

# Aquatica Laundry Tubs

Product Disclosure Information Self-Assessment

Version: V1

<b>Product Name</b>	Aquatica Laundry Tub
<b>Product Line</b>	AQUATICA LAUNDRY TUBS
<b>Product Identifier</b>	<p><b>360mm Wide Tubs:</b> STUDIO360, STUDIO360 KO, STUDIO360 XS, STUDIO360 VIAMO, STUDIO360 MAX VIAMO</p> <p><b>460mm Wide Tubs:</b> LAUNDRA460, LAUNDRA460 PLUS, LAUNDRA460 MAX AUS LAUNDRA460</p> <p><b>560mm Wide Tubs:</b> STUDIO560, STUDIO560 KO, STUDIO560 VIAMO, STUDIO560 MAX VIAMO, HUBTUB560 PREMIUM, HUBTUB560 MAX LAUNDRA560 CENTRO, LAUNDRA560 TUBBIE, LAUNDRA560 PLUS, LAUNDRA560 MAX</p> <p><b>900mm Wide Tubs:</b> STUDIO900, STUDIO900 VIAMO, STUDIO900 CT VIAMO</p> <p><b>1200mm Wide Tubs:</b> STUDIO1200, STUDIO1200 VIAMO, STUDIO1200 CT VIAMO</p>

## Product description

Laundry bowl and cabinet with concealed washing machine controls on HUBTUB and STUDIO models. Laundry bowl and cabinet with washing machine controls exposed on the console for all LAUNDRA models. All models include a hot and cold mixer suitable for both mains and low pressures (except the AUS LAUNDRA460 which is suitable for mains pressure only). All drawer models have soft close drawers (except the STUDIO 1200 CT VIAMO. This sheet also covers spare parts for all models.

## Relevant Building Code Clauses

**B2 DURABILITY B2.3.1 (i) and (ii)**

**E3 INTERNAL MOISTURE E3.2(c), E3.3.3, E3.3.4, E3.3.5, E3.3.6**

**G2 LAUNDERING G2.2**

**G4 VENTILATION G4.3.3 (Referenced in maintenance requirements)**

**H1 ENERGY EFFICIENCY H1.2**

## Contributions to Compliance

**B2.3.1 Durability:** The 0.8mm galvanised steel, powder-coated cabinet and sink mixer have a 5 year residential warranty. The European mixer cartridge has a 20 year residential warranty.\*\* The 1.0mm thick, 304 stainless steel bowl, exceeding the thickness required by 20%, has a 20 year warranty from manufacturing defects. 304 stainless contains 18% chromium and 8% nickel, which gives stainless its corrosion resistance quality. It is long-lasting, has high tensile strength, and being 100% recyclable makes it environmentally friendly as well. It is widely used in the food industry as standard food grade stainless steel.

Only high quality german flow restrictors from Neoperl are used in the Aquatica Laundry Tub mixer, which reliably limits flow to the required litres per minute to achieve the stated water efficiency rating under WELS for both mains pressure situations. [For the STUDIO360 XS, the restrictor is designed to stay in place for both mains and low pressure situations.] (If even greater efficiency is required than the stated WELS rating, this can be requested at the time of ordering.) The flexible tails on the sink mixer are generous at 500mm long for easy installation and to discourage kinks which can affect the performance of the mixer and longevity of the installation. Any failure would be easily detected during normal use.

**E3 Internal Moisture: E3.2(c) E3.3.3 and E3.3.4 and E3.3.5** The smooth surfaces of the powder-coated galvanised steel cabinet are easy to wipe clean thereby reducing mould growth and contamination. The stainless steel bowl is also easy to keep hygienically clean, which is why it is considered a preferred material in food preparation areas. **E3.3.6** Installed correctly the laundry tub with its pressed bowl and anti-drip lip on the top edge fulfills the requirement of AS/NZS 1229:2002 for rims to be self-draining, thereby reducing the likelihood of water splash on surfaces beyond the laundry tub.

**G2 Laundering: G2.2** Installing the Aquatica Laundry tub ensures that clothes washing and other cleaning activities can be carried out in separate facilities from food preparation.

**G12 Water Supplies: G12.3.2** The sink mixers in the laundry tubs have a high quality, German Neoperl Pressure Compensating Washer (PCW) in the cold tail which is designed to limit the flow on the cold water to more closely match the hot. This reduces the risk of back flow of cold water into the hot line and also makes it easier to achieve a warm mix during operation.

**G12.3.7** System flow rates can vary hugely and fixtures like mixers must function properly under normal conditions. The mixer on the laundry tub functions correctly under both mains pressure and low pressure environments, thereby widening the normal range of conditions. Under mains pressure conditions, a pressure compensating aerator (PCA) is installed in the mixer to limit flow, while the flow guide (installed as supplied), combined with a wider diameter flexible tail on the hot side, assists in producing maximum flow under low pressures. Each individual mixer is pressure tested in New Zealand prior to dispatch to reduce the likelihood of failure.

For unequal pressure environments, the mixers are set up so that high cold water pressure is less likely to backflow through the cartridge and into the hot water line, and back into the hot water cylinder, and even out onto the roof, thereby wasting water and energy. (See Conditions of Use for the details of what is supplied to achieve this.)

The Sink Mixer with Pullout Spray on the **LAUNDRA460 PLUS** and the **LAUNDRA560 PLUS** is fitted with two non-return valves, one on either side of the connection between the hose and the spray head. These are a safety measure in the unlikely event that the spray head is dropped into a vessel of contaminated water. These valves provide back-flow prevention to ensure that dirty water cannot be syphoned back through the line to contaminate the water supply.

**H1 Energy Efficiency: H1.2** The mixer on the laundry tub complies with WELS (the Water Efficiency Labelling Scheme) with ratings as listed below. For all mixers except those with a pullout spray, the WELS rating is achieved with the use of a high quality german Neoperl pressure compensating aerator (PCA) for mains pressure which limits flow to the stated litres per minute. On low pressure installations, the PCA is not used. The Neoperl grey flow guide is used instead. At time of ordering, customers can request a higher star rating. (5 star would be the highest we would recommend to still be functional, ie 6 litres per minute.)

The Sink Mixer with Pullout Spray on the **LAUNDRA460 PLUS** and the **LAUNDRA560 PLUS** achieves its WELS rating for mains pressure, from the pressure compensating washer (PCW) installed in the connection between the tap body and the hose.

WELS (Water Efficiency) ratings for all models:

STUDIO360 *	4* Mains and Low Pressures (7.5 l/min)
STUDIO360 KO *	4* Mains and Low Pressures (7.5 l/min)
STUDIO360 XS *	4* Mains (7.5 l/min), 5* Low (6.0 l/min)
STUDIO360 VIAMO	4* Mains and Low Pressures (7.5 l/min)
STUDIO360 MAX VIAMO	4* Mains and Low Pressures (7.5 l/min)
LAUNDRA460 *	3* Mains and Low Pressures (9.0 l/min)
LAUNDRA460 PLUS *	3* Mains (9.0 l/min), 5* Low (6.0 l/min)
LAUNDRA460 MAX *	3* Mains and Low Pressures (9.0 l/min)
AUS LAUNDRA460 *	3* Mains Pressure (9 l/min)
STUDIO560 *	4* Mains and Low Pressures (7.5 l/min)
STUDIO560 KO *	4* Mains and Low Pressures (7.5 l/min)
STUDIO560 VIAMO	4* Mains and Low Pressures (7.5 l/min)
STUDIO560 MAX VIAMO	4* Mains and Low Pressures (7.5 l/min)
HUBTUB560 PREMIUM *	3* Mains and Low Pressures (9.0 l/min)
HUBTUB560 MAX *	3* Mains and Low Pressures (9.0 l/min)
LAUNDRA560 CENTRO *	3* Mains and Low Pressures (9.0 l/min)
LAUNDRA560 TUBBIE *	3* Mains and Low Pressures (9.0 l/min)
LAUNDRA560 PLUS *	3* Mains (9.0 l/min), 5* Low (6.0 l/min)
LAUNDRA560 MAX *	3* Mains and Low Pressures (9.0 l/min)
STUDIO900 *	3* Mains and Low Pressures (9.0 l/min)
STUDIO900 VIAMO	4* Mains and Low Pressures (7.5 l/min)
STUDIO900 CT VIAMO	4* Mains and Low Pressures (7.5 l/min)
STUDIO1200 *	3* Mains and Low Pressures (9.0 l/min)
STUDIO1200 VIAMO	4* Mains and Low Pressures (7.5 l/min)
STUDIO1200 CT VIAMO	4* Mains and Low Pressures (7.5 l/min)

### Energy Saving and Anti-scald

As an additional energy saving feature, the European Kerox cartridge (in the mixer of all the models above with an asterisk\*), includes a clever yet simple anti-scald device which can be set if desired. This is both a safety feature and an energy saving device. It's a simple matter of removing the grey plastic ring on the top of the cartridge and repositioning it so that the cartridge is prevented from travelling all the way to full hot, stopping instead at whatever point in its travel is chosen as the maximum hot temperature.

## Scope of Use

The Aquatica Laundry Tub is intended for residential use. It is suitable for both hot and cold water use, and with mains or low pressure systems with minimum pressures of 35kPa, (except the AUS LAUNDRA460 which is suitable for mains pressure only and the PLUS models with pullout spray which require a minimum of 65kPa).

## Conditions of Use

All Aquatica Laundry Tub models should be installed by a registered plumber following best practice. All models (except the AUS LAUNDRA460) are supplied ready for low pressure environments and are suitable for all pressures above 35kPa, or 65kPa for the PLUS models with pullout spray.

A separate pressure compensating aerator (PCA) is supplied for installation into the aerator for mains pressure situations for all Aquatica Laundry Tub models except the models ending in PLUS. This PCA is required to achieve the WELS rating. After installation, the mixer tails should not be kinked or unduly twisted. The STUDIO360 XS is also an exception. The PCA stays in place for both mains and low pressure environments.

All models are designed to operate under pressures up to a maximum of 1000kPa. However, there are 2 things to consider. Firstly, consider that the pressure overnight increases while taps are not being used and can easily spike to well beyond 1000kPa without a pressure limiting device installed. And secondly, consider what the Building Code now requires, shown below.

### **Building Code Requirement - Pressure**

It is now a requirement in the NZ Building Code that the minimum working pressure at any fixture is 30kPa and the maximum static pressure shall be no more than 500kPa.

### **Building Code Requirement - Temperature**

Another Building Code requirement is that the temperature of water at personal hygiene fixtures in a home should not exceed 50°C. 45°C is the maximum in early childhood education and care centres, schools, old people's homes, institutions for people with psychiatric or physical disabilities and hospitals. (For licensing purposes for early childhood education and care centres, the Ministry of Education requires that the temperature of water delivered from taps that are accessible to children should not exceed 40°C.)

Low pressure environments typically mean low pressure hot water and high pressure cold water. The sheer force of the cold water can make its way through the cartridge and into the hot line, back into the hot water cylinder, and even out onto the roof unless there is a mechanism within the mixer to reduce the risk of a backflow situation from occurring. The sink mixers in the laundry tubs have a high quality, German Neoperl Pressure Compensating Washer (PCW) in the cold tail which is designed to limit the flow on the cold water to more closely match the hot. This reduces the risk of a back flow issue and also makes it easier to achieve a warm mix during operation. It's important that the PCW is installed so that the direction of the water is towards the side of the washer with the little black oring.

The Sink Mixer with Pullout Spray on the **LAUNDRA460 PLUS** and the **LAUNDRA560 PLUS** achieves its WELS rating for mains pressure, from the pressure compensating washer (PCW) installed in the connection between the tap body and the hose. This PCW should be removed for low pressure installations. Be aware the Mixer requires a minimum of 65kPa to function properly. This mixer is also fitted with two non-return valves, one on either side of the connection between the hose and the spray head. These are a safety measure in the unlikely event that the spray head is dropped into a vessel of contaminated water. These valves provide back-flow prevention to help ensure that dirty water cannot be syphoned back through the line to contaminate the water supply.

## Maintenance Requirements

The powder-coated surface of the galvanised steel cabinet can handle water splash but should not be sitting in water for long periods. As well as the tub bowl, the flexible tails on the mixer are also stainless steel. Although stainless steel stains less than steel, it is not stain-proof. It is more resistant to corrosion than ordinary carbon or alloy steels but in some circumstances it can corrode. Chemicals ending in "ine" such as chlorine, iodine and bromine will attack stainless steel. This can happen if you store chemicals under the sink. Even if the container has a lid on, it may not be perfectly sealed and can give off vapour which, when combined with any dampness in the air will corrode stainless steel flexible tails and sinks. There's nothing wrong with cleaning the bowl with diluted chlorine, just be sure to rinse it thoroughly afterwards. Leaving metal cleaning scourers or metal utensils sitting in the bowl can also result in corrosion. It's a good idea to check on your mixers' flexible tails about every 6 months for any signs of corrosion.

To maintain continuous expulsion of dirty water through the waste system, it is recommended every 10th wash should be a hot wash. This ensures that detergent build-up in the line is dissolved.

To prevent mould growth in the laundry, and to increase the life of all the fixtures, install a fan which draws out moisture from the room. To ensure regular use of the fan, you could ask your electrician to link the light switch to the fan. *(This would fulfill obligations under the building code clause **G4.3.3** to remove moisture and pathogens in the air from laundering.)*

Debris in a water line can damage the smooth ceramic surfaces in a mixer cartridge. This is the most likely reason for a good cartridge to fail. In that event, replacing a cartridge is not an overly technical activity and can typically be carried out by a home handyperson.

Sometimes debris in the water line can make its way into the aerator at the end of the spout. You might notice the flow pattern become irregular. Simply unscrew the aerator ring, rinse out and reinstall. There are flats on the aerator ring for grip. Most often this can be unscrewed by hand just with a piece of rubber. If a wrench is needed, still use the rubber to prevent damage to the aerator ring.

For drawer models, in the event maintenance is required, the soft-close drawers can be removed by lifting at the front edge of the drawer then pulling towards you and lifting out. To replace, make sure the drawer slides are fully extended, sit the drawer onto the slides and close the drawer. This will engage the locks.

## Warnings and Bans

This product line is not subject to any warning or ban under section 26 of the Building Act 2004.

## Contact details

<b>Manufacture locations</b>	New Zealand, China, Germany, Hungary
<b>Legal and trading name of manufacturer and importer</b>	AQUATICA NZ LIMITED
<b>Manufacturer/Importer Address for Service</b>	9 Saunders Place, Avondale Auckland 1026
<b>Manufacturer/Importer Website</b>	<a href="http://www.aquatica.co.nz">www.aquatica.co.nz</a>
<b>Manufacturer/Importer NZBN</b>	9429000023962
<b>Manufacturer/Importer Email</b>	<a href="mailto:info@aquatica.co.nz">info@aquatica.co.nz</a>
<b>Manufacturer/Importer Phone Number</b>	09.828.2068

## All Relevant Building Code Performance Clauses

### B2 DURABILITY

**B2.3.1** *Building elements* must, with only normal maintenance, continue to satisfy the performance requirements for this code for 5 years if (i) The *building elements* (including services, linings, renewable protective coatings, and *fixtures*) are easy to access and replace, and (ii) Failure of those building elements to comply with the building code would be easily detected during normal use of the building.

### E3 INTERNAL MOISTURE

**E3.3.5** Surfaces of *building elements* likely to be splashed or become contaminated in the course of the *intended use* of the *building* must be *impervious* and easily cleaned.

**E3.3.6** Surfaces of *building elements* likely to be splashed must be constructed in a way that prevents water splash from penetrating behind linings or into *concealed* spaces.

### G2 LAUNDERING

**G2.2** *Buildings* shall be provided with *adequate* space and facilities for laundering.

### G12 WATER SUPPLIES

**G12.3.2** A potable water supply system must be a) protected from contamination; and b) installed in a manner that avoids the likelihood of contamination within the system and the water main; and c) installed using components that will not contaminate the water.

**G12.3.7** *Water supply systems* must be installed in a manner that a) pipes water to *sanitary fixtures* and *sanitary appliances* at flow rates that are adequate for the correct functioning of those *fixtures* and *appliances* under normal conditions; and b) avoids the likelihood of leakage; and c) allows reasonable access to components likely to need maintenance; and d) allows the system and any backflow prevention devices to be isolated for testing and maintenance.

## **H1 ENERGY EFFICIENCY**

**H1.2** *Buildings* must be *constructed* to achieve an adequate degree of energy efficiency when that energy is used for a) modifying temperature, modifying humidity, providing ventilation, or doing all or any of those things; or b) providing hot water to and from sanitary fixtures or sanitary appliances, or both.

## **G4 VENTILATION** (*only with reference to Maintenance Requirements*)

**G4.3.3** Buildings shall have a means of collecting or otherwise removing the following products from the spaces in which they are generated: **b)** [Moisture] from laundering, utensil washing, bathing and showering and **h)** bacteria viruses or other pathogens.

*\*\* The warranties referred to in this document are residential warranties. Commercial warranties can be found as part of Aquatica's full warranty document available at [www.aquatica.co.nz](http://www.aquatica.co.nz).*