



Crane Copper Tube

COPPER TUBING → TUBING SYSTEMS → RECYCLED WATER

Recycled Water Tube

SUPERIOR SOLUTIONS, FOR A
SUSTAINABLE ENVIRONMENT



Crane Copper Tube is the premium choice for project managers and plumbers of recycled water piping. International research has shown that the presence of harmful micro-organisms in water is reduced significantly when transported in copper pipes. In contrast, it was demonstrated that micro-organisms multiplied considerably in water exposed to non-copper pipe materials, under identical conditions.*

Recycled Water – Uses and Restrictions

There are strict regulations of how recycled water can be used safely, as follows:

Recycled water applications

- ✓ Garden watering and irrigation
- ✓ Toilet flushing
- ✓ Filling ornamental ponds
- ✓ Car washing
- ✓ Construction and industry

Recycled water must NOT be used for:

- ✗ Drinking
- ✗ Cooking
- ✗ Personal washing (baths, showers and hand basins)
- ✗ Household cleaning
- ✗ Washing clothes
- ✗ Irrigation of fruit trees where fruit is eaten raw or unprocessed
- ✗ Swimming pools

Recycled water – tapping a new source



Climate change and increased urbanisation are imposing a huge burden on our precious drinking water supplies. Communities and governments Australia-wide are facing the stark realisation that water is a limited resource.

Recycling water, through the installation of dual pipe systems, has the potential to reduce our demand for essential drinking water by as much as 50%. Experts agree that recycling is set to become a key strategy in building a sustainable water supply solution.

Recycled water originates from wastewater, collected from homes and businesses and diverted to a wastewater treatment plant where it passes through a series of purification processes, in accordance with national recycled water quality standards.

The process includes treatment to reduce undesirable substances such as coliforms and brings the recycled water up to Class A standard[†], a rating that makes it suitable for a wide range of uses but unsuitable for drinking purposes.

Dual drinking water and recycled water piping systems are being installed at a number of new housing developments and industrial sites, and an extended program of these projects is predicted.

The two water supplies will have their own water meter with the recycled water supply being clearly marked a purple-lilac colour. All plumbing that is connected to the recycled water supply, including taps and pipelines, must also be colour-coded purple-lilac.



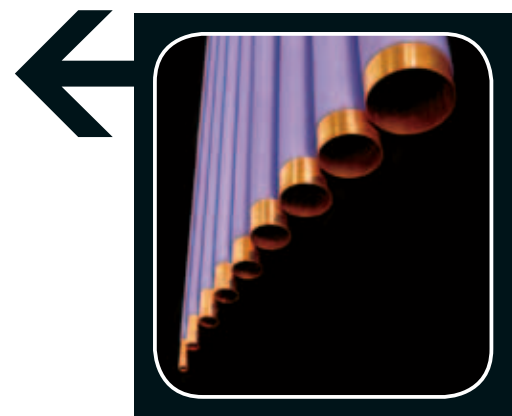
* Study conducted by INCRA under project no. 348 – 1984 using water contaminated with coliforms.
[†]Class A standard refers to the EPA Victoria guidelines "Use of reclaimed water". Slightly different guidelines may be applied by your local authority.

Recycled Water Tube Range

Crane Copper tubing is compliant with all relevant Australian Standards.

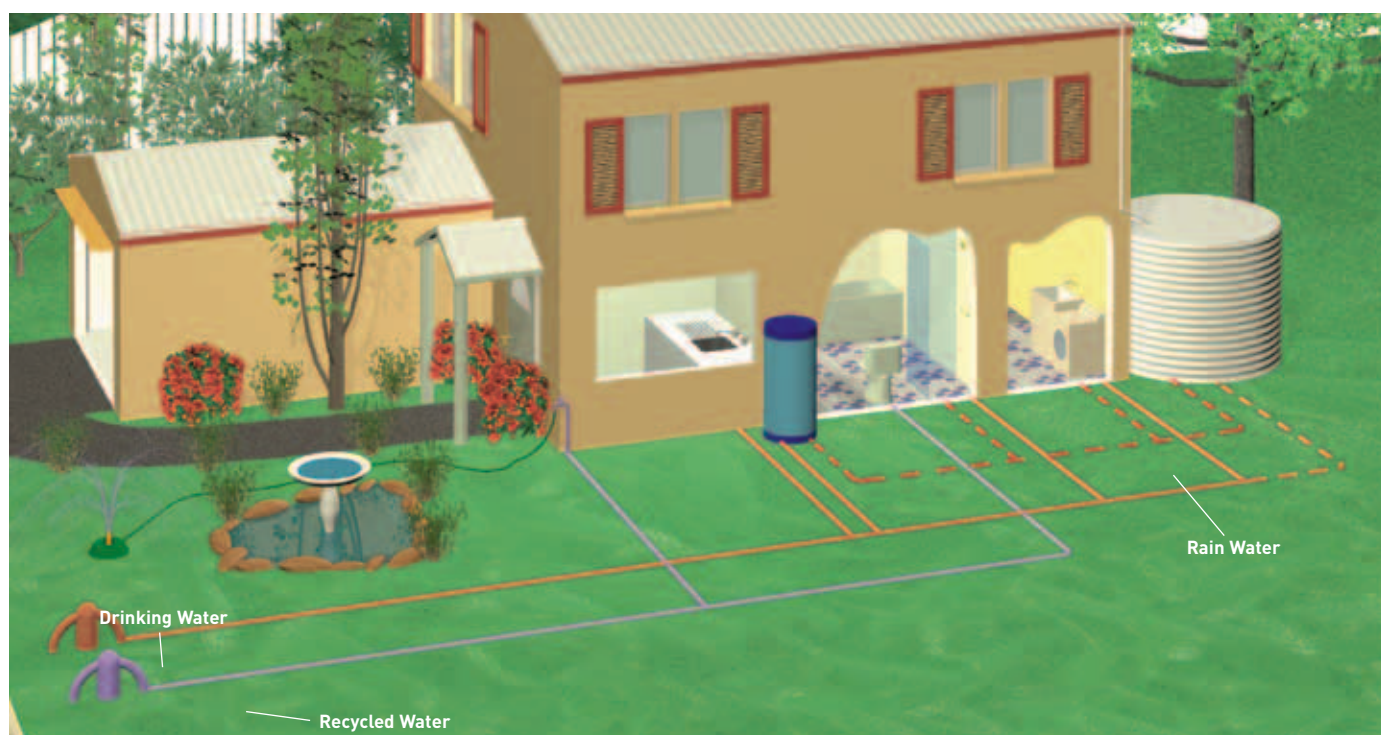
Crane Copper Tube's range of Recycled Water Tube is clearly marked with purple-lilac sleeving and is labelled 'RECYCLED WATER-CAUTION NOT FOR DRINKING'.

Crane Copper Tube's Recycled Water tube range is manufactured in Type B copper tube to comply with Australian Standard **AS 1432-2004: "Copper tubes for plumbing, gasfitting and drainage applications"**.



Standard Product Range

Crane Item number	Nominal size	Outside Diameter (mm)	Wall Thickness (mm)	Imperial Equivalent O.D. and swg	Nominal Weight (kg/m)	Form	Temper	Safe working pressure (kPa)
50103340	DN 15	12.70	0.91	1/2"x20	0.301	6m straight	Bendable	5290
50103341	DN 20	19.05	1.02	3/4"x19	0.517	6m straight	Bendable	3970
50103342	DN 25	25.40	1.22	1"x18	0.829	6m straight	Hard drawn	3500
50103343	DN 32	31.75	1.22	1 1/4"x18	1.046	6m straight	Hard drawn	2780
50103344	DN 40	38.10	1.22	1 1/2"x18	1.264	6m straight	Hard drawn	2300
50103345	DN 50	50.80	1.22	2"x18	1.699	6m straight	Hard drawn	1710
50103346	DN 65	63.50	1.22	2 1/2"x18	2.134	6m straight	Hard drawn	1370
50103347	DN 80	76.20	1.63	3"x16	3.414	6m straight	Hard drawn	1520
50107632	DN100	101.60	1.63	4"x16	4.577	6m straight	Hard drawn	1200



■ Recycled Water Pipeline

For use with toilet flushing and external taps. (Appearance: copper tube with purple-lilac sleeving).

■ Drinking Water Pipeline

For use in the house except toilet flushing. May optionally be used to top up the rainwater tank if installed and therefore not used in the bathroom, laundry and hot water system. (Appearance: bare copper tube).

■ Rainwater Pipeline (Optional)

Optionally for use in the bathroom, laundry and hot water system instead of using the Drinking water. (Appearance: bare copper tube, some authorities may also require labels applied stating that it is rainwater).

The diagram above illustrates how a dual water supply can be structured, which includes an optional rainwater tank. (Note: this picture is for general information only and depicts a layout that may not be in accordance with some local authority regulations, as these vary across Australia.)

Check procedure for cross connections

To ensure the proper installation of drinking and recycled water services it is essential that all connections are checked for any cross over. Cross connections between drinking and recycled water services must be checked throughout the installation process or modification of pipework. The system should also be tested directly after any plumbing work is undertaken.

The following is a recommended procedure for testing for cross connection between drinking water and recycled water pipes installed within a property.

1. Turn off the drinking water supply at the meter. Leave the Recycled water on.
2. Turn on all sink, basin, bath and shower taps (both hot and cold water). These should run dry within a short period of time.
3. Turn on any external taps not clearly labelled as recycled water. These should also run dry within a short period of time.
4. Flush all toilets. These should refill normally provided that they are connected to the recycled water supply.
5. Turn on all recycled water taps (external taps). These should also work normally provided they are connected to the recycled water supply.
6. Close all taps and turn the recycled water supply off at the meter.
7. Turn back on the drinking water supply at the meter.
8. To check appliances within the home such as washing machines and dishwashers, run the recycled water supply dry by turning on outside taps or/and flushing the toilets. Then, turn on the internal appliances. If the appliances do not fill, they are connected to the incorrect supply.
9. Turn back on the recycled water supply at the meter.

Reasons to insist on Crane Copper Tube

- Copper reduces the number of harmful micro-organisms in water
- Made to a industry standard size not a unique brand size
- Copper is a 100% recyclable material
- Copper does not become brittle with age or exposure to sunlight
- Neater installations because of straight lengths of copper tube

Note: At the time of printing, local authorities were still developing recycled water regulations. For this reason, some information in this brochure may not be consistent with your local authorities regulations and should be used as a guide only.

Crane Copper does not warrant that the information in this brochure is accurate or without errors or omissions. Crane Copper reserves the right to correct any errors or misprints. Installation of dual pipe systems must be conducted by competent, accredited tradespersons in accordance with current relevant standards.

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