Raised Curb or Painted Inside Line for Outdoor Running Tracks

The idea that a raised curb and a painted inside line are interchangeable is a common misconception in running track design and construction. Making the decision of which to incorporate in the design process is critical since each has its own implications on the design and the facility’s ongoing maintenance. Using a raised curb, for example, affects the dimensions the track is built to and how it’s striped, and that dimension typically cannot be changed after the fact. A painted inside line, however, is not universally accepted for certain types of competition.

A raised curb is defined as one that is 5 cm (2 inches) or more above the track surface. The curb may be removable, such as an aluminum rail, or may be fixed, such as a concrete curb. The determining factors for dictating a raised curb are set by the rules of the governing body for the competitions to be held at that facility (NFHS, NCAA, or IAAF). This decision must be made prior to construction because it will affect the construction of the entire track and is irreversible. Both high school (NFHS) and collegiate (NCAA) rules allow the use of either a raised curb or a painted inside line; however, the NCAA will not recognize records set on a track without a raised curb. Note that recent NCAA rule changes now only require the raised curb around the radius areas of the track. The IAAF requires the use of a raised curb for all outdoor 400 meter tracks.

The measure line is the theoretical line at which a track is measured to 400 meters. The location of the measure line, and therefore the size of the entire track, changes depending on whether a painted line or a raised curb is used. The use of a painted line inside lane one requires the runner’s edge of that line to be 20 cm from the measure line. The use of a raised curb requires that the runner’s edge of the raised curb be placed at 30 cm from the measure line. This distinction affects the size and dimension of the entire track (see diagram below).
Per NCAA rules as of the publication of this paper, all lanes must be of equal width so that no athlete has an unfair advantage over another. If a rail is used on a track built for a painted inside line, the runner in lane one will be running longer than 400 meters. If a surface is built for a raised curb and run on without a raised curb, the runner in lane one will be running shorter than 400 meters. In order to comply with the rules, a track designed for a raised curb must utilize a raised curb. A competition track designed with a painted inside line cannot be used for competition with a raised curb. Since the raised curb and painted inside line are 10 cm apart with respect to the measure line, all subsequent lines and markings are placed in different locations as well.

Differences in site, weather and soil conditions require variations in construction and repair methods and materials. Readers are advised to consult an ASBA Certified Track Builder, a design professional with experience in designing sports facilities or a qualified contractor before undertaking construction or repair of a running track facility.