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GAMECOURT® INSTALLATION INSTRUCTIONS

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1. FLOOR PREPARATION

Concrete to cure a minimum of 90 days. The concrete slab should be tested for moisture content and pH levels prior to installation. The moisture content of the concrete slab should not be greater than 4 lbs. of moisture per 1000 Square Feet per 24-hour period in accordance with the RFMA (Rubber Flooring Manufacturer's Association) Calcium Chloride Test. The maximum pH level allowed is 8.5. The temperature in the building should be between 65-70 degrees, max humidity at 70 - preferable at 50%, HVAC installed and running.

Prior to delivery and starting installation, inspect jobsite to see if area to receive synthetic flooring is ready and concrete is level and dry. Necessary measures, such as scraping, sanding and grinding must be performed to remove all dirt, paint, drywall compound or anything that will prevent the adhesive from bonding the basemat to the substrate.

Disc sand entire floor to remove all foreign materials from the concrete subfloor and rough up the surface for proper adhesion. Use 36 grit sandpaper discs. Use these discs on a buffer with a sanding head (the type that has a hub for attaching the sandpaper).

After the floor is disc sanded, remove all dust and debris by first sweeping and then tacking the floor with methanol or water. Vacuum as necessary to remove all dust. This floor prep should be performed prior to unrolling the basemat as this will keep the basemat clean.

Protect walls with duct tape. Apply two rows of duct tape, holding off floor approximately 1/8". Tape all door jams with blue masking tape.

Fill all expansion joints around walls and throughout the floor with joint filler. Joints should be flush with the floor. If joint fill is higher than the floor, scrape or sand accordingly.

DOOR OPENINGS - If transition strips are specified and synthetic is to butt to carpet, vinyl or tile - install snap track. Fill snap track groove with cardboard or 1/8" masonite covered with duct tape. Scratch and wear coat will not adhere to duct tape. Roppe Corporation (800-537-9527)(SWEETS 09650/ROP) makes vinyl reducers and metal snap track (for both straight and flexible applications).

2. INSTALLATION PREPARATION

INVENTORY AND SEPARATE MATERIALS -Check incoming product against the packing slips to ensure proper quantities are delivered. NOTIFY MOOSE SPORTS OF ANY DAMAGED OR SHORT SHIPPED QUANTITIES AS SOON

AS POSSIBLE. This will allow us to get the correct quantities to you in a timely fashion. Check quantities shipped with the floor area square feet to ensure adequate product was shipped. Approximate coverage rates per working unit are:

GAMECOURT® Primer (74)	24 kg unit	.014 kgs/SF (1700 SF/unit)
GAMECOURT® Adhesive (111)	20 kg unit	.084 kgs/SF (238 SF/unit)
GAMECOURT® Scratch Coat (220)	20 kg unit	.065 kgs/SF (307 SF/unit for 2 applications)
GAMECOURT® Wear Coat (224)	20 kg unit	.223 kgs/SF (90 SF/unit for a 2mm pour)
GAMECOURT® Top Coat (67)	10 kg unit	.026 kgs/SF (385 SF/unit - spray applied) .018 kgs/SF (556 SF/unit - roller applied)
GAMECOURT® Line Paint (45)	1/2 kg unit	Approx. 160 lineal feet per unit for 2" line

Separate and mark a number on each "A" & "B" component with a magic marker, starting with #1 and mix the #1 "A" component with the marked #2 "B" component to ensure everything is mixed properly. Proper inventory, separating and marking of materials will prevent the wrong mixing of materials or use of wrong materials.

Set up a mixing station as close to area where synthetic flooring is to be installed. Have adequate power and light. Cover floor and walls with 6-mil polyethylene, joints sealed with duct tape.

"IMPORTANT NOTE" Mixing Station

Proper mixing of two component materials is critical to a successful installation. A clean, well organized mixing area will help in the proper mixing and application of synthetic materials.

TOOLS - PREP

- Brooms
- Vacuum
- Buffer with sanding head
- Sandpaper discs for buffer
- Patching/joint filler - Plani/Patch by Mapei or similar cement based compound
- Cement trowel
- Duct tape and blue tape (2")

3. GLUE THE BASEMAT

Unroll basemat and rough out to size allowing extra (a minimum of 6") on butt seams and at walls. **DO NOT PRECUT. REVERSE ROLL BASEMAT TO RELAX TENSION** (this is especially true for thinner basemat @ 6MM or less). Ideal room temperature for gluing is 70-75 degrees and low humidity.

After the basemat is allowed to relax, fold back first row from wall (fold back a little more than half way). Mix two-component GAMECOURT Adhesive. The mixing team will mix adhesive units in sequence starting with number 1. Thoroughly pre-mix Part "A" prior to adding Part "B". Add Part "B" to Part "A" while mixing part "A". Be careful not to splash Part "B" on you when pouring into bucket. Clean any contacted areas immediately. Move mixer around bottom of unit and all around until the color is consistent. Do not mix next unit until first unit is used up. Pour unit onto floor. Bucket can be placed up side down to drain adhesive from unit. **DO NOT SCRAPE SIDES OF BUCKET.**

Trowel glue onto concrete floor with recommended notched trowel (3/32" X 3/32" X 3/32" V-notched trowel). Contact Beno J. Gundlach Company, Belleville, IL (618-233-1781) for a local distributor. Their stock item is RCA trowel (68.5 SF/Gal). Spread adhesive from wall to fold in basemat. After row is completed, roll basemat into fresh adhesive and make end cuts allowing 1/2"-3/4" gap between wall and basemat. Open up and fold back the first row and second row of basemat. The first row should be folded back sufficient enough to expose the adhesive. The second row should be folded back about half way. Apply adhesive to exposed concrete. After adhesive is applied to entire row, roll basemat back. Be sure side seams are not touching, but have a slight gap. Work the basemat across the room providing a 1/2"-3/4" gap at all floor openings, athletic equipment inserts, electrical openings and door jams. If the adhesive starts to set up and is very difficult to trowel, stop and mix more adhesive. Do not try to force the glue after it has begun to set.

“IMPORTANT NOTE” Placing the Basemat

Place adjacent basemat side seams with slight gap. **BASEMAT MUST NOT BE IN COMPRESSION.** If basemat is in compression, it will lift at seam and will not be adhered. End seams can be double cut, but after bottom cut piece is taken out, apply additional adhesive in area where cut piece is removed.

ADHESIVE SPREAD RATES - Be sure a proper amount of adhesive is being applied to floor. **On first unit of adhesive, check the square footage to see if the proper amount is being used.** The proper size notch is critical to this application. If notches are too deep, too much adhesive will be used and there will not be sufficient amount of adhesive to finish the job. If notches are too shallow, insufficient adhesive will be applied and basemat will not be adequately adhered to concrete.

Be sure and check trowel notches during installation to be sure they maintain the proper depth and re-notch with file if necessary. Clean trowel during installation and at end of day so glue will not clog up notches and effect spread rates.

ROLLING THE BASEMAT - After a few rows of basemat are installed into adhesive, roll with linoleum roller to set basemat into adhesive and eliminate air pockets. **Never leave roller on freshly glued basemat.** Set on unglued basemat or on concrete. Check all seams (especially end seams at the roll's core) and weight if necessary (use 1" X 6" weighted down with buckets of GAMECOURT® materials). Be sure the perimeter is rolled sufficiently. The roller should be almost touching the wall so the end of the basemat at the perimeter is completely rolled. If mat at perimeter rolls up, secure with weight. Allow approximately 8 hours after gluing the basemat before proceeding to the next step.

TOOLS - GLUING THE BASEMAT

- Heavy duty 1/2" mixing drill and mixing paddle
- V-notch trowel (3/32" X 3/32" X 3/32")
- Utility knife with replacement blades
- Linoleum roller - 75# or more

4. SEAL THE BASEMAT - SCRATCH COATS

Remove 1" X 6" wood strips and buckets from basemat. Check basemat for any loose or hollow places and make repairs. Cut out hollow spots and replace with basemat. Check all seams for high ridges. Tape all inserts, insert covers, reducers and other obstructions with duct or masking tape. If basemat has become soiled during installation sweep and clean prior to scratch coat application.

Use steel cement trowels to apply scratch coat material. Grind or file 1/4" radius on all corners. This small round off will help eliminate most of swirls and ridge marks.

MIX SCRATCH COAT – The mixing team will mix scratch coat units in sequence starting with number 1. Thoroughly mix Part A then add Part B to Part A while mixing part A. Be careful not to splash Part B on you when pouring into bucket. Clean any contacted areas immediately. Move mixer around bottom of unit and all around until the color is consistent. Do not mix next unit until first unit is used up.

1st SCRATCH COAT - Start at perimeter and work into the center and towards a pre-planned exit. Solid fill perimeter, equipment and doorway voids. Force scratch coat into basemat side and end seams to be sure they are filled completely. This becomes critical as the thickness of the basemat increases. Look for any loose mat one more time. This will be identified by feel and/or may appear as a different shade or look.

If loose, cut out and fill with scratch if small area. Apply scratch coat without any “lick” marks or “ridges”. Bucket can be placed up side down to drain scratch coat from unit. **DO NOT SCRAPE SIDES OF BUCKET.** Allow 1st scratch coat to dry approximately 8-12 hours before applying the next scratch coat.

“IMPORTANT NOTE” Scratch Coat Application Rates

The first scratch coat will use approximately 60%-70% of material as the basemat and perimeter voids will absorb considerable amount of material.

PREP SEAMS & FLOOR - After scratch coat has cured, inspect basemat again for loose spots and do repairs. Prep seams by **LIGHTLY** sanding with 4-1/2" electrical grinder and 50 grit sandpaper. Run sandpaper over **ALL** seams being sure not to cut too deep as to expose raw basemat. This sanding should not produce significant amounts of dust so sweeping will not be required unless the floor has been soiled by other means. The 2nd scratch coat will self clean any

minute sanding dust. In addition to the seams, check the entire floor for any imperfections or in the basemat or scratch coat material. Sand and/or repair the areas.

The prepping of the seams/floor will provide a smooth surface. This is critical as any "high" spots or seams in the floor may telegraph through the wear coat. The process of creating a smooth floor is an ongoing process throughout the entire basemat/scratch coat phase.

2nd SCRATCH COAT - Apply the 2nd scratch coat only after the floor has been inspected and prepped. As before, pay attention to seams since there may be some shrinkage of 1st scratch coat. Now is the time to final fill all seams and cut outs. Again, if loose basemat is found during application, cut out and fill with scratch coat. For these repairs overfill any cutouts as they will shrink. Any excess can be sanded level prior to wear coat.

INSPECT 2ND SCRATCH COAT - Prior to application of wear coat inspect basemat and scratch coat again for any licks or ridges. These can be sanded but extreme care must be taken as not to cut into unsealed basemat. Any unsealed basemat will cause imperfections in the wear coat. Allow 2nd Scratch Coat to dry approximately 8-12 hours before applying the 2mm Wear Coat.

"IMPORTANT NOTE" Importance of Proper Basemat and Scratch Coat Installation

The wear coat is only 2MM thick. This is approximately the thickness of a nickel. Any imperfections in the basemat or scratch coat that exceed this thickness may telegraph through. If these occur at a "high" spot in the concrete they will show even more as the wear coat "thins" slightly at these areas. The wear coat and top coat paint will not "cover up" poor or inadequate basemat/scratch coat applications. If there is proper installation of basemat and scratch coat the wear coat will require little prep work prior to painting.

TOOLS - SCRATCH COAT

Steel cement finishing trowels
Heavy duty 2@ mixing drill and mixing paddle
Xylene, Toluene or Acetone
4-1/2" electrical grinder and 50 grit sandpaper.

5. APPLY THE 2MM WEAR LAYER – THE "POUR"

Measure room and divide square footage by number of wear coat units. Along the long wall place strips of masking tape indicating square footage and approximate number of wear coat units. Place these markings at regular intervals (every 10 units works well). These markings will provide a running gauge for application of the wear layer so the proper amount of material will be applied to the floor.

APPLICATION SQUEEGEE – The use of a notched squeegee is recommended to apply wear coat. For a 2.0 MM lift a 24" rubber or neoprene squeegee can be cut with a razor knife with notches 3/8" deep and 3/8" wide. Layout the v-grooves with ink pen on masking tape applied to blank squeegee. Depending on the installer and how fast or slow they walk the size of the squeegee notches may vary, but not more than 1/16" (plus or minus) in any dimension. Seal off doorways and other transition areas to prevent wear coat from running off sealed basemat. A dam can be constructed with duct tape, foam weather-stripping (self stick type) or caulk.

"IMPORTANT NOTE" Plan For a Continuous Pour of the Floor

Prior to starting be sure everything is ready to go as once mixing has started, there can be no stopping until entire area has been covered with mixed wear coat. This is a monolithic pour. The material has to be poured wet to wet (not allowing the wear coat to set up). The Wear Coat sets up quickly so make sure to have enough crew members to keep the pour continuous.

MIX TWO COMPONENT WEAR COAT - The mixing team will mix adhesive units in sequence starting with number 1. Thoroughly pre-mix Part A for at least 30 seconds prior to adding Part B. Add Part B to Part A while mixing part A. Be careful not to splash the Part B on you when pouring into bucket. Clean any contacted areas immediately. Move mixer around bottom of unit and all around until color is consistent. After wear coat is thoroughly mixed (mix for at least 2 minutes), filter through fiberglass window screen into a clean 5 gallon bucket.

Use only these buckets to transport material out to floor. Mark as "transport buckets" to be sure only these buckets are used to transport mixed and screened material to floor. **DO NOT USE BUCKETS THE WEAR COAT COMES IN TO**

TRANSPORT MATERIAL. There is a possibility unmixed material from sides of buckets will be deposited on floor and will not set up.

Apply 2MM wear coat with notched squeegee. Plan the pour so you leave yourself a good exit. If room is rectangular work across short dimension of room. Pour mixed material starting at wall and spread to proper thickness. Keep notches in trowel full of material. Do not overwork material. Pour the next bucket along wet line of previously poured material. Do not let wet line begin to cure - work evenly across floor.

“IMPORTANT NOTE” Monitor Your Usage During the Pour

Check usage rate at start and during pour to be sure correct amount of material is being applied to floor. If too little is applied seams may show through and if too much is applied you will run out of material. Adjust your usage rate if applying too little or too much wear coat material.

PROPANE TORCH - The use of a propane roofing torch can be used to eliminate the small bubbles created during mixing process. Only qualified technicians shall teach and demonstrate the proper use of this equipment.

After completing pour, clean up tools, mixing area and secure all doors going into work area to prevent any person from walking on uncured wear coat. Wait approximately 8-12 hours for Wear Coat to dry before applying Top Coat.

TOOLS - 2MM LIFT

Heavy duty ½” mixing drill
Mixing paddle
CLEAN 5-gallon buckets
Fiberglass window screen
V-notch rubber squeegee

6. TOP COAT - THE “PAINT”

Top coat material should be applied within 2-3 days of the 2mm wear coat pour. If the Top Coat is applied 3-5 days after the 2mm pour, the floor should be tacked twice with zylene or acetone prior to applying the Top Coat. If the Top Coat is applied 5+ days later, then the 2mm pour should be screened with a 120 grit paper, tacked with zylene or acetone and then the Top Coat can be applied.

Top Coat material contains solvent. Strictly follow MSDS instructions for handling all hazardous materials. All employees **MUST** be instructed in the precautions to take when working with hazardous materials. **Proper breathing apparatus is REQUIRED for top coat application.** It is recommended that the top coat be applied when no other personnel are in the immediate area.

Check wear coat for imperfections. Sand these smooth with 150 grit sandpaper. If a coarser grit is required, finish sand using a 150 grit to remove scratches. If scratches are left in floor, they will telegraph through the top coat.

Mix two-component Top Coat. The mixing team will mix wear coat units in sequence starting with number 1. Thoroughly pre-mix Part A prior to adding Part B. Add Part B to Part A while mixing part A. Be careful not to splash Part B on you when pouring into bucket. Clean any contacted areas immediately. Move mixer around bottom of unit and all around until color is consistent. Pour through a screen directly into roller pan.

Roll on Top Coat using 3 people rolling and 18” wide rollers. For best results use a ½”- ¾” solvent resistant roller, solvent resistant roller pan and 2 people to apply and spread the paint, and a 1 ¼” nap roller (1 person) to back roll the paint. Note: 1 ¼” rollers are hard to find and can be purchased from Wesley Enterprises at 888-276-6030. If you can't find 1 ¼” nap rollers, use ½” rollers to apply and spread and ¾” rollers to back roll.

Use a roller pan to load paint onto roller. Be sure roller pan is solvent resistant. If unsure, line inside of pan with 6-mil poly attached to pan with spray adhesive (3M 777). If area is rectangular, work across short dimension of room. Starting along wall, use a 3” roller to cut in next to wall.

Once cut in is done, the first roller applies material heavily to insure coverage across the short dimension of the room. The first roller works the material on the floor, usually 2 or 3 passes. It is recommended that the first roller applies paint at right angles to the second roller. The second roller evens out the material and picks up any excess. The third roller also evens out the paint and leaves a light stipple finish.

The second and third rollers should use a straight up and back motion and pick up the roller and move it over so as to half lap the next pass. The second roller should not paint in an "X" or "W" pattern. The width of pass across the floor is extremely critical to avoiding lap marks and creating an even application of finish. The recommended pass width is usually 4-6 feet. The narrower the pass, the more highly likely the applicator can get back to the overlap while still wet. Once the first pass is completed, the first roller starts a second pass. The first roller should apply the paint right next to the previous pass. The second roller will then go into the previous pass 6-8" and blend in the two passes. The third roller goes 10-12" into the previous pass and blends the two passes. If second roller becomes loaded with excess top coat, dry out by running roller next to wall. Do not let wet line become too dry. Work as quickly as possible and evenly across the floor.

After applying the top coat, discard rollers, clean up tools and secure all doors going into the work area to prevent any person from walking on fresh Top Coat. Allow approximately 12-24 hours for the Top Coat to dry before applying the Game Line Paint.

Spraying - Contact Moose Sports Surfaces, Ltd. for equipment and instructions for spraying Top Coat Paint.

TOOLS - PAINTING

- Heavy duty 1/2" mixing drill and small mixing paddle
- 18" wide - 1/2", 3/4" and 1-1/4" nap solvent resistant roller covers
- Heavy duty roller frames and extension poles
- Solvent resistant roller pan (18")
- 3" wide roller frame (for cutting in along walls)
- NIOSH approved respirators for urethanes.
- Fine mesh white paint screen

7. GAME LINES

Allow sufficient drying time before painting. Drying time will depend on temperature and humidity. Normally it will be difficult to paint lines the next day after painting top coat. Use only good quality masking tape (3M--#233 automotive masking tape). **No blue tape**. It is important to press the tape down with the tape machine rollers again (without the tape in the tape machine) RIGHT BEFORE you apply the paint to ensure the paint does not leech under the tape.

APPLY GAME LINES WITHIN 2 DAYS OF APPLYING TOP COAT PAINT. If game lines are applied after this time frame, there is a good possibility they will not stick. If lines are applied beyond the above time frame, sand the surface with 100 grit sandpaper and clean with solvent prior to applying game lines.

Use brushes or rollers for painting game lines. Mix two-component game line paint. If using a brush, back roll with a roller to apply a light texture to game line paint. Light colors (white and yellow) will usually require two coats. Once the game line painting is complete, **PULL THE TAPE**. Do not allow game line tape (either painted or unpainted) to remain in place overnight.

TOOLS - GAME LINES

- Game line taping machine
- Masking tape
- Mixing drill and small mixing paddle
- Rollers and frames
- Small paint roller pans
- Paint brushes

8. DISPOSAL

Dispose all debris and unused material in accordance with all Federal, State and Local statutes.

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