

# Diablo and Krosstina Taps

Product Disclosure Information Self-Assessment

Version: V1

<b>Product Name</b>	Diablo and Krosstina Taps
<b>Product Line</b>	Aquatica Diablo and Krosstina Tapware for Mitre 10
<b>Product Identifier</b>	<p><b>Basin Taps</b>  DB 1BASIN (SKU 215749)  DB BASSETLS (SKU 215750)  DB BAST (SKU 215741)  KR 1BASIN (SKU 158367)  KR BASSET (SKU 158361)  KR BASSETLS (SKU 158799)  KR BAST (SKU 158357)</p> <p><b>Bath Taps</b>  DB BSETTHS15 (SKU 215751)  DB BSETTHS20 (SKU 219596)  DB BT15 (SKU 215742)  DB BT20 (SKU 215743)  KR BSETTHS15 (SKU 158362)  KR BSETTHS20 (SKU 158363)  KR BT15 (SKU 158358)  KR BT20 (SKU 158359)</p> <p><b>Shower Taps</b>  KR SHST (SKU 158360)</p> <p><b>Laundry Taps</b>  DB LCS (SKU 215744)  DB LT (SKU 219649)  KR LCS (SKU 158369)  KR LT (SKU 158368)</p> <p><b>Kitchen Set</b>  DB XSS (SKU 215745)  KR XSS (SKU 158365)  TR XSS (SKU 158385)</p>

## Product description

Diablo and Krosstina tapware with individual handles for hot and cold. The ranges include basin, bath, shower, laundry and kitchen taps as broken down in the above list.

## Relevant Building Code Clauses

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

**E3 INTERNAL MOISTURE E3.3.5**

**G12 WATER SUPPLIES G12.3.5, G12.3.7**

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

**H1.2**

## Contributions to Compliance

**B2.3.1 Durability:** Made from brass and with solid metal handles, the Diablo and Krosstina tapware ranges come with a 5 year warranty including the brass mechanism.\*\* The mechanism used in the range is European. The colour finish is from chromium electroplating, which wears well over many years with simple maintenance.

The kitchen sink set comes with 15mm eccentrics in solid brass. Only high quality german flow regulators from Neoperl are used in the Kitchen Sink Sets, which reliably limit flow to 9 litres per minute to achieve the 3 star water efficiency rating under WELS for both mains and low pressure situations.

**E3 Internal Moisture: E3.3.5** The smooth surfaces of the chrome plated Diablo and Krosstina tapware are easy to wipe clean thereby minimising mould growth and surface contamination.

**G12 Water Supplies G12.3.5** These fixtures are intended so that 1 of a pair is to supply hot water and the other to supply cold water as required for utensil and personal washing, showering or bathing. Laundering is excluded from this requirement as some washing machines only require cold water to function. In that instance one laundry tap or laundry conversion tap may be used.

**G12.3.7** Each tap delivers sufficient flow for correct functioning under normal conditions. In fact, these ranges operate on pressures as low as 20kPa. For unequal pressure environments, the Kitchen Sink Sets are set up so that high cold water pressure is less likely to backflow through the body into the hot water line, back into the hot water cylinder, and out onto the roof, thereby wasting water and energy. (See Conditions of Use for the details of what is supplied to achieve this.)

The Telephone Bath Sets also come with a double non-return valve on the shower hose to prevent back-flow of contaminated water through the line and into the main water supply, if the handshower head was accidentally dropped into the dirty bath water.

**H1 Energy Efficiency: H1.2** All the products in the ranges that are covered by WELS, the Water Efficiency Labelling Scheme, are listed below. The Kitchen Sink Sets achieve their WELS rating with the use of a high quality german Neoperl pressure compensating aerator (PCA) for mains pressure. On low pressure installations, the PCA is not used. The german Neoperl grey flow guide is used instead. The bath sets achieve their mains pressure rating by way of a pressure compensating washer (PCW) for installation into one end of the shower hose. (See Conditions of use for more information).

## WELS Ratings

DB 1BASIN, KR 1BASIN	4* Mains Pressure (7.5 l/min), 3* Low Pressure (9 l/min)
DB BASSET, DB BASSETLS, KR BASSET, KR BASSETLS,	4* Mains Pressure (7.5 l/min), 4* Low Pressure (9 l/min)
DB BSETTHS15, DB BSETTHS20 KR BSETTHS15, KR BSETTHS20	3* Mains Pressure (9 l/min), 3* Low Pressure (9 l/min)
DB XSS, KR XSS	3* Mains Pressure (9 l/min), 1* Low Pressure (16 l/min)
DB BAST, KR BAST	0* Mains Pressure (50.0 l/min), 0* Low Pressure (18 l/min)

## Scope of Use

The Diablo and Krosstina Tapware 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.

## Conditions of Use

The Diablo and Krosstina tapware should be installed by a registered plumber following best practice.

The Kitchen Sink Set is supplied ready for low pressure environments with a german Neoperl grey flow guide installed. A separate pressure compensating aerator (PCA) is supplied for installation into the aerator for mains pressure situations. This is required to achieve the WELS water efficiency rating.

The kitchen sink sets and the bath sets with telephone handshower are wall mounted and have inlets which are 150mm apart (centre to centre). Included is a pair of eccentrics which allow for the hot and cold pipes coming out of the wall to be up to 204mm apart, centre to centre. If this is still not wide enough, extra long eccentrics can be purchased which allow for centres up to 265mm apart. The kitchen sink set comes with 15mm eccentrics. The bath set comes with either 15mm or 20mm eccentrics indicated at the end of each code. The extra long eccentrics only come with 15mm inlets.

Low pressure environments typically mean low pressure hot water and high pressure cold water. The sheer force of the cold water can result in backflow of cold water 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 tap to reduce the risk of a backflow situation from occurring. The Kitchen Sink Sets and Bath Sets in have a high quality, german Neoperl ENT flow regulator for installation in the cold eccentric which is designed to limit the flow on the cold water line to more closely match the hot. This reduces the risk of a backflow issue and also makes it easier to achieve a warm mix during operation.

**Bath Taps, Shower Taps and Laundry Taps** are exempted under the WELS scheme and are therefore not rated.

As mentioned under the Energy Efficiency section the bath sets with telephone handshower are supplied with a pressure compensating washer (PCW) for installation into the mixer end of the shower hose to achieve its WELS rating. The PCW should be installed so that the flow of water is towards the side with the little black oring. On low pressure installations, the PCW is not used.

There are 2 reasons for installing the PCW into the mixer end of the shower hose. Firstly, because the hose is then more flexible and secondly because it prevents the shower hose taking the brunt of any build up of pressure that might occur behind the PCW.

The Bath set also comes with a double non-return valve to prevent back-syphoning of contaminated water through the line and into the main water supply.

The **Basin Taps** are zero rated for WELS, which can be advantageous in very low pressure situations.

All the tapware is 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.)

## **Maintenance Requirements**

Chromium electroplated tapware is amongst the hardest of fixture coatings. However, to keep tapware looking good for longer, avoid using spray cleaners which over time can attack the chrome finish. Instead, wipe regularly using a mild detergent and a soft damp cloth. Then wipe dry with a clean cloth.

To prevent mould growth in the laundry or bathroom, 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, showering and bathing.)*

Sometimes debris in the water line can make its way into the aerator at the end of the spout of the kitchen sink set. 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 metal-on-metal damage to the aerator ring.

## **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, Italy, Germany
<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

## Building code performance clauses

All relevant building code performance clauses listed in this document:

### B2 DURABILITY

**B2.3.1** *Building elements* must, with only normal maintenance, continue to satisfy the performance requirements of 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.

### G12 WATER SUPPLIES

**G12.3.5** Sanitary fixtures and sanitary appliances must be provided with hot water when intended to be used for a) utensil washing; and b) personal washing, showering or bathing.

**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).