



#### ASTM A497 & A185 TESTING FIXTURE – Application

This testing device is used to determine the shear strength of the welds of welded wire fabric.

As it regards the two standards ASTM A 497 and ASTM A 185, there are no substantial differences, for this reason they use the same test fixture.

From the wire fabric, is cut a weld junction , with the transverse wire extending approximately 1” on each side of the longitudinal wire. The extension of the longitudinal wire is 2 “or more above the junction, and about 5” below. To accommodate wires over a range of diameters the fixture is adjustable. The vee-grooved rollers restraining the longitudinal wire to keep the transverse wire on top of the support platform.

There is a threaded hole on the top of the device. In this way, is guaranteed the attachment to the crosshead of the tensile test machine. The bottom of the longitudinal wire is pulled until the weld fails, this failure load being reported.

Sources of Additional Information:

- ASTM Standard A 497-01 (2001), "Standard Specification for Steel Welded Wire Fabric, Deformed, for Concrete Reinforcement," American Society for Testing and Materials, West Conshohocken, Pennsylvania (first published in 1964).
- ASTM Standard A 185-02 (2002), "Standard Specification for Steel Welded Wire Fabric, Plain, for Concrete Reinforcement," American Society for Testing and Materials, West Conshohocken, Pennsylvania (first published in 1936).