



## 1.0 Product Overview and Technical Details

### Eco-Duo 90 Degree Street Elbow

W1517 CP Eco-Duo 90 Degree Street Elbow for 15mm  
W1518 CP Eco-Duo 90 Degree Street Elbow for 22mm  
W1519 CP Eco-Duo 90 Degree Street Elbow for 28mm  
W1520 CP Eco-Duo 90 Degree Street Elbow for 35mm  
W1521 CP Eco-Duo 90 Degree Street Elbow for 42mm  
W1522 CP Eco-Duo 90 Degree Street Elbow for 54mm  
W1523 CP Eco-Duo 90 Degree Street Elbow for 66.7mm  
W1524 CP Eco-Duo 90 Degree Street Elbow for 76.1mm

The fittings and tube shall be drawn from the Eco-Duo Copper Press fittings (available from Water Kinetics), manufactured from copper with EPDM 'O' rings. These fittings are for jointing copper tube and are available in sizes 15mm to 76.1mm. The fittings shall incorporate a "leak before press" facility offering a final check of the system to provide instant identification of joints that are assembled correctly but left unpressed. The fittings shall also offer electrical continuity.

Where pressure/temperature gauges, binder points or drain offs etc are required the Eco-Duo Confluence Tee should be used.

Suitable applications include hot & cold potable water services (Eco-Duo is not suitable for heating systems)

Eco-Duo fittings are exempt from the Pressure Equipment Directive (PED 1999) unless they are incorporated into pressure equipment falling within its scope.

### Tube compatibility

Eco-Duo Copper fittings are suitable for connecting to the following:

BS EN1057 – copper pipes with a hardness rating R250 (half hard) BS EN1057 – Copper pipe with a hardness rating of R290 (hard)



## Pressure And Temperature Ratings

### Copper Fittings

Temperature (Degrees C)	Maximum Pressure
-24 to 110	16 Bar (throughout the temperature range)

For high working pressure applications contact the Water Kinetics technical help desk.  
(NB: For products used in water systems, working temperatures of less than 4 degrees C can only be achieved if antifreeze is added to the system).

## 2.0 Installation

### 2.1 Electrical Continuity

All metallic pipe work should comply with the equipotential bonding requirements of the current edition of the IEE wiring regulations (BS 7671: 2001). After all plumbing work has been completed continuity checks are to be conducted by a qualified electrician in accordance with regulations.

### 2.2 Heat Free

The Eco-Duo Ranges offer heat free jointing - Do not braze Eco-Duo copper tubes or fittings.

### 2.3 Insulation

Water Supply (Water Fittings) Regulations and Building Regulations 1999. Always use suitable insulation

### 2.4 Dissimilar Metals

The UK Water Regulations recommend that tubes and fittings made from different types of metals shall not be connected directly together except where galvanic action is unlikely or where effective measures are taken to prevent it. Galvanic corrosion is a process whereby the materials that come in to contact with each other oxidises or corrodes. If you are in doubt, we recommend you refer to the full and detailed information provided in Water Regulations Guide (G2.11 and R3.2), or by contacting the Water Regulations Advisory Scheme [info@wras.co.uk](mailto:info@wras.co.uk).



## **2.5 Press Fit Tooling**

Water Kinetics Ltd do not manufacture press fit tools but REMS and NOVOPRESS are the two recommended manufacturers for the Eco-Duo ranges. (Please check Eco-Duo installation information for correct jaw and power supply details).

## **2.6 Pre Installation - Health and Safety**

Before starting work on any installation a risk assessment must be made to consider the possibility of operational limits being exceeded and reduction or elimination of any potential hazards. Protective clothing and safety equipment must be utilised as appropriate to the hazard presented by the nature of the process of the installation.

The system shall be installed all in accordance with the manufacturer's installation recommendations.

## **3.0 Testing**

Eco-Duo Copper installations may be tested to 1.5 times their normal working pressure at ambient temperature to a maximum of 16 bar. If higher test pressures are required advice should be sought from Water Kinetics Limited.

## **3.1 Additives**

It is strongly recommended to consult a commissioning engineer in conjunction with the manufacturer prior to their use.

## **3.2 Warranty**

Eco-Duo is guaranteed against all manufacturing defects for 25 years when installed as a system using Eco-Duo copper tube.

## **3.3 Certification**

Eco-Duo Copper Fittings have WRAS approval on all sizes



### **3.4 Storage**

Eco-Duo Copper tube and fittings must be protected against dirt and damage whilst in transit and being stored.

The fittings should be kept in the packaging until point of use.

### **4.0 Contact Details**

For further details please contact our technical department: **0141 280 9585**

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