

ArenaDeck® Athletica O&M manual

Thank you for purchasing the ArenaDeck® Ice Floor Covering System

ArenaDeck® is the premier ice floor covering system available. With proper care and storage, the ArenaDeck® system will provide your arena facility with many years of service in the harsh conversion environment.

ArenaDeck® is specifically designed for use as an ice cover for multi-purpose arenas. As such, it is a strong, durable, yet lightweight sheet that is relatively maintenance-free. However, like any new product there are do's and don'ts associated with this system.

The following information contained in this document will assist you with installation, care and maintenance of your ice floor covering system. We ask that you read this document prior to the first installation of the ArenaDeck®.

If you have any questions or comments about the ArenaDeck®, please feel free to contact our office by phone at 1.877.778.5911.

Tools Required

Item	Quantity
Handheld circular saw with fine-tooth blade	2
Saw horses or 4' x 8' work table	1
Black 'Sharpie' markers	4 - 6
100' chalk line and chalk	1
4' steel straight edge	1
8' steel straight edge	1
Steel square	1
Tape measure (25' min) with steel blade (not fabric or cloth due to stretching)	1
White paint pen or similar to mark locations of cut sheets	1
Gloves	1
Safety eyewear	1
Safety footwear	1
Stabilicers or similar anti-slip soles	1
Template of ice rink board radius - 8'	1
Note pads	1
Shop-vac, brooms. and garbage bin	1



IMPORTANT!

NOTE: For the first installation, it is recommended that you employ a supervisor from Athletica Sport Systems Inc. If you have previously installed an ice floor cover, a supervisor is not a necessity. You should have four to six (4-6) Conversion or Operations Staff involved in the initial installation. In addition, you should have one or two carpenters, or similar trained personnel, to cut the sheets. The first installation will take eight to ten (8-10) hours. Allow enough time between events to ensure that the installation is completed and that there is time to remove the ice cover once it has been cut and marked.

Inspection

We recommend that you inspect all of the ArenaDeck® sheets as soon as possible after receiving them and report to us any problems. defects, or issues. While we employ high quality control standards in the production of ArenaDeck®, there may be the occasional sheet that has a defect. Every measure is taken in the manufacturing process to ensure our best finished look, however, all fiberreinforced polyurethane products are subject to some minor inconsistent surface variables and slight color variations that are inherent to our process and the polymerization of polyurethane foam. These variables in no way affect the structural integrity of the material; nor are they covered under the manufacturer's warranty. Any defects that are found must be reposted to Athletica Sport Systems Inc. within 30 days.

Installation

The ArenaDeck® ice floor cover will arrive at your facility packaged on hardwood skids. Most pallets will contain 50 sheets. If you plan not to use the original storage carts, retain the hardwood skids. They are suitable to use for storing the ArenaDeck® when not in use.

The ArenaDeck® has been designed to have minimal expansion and contraction due to temperature change, however, there is a small amount of shrinkage that occurs once the sheet is laid on the ice. It is recommended twenty-four (24) hours prior to the first installation of the ArenaDeck® that the skids be moved into the rink area to acclimatize and cool down. This will help to contract the sheets and ensure a tight installation.

We recommend that the ArenaDeck® be stored indoors. If stored outdoors, ensure the sheets are completely covered with a tarp. UV rays will discolor the sheets and turn them slightly green. The UV will not affect the structural integrity of the sheet, but it will look unsightly. Discoloration from UV exposure is not covered under warranty.

Prior to installation of the ArenaDeck® you should decide the method of installation that you want

to employ. This discussion should include the Operations and Conversion Staff. Essentially, there are three ways of installing the ice floor cover:

- 1. Interlocking Brick Pattern Lengthwise Recommended (see picture below)
- 2. Square Pattern Lengthwise
- 3. Square Pattern Widthwise

We recommend the interlocking brick pattern as it helps to secure the sheets in place and does not allow four corners to come together. Over time, the corners of any ice floor cover can become rounded. This can create a hole where the four corners meet.





IMPORTANT!

This document will describe the Interlocking Brick Pattern installation method.

Interlocking Brick Installation Method

Step 1

Before installing any sheets, make sure that the ice has been scraped and is dry. It is not recommended to flood the ice prior to installation of the ice floor cover as it makes it more difficult to walk on the ice and the sheets tend to slide. Also, we recommend that you use a power edger and a manual ice scraper to remove any build-up of ice around the perimeter of the rink boards.

Step 2

Choose one side of the rink to begin the installation. From the center of the red line, make a mark on the kick plate 4' down from center. Do this on the opposite side of the rink also. Stretch the chalk line across the width of the rink and snap a line 4' back from center. This line will be used to create the brick pattern and to ensure that each subsequent row of the ice cover is installed straight.

Step 3

Start installation of the ice cover by laying the first sheet against the boards at center ice. Make sure that this sheet is properly located and tight against the boards.



Step 4

Install additional ArenaDeck® sheets down the length on this side until you reach the start of the radius of the boards. Take caution to ensure that the sheets don't slide on the ice. Check frequently to see that the center sheets are still on the lines.



Step 5

Once the first row is complete to the radius, begin the next row at center ice. Stagger the second row using the chalk line to offset the sheets 4'. When installing the second row, always take care that the second row is tight to the first. You will find that lightly kicking the center of the sheet will keep the rows aligned and the sheets tight.



Step 6

Continue to install additional rows of sheets up to the radius of the rink. **Do not cut the radius corners in at this point.** Make sure that the rows are tight and there are no gaps between the sheets.



Step 7

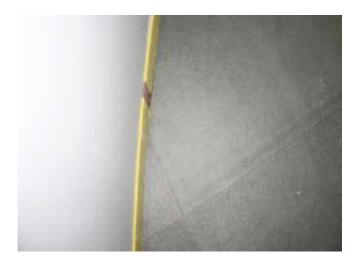
Once all the rows have been installed, you will need to cut a sheet lengthwise for the final row. On an 85' wide rink, this final row will be 9" - 12" wide. Cut one or two pieces of 8' long sheets to the proper width and install them snugly against the kick strip. This will help to lock the floor in place while cuting the radius corners and end pieces.

Step 8

Cut pieces to fill in the gaps at each end of the rink. Once complete, you can begin measuring and cutting the radius corners. Each radius piece will need to be measured and cut. Many ice rinks have variations in the radius from corner to corner and even through the radius itself.









Step 9

Once the entire ice floor cover is installed, the custom cut pieces will need to be marked by location using the white paint pen or similar utensil.



Operational Care and Maintenance

Your new ArenaDeck® ice floor cover is relatively simple to use, clean, and maintain. The sheets are manufactured from polyurethane foam and will not absorb moisture or odors. A few simple steps will keep your ice cover looking and smelling clean.

Operation

Prior to installation of the ice cover, make sure that the ice is dry and has been shaved. It is recommended that you use a power edger and hand scraper around the perimeter of the rink boards to ensure that there are no bumps or uneven areas.



IMPORTANT!

Do not drive forklifts or carts over the ice cover until it is completely installed.

Once the ice cover has been installed, it is important to keep an eye on the ice temperature below the cover. As the ArenaDeck® has insulating properties, it will help to isolate the ice from the various heat loads inside the rink (radiant, ambient, lighting, etc.) If the cover is down for an extended period of time, the ice temperature may drop significantly if not controlled. A large drop in ice temperature can cause the ice cover to become cold and drop below the dew point in the rink area. If this happens, moisture may condense out on the top side of the ice cover. This is an uncommon occurrence, but can happen under certain conditions.

The ArenaDeck® can be left on top of the ice for extended periods of time without the worry of it sticking to the ice.

Cleaning and Maintenance

When ready to store until the next event, a mild soap and water mixture with a low pressure washer or floor scrubber will adequately clean the panels. Store the panels away from direct sunlight on pallets or carts, and stack horizontally.

Once a year, a thorough cleaning of the ArenaDeck® can be done with a low pressure sprayer and mild soap.

The use of harsh chemicals is not recommended. If using anything other than soap and water, test on a small, inconspicuous area first to observe the effects.

Product Technical Data

ArenaDeck® Pro

Properties Data				ArenaDeck® <i>Pro</i>	ArenaDeck® <i>Pro FASCOAT</i>
Nominal Density			Ib/ft³	26 ± 1	20 ± 1
Nominal Board Weight			lb	55	47
Tensile	Modulus	ASTM D1037	ksi	127	81.8
	Strength		ksi	2.42	1.56
Flexural	Modulus	ASTM C393	ksi	160	97.0
	Strength		ksi	4.11	2.27
Compressive	Modulus	ASTM D1621	ksi	44.3	13.2
	Strength @10% Strain		ksi	2.05	0.73
Thermal Resistance (R-Value)		ASTM C518	ft²-°F- hr/Btu	2.44	2.69
Coefficient of Thermal Expansion		ASTM D696	in/in/°F	2.8 x 10 ⁻⁵	2.8 x 10 ⁻⁵

ArenaDeck® Lite-Duty

Properties Da	nta	ArenaDeck® <i>Lite-Duty</i>		
Nominal Densi	ty		Ib/ft³	24 ± 1
Nominal Board Weight			lb	30
Tensile	Modulus	ASTM D1037	ksi	151
	Strength		ksi	2.65
Flexural	Modulus	ASTM C393	ksi	188
	Strength		ksi	3.84
Compressive	Modulus	ASTM D1621	ksi	55.8
	Strength @10% Strain		ksi	1.50
Thermal Resistance (R-Value)		ASTM C518	ft²-°F- hr/Btu	1.86
Coefficient of Thermal Expansion		ASTM D696	in/in/°F	2.8 x 10 ⁻⁵

The tensile, flexural, compressive, coefficient of thermal expansion and density properties given in the tables above are material properties which do not take into account global mechanical property differences due to the complex geometry of the board. However, thermal resistance values listed are global properties because they take the thermal resistance of the air trapped by the board geometry into account. The mechanical properties listed here are, to the best of our knowledge, correct. However, due to the variability of the manufacturing process, these values should not be used for design purposes. Anyone using this product is urged to validate the product for intended use. Athletica Sport Systems Inc. is not liable for any product misuse. Oral statements or representations made by anyone which are contrary to or at variance with the statements and material properties stated in this document are invalid.

5-Year ArenaDeck® Warranty

Subject to the disclaimer, proper utilization, maintenance, limitations and Cautionary Information stated hereafter, Manufacturer warrants that the product will technically remain non-absorbent, will remain stable, and will remain free from defects in material or workmanship for a period of five years under normal non-abusive use.

THIS LIMITED WARRANTY IS EXPRESSLY MADE IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE EXCLUSIVE REMEDY OF THE BUYER IS LIMITED TO REPLACEMENT OF THE PRODUCT WHICH MAY BE PRORATED AT MANUFACTURER'S DISCRETION AND DETERMINED BY THE LENGTH OF TIME THE ARENADECK® HAS BEEN IN SERVICE. EXCEPT AS STATED IN THIS LIMITED WARRANTY, MANUFACTURER SHALL NOT BE LIABLE FOR ANY LOSS, INCONVENIENCE, OR DAMAGE, INCLUDING DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, RESULTING FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER RESULTING FROM BREACH OF WARRANTY OR ANY OTHER LEGAL THEORY.

Any oral statements or representations made by anyone which are contrary to or at variance with the terms stated in this LIMITED WARRANTY are void.

Cautionary Information

- 1. This product will discolor if left exposed to direct sunlight for extended periods of time without a surface coating.
- 2. Because this product is available in various strengths and sizes, please consult a certified engineer before utilizing this product in any weight-bearing and/or structural application.
- 3. This product has been produced to meet customer's basic requirements only. Customer's actual structural strength and other engineering requirements are unknown to Athletica Sport Systems Inc. It is understood that the customer will qualify each product to meet the particular applications intended.
- 4. This product to be applied and used by people learned in the construction industry.
- 5. Although this product has successfully passed a UL 94 HB fire test, it will burn under certain conditions such as exposure to high heat and/or direct flame for an undetermined period of time. Although no standards exist for the ArenaDeck® regarding an average Coefficient of Friction, in accordance with ASTM D2047, the average Coefficient of Friction of a dry ArenaDeck® is 0.34, and the average Coefficient of Friction of a wet ArenaDeck® is 0.74. Additional coating of this product is available at an added cost through the Manufacturer, which coating will improve the average Coefficient of Friction of an ArenaDeck®.

In order to place a claim under warranty, the Buyer must contact the Athletica Sport Systems Inc. sales office for Return Goods Authorization and pre-paid shipping instructions. Claims on products that have been physically altered or which have been used in a manner inconsistent with written instructions, this LIMITED WARRANTY, or the Cautionary Information contained herein will not be accepted. No warranty will be honored unless the product return is, in the judgment of the Manufacturer, defective in material or workmanship.





554 Parkside Drive, Waterloo, Ontario, Canada N2L 5Z4 **TEL** 519-747-1856 720 Innovation Drive, Shakopee, Minnesota, USA 55379 **TEL** 763-249-7465

athletica.com







