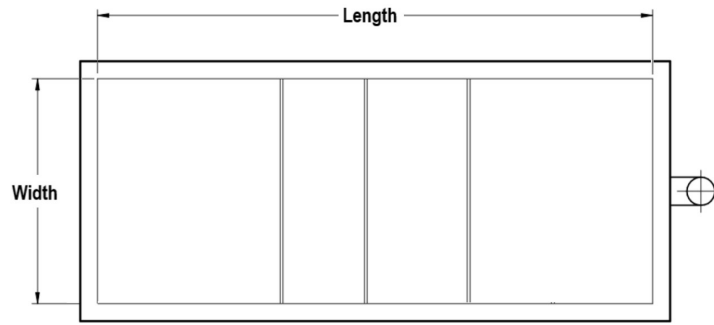
Two vents are required to provide air pressure equalisation, heat transfer and the removal of odour away from the unit.

The grease arrestor has one vent connection on the body, the other vent is usually connected to the inlet pipework.

WATER SUPPLY AT THE ARRESTOR.

A hose cock and hose are required for the washing of the arrestor. These must be located within 5 m of the arrestor.

NOTE: The required back flow prevention device must be fitted.



ELEVATION

Part No	Volume	Length	Width	Height	Inlet	Outlet	Water Level
GA1000S & GA1000F	1000 Lt	1500	600	1600	1300	1200	1150
GA1500S & GA1500F	1500 Lt	1800	750	1600	1300	1200	1150
GA2000S & GA2000F	2000 Lt	2000	800	1750	1400	1300	1250
GA3000S & GA3000F	3000 Lt	2400	1000	1800	1400	1300	1250
GA4000S & GA4000F	4000 Lt	3000	1100	1800	1400	1300	1250
GA5000S & GA5000F	5000 Lt	3400	1200	1900	1400	1300	1250

Maintenance instructions.

The grease arrestor must be pumped out and cleaned at the pump out frequency set by the Water corporation WA.

Where a relevant water authority does not exist then all grease arrestors should be pumped out every three months.

The grease arrestor must have its entire contents removed when it is serviced. Any undersink unit or pump box must also be serviced at the same time.

The cleaning process includes:

1. Hosing the sides down as the contents are being pumped out.
2. Wiping down the lids and any other pump out connections etc.
3. Checking the operation of any pumps connected to the arrestor

Do not use metal scrapers or similar tools on FIBREGLASS GREASE ARRESTOR

Manufacturer's Warranty

Eclipse grease arrestors manufactured by Eclipse Environmental Aust P/L are guaranteed to be free from defects in materials and workmanship for 60 months from the date of purchase.

The obligations under this warranty, statutory or otherwise, is limited to replacement or repair at our factory or another depot designated by us, of such component that we believe to be faulty or defective.

This warranty does not include freight to and from our factory or depot.

No expressed, implied or statutory warranty other than herein is made by Eclipse Environmental Aust. P/L.

In no event shall Eclipse Environmental Aust. P/L be liable for consequential damages or contingent liabilities arising out of the failure of any component supplied by us.

Compliance Plate.

The grease arrestor has a compliance plate made from metallic film with plastic substrate mounted next to the outlet pipe in the above ground unit and internally near the top on the outlet side of the below ground unit. The plate is 100 mm by 50 mm in size and is attached with polyurethane adhesive.

Compliance Plate Example (Fibreglass)

<p>Eclipse Grease Arrestor (Fibreglass). Manufactured by Eclipse Environmental Aust. 73 Victoria Street Smithfield NSW 2164 Ph (02) 9757 1212</p> <p>Model no. _____ Volume. _____ litres Serial No. _____ Authorisation No _____</p>
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Compliance Plate Example (Stainless Steel)

<p>Eclipse Grease Arrestor (Stainless Steel . Manufactured by Eclipse Environmental Aust. 73 Victoria Street Smithfield NSW 2164 Ph (02) 9757 1212</p> <p>Model no. _____ Volume. _____ litres Serial No. _____ Authorisation No _____</p>
