

Approved Water Supply Products & Materials List

(Revision Date: March 2015)

Introduction

This document lists products and materials that are approved for use in Kāpiti Coast District Council water supply network. The list is generally restricted to pipeline fixtures and fittings. Specialised items, such as pumps, radio transmitters and electrical components, are not included in this list. Prior to design, the designer should confirm the specifications for these specialised items with the Water Assets Manager.

Where a product is not listed, it should be assumed that the product has not been approved. Confirmation can be sought from Water Assets Team.

To apply to have a product included on the register, consideration should be made towards the Council's material specifications prior to any application. Any application should be lodged with Council for further consideration.

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WS-01: Water Supply Pipes



Product	Notes	KCDC
Concrete Lined Ductile Iron Pipe (AS/NZS 2280) – Pentair	<ul style="list-style-type: none"> • Must be used with Tyton-lok rings and PN35 pipe; standard Tyton rings used elsewhere • Polyethylene wrap used where ground conditions or specifications require. Alternative coating may be considered by Council upon application 	✓
Concrete Lined Ductile Iron Pipe (AS/NZS 2280) – Saint Gobain PAM pipe (AS/NZS 2280)	<ul style="list-style-type: none"> • Is NOT certified to be used with restraining rings. • Polyethylene wrap used where ground conditions or specifications require. Alternative coating may be considered by Council upon application 	✓
Concrete Lined Ductile Iron Pipe (AS/NZS 2280) – Humes AS/NZS 2280 DICL pipe (Ø150 & Ø200 PN35 only)	<ul style="list-style-type: none"> • Must be used be used with restraining rings. • Polyethylene wrap used where ground conditions or specifications require. Alternative coating may be considered by Council upon application 	✓
Concrete Lined Ductile Iron Pipe (AS/NZS 2280) – Gillies Hydrotite AS/NZS 2280 DICL pipe (Xingxing - <i>provisional</i>)	<ul style="list-style-type: none"> • Must be used be used with restraining rings. • Polyethylene wrap used where ground conditions or specifications require. Alternative coating may be considered by Council upon application 	✓
Concrete Lined Ductile Iron Pipe (BS EN 545)	<ul style="list-style-type: none"> • Proprietary rubber ring joints. Polyethylene wrap to be used in all situations. Alternative coating may be considered by Council upon application 	✓
MPVC, RRJ Series 2 (AS/NZS 4765)	<ul style="list-style-type: none"> • Min pressure classification 12 kPa 	✓
UPVC, RRJ Series 2 (AS/NZS 1477)	<ul style="list-style-type: none"> • Min pressure classification 12 kPa 	✓
PE80b (MDPE) (AS/NZS 4130)	<ul style="list-style-type: none"> • Approved for pipes 63mmOD or less, pressure rating PN12.5 • Blue jacketed for water pipe • White jacketed for wastewater pressure mains 	✓
PE100 (AS/NZS 4130)	<ul style="list-style-type: none"> • Approved for pipes >= 100 mmID, min pressure rating PN12 with either Royal Blue jacketed or stripped for water pipes and white/cream jacketed/stripped for wastewater • Butt welding the required jointing method. • May approve electro-fusion jointing for tie ins with existing. Refer Electro-fusion Fittings. • Note: shall be blue jacketed for water use • Shall be white jacketed for wastewater pressure mains and white lined for gravity mains 	✓

Product	Notes	KCDC
Concrete lined mild steel (NZS 4442) - Steel Pipe NZ	<ul style="list-style-type: none"> • Externally coated with an approved tape wrapping system unless alternative approved • "Speed-steel" couplings rated to the min PN16 pressure 	☑
Sintalock concrete lined steel (AS 1579)	<ul style="list-style-type: none"> • For pipe 600mm nominal bore or smaller • Choose equivalent min. wall thicknesses in-line with NZS 4442 Table 2 Column B or as specified in the specification 	☑
ABS (AS/NZS 3518)	<ul style="list-style-type: none"> • For pump station pipe work. Generally not used in underground applications. 	☑

Note: All pipes shall be rated to the appropriate pressure class as defined in each Council's code of practice.

WS-02: Bends, Tees & Connectors

All flanges to be round and to AS/NZS 4087 PN16.

Dress sets shall be 316 S/S and Denso 2-pack system wrapped.



Product	Notes	KCDC
Ductile iron bends, tees, tapers, spools (AS/NZS 2280)	<ul style="list-style-type: none"> Fittings shall be protected from corrosion by a factory applied coating; eg Rilsan, Levasit etc. Series 2. 	✓
Push-lok compression fittings (for PE80b only) (AS/NZS 4129)	<ul style="list-style-type: none"> All 50 and 63 OD straight connectors to be PLASSON. All other connectors may be Push-lok 	✓
Alprene compression fittings (for PE80b and PE100) (AS/NZS 4129)	<ul style="list-style-type: none"> All 50 and 63 OD straight connectors to be PLASSON. Alprene may be used for all other connections if Push-lok unavailable or if used on PE100. 	✓
Plasson compression fittings (for PE80b and PE100) (AS/NZS 4129)		
Electrofusion couplings (see Electrofusion fittings)		✓

Notes:

All compression fittings used on PE80b or PE100 shall be supplied complete with internal insert.

Other fittings may be considered by Water Assets Manager upon written application.



WS-03: Gate valves – Resilient Seated

All flanges to be round and to AS/NZS 4087 PN16.

Dress sets shall be 316 S/S and Denso 2-pack system wrapped.

Product	Notes	KCDC
AVK series 57 (NZS/AS 2638.2)	<ul style="list-style-type: none"> • \geq 100mm nominal diameter, anti-clockwise closing 	<input checked="" type="checkbox"/>
Hawle E2 (NZS/AS 2638.2)	<ul style="list-style-type: none"> • \geq 100mm nominal diameter, anti-clockwise closing 	<input checked="" type="checkbox"/>
Pentiar (NZS/AS 2638.2)	<ul style="list-style-type: none"> • \geq 100mm nominal diameter, anti-clockwise closing 	<input checked="" type="checkbox"/>
Challenger (NZS/AS 2638.2)	<ul style="list-style-type: none"> • \geq 100mm nominal diameter, anti-clockwise closing 	<input checked="" type="checkbox"/>
Sufa (NZS/AS 2638.2)	<ul style="list-style-type: none"> • \geq 100mm nominal diameter, anti-clockwise closing 	<input checked="" type="checkbox"/>

Note: Other valves may be considered by Water Assets Manager upon written application if certified to (NZS/AS 2638.2).



WS-04: Gate valves – Metal Seated

Product	Notes	KCDC
Maxiflow DZR Brass (AS 1628)	<ul style="list-style-type: none"> To be used for 50mm nominal bore or less. All T-bar type. All clockwise closing. 	☑



WS-05: Service Valves Manifolds (Tobies)

(Gate valves can also be used as service valves for services larger than 32mmID)

Product	Notes	KCDC
DR Brass Manifold (20 mm NB) - Acuflo	<ul style="list-style-type: none"> GM900 with dual-check valve as per Standard Drawing WS-014. 	☑
DR brass diaphragm valve (20 mm NB) - Acuflo	<ul style="list-style-type: none"> Only where insufficient room for manifold. Must be installed with downstream Wilkins dual-check valve. 	☑
Dual Restrictor Manifold DR Brass Manifold (20 mm NB) - Acuflo	<ul style="list-style-type: none"> GM900 with 15mm restrictor and dual-check valve as per Standard Drawing WS-015. 	☑

Note: Other manifolds may be considered by Water Assets Manager upon written application.

WS-06: Hydrants



Product	Notes	KCDC
AVK Series 29 Hydrant (NZS 4522)		☑
Torq-lok 2 (NZS 4522)	<ul style="list-style-type: none"> Limited availability 	☑
Gillies Metaltech Hydrant (NZS 4522)		☑
Tyco hydrant (NZS 4522)		☑

Notes:

All hydrants shall be clockwise closing and without frost plugs.

Other hydrants may be considered by Water Assets Manager upon written application where certified to NZS 4522, tall pattern.



WS-07: Polyethylene Electro-fusion Fittings

Product	Notes	KCDC
Frialen (AS/NZS 4129)		✓
Agru (AS/NZS 4129)		✓
Plasson (AS/NZS 4129)		✓
George Fischer (AS/NZS 4129)		✓
Innogaz (AS/NZS 4129)		
Durafuse (AS/NZS 4129)		✓
Plasson (AS/NZS 4129)		✓

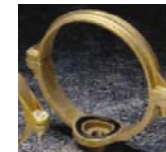
Notes:

*Other fittings may be considered by Water Assets Manager upon written application if certified to AS/NZS 4129.
All tapping saddles to utilise fully encircled welding clamps.*



WS-08: Polyethylene Compression Fittings

Product	Notes	KCDC
Talbot Pushfit (AS/NZS 4129)	For use on PE80b only Up to 63mm OD only To be used with inserts	<input checked="" type="checkbox"/>
Philmac Metric (AS/NZS 4129)	For use on PE80b and PE100 Up to 63mm OD only	<input checked="" type="checkbox"/>
Plassim (AS/NZS 4129)	For use on PE80b only Up to 63mm OD only	<input checked="" type="checkbox"/>
Plasson "Series One" (AS/NZS 4129)	For use on PE80b and PE100 Up to 63mm OD only	<input checked="" type="checkbox"/>
Hansen "Easy Fit" (AS/NZS 4129)	For use on PE80b and PE100 Up to 63mm OD only	<input checked="" type="checkbox"/>



WS-09: Tapping Connections

Product	Notes	KCDC
Plasson PN16 mechanical tapping saddle (PE80b)	DZR Brass or LG2 Gunmetal.	<input checked="" type="checkbox"/>
RX Fittings (for PE80b pipe only)		<input checked="" type="checkbox"/>
LG2 or Aluminium bronze tapping band. Fully encircled, metal to metal seating and hydraulically activated lip seal - Giltech		<input checked="" type="checkbox"/>



WS-10: Mechanical Couplings

Only to be used for transition joints from new to existing mains and repairs.
Not as a standard pipe jointing method.

Mechanical flange adapters to have round flanges and to AS/NZS 4087 PN16.

Dress sets shall be 316 S/S.

All mechanical couplings to be Denso 2-pack system wrapped.

Product	Notes	KCDC
Viking Johnson range	<ul style="list-style-type: none"> Approved when restrained against seismic movement 	<input checked="" type="checkbox"/>
AVK Supacoupler range	<ul style="list-style-type: none"> Approved for < = DN600 mm pipe lines 	<input checked="" type="checkbox"/>
Tyco Vari-Gib	<ul style="list-style-type: none"> Approved for < = DN600 mm pipe lines 	<input checked="" type="checkbox"/>
Maxi Coupling	<ul style="list-style-type: none"> Approved for < = DN600 mm pipe lines 	<input checked="" type="checkbox"/>

Notes:

All installed mechanical couplings shall be protected using the Denso paste and minimum 2 pack Denso wrapping system.

Other couplings may be considered by Water Assets Manager upon written application if certified to AS/NZS 4998 for fitting sizes less than 400 mm.

WS-11: Water Meters



Product	Notes	KCDC
Sensus (formerly Socam and Meinecke)	<ul style="list-style-type: none"> In-line and 20mm manifold type meters >= 50mm Combination meters 	<input checked="" type="checkbox"/>
Elster-Kent	<ul style="list-style-type: none"> In-line and 20mm manifold type meters >= 50mm Combination meters 	<input checked="" type="checkbox"/>
Itron (formerly Actaris and Neptune)	<ul style="list-style-type: none"> In-line meters only 	<input checked="" type="checkbox"/>
Sappel (Diehl)	<ul style="list-style-type: none"> In-line and manifold meters 	<input checked="" type="checkbox"/>
Magflow Meters - ABB Magmaster - Aquamaster - Water Master	<ul style="list-style-type: none"> >= 100mm Magnetic flow meter. Check with Council for Scada and electrical requirements 	<input checked="" type="checkbox"/>

Note: All meters must comply with the requirements of OIML R49 (Class C).





WS-12: Surface Boxes

Product	Notes	KCDC
Fire Hydrant Box - Humes	<ul style="list-style-type: none"> • Heavy duty cast iron lid • Manufactured to BS750 • Lid 250 x 420mm • To be painted YELLOW in accordance SNZ/PAS 4509 • Single piece lid marked with FH. 	<input checked="" type="checkbox"/>
Sluice Valve and Gate Valve Box - Humes	<ul style="list-style-type: none"> • Heavy duty cast iron square lid • Single piece lid marked with SV or GV (as appropriate) • Lid 225 x 250mm painted WHITE. 	<input checked="" type="checkbox"/>
20mm Manifold & Meter Box -Acuflow AMB 300 or 350	<ul style="list-style-type: none"> • Blue plastic lid marked with WATER • Lid 210 x 260mm. 	<input checked="" type="checkbox"/>
Heavy Duty 20mm Meter Box - Humes	<ul style="list-style-type: none"> • Heavy duty cast iron • For areas and commercial vehicle crossings • Manufactured to BS750 • Lid FH size 250 x 420mm, to be painted BLUE • Single piece lid marked with METER or WM. 	<input checked="" type="checkbox"/>

Note:

Other surface boxes may be used on specific jobs with written approval from the Water Asset Manager.



WS-13: Other Items

Product	Notes	KCDC
Mainscock – Tita gunmetal in-line ball valve	<ul style="list-style-type: none"> Used mostly when tapping under pressure. 	✓
Check valve – AVK Ball Check (DN50 only)		✓
Check valve – AVK Swing Check	<ul style="list-style-type: none"> For mains 80 mm and above 	✓
Pressure Reducing Valve – Bermad	<ul style="list-style-type: none"> To be installed as per standard detailing 	✓
Pressure Reducing Valve – Cla-Val	<ul style="list-style-type: none"> To be installed as per standard detailing 	✓
Back Flow Preventor – Wilkins-Zurn, Watts, Febco or Pentiar ValCheQ. To comply with AS/NZS 2845.1	<ul style="list-style-type: none"> BFP type to be determined by Council in conjunction with activity hazard class. 	✓

Notes:

Other items may be used on specific jobs with written approval from the Water Asset Manager.

Consultation with the Council's Subdivision and Development Principles and Requirements should be carried out prior to application. Refer front page of this document for weblink.