

**SIGNATURE SERIES OUTDOOR
STEEL FRAME DASHER BOARD SYSTEM
SPECIFICATIONS
GENERAL**

A.) SCOPE: Manufacturer shall furnish and install one complete set of steel framed dasher boards for a _____' x _____' x _____' radius rink as manufactured by **Becker Arena Products, Inc. Burnsville, Minnesota.**

B.) MATERIALS: All materials will 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 best grade material and construction.

C.) SUBMITTAL: (shop drawings) The manufacturer shall upon receipt of contract from owner or its representative, prepare shop drawings, which will itemize sizes and materials as well as construction details for installation. The manufacturer will submit shop drawings to the owner and/or its representative for approval before fabrication of materials.

D.) DELIVERY: To be arranged with owner and/or its representative to coincide with completion date of the project.

E.) WARRANTY: Manufacturer shall warrant all equipment from all defects in materials and/or workmanship, for a period of one year from completion of installation. Any misuse or abuse and/or accident not caused by normal conditions are the responsibility of the owner.

SPECIAL PROVISIONS

A.) PROJECT DESCRIPTION: The project outlined with these specifications consists of the manufacture and supervision of the installation of a complete steel frame dasher board system as manufactured by Becker Arena Products, Inc., or equal and approved.

The contractor shall be responsible for all necessary and related appurtenances to complete the project as described in these specifications. These specifications have been written with quality in mind. Any deviations from the following specifications found after installation will be back charged to the dasher contractor at owner's discretion of value.

B.) SAMPLES: All contractors bidding this project shall supply a sample panel of proposed dasher system being bid showing exactly how the system will be manufactured. Samples will show how shield-mounting hardware will be attached to system, as well as samples of gate latches and related hardware.

Polyethylene samples shall be submitted for owner approval of color and quality prior to bid.

C.) MATERIAL SUBSTITUTION: In the specifications certain items are named by manufacturer, this is done for quality control. Other manufacturers of equal quality will be approved if submitted to the owner for review. Such requests must be submitted to the owner, in writing, seven (7) days before bid opening. Any such approved substitutions must be shown or noted at the time of bid. Any deviations from the specifications must be clearly indicated by the bidder. Bids offering lesser sizing or quality will not be considered. Bidders shall supply manufacturer's literature, specifications and fact sheets.

D.) PROJECT COMPLETION: The contractor shall commence work immediately upon receipt of a signed contract. Completion of the project shall be not later than _____.

PRODUCTS

Acceptable system design shall be identical in design to:

1. **Becker Arena Products, Inc. Burnsville, Minnesota**

A. DASHER PANEL FRAMEWORK

1. Dasher panels shall be fabricated in demountable sections of nominal 8' lengths. The design of all panels, whether straight section, curved section, or section in which a gate is located shall be fundamentally similar. Each section shall be made of two horizontal 2" x 2" x 3/16" steel angles used at the top and intermediate locations and one horizontal 2" x 2" x 1/4" steel angle used at the base location. All angles will be welded to a specially designed 11 gauge x 6" deep steel end plates on each end of the panel. All vertical formed channels must have a minimum of 3/4" return edges.

Each end plate will have three matching holes to accommodate 1/2" through bolts.

An additional 2" x 1-1/2" x 1/4" steel angle shall be welded to the back and bottom of each panel to form a continuous slot for anchoring panel to the floor.

An additional 1" x 1" x .083 square steel tube shall be welded to the top and back of each panel to aid in the fastening of the top caprail to the panel.

In panels over 5' in length an additional 2" x 3" x .120 steel tube shall be welded at the center point of the panel (vertically) to add rigidity.

Each panel is to be a complete welded construction. After the construction of the framing each panel is to be hot dip galvanized. Zinc or nickel plating is not acceptable.

The use of steel tubing for horizontal framing members or end vertical framing members is not acceptable.

Systems that require separate support posts to support the dasher system are not acceptable.

2. Standard sizes of the dasher panels are to be 96" long by 48" high.

B. GATES

1. Access gates (3'-0" wide standard) and player gates (2'-6" wide) shall be built into 8' panels and shall be left or right-hand swing. Gate panel framing shall be of the same construction as standard panels. Gate insert shall be made of pre-punched 3/4" long slotted-formed channels both vertically and horizontally.

2. The gate latch shall be equipped with standard lift latch assembly. Handle to be made so that a player wearing hockey gloves can easily open gate. The use of chains or cables for operating spring mechanism is not acceptable. Latches must be a solid welded construction designed for their intended use. Latches made of cast materials are not acceptable. Access gate latches on gates with upper containment must be equipped with push button releases located on the caprail on the ice side of upper containment so that the gate can be opened from the ice side. The use of cables, chains or other similar devices to open these gates is not acceptable.

3. The hinges for all gates shall be two, lift off type, welded to the frame. All hinge assemblies shall have grease fittings for easy lubrication. Hinges that are bolted to gate framework is not acceptable.

All single swing access and player gates shall have one 3/8" thick x 3-1/2" wide x 4-1/2" long door stop welded to the gate frame. Threshold of access gates shall be 2-1/2" above floor level.

Thresholds for all player and penalty box gates shall be 9-1/2" above floor level.

4. Equipment gates shall be a double leaf gates with 10'-0" opening. Size of gate leaves to be determined by the owner. Gate panel framing shall be made of pre-punched slotted channels vertically and horizontally.

5. Equipment gate latch is to be the sliding bar type 2-1/4" x 2-1/4" x 12 gauge steel tubing with a large grasp handle. Each equipment gate shall lock into the steel threshold by means of 3/4" x 12" long cane bolts. Each equipment gate leaf over 36" in length shall be equipped with adjustable casters.

The equipment gate will be furnished with a steel threshold 1-1/2" high.

C. HARDWARE

1. All steel hardware shall be galvanized or zinc plated for rust resistance after welding. Hardware shall include hinges, latches, nuts, bolts, washers and miscellaneous fastening devices necessary for complete installation.

D. ANCHORS

1. The dasher contractor shall install all new 5/8" epoxy anchors required for the installation of the dasher boards. The dasher contractor shall furnish 5/8" cast-in place anchors to be set in concrete footing. Dasher contractor shall furnish 1/2" x 4" x 5" steel hold down plate. Plate to have a 3/4" hole to accept 5/8" bolt and flat washer for securing of dasher panel to anchors. Dasher contractor shall furnish an anchor layout drawing indicating all anchor locations.

E. DASHER FACING

1. The dasher board facing will be ¼” thick UV stabilized high-impact exterior grade fiberglass. The dasher facing is to be furnished in a bright white color. Whites must match within manufacturers tolerances.

The dasher facing will be attached to the horizontal angles with 1/4" Phillips flat head machine screws. Heads of screws to be painted to color match dasher facing and kickplate. Spacing of the 1/4" screws will not exceed 1'-6" on center.

F. CAPRAIL

1. Red UV stabilized high-density polyethylene caprail 3/4" thick, shall be fastened to the top horizontal-framing members. The front edge of the caprail shall be attached to the top angle using 1/4" x 1-3/4" Phillips flat head machine screws, flat washers and 1/4" nylon insert lock nuts. The back edge of caprail will be attached to the 1" x 1" steel tube using 1/4" x 1-1/2" type F thread cutting screws. Heads of screws to be painted to color match caprail. Spacing of the 1/4" screws (two rows) will not exceed 24" on center. The use of nylon rivets or sheet metal screws is unacceptable. The front and back edges of the caprail shall have smooth and radiused edges.

G. KICKPLATE

1. Kick plate shall be constructed of 1/4" x 8” UV stabilized high-impact yellow fiberglass. The kickplate shall be fastened to the bottom of the dasher panel using 1/4" x 1-1/4" Phillips flat head machine screws, flat washers and nylon insert locking nuts. The heads of the screws are to be painted to color match the kickplate. The use of nylon rivets or sheet metal screws is not acceptable.

H. THRESHOLDS

1. Access and player gates shall have 1" thick high-density polyethylene thresholds that can be removed and replaced when wearing occurs. Polyethylene thresholds less than 1" are not acceptable.

I. INSTALLATION

1. Manufacturer will construct, fabricate and deliver all materials to job site per plans and specifications.

All materials will be installed to result in a complete steel frame dasher system with all dashers and spectator shielding to be straight and true to line and properly braced. Installation shall be done under the direct supervision of a factory representative at all times. The use of subcontractors without factory supervision is not acceptable.

J. PROJECT CLEAN UP & RESTORATION:

1. The contractor shall be responsible for all area clean up of construction debris.

K. OTHER MATERIAL

1. Provide other materials, not specifically described but required for a complete and proper operational installation, as selected by the contractor subject to the approval of the owner.

L. EXECUTION

1. Examine the areas and conditions under which work of this section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

Installation shall be in strict conformance with manufacturer requirements and instructions.

Erect units rigid, straight, level, plumb, and true with horizontal and vertical lines level.

No defective, scratched, marred or otherwise damaged equipment and materials shall be installed.

M. ADJUSTMENTS

1. 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.