



# SLEDGE HOCKEY ACCESSIBILITY: DESIGN GUIDELINES FOR ARENAS

AS RECOGNIZED BY HOCKEY CANADA







## I. INTRODUCTION

**SLEDGE HOCKEY** is the Paralympic version of hockey and, since its debut on the Paralympic program at the 1994 Lillehammer Paralympic Winter Games, it has become one of the biggest attractions for spectators at the Paralympic Winter Games. It is fast-paced, highly physical and played by athletes with a physical disability in the lower part of the body. (Hockey Canada)

Sledge Hockey is just one of the program extensions that have brought new participants and programs into arena facilities. With the sport of sledge hockey growing in popularity across Canada and the fact that it is a wholly inclusive sport enjoyed equally by males and females, building owners are encouraged to evaluate their existing buildings to accommodate such programming. This would include accessibility, adaptability of current structure and any financial implications for modifications.

The following guide is intended for building owners and managers wishing to accommodate the sport of Sledge Hockey. It is not a standard but rather a resource tool to help evaluate existing systems and to guide future construction.

Building owners should review the most current accessibility laws and building code requirements for their local jurisdictions.

Sledge hockey consists of players being moved about an ice surface on a “sledge” instead of traditional skates – this design allows the puck to pass underneath the player. The traditional hockey stick is replaced with a shorter version that has a spiked end and a different lie to help move the players around the ice. As much as the game is designed for physically disabled athletes it is not uncommon to see able bodied players participating. It can be played at either a competitive or recreational level.

Sledge hockey follows International Ice Hockey Federation (IIHF) rules with a few modifications and as such can be played on any existing hockey surface.

Current dasherboard design specific to height and construction are acceptable, but consideration for design and construction changes to meet the needs of sledge hockey players should be investigated. Existing ice hockey markings are utilized for sledge hockey games.



## 2. FACILITY CONSIDERATIONS

In order to accommodate the sport of Sledge Hockey there are a number of design elements to consider such as:

- 2.1 Player/Penalty areas
- 2.2 Mobility of players
- 2.3 Dasherboard design
- 2.4 Change room areas
- 2.5 General facility accessibility

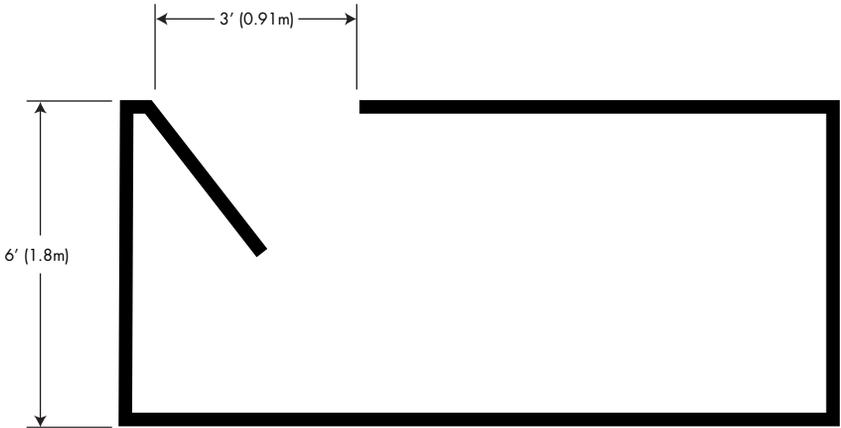
### 2.1 Player/Penalty Areas

As with traditional hockey, sledge hockey players are required to be housed in two distinct locations during play – player and penalty areas. Owners are encouraged to seek out the most recent dasherboard designs available for a premium playing environment. Design should allow for viewing by a sledge hockey player from a player or penalty box area. Players benches and penalty boxes must have plexi glass in front, the players benches must have two doors with level access to the ice surface, allowing the athletes entrance and egress without assistance or lifting by support staff. The penalty boxes should have level access also. Additionally, the surfaces inside these off-ice areas should be plastic surface or ice-covered to avoid damage to sledge blades. Any structural supports protruding must be securely padded or protected to avoid damage or injury. The bench areas should be designed to be removable or altered to provide more room for athletes to maneuver their sledges inside the benches. As an alternative, the benches can remain in place if there is a minimum of 36” (90cm) between the bench and the boards.

### 2.2 Mobility of Players

Owners must give consideration for players who exit the ice surface area during play and between games. Unlike traditional hockey players who can walk on protective matting in player or penalty box areas a sledge hockey player is limited to the glide of the sledge. As such, facility design to accommodate this challenge must be considered. Various artificial surfaces are available in today’s market place and discussion with suppliers will allow for the best artificial surfaces to be selected. The required maintenance, sanitization and housekeeping of these materials should be obtained.

Alternatively, owners may wish to consider an extension of the current ice sheet into these areas. Contact your refrigeration contractors in the early design phase of new construction to determine its feasibility.

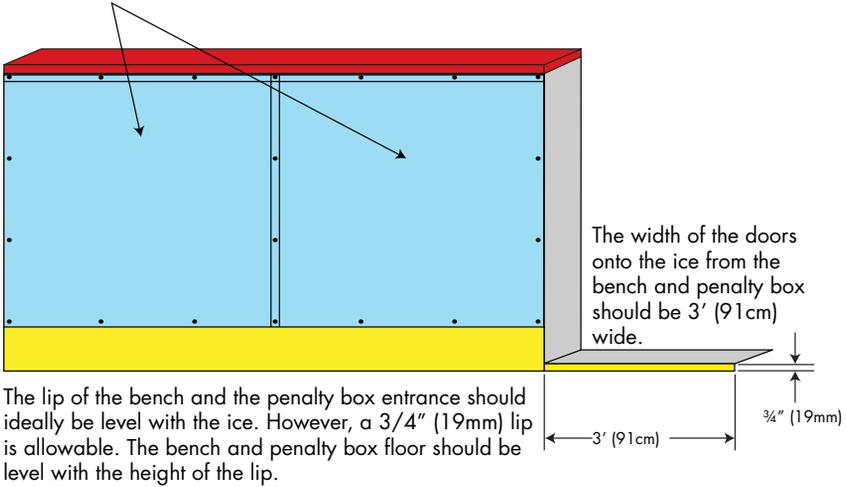


2.1 Player Area



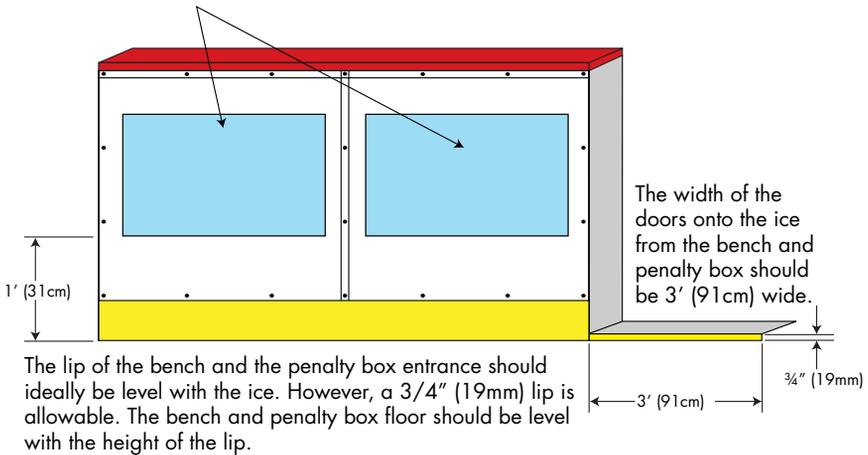
### Option #1

- A clear plexi glass should be used in place of a plain/white board in front of the bench and penalty box.
- This glass should replace all the board in front of the bench
- The thickness should be the same as the current plexiglass system used above the boards



### Option #2

A half clear plexi glass can be built into a plain white board in front of the bench and penalty box.





### 2.3 Dashboard Design

Dashboard access gates onto the ice surface from dressing room areas, player benches and penalty boxes should be no less than 36" (90cm).

Players need to glide on and off the ice in their sleds with ease. A step down from off-ice areas to the ice surface of no more than a traditional ice dam thickness of 1" (2.5cm) at player benches and penalty boxes should be met. However, it is recommended that there be no lip between the ice surface and the bench area. (Note: this may not be possible as the ice will naturally creep into these areas causing an ongoing operational challenge.)

### 2.4 Change Room Areas

Moving the players from the change room areas to the playing surface must also be considered.

Sledge hockey player change room areas should be as close to the ice surface as possible. An artificial ice surface can be considered as a permanent or removable addition to the facilities amenities.

These surfaces when placed down in traditional walkway areas will allow players to glide on their sleds from the ice surface to their dressing room with ease.

Accessible washroom and shower areas will need to also be considered as well as the need to have traditional clothing hooks lowered. Inside the dressing room, the width of the benches is a concern. It is not uncommon to find the benches players sit on to change very narrow. Disabled athletes need wider benches because they are more likely to be amputees or paraplegics who cannot touch the ground with their feet, and thus cannot stay upright on a bench.

## 2.5 General Facility Accessibility

Accessibility laws and local building codes will help to guide new or retrofitted facility construction. Special consideration for ample off-ice viewing areas should be given during the design phase. Buildings which hope to host significant sledge hockey events should be designed to allow for maximum viewing that is within proximity of the ice surface. As sledge hockey is played by disabled athletes, many spectators, especially in tournament settings, will be disabled. Therefore, it is encouraged that facilities provide accessible seating above and beyond what is suggested in accessibility laws and local building codes.

Full consideration must be given to emergency evacuation planning activities to coordinate and accommodate persons who are physically challenged.

## Appendix A: Sledge Hockey History, Technology and Equipment

A direct descendant of Ice Hockey, Ice Sledge Hockey was invented at a rehabilitation centre in Stockholm, Sweden, during the early 1960s by a group of Swedes who, despite their physical disability, wanted to continue playing Hockey. The men modified a metal frame sled, or sledge, with two regular-sized Ice Hockey skate blades that allowed the puck to pass underneath. Using round poles with bike handles for sticks, the men played without any goaltenders on a lake south of Stockholm.

The sport caught on and, by 1969, Stockholm had a five-team league that included players with a physical disability and able-bodied players. That same year, Stockholm hosted the first international Ice Sledge Hockey match between a local club team and one from Oslo, Norway. During the 1970s, teams from these two countries played once or twice a year. Several other countries began to establish teams, including Great Britain (1981), Canada (1982), USA (1990), Estonia and Japan (1993).





Two Swedish national teams played an exhibition match at the inaugural Örnsköldsvik 1976 Paralympic Winter Games in Sweden. However, Ice Sledge Hockey did not become an official event until the Lillehammer 1994 Paralympic Winter Games. Canada, Norway, Sweden, Great Britain, USA, Japan and Estonia have dominated international competitions, but the sport is growing with club teams now established in Germany, the Netherlands, Denmark, Czech Republic, Russia and Korea.

For additional sledge hockey information, including information about protective gear, please consult Hockey Canada's sledge hockey website at: [www.hockeycanada.ca/sledgehockey](http://www.hockeycanada.ca/sledgehockey)

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