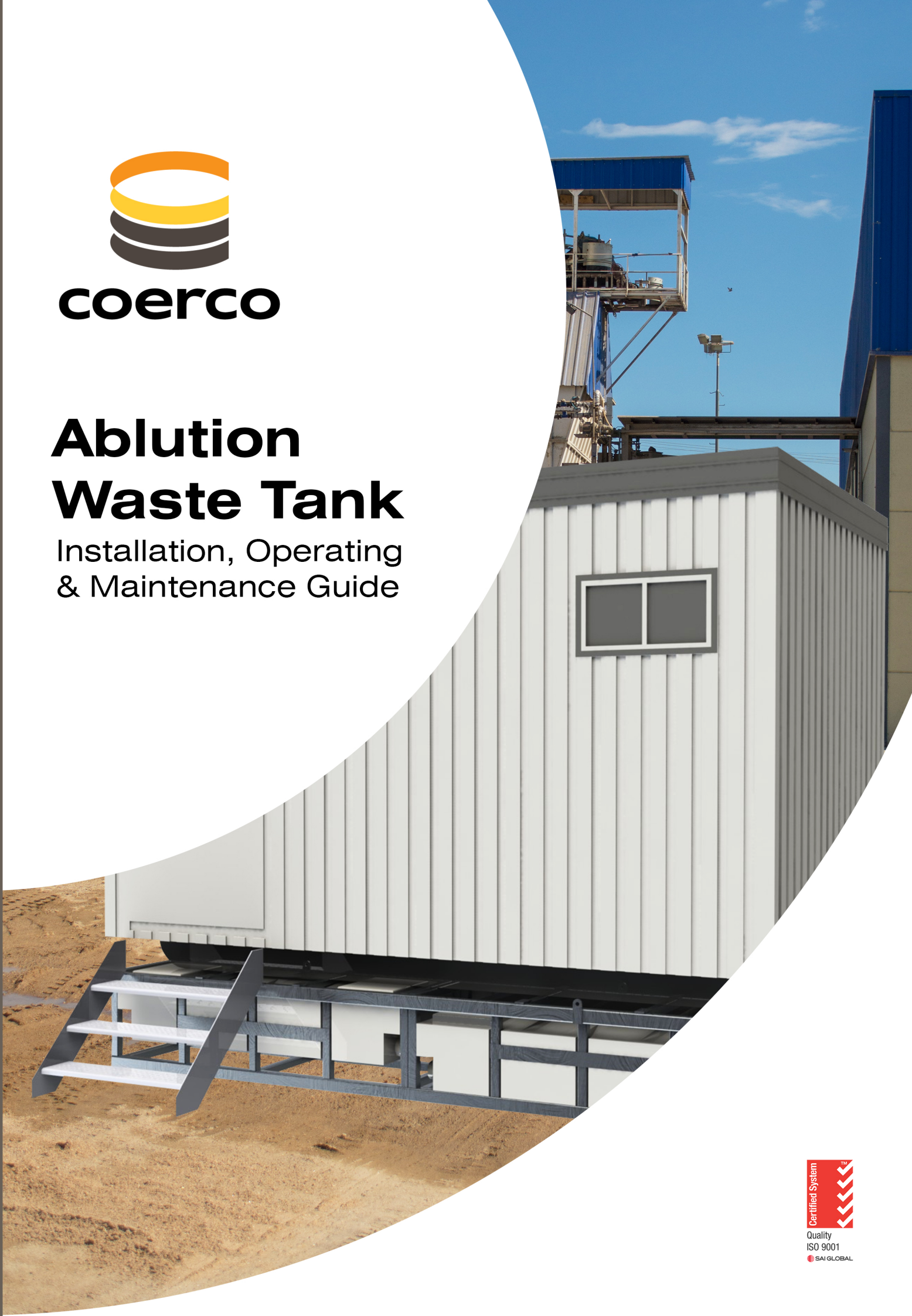




coerco

Ablution Waste Tank

Installation, Operating
& Maintenance Guide



Ablution Waste Tank

General Installation Guide

COERCO STORAGE SYSTEMS must be installed according to these instructions.

Introduction

Congratulations on your purchase of the Coerco Ablution Waste Tank System.

With proper care and following a few simple guidelines your system will give you many years of dependable service.

Important

The following information must be read in conjunction with all local council, governing authorities and relevant standards for the requirements of installing this system.

Only qualified personnel should install, operate and repair your Coerco Ablution Waste Tank System. Any wiring of pumps or similar electrical equipment should only be performed by a qualified electrician.

All specifications must be certified by the engineers/consultants and relative governing authorities before commencement of construction and installation.

The customer or installer is responsible for ensuring that the installation of this Coerco Ablution Waste Tank System is in compliance with any regulatory requirements of the planning authorities, building control, Environmental Agency, Water Board and/or National AS/NZ Standards.

Safety Precautions



- Ensure the installer is aware of all confined spaces and OH&S guidelines.
- Make sure that there is sufficient oxygen and there are no poisonous gases present.
- Check the explosion risk before welding or using electrical tools.
- Do not ignore health hazards and observe strict cleanliness.
- Ensure all lifting equipment is in good condition and meets the relevant standards for the purpose.
- In case of any contamination, please ensure all personnel who work on the system are vaccinated against diseases that can occur.
- Always keep a first aid kit within easy reach.

Off-loading and Handling

(Please refer to APPENDIX A - "Lift Study Details")

The contractor is responsible for off-loading the tank. The tank must be handled with care to prevent accidental damage from impact or contact with sharp objects.

Oversize Loads

Where tanks are of such size that police or private escort is required, delivery times given are only estimates. In the event of a delay outside our control, if any extra charges arise, they will be forwarded to the contractor.

Site Access and Conditions

It is the responsibility of the client or installer to ensure suitable access to good hard ground conditions that are safe and suitable for off-loading the Coerco storage system.

Storage

Set the tank on smooth level ground, free from bricks and/or sharp objects. Chock/tie down to prevent the tank moving during high winds.

The tanks should be lifted using suitable slings, chains or wire ropes, attaching to designated lifting points. Do not drag the tank along the ground for any distance and avoid jarring or bumps.
DO NOT lift with water in the tank.



Prior to Installation

Determine the best location for your Coerco storage system and pump controls (if applicable).

These recommendations indicate the requirement for installation in typical site conditions. The installer should ensure that the requirements for their particular site conditions and anticipated loadings are met, taking engineers advice where necessary.

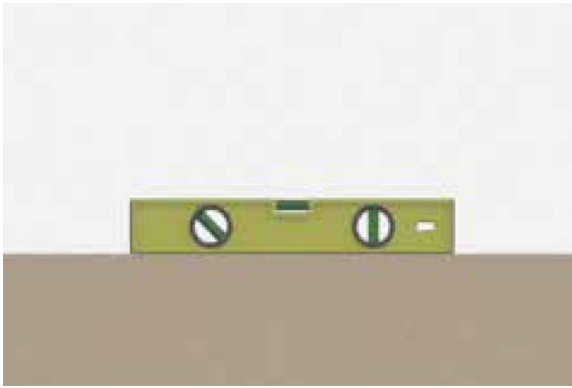
The installation of the Coerco Storage System may require the prior approval of the local council.

Questions relating to this should be directed to a responsible officer of the local council and/or relevant authorities. Coerco regret they are not able to supply this information. Check tank for any damage that may have occurred during freight or handling. Be careful to avoid any "bruising", as all damage must be repaired before installation. Refer to supplier.

Please tighten all fasteners and associated equipment before installation.

Venting

Coerco Storage Systems should be vented in accordance with the current applicable plumbing and drainage standards. In multiple chamber tanks, venting must not be combined into a common stack below a point where pollutants contained could be transferred to other chambers.



Step No. 1

Clear area of installation and ensure site is level, compacted and free from any objects such as stones, sticks etc. which may damage or hinder the level resting of the Coerco Ablution Waste Tank.



Step No. 2

Coerco Ablution Waste Tank
MUST ONLY BE LIFTED WHEN EMPTY.

Lift tank by designated certified lifting points (see APPENDIX A) into place ensuring it is correctly orientated with inlet/outlet points in the desired finished positions. Carefully lower Coerco Ablution Waste Tank into chosen position and set into place. Ensure tank is sitting level on all planes for optimum waste flow and operation.

Note all OH & S requirements and practises regarding lifting the Coerco Ablution Waste Tank.



Step No. 3

Once a Coerco Ablution Waste Tank is level and stable, check all inlet/outlet points are ready for connection and free from damage. Carry out verification testing for tank water tightness as per procedures and test forms given in APPENDIX C & D of this installation manual.

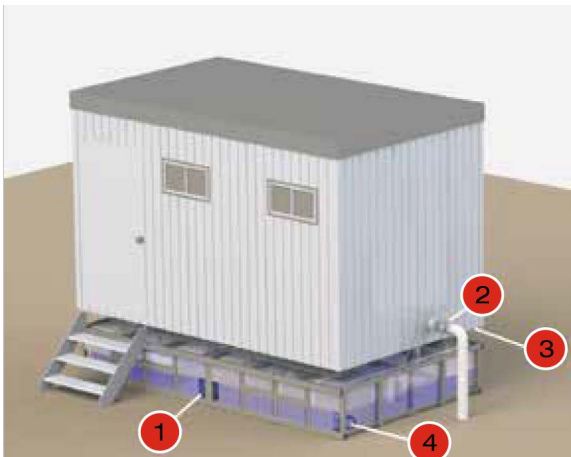


Step No. 4

Check that ablution building is within engineering design safe load weight for Coerco Ablution Waste Tank supporting frame.

Lift ablution building into place (refer to ablution building manufacturer's lift study & instructions before lifting building structure), gently lowering onto top of Coerco Ablution Waste Tank supporting frame ensuring location of ablution building sewage outlets match the orientation of the Coerco Ablution Waste Tank.

Note all OH & S requirements regarding the lifting of the ablution building.



- 1 Tank joiners (if app)
- 2 Water supply
- 3 Joining connection between building and tank
- 4 Outlet connection



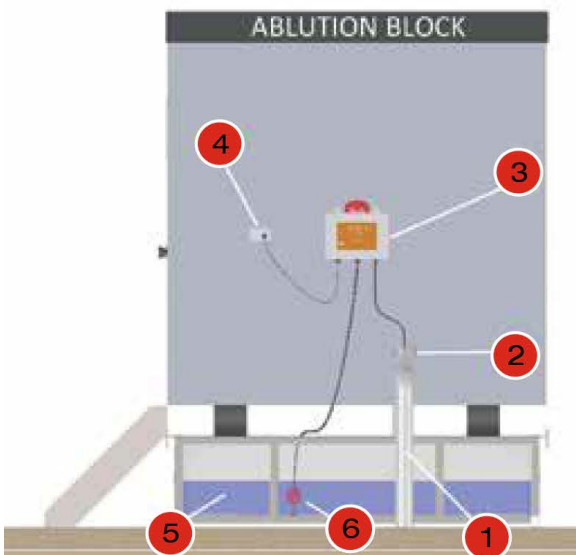
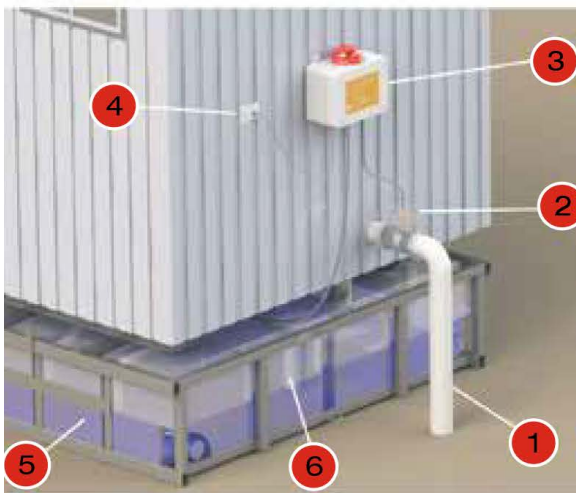
All **INLETS** and **OUTLETS** must be minimum size of DN100

Flowpath distance between **INLET** and **OUTLET** must be a minimum of 1200mm.



Step No. 5

Connect water supply to ablution building and sewage outlets to inlet on Coerco Ablution Waste Tank, ensuring all couplings are securely fitted and functional. Carry out verification testing for joints around fittings as per procedures and test forms given in APPENDIX B & D of this installation manual.



- 1 Water supply
- 2 Solenoid valve
- 3 Liquid level alarm controller
- 4 Power source
- 5 Pump

Step No. 6

Install water shut off and level alarm to the ablution block and Coerco Ablution Waste Tank as per manufacturer's instructions. The Water Shut-off and Level Alarm is a system controller developed to isolate the supply of Mains Water in the event of certain alarm conditions, such as when the Coerco Ablution Waste Tank is full and needs to be pumped out. Allowing water supply to continue in the event of power failure or pump fault, could result in an overflow spill of untreated sewage.

By monitoring the level in the Coerco Ablution Waste Tank and the presence of mains power, the controller appropriately switches the Water Supply Valve open or closed. The controller also incorporates 'Power On', 'Alarm' lamp indicators, as well as a mutable Audible Siren, which is activated in the event of a High Level. Refer to manufacturer's instructions for full details.



Perform final visual inspection of Coerco Ablution Waste Tank around the perimeter and ablution facility is successfully operational.

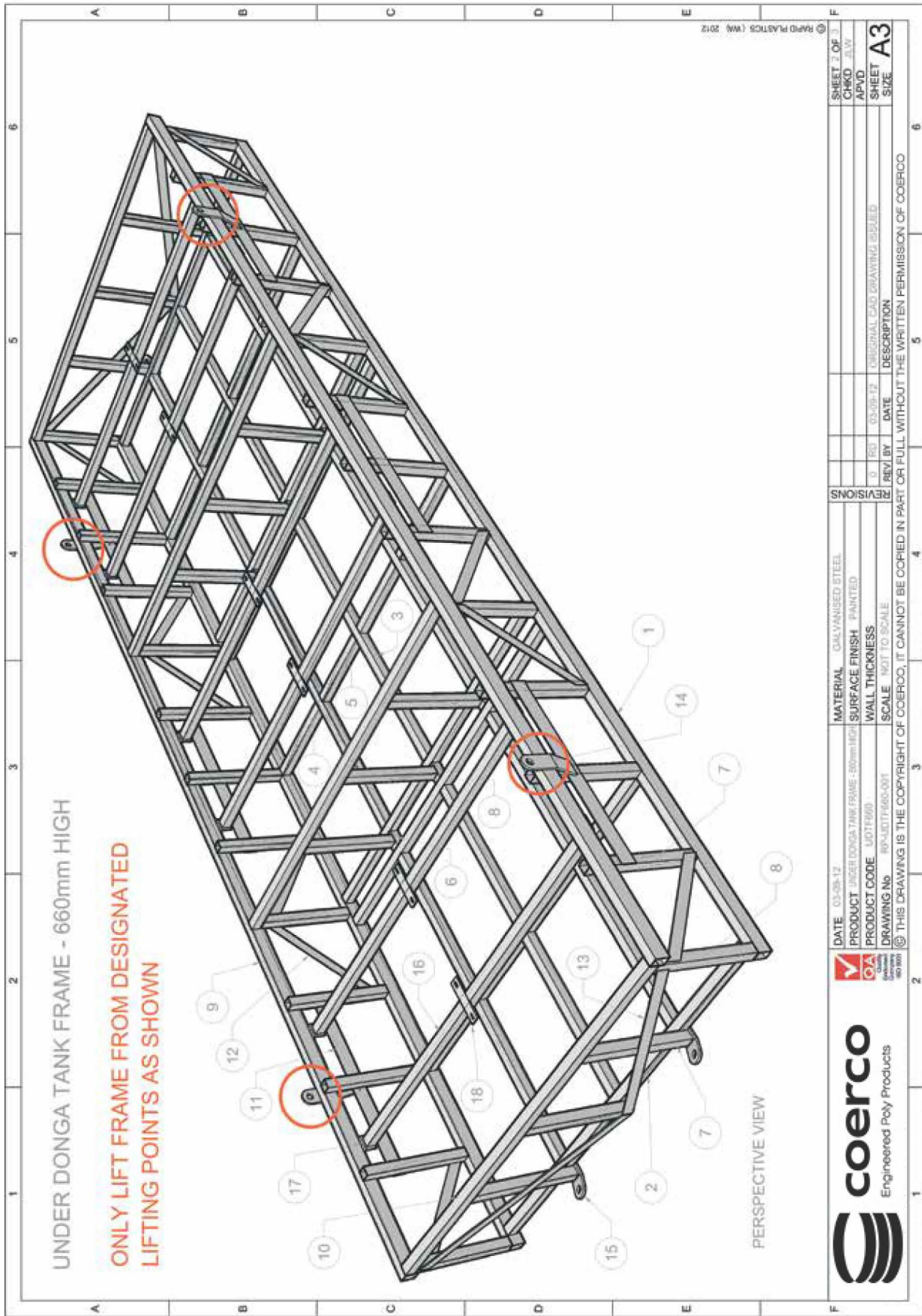
Step No. 7

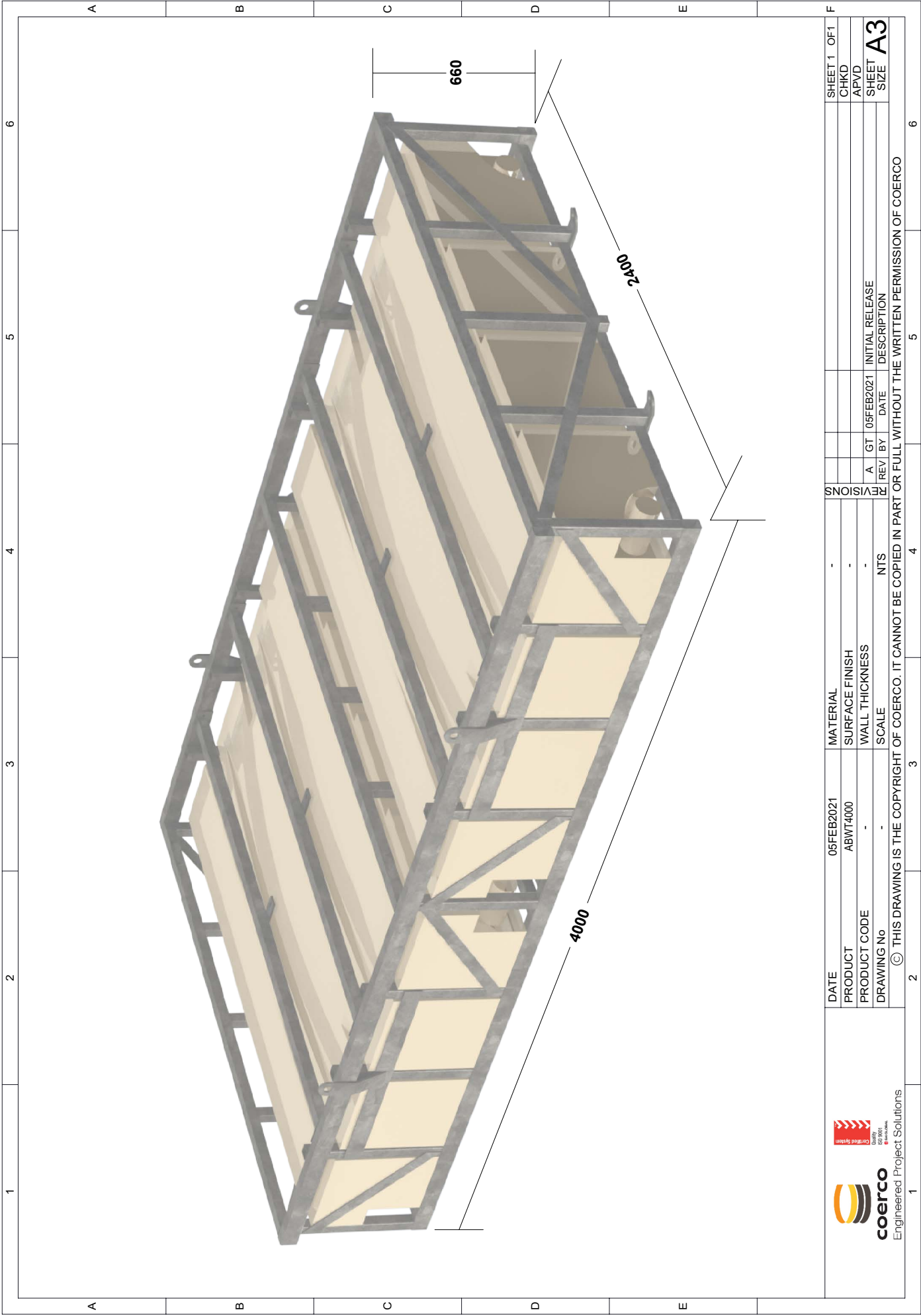
Note the contents of Coerco Ablution Waste Tank must be pumped, hauled and disposed of by a licensed sewage pumping contractor and in a manner approved by the local government. No sewage from the Coerco Ablution Waste Tank system must be applied onto the ground surface, into ground water or surface waters. Sewage from the Coerco Ablution Waste Tank must be disposed of into an approved site.

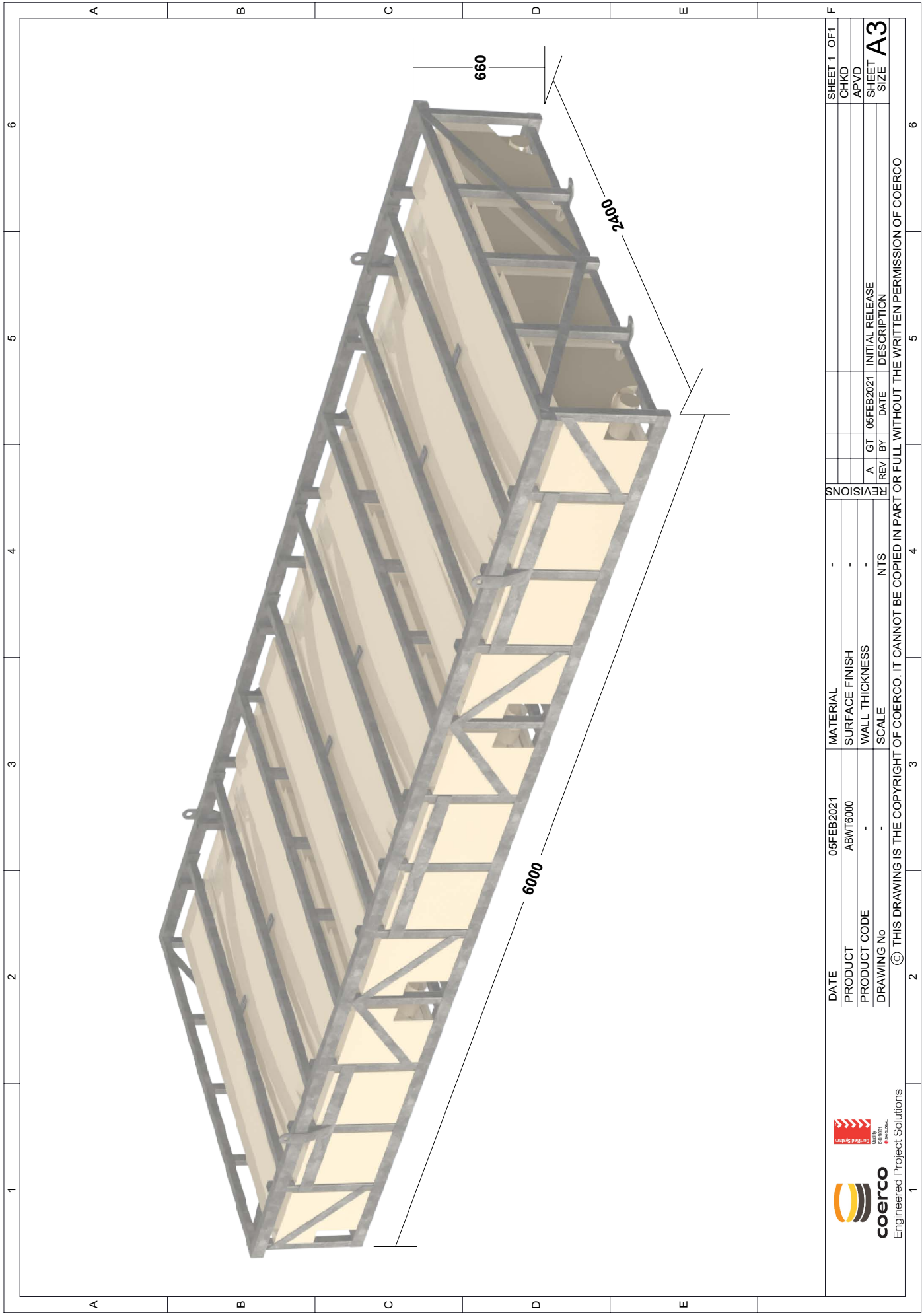
Please refer to local government body and Department of Health in your local area for full regulatory requirements concerning Sewage Holding Tanks and related services.

Appendix A

Lift Study Guide Details







Appendix B

Fitting Installation Test Procedure

APPENDIX E of AS/NZS 1546.1:2006

TEST OF MANUFACTURER'S INSTRUCTIONS FOR THE INSTALLATION OF FITTINGS IN A SOUND AND WATERTIGHT MANNER (Normative)

E1 SCOPE

This Appendix sets out a method for the testing of the manufacturer's instructions for the installation of fittings in a sound and watertight manner, whether the fittings are installed in the factory or on-site.

E2 PRINCIPLE

This Appendix sets out a method for the testing of the manufacturer's instructions for the installation of fittings in a sound and watertight manner, whether the fittings are installed in the factory or on-site.

CE2

It is assumed that a fitting installation that is watertight in this situation will also be watertight against water ingress to the tank through the fittings.

E3 TESTING

E3.1 Procedure

The test procedure shall be as follows:

- (a) Set up the tank as for the watertightness test as required by Appendix G;
- (b) Install fittings in accordance with the manufacturer's instructions;
- (c) Seal openings in the fittings to allow water to build up behind the fitting during the test;
- (d) Fill the tank with water to the rim;
- (e) Allow the tank to stand for at least ten minutes; and
- (f) Observe the tank and fittings for any leakage.

E3.2 Test criteria

The criteria of G4.2 shall apply.

E4 TEST RECORDS

The report shall include the following information for each test specimen:

- (a) Identification of person/organisation carrying out test;
- (b) Identification of the fitting system(s) tested;
- (c) Date of test;
- (d) The results of the test; and
- (e) Reference to this test method, AS/NZS 1546.1, Appendix E.

Appendix C

Determination of Watertightness Procedure

APPENDIX G of AS/NZS 1546.1:2006 **DETERMINATION OF WATERTIGHTNESS** (Normative)

G1 SCOPE

This Appendix sets out a method for testing the watertightness of septic tanks.

G2 PRINCIPLES

The tank is subjected to a hydrostatic pressure head and is then examined for signs of water leakage.

G3 TESTING OF TANKS CAST-IN-SITU

G3.1 Testing Procedure

The procedure shall be as follows:

- (a) Fill the tank with water to a depth of 900mm or to the invert of the outlet pipe, whichever is the greater depth;
- (b) Allow to stand for a minimum of 24 hours;
- (c) Top up with water and start test observation;
- (d) Top up again after 8 hours to determine the 8-hour loss; and
- (e) Continue for a further 24 hours if required by G3.2, and again top up to determine the loss.

G4 TESTING OF FACTORY-BUILT TANKS

G4.1 Set-up and test procedure

Tanks that can be stood in position without the need of support shall be placed on at least three bearing blocks: 500mm (minimum) length x 100mm wide x 100mm deep (see Figure G1 (a)).

Tanks that need support in order to remain in position for example, horizontal cylinders shall be placed on timber bearers and held in place with chocks, (see Figure G1 (b)). Horizontal cylindrical tanks shall be supported sufficiently so as to counter any bending and induced tension.

For the test an elbow is plumbed into the outlet (temporarily). Start the test with the water level at a mark, about 50mm up vertical. Measure the water needed to "top tank up" to that same sight mark.

The procedure shall be as follows:

- (a) Level the tank on the supports;
- (b) Fill the tank with water to a depth of 900mm or to the invert of the outlet pipe, whichever is the greater depth;
- (c) Allow to stand for a minimum of 4 hours;
- (d) Top up with water and start test observation; and
- (e) Observe for any leakage and count the drops per minute from any single point.

G4.2 Test criteria

Concrete septic tanks shall not show a leakage rate greater than 4 drops/min from any single point, and a total loss in accordance with G3.2; damp patches in concrete tanks are not considered leakage.

Glass fibre-reinforced or plastic tanks shall have no leakage, and no damp patches.

G5 REPAIR

Isolated minor leakages in concrete tanks may be repaired so as to effectively and permanently seal the leak.

After repair, the tank shall be retested.

G6 TEST RECORDS

The report shall include the following information for each test specimen:

- (a) Identification of person/organisation carrying out test;
- (b) Identification of the tank tested
- (c) Date of test;
- (d) The leakage rate, in drops per minute; and
- (e) Reference to this test method, AS/NZS 1546.1, Appendix G.

Appendix D

Test Form Template

HYDROSTATIC TEST FORM DATA									
PERSON TESTING	TANK MODEL	TANK SERIAL ID	DATE TESTED	RESULTS	TEST METHOD	JOB N°	CLIENT	SIGNED	
					AS/NZS 1546.1, Appendix E & G				

This image shows a full page of blank handwriting practice paper. It features 20 evenly spaced horizontal blue lines across the entire page. There are no margins, text, or other markings present.

