TABLE OF CONTENTS

RECOMMENDED MAINTENANCE PROGRAMS FOR WOOD GYM FLOORS

Preparation of New Wood Gym Floors Page 2-6
Preventative Maintenance Page 7
Outline for Preparation of New Wood Gym Floors Page 8-9
Outline for Scrub & Recoat Page 10
Scrub & Recoat/Screen & Recoat Page 11-13
Laying Out the Court Page 14
How to Line the Court Page 15
Painting Court Lines Page 16

OFFICIAL COURT MARKINGS AND DIAGRAMS

NFHS Basketball – Court Diagram Page 17
NCAA Basketball – Court Diagram Page 18
NBA Basketball – Court Diagram Page 19
USA Basketball – International Basketball Court Diagram Page 19
USA Volleyball – All Volleyball Court Markings Page 20
NFHS Volleyball – Court Diagram Page 20
US Tennis Association – Court Markings Page 21
USA Badminton – Court Diagram Page 21
International Shuffleboard Association – Court Diagram Page 21
USA Racquetball Association –
Four Wall Handball Court Diagram Page 22
Racquetball Court Diagram Page 22
US Squash Racquets Association –
International North American Court Diagram Page 22
International Court Diagram Page 22
Doubles Court Diagram Page 22
Hillyard offers a variety of coating systems for treating and maintaining wood gym floors. Whether you choose our water-based gym finish 1907®, or our other low VOC products such as Tip-Off or Contender finishes, to our industry leading solvent-based Gold Medalist, Trophy, and 450 / 350 Gym Finishes, you can be assured of the highest quality and most durable finishes for your wood sports floor projects. Hillyard’s Basecoat II allows you to achieve the properties of an oil-modified urethane in a water dispersed form for VOC restricted areas to use as a seal or bridge coat under our solvent-based coatings. Hillyard wood gymnasium finishes include a unique water-based epoxy finish called Contender; a quick drying water-based seal/finish called Tip-Off, to our newest addition of our single component water dispersed oil-modified urethane called 1907. Our solvent-based oil-modified finishes include our Gold Medalist, along with our lower VOC 450 Gym Finish and for more restricted areas, our 350 Gym Finish. Rounding out our wood finish systems is our solvent-based epoxy Trophy Gym Finish.

The primary difference between the water-based and solvent-based systems is in the number of seal and finish coats applied for the completed system. The Contender system (water-based) utilizes two coats of Star as the seal, followed by painting and either an additional coat of Star followed by a single coat of Contender Finish, or two coats of Contender Finish directly over the sealed and painted floor. The Tip-Off system (water-based) is designed around four coats of product, either 2 coats of Basecoat II or 2 coats of Tip-Off, followed by painting and then 2 additional coats of Tip-Off as the finish. Our 1907 coating system is designed around 2 applications of Basecoat II as the seal, followed by painting and then 2 coats of 1907.

Our solvent-based coating systems of Gold Medalist and the Trophy system follow the industry standard process of 2 coats of their respective seals, followed by painting and then 2 coats of finish. A new system for VOC restricted areas involves the use of our Basecoat II as the seal, followed by game line markings, and either an additional coat of Basecoat II followed by the VOC compliant solvent urethane or 2 coats of the VOC compliant urethane finish. An additional option for VOC restricted areas in the Northeast region involves the use of a 4-coat application process with our 350 Seal and 350 Gym Finish. This system involves using 2 coats of 350 Seal followed by painting and then 2 coats of 350 Gym Finish.

**Preparing New Wood Gym Floors**

**Important**

To prevent future trouble of warping, buckling, and dry rot, it is important that arrangements for adequate circulation of air under the floor be provided during construction. Allow at least three (3) inches for expansion and contraction on the sides of the floor and do not tie the floor to the wall. Refer to MFMA (Maple Flooring Manufacturer’s Association) for proper acclimation of your floor system.

**Preparation**

After sanding, brush sweep and vacuum the floor until the surface and cracks are free of sanding dust. Next, tack the floor with a turkish towel dampened with Hillyard Kleen-Up Solvent.

Tack the floor several times until it is absolutely clean. It’s also a good idea to dust around the stage, pipes, window ledges, bleachers, and any other areas where dust can collect to be sure that no dust will fall into the seal or finish once they are applied. After the final tacking, allow the floor to sit at least 30 minutes before applying the first coat of seal. Floor temperature affects drying time. If the floor is cold, allow a longer period of time before the first coat is applied.
Preparing New Wood Gym Floors

Sealing — Finishing

A. Trophy or Gold Medalist Systems

1. Apply thin coat of seal with a lambswool or other approved Hillyard applicator.
2. Allow overnight drying and abrade the entire floor with Hillyard maroon pads (250 ft² per side). If grain raise is visible, 120 grit screen disks may be used in place of maroon pads for this step.
3. Tack the floor with Hillyard Tack-It™, Kleen-Up Solvent, or Pre-Game™ solution and let the floor dry at least 30 minutes.
4. Apply the second coat of seal with a lambswool or other approved applicator. After overnight drying, abrade the entire floor surface with Hillyard maroon pads (250 ft² per side of pad) and tack the floor with Hillyard Tack-It. Kleen-Up Solvent, or Pre-Game solution.
5. Mark game lines with Hillyard approved gym line marking paint.
6. Allow overnight drying of the paint and graphics. Allow the paint to dry thoroughly and then abrade the entire floor using Hillyard maroon pads (250 ft² per side).
7. Apply the first coat of Contender with a lightweight T-bar or Multi-Flo applicator.
8. Allow at least 2-4 hours of drying. If the floor is showing visible grain raise, abrade the floor with 3M SPP pads to smooth the floor. Tack and prepare the floor for the next coat of Star. If Star dries longer than 10 hours between coats, abrade the entire floor with 3M SPP or Hillyard maroon pads (250 ft² per side).
9. Apply the 2nd coat of Star and allow it to dry 4 hours.
10. Turn on exhaust system immediately after each coat of Contender Finish. Tack the floor with Tack-It or Pre-Game solution. Allow the floor to dry at least 30 minutes.
11. After the final coat, do not use the floor for at least 72 hours. Heavy traffic and scheduled events should not be allowed for at least one week. Turn on ventilation system and increase fresh airflow to aid in proper curing of the finish.

Note: Refer to the “Methods of Application” chart on page 6 for the appropriate applicator to be used with your choice of Hillyard finish.

B. Contender System

1. Apply the first coat of Star with a lightweight T-bar or Multi-Flo applicator.
2. Allow at least 2-4 hours of drying. If the floor is showing visible grain raise, abrade the floor with 3M SPP pads to smooth the floor. Tack and prepare the floor for the next coat of Star. If Star dries longer than 10 hours between coats, abrade the entire floor with 3M SPP or Hillyard maroon pads (250 ft² per side).
3. Apply the 2nd coat of Star and allow it to dry 4 hours.
4. Mark game lines with Hillyard approved gym line marking paint. Contact your Hillyard consultant for specific site instructions.
5. Allow overnight drying of the paint and graphics. Allow the paint to dry thoroughly and then abrade the entire floor using Hillyard maroon pads (250 ft² per side). If paints dry longer than 48 hours, abrade the paint and floor using 3M Surface Preparation Pads (SPP pads) or 150-120 grit screens depending upon the length of drying time allowed. Tack the floor with Hillyard Tack-It or Pre-Game solution, and let dry 30 minutes. Tack the floor one additional time with a cleaning cloth similar to Hillyard item #CHI415 to remove fine dust and particulates.
6.NOTE: If a delay is encountered longer than 48 hours before completing the painting process, the entire floor may require screening to ensure proper adhesion of the finish system.

7. Apply the second coat of Contender Finish using approved applicator.
8. After overnight dry (12 – 24 hours), apply 2nd coat of Contender Finish in the same manner as the first coat. No abrasion between coats of Contender Finish is needed if applied within 24 hours. If Contender dried longer than 48 hours, abrade with 150 grit discs or 3M Surface Preparation Pads (250 ft² per side), tack the floor with Hillyard Tack-It or Pre-Game solution, and let the floor dry. Tack the floor one final time with a cleaning cloth similar to Hillyard item #CHI415 to remove fine dust and particulates.
9. Apply the final coat of Tip-Off.
10. Turn on exhaust system immediately after each coat of Tip-Off to promote proper drying.
11. After the final coat, do not use the floor for at least 72 hours. Heavy traffic and scheduled events should not be allowed for at least one week. Turn on ventilation system and increase airflow to aid in proper curing of the finish.

D. Tip-Off using Basecoat II as Seal System

1. Apply the first coat of Basecoat II using the Hillyard Multi-Flo or lightweight T-Bar.
2. Allow the first coat to dry four (4) hours. Dry abrade the floor with Hillyard maroon pads (250 ft² per side). Tack the floor with towels lightly moistened in Hillyard Tack-It or Pre-Game Solution and allow the floor to dry. Tack the floor one additional time using a cleaning cloth similar to Hillyard #CHI415 to remove fine dust and particulates.
3. Apply a second coat of Tip-Off and allow to dry four (4) hours.
4. Dry abrade the entire floor using Hillyard maroon pads (250 ft² per side). If floor cures longer than 48 hours, use 150-120 grit screen disks or 3M SPP pads for abrading the floor to a uniformly dull appearance.
5. Contact your Hillyard Consultant for specific instructions.

6. Allow Contender Line Paints to dry overnight, abrade the entire floor with Hillyard maroon pads (250 ft² per side). If paint and seal dry longer than 48 hours, abrade the entire floor with 120-150 grit screens to ensure proper adhesion. Tack the floor with towels dampened in Hillyard Tack-It or Pre-Game and allow the floor to dry 30 minutes. Tack the floor one final time using the cleaning cloth similar to Hillyard item #CHI415 to remove fine dust and particulates.
7. Apply the third coat of Tip-Off.
8. Allow the 3rd coat of Tip-Off to dry 4 hours and apply the 4th (final) coat of Tip-Off. If the previous coat of Tip-Off has dried more than 24 hours, abrade entire floor with Hillyard maroon pads (250 ft² per side of pad). Tack the floor with towels dampened in Hillyard Tack-It or Pre-Game and allow to dry 30 minutes. Tack the floor one final time using the cleaning cloth similar to Hillyard item #CHI415 to remove fine dust and particulates.
9. Apply the final coat of Tip-Off.
10. Turn on exhaust system immediately after each coat of Tip-Off to promote proper drying.
11. After the final coat, do not use the floor for at least 72 hours. Heavy traffic and scheduled events should not be allowed for at least one week. Turn on ventilation system and increase airflow to aid in proper curing of the finish.
Preparing New Wood Gym Floors

3. Apply a second coat of Basecoat II and allow to dry 4–6 hours.

4. Dry abrade the entire floor using Hillyard maroon pads (250 ft² per side). If floor cures longer than 48 hours, use 150-120 grit screen disks or 3M SPP pads for abrading the floor to a uniformly dull appearance. Tack the floor with towels lightly moistened in Hillyard Tack-It or Pre-Game solution and allow the floor to dry.

5. Mark game lines using Contender Line Paints or other Hillyard approved paints. Contact your Hillyard Consultant for specific instructions.

6. Allow Contender Line Paints to dry overnight, abrade the entire floor with Hillyard maroon pads (250 ft² per side). If paint and seal dry longer than 48 hours, abrade the entire floor with 120-150 grit screens to ensure proper adhesion. Tack the floor with towels dampened in Hillyard Tack-It or Pre-Game and allow to dry 30 minutes. Tack the floor one final time using the cleaning cloth similar to Hillyard item #CH415 to remove fine dust and particulates.

7. Apply the first finish coat of 1907 Gym Finish.

8. Allow the 1st coat of 1907 to dry 4–6 hours and apply the 2nd (final) coat of 1907 Gym Finish. If the previous coat of 1907 has dried more than 12 hours, abrade entire floor with Hillyard maroon pads (250 ft² per side of pad). Tack the floor with towels dampened in Hillyard Tack-It or Pre-Game and allow to dry 30 minutes. Tack the floor one final time using the cleaning cloth similar to Hillyard item #CH415 to remove fine dust and particulates before applying the final coat of Tip-Off.

9. Turn on exhaust system immediately after each coat of Tip-Off to promote proper drying.

10. After the final coat, do not use the floor for at least 72 hours. Heavy traffic and scheduled events should not be allowed for at least one week. Turn on ventilation system and increase airflow to aid in proper curing of the finish.

E. Basecoat II and 1907 Wood Gym Finish System

1. Apply the first coat of Basecoat II using the Hillyard Multi-Flo or lightweight T-Bar.

2. Allow the first coat to dry 4–6 hours. Dry abrade the floor with 3M SPP pads (250 ft² per side) to smooth any grain raise. Tack the floor with towels lightly moistened in Hillyard Tack-It or Pre-Game solution and allow the floor to dry. Tack the floor one additional time using a cleaning cloth similar to Hillyard item #CH415 to remove fine dust and particulates.

3. Apply a second coat of Basecoat II and allow to dry 4-6 hours.

4. Dry abrade the entire floor using Hillyard maroon pads (250 ft² per side). If floor cures longer than 48 hours, use 150-120 grit screen disks or 3M SPP pads for abrading the floor to a uniformly dull appearance. Tack the floor with towels lightly moistened in Hillyard Tack-It or Pre-Game solution and allow the floor to dry.

5. Mark game lines using Contender Line Paints or other Hillyard approved paints. Contact your Hillyard Consultant for specific instructions.

6. Allow Contender Line Paints to dry overnight, abrade the entire floor with Hillyard maroon pads (250 ft² per side). If paint and seal dry longer than 48 hours, abrade the entire floor with 120-150 grit screens to ensure proper adhesion. Tack the floor with towels dampened in Hillyard Tack-It or Pre-Game and allow to dry 30 minutes. Tack the floor one final time using the cleaning cloth similar to Hillyard item #CH415 to remove fine dust and particulates.

7. Apply the first finish coat of 1907 Gym Finish.

8. Allow the 1st coat of 1907 to dry 4–6 hours and apply the 2nd (final) coat of 1907 Gym Finish. If the previous coat of 1907 has dried more than 12 hours, abrade entire floor with Hillyard maroon pads (250 ft² per side of pad). Tack the floor with towels dampened in Hillyard Tack-It or Pre-Game and allow to dry 30 minutes. Tack the floor one final time using the cleaning cloth similar to Hillyard item #CH415 to remove fine dust and particulates before applying the final coat of Tip-Off.

9. Turn on exhaust system immediately after each coat of Tip-Off to promote proper drying.

10. After the final coat, do not use the floor for at least 72 hours. Heavy traffic and scheduled events should not be allowed for at least one week. Turn on ventilation system and increase airflow to aid in proper curing of the finish.

F. 450 Gym Finish using Hillyard Gold Medalist Seal System

1. Apply thin coat of Gold Medalist Seal with a lambsooool or other approved Hillyard applicator.

2. Allow overnight drying and abrade the entire floor with Hillyard maroon pads (250 ft² per side). If grain raise is visible, 120 grit screen disks may be used in place of maroon pads for this step.

3. Tack the floor with Hillyard Tack-It™, Kleen-Up Solvent, or Pre-Game™ solution and let the floor dry at least 30 minutes.

4. Apply the second coat of Gold Medalist Seal with a lambsooool or other approved applicator. After overnight drying, abrade the entire floor surface with Hillyard maroon pads (250 ft² per side of pad) and tack the floor with Hillyard Tack-It, Kleen-Up Solvent, or Pre-Game solution.

5. Mark game lines with Hillyard approved gym line marking paint.

6. Allow overnight drying of the paint and graphics. Allow the paint to dry thoroughly and then abrade the entire floor using Hillyard maroon pads (250 ft² per side). If paints dry longer than 48 hours, abrade the paint and floor using 3M Surface Preparation Pads (SPP pads) or 150-120 grit screens depending upon the length of drying time allowed. Tack the floor with Hillyard Tack-It, or Pre-Game solution and let dry 30 minutes. Tack the floor one additional time with a cleaning cloth similar to Hillyard item #CH415 Chicopee stretch and dust tacking cloth to remove fine dust and particulates.

7. Apply a thin coat of 450 Gym Finish with a lambsooool pad or other approved Hillyard applicator, such as the Hillyard Multi-Flo.

8. Allow the first coat of 450 Gym Finish to dry 24 hours before abrading the entire floor with Hillyard maroon pads (250 ft² per side). Tack the floor with Hillyard Tack-It or Pre-Game solution and let the floor dry for at least 30 minutes. Tack the floor one additional time using a cleaning cloth similar to Hillyard item #CH415 to remove fine dust and particulates.

9. Apply the final coat of 450 Gym Finish with a lambsooool or other approved Hillyard applicator.

10. Turn on exhaust system 3–4 hours after each coat of 450 Gym Finish to promote proper drying.

11. After the final coat, do not use the floor for at least 72 hours. Heavy traffic and scheduled events should not be allowed for at least one week. Turn on ventilation system and increase fresh airflow to aid in proper curing of the finish.

Note: If time requirements do not allow for waiting 48 hours between finish coats of 450-Gym Finish, consider using Gold Medalist Finish as the first coat under 450 Gym Finish where VOC restrictions do not prohibit their use.

G. 450 Gym Finish using Hillyard Basecoat II as a Seal System

1. Apply the first coat of Basecoat II using the Hillyard Multi-Flo or lightweight T-Bar.

2. Allow the first coat to dry 4-6 hours. Dry abrade the floor with 3M SPP pads (250 ft² per side) to smooth any grain raise. Tack the floor with towels lightly moistened in Hillyard Tack-It or Pre-Game solution and allow the floor to dry. Tack the floor one additional time using a cleaning cloth similar to Hillyard item #CH415 to remove fine dust and particulates.

3. Apply a second coat of Basecoat II and allow to dry 4-6 hours.

4. Dry abrade the entire floor using Hillyard maroon pads (250 ft² per side). If floor cures longer than 48 hours, use 150-120 grit screen disks or 3M SPP pads for abrading the floor to a uniformly dull appearance. Tack the floor with towels lightly moistened in Hillyard Tack-It or Pre-Game solution and allow the floor to dry.
1. Apply thin coat of 450 Gym Finish with Hillyard applicator, such as the Hillyard Multi-Flo.
2. Allow the 450 Gym Finish to dry 48 hours before abrading the entire floor with Hillyard maroon pads (250 ft² per side). Tack the floor with Hillyard Tack-It or Pre-Game solution and let the floor dry 30 minutes. Tack the floor one additional time using a cleaning cloth similar to Hillyard item #CHI415 to remove fine dust and particulates.

**H. 450 Gym Finish using No Separate Seal System**

1. Apply thin coat of 450 Gym Finish with a lambswool pad or other approved Hillyard applicator.
2. Allow overnight drying and abrade the entire floor with Hillyard maroon pads (250 ft² per side). If grain raise is visible, 120 grit screen disks may be used in place of maroon pads for this step.
3. Tack the floor with Hillyard Tack-It™, Kleen-Up Solvent, or Pre-Game™ solution and let the floor dry at least 30 minutes.
4. Mark game lines with Hillyard approved gym line marking paint.
5. Allow overnight drying of the paint and graphics. Allow the paint to dry thoroughly and then abrade the entire floor using Hillyard maroon pads (250 ft² per side). If paints dry longer than 48 hours, abrade the paint and floor using 3M Surface Preparation Pads (SPP pads) or 150-120 grit screens depending upon the length of drying time allowed. Tack the floor with Hillyard Tack-It or Pre-Game solution and let dry 30 minutes. Tack the floor one additional time with a cleaning cloth similar to Hillyard item #CHI415 Chicopee stretch and dust tacking cloth to remove fine dust and particulates.

**I. 350 Gym Finish g/L VOC Solvent Based Gym Finish using Hillyard Basecoat II as a Seal System**

1. Apply the first coat of Basecoat II using the Hillyard Multi-Flo or lightweight T-Bar.
2. Allow the first coat to dry 4-6 hours. Dry abrade the floor with 3M SPP pads (250 ft² per side) to smooth any grain raise. Tack the floor with towels lightly moistened in Hillyard Tack-It or Pre-Game Solution and allow the floor to dry. Tack the floor one additional time using a cleaning cloth similar to Hillyard item #CHI415 to remove fine dust and particulates.
3. Apply a second coat of Basecoat II and allow to dry 4-6 hours.
Hillyard maroon pads (250 ft² per side). If paints dry longer than 48 hours, abrade the paint and floor using 3M Surface Preparation Pads (SPP pads) or 150-120 grit screens depending upon the length of drying time allowed. Tack the floor with Hillyard Tack-It or Pre-Game solution and let dry 30 minutes. Tack the floor one additional time with a cleaning cloth similar to Hillyard item #CHI415 Chicopee stretch and dust tacking cloth to remove fine dust and particulates. **NOTE: If a delay is encountered longer than 48 hours before completing the painting process, the entire floor may require screening to ensure proper adhesion of the finish system.**

7. Apply a thin coat of 350 Gym Finish with a lambswool pad or other approved Hillyard applicator, such as the Hillyard Multi-Flo.

8. Allow the first coat of 350 Gym Finish to dry 48 hours before abrading the entire floor with Hillyard maroon pads (250 ft² per side). Tack the floor with Hillyard Tack-It or Pre-Game solution and let the floor dry 30 minutes. Tack the floor one additional time using a cleaning cloth similar to Hillyard item #CHI415 to remove fine dust and particulates.

9. Apply the final coat of 350 Gym Finish with a lambswool or other approved Hillyard applicator.

10. Turn on exhaust system 3-4 hours after each coat of 350 Gym Finish to promote proper drying.

11. After the final coat, do not use the floor for at least 72 hours. Heavy traffic and scheduled events should not be allowed for at least one week. Turn on ventilation system and increase fresh airflow to aid in proper curing of the finish.
Matting

Where there are outside entrances directly to the gym, the use of walk-off mats is the first defense in preventative maintenance. Select a mat that will trap dirt and absorb moisture brought in by foot traffic. (Contact your Hillyard Representative for mat selection assistance.) Preventative maintenance should occur outside the building as well. More than 75% of soil in any building is tracked in. Keep sidewalks clean to reduce soil migration into the building.

Dust Mopping

An essential element of preventative maintenance of wood sports flooring is dust-mopping daily.

The least expensive and most important tool in floor care is the dust mop. A mop that has been treated with Super Hil-Tone, Hil-Mist, or EP Dust Mop Treatment will remove dirt and grit that can abrasively wear away the gloss and protective finish of the floor.

Treat the dust mop by following the label directions. Brush or vacuum the mop after daily use and re-treat the mop with dressing and store it properly for the next day’s use.

Spot Mopping and Damp Mopping

Preventative maintenance of wood sports flooring includes the routine removal of spills¹ and soils that daily dust mopping does not remove. It is important to remove spills as soon as possible to prevent slips and falls.

**Tools required:**

- "Wet Floor" signs
- Mop bucket and wringer
- Clean, rayon mop with handle
- Court Clean System with towels (optional)
- Autoscrubber with pads (optional)

**Procedures**

1. Set out “Wet Floor” signs.
2. Mix Super Shine-All at 2 ozs. per gallon of water in a mop bucket or 1-ounce per gallon in an automatic scrubber.
3. For spills, soak mop in the solution, wring out, and mop the floor area while absorbing the spill.
4. Re-soak the mop in the cleaning solution, wring out, and mop the area a second time.

5. When damp mopping the entire floor, change the cleaning solution when it becomes cloudy with dirt. **NOTE:** Do not mop heavy amounts of cleaning solution onto the floor.

6. When using the Court Clean System, soak the cleaning towel in the Super Shine-All solution and wring out. Place the cleaning towel under the Court Clean applicator and attach it to the unit. Pull the Court Clean in the direction of the boards. Be sure that the collected debris from the towel into a waste receptacle and re-treat towel as it becomes soiled. Continue to pull the lightly dampened towel along the floor until clean. Hillyard Tack-It or Pre-Game solution can also be used with the Court Clean System in place of Super Shine-All.

7. If autoscrubbing a well-sealed floor, use new white polishing pads to scrub. Pick up the cleaning solution immediately, do not allow liquid to pool or puddle on the floor.

8. Allow the floor to dry thoroughly before removing “Wet Floor” signs.

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¹ For removal of blood, fecal matter, urine, and other potentially infectious materials as outlined in OSHA Regulation 29 CFR 1910.1030, use the Hillyard Spill Response Kit.

**Methods of Application**

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<thead>
<tr>
<th>Product Name</th>
<th>Applicator(s) To Be Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trophy Seal/Finish</td>
<td>2, 3, 4, 5</td>
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<tr>
<td>Gold Medalist Seal/Finish</td>
<td>2, 3, 4, 5</td>
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<tr>
<td>450 Gym Finish</td>
<td></td>
</tr>
<tr>
<td>350 Gym Finish/350 Seal</td>
<td>2, 4, 5</td>
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<tr>
<td>1907 Gym Finish</td>
<td>1, 5</td>
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<tr>
<td>Contender Finish</td>
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<tr>
<td>Tip-Off</td>
<td>1, 5</td>
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<tr>
<td>Basecoat II</td>
<td>1, 5</td>
</tr>
<tr>
<td>Star</td>
<td>1, 5</td>
</tr>
<tr>
<td>Point Guard</td>
<td>1, 5</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Applicator Name</th>
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<tbody>
<tr>
<td>1. Lightweight T-Bar</td>
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<tr>
<td>2. Weighted T-Bar</td>
</tr>
<tr>
<td>3. E-Z Way Applicator</td>
</tr>
</tbody>
</table>

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Outline for Preparing New Wood Gym Floors

I. Refer to MFMA for proper acclamation.

II. Measure floor surface.

III. Check off list of equipment and products needed.

A. Products

- Tack-It®
- Pre-Game
- Kleen-Up Solvent (For tack-raging solvent system)
- Gold Medalist® Seal and Finish
- Trophy® Seal and Finish
- 1907® Gym Finish
- Contender® Finish
- Tip-Off®
- 450 Gym Finish / 350 Gym Finish / 350 Seal
- Hillyard Approved Paints (i.e. Gym Line Marking Paints) to ensure compatibility with Trophy, 450, 350, or Gold Medalist Systems
- Contender® Gym Line Paints (To ensure Compatibility with Contender, 1907, Point Guard or Tip-Off system)
- Super Shine-All® (For damp mopping maintenance)
- Super Hil-Tone® (Daily dust mopping)
- Hil-Mist® (Daily dust mopping)
- Basecoat II
- Star
- Point Guard

B. Equipment

- 2 Applicator Pans
- 4 Lambswool Applicators
- 8 Lambswool Pads (For Trophy, 450 Finish, 350 Finish, or Gold Medalist Systems)
- Hillyard Maroon Pads; 500 ft²/pad (250 square feet per side) for Trophy, 450 Finish, 350 Finish, or Gold Medalist Systems
- 8 Synthetic Pads (For Contender, 1907, Point Guard or Tip-Off Systems)
- Hillyard Maroon Pads; 500 ft²/pad (250 per side)
- 5 lbs. Turkish Toweling
- Single Brush Floor Machine with Drive Brush
- Dry Pick-up Vacuum
- 2 - 50 ft. Extension Cords
- Putty Knife
- 3/4" Masking Tape (12 rolls)
- 4 - 2” Paint Brushes
- Push Broom (24 or 36 inch)
- Gym Line Taper
- Multi-Flo™ Applicator

IV. Material Estimate for Preparation

A. Solvent-Based System (Trophy, Trophy Plus, Gold Medalist, 450 Finish, or 350 Gym Finish)

<table>
<thead>
<tr>
<th>Coverage Table for Hilliard Approved Paints</th>
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<tbody>
<tr>
<td>Sq. Ft./Qt.</td>
</tr>
<tr>
<td>Black</td>
</tr>
<tr>
<td>Red</td>
</tr>
<tr>
<td>White</td>
</tr>
<tr>
<td>Blue</td>
</tr>
<tr>
<td>Dark Green</td>
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<tr>
<td>Yellow</td>
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</table>

6 gallons Kleen-Up Solvent for tacking and cleaning equipment.

B. Solvent-Based System (450 Gym Finish / Fast Dry 450 II / 350 Gym Finish) – No Seal

Trophy Finish, 350 Finish, or 450 Finish

<table>
<thead>
<tr>
<th>Coverage Table for Hilliard Approved Paints</th>
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<td>White</td>
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<td>Blue</td>
</tr>
<tr>
<td>Dark Green</td>
</tr>
<tr>
<td>Yellow</td>
</tr>
</tbody>
</table>

6 gallons Kleen-Up Solvent for tacking and cleaning equipment.
Outline for Preparing New Wood Gym Floors (continued)

C. Water-Based System (Basecoat II or Star & Tip-Off)

<table>
<thead>
<tr>
<th>Sq. Ft.</th>
<th>Divide by 400 sq. ft./gal. = Basecoat II or Star gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>sq. ft.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sq. Ft.</th>
<th>Divide by 400 sq. ft./gal. = Basecoat II or Star (2nd coat) gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>sq. ft.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sq. Ft.</th>
<th>Divide by 600 sq. ft./gal. = Tip-Off (1st &amp; 2nd coat) gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>sq. ft.</td>
<td></td>
</tr>
</tbody>
</table>

Coverage Table for Hillyard Approved Paints

<table>
<thead>
<tr>
<th>Sq. Ft./Qt.</th>
<th>Line/Qt.</th>
<th>Quarts Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>187</td>
<td>1125</td>
</tr>
<tr>
<td>Red</td>
<td>175</td>
<td>1050</td>
</tr>
<tr>
<td>White</td>
<td>125</td>
<td>750</td>
</tr>
<tr>
<td>Blue</td>
<td>162</td>
<td>975</td>
</tr>
<tr>
<td>Dark Green</td>
<td>187</td>
<td>1125</td>
</tr>
<tr>
<td>Yellow</td>
<td>87</td>
<td>525</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sq. Ft.</th>
<th>Divide by 450 sq. ft./gal. = Contender Finish gallons (1st coat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>sq. ft.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sq. Ft.</th>
<th>Divide by 500 sq. ft./gal. = Contender Finish (2nd coat Final) gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>sq. ft.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sq. Ft.</th>
<th>Divide by 600 sq. ft./gal. = Tip-Off (3rd &amp; 4th coat) gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>sq. ft.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sq. Ft.</th>
<th>Divide by 500 sq. ft./gal. = 1907 Gym Finish (1st &amp; 2nd coat) gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>sq. ft.</td>
<td></td>
</tr>
</tbody>
</table>

V. Material Estimate for Maintenance

<table>
<thead>
<tr>
<th>Gallons Super Shine-All (need 15 gallons per 5000 sq. ft. per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallons Super Hil-Tone (need 5 gallons per 5000 sq. ft. per year)</td>
</tr>
<tr>
<td>Gallons Hil-Mist (need 5 gallons per 5000 sq. ft. per year)</td>
</tr>
</tbody>
</table>

Scrub and Reccoat

1. After a year’s wear, the floor should be scrubbed and refinshed. Scrub floor thoroughly with a dilution of Hillyard Super Shine-All (1 cup to 3 gallons of water) using 120 grit discs under a single brush floor machine.
2. Pick up scrubbing solution with wet vac, damp mop rinse, and allow to dry overnight. With Contender Finish or Tip-Off, you can coat the floor the same day you scrub it, provided no touch-up is needed. Simply allow the floor to dry one hour after the last damp mop rinse before applying Contender Finish or Tip-Off.
3. Touch up game lines using Hillyard Approved Paints for Hillyard solvent-based finishes and VOC compliant solvent-based finishes.
4. Heavily worn areas such as doorways, keys, and jump circles should be patched with a coat of finish using a lambswool applicator or weighted T-Bar applicator for Hillyard solvent-based finishes. Use synthetic applicator of lightweight T-Bar for Hillyard Contender or Tip-Off water-based finishes.
5. Allow touched up game lines and any patched areas to dry overnight. Abrade any patched areas / paints with Hillyard maroon pads (250 square feet per side).
   Use the Hillyard maroon pads for Contender or Tip-Off water-based systems.
6. Tack-rag with Hillyard Kleen-Up Solvent or Tack-It for the solvent-based systems, or Tack-It for the water-based Contender and Tip-Off systems. Allow the floor to dry 30 minutes. Tack the floor one final time with a cleaning cloth similar to Hillyard item #CHI415 to remove the fine dust and particulates.
7. Apply one coat of finish over the entire floor. (NOTE: Two coats are recommended for Tip-Off).
8. After the final coat, do not use the floor for at least 72 hours. Heavy traffic and scheduled events should not be allowed for one week.

NOTE: Refer to the “Methods of Application” chart on page 7 for the appropriate applicator to be used with your chosen product.

Scrub and Reccoat - Converting Competitive Water-Based Products to Hillyard Finishes Using Basecoat II

1. Converting a water-based competitive finish to Hillyard finishes can be successfully accomplished using Hillyard Basecoat II. As long as the previous coating system is well bonded and intact, using Basecoat II as a bridge coat will allow Hillyard water-based and solvent-based finishes to perform properly. Consult your Hillyard Consultant for specific information and recommendations.
2. Scrub the floor thoroughly with a dilution of Hillyard Super Shine-All (1 cup to 3 gallons of water) using 120 grit screen disks under a single brush floor machine.
3. Pick up the scrubbing solution with a wet vacuum, damp mop rinse, and allow to dry overnight. With Contender Finish or Tip-Off, you can coat the floor the same day you scrub it, provided no touch-up is needed. Simply allow the floor to dry one hour after the last damp mop rinse before applying Contender Finish or Tip-Off.
4. Heavily worn areas such as doorways, keys, and jump circles should be patched with a coat of finish using a lambswool applicator or weighted T-Bar applicator for Hillyard solvent-based finishes. Use synthetic applicator of lightweight T-Bar for Hillyard Contender or Tip-Off water-based finishes.
5. Allow touched up game lines and any patched areas to dry overnight. Abrade any patched areas / paints with Hillyard maroon pads (250 square feet per side).
   Use the Hillyard maroon pads for Contender or Tip-Off water-based systems.
6. Tack-rag with Hillyard Kleen-Up Solvent or Tack-It for the solvent-based systems, or Tack-It for the water-based Contender and Tip-Off systems. Allow the floor to dry 30 minutes. Tack the floor one final time with a cleaning cloth similar to Hillyard item #CHI415 to remove the fine dust and particulates.
7. Apply one coat of finish over the entire floor. (NOTE: Two coats are recommended for Tip-Off).
8. After the final coat, do not use the floor for at least 72 hours. Heavy traffic and scheduled events should not be allowed for one week.

NOTE: Refer to the “Methods of Application” chart on page 7 for the appropriate applicator to be used with your chosen product.
Outline for Scrub and Recoat

I. Measure floor surface.

II. Check off list of equipment and products needed.

A. Products

___ Super Shine-All®
___ Tack-It®
___ Pre-Game
___ Kleen-Up Solvent (For tack-ragging solvent system)
___ Contender® Finish (Water-based)
___ Tip-Off® (Water-based)
___ 1907® Gym Finish (Water-based)
___ Trophy® Finish (Solvent-based)
___ Gold Medalist® Finish (Solvent-based)
___ 450 Gym Finish (Solvent-based)
___ 350 Gym Finish (Solvent-based)
___ Super Hil-Tone® (For daily dust mopping)
___ Hil-Mist® (For daily dust mopping)
___ Basecoat II
___ Point Guard

B. Equipment

___ Single Brush Floor Machine with Drive Brush
___ Wet Pick-up Vacuum
___ 4 Mop Buckets with Wringers
___ 3 Mops with Handles
___ 120 Grit Discs (10 per 5,000 sq. ft.) for solvent-based systems
___ 3M SPP (Surface Preparation Pads) for water-based systems (500 sq. ft. per pad for dry abrading/1,000 sq. ft. per pad for wet abrading)
___ Hillyard Maroon Pads; 500 ft²/pad (For Contender, 1907 or Tip-Off system)
___ 2 - 50 ft. Extension Cords
___ Putty Knife
___ 5 lbs. Turkish Toweling
___ 3/4” Masking Tape (If lines are to be patched)
___ 2” Paint Brushes (For line touch-up)
___ 2 Applicator Pans
___ 4 Lambswool Applicators and Pads (For Trophy, Gold Medalist Systems, 450 Gym Finish, and 350 Gym Finish)
___ Hillyard Maroon Pads; 500 ft²/pad (250 square feet for Trophy, Gold Medalist Systems, 450 Gym Finish)

III. Material Estimate for Scrub and Recoat

A. Preparation

_______ divided by 6000 sq. ft./gal. = _______ Super Shine-All sq. ft. gallons

_______ divided by 1250 sq. ft./gal. = _______ Pre-Game Conc. sq. ft. gallons (dilute 1:4 for floor project)

B. Patching Worn Areas

Trophy Finish, 350 Gym Finish

_______ divided by 500 sq. ft./gal. = _______ Medalist Finish sq. ft. to be patched gallons

_______ divided by 400 sq. ft./gal. = _______ Contender Finish sq. ft. to be patched gallons

_______ divided by 600 sq. ft./gal. = _______ Tip-Off sq. ft. to be patched gallons

_______ divided by 500 sq. ft./gal. = _______ Basecoat II sq. ft. to be patched gallons

C. Patching Worn Game Lines

(See coverage table for Gym Line Paint or Contender Paint under OUTLINE FOR PREPARING NEW WOOD GYM FLOORS, pages 8 and 9.)

D. Finish Application

Trophy Finish, 350 Gym Finish

_______ divided by 600 sq. ft./gal. = _______ Medalist Finish sq. ft. gallons

_______ divided by 500 sq. ft./gal. = _______ Contender Finish sq. ft. gallons

_______ divided by 500 sq. ft./gal. = _______ Basecoat II and sq. ft. gallons 1907 Gym Finish

_______ divided by 600 sq. ft./gal. = _______ Tip-Off sq. ft. gallons (1st & 2nd coat)

IV. Material Estimate for Maintenance

_______ gallons Super Shine-All (need 15 gallons per 5000 sq. ft. per year)

_______ gallons Super Hil-Tone (need 5 gallons per 5000 sq. ft. per year)

_______ gallons Hil-Mist (need 5 gallons per 5000 sq. ft. per year)
After a year of activity and wear, your sports floor should be scrubbed and refinished. Two methods of achieving a fresh coating to your floor to prepare it for the upcoming season can be accomplished by either a scrub and recoat operation, or by a dry preparation method involving screen discs or specially designed abrasive pads (depending on the coating system chosen for refinishing your floor.) The procedures for each situation are listed below to best meet your specific needs for refinishing your existing wood sports floor.

A. Scrub and Recoat – Standard Process
1. Dust mop or sweep the floor to remove surface debris.
2. Scrub the floor with a dilution of Hillyard Super Shine-All or Pre-Game solution using 175-rpm rotary floor machines equipped with 120 grit screen discs.
3. Scrub areas 10’ by 10’ and immediately pick up the scrubbing solution using a wet vacuum or automatic scrubber. Do not flood the floor with cleaning solution or rinse water. Rinse the floor with clean water followed by a damp mop and allow the floor to dry a minimum of 1 hour before applying Hillyard water based gym finishes.
4. If the floor is showing excessive wear of painted sections, consideration to touching up lines and other details may be desired. Touch up game lines, as needed using Hillyard Contender Paints. Heavily worn areas such as doorways, keys, jump circles, etc. may be patched with a coat of finish prior to recoating the entire floor. A lambswool applicator or weighted T-Bar applicator can be used to apply the patch coat of Hillyard solvent-based finishes. Applying patches using Hillyard water-based finishes can be done using a lightweight T-Bar applicator.
5. Allow touched up game lines and patched areas to dry. Refer to product label for minimum recommended drying times.
6. Abrade patched areas with Hillyard maroon pads (250 ft² per side).
7. Tack the patched areas until clean, using Hillyard Tack-It or Pre-Game solution and allow the floor to dry a minimum of 30 minutes. Tack the floor one final time using a cleaning cloth similar to Hillyard item #CHI415 to remove fine dust and particulates.
8. Apply one coat of finish to the entire floor using approved Hillyard applicator. Refer to the “Methods of Application” chart for specific recommendations (2 coats of finish are recommended for Hillyard Basecoat II, Point Guard, 1907 and Tip-Off water based finishes.) If additional coats of finish are desired, please refer to the product label for specific instructions.
9. After the final coat is applied, turn on ventilation system and do not use the floor for 72 hours for light traffic and preferably 1-week before heavy traffic or scheduled events.

B. Scrub and Recoat – 3M Surface Preparation Pads Process for Hillyard Water-Based Finishes
1. Dust mop or sweep the floor to remove surface debris.
2. Scrub the floor with Hillyard Pre-Game solution (diluted 32 ounces per gallon with clean water) using 175-rpm rotary floor machines equipped with 3M SPP pads (Surface Preparation Pads).
3. Scrub areas 10’ by 10’ and immediately pick up the scrubbing solution using a wet vacuum or automatic scrubber. Do not flood the floor with cleaning solution or rinse water. Rinse the floor with clean water followed by a damp mop and allow the floor to dry.
4. If the floor is showing excessive wear of painted sections, consideration to touching up lines and other details may be desired. Touch up game lines, as needed using Hillyard Contender Paints. Heavily worn areas such as doorways, keys, jump circles, etc. may be patched with a coat of finish prior to recoating the entire floor. Apply patches using Hillyard water-based finishes using a lightweight T-Bar applicator.
5. Allow touched up game lines and patched areas to dry. Refer to product label for minimum recommended drying times.
6. Abrade patched areas with Hillyard maroon pads (250 ft² per side).
7. Tack the patched areas until clean using Hillyard Tack-It or Pre-Game solution and allow the floor to dry a minimum of 30 minutes. Tack the floor one final time using a cleaning cloth similar to Hillyard item #CHI415 to remove fine dust and particulates.
8. Apply finish to the entire floor using approved Hillyard applicator. Refer to the “Methods of Application” chart for specific recommendations. **NOTE:** 2 coats of finish are recommended for Hillyard Basecoat II, Point Guard, 1907 and Tip-Off water based finishes. If additional coats of finish are desired, please refer to product labels for specific instructions.

9. After the final coat is applied, turn on ventilation system and do not use the floor for 72 hours for light traffic and preferably 1 week before heavy traffic or scheduled events.

C. **Dry Screen Preparation Method – 3M Surface Preparation Pads Process for Hillyard Water-Based Finishes**

1. Dust mop or sweep the floor to remove surface debris.

2. Pre-clean the floor to remove surface soil by tack ragging or using the Court Clean system or optional, autoscrub using Hillyard Tack-It or Pre-Game solution (diluted 32 ounces per gallon with clean water).

3. Dry abrade the floor using 175-rpm rotary floor machines equipped with 3M SPP pads (Surface Preparation Pads). Use pads no more than 250 ft² per side for dry abrading.

4. Vacuum and tack floor using Hillyard Pre-Game solution or Tack-It to remove abrasion dust and debris. Tack floor until clean.

5. If the floor is showing excessive wear of painted sections, consideration to touching up lines and other details may be desired. Touch up game lines, as needed using Hillyard Contender Paints. Heavily worn areas such as doorways, keys, jump circles, etc. may be patched with a coat of finish prior to recoating the entire floor. Apply patches using Hillyard water-based finishes using a lightweight T-Bar applicator.

6. Allow touched up game lines and patched areas to dry. Refer to product label for minimum recommended drying times.

7. Abrade patched areas with Hillyard maroon pads (250 ft² per side).

8. Tack the patched areas until clean using Hillyard Tack-It or Pre-Game solution and allow the floor to dry a minimum of 30 minutes. Tack the floor one final time using a cleaning cloth similar to Hillyard item #CHI415 to remove fine dust and particulates.

9. Apply finish to the entire floor using approved Hillyard applicator. Refer to the “Methods of Application” chart for specific recommendations. **NOTE:** 2 coats of finish are recommended for Hillyard Basecoat II, Point Guard, 1907 and Tip-Off water based finishes. If additional coats of finish are desired, please refer to product labels for specific instructions.

10. After the final coat is applied, turn on ventilation system and do not use the floor for 72 hours for light traffic and preferably 1 week before heavy traffic or scheduled events.

D. **Dry Screen and Recoat – Hillyard Solvent-Based Finishes**

1. Dust mop or sweep the floor to remove surface debris.

2. Pre-clean the floor to remove surface soil by tack ragging or using the Court Clean system or optional, autoscrub using Hillyard Tack-It or Pre-Game solution (diluted 32 ounces per gallon with clean water).

3. Dry abrade the floor using 175-rpm rotary floor machines equipped with 120 grit discs. (Use discs no more than 250 ft² per side for dry abrading).

4. Vacuum and tack floor using Hillyard Pre-Game solution or Tack-It to remove abrasion dust and debris. Tack floor until clean.

5. If the floor is showing excessive wear of painted sections, consideration to touching up lines and other details may be desired. Touch up game lines, as needed using Hillyard approved paints. Heavily worn areas such as doorways, keys, jump circles, etc., may be patched with a coat of finish prior to recoating the entire floor. Apply patches using Hillyard solvent-based finishes using a lambswool applicator or weighted T-Bar applicator.

6. Allow touched up game lines and patched areas to dry. Refer to product label for minimum recommended drying times.

7. Abrade patched areas with Hillyard maroon pads (250 ft² per side).

8. Tack the patched areas until clean using Hillyard...
Tack-It or Pre-Game solution and allow the floor to dry a minimum of 30 minutes. Tack the floor one final time using a cleaning cloth similar to Hillyard item #CHI415 to remove fine dust and particulates.

9. Apply finish to the entire floor using approved Hillyard applicator. Refer to the “Methods of Application” chart for specific recommendations. If additional coats of finish are desired, please refer to product labels for specific instructions.

10. After the final coat is applied, turn on ventilation system and do not use the floor for 72 hours for light traffic and preferably 1 week before heavy traffic or scheduled events.

E. Scrub and Recoat – Converting Competitive Water-Based Products to Hillyard Finishes Using Basecoat II

Converting a water-based competitive finish to a Hillyard finish of choice can be accomplished using the following step-by-step process. As long as the previous coating system is well bonded and intact, using Hillyard Basecoat II as a “bridge coat” will set the foundation for our water- and solvent-based gym finishes to perform properly. Contact your Hillyard consultant for specific information and recommendations.

1. Dust mop or sweep the floor to remove surface debris.

2. Scrub the floor with a dilution of Hillyard Super Shine-All or Pre-Game solution using 175-rpm rotary floor machines equipped with 120 grit screen discs or 3M SPP (Surface Preparation Pads).

3. Scrub areas 10' by 10' and immediately pick up the scrubbing solution using a wet vacuum or automatic scrubber. Do not flood the floor with cleaning solution or rinse water. Rinse the floor with clean water followed by a damp mop rinse and allow the floor to dry a minimum of 1 hour before applying Hillyard Basecoat II.

4. If the floor is showing excessive wear of painted sections, consideration to touching up lines and other details may be desired. Touch up game lines, as needed using Hillyard approved paints. Heavily worn areas such as doorways, keys, jump circles, etc. may be patched with a coat of finish prior to recoating the entire floor. Applying patches using Hillyard Basecoat II can be done using a lightweight T-Bar applicator.

5. Allow touched up game lines and patched areas to dry. Refer to product label for minimum recommended drying times.

6. Abrade patched areas with Hillyard maroon pads (250 ft² per side).

7. Tack the patched areas until clean, using Hillyard Tack-It or Pre-Game solution and allow the floor to dry a minimum of 30 minutes. Tack the floor one final time using a cleaning cloth similar to Hillyard item #CHI415 to remove fine dust and particulates.

8. Apply one coat of Hillyard Basecoat II to the entire floor using Hillyard Multi-Flo or lightweight T-Bar applicator. Refer to the “Methods of Application” chart for specific recommendations.

9. Allow the “bridge coat “ Basecoat II to dry 4-6 hours (depending upon temperature and humidity) and abrade the entire floor using maroon pads (250 ft² per side). Tack the floor using Hillyard Tack-It or Pre-Game solution until clean. Allow the floor to dry 30 minutes and tack one final time using a cleaning cloth similar to Hillyard item #CHI415 to remove fine dust and particulates.

10. Apply selected Hillyard gym finish using approved applicator. Refer to “Methods of Application” chart for additional details. If additional coats of finish are desired, refer to the product label for specific instructions.

11. After the final coat is applied, turn on ventilation system and do not use the floor for 72 hours for light traffic and preferably 1 week before heavy traffic or scheduled events.
Laying Out the Court

Tools Required

- 3/4" Masking tape – 8-10 rolls
- Steel tape (100' preferred)
- Plumb bob
- Chalk line and chalk (use white chalk)
- Carpenter’s square
- 6-penny finishing nails
- 18-penny casing nails
- Pencil (“B” soft)
- A good lining brush (1½” or 2” sash brush)
- Hammer
- Hand or push drill
- 1/16" and 1/8" drills
- File
- Straight edge (10' or 15' board with one straight edge – wallpaper straight edge or 2" metal strip)

1. From exact center of face of each backboard drop a plumb bob to the floor and drive a nail at this point.

2. Run a chalk line from each nail down the center of the floor and snap it.

3. Four feet behind backboard drive nail to locate end line.

4. From end line mark up the center line 12 feet and drive a nail to mark this point.

5. From mark 4' behind backboard lay out 16' of tape along end line. From 12' nail mark lay out 20' tape diagonally to end of 16' tape. This squares off end line — which then can be extended to predetermined width. Repeat on opposite side and other end.

6. When the corners have been established run the chalk line from corners A to D and B to C. The inside measurements of these lines should measure exactly the distance required for the court. See “Minimum of 3 Feet” instructions on court marking diagrams.

BACKBOARD MEASUREMENTS

RECTANGULAR BACKBOARD AND GOAL

Upper edge shall be 13 feet above floor for rectangular, and 12 feet, 8 inches for fan shape. Basket ring shall be securely attached to backboard with upper edge 10 feet above and parallel to floor.
**How to Line the Court**

1. Run a chalk line from corner A to corner C, and also from corner B to corner D. Where these lines cross is the center of the court. (The distance from A to C must be exactly the same as the distance from B to D).

2. Using the Gym Line Taper, position the rods and place the centerspike of the Hillyard Gym Line Taper, at point F (center of gym floor). For NBA courts, make the inner circle with a radius of exactly 2 feet to the inside edge.

3. Form the second center circle, (outside circle) in the same manner using the Hillyard Gym Line Taper placing the centerspike at point F. Adjust the rod to create a 6 foot outside radius circle. The outer circle, outside edge should be a 6 foot radius, (except for international style courts).

4. **DIVISION LINE.**

5. Measure 19 feet back from each end line on the center line and mark the center of the free throw circles. Repeat step 3 to mark the 6 foot radius free throw circles.

6. **FREE THROW LINES.** To mark the two-inch free throw lines, measure 19 feet from the end line to each side of the circle. This line should run exactly through the center of the circle, parallel to the end line. Move one inch toward the end line and snap the chalk line to make the center guide line of the free throw line. This line must be 19 feet from the end line. The outside edge closest to the end line should measure 18 feet, 10 inches. Repeat this process on the circle at the opposite end of the court.

7. **FREE THROW LANES.** Using the Hillyard Gym Line Taper, snap a chalk line parallel to the center line, measuring 5 feet, 11 inches from the center line. Repeat this procedure on the opposite side of the center line to complete the lane. Each line should be 19 feet in length from the end line. The outside measurements should be exactly 12 feet across, or inside measurements should be 11 feet, 8 inches. These lines should not touch the free throw circle.

8. **THREE POINT LINE.** Using the Hillyard Gym Line Taper, place the centerspike directly under the center of the basket hoop, which measures 63 inches from the end line, along the center line of the court. Adjust the rods to create the appropriate line, 19 feet, 9 inches radius for High School, 20 feet, 9 inches radius for College. The 3 point circle should be drawn so that it ends on each side of the court, 63 inches from the end line for High School and College courts. The sides are cut to run parallel to the free throw lanes. The three point circle should intersect with the far end of the free throw circle.

NOTE: See appropriate layout guide for NBA, College and International Courts.
Painting Court Lines (Masking Tape Method)

After properly abrading the floor, tack-rag to remove dust and particles from the surface and cracks. Then follow steps 1 thru 5 of “Laying Out Court.” Mark points (see diagram) each side of basket and stretch line over these points beyond the desired width of court. Mark corner points of court with pencil and also make pencil marks every ten feet for guide line in laying tape.

Using ¾ inch or 1 inch wide masking tape, start at one end of end line and stick tape to floor for 6 or 8 inches past pencil mark. Make sure that this first tape is laid to the inside of the court. Then stretch tape lightly full length of line to far corner pencil mark, keeping far end of tape well above floor. Hold raised end of tape directly above mark for a few seconds until tape stops vibrating, then lower raised end directly down to pencil marks. Next tap masking tape to floor every 2 to 3 feet for full length and follow this by pressing tape tightly to floor between tapped spots. Do not press masking tape directly to floor without first tapping as indicated, since the tape will tend to buckle and go out of line if not tapped at short intervals. Straightness of line can be checked by eye or by stretching a line above it.

Before laying tape on side lines, stretch line entire length of court to corner markings and make a mark along this line every 10 feet for guide lines. Then to be sure your guide markings are accurate, measure out ½ the width of your court from the exact center of your court. Tape side lines and all remaining straight lines in same manner.

For circles use radius board as shown in “How to Line the Court” with marking holes drilled large enough to permit use of a pencil. Mark circles with pencil and lay tape around circles, pressing tape down tight as it is laid. ¾ inch or 1 inch wide masking tape bends readily, without wrinkling around all basketball circles. When all tape is laid, cut out tape where line is continuous around corners, and press tape down with the fingernail where it laps over a crossing tape.

Rub or roll inside edge so tape is tight to floor and no chalk dust or dirt is under tape. Paint will not bleed under tape and will leave a clean, sharp edge. Paint lines between tapes with Hillyard GYM LINE MARKING PAINT or CONTENDER GYM MARKING PAINT, according to directions. After painting between tape strips, allow one hour for paint to set and lift the tape. The paint will not run and the edges of the lines will have complete freedom to dry hard. Let paint dry a minimum of 24 hours and abrade before finish coat is applied. Before starting to apply finish, tack the floor and remove any chalk or pencil marks.

When more than one court is to be laid out, put down all courts before starting painting. Junctions of different colored courts can be cut in, or if first court is painted on the previous day the junctions can be taped for painting. Chalk lines should be kept to a minimum because the chalk prevents the best adhesion of the tape and paint.
The information contained in this guide, based on information provided by various associations and governing organizations, is intended merely as a guide and is not applicable to all situations. Contact the appropriate organization for further information.

For more information contact:

NATIONAL FEDERATION OF STATE HIGH SCHOOL ASSOCIATIONS
P.O. Box 690
Indianapolis, IN 46206
(317) 972-6900
www.nfhs.org
Basketball

N.C.A.A. COLLEGE BASKETBALL COURT

THE COURT

For more information contact:

THE NATIONAL COLLEGIATE ATHLETIC ASSOCIATION
P.O. Box 6222
Indianapolis, IN 46206-6222
700 W. Washington Street
Indianapolis, IN 46206-6222
(317) 917-6222
www.ncaa.org
For more information contact:

NATIONAL BASKETBALL ASSOCIATION
Olympic Tower, 645 Fifth Avenue
New York, NY 10022
(212) 826-8000
www.nba.com

INTERNATIONAL BASKETBALL COURT

For more information contact:

USA BASKETBALL
5465 Mark Dabling Blvd.
Colorado Springs, CO 80918-3842
(719) 590-4800
www.usabasketball.com
ALL VOLLEYBALL COURT MARKINGS

For more information contact:
USA VOLLEYBALL
715 S. Circle Drive
Colorado Springs, CO 80910-2368
88USVolley Information Line
(719) 228-6800
info@usav.org
www.usavolleyball.org

NOTE:
Net height 7'-115/8" (2.43M) for boys and
7'-41/8" (2.24M) for girls.

For more information contact:
NATIONAL FEDERATION OF STATE HIGH SCHOOL ASSOCIATIONS
P.O. Box 690
Indianapolis, IN 46206
(317) 972-6900
www.nfhs.org

NOTE:
All lines on the court are 2 inches wide. For the center line a solid or shadow-bordered 2-inch wide line is permissible. The border or outlines for the shadowed center line shall be at least 1/4 inch wide and shall be within the 2-inch width. It is recommended that the court should be clear of obstructions and the overhead playable area should be at least 23 feet (7 meters) high.

NOTE:
Net height 7'-115/8" (2.43M) for boys and 7'-41/8" (2.24M) for girls.
Tennis, Badminton & Shuffleboard

TENNIS COURT MARKINGS

NOTE:
All dimensions are to the outside edge of lines.
All playing lines are 2" in width, except the base line which may be between 2" and 4" in width.

For more information contact:
U.S. TENNIS ASSOCIATION
70 W. Red Oak Lane
White Plains, NY 10604-3602
(914) 696-7000
FAX: (914) 696-7167
(800) 990-USTA (8782)
www.usta.com

BADMINTON COURT

Court may be used for singles or doubles play.

NOTE: Diagram follows 2001 guidelines set by the US Badminton Association.
*Optional testing marks (see rule handbook)

For more information contact:
USA BADMINTON
One Olympic Plaza
Colorado Springs, CO 80909
(719) 866-4808
FAX: (719) 866-4507
www.usabadminton.org

STANDARD SHUFFLEBOARD COURT

NOTE:
Number markings are optional.
All line dimensions must be measured from line centers.

For more detailed information contact:
INTERNATIONAL SHUFFLEBOARD ASSOCIATION
Jim Allen
Allen R. Shuffleboard Co., Inc.
6595 Seminole Blvd. (Alt. 19)
Seminole, FL 33772
(800)260-3834
Handball, Racquetball & Squash

FOUR WALL HANDBALL AND RACQUETBALL COURTS

For more information contact:

USA
RACQUETBALL ASSOCIATION
1685 W. Uintah
Colorado Springs, CO 80904-2906
(719) 635-5396
FAX: (719) 635-0685
www.usaracquetball.com

Short line - Back edge is exactly midway in court.

Drive Serve line - Front edge is 5' from the back edge of the short line.

Service box - The inside edge of the lines are 18” from the side walls.

Receiving line - Back edge of the receiving line is 5' from the back edge of the short line. The segment from the wall is 21" long. There are 16 lines, each 6" long with 6" spaces between lines.

Screen Line - The outside edge of the line is 3 feet from the side wall.

Front edge is the edge on the line closest to the front wall.

Back edge is the edge on the line closest to the back wall.

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SQUASH COURTS

For more information contact:

U.S. SQUASH
555 Eight Avenue
Suite 1103
New York, NY 10018-4311
(212) 268-4090
www.ussquash.com
Choose The Best Seal And Finish For Your Wood Gym Floor

No other company offers a greater selection of wood gym seals and finishes formulated to help you get the most wear and beauty from your gym floor. The chart below lists Hillyard solvent-based seals and finishes in red and our innovative water-based seals and finishes in blue. Check the features of each of these products to see how they can benefit your wood gym floor maintenance program.

<table>
<thead>
<tr>
<th>PRODUCTS</th>
<th>VOC LEVEL (GRAMS/LITER)</th>
<th>Resin Type</th>
<th>Solids Content</th>
<th>Durability Rate (sq. ft./gal.)</th>
<th># of Coats for Recoating</th>
<th>Method of Application</th>
<th>Avg. Dry Time Between Coats</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trophy® Wood Seal</td>
<td>601</td>
<td>Epoxy Ester</td>
<td>30%</td>
<td>350-500</td>
<td>2,3,4,5</td>
<td>12 Hrs.</td>
<td>Clear Epoxy Penetrating Seal Strengthens The Surface Of The Floor</td>
<td></td>
</tr>
<tr>
<td>Trophy® Gym Finish</td>
<td>518</td>
<td>Epoxy Ester</td>
<td>40%</td>
<td>Excellent</td>
<td>500-600</td>
<td>1-2</td>
<td>2,3,4,5</td>
<td>12 Hrs.</td>
</tr>
<tr>
<td>Gold Medalist® Gym Finish</td>
<td>520</td>
<td>Oil-Mod. Urethane</td>
<td>40%</td>
<td>Very Good</td>
<td>500-600</td>
<td>1-2</td>
<td>2,3,4,5</td>
<td>12 Hrs.</td>
</tr>
<tr>
<td>Gold Medalist® Wood Seal</td>
<td>603</td>
<td>Oil-Mod. Urethane</td>
<td>35%</td>
<td>350-500</td>
<td>2,3,4,5</td>
<td>12 Hrs.</td>
<td>Urethane Seal That Strengthens And Seals The Surface Of The Floor</td>
<td></td>
</tr>
<tr>
<td>350 Gym Finish®</td>
<td>350</td>
<td>Oil-Mod. Urethane</td>
<td>50%</td>
<td>Very Good</td>
<td>500-600</td>
<td>1-2</td>
<td>2,4,5</td>
<td>24-48 Hrs.</td>
</tr>
<tr>
<td>350 Seal</td>
<td>350</td>
<td>Oil-Mod. Urethane</td>
<td>39%</td>
<td>350-500</td>
<td>2,4,5</td>
<td>12 Hrs.</td>
<td>Low VOC, Urethane Seal</td>
<td></td>
</tr>
<tr>
<td>450 Gym Finish®</td>
<td>&lt;450</td>
<td>Oil-Mod. Urethane</td>
<td>50%</td>
<td>Very Good</td>
<td>500-600</td>
<td>1-2</td>
<td>2,4,5</td>
<td>24-48 Hrs.</td>
</tr>
<tr>
<td>Contender® Gym Finish</td>
<td>&lt;350</td>
<td>Waterborne Epoxy</td>
<td>26%</td>
<td>Very Good</td>
<td>450-600</td>
<td>1-2</td>
<td>1,5</td>
<td>12 Hrs.</td>
</tr>
<tr>
<td>Tip-Off® Gym Finish</td>
<td>&lt;275</td>
<td>Waterborne Urethane</td>
<td>32%</td>
<td>Good</td>
<td>500-700</td>
<td>2</td>
<td>1,5</td>
<td>4 Hrs.</td>
</tr>
<tr>
<td>1907® Gym Finish</td>
<td>&lt;200</td>
<td>Waterborne Oil-Mod. Urethane</td>
<td>29%</td>
<td>Very Good</td>
<td>500-550</td>
<td>2</td>
<td>1,5</td>
<td>4-6 Hrs.</td>
</tr>
<tr>
<td>Basecoat II</td>
<td>&lt;200</td>
<td>Waterborne Oil-Mod. Urethane</td>
<td>29%</td>
<td>500-550</td>
<td>1,5</td>
<td>4-6 Hrs.</td>
<td>Low VOC, Easy to Apply Waterborne Seal</td>
<td></td>
</tr>
<tr>
<td>Point Guard®</td>
<td>267</td>
<td>Urethane-Acrylic</td>
<td>27%</td>
<td>Good</td>
<td>500-600</td>
<td>2</td>
<td>1,5</td>
<td>2-4 Hrs.</td>
</tr>
<tr>
<td>Star™</td>
<td>145</td>
<td>Waterborne-Acrylic</td>
<td>29%</td>
<td>400-550</td>
<td>1,5</td>
<td>2-4 Hrs.</td>
<td>Low VOC, Easy to Apply, Fast Drying Seal</td>
<td></td>
</tr>
</tbody>
</table>

1 = Lightweight T-Bar; 2 = Weighted T-Bar; 3 = EZ Way Applicator; 4 = Lambswool Pad/Block Applicator; 5 = Hillyard Multi-Flo® Applicator.