



— RINK —
**TECHNICAL
GUIDELINES**



DEVELOPED 2024



RINK TECHNICAL GUIDELINES

To standardize ice hockey markings across the country and centralize the information available, Hockey Canada has created this line markings guidebook. Hockey Canada encourages facility representatives to consider the benefits of conforming to these layout guidelines whenever possible. New construction and/or retrofits to a facility should consider these measurements, however, other ice sport marking requirements should be overlaid prior to making any changes so that all ice sports are given the same consideration as ice hockey.

The following diagrams are offered as a support tool for facility representatives when planning ice painting activities. As sport evolves, ice markings may change; facility representatives should verify all local and regional ice sport marking requirements on an annual basis, prior to undertaking the ice painting task.

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The Rink and Ice Markings

Ice hockey is played on an arena of ice called a Rink. The dimensions of a new rink are recommended to be a maximum of 60.96 m (200 ft) long and 30.48 m (100 ft) wide or a minimum of 56.39 m (185 ft) long and 25.91 m (85 ft) wide. The corners will be rounded in the arc of a circle with a radius of 8.53 m (28 ft).

A red line, 5.08 cm (2 in.) wide, will be marked 3.35 m (11 ft) from each end of the rink, parallel to the end boards. These lines will extend across the rink and be known as the Goal Lines.

On rinks 56.39 m (185 ft) or more in length, blue lines, 30.48 cm (12 in.) wide, will be marked on the ice parallel to the goal lines at a point 19.51 m (64 ft) from each goal line, while the neutral zone will take up the remaining space in the centre ice area. These lines will extend across the ice surface and vertically on each sideboard and will be known as the Blue-Lines.

On rinks less than 56.39 m (185 ft) in length, the blue lines will be positioned so they divide the distance between the goal lines into three equal areas. For rinks under 22.90 m (75 ft) in width, the face-off circles will be reduced in circumference so that they do not overlap. A minimum area of 60.96 cm (2 ft) from the adjacent side boards is to be maintained.

For all ice surfaces 25.91 m wide x 56.39 m long (85 ft x 185 ft) to 30.48 m wide x 60.96 m long (100 ft x 200 ft), goal lines are still 3.35 m (11 ft) from each end of the rink with end zones being 19.51 m long (64 ft).

Note: these measurements (goal lines and end zones) never change for surfaces over 56.39 m (185 ft) in length. The difference in length will determine the size (length) of the neutral zone. For all surfaces less than 25.91 m x 56.39 m long (85 ft x 185 ft), the goal lines are still 3.35 m (11 ft) but the remaining length is divided into 3 equal parts.

A red line, 5.08 cm (2 in.) wide, in the shape of a semi-circle and with a 3.05 m (10 ft) radius will be marked on the ice immediately in front of the Penalty Timekeeper's seat, extending 1.83 m (6 ft) from the boards. The area enclosed by this line will be known as the Referee's crease.

Figure 1. Basic Rink Diagram

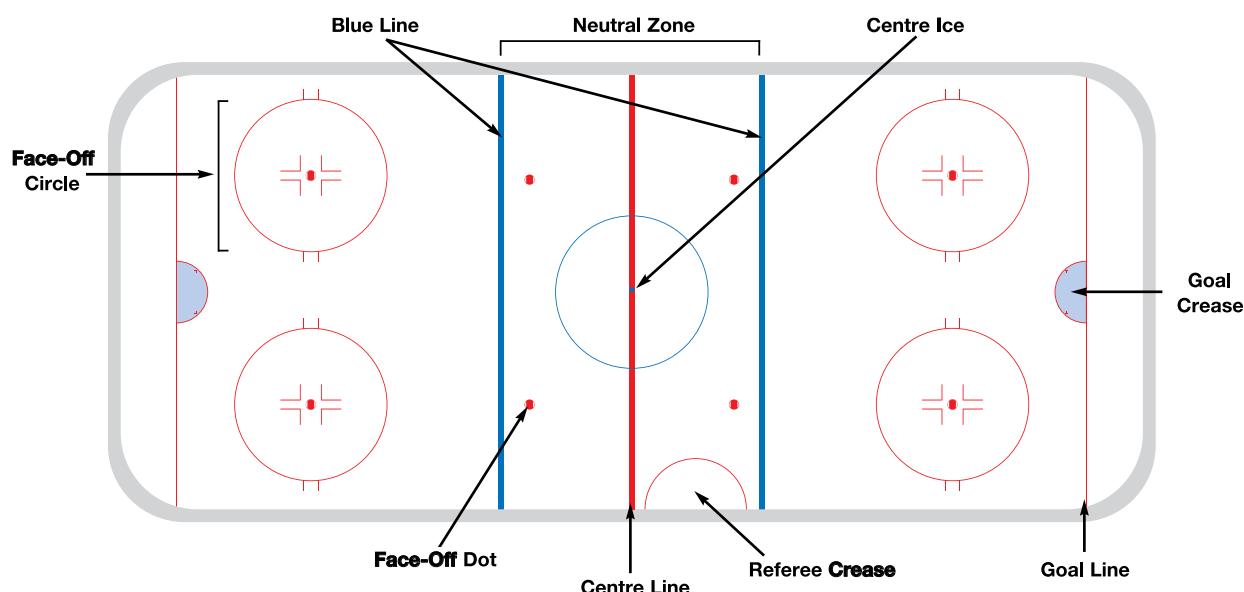
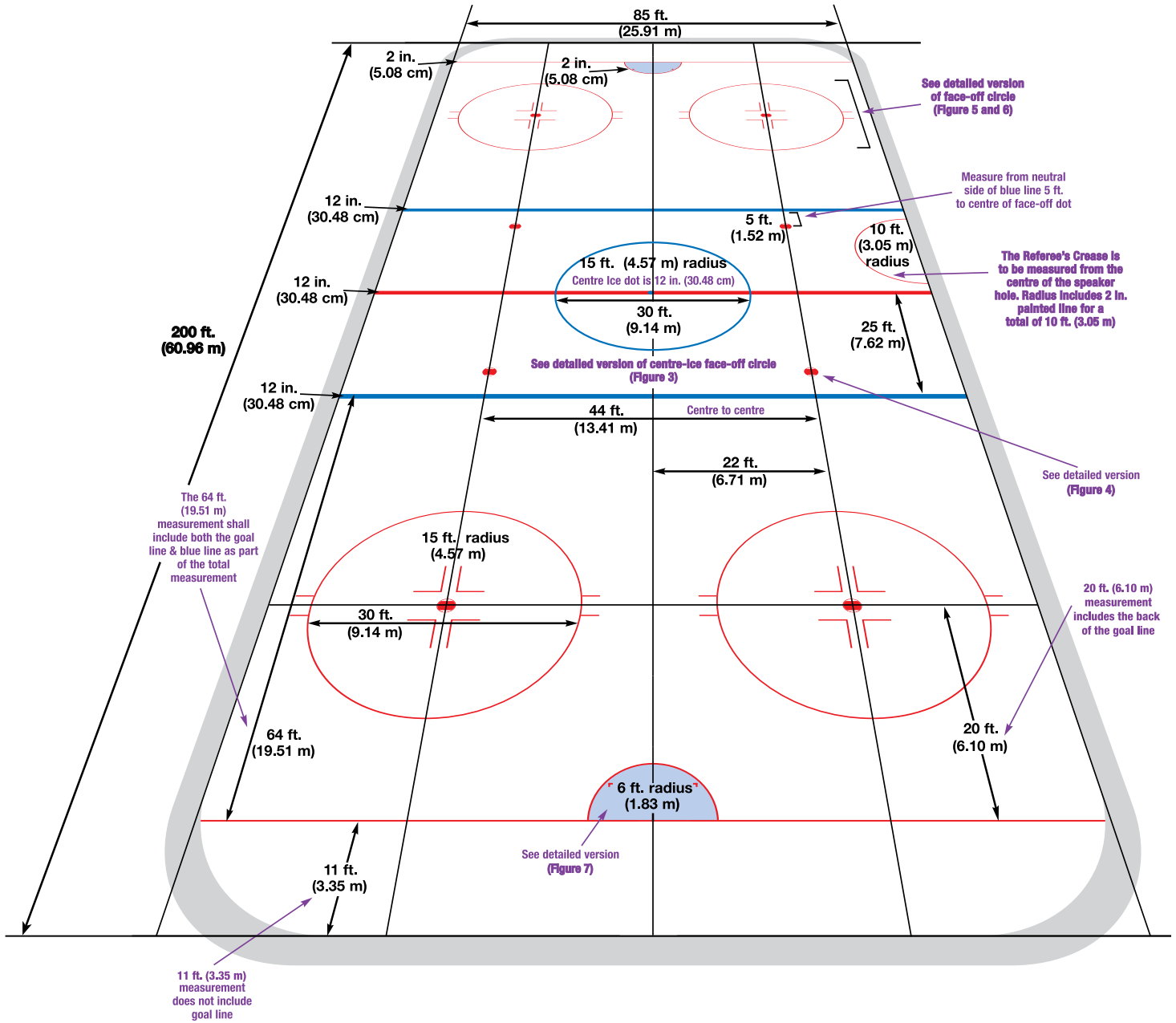


Figure 2. Detailed Rink Diagram



Face-Off Circles

There are 9 face-off locations on an ice hockey surface, 8 of them are 60.96 cm (24 in.) painted with a half-moon (see Figure 4) while the centre ice face-off dot is 30.48 cm (12 in.) and painted solid blue (see Figure 3).

Centre Ice Face-Off Spot

A circular blue spot, 30.48 cm (12 in.) in diameter, will be marked on the ice exactly in the centre of the rink. Using this spot as a centre, a circular blue line, 5.08 cm (2 in.) wide, with a radius of 4.57 m (15 ft), will then be marked on the ice (See Figure 3).

Neutral Zone Face-Off Spots

Two red spots, 60.96 cm (2 ft) in diameter, will be marked on the ice in the Neutral Zone, 1.52 m (5 ft) from each blue-line, and the same distance from the boards as the end zone face-off spots. Within each face-off spot, draw two parallel lines 7.62 cm (3 in.) from the top and bottom of the spot. The area within the two lines will be painted red; the remainder will be painted white (See Figure 4).

End Zone Face-Off Spots

In both end zones and on both sides of each goal, red face-off spots and circles will be marked on the ice. The face-off spots will be 60.96 cm (2 ft) in diameter and the circles will have a radius of 4.57 m (15 ft) from the centre of the face-off spots. The lines of the circle will be 5.08 cm (2 in.) wide. As well, 5.64 m (18.5 ft) and 6.55 m (21 ft. 6in.) from the goal line and parallel to it, two red lines 91.44 cm (3 ft) apart, 60.96 cm (2 ft) in length and 5.08 cm (2 in.) wide, will be marked on the ice extending from the outer edge of both sides of each face-off circle. The face-off spots will be 60.96 cm (2 ft) in diameter (See Figure 5).

Other notes:

- The distance from the back of the goal line to the centre of the face-off dot should be 6.1 m (20 ft).
- The distance of face-off dots in the neutral zone are to be 1.52 m (5 ft) from the neutral side of the blue line to the centre of the face-off dot.
- The five large face-off circles are to be 15 ft. (4.57 m) radius from the centre of the dot to the outside of the painted area (30 ft (9.14 m) diameter from outside to outside).

Figure 3. Centre Face-Off Circle

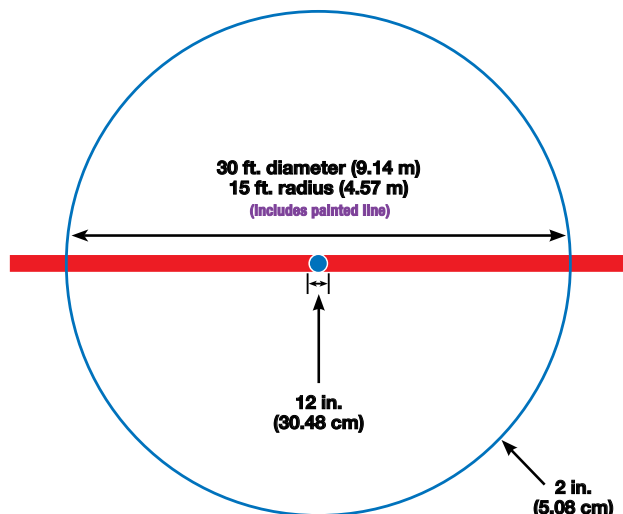


Figure 4. Face-Off Dot

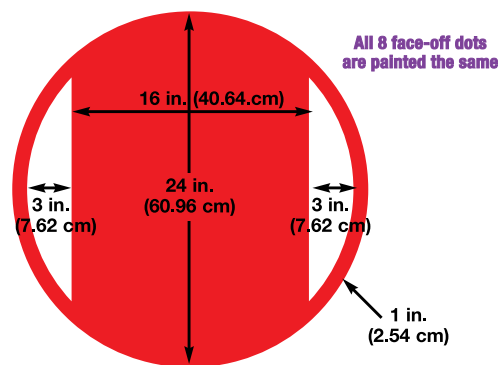
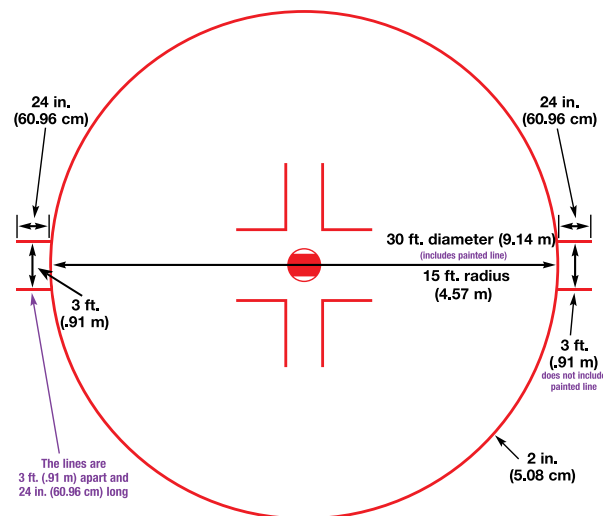


Figure 5. Face-Off Circle

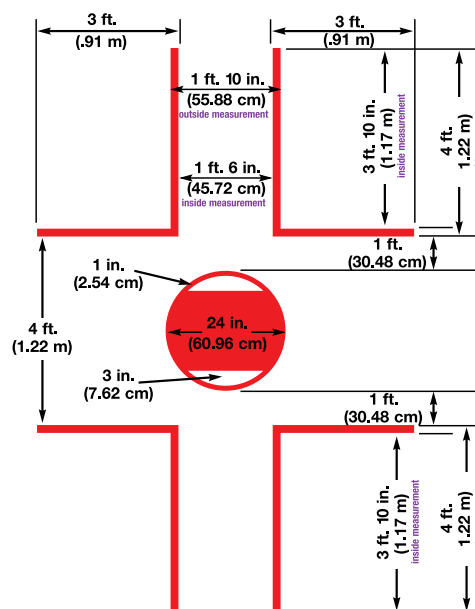


End-Zone Restraining Lines

Within each face-off spot draw two parallel lines 7.62 cm (3 in.) from the top and bottom of the spot. The area within the two lines will be painted red, the remainder will be painted white. Two lines, 30.48 cm (1 ft) away from the edge of the face-off spot, will be drawn parallel with the sideboards that will be 1.22 m (4 ft) in length and 45.72 cm (1 ft. 6 in.) apart. Parallel to the end boards, commencing at the end of the line nearest to the face-off spot, a line will extend 86.36 cm (2 ft. 10 in.) in length. All lines will be 5.08 cm (2 in.) in width (See Figure 6. Face-Off Restraining Lines).

The location of the face-off spot will be fixed in the following manner: Along a plane running 6.09 m (20 ft) from, and parallel to, each goal line, mark a point 6.71 m (22 ft) on both sides of the plane that bisects the rink through the midpoint of each goal line. Each point will be the centre of the face-off spot and circle.

Figure 6. Face-Off Restraining Lines



Goal Crease

In front of each goal, a Goal Crease area will be marked by a red line 5.08 cm (2 in.) wide.

The goal crease will be laid out as follows: a semicircle 1.82 m (6 ft) in radius and 5.08 cm (2 in.) in width will be drawn using the midpoint of the goal line as the centre point. In addition, an L-shaped marking of 12.7 cm (5 in.) in length (both lines) at each front corner will be painted on the ice. The location of the L-shaped marking is measured by drawing an imaginary 1.22 m (4 ft.) line from the goal line to the edge of the semicircle. At that point, the “L” may be drawn.

The interior colouring of the crease will be light blue. The radius of the goal-crease is to be measured from the back of the goal line.

Figure 7. Goal Crease

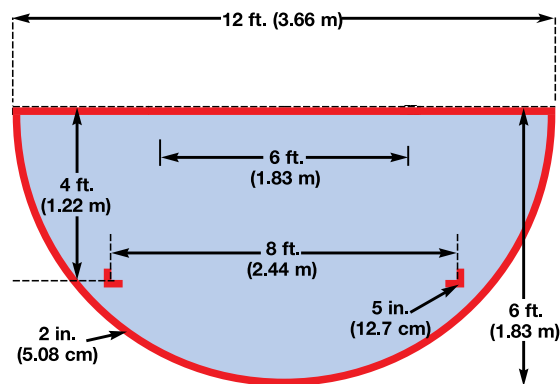
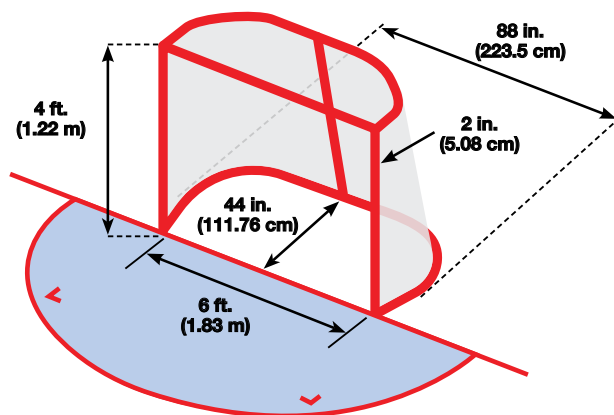


Figure 8. Goal Posts



Goal Posts and Netting

In the centre of the goal lines between the side boards, regulation goal posts and nets of approved design and materials will be placed in such a manner as to remain stationary during the game. It is recommended that nets be restrained by magnetic, breakaway pegs, or similar types of fastening devices in Hockey Canada games.

The goal posts will be set 1.83 m (6 ft) apart, measured from the inside of the posts. They will extend 1.22 m (4 ft) vertically from the ice surface and a cross bar of the same material as the goal posts will be extended horizontally from the top of the other posts. The cross bar should be securely fastened to both goal posts.

The outside measurement of both the goal posts and the cross bar will be 5.08 cm (2 in.) in diameter. The area enclosed by the goal posts and the cross bar will be known as the goal and will have a depth of 111.76 cm (44 in.). The base of the goal is rounded with 45.7 cm (18 in.) radii and an overall width of 223.5 cm (88 in.)

The goal posts, cross bar and exterior surface of other supporting framework for the goal will be painted red.

There shall be attached to each goal frame a net of approved design made of white nylon cord, which shall be draped in such manner as to prevent the puck coming to rest on the outside of it, yet strung in a manner that will keep the puck in the net. A skirt of heavy white nylon fabric or heavyweight white canvas shall be laced around the base of the goal frame in such a way as to protect the net from being cut or broken. This skirt shall not project more than 2.54 cm (1 in.) above the base.

Note 1: The frame of the goal shall be draped with a nylon mesh net so as to completely enclose the back of the frame. The net shall be made of three-ply twisted twine (0.33 cm (0.13 in.) diameter) or equivalent braided twine of multi-filament white nylon with an appropriate tensile strength of 318 kg (700 lb). The size of the mesh shall be 6.35 cm (2.5 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.

Points of Clarification

Logos

Logos must not disrupt or alter any official ice markings as described in this document. It is recommended that no logos or advertising be allowed on the ice in the end zones. Facility representatives must research league logo placement allowances prior to installing ice advertising, but there must be a 5.08 cm (2 in.) line that defines both sides of the design.

Measurements

To define the distance between the goal line and the blue line, measurements are taken from the back of the goal line to the neutral side of the blue line directly adjacent to the neutral zone.

- All measurements to be painted on the inside of the scribe with the exception of the outside hash marks. Red and Blue lines are 30.48 cm (12 in.) wide with all other markings 5.08 cm (2 in.) in width.
- All measurements for the face-off dots in the end zones should be measured from the back of the goal line.

Paint

All colours are considered “red” with the exception of the centre face-off dot 38.48 cm (12 in.), the centre face-off circle and the blue lines which are dark blue. Goal crease areas are to be painted a light blue. The Centre line can be solid red or can have a design painted (i.e. diamond/checkered) providing the design has 5.08 cm (2 in.) of solid red between each design image.

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