NOTICE: This standard has either been superseded and replaced by a new version or withdrawn.
Contact ASTM International (www.astm.org) for the latest information

Designation: F2336 – 05

AnAmerican National Standard

Standard Guide for Roller Hockey Playing Facilities[1]

This standard is issued under the fixed designation F2336; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

INTRODUCTION

The purpose of this guide is to reach common understanding by providing a guide for the design and construction of roller hockey playing facilities. Attention is called to the alternative dimensions of the playing surface depending upon the type of use and the age of the user.

In the interest of future standardization, it is recommended that surface dimensions of all new facilities be classified in accordance with those found in this guide.

It is recognized that roller hockey playing facilities also are used for figure skating, speed skating, and pleasure skating. Organizers of these sports may adopt the present standard as written, or modify the guide in accordance with their special interests.

1. Scope

1.1 This guide covers the provisions for consistent safety considerations in the design and construction of new roller hockey rinks in order to reduce potential safety hazards. It is intended to standardize game conditions and establish guidelines that will provide a level of conformity for the purpose of competition and reduce potential hazards to players and game officials.

1.2 This guide should be taken into consideration by architects, designers, engineers, construction contractors, and appropriate inspectors who may be involved in the design and construction of new roller hockey rinks. This guide applies to the development of new arenas and to existing facilities that will be renovated.

1.3 This guide takes into consideration that most ice hockey rinks with concrete surfaces can be acceptable for roller hockey. However, dasher boards must meet criteria respective of the specific activity. Facilities designed and constructed for roller hockey may not be acceptable for ice hockey use.

1.4 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

1.5 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ANSI Standard:*[2]

ANSI Z535.2 Product Safety Signs and Labels

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *blue line (optional), n*—blue line, 1 ft (30.5 cm) in width, drawn parallel to and 60 ft (18.3 m) from the goal line and extending up to the top of the boards.

3.1.2 *board cap or railing, n*—wood, plastic, or plastic-coated wood material 3 ± 1 in. (7.62 ± 2.54 cm) in width, attached at right angles to the top of the boards

3.1.3 *center circle, n*—blue circle, 2 in. (5.1 cm) in width, 30 ft (9.1 m) in diameter, whose center point is the midpoint of the center line.

3.1.4 *center face-off spot, n*—circular blue spot, 1 ft (30.5 cm) in diameter, whose center point is the midpoint of the center line circle.

3.1.5 *center line, n*—red line, 1 ft (30.5 cm) in width, that divides the surface into two halves, drawn at right angles to the long axis of the playing surface and extending up to the top of the boards.

3.1.6 *dasher boards, n*—wall of wood or plastic-coated wood, fiberglass, or other high-impact material that encloses and is part of the playing surface; also called the boards.

3.1.7 *enclosure, n*—part of the playing facility that surrounds the perimeter of the surface and consists of a lower section (the kick-plate) that contacts the surface, the boards,

[1] This guide is under the jurisdiction of ASTM Committee F08 on Sports Facilities.

Current edition approved Feb. 1, 2005. Published March 2005. DOI: 10.1520/F2336-05.

[2] Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036.

Copyright © ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. United States

Documents
Document Sharing Hub
Full document details: ASTM F2336-05

and a vertical extension above the boards (the net, chain link, or glass). Together, these three elements are meant to confine the area of play.

3.1.8 *face-off circle, n*—red line, 2 in. (5.1 cm) in width, 30 ft (9.1 m) in diameter, forming a circle whose center point is 22 ft (6.7 m) from the midpoint and 20 ft (6.1 m) away from the back of the goal line.

3.1.9 *face-off spot, n*—circular red spot, 2 ft (61 cm) in diameter, whose center point is the same as the face-off circle. Within each face-off spot, draw two parallel lines 4 in. from the top and bottom of the spot. The remainder shall be painted white. All lines (center, blue, goal, goal crease, face-off circle, and spots) shall be applied below the surface except for placement on the boards.

3.1.10 *kick–plate, n*—portion of the boards that contacts the surface. It is made of a high-impact material and is also part of the playing surface, and should be yellow in color.

3.1.11 *game lines, n*—colored lines drawn on the surface that divide the playing surface into various areas as described in the rules of play.

3.1.12 *goal crease line, n*—red line, 2 in. (5.1 cm) in width, 6-ft (1.83-m) radius, forming a semi-circle with the open end facing the nearest end of the rink and whose center point is the midpoint of the goal line. This area, excluding the red lines, should be painted a light blue color.

3.1.13 *goal frame, n*—two rigid tubular vertical posts 2 in. (5.1 cm) in diameter connected at the top with a crossbar placed on the surface on the goal line, and set 6 ft (1.83 m) apart measured from the inside of the posts. Refer to the appropriate rule book for further information.

3.1.14 *goal net, n*—net of appropriate mesh and cord size to resist the penetration of a high velocity puck shot, connected to the posts and the crossbar. It should be loosely draped over and attached to the metal framework of the goal extending behind the goal line. There shall be a net made of white nylon cord attached to each goal frame which shall be draped in such a manner as to prevent the puck from coming to rest on the outside of it. The net shall be made of three-ply twisted twine (0.130-in. diameter) or equivalent braided twine of multi-filament white nylon with an appropriate tensile strength of 700 lb. The size of the mesh shall be 2½ in. (inside measurement) from each knot to each diagonal knot when fully stretched. Knotting shall be made as to ensure no sliding of the twine. The net shall be laced to the frame with medium white nylon cord no smaller in size than No. 21.

3.1.15 *roller hockey playing facility, n*— playing surface consisting of a horizontal surface surrounded by a vertical enclosure used for the sport of roller hockey. Ensure that the surface along the perimeter of the rink, known as the edge, is flush (to the kick-plate), and without any gaps.

3.1.16 *shielding, n*—transparent, shatter-resistant glass, plastic, net, or chain link, or similar material that is also part of the playing surface and extends above the boards.

4. Structures and Environment

4.1 *Surface Configuration*—Ensure that the sides of the rink are straight and the corners rounded to a 28-ft (8.1-m) radius.

4.2 *Dimensions*—The playing surface shall be in accordance with the following dimensions. The playing surface shall to be 185 ft (56 m) to 200 ft (60 m) in length and 85 ft (26 m) in width. There shall be a minimum of 20-ft clearance above the surface.

4.3 *Dasher Panels*—Dasher panels should be prefabricated in demountable sections. The design of all panels, whether straight section, curved section, or section in which a gate is located, shall be either steel, wood, or aluminum which extends the full height of the dasher panel. This frame shall allow for fastening of the polyethylene or wood facing at each end. This will ensure flush mating of the facing at the dasher panel joints.

4.3.1 *Cap Rail*—A polyethylene or wood cap rail shall be through-bolted to the top horizontal framing member. The surface side of the cap rail shall have a smooth and rounded edge flush with the dasher facing. Color of the cap rail can vary according to the owner's needs.

4.3.2 *Standard Sizes*—Standard size of straight dasher panels shall be 96 in. long by 42 to 48 in. high, and 3.5 to 6 in. (8.89 to 15.24 cm) wide. Standard size of a curved dasher panel shall be 95 in. (2.41 m) long.

4.4 *Gates:*

4.4.1 *Access Gates*—If required, access gates for public skating and other large entry use shall be built into standard 8-ft (2.4 m) sections and can vary from 3 to 5 ft in width. Gate latches shall be a single latch or can be similar to that used on the equipment gates. Gates on the radius shall have two latching points of contact.

4.4.2 *Players' Gates*—Players' gates shall be built into standard 8-ft. (2.4-m) sections and shall be 30 in. (76.2 cm) wide and should swing away from the end of the bench. The gate latch shall be a single latch type. Refer to local ADA requirements.

4.4.3 *Equipment Gates*—Equipment gates shall be double-leaf gates with a 10-ft (3.05-m) opening. Gate latches shall be of sliding bar latch type using 2-in. (5.1-cm) steel tubing. Equipment gate leaves shall lock into a dam by means of a minimum 0.5625-in. (1.43-cm) diameter sliding cane bolt. Each leaf shall be locked in the floor. Each equipment gate and access gate over 3-ft (91.4-cm) wide shall be equipped with adjustable spring-loaded swivel casters.

4.4.4 Where operation of the gate latch is required from the surface side of the doors, a push-button shall be flush mounted in the cap rail to activate the latch system. The button shall be large enough to be operated by players wearing gloves, approximately 1.5 by 5 in. (3.81 by 12.7 cm). The push-button shall be designed to be simple to operate, yet not allow accidental opening.

4.4.5 *Hinges*—Hinges should be suitable materials to prevent breakage and prevent rusting. All hinge assemblies shall be constructed of low-carbon steel. The common hinge bracket shall be bolted to the dasher panel framing to facilitate removal of the hinge assembly. The hinges shall be complete with integral self-lubricating bushings and ball bearings for smooth precision operation. Each hinge shall incorporate a built-in vertical height adjustment feature ±0.31 in. (8 mm). The hinge assembly also shall include a grease zerk fitting for proper lubrication of the bushings or bearings. Use only lithium grease

AVA Documents
Document Sharing Hub

Full document details: ASTM F2336-05