

<b>Test Code Sheet Number</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>13</b>
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WRAS TEST & ACCEPTANCE CRITERIA

Issue No: 1  
Date of issue: May 2012

Sheet 1 of 1

TEST CODE SHEET

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**1. TYPE OF TEST(S)**

Tension - (Resistance to pull-out of assembled joint - single pull)

**2. TEST procedure**

Note The test shall be carried out at a temperature of  $20 \pm 10^{\circ}\text{C}$ .

**3. Tests applicable to the following fittings:-**

**Fittings for use with metal pipe, above & below ground where there is no current test code sheet.**

**Fittings for use with plastic pipe, above & below ground where there is no current test code sheet.**

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**TEST CRITERIA FOR FITTINGS FOR USE WITH METAL PIPE, ABOVE & BELOW GROUND WHERE THERE IS NO CURRENT TCS –**

This is based on the current criteria for copper, lead and galvanised pipe.

<b>Nominal pipe size (mm)</b>	<b>12 &lt;16</b>	<b>16&lt;20</b>	<b>20&lt;25</b>	<b>25&lt;32</b>	<b>32&lt;40</b>	<b>40&lt;50</b>	<b>50&lt;63</b>	<b>63</b>
<b>Test Force (KN)</b>	<b>0.60</b>	<b>0.94</b>	<b>1.26</b>	<b>1.97</b>	<b>3.23</b>	<b>5.00</b>	<b>7.80</b>	<b>12.40</b>

**TEST CRITERIA FOR FITTINGS FOR USE WITH PLASTIC PIPE, ABOVE & BELOW GROUND WHERE THERE IS NO CURRENT TCS –**

This is based on the minimum requirements stated in TCS 1314.11 Table 3.

**Note:** Electro-fusion, solder ring and crimped fittings are exempt.

<b>Nominal pipe size (mm)</b>	<b>10 &lt;11</b>	<b>11&lt;15</b>	<b>15&lt;18</b>	<b>18&lt;22</b>	<b>22&lt;28</b>	<b>28&lt;35</b>	<b>35</b>
<b>Test Force (KN)</b>	<b>0.38</b>	<b>0.470</b>	<b>0.705</b>	<b>0.870</b>	<b>1.190</b>	<b>1.960</b>	<b>3.020</b>

Apply the tensile force gradually over a period of 15 - 30 seconds. Hold the specimen in constant tension for a period of 5 minutes + 30, - 0 seconds and at a temperature of  $23 \pm 2$  °C.

Acceptance criteria

The pipe shall not fracture within the fitting or separate from the fitting during the period of the test.

**NOTE:**

**When conducting tensile tests on plastic pipes, yielding of the pipe will not constitute a failure.**