



# **Picket fence**

Product Number: DT260

### **Overview**

Picket Fences have eight opaque bars spaced every 5 cm, silk-screened directly onto clear plastic. Drop the picket fence through a photogate to obtain records of position, velocity and acceleration vs time or to measure g.

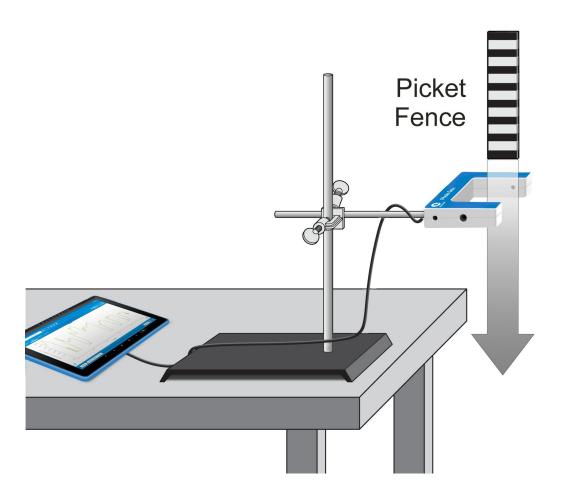
• Dimensions: 338 x 63 x 2.8 mm

• Bars: Each opaque bar is 25 mm wide, with 25 mm between opaque bars

Note: shipped with protective backing. Remove protective backing (may be on both sides) before use

#### How does it work?

Physics students measure the acceleration due to gravity using a wide variety of timing methods. In this experiment, the student will have the advantage of using a very precise timer and a Photogate. The Photogate has a beam of infrared light that travels from one side to the other. It can detect whenever this beam is blocked. You will drop a piece of clear plastic with evenly spaced black bars on it, called a Picket Fence. As the Picket Fence passes through the Photogate, the interface measures the time from the leading edge of one bar blocking the beam until the leading edge of the next bar blocks the beam. This timing continues as all eight bars pass through the Photogate. From these measured times, the software calculates and plots the velocities and accelerations for this motion.



## **Technical support**

Please contact the Fourier technical support team as follows:

Web: <a href="http://fourieredu.com/support/">http://fourieredu.com/support/</a> Email: <a href="mailto:support@fourieredu.com">support@fourieredu.com</a>

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