



## QMA Soft-Wall Specification

The QMA Soft-Wall Specification is intended to provide a “soft wall” guideline to improve overall driver safety by providing a means to minimize impact at retaining walls.

### I. Specification:

1. Soft walls shall be constructed in a manner as to allow the wall to be “free-floating” from the two end anchor points.
  - a. The corner anchor point shall start at approximately 45 degrees from the apex of the corner as shown in Figure 1.
  - b. The straightaway or end anchor point shall be located at a point at or beyond the midpoint of the straightaway.
  - c. There shall be no anchor points in between, allowing the wall to float freely.
  - d. There shall be a minimum of 12 inches clearance behind the wall allowing the wall to move in the event of impact.
  - e. Ground or track surface shall allow the wall to slide or move upon impact.
2. Soft walls shall be constructed with the following dimensions.
  - a. Walls shall be a minimum of 18 inches high.
  - b. Walls shall be a minimum of 10 inches wide so as to allow the wall to be free-standing. The 10 inch minimum width is also required to minimize the chance of the wall tipping during an impact.
3. All soft walls to be used at a QMA facility shall be in conformance with this specification or shall be approved in writing by the QMA National Safety Director.

### II. General Guidelines and Recommendations:

1. Soft Walls Construction Materials.
  - a. A typical construction method is to use racing or automotive tires between  $\frac{3}{4}$  inch treated plywood or similar materials. The plywood is overlapped approximately 6 inches and bolted through the tires using counter-sunk bolts. This construction allows for a continuous wall and has proven to be very effective.

- b. A material such as Lexan or similar shatter-proof plastic can be used to face the lower 12 to 15 inches of the plywood on the track side to provide a smoother more durable surface allowing slight contact without damage to the wall or race equipment. If Lexan or other material is not used, care should be taken with placement of hardware so as to avoid catching rims and tires that come in contact with the lower portion of the wall. Location and application of hardware at the lower portion of the wall is critical and should be planned for so as to not cause damage to wheels that contact the wall.
- c. An alternative solution for soft walls is a barrier system sold by Scribner Plastics and is successfully deployed at one existing QMA facility.

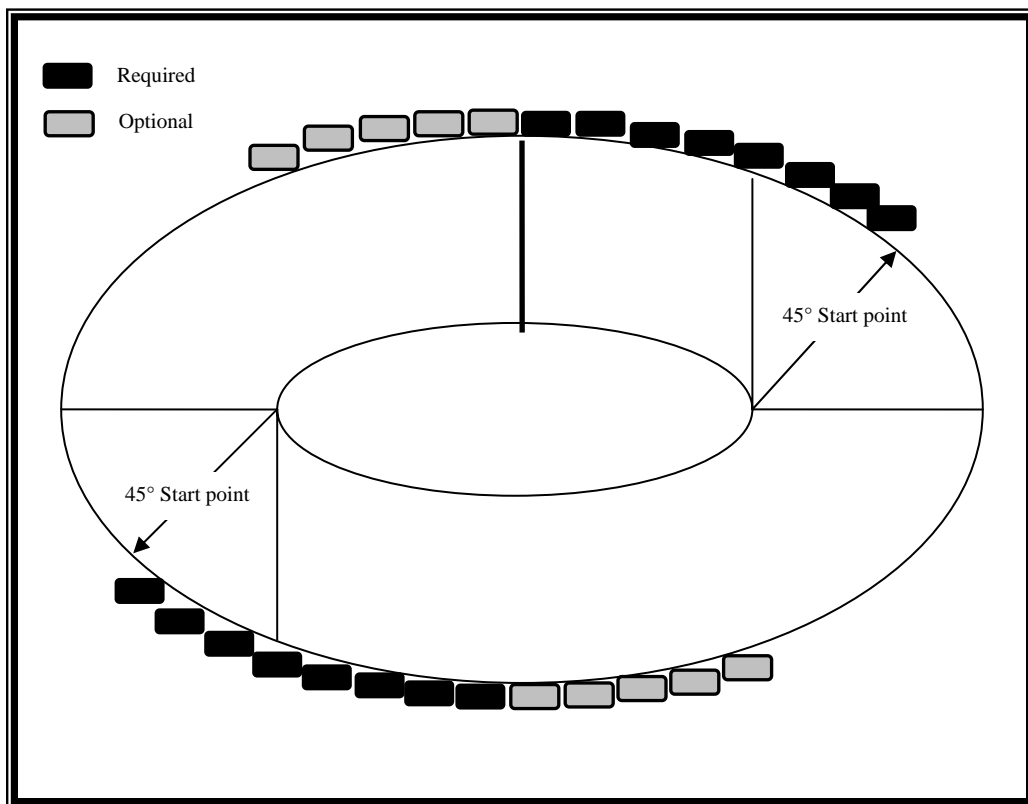


Figure 1. Soft-Wall Layout Diagram