



Grease Arrestor Product Installation, Operation and Maintenance Manual

Coerco engineer a range of Polyethylene Grease Arrestors to suit any above or below ground application that have all been rigorously tested to meet Water Corporation Guidelines and Australian Standard and approved by Department of Health for installation throughout W.A., S.A. and N.T.

Their durable lightweight design makes them convenient to transport which is ideal for local and remote destinations alike. Coerco Grease Arrestors are designed to provide many years of trouble-free service by following these installation guidelines. Sizing is a critical aspect to ensure efficiency, therefore, tanks should be sized by either calculating the fixture unit ratings or peak flow rates. Refer to your local Water Authority for further details.

WESTERN AUSTRALIA

Water Corporation – Trade Waste (Ph: 13 13 95)

<https://www.watercorporation.com.au/Help-and-advice/Trade-waste/Retail-food-businesses/Grease-arrestor-maintenance/Grease-arrestor-sizing>

SOUTH AUSTRALIA

SA Water Trade Waste (Ph: 1300- 729-283)

Email: tradewaste@sawater.com.au

Revision	Document Date	By Author
G	10 January 2023	TK

Installation Instructions

These instructions must be read in conjunction with local council, government authorities and relevant standards applicable to this installation and should be performed by suitably qualified personnel.

Grease Arrestors discharging to the Ministers Sewer must have a Trade Waste Application submitted and approved by the local Water Authority prior to installation.

Handling

- Tank should only be moved when empty by using the lifting points located at the top of the tank.
- Conformance plate is located at the base of the internal manhole riser and can be found by removing the inlet cover.
- Data Plate is moulded into the tank directly above the inlet pipe.
- Care should be taken when placing or moving tanks on hard/abrasive surfaces.
- Visual Inspection for any damage during transport should be conducted prior to installation.
- Identification plate and serial no. is located on top of the tank, adjacent to the inlet side and should be recorded at the tail of this manual for future reference.

Excavation

- Ensure excavated hole is free of all services – Dial before you dig ‘www.1100.com.au’.
- Observe all local and statutory requirements related to excavations (eg. Benching/battering/shoring/dewatering/barriers and warning signs).
- The installer shall take all reasonable precautions to ensure the tank is not within the zone of influence of nearby existing structures, such as retaining walls, residential dwellings, commercial buildings, trafficable areas, and the like. In such circumstances, advise from a suitably qualified person should be obtained.
- Measure the distance from the base of the tank while sitting on flat ground to the inlet pipe invert level (effective depth).
- Excavate a suitably sized hole and allow for a 100mm clean and level compacted base of sand, cracker dust, or crushed limestone up to 6mm, beneath the base of the tank.
- Note: Maximum cover allowed over the tank is equal to the top of the riser on each model as shown in diagram. Non-compliance will void warranty.

Revision	Document Date	By Author
G	10 January 2023	TK

Above Ground Installations

- Grease Arrestors must be installed on a level concrete slab no less than 100mm thick.
- Install 20mm galvanized steel pins through the support leg holes and fix to the concrete base with suitable fixings eg. Dynabolt, Ankascrew.
- Ensure there is vertical clearance above the grease arrester, greater than the maximum depth of the grease arrester, but not less than 1m.
- Manhole riser should be cut to a suitable height for the application.
- Remove factory fitted screw lid and seal the underside of the Manhole Adaptor, to the riser with Sikaflex Stick & Seal, Selleys N Mastic, or similar product.
- Fix Manhole Adaptor from the inside with minimum of 4 x Stainless Steel Screws. Refit screw lid and ensure a gas tight seal.
- Provision should be made for a platform and access steps, manufactured to Australian Standard AS-1657 for safe access to inspect and maintain.
- Provide adequate protection to prevent unauthorized access or damage to Grease arrester (eg. Enclosure, cage, or bollards etc.).
- The grease arrester is manufactured from UV stabilized polyethylene with a UV resistance value of UV20 as per AS4766. However, consideration shall be given to install the apparatus out of direct sunlight to maximise efficiency.
- Grease Arrestors located in internal areas shall meet ventilation requirements as specified in AS5215:2022.
- Above ground Grease Arrestors shall have provision to contain the entire operating volume in the case of a spill.

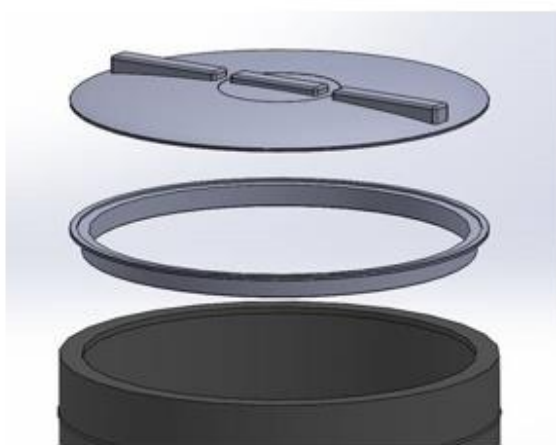
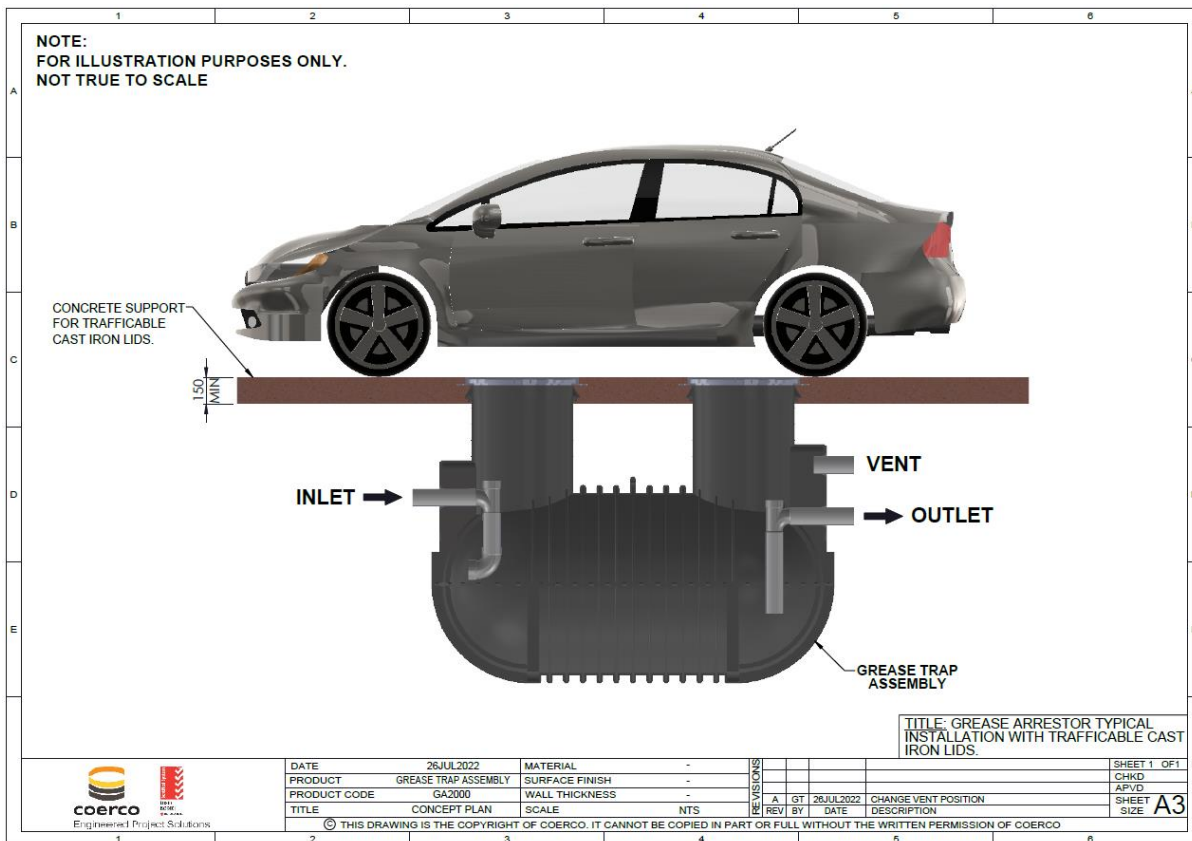
Below Ground Installations

- For non-trafficable areas, poly screw-lids can be installed as detailed in the Above Ground methodology above, must comply with AS3996:2019 and must be contained within a secure compound to prevent unauthorized access.
- Grease Arrester manhole risers fitted to the tank can be cut to suit the application and should be at a height to ensure adequate stormwater drainage away from the unit.
- Seal the underside of the Manhole Adaptor, to the tank riser with Sikaflex Stick & Seal, Selleys N Mastic, or similar product.
- Fix Manhole Adaptor to the tank riser from the inside with minimum of 4 x Stainless Steel Screws and ensure a gas tight seal.
- Prepare a Butyl Mastic sealing bead on top of the Manhole Adaptor and fit the trafficable cover directly to the manhole adaptor and ensure a gas tight seal.
- Gatic style cast iron or composite lids must be installed into a self-supporting 150mm concrete slab with no direct weight transfer applied to the Grease Arrester. Consult the manufacturer or design engineer for further details. For trafficable areas tanks should be fitted with Gatic style cast iron or composite access lids that comply with AS3996-2006 Table 3.1 (refer below).

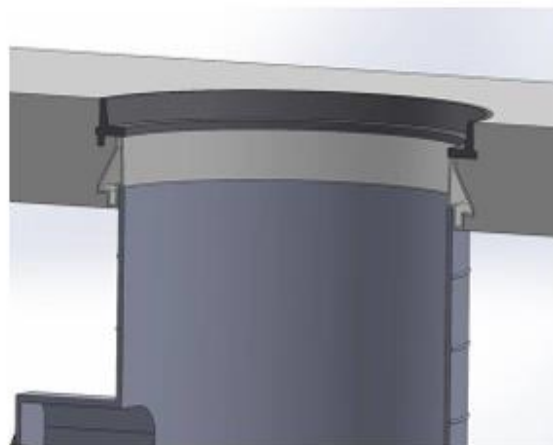
Revision	Document Date	By Author
G	10 January 2023	TK

Furthermore, Gatic style cast iron or composite access lids must be keyed into a self-supporting concrete slab, that complies with AS5215:2022 Section 7.2. Under no circumstances should any additional force be applied to the Grease Arrestor. Please consult the manufacturer or design engineer for further details.

Trafficable Areas



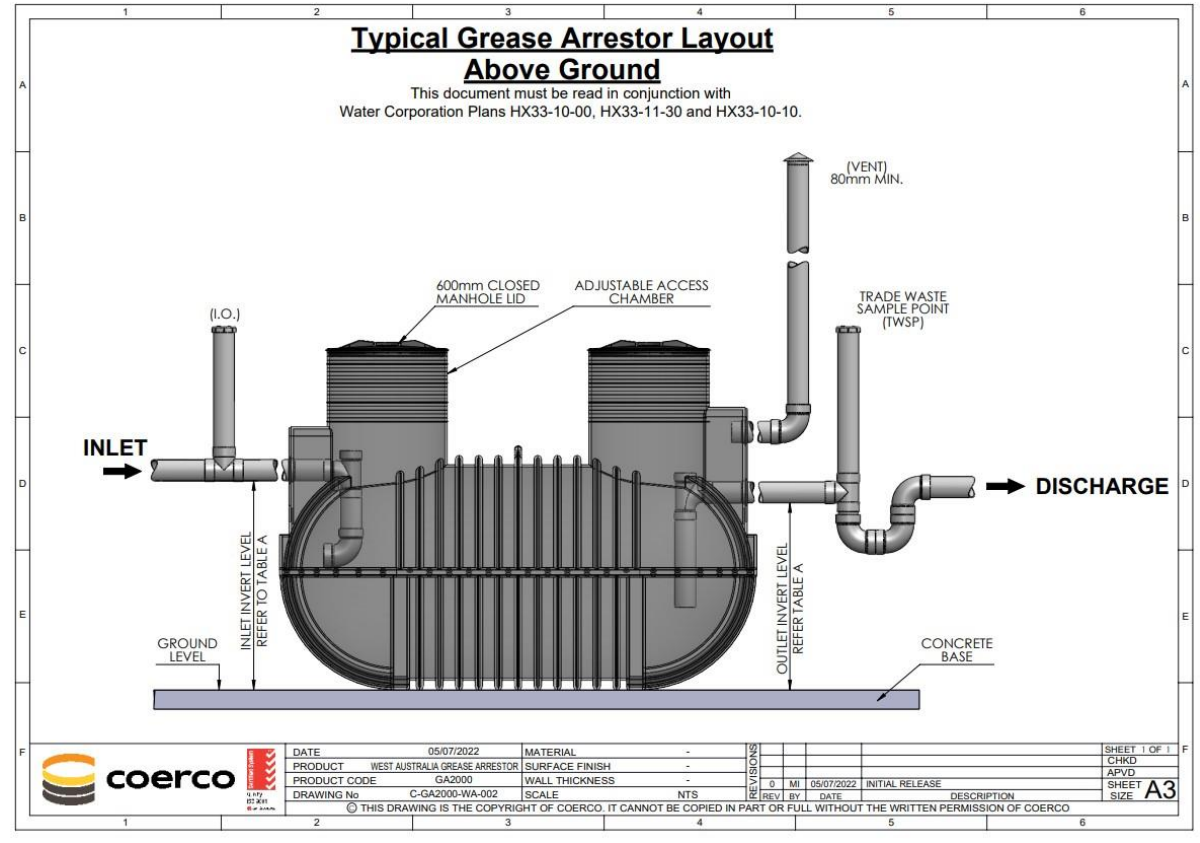
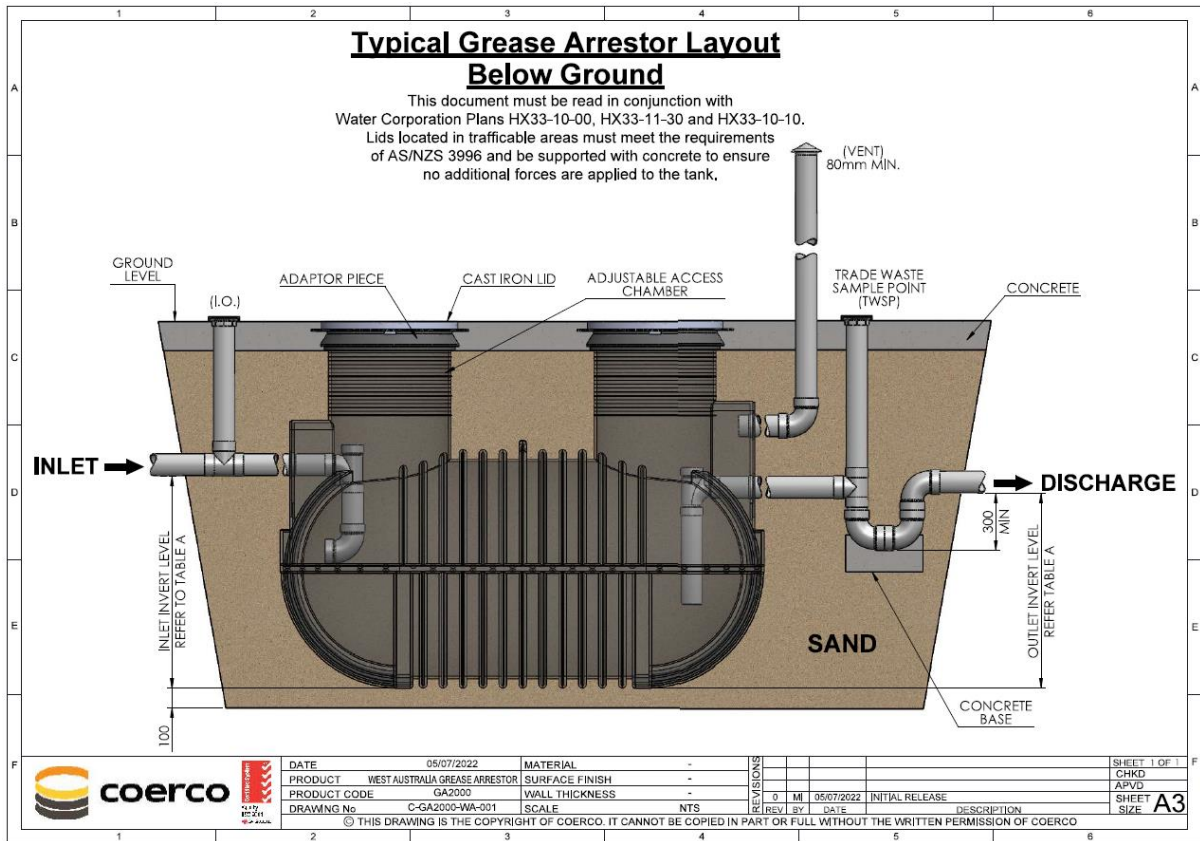
Above ground poly screw lid



Below ground trafficable cover

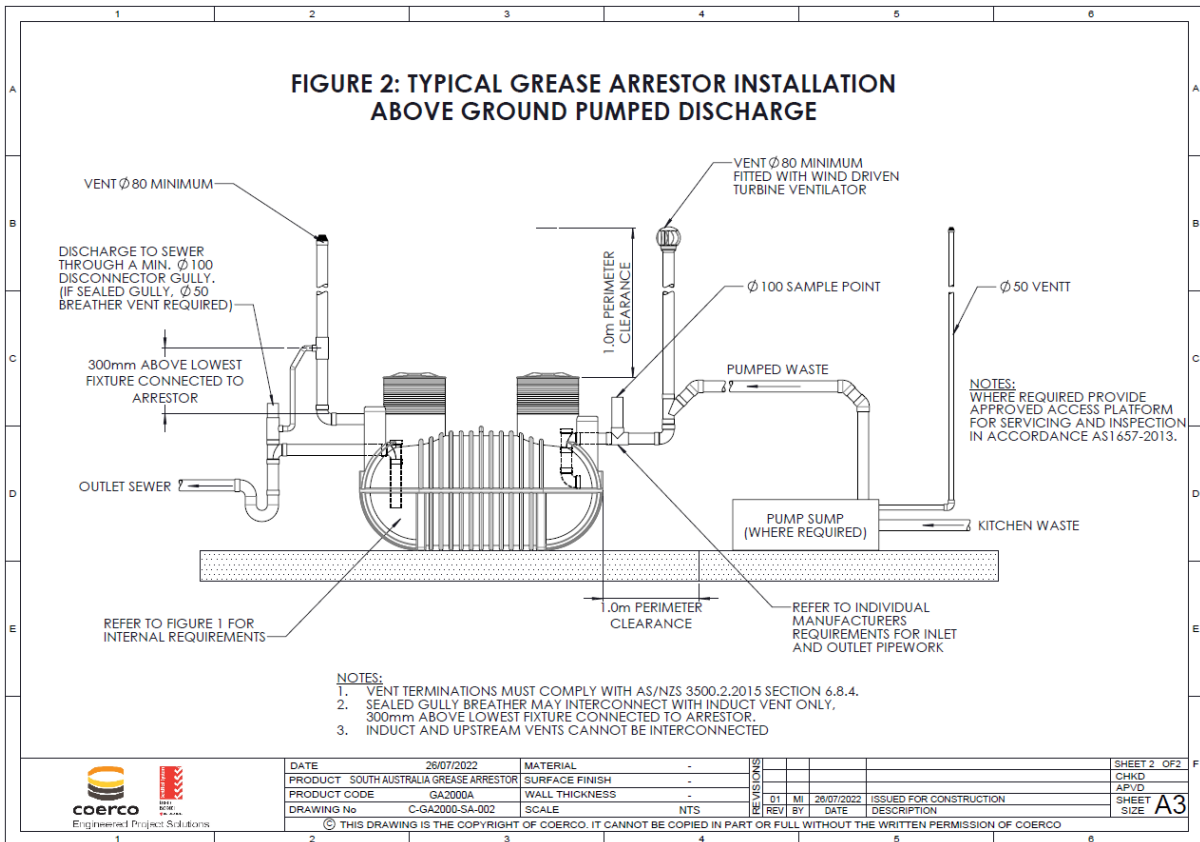
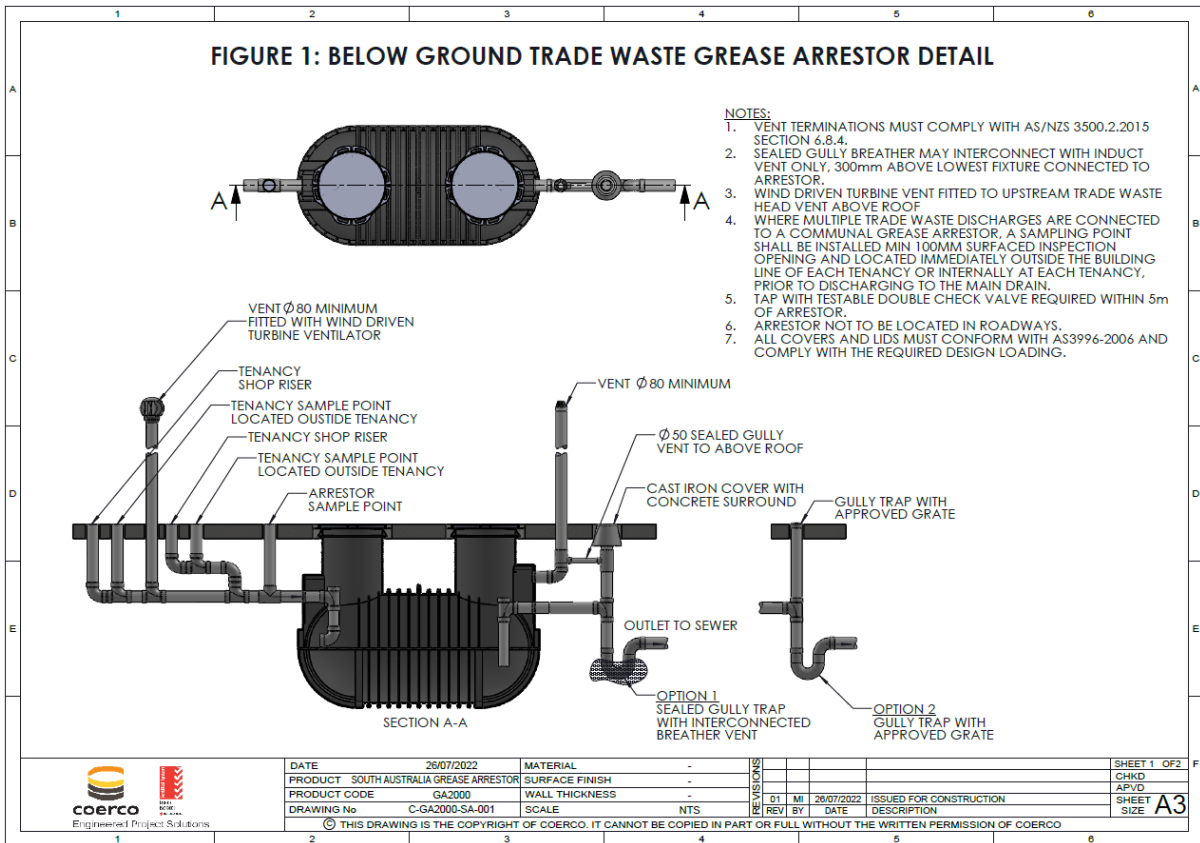
Revision	Document Date	By Author
G	10 January 2023	TK

For Western Australian Installations



Revision	Document Date	By Author
G	10 January 2023	TK

For South Australian Installations



Revision	Document Date	By Author
G	10 January 2023	TK

Table A

Model	Capacity (L)	Install Type 1	Length 2 (mm)	Width 2 (mm)	Height 3 (mm)	Pipe Size (mm)	Inlet Height 4 (mm)	Outlet Height 4 (mm)	Max. Grease Storage Depth (mm)	Max. Solids Storage Depth (mm)	Sizing	Approval No.
GA1200	1267lt	Both	2500	1000	1595	100	910	810	119	231	1.05lt/s 9 F.U.	
GA2000	1861lt	Both	2498	1224	1768	100	1110	1010	153	277	1.55lt/s 16 F.U.	AN-093-01
GA4000	4210lt	Both	2500	1800	2445	100	1670	1570	240	416	3.50lt/s 85 F.U.	

1: Above or Below Ground. 2: External. 3: Including Manhole Riser. 4: From tank base.

TABLE 3.1

LOAD CLASSIFICATIONS OF COVERS AND GRATES

Class	Typical use	Nominal wheel loading kg	Serviceability design load kN	Ultimate limit state design load kN
A	Areas (including footways) accessible only to pedestrians and pedal cyclists and closed to other traffic (extra-light duty)	330	6.7	10
B	Areas (including footways and light tractor paths) accessible to vehicles (excluding commercial vehicles) or livestock (light duty)	2 670	53	80
C	Malls and areas open to slow moving commercial vehicles (medium duty)	5 000	100	150
D	Carriageways of roads and areas open to commercial vehicles (heavy duty)	8 000	140	210
E	General docks and aircraft pavements (extra heavy duty – E)	13 700	267	400
F	Docks and aircraft pavements subject to high wheel loads (extra heavy duty – F)	20 000	400	600
G	Docks and aircraft pavements subject to very high wheel loads (extra heavy duty – G)	30 000	600	900

NOTES:

- Nominal wheel loads are given for guidance only. Consideration should be given to the type, size and pneumatic pressure of the load applied.
- Class B design loads exceed AS 5100.2 requirements for footway loading.
- Class D design loads exceed AS 5100.2 requirements for a W80 wheel load.
- Class C units are based on an intermediate load.
- The serviceability load is set at 2/3 of the ultimate limit state design load.
- A force of 1 kN approximately equal to the weight of 100 kg.

Revision	Document Date	By Author
G	10 January 2023	TK

Placement of Tank

- Utilising the molded lifting points, place the tank on the completed 100mm clean and level compacted sand pad.
- Ensure tank is true and level with adequate drain fall.
- Your installation should be installed as approved by the relevant authority to meet all applicable standards and guidelines.
- Connect Plumbing pipework to AS/NZS 3500 regulations.
- All Grease Arrestors require venting to atmosphere in accordance with AS/NZS 3500 and must be read in conjunction with
- **Western Australia** - Water Corp. <https://www.watercorporation.com.au/Help-and-advice/Trade-waste/Retail-food-businesses/Grease-arrestor-maintenance/Grease-arrestor-installation-guidelines> and Plan HX33-10-00 and PLB Technical Note “Venting in Trade Waste Applications”.
- All Grease Arrestors require installation of a Trade Waste Sample Point (TWSP) immediately downstream of the outlet, as per guidelines contained in Water Corp Plan HX33-11-30 and HX33-10-10 for sealed TWSP’s.
- **South Australia** – S.A. Water Basic pre-treatment devices – Design, Installation and Accessibility notes 18/12/18.
- Adjust risers to suit application, as detailed above.
- Secure Manhole Adaptor with Stainless Steel fasteners and cover all tank openings to prevent dirt ingress during backfilling.
- In areas of potential high water tables, concrete ground anchors should be provided at the base of the hole tied in with 20mm rebar installed to the four legs via the anchor points provided. Contact Coerco Engineering Department for further details and calculations.
- Fill tank with water prior to backfilling.

Backfilling

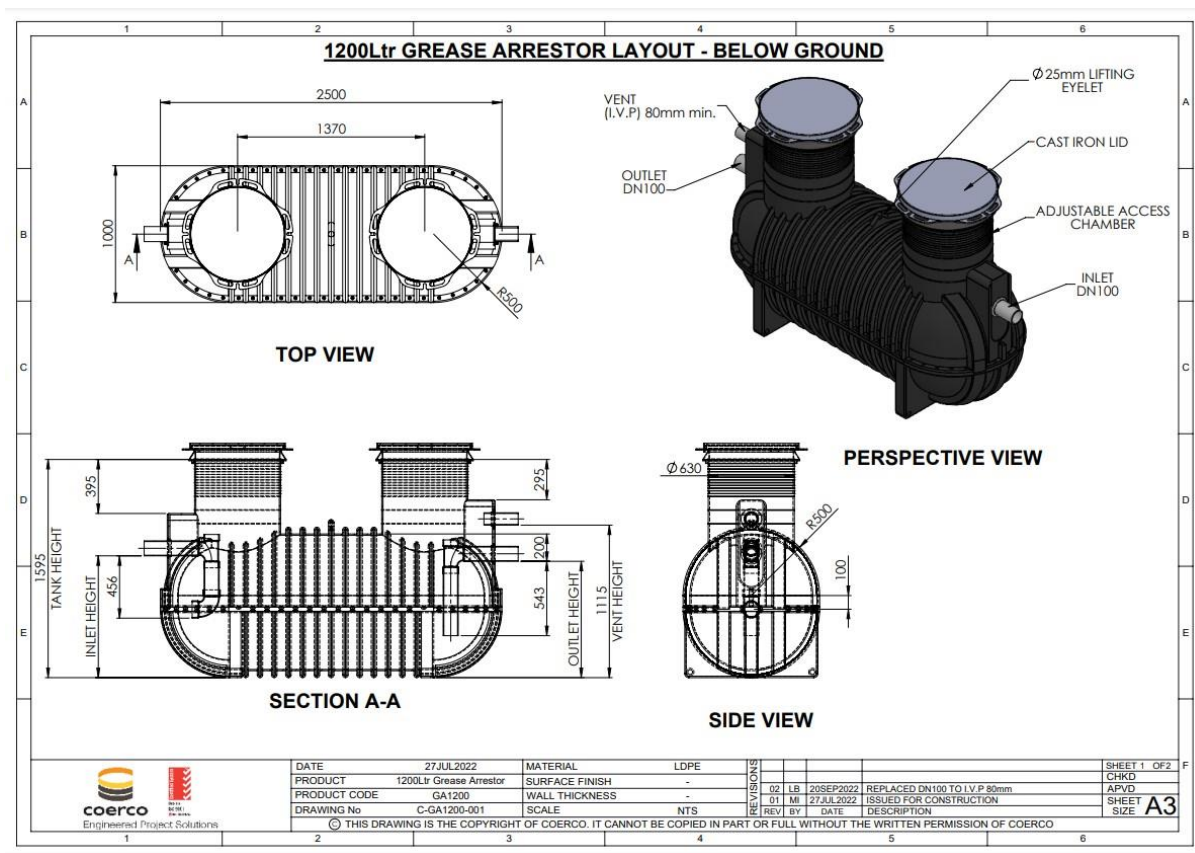
- Backfill and foundation material should consist of clean permeable sand, cracker dust or crushed limestone. Clay is not permitted.
- Place fill slowly and evenly from all sides, to ensure there are no voids.
- Backfill around the tank shall be placed evenly in compacted layers, no greater than 300mm.
- Only handheld vibrating plate compactors (Jumping Jack/Rammer) may be used in the compaction process.
- Soil pressures based on a backfill/subgrade material must have a minimum density of 18kN/m³ and a maximum of 20kn/m³.
- Backfill material is to be compacted around the perimeter of the tank to a 98% modified dry density \pm 2% for optimum moisture content.
- Divert stormwater/runoff from the tank location through use of bunds or diversion drains.

Revision	Document Date	By Author
G	10 January 2023	TK

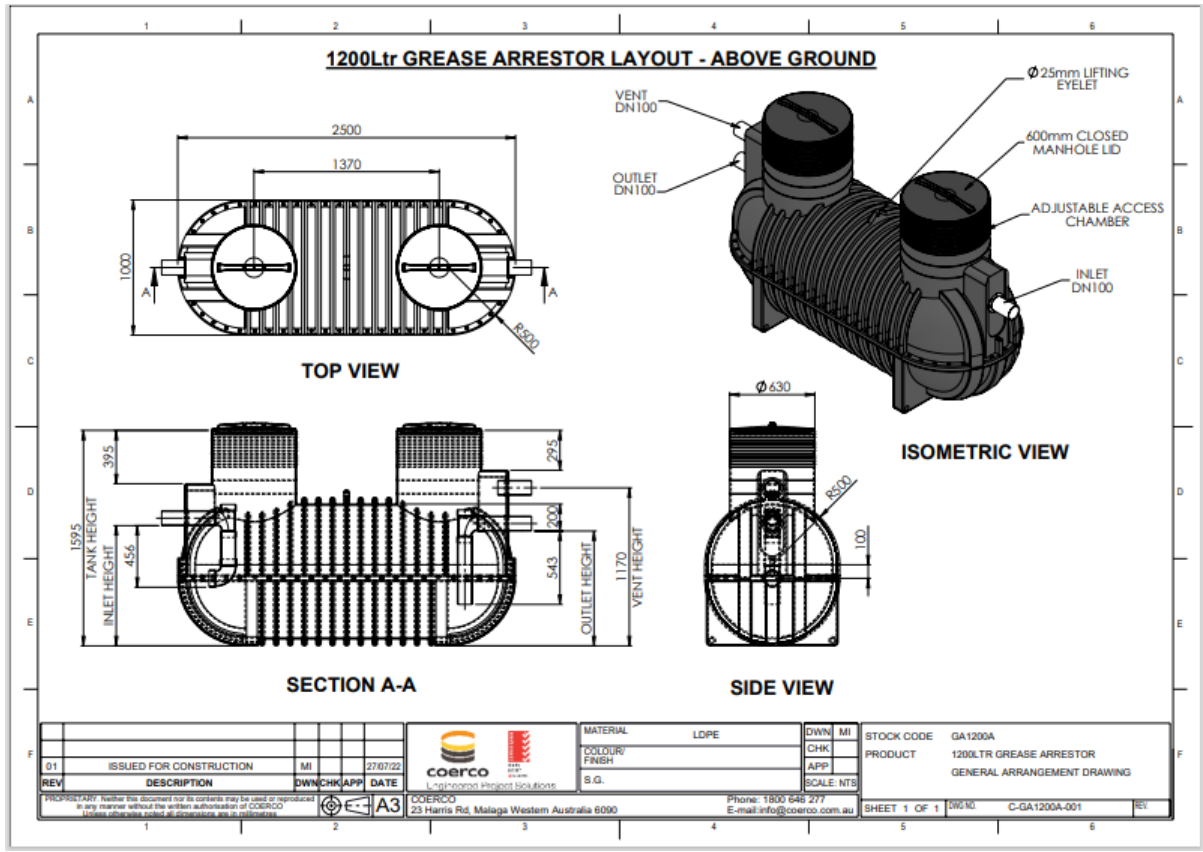
Completion and Maintenance Instructions

- Your installation must be inspected by the relevant authority, which should be arranged at a suitable time prior to usage.
- A Certificate of Compliance must be provided to the PLB on commencement/completion of the installation.
- A Trade Waste application should be submitted to the local Water Authority prior to any discharge from the apparatus.
- The local Water Authority must be notified within fourteen (14) days upon installation of the Grease Arrestor.
- A maintenance schedule agreement will be determined by the local Water Authority based on wastewater loads, with a suitably licensed contractor utilized for cleaning/maintenance to the schedule.
- Clear access must be maintained at all times.
- A water tap with an appropriate backflow prevention device must be located within 5m of the arrestor pit for maintenance purposes.
- No use of emulsifying agents upstream of apparatus is permitted.

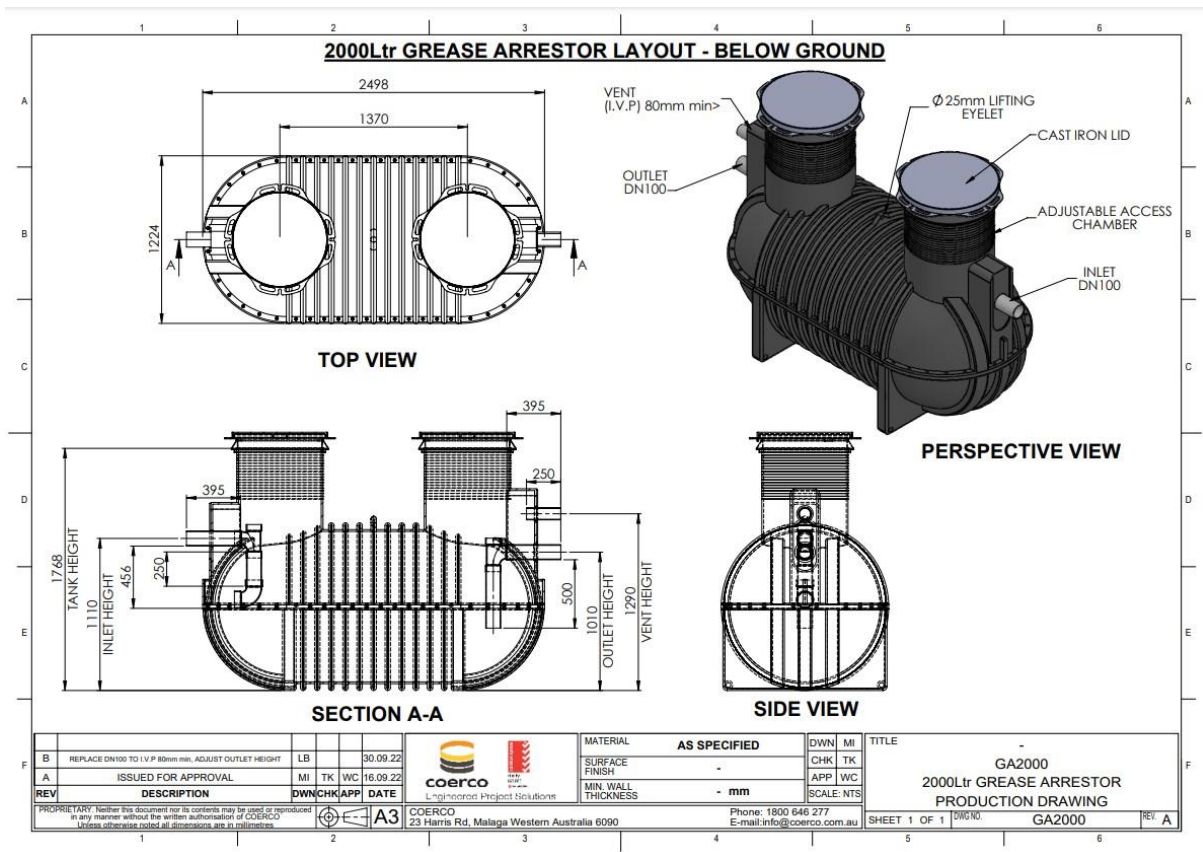
GA1200



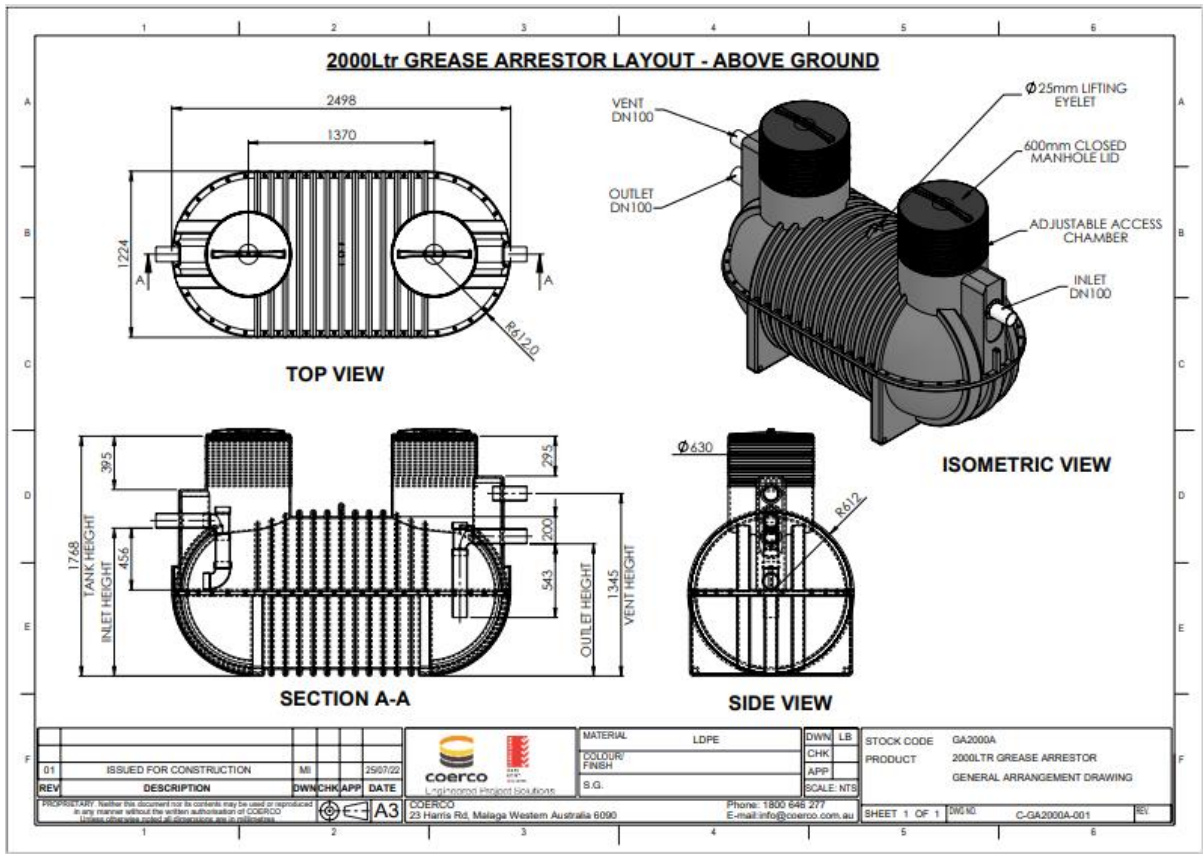
Revision	Document Date	By Author
G	10 January 2023	TK



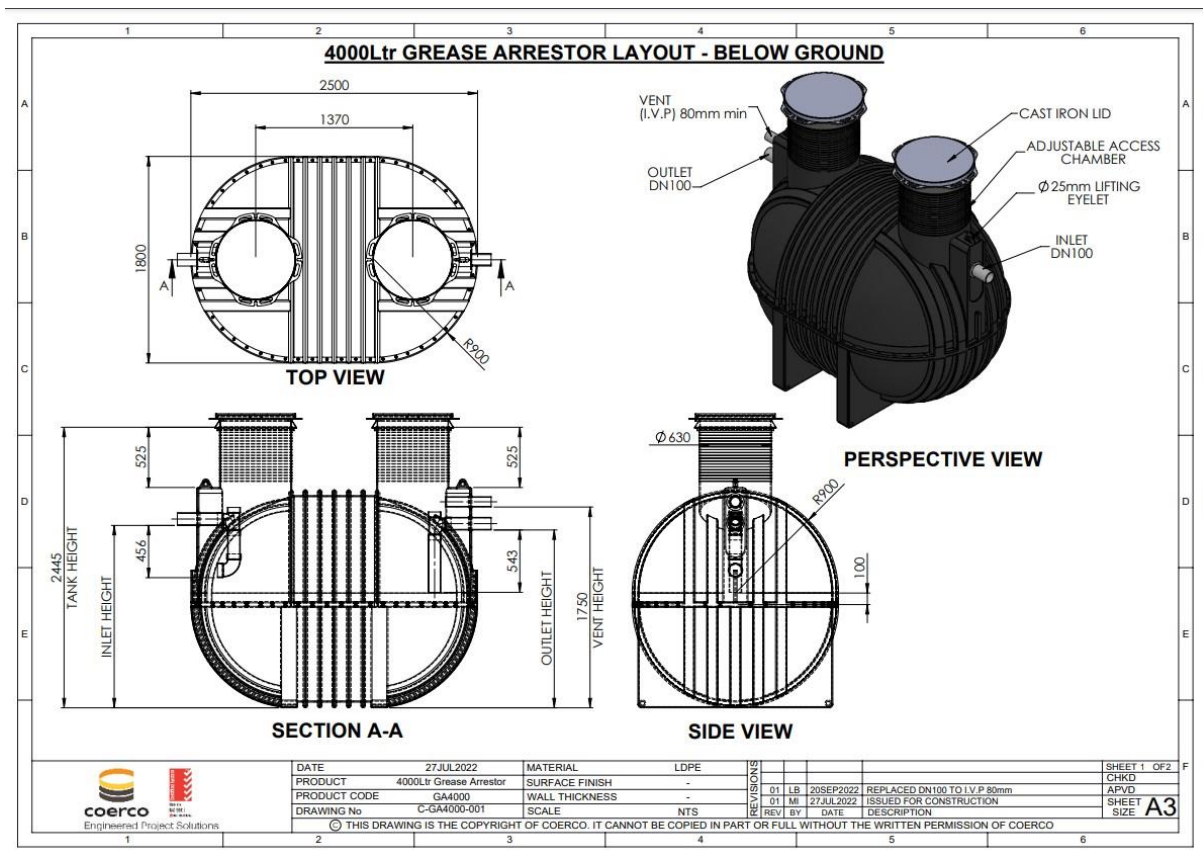
GA2000



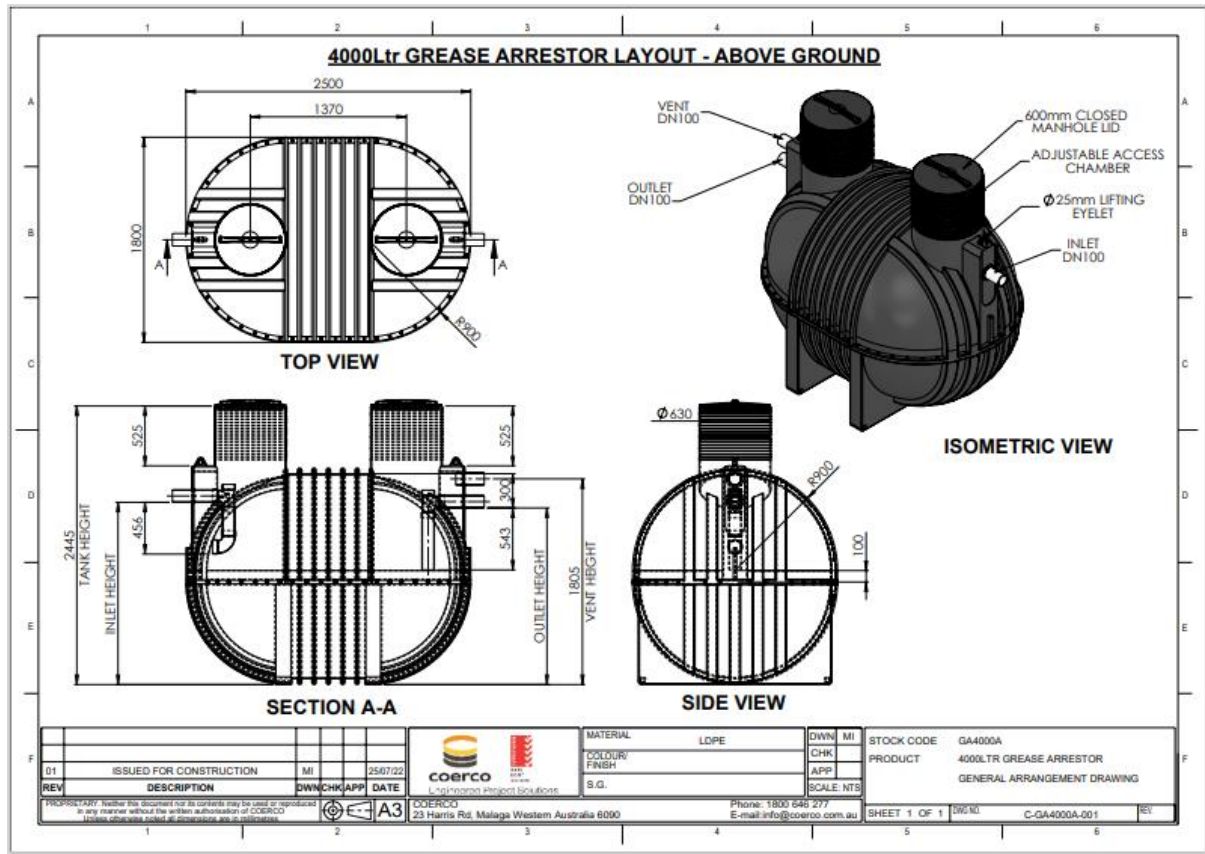
Revision	Document Date	By Author
G	10 January 2023	TK



GA4000



Revision	Document Date	By Author
G	10 January 2023	TK



Australian Consumer Law and Consumer Warranty

- Coerco warrants all our Grease Arrestors against defects in materials and workmanship for a period of 5 years from the date of purchase.
- Coerco handles returns and process refunds in accordance with the Australian Consumer Law.
- Should you wish to return your order, you must contact us within fourteen (14) calendar days of delivery to report any discrepancies or faults.
- You are entitled to return a faulty Product. You may choose a refund or exchange if a Product has a major fault. If the fault is minor, Coerco may elect to give you a free repair instead of a replacement or refund.
- Returns or refunds are made in our discretion subject to any guarantees that cannot be excluded under the Australian Consumer Law.

Owner details

Revision	Document Date	By Author
G	10 January 2023	TK

Name: _____

Installation address: _____

_____ Postcode: _____

Phone: _____ Email: _____

Serial Numbers: _____

Date of Purchase: _____

Installer Details

Name/Company: _____

Address: _____

_____ Postcode: _____

Phone: _____ Email: _____

Contact Us:

We are always happy to receive feedback about our products and service so call one of our friendly staff if you require any further information about any of our products and services.

Mail: COERCO

P.O. Box 319

Revision	Document Date	By Author
G	10 January 2023	TK

Dalwallinu W.A. 6609.

Freecall: 1800-491-756

Email: info@coerco.com.au

Revision	Document Date	By Author
G	10 January 2023	TK