



# ASTM C1609 Fixture

## ASTM C1609 Accessory Package

Designed according to ASTM C78, ASTM C1609

Includes the averaging flex fixture, cage, and two displacement transducers with holders at mid-span mounted on either side of the beam

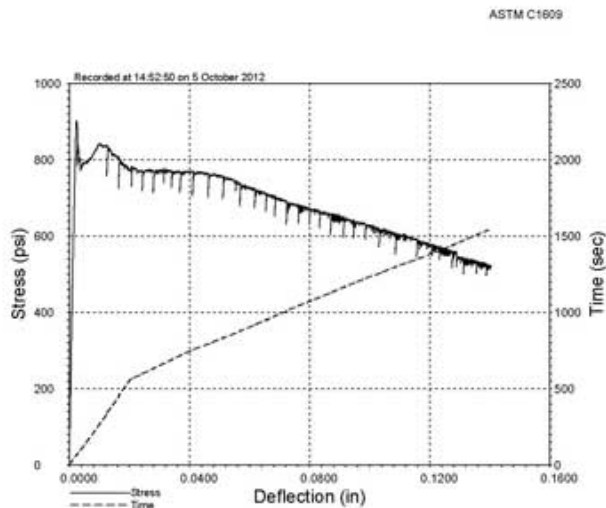
Net deflection is the average of two displacement sensors placed on either side of the specimen. This configuration ensures accurate measurement of mid-span deflection and minimizes errors due to concrete specimen twisting or seating in the supports.

For further information on ASTM C1609 testing, click [here](#).

Item number	FF-100T-C1609
Maximum Capacity	100 kN (22,480lbf)
Upper Bar Length	240 mm with adjustable adapter
Lower Bar Length	500 mm
Roller Diameter	30 mm
Support Options	Moveable in two axes
Temperature range	0 – 180 °C
Material/Finish	Steel
Connection Size*	31.8 mm or 40 mm Female eye end



## MTESTQuattro ASTM C1609 Analysis:



Specimen Identifier: 2  
 Test#: 21  
 Operator: RTG  
 Support Span (in): 18  
 Nose Span (in): 6  
 L/600 Rate 1 (in/min): 0.002  
 L/150 Rate 2 (in/min): 0.007

Test Date: 5 October 2012  
 Start Time: 14:52:50  
 End Time: 15:18:35

Geometry: Beam 3rd  
 Width: 6.2500 in  
 Depth: 6.0000 in  
 Span Length: 18.0000 in  
 Axial Strain Gauge Length: 1.0000 in  
 Transverse Strain Gauge Length: 1.0000 in  
 Area: 12.5000 sq in

### Analysis Results

ASTM C1609/C1609M

Load at 1st Peak	11269 lb
Deflection at 1st Peak	0.0025 in
Strength at 1st Peak	902 psi
Load at Peak	11269 lb
Deflection at Peak	0.0025 in
Strength at Peak	902 psi
Residual Load at L/600	9858 lb
Residual Strength at L/600	773 psi
Ratio at L/600	85.7 %
Residual Load at L/150	7243 lb
Residual Strength at L/150	579 psi
Ratio at L/150	64.3 %
Residual Load at L/300	9085 lb
Residual Strength at L/300	727 psi
Ratio at L/300	80.6 %
Residual Load at L/400	9554 lb
Residual Strength at L/400	764 psi
Ratio at L/400	84.8 %
Toughness at L/600	290 lbin
Toughness at L/150	1061 lbin
Equivalent Strength (fc)	707 psi
Strength Ratio (Rc)	78.5 %