SECTION 09 93 10

HARDWOOD SPORT FLOOR FINISHING AND MAINTENANCE

Display hidden notes to specifier. (Don't know how? [Click Here](https://www.arcat.com/sd/display_hidden_notes.shtml))

*Copyright 2018 - 2024 ARCAT, Inc. - All rights reserved*

\*\* NOTE TO SPECIFIER \*\* Bona US; wood floor finishing and maintenance products.  
.  
This section is based on the products of Bona US, which is located at:24 Inverness Place East, Suite 100Englewood, CO 80112Toll Free Tel: 800-872-5515Tel: 303-371-1411Fax: 303-307-5029Email:  [Frank.Coppolino@bona.com](mailto:Frank.Coppolino@bona.com?subject=RE:%20Spec%20Question%20(09931bon):%20)  
Web: <https://www.bona.com>   
 [ [Click Here](https://arcat.com/company/bona-us-30999) ] for additional information.  
  
At Bona we are committed to the whole lifetime of hardwood floors. We are devoted to providing solutions that keep a floor perfect during its entire life. Through our long commitment and constant search for innovation we are able to offer lasting, sustainable results for professionals and floor owners. With Bona you can expect a commitment that lasts for generations.  
Today Bona is a world leading innovator with a unique system, having local presence all across the world. Since established in 1919 we are now, through subsidiaries and distributors, present in more than 50 different countries all over the world.

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Hardwood sport floor finishing and maintenance of the following types
       1. Waterborne finishes and sealers.
       2. Oil-modified finishes and sealers.
       3. Paint.
       4. Sport floor maintenance.
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 09 64 00 - Wood Flooring.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data: Manufacturer's data sheets on each product to be used, including:
        1. Preparation instructions and recommendations.
        2. Storage and handling requirements and recommendations.
        3. Installation methods.

\*\* NOTE TO SPECIFIER \*\* Delete selection samples if colors have already been selected.

* + 1. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
    2. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square representing actual product, color, and patterns.
  1. QUALITY ASSURANCE
     1. Installer Qualifications: Trained in application of the manufacturer's floor products.

\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
       1. Finish areas designated by Architect.
       2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
       3. Refinish mock-up area as required to produce acceptable work.
  1. DELIVERY, STORAGE, AND HANDLING
     1. Store products in manufacturer's unopened packaging until ready for installation.
     2. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.
  2. PROJECT CONDITIONS
     1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Bona US, which is located at: 24 Inverness Place E. Suite 100; Englewood, CO 80112; ASD Toll Free Tel: 800-872-5515; Tel: 303-371-1411; Fax: 303-307-5029; Email: [Frank.Coppolino@bona.com](mailto:Frank.Coppolino@bona.com?subject=RE:%2520Spec%2520Question%2520(09931bon):%2520%2520); Web: <https://www.bona.com>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.
  1. WATERBORNE FINISHES AND SEALERS
     1. Finishes:

\*\* NOTE TO SPECIFIER \*\* Bona SuperSport is a top sport finish for durability and appearance. Specifically formulated for professional use on maple sport floors, providing a tough, durable, high-build urethane finish.

* + - 1. Product: Bona SuperSport as manufactured by Bona US.
         1. Ingredients: Water, polyurethane resin, N-Methyl-2-Pyrrolidone, Dipropylene Glycol Monomethyl Ether and Dipropylene Glycol n-Butyl Ether.
         2. Color: Milky, off white (wet).
         3. pH: 8.3.
         4. Solids: 28 percent.
         5. Viscosity: (#4 Ford cup at 25 degree C) approx. 16 seconds.
         6. Density: 8.52 lbs./gallon (1.02 S.G.).
         7. US Regulatory VOC: 350 g/L.
         8. Gloss Level: (60 degrees) 88+.
         9. Odor: Non-offending.
         10. Stability: 1-year shelf life in unopened container.
         11. Percent Cured After 24 Hours: 70 percent; after 72 hours - 90 percent.
         12. Maximum Cure: 100 percent in one week.

\*\* NOTE TO SPECIFIER \*\* Bona SuperSport DRIVE, a premium one-component waterborne wood sport floor finish with exceptional build with excellent flow and leveling. Providing unsurpassed scuff, scratch and chemical resistance at full cure.

* + - 1. Product: Bona SuperSport Drive as manufactured by Bona US.
         1. Ingredients: Water, polymeric resins, and propylene-base glycol ethers.
         2. Color: Milky white (wet).
         3. pH: 8.5.
         4. Solids: 31 percent.
         5. Density: 8.60 lbs./gallon (1.03 S.G.).
         6. Viscosity: 20 to 30 cP.
         7. US Regulatory VOC: 275 g/L.
         8. Gloss Level: 60 degrees/ Gloss: 85 or above.
         9. Odor: Very slight non-offensive odor.
         10. Stability: 1-year shelf life in unopened container.
         11. Clarity: Clear and colorless when dry.
         12. Leveling: Excellent.
         13. Defoaming: Excellent.
         14. Drying Time: 2-3 hours.
         15. Coverage: 500-600 square feet per gallon.
         16. Percent Cured After 24 Hours: 70 percent, 72 hours - 90 percent.
         17. Maximum Cure: 100 percent after 1 week.

\*\* NOTE TO SPECIFIER \*\* Bona SuperSport ONE Finish is the leading one-component sport finish for durability and appearance. A premium waterborne wood floor finish, it's specifically formulated for professional use on maple sport floors, providing a tough, urethane finish with good build. MFMA-approved and VOC compliant-VOC does not exceed 145 grams per liter.

* + - 1. Product: Bona SuperSport ONE Finish as manufactured by Bona US.
         1. Ingredients: Water, polymeric resin, Propylene-based glycol ether, levelling and defoaming agents.
         2. Color: Milky white (wet).
         3. Clarity: Clear when dry.
         4. pH: 8.0.
         5. Solids: 32.5 percent.
         6. Viscosity: (No. 4 Ford cup at 25 degrees C) approx. 17 seconds.
         7. Density: 8.66 lbs./gallon (1.04 S.G.).
         8. US Regulatory VOC: Less than 200 g/L.
         9. Odor: Non-offending.

\*\* NOTE TO SPECIFIER \*\* Bona SuperSport Seal is a unique product specifically designed and developed for use on wood sport floors. Bona SuperSport Seal's quick drying, non-ambering formula reduces grain raise and prepares the floor for a protective top coat of SuperSport Finish.

* + - 1. Product: Bona SuperSport Seal as manufactured by Bona US.
         1. Ingredients: Water, acrylic resin, Dipropylene Glycol Monomethyl Ether, defoamers.
         2. Color: Milky, off white (wet).
         3. Clarity: Clear when dry.
         4. pH: 7.8.
         5. Solids: 35 percent.
         6. Density: 8.66 lbs./gallon (1.04 S.G.).
         7. US Regulatory VOC: 100 g/L.
         8. Gloss Level: N/A.
         9. Odor: Non-offending.

\*\* NOTE TO SPECIFIER \*\* Bona SuperSport MVP(tm) is a two-component, premium waterborne finish formulated for professional use on maple sport floors. Excellent scratch and scuff resistance, combined with exceptional gloss retention. Stands up to the high demands of gymnasiums and sporting arenas alike.

* + - 1. Product: Bona SuperSport MVP as manufactured by Bona US.
         1. Ingredients: Water, Polymeric Resin, Dipropylene Glycol Monomethyl Ether, Silica Derivate, Dipropylene Glycol Butyl Ether.
         2. Color: Milky, off white (wet).
         3. Clarity: Clear when dry.
         4. Solids: 30 percent.
         5. Density: 8.704 lbs per gallon (1.043 grams per cu cm).
         6. US Regulatory VOC Compliant: 275 grams per L.
         7. Gloss Level: Greater than 87.
         8. Odor: Non-offending.
         9. Stability: 1-year shelf life in unopened container.
         10. Leveling: Excellent.
         11. Defoaming: Excellent.
         12. Drying Time: 2 to 3 hours.
         13. Coverage: 500 to 600 sq ft per gal.
         14. Curing: Fully cured in 5 days.

\*\* NOTE TO SPECIFIER \*\* Bona SuperSport ELITE(tm); a two-component, premium waterborne sport floor finish formulated for professional use on athletic sport floors. This urethane finish has low VOCs and provides a long-lasting consistent look and is available in satin and gloss sheens. Minimizes glare and reflections on the court surface.

* + - 1. Product: Bona SuperSport ELITE as manufactured by Bona US.
         1. Ingredients: Water, Polymeric Resin, Amorphous Silica, and Dipropylene Glycol Dimethyl Ether.
         2. Color: Milky, off white (wet).
         3. pH: 8.3.
         4. Clarity: Clear when dry.
         5. Solids: 32 percent.
         6. Density: 8.67 lbs per gal (1.039 grams per cu cm).
         7. US Regulatory VOC Compliant: 275 grams per L.
         8. Gloss Level: Greater than 87. Satin (Matte): Less than 20.
         9. Odor: Non-offending.
         10. Stability: 1-year shelf life in unopened container.
         11. Leveling: Excellent.
         12. Defoaming: Excellent.
         13. Drying Time: 2 to 3 hours.
         14. Coverage: 450 to 550 square feet per gallon.
         15. Curing: Fully cured in 3 days.
      2. Product: Bona Activator as manufactured by Bona US.
      3. Product: Bona Sport Crosslinker as manufactured by Bona US. To be used with Bona 2-component finishes.
    1. Sealers:

\*\* NOTE TO SPECIFIER \*\* Bona SuperSport DTS is a specially formulated waterborne sanding sealer for use with all Bona waterborne finishes. Bona SuperSport DTS seals the wood; develops a deep natural tone, vibrant look; abrades easily; and prevents the finish from penetrating into the wood surface. Delete if not required.

* + - 1. Product: Bona SuperSport DTS as manufactured by Bona US.
         1. Ingredients: Water, polymeric resin, silica derivate, diethylene glycol monoethyl ether, propylene glycol.
         2. Color: Milky white (wet).
         3. Clarity: Clear when dry.
         4. pH: 7.5 to 7.9.
         5. Solids: 31 to 32 percent.
         6. Density: 8.66 lbs./gallon (1.04 S.G.).
         7. US Regulatory VOC: 250 g/L.
         8. Odor: Non-offending.

\*\* NOTE TO SPECIFIER \*\* Bona ClearSeal(tm) is a waterborne sealer that offers easy abradability, great build characteristics and is fast drying. The clear aspect offers a classic appearance which highlights the natural color of wood. Bona ClearSeal provides an initial layer that prevents the finish from penetrating into the wood. Delete if not required.

* + - 1. Product: ClearSeal as manufactured by Bona US.
         1. Ingredients: Water, acrylic resin, urethane resin, dipropylene glycol monomethyl ether (DPM), binding agent.
         2. Color: Milky white (wet).
         3. Clarity: Clear when dry.
         4. pH: 7.7.
         5. Solids: 32 percent.
         6. Density: 8.70 lbs per gal (1.04 s.g.).
         7. US Regulatory VOC: 100 g/L.
         8. Gloss Level: N/A.
         9. Odor: Non-offending.
         10. Clarity: Clear when dry.
         11. Leveling: Excellent.
         12. Defoaming: Excellent.
         13. Drying Time: Approximately 1-2 hours (high humidity and/or low temperature conditions will extend the drying time).
         14. Stability: 1-year shelf life in unopened container.
         15. Certification: GREENGUARD Certified for indoor air quality.
         16. LEED: Complies with USGBC LEED low-VOC requirements.
  1. OIL-MODIFIED FINISHES & SEALERS
     1. Finishes:

\*\* NOTE TO SPECIFIER \*\* Bona Sport Poly 350 is a premium quality, high solids oil-modified polyurethane developed specifically for the wood sport floor market. It has low VOC's and provides and extremely tough, high build gloss finish with excellent chemical resistance, protecting against perspiration and routine cleaning. Bona Sport Poly 350 is specially formulated to meet all federal and state clean air quality standards.

* + - 1. Product: Bona Sport Poly 350 as manufactured by Bona US.
         1. Ingredients: Oil-modified polyurethane resin, mineral spirits (solvent), driers.
         2. Color: Amber.
         3. Clarity: Clear when dry.
         4. Solids: 52-55 percent.
         5. Viscosity: (#4 Ford cup at 25 degrees C) approx. 22 to 26 seconds.
         6. Density: 7.6 lbs./gallon (.91 S.G.).
         7. US Regulatory VOC: 350 g/L.
         8. Gloss Level (60 degree): 90+.
         9. Odor: Mineral spirits.
         10. Flash Point: 104 degrees F (40 degrees C).
         11. Stability: 2-year shelf life in unopened container.
         12. Percent Cured After 24 Hours - 50 percent.
         13. Maximum Cure - 2 weeks.

\*\*NOTE TO SPECIFIER\*\* Bona Sport Poly 275 is a premium quality, oil-modified polyurethane developed specifically for the wood sport floor market. Bona Sport Poly 275 is low VOC and provides an extremely tough, high build gloss finish with excellent chemical resistance, protecting against perspiration and routine cleaning. Bona Sport Poly 275 is specially formulated to meet all federal and state clean air quality standards.

* + - 1. Product: Bona Sport Poly 275 as manufactured by Bona US.
         1. Ingredients: Oil-modified polyurethane resin, mineral spirits (solvent), silicone fluid (solvent), driers.
         2. Color: Amber.
         3. Clarity: Clear when dry.
         4. Solids: 57 to 59 percent.
         5. Viscosity: (#4 Ford cup at 25 degrees C) approx. 18-24 seconds.
         6. Density: 7.6 lbs/gallon (0.91 S.G.).
         7. US Regulatory VOC: 275 g/L
         8. Gloss Level (60 degree): 90+.
         9. Odor: Mineral spirits.
         10. Flash Point: 104 degrees F (40 degrees C)
         11. Stability: 1-year shelf life in unopened container.
         12. Percent Cured After 24 Hours: 50 percent.
         13. Maximum Cure: 2 weeks.

\*\* NOTE TO SPECIFIER \*\* Bona Sport All Court Polyurethane is a premium quality, oil-modified, polyurethane gloss developed specifically for the wood sport floor market. It provides an extremely tough, high build gloss finish with superior flow and leveling. Light amber color enhances natural color of wood. MFMA approved.

* + - 1. Product: Bona All Court Poly as manufactured by Bona US.
         1. Ingredients - Oil-modified polyurethane resin, mineral spirits (solvent), driers.
         2. Color: Light amber.
         3. Clarity: Clear when dry.
         4. Solids: 43 percent.
         5. Viscosity: (#4 Ford cup at 25 degrees C) approx. 14-16 seconds.
         6. Density: 7.3 lbs./gallon (0.9 S.G.).
         7. US Regulatory VOC: 500 g/L.
         8. Gloss Level (60 degree): 90+.
         9. Odor: Mineral spirits.
         10. Flash Point: 103 degrees F (39 degree C).
         11. Stability: 2-year shelf life in unopened container.
         12. Percent Cured After 24 Hours - 50 percent.
         13. Maximum Cure - 2 weeks.

\*\* NOTE TO SPECIFIER \*\* Bona Sport Poly is a premium quality, oil-modified, polyurethane gloss developed specifically for the wood sport floor market. Provides an extremely tough, high build gloss finish with excellent chemical resistance, protecting against perspiration and routine cleaning. Light amber color enhances natural color of wood. Bona Sport Poly meets the federal and most state clean air quality standards and is MFMA approved.

* + - 1. Product: Bona Sport Poly as manufactured by Bona US.
         1. Ingredients: Oil-modified polyurethane resin, mineral spirits (solvent), driers.
         2. Color: Light amber.
         3. Clarity: Clear when dry.
         4. Solids: 50 percent.
         5. Viscosity: (#4 Ford cup at 25 degrees C) approx. 21 to 24 seconds.
         6. Density: 7.5 lbs./gallon (.90 S.G.).
         7. US Regulatory VOC: 450 g/L.
         8. Gloss Level (60 degree): 90+.
         9. Odor: Mineral spirits.
         10. Flash Point: 110 degrees F (40 degrees C).
         11. Stability: 2-year shelf life in unopened container.
         12. Percent Cured After 24 Hours - 50 percent
         13. Maximum Cure - 2 weeks
    1. Sealers:

\*\* NOTE TO SPECIFIER \*\* Bona Sport Seal is an oil-modified sealer for use over newly sanded sport and all-purpose floors. Formulated for use with Bona Sport Poly and Bona All Court Poly. Seals the wood, providing a build layer and prevents the finish from penetrating. Bona Sport Seal meets the federal and most state clean air quality standards.

* + - 1. Product: Bona Sport Seal as manufactured by Bona US.
         1. Ingredients: Oil-modified polyurethane resin, mineral spirits (solvent), driers, defoamers.
         2. Color: Light amber.
         3. Clarity: Clear when dry.
         4. Solids: 43 percent.
         5. Density: 7.3 lbs./gallon (.88 S.G.).
         6. US Regulatory VOC: 500 g/L.
         7. Viscosity: (#4 Ford cup at 25 degrees C) approx. 17 seconds.
         8. Odor: Mineral spirits.
         9. Flash Point: 110 degrees F (42 degree C).
         10. Stability: 2-year shelf life in unopened container

\*\* NOTE TO SPECIFIER \*\* Bona Sport Seal 350 is a low-VOC, oil-modified sealer for use over newly sanded sport and all-purpose hardwood floors. Formulated for use with Bona Sport Poly 350. Seals the wood, providing a build layer, and prevents the finish from penetrating. Bona Sport Seal 350 is specially formulated to meet all federal and state clean air quality.

* + - 1. Product: Bona Sport Seal 350 as manufactured by Bona US.
         1. Ingredients: Oil-modified polyurethane resin, mineral spirits (solvent), polysiloxane, driers, defoamers.
         2. Color: Light amber.
         3. Clarity: Clear when dry.
         4. Solids: 51 to 54 percent.
         5. Viscosity: (#4 Ford cup at 25 degrees C) approx. 22 to 26 seconds.
         6. Density: 7.7 lbs./gallon (.92 S.G.).
         7. US Regulatory VOC: 350 g/L.
         8. Odor: Mineral spirits.
         9. Flash Point: Greater than 104 degrees F (PMCC).
         10. Stability: 2-year shelf life in unopened container

\*\* NOTE TO SPECIFIER \*\* Bona DriFast Sport Seal is a quick-drying (1.5 - 2 hours), oil-modified sealer designed to penetrate and seal bare wood. Compatible with all Bona Sport paints and oil-modified and waterborne sport finishes.

* + - 1. Product: Bona DriFast Sport Seal as manufactured by Bona US.
         1. Ingredients: Mineral spirits (solvent), urethane resins, silica, driers.
         2. Color: Wet - amber; Dry - light amber.
         3. Solids: 37 percent.
         4. Density: 7.21 lbs./gallon (.866 S.G.).
         5. US Regulatory VOC: 550 g/L.
         6. Odor: Mineral spirits.
         7. Flash Point: 103 degrees F (39 degrees C).
         8. Clarity: Clear.
         9. Stability: 2-year shelf life in unopened container.
  1. PAINT
     1. Court Sport Floor Paint:

\*\* NOTE TO SPECIFIER \*\* CourtLines Sport Floor Paint is a high-solids, fast-drying, solvent-based sport floor paint, manufactured specifically for use with both waterborne and oil-modified sport floor sealers and finishes. Available in fifteen vibrant primary colors, all CourtLines paints are blendable to achieve an endless array of custom colors.

* + - 1. Product: Bona CourtLines Sport Floor Paint as manufactured by Bona US.
         1. Ingredients: Alkyd resins, odorless mineral spirits, pigments, driers, titanium dioxide.
         2. Base Colors: Red, yellow, green, lt. blue, dark blue, orange, brown, black, white, gold, maroon, purple, lt. beige, gray, NC blue. Refer to drawings and finish schedule.
         3. Odor: Non-offending low odor.
         4. Solids: Colors - 47-51 percent; White - 66 percent.
         5. Flash Point: 100 degrees F (TCC).
         6. Density: Colors - 7.6 to 7.9 lbs./gallon; White - 11.1 lbs./gallon.
         7. US Regulatory VOC: Does not exceed 490 g/L.
         8. Stability: 2-year shelf life in unopened container

\*\* NOTE TO SPECIFIER \*\* Delete color not required.

* + - * 1. Color: Light Blue.
        2. Color: Red.
        3. Color: Green.
        4. Color: White.
        5. Color: Black.
        6. Color: Orange.
        7. Color: Dark Blue.
        8. Color: Yellow.
        9. Color: Brown.
        10. Color: Purple.
        11. Color: Gold.
        12. Color: Maroon.
        13. Color: Grey.
        14. Color: Light Beige.
        15. Color: NC Blue.

\*\* NOTE TO SPECIFIER \*\* Bona SuperSport Paint is a fast drying, waterborne gameline paint manufactured specifically for use with both waterborne and oil-modified sport floor sealers and finishes; Specifically formulated for sport gamelines, lettering and logos; Use with Bona waterborne or oil-modified finishes; 17 vibrant colors including white, blendable for an unlimited possibility of custom colors; Fast drying with 3 - 4 hour recoat of finish; No abrasion needed for adhesion of finish; VOC compliant; Very low odor; Excellent flow and leveling; Excellent adhesion; Available in gallons; GREENGUARD Gold certified for indoor air quality.

* + - 1. Product: Bona SuperSport Paint
         1. Ingredients: Polymer, Water, Dipropylene glycol n butyl ether, Dipropylene glycol monoethyl ether, and Pigments.
         2. Odor: Non-offending low odor.
         3. Solids: Colors: 32 - 46 percent.
         4. Density: Colors: 8.8-10.2 lbs./gallon; White: 9.9 lbs./gallon.
         5. US Regulatory VOC: Does not exceed 150 g/L.
         6. Stability: 18 months shelf life in unopened container.
         7. Drying Time: 3-4 hours before coating with waterborne finish, 12-16 hours for oil-modified. A second coat of paint can be applied within 30-90 minutes.

\*\* NOTE TO SPECIFIER \*\* Delete color not required.

* + - * 1. Color: Light Beige.
        2. Color: Black.
        3. Color: Dark Blue.
        4. Color: League Blue.
        5. Color: NC Blue.
        6. Color: Brown.
        7. Color: Gold.
        8. Color: Gray.
        9. Color: Green.
        10. Color: Light Green.
        11. Color: Maroon.
        12. Color: Orange.
        13. Color: Purple.
        14. Color: Red.
        15. Color: White.
        16. Color: Yellow.
        17. Color: Light Yellow.

\*\* NOTE TO SPECIFIER \*\* A premium quality quick-drying stain for interior hardwood floors, DriFast Stain's advanced technology formula provides speed and high performance for hardwood floor finishing professionals. Compatible with all Bona waterborne systems and all other Bona finish systems.

* + 1. Stains:
       1. System: Bona DriFast Stain.
          1. Ingredients: Wood tones: Oil-modified resins, mineral spirits (solvent), pigments, driers. White: Oil-modified resins, mineral spirits (solvent), titanium dioxide, fillers.
          2. Colors: Wood tones: Natural, Golden Oak, Nutmeg, Early American, Provincial, Special Walnut, Rosewood, Red Mahogany, Jacobean, Graphite, Medium Brown, Antique Brown, Puritan Pine, Cherry, Sedona Red, Spice Brown, Grey, Ebony, Bark, Cocoa, Driftwood, Birch, Aged Pewter, Twig and Sand Dune.
          3. Pastel: White (Not recommended on white oak due to excessive color variation).
          4. Solids: 5-47 percent
          5. Density: Wood tones: 7.2-7.5 lbs.s/gallon (0.86-0.90 s.g.), White: 8.7-9.0 lbs.s/gallon (1.04-1.8 s.g.)
          6. US Regulatory VOC: 550 g/L
          7. Odor: Mild solvent odor
          8. Stability: Two-year shelf life in unopened container
          9. Flashpoint: 116.6 degrees F (47 degrees C)
          10. Clarity: Semi-transparent (dry)
          11. Drying Time: 2 hours for wood tones, 6 hours minimum for white and 12-18 hours for Ebony, Spice Brown, Bark and Cocoa under ideal conditions of 60 degrees - 80 degrees F (16 degrees - 27 degrees C) with 35-75 percent relative humidity.

\*\* NOTE TO SPECIFIER \*\* The Metropolitan Collection is comprised of saturated reds, smoky browns, grays and rich, chocolaty black. Each color captures an urban vibe that's just right for today's sophisticate.

* + - 1. Product: Bona DriFast Stain - Metropolitan.

\*\* NOTE TO SPECIFIER \*\* The Classic Collection is a rich presentation of authentic browns and rich auburns that compliment the heritage of traditional design. This exemplary palette has its roots in the natural appeal of hardwoods.

* + - 1. Product: Bona DriFast Stain - Classic.

\*\* NOTE TO SPECIFIER \*\* The Essentials Collection is comprised of warm ambers and hints of exotic spices that transport this palette across varied design styles. Find just the right shade for your particular paradise..

* + - 1. Product: Bona DriFast Stain - Essentials.

\*\* NOTE TO SPECIFIER \*\* The Natural Collection is subtle and soft with light tones mixed with warm whites. This easy, breezy collection blends right in with your everyday, everyway living.

* + - 1. Product: Bona DriFast Stain - Naturals.

\*\* NOTE TO SPECIFIER \*\* Bona Sport products continue to lead the way with trends in athletic wood floors through our hybrid paint/stain and paint/sealer applications.

* + 1. Tints and Blends:
       1. Contact manufacturer.

\*\* NOTE TO SPECIFIER \*\* Bona CourtLines and Bona SuperSport Paint are customizable to meet any school or facility color needs. The colors shown on the Bona website are a representation of what's possible with Bona. These are not stock colors, however, by using the search function, you can look-up the desired PMS number and review the recommended formulas. If the color you need is not listed, please contact your Bona Sale Representative or email Paint.Request@bona.com.

* + 1. Color Blend Formulas. Contact your Bona Sale Representative or email Paint.Request@bona.com.
  1. SPORT FLOOR MAINTENANCE
     1. Floor Cleaners:

\*\* NOTE TO SPECIFIER \*\* Bona SuperCourt Cleaner is a professional strength, waterborne cleaner formulated for unwaxed, polyurethane finished wood floors. This environmentally responsible cleaner leaves no residue and will not dull the floor's finish.

* + - 1. Product: Bona SuperCourt Cleaner.
         1. Leaves no residue.
         2. Safe for wood floors.
         3. Specifically designed for gym floor cleaning/auto scrubber.
         4. Tilt-n-Measure for easy use.
         5. Concentrated 1:128.
         6. Green Seal Certified.
    1. Accessories:
       1. Bona SuperCourt Athletic Floor Care System
       2. Bona SuperCourt Athletic Floor Care Microfiber Scrubbing Pads.
       3. Bona SuperCourt Athletic Floor Care Microfiber Dry Dusting Pads.
       4. Bona SuperCourt Athletic Floor Care Microfiber Wet Cleaning Pads.
       5. Bona SuperCourt Dispensing Unit.
    2. Sport Cleaner Concentrate:

\*\* NOTE TO SPECIFIER \*\* Professional strength, non-toxic, waterborne hardwood floor cleaner concentrate, Formulated for unwaxed, polyurethane finished wood floors. This environmentally responsible cleaner leaves no residue and will not dull the floor's finish.

* + - 1. Product: Bona Pro Series Hardwood Cleaner Concentrate as manufactured by Bona US.
         1. Ingredients: Water, glycol ether solvents, non-ionic and anionic surfactants.
         2. Color: Light purple (wet).
         3. pH: 7.0 to 8.0.
         4. Solids: Less than 1 percent.
         5. Density: 8.34 lbs per gal (1.0 s.g.).
         6. VOC: Less than 1 percent.
         7. Odor: Non-Offending.
         8. Certification: GREENGUARD GOLD for indoor air quality.
         9. LEED: Complies with USGBC LEED low-VOC requirements.

\*\* NOTE TO SPECIFIER \*\* The Bona Recoat System is the first and only guaranteed recoat system in the industry. This process safely removes all contaminants from the floor preparing it for optimal adhesion of a new coat of Bona Traffic or Bona Traffic HD. When the process is followed correctly, Bona's guarantee will cover the cost of sanding and finishing the floor if the finish doesn't adhere to the floor.

* + 1. Prep System and Recoat Optimizer:

\*\* NOTE TO SPECIFIER \*\* Bona Prep is a specially formulated recoat adhesion system for all types of polyurethane finished hardwood floors, including factory prefinished floors. residential, commercial, and sport polyurethane finished hardwood floors, including aluminum oxide, ceramic, and other factory prefinished floors. It's fast and easy with the Prep system, and completely dust-free when using a Bona Dust Containment System. GREENGUARD certified for indoor air quality.

* + - 1. Product: Bona Prep as manufactured by Bona US.
         1. Ingredients: Surfactants, Dipropylene Glycol Monomethyl Ether, Ethylene Glycol Monobutyl Ether, water, other proprietary ingredients.
         2. Color: Amber (wet).
         3. Clarity: Negligible residue (dry).
         4. pH: 7.0 to 8.0.
         5. Solids: Less than 1 percent.
         6. Density: 8.32 lbs./gallon (1.0 S.G.).
         7. VOC: Less than 2 percent.
         8. Odor: Light antiseptic.
         9. LEED: Complies with USGBC LEED low-VOC requirements.

1. EXECUTION
   1. MANUFACTURER'S INSTRUCTIONS
      1. Comply with the instructions and recommendations of the floor finish system manufacturer.
      2. For new installation of floors, use only in structures with humidity and temperature controls. Do not use over channel and clip floor systems in environments not controlled for temperature and humidity.
   2. EXAMINATION
      1. Do not begin installation until substrates have been properly prepared.
      2. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
   3. PREPARATION
      1. Protection: Protect adjacent finish surface to prevent damage during sanding and sport floor system application.
      2. Surface Preparation:
         1. Sand and prepare floor using MFMA accepted methods.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - 1. For Sport Poly 350 oil modified system, make final sanding cut to 100 - 120 grit paper. Screen with 100 - 120 grit screen.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - 1. For Sport Poly 275 oil modified system, make final sanding cut to 100 - 120 grit paper. Screen with 100 - 120 grit screen.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - 1. For SuperSport waterborne system, make final cut with 100 - 120 grit sandpaper and screen to 120 - 150 grit.
      2. Vacuum thoroughly.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - 1. For Sport Poly 350, tack with mineral spirits.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - 1. For Sport Poly 275, tack with mineral spirits, a slightly damp Bona SuperCourt Microfiber Wet Tacking Pad, or a dry Bona SuperCourt Microfiber Tacking Pad

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - 1. For SuperSport, tack with slightly water dampened Bona Mop or cloth.
  1. APPLICATION
     1. Specific application methods vary with product. Consult manufacturer and comply fully with manufacturer's application recommendations.
        1. Before using these products, read and understand all directions and the Material Safety Data Sheets (MSDS).
        2. Shake well before using.
        3. Do not thin products.
        4. Keep from freezing.
     2. Finish System: As scheduled or indicated on the drawings.

\*\* NOTE TO SPECIFIER \*\* Edit system to comply with Bona waterborne sealer and finish system selected.

* + - 1. 4-coat system, 1 to 2 coats of a sport sealer, court lines paint (where scheduled or indicated) and 2 to 3 coats of a sport court finish.
  1. PROTECTION
     1. After application, protect floor finish from damage during subsequent work.
     2. Do not allow foot traffic until floor is sufficiently dried and cured.

END OF SECTION