



## ASTM C579B, Load Rate II: Manual Compression Machine Set Up

### MANUAL DETERMINATION OF CROSSHEAD RATE FOR TESTING EPOXY GROUT CUBES IN ACCORDANCE WITH ASTM C 579 B (LOAD RATE II)

#### OVERVIEW

To load a 2 inch x 2 inch (50 mm x 50 mm) cube of epoxy grout at a specified load rate (Load Rate II). ASTM C 579 Load Rate II is 0.125 inches / minute x specimen height of 2 inches = 0.25 inches / minute load rate to properly test a 2 inch epoxy cube.

#### PROCEDURE

Items Required: Depth micrometer; stopwatch

To measure the crosshead travel rate on the compression tester machine:

1. With the hydraulic valve on the compression tester machine fully closed, position a depth micrometer upside down under the load head.
2. Open the hydraulic valve to the first position and allow load head to make contact with the depth micrometer.
3. Using a stopwatch, measure crosshead displacement to obtain a travel rate of 0.125 inches over a 30 second period by opening the hydraulic valve accordingly. (Over a 60 second period this will equate to 0.25 inches per minute as required in ASTM C 579 for a 2 inch epoxy cube.)
4. Take 4 separate readings and average results.

A 4% variation is allowed in readings; readings can be as high as 0.13 and as low as 0.12.

#### REFERENCE

ASTM C 579: "Standard Test Method for Compressive Strength of Chemical-Resistant Mortars, Grouts, Monolithic Surfacing and Polymer Concretes"