

# **ICE LOCK™**

## **ENGINEERED DASHBOARD SPECIFICATIONS**

### **PART 1 - GENERAL**

#### **1.01 PROJECT SCOPE**

- A. Contractor shall furnish and install one complete set of steel framed dashboards as indicated on the drawings and specified herein. The contractor shall be responsible for all necessary labor, materials, equipment, and services to complete the project.

#### **1.02 SUBMITTALS**

- A. The contractor shall upon receipt of contract from Owner, prepare a set of shop drawings which will itemize sizes and materials as well as construction details for installation. The manufacturer will submit drawings to the Contractor for review and submittal to the Engineer, Architect or Owner for approval prior to actual fabrication of materials.
- B. Facing samples shall be submitted for Owner approval of color and quality.

#### **1.03 QUALITY ASSURANCE**

- A. All materials shall be per plans and specifications and constructed, manufactured, and installed per plans and specifications. All equipment and materials supplied under these specifications shall be new and of the highest grade material and construction.
- B. Approved dashboard systems, manufacturers and installers:
  - 1. **ICE LOCK™** dashboard system identical in design to Rink Systems, Inc., Albert Lea, Minnesota.
- C. To receive approval prior to bid, dashboard contractors must:
  - 1. Provide evidence of at least five (5) installations similar in construction to the following specifications, each with a minimum of three (3) years operating experience prior to the bidding date. A list of these installations including names, addresses, contacts, and telephone numbers is to be included with requests for prior approval.
  - 2. Manufacturers wishing to obtain prior approval shall have a factory representative perform a site visit.
  - 3. Submit a sample panel of proposed dashboard system being bid showing exactly how the system will be manufactured. Samples shall show how shield mounting hardware will be attached to system, as well as samples of gate latches, hinges, and related hardware.

4. Submit dasher shop drawings detailing systems design. Drawings must be prepared and approved by a licensed professional engineer.

5. Approval must be obtained at least 10 days prior to the bid date.

D. Bids received from contractors without prior approval will be returned unopened.

#### **1.04 GUARANTEE**

A. Manufacturer shall warranty all equipment provided under this project against all defects in materials and/or workmanship for a period of two years from the date of completed installation.

#### **1.05 DELIVERY**

A. To be arranged to coordinate with completion date of the project. Delivery date shall allow for sufficient installation time prior to project completion date.

### **PART 2 - PRODUCTS**

#### **2.01 ACCEPTABLE MANUFACTURER/TYPE**

A. As noted in 1.03 B above.

#### **2.02 MATERIALS AND EQUIPMENT**

A. Demountable Frame Sections:

1. Dasher panels shall be fabricated in demountable sections of nominal 8' lengths. The design of all panels, whether straight sections, curved sections, or sections in which a gate is located shall be fundamentally similar.
2. Each section shall be made of two horizontal 2" x 1" x 14 ga. steel rectangular tubes used at the top and base locations.
3. An additional 2" x 1-1/2" x 14 ga. steel rectangular tube shall be used vertically in the center on any panel over 48" long.
4. All horizontal tubes shall be welded to end plates on each end of the panel. The end plates shall be made of a 2" x 1-1/2" x 1/8" steel angle.
5. Each end plate shall have three 9/16" matching holes to accommodate 1/2" through bolts.
6. Each panel is to be a complete welded construction. After construction of the framing, each panel shall hot dip galvanized.
7. Standard size of dasher panel frame shall be 96" long x 42" high x 2" thick.

B. Support Posts:

1. Separate demountable dashboard support posts shall be constructed of a 2" x 2" x 11GA steel square tube.
2. At the bottom of support post shall be a 1/4" x 6" x 24" steel plate welded to the 2" x 2" steel tube.
3. Each support post shall have two 3/8" holes to accommodate 5/16" through bolts for attaching to dashboard framework
4. Each support post is to be a complete welded construction. After construction, each post shall hot dip galvanized.
5. Two support posts shall be supplied for each 8' dashboard panel
6. Once assembled, dashboard system shall be self supporting without anchoring to ground.

C. Dasher Facing (Option #1):

1. Dasherboard cladding shall be Rinkmaster Outboard™ FRP facing.
2. The facing shall be constructed of 1/2" exterior grade plywood with .090 Fiberglass Reinforced Plastic (FRP) laminated to the play side and .030 poly laminated to the frame side.
3. FRP on both sides of the plywood panel shall be factory laminated, color white, texture smooth.
4. All edges of plywood panels shall be painted with two (2) coats of white porch and deck alkyd enamel paint with mildewcide additive. All exposed edges of gates and gate openings shall be fitted with an extruded edge cap moulding.
5. Facing panels shall be one piece and cut to match length of demountable framing sections.
6. On panels that require game lines, a vinyl adhesive back strip shall be installed over the facing material. The kickplate shall be removed by the widths specified so that a 1/2" thick red kickplate panel of high molecular weight polyethylene can be inserted. Lines shall extend from the kickplate to the caprail.
7. The facing material shall be attached to the horizontal and vertical frame members with 1/4" stainless steel phillips flat head tek screws. Spacing of fasteners shall not exceed 10" on center. All exposed fastener heads shall be painted to match facing color.

D. Dasher Facing (Option #2):

1. Dasherboard cladding shall be 1/4" clear polycarbonate.
2. Facing panels shall be one piece and cut to match length of demountable framing sections.
3. The facing material shall be attached to the horizontal and vertical frame members with 1/4" barrel head machine screws. Spacing of fasteners shall not exceed 10" on center.

E. Caprail:

1. The caprail shall be constructed of 3/4" thick UV stabilized high density polyethylene. The caprail must have a textured or mat finish. A smooth finish shall be unacceptable.
2. The 3/4" caprail shall be attached to the front horizontal frame member with 1/4" stainless steel phillips flat head tek screws. Spacing of fasteners shall not exceed 18" on center. All exposed fastener heads shall be painted to match caprail color.
3. The caprail shall have smooth and radiused edges on the front and back edges.
4. Caprail to be (red) (dark blue) (white) in color.

F. Kickplate:

1. Kickplate shall be constructed of 1/2" thick x 8" high, UV stabilized polyethylene, and shall surround the entire rink.
2. The top edge of the kickplate shall be beveled.
3. The 1/2" kickplate shall be attached to the bottom of the dasher panel with 1/4" stainless steel phillips flat head tek screws. All fastener heads used to attach kickplate to dasher panels shall be painted to match the kickplate color.
4. Kickplate shall be (yellow) (white) in color.

G. Access and Players' Gates:

1. Access gates shall be 3'-0" wide and/or 4'-0" wide in quantity as specified in the drawings.
2. Players' gates shall be 2'-6" wide in quantity as specified in the drawings.
3. Gates shall be built into 8' dasher panels and shall be left or right hand swing as specified in the drawings.

4. Gate panels shall be constructed of the same materials and methods as the demountable frame panels.
5. The single bar gate latch mechanism shall be designed so the gate can be closed and latched in a single movement. The gate handle shall be designed so players wearing hockey gloves can easily open the gates. Latches shall be of solid welded steel construction. Spring loaded bolt latches shall be unacceptable.
6. Hinges for all gates shall be of steel construction and bolted to the frame for easy maintenance, two per gate door. Hinges to have horizontal and vertical adjustment. Hinges shall have 1/2" diameter pins and grease fittings for lubrication purposes. Hinges shall be designed so gates can be lifted off and removed. Piano style hinges or hinges welded to the frame shall be unacceptable.
7. All single swing access and player gates shall have 3/8" x 3-1/2" x 3" door stops welded to the frame gate. All gate with shielding shall be equipped with push button releases located on the caprail on the ice side of the shielding. Latches shall be designed so players wearing hockey gloves can easily open the gates.
8. Gates with shielding shall be made to accept shield mounting hardware.
9. Thresholds for 3' and 5' access gates shall be approximately 2" above floor level.
10. Thresholds for players' and penalty box gates shall be 8-1/2" above floor level.

#### H. Equipment Gate:

1. Equipment gate shall be a double leaf gate with a 10'-0" opening. Each leaf shall be 5' wide.
2. Gate panels shall be constructed of the same materials and methods as the demountable frame panels.
3. Hinges for all gates shall be of steel construction and bolted to the frame for easy maintenance, two per gate door. Hinges to have horizontal and vertical adjustment. Hinges shall have 1/2" diameter pins and grease fittings for lubrication purposes. Hinges shall be designed so gates can be lifted off and removed. Piano style hinges or hinges welded to the frame shall be unacceptable.
4. Equipment gate latch shall be the sliding bar type, constructed of 2" x 2" x 11ga square tubing for structural rigidity, with a large grasp handle. Slide bars fabricated from round tube shall be unacceptable.
5. Each equipment gate shall lock into the steel threshold with 3/4" x 12" long cane bolts.

6. Each equipment gate shall be equipped with a sturdy spring loaded, adjustable caster. For safety and component protection, the spring shall be totally enclosed in the caster mechanism, casters with exposed springs shall be unacceptable.
  7. Threshold for equipment gate shall be 1-1/2" above floor level.
- I. Hardware:
1. All steel hardware used during the construction or installation of the system shall be hot dip galvanized or stainless steel for rust resistance.
  2. Hardware shall include hinges, latches, nuts, bolts, washers, and miscellaneous fastening devices necessary to complete installation.
- J. Thresholds:
1. Access and players' gates shall have 1" thick high molecular weight polyethylene, replaceable thresholds.

## **PART 3 - EXECUTION**

### **3.01 INSTALLATION**

- A. Manufacturer shall construct, fabricate and deliver all materials to the job site per plans and specifications under the direct supervision of a licensed professional engineer. All materials shall be installed to result in a complete steel frame dasher system with all boards and shielding to be straight and true in line and properly braced. All installation work shall be completed by a factory installation crew
- B. Installation shall be in strict conformance with manufactures requirements and instructions. Erect units rigid, straight, level, plumb, and true with horizontal and vertical lines level, and securely anchored in place. Whether shown on the drawings or not, this contractor shall provide all accessory materials for a complete, finished installation. No defective, scratches, marred or otherwise equipment and materials shall be installed.
- C. Put all items of equipment and systems through at least five complete cycles of operation, verifying that each item is properly installed and properly operating, and making required adjustments to achieve optimum operation.

### **3.03 CLEANING**

- A. Clean all surfaces removing all evidence of dirt, packaging materials and protective wrappings.
- B. Replace all damaged materials including scratched glass.

**END OF SECTION**