# ArmaSport

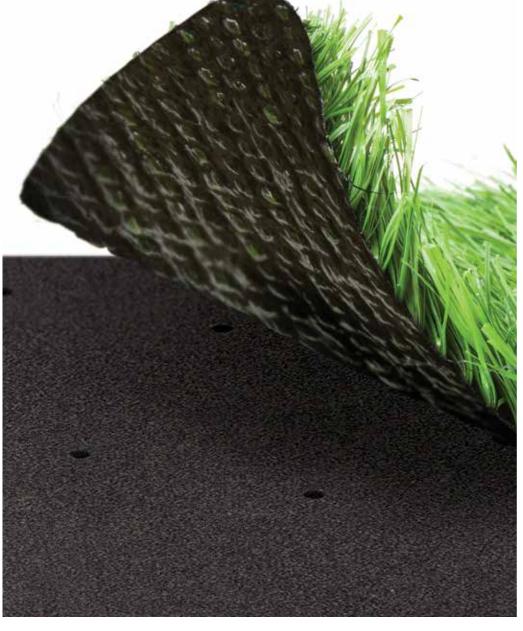
For safety and performance, your synthetic field's success starts UNDER the turf.

#### **Installation Guide**

// Provides consistent shock attenuation
// Turf-carpet widths make installation fast













# ArmaSport

For safety and performance, your synthetic field's success starts UNDER the turf.

ArmaSport® turf underlayment pad stabilizes and cushions the playing surface providing consistent shock attenuation across the field. Its optional drainage system and elastomeric material construction ensure greater field performance, durability and longevity. The ArmaSport pad system is the ideal, safer choice with or without granular infill systems.

- // Provides consistent shock attenuation
- // 100% protection, 100% of the time
- // Unlike infill, no loss or migration of the cushioning material
- // Turf-carpet widths make installation fast
- // Made in USA

Field Hockey



Football



Soccer



#### 100% Protected from Goal to Goal

ArmaSport turf underlayment shock pad is a superior turf pad for exceptional sports field performance and consistent playing conditions. Continuous shock pad installations like ArmaSport TU2 meet the G-MAX standard and provide consistent shock attenuation across 100% of the field, 100% of the time. There's no movement of the cushioning material to edges, and no direct contact with players.

#### Safer and More Durable

- // Using an ArmaSport pad under turf fields ensures more consistent shock attenuation across the field than other non-pad systems.
- // Tested to FIFA Quality Pro test methods
- // Tested to ASTM F355 test methods

#### **Innovative Drainage Options**

- // Perforation for water drainage available
- // Ridge pattern available for better drainage

#### Synthetic Turf Applications

- // Field Hockey, Football, Soccer, Lacrosse
- // Multi-purpose
- // Indoor multi-use, practice fields
- // Indoor portable systems

#### **Variety of Options**

- // Closed cell rubber foams in two densities and firmnesses to meet strictest specifications. Additional firmnesses and custom thicknesses available upon request
- // Currently used in turf underlayment / field padding applications worldwide

#### **Environmentally Friendly**

- // An Armacell PVC / NBR elastomeric pad system adds durability and longevity to a field
- // Armacell turf underlayment materials are low phthalate products and meet the phthalate threshold requirements (<0.1%) of the CPSIA / CPSC Improvement Act of 2008 public law 110-114
- // Does not contain lead, cadmium, mercury or formaldehyde, and meets the global REACH and RoHS requirements covering prohibited substances
- // Manufactured with antimicrobial protection against fungi, mold and bacteria

#### Sizes

- // Width: 60" typical
- // Thickness: Typical application thicknesses are 3/8" (9.5 mm) or 5/8" (15 mm). Other thicknesses are also available.
- // Length: 3/8" typically stocked at 200-ft and 5/8" stocked at 180-ft length rolls. Other lengths are also available.

## TABLE OF CONTENTS

#### **GENERAL INFO**

Unrolling
Layout Configurations
Installation Options
1 Seam and Glue
2 Seam – No Glue1
3 Tape and Glue
Limited Warranty

**INSTALLATION METHODS** 

8

9

0 5

Recommended Applications3
Precautions and Warnings
Substrates
Infill4
Material Shipment5
Specification and Compliance6
Adhesive Manufacturers
Association Memberships

#### RECOMMENDED APPLICATIONS

Recommend using perforated padding for outdoor fields to allow drainage.

- // Field Hockey, Football, Soccer, Lacrosse, Baseball
- // Professional, Collegiate, High School, Community and Club Fields
- // Multi-purpose Fields

- // Indoor Multi-use, Practice Fields
- // Indoor Portable Systems
- // Golf Mats
- // Residential Landscaping
- // Commercial Mixed-Use Landscaping











#### PRECAUTIONS AND WARNINGS

**SAFETY:** Installers should wear proper personal protective equipment (PPE) during field preparation, installation and maintenance.

// Follow all manufacturers' instructions for application of tapes and adhesives, and installation of turf products.

**HANDLING:** Care should be taken to protect rolls from damage when moving with a forklift or other equipment.

// Loads on the padding should not exceed 35 psi.

**STORAGE:** Rolled material should be stored laying down. Do not store on ends as this may cause the edges of the roll to curl. Do not store rolls higher than 2 rolls high or outside for more than 30 days.

**CHEMICAL EXPOSURE:** Most general cleaning chemicals should be acceptable for use as most are diluted with water. Request Armacell's complete chemical resistance guide for specific chemicals to avoid contact with. Generally acids at elevated temperatures should be avoided.



Suitable for use for both indoor and outdoor fields.

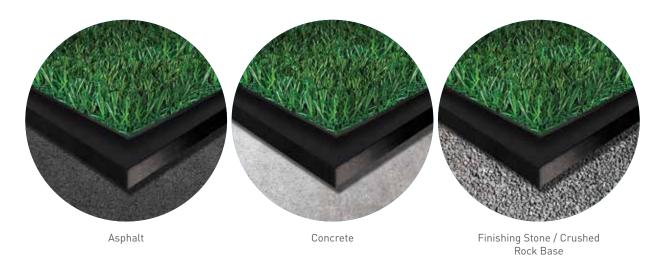
For more info please contact Armacell

www.armacell.us 800-973-0490 info.cf.us@armacell.com

Manufactured at Conover, NC facility: Quality Management System complies with the requirements of ISO 9001

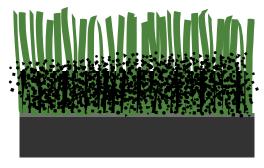
#### **SUBSTRATES**

Base should be completed prior to laying padding down. It should be free of any debris and sloped properly to meet site drainage requirements. ArmaSport turf underlayment shock pad can be used over a wide range of substrates including:



#### INFILL

Use with or without infill





#### MATERIAL SHIPMENT

3/8" roll 60" wide x 200-ft long = 45 rolls per truck load Approx. roll diameter 35" +/- approximately Height 61" +/-& weight typically 270 lbs.

5/8" roll 60" wide x 180-ft long = 36 rolls per truck load Approx. roll diameter is 42" +/- approximately Height 61" +/-& weight typically 370 lbs.

Other thicknesses and lengths available.

- // Roll material should be stored on its side.
- // Do not store on end as this may cause the edges to curl.
- // Do not store rolls higher than 2 rolls high or outside for more than 3 months.



#### SPECIFICATION AND COMPLIANCE

#### **MAINTENANCE**

The padding itself requires no maintenance. Follow recommended field maintenance guidelines for type of field installed.

#### **ANTIMICROBIAL**

Padding contains an added biocide and has been tested to ASTM G21. Contact Armacell for full details.

#### WARRANTY

# ARMACELL ARMASPORT® TURF UNDERLAYMENT SHOCK PAD LIMITED WARRANTY

The limited warranty ("Warranty") set forth below is given by Armacell, LLC ("Armacell") with respect to the ArmaSport® turf underlayment shock pad referenced in the quote provided to you along with this limited warranty (the "Product"). Subject to the terms, conditions, and limitations set forth below, the Product, when purchased by you ("Buyer") in new condition, is warranted against defects in materials or workmanship for a period of SIXTEEN (16) YEARS from the date of original purchase from Armacell (the "Warranty Period"). In the event that Buyer asserts a claim pursuant to this Warranty, and Armacell determines that the Product is defective, the Product will be repaired or removed and replaced with new Product, as determined in Armacell's discretion. This Warranty is valid only to the original purchaser of the Product and is not transferable (whether by operation of law or otherwise).

This Warranty does not cover any defect, nonperformance or failure of the Product caused by accidents, misuse, abuse, lack of reasonable care, alteration, improper, faulty or negligent installation, subjecting the Product to any use or maintenance other than as specified in the Product specifications, including without limitation, exposing the Product to sun, rain or other weather prior to installation, exposing the Product, at any time, to any harmful chemical, or any other failure not directly resulting from defects in materials or workmanship. This Warranty does not apply in the following cases: loss of or damage to the Product due to acts of God (including lightning strikes); fire; vandalism; civil disturbances; mishandling; or because of services performed by someone other than Armacell or its authorized service provider. WARRANTY IS VOID IF PRODUCT IS NOT USED FOR THE PURPOSE FOR WHICH THE PRODUCT IS MANUFACTURED.

Any Warranty claim Buyer may have regarding the Product must be addressed to Armacell, LLC, 55 Vilcom Center Drive, Suite 200, Chapel Hill, NC 27514. Armacell shall have no liability under this Warranty unless [1] Armacell is notified in writing within the Warranty Period and within thirty [30] days after Buyer's discovery of the defect, and [2] Buyer preserves the Product in its alleged defective condition and Armacell is given the opportunity to inspect the Product while the Product is still installed (prior to any alteration or removal of the Product). This Warranty excludes labor and service charges related to the removal or reinstallation of the Product.

EXCEPT AS EXPRESSLY SET FORTH ABOVE, ARMACELL MAKES NO OTHER REPRESENTATIONS OR WARRANTIES, AND EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT, AND NO OTHER EXPRESS WARRANTY OR GUARANTY GIVEN BY ANY PERSON OR ENTITY WITH RESPECT TO THE PRODUCT SHALL BIND ARMACELL.

ARMACELL SHALL IN NO EVENT BE LIABLE, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY, OR ON ANY OTHER BASIS, FOR DAMAGES TO PERSONS OR PROPERTY, CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL, TREBLE OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF INVESTMENT, INDEBTEDNESS, LOSS OF FINANCING, LOSS OF SALES OR PROFITS, OR BUSINESS INTERRUPTION, DISCONTINUATION, OR TERMINATION SUSTAINED BY BUYER, OR BY ANY PERSON DEALING WITH BUYER, IN CONNECTION WITH THE PRODUCTS, AND BUYER SPECIFICALLY WAIVES ANY SUCH CLAIMS OR CAUSES OF ACTION BUYER MAY PURPORT TO HAVE. ARMACELL'S LIABILITY FOR ANY CLAIM OF ANY KIND (INCLUDING, WITHOUT LIMITATION, CLAIMS BASED UPON ANY EXPRESS WARRANTY CONTAINED HEREIN AND CLAIMS BASED UPON ANY WARRANTY IMPLIED BY LAW), SHALL BE LIMITED, AT ARMACELL'S OPTION, TO REPLACEMENT OR REPAIR OF THE PRODUCT, AND BUYER EXPRESSLY WAIVES ANY RIGHT IT MIGHT HAVE TO ANY OTHER MEASURE OF DAMAGES, STATUTORY OR OTHERWISE. NOTWITHSTANDING ANYTHING TO THE CONTRARY HEREIN, IN NO EVENT SHALL ARMACELL'S LIABILITY ARISING OUT OF OR RELATED TO THIS WARRANTY EXCEED THE AMOUNT PAID BY BUYER FOR THE DEFECTIVE PRODUCT.

This limited warranty is subject to Armacell's Quote Terms, as the same are in effect on the date of sale of the Product to Buyer. In the event of any conflict between this Warranty and the Quote Terms, this Warranty shall control.



#### **REACH and RoHS**

Download our REACH and RoHS statements from our website:

www.armacell.us/ solutions-center/ document-downloads/certificates/

#### ADHESIVE MANUFACTURERS (MEMBERS OF STC)

# NOTE: Follow all adhesive manufactures' instructions.

Temperature and humidity may affect adhesive bonding and site conditions should be monitored.

#### Adhesive Technologies LLC

Sarasota, FL United States P: 754-399-1684

#### Aplix Inc.

Charlotte, NC United States P: 704-588-1920

#### California Sports Surfaces

Andover, MA United States P: 978-623-9980

#### **Chemical Concepts**

Huntingdon Valley, PA United States P: 800-220-1966

#### **Chemique Adhesives**

Kennesaw, GA United States P: 770-451-2904

#### Henko A&T USA

Miami, FL United States P: 786-296-7531

#### **ITW TACC**

Rockland, MA United States P: 781-681-0472

#### Mapei

Quebec, Canada P: 514-946-8175

#### The Reynolds Company

Greenville, SC United States P: 864-232-6791

#### **Sika Corporation**

Lyndhurst, NJ United States P: 201-933-8800

#### Stauf USA, LLC

Arlington, TN United States P: 901-820-0007

#### SynLok Adhesives

Stony Point, NC United States P: 828-244-0200

#### \*Synthetic Surfaces, Inc.

Scotch Plains, NJ United States P: 908-233-6803

#### Turf-n The World, Inc

Riverside, CA United States P: 951-686-2270

#### ASSOCIATION MEMBERSHIPS

Armacell is a proud member of







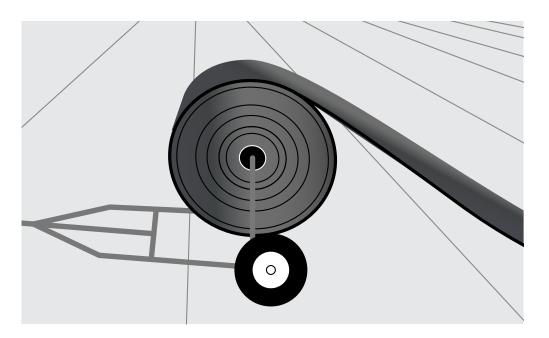
<sup>\*</sup>Experienced ArmaSport supplier

#### RECOMMENDED INSTALLATION METHOD

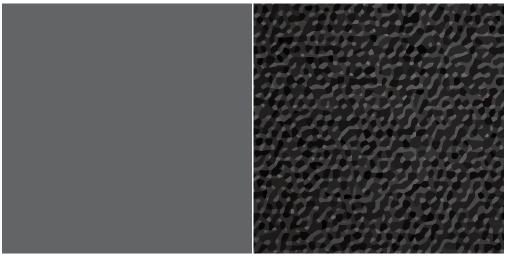
#### **UNROLLING THE FIELD**

ArmaSport shock pad is sold in rolls, which speeds up installation and results in less waste.

Unroll padding in desired configuration, typically across field width. Can layout with or without perpendicular rows of pad.



Padding has a smooth skin side and a skived cut surface. The padding thickness is produced double the thickness required and then skived in half producing the installed thickness. The padding is typically installed with the skived side down.



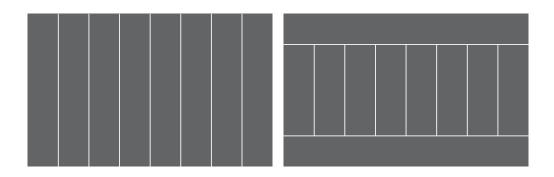
Smooth Side Up

Skived Side Down

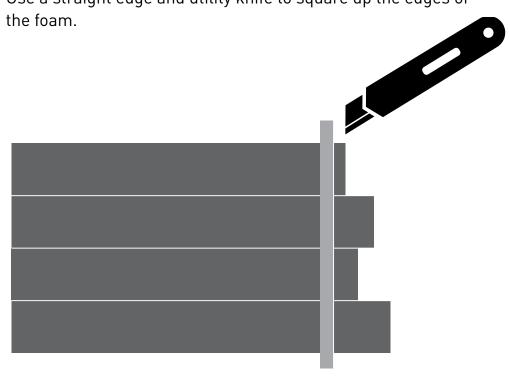
#### **LAYOUT CONFIGURATIONS**

Installation configurations may vary by field type, field conditions and design preference.

Rolls may run across the field or a layout utilizing a perpendicular roll on each edge may be preferred.



Use a straight edge and utility knife to square up the edges of the foam.

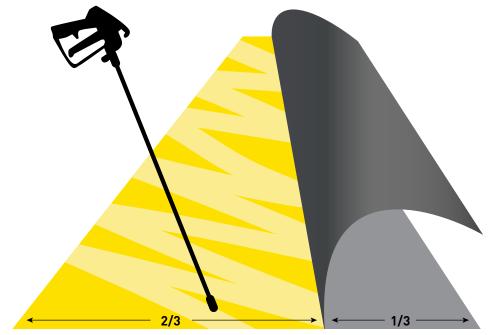


#### **INSTALLATION OPTION #1**

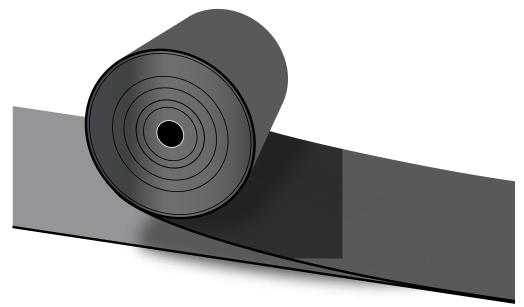
# SEAM AND GLUE DOWN

#### **INSTALLATION AS WITH FIELD HOCKEY**

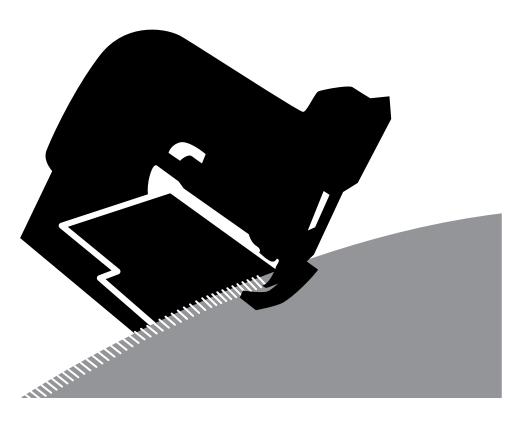
- Roll out first length of padding.
- Apply spray glue to the substrate surface for 2/3 of the width.

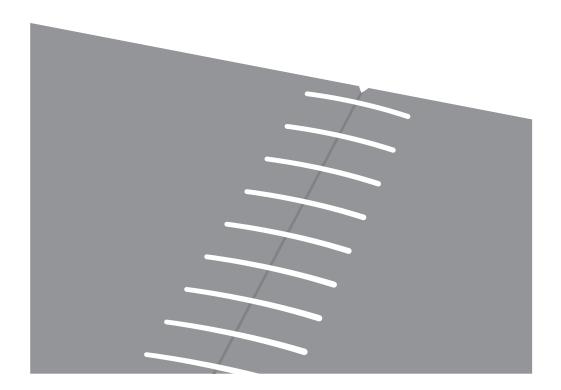


- Unroll and lay the second roll of padding on top of the first length of pad.
- Align the edges so that they may be stitched together.



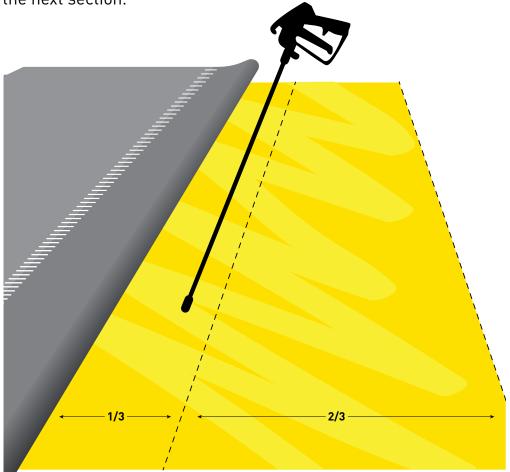
5 Stitch two sections together on one edge.



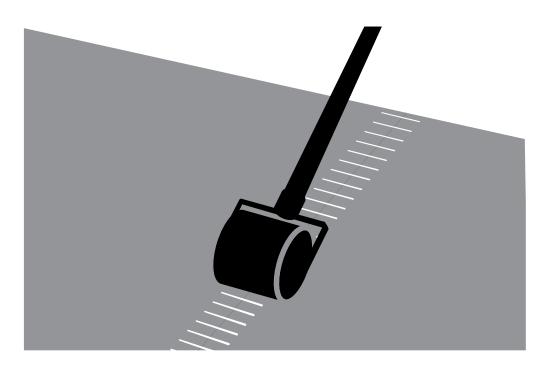


6 Pull back what remains of the unglued first section along with the second section. Expose enough substrate surface to apply adhesive to cover the remaining 1/3 width of the first section and 2/3 width of the second section.

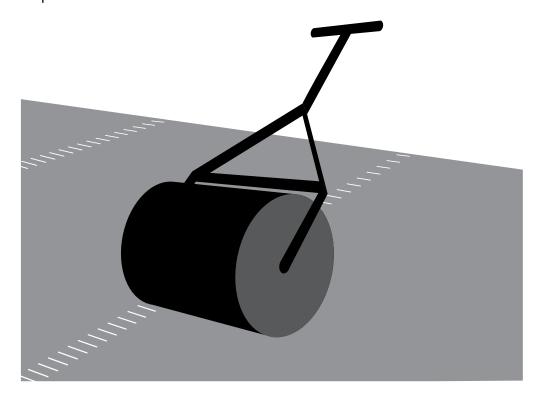
This leaves enough material unglued so that it may be stitched to the next section.



7 Flatten each completed seam.



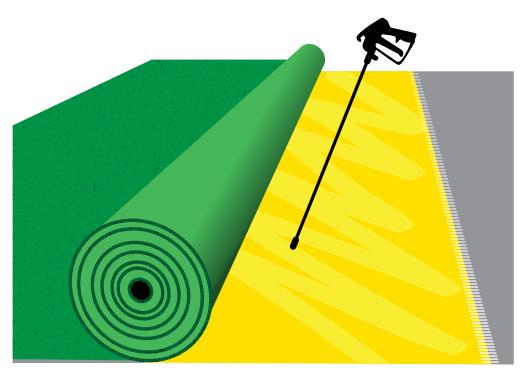
8 Then use a weighted roller to flatten out each section.
Repeat until the entire field is covered.



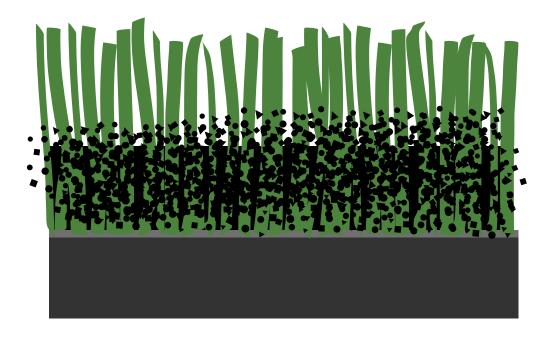
#### **TURF INSTALLATION**

Once the field is covered with padding, the synthetic turf can be installed according to turf manufacturer's specifications.

For field hockey the turf is typically spray-glued to the pad.



For infilled fields the turf typically lays on top of the padding with the weight of the infill keeping it in place.

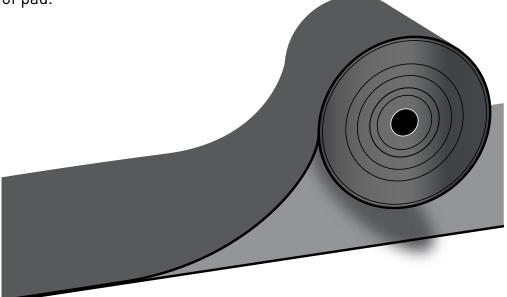


# **SEAM ONLY**

# NO GLUE DOWN TO SUBSTRATE – TYPICALLY USED FOR INFILLED TURF

1 Unroll first length of padding across the field.

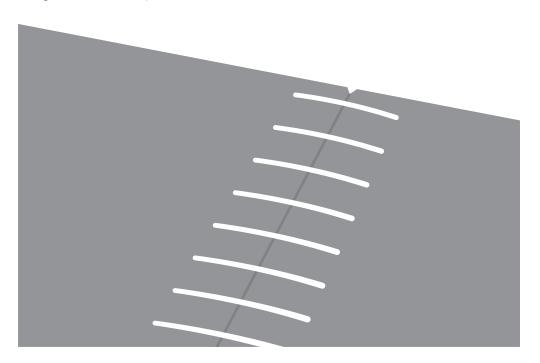
Unroll and lay the second roll of padding on top of the first length of pad.



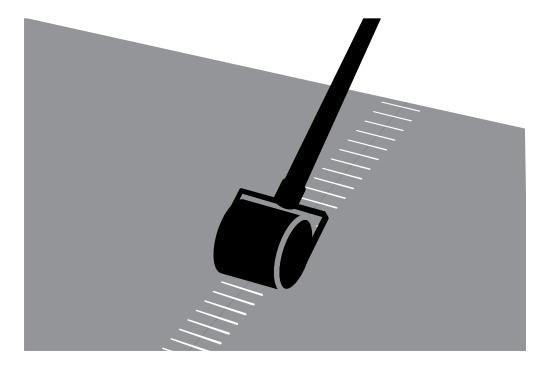
3 Align the edges so that they may be stitched together.



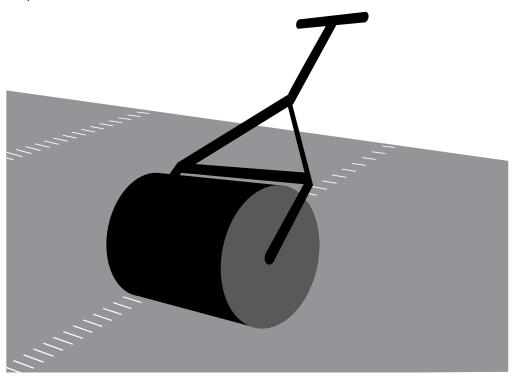
Once these two sections are stitched together, pull the second length out and lay flat.



5 Flatten each completed seam.

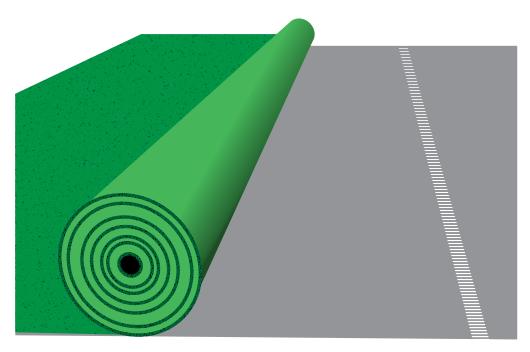


6 Then use a weighted roller to flatten out each section.
Repeat until the entire field is covered.

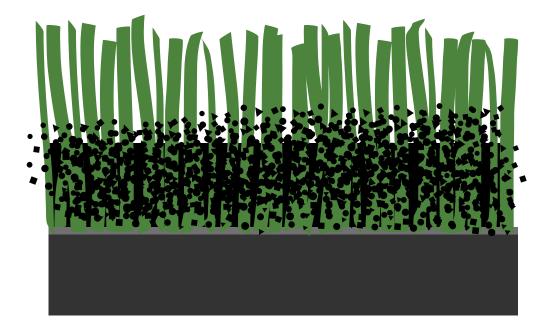


#### **TURF INSTALLATION**

Once the field is covered with padding, the synthetic turf can be installed according to turf manufacturer's specifications.



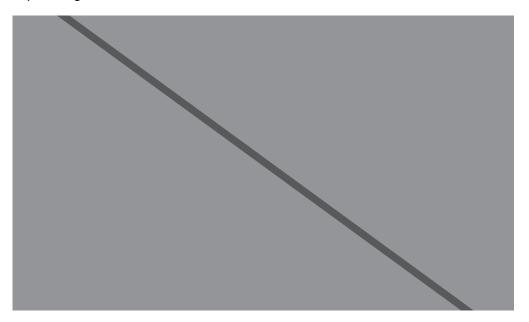
8 For infilled fields the turf typically lays on top of the padding with the weight of the infill keeping it in place.



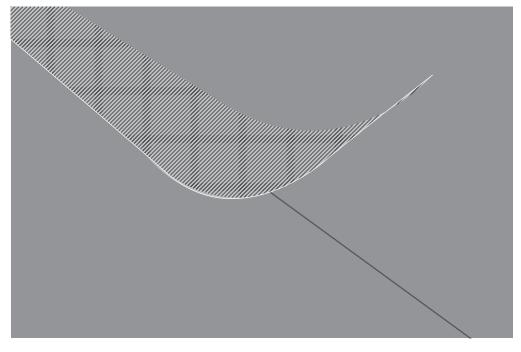
#### **INSTALLATION OPTION #3**

# TAPE AND GLUE

- 1 Unroll first length of padding across the field.
- Unroll and lay the second roll of padding adjacent to the first length of pad. Butt up and align the edges so that they may be taped together.



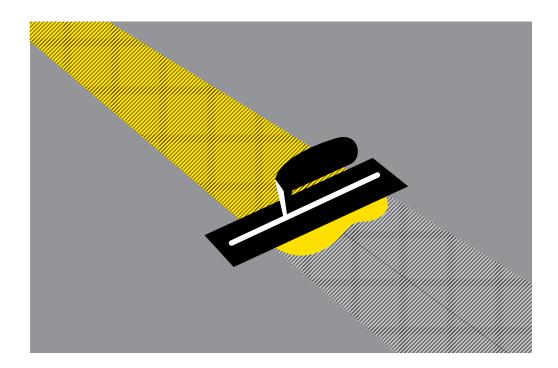
Apply mesh seaming tape across the seam of the two sections of padding.



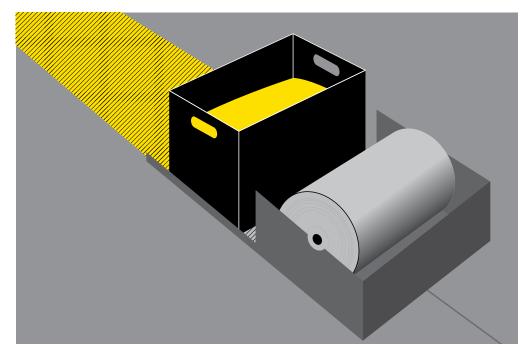


4 Apply seaming adhesive and trowel the adhesive over the joint covering the mesh seaming tape.

Repeat until the entire field is covered.

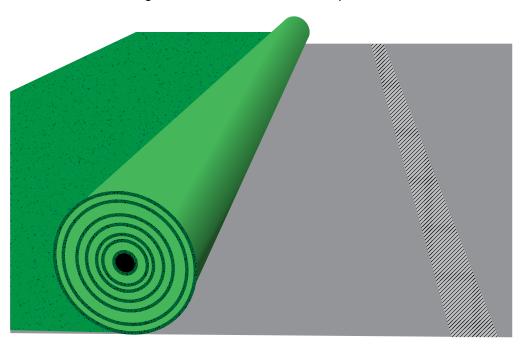


A glue box may also be used.

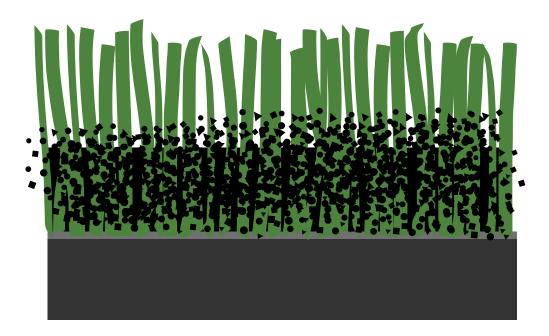


#### **TURF INSTALLATION**

Once the field is covered with padding, the synthetic turf can be installed according to turf manufacturer's specifications.



6 For infilled fields the turf typically lays on top of the padding with the weight of the infill keeping it in place.



All data and technical information are based on results achieved under the specific conditions defined according to the testing standards referenced. Despite taking every precaution to ensure that said data and technical information are up to date, Armacell does not make any representation or warranty, express or implied, as to the accuracy, content or completeness of said data and technical information. Armacell also does not assume any liability towards any person resulting from the use of said data or technical information. Armacell reserves the right to revoke, modify or amend this document at any moment. It is the customer's responsibility to verify if the product is suitable for the intended application. The responsibility for professional and correct installation and compoliance with relevant building regulations lies with the customer. This document does not constitute nor is part of a legal offer to sell or to contract.

At Armacell, your trust means everything to us, so we want to let you know your rights and make it easier for you to understand what information we collect and why we collect it. If you would like to find out about our processing of your data, please visit our **Data Protection Policy**.

© Armacell, 2022. All rights reserved. Trademarks followed by ® or TM are trademarks of the Armacell Group

00273 | ArmaSport Turf | ArmaSport | InstManual | 012022 | NA | EN-A

### ABOUT ARMACELL

As the inventors of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal, acoustic and mechanical solutions that create sustainable value for its customers. Armacell's products significantly contribute to global energy efficiency making a difference around the world every day. With 3,000 employees and 23 production plants in 15 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for high-tech and lightweight applications and next generation aerogel blanket technology.

