

3 Part CSI Formatted Specification Guide
Zandur Sport Flooring Products
Zandur, Inc
888.397.2656
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Section 09 65 66

RESILIENT RUBBER ATHLETIC FLOORING
SUSTAIN SPORT CORK RUBBER, FLEX SPORT SOLID RUBBER

DOCUMENT #Z842

THE FOLLOWING DOCUMENT IS A GUIDE FOR CREATING YOUR CSI FORMATTED 3-PART ARCHITECTURAL GUIDE SPECIFICATIONS.

ZANDUR ACCEPTS NO LIABILITY FOR ANY DAMAGES RESULTING FROM THE USE OF THIS DOCUMENT OR RELATED SPECIFICATIONS. PRIOR TO USE OF THIS DOCUMENT, ENSURE THAT YOU HAVE OBTAINED ALL UP TO DATE PUBLICATIONS AND SPECIFICATIONS FROM ZANDUR.

THE SPECIFIER IS RESPONSIBLE FOR PRODUCT SELECTION, ACCURACY OF ALL PROJECT SPECIFICATIONS AND USE OF PROPER SPECIFICATION DATA.

1.GENERAL

1. RELATED DOCUMENTS

- A. Drawings and provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

2. SUMMARY

- A. Section Includes:
 - 1. Vulcanized Rubber Tile Sport Flooring
 - 2. Vulcanized Cork Rubber Tile Sport Flooring

3. SUBMITTALS

- A. Product Data: Submit product data including manufacturers general specification sheet for each product specified.
- B. LEED Submittals:

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1. Product Data for each LEED credit where product meets qualifications: For adhesives, include printed statement of VOC content and chemical components.
- C. Samples for Initial Selection: Submit representative selection of samples for finish, color and shade.
- D. Product Schedule: For resilient products. Use same designations indicated on Drawings.
4. **QUALITY ASSURANCE**
 - A. Mockups: Provide resilient products with mockups specified in other Sections.
 - B. Documents. Submit the following:
 1. Test reports showing compliance with specified performance and physical characteristics
 2. Installation instructions
 3. Care and Maintenance Instructions
 - C. Samples for Verification: For each product specified, provide two samples in manufacturer's standard submittal size for site verification prior to installation showing color, shade, texture, and pattern specified.
5. **DELIVERY, STORAGE, AND HANDLING**
 - A. Material shall be stored in a cool, dry, enclosed space with a minimum temperature of 45°F. Prior to installation, verify job site conditions are maintained between 65°F and 75°F with a relative humidity between 45% and 65%. These conditions must be maintained for 72 hours prior to, during and 72 hours after installation. Temporary heating may not be used during acclimation or installation.
6. **PROJECT CONDITIONS**
 - A. Install resilient flooring after other finishing work, including painting and installation of ceiling systems.
 - B. Maintain ambient temperature and humidity on job site in the range between 65°F and 75°F with a relative humidity between 45% and 65%.
 - C. HVAC system must be in operation at least 72 hours prior to during and 1 week after installation.
7. **WARRANTY**
 - A. Manufacturer's Warranty: Submit manufacturers standard warranty documentation.

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8. ADDITIONAL MATERIALS

- A. Attic Stock: Deliver 5% additional materials from same production run to owner for use at a future time should repair and/or replacement of a damaged area of the floor be required.

PART 2 - PRODUCTS

2.0 RESILIENT ATHLETIC FLOORING

A. CORK RUBBER ATHLETIC FLOORING

1. SUSTAIN SPORT CORK RUBBER TILE Manufactured By:

Zandur	Phone:	888.397.2656
26 Kelley Dr		610.932.4390
Front Royal, VA, 22630	Tech:	888.397.2656
Web: www.zandur.com	Samples:	888.397.2656
email: sales@zandur.com	Fax:	540.987.5049

2. Product shall have the following physical characteristics:

1. Manufactured with a vulcanized backing, made with recycled, rapidly renewable cork and rubber and permanently vulcanized to the wear layer.
2. Wear Layer Type (Specify)
 - 1) Standard Wear Surface: Manufactured with Nitrile Rubber, 65% recycled/renewable cork, environmentally safe, fade resistant pigments and natural fillers.
 - 2) Heavy Duty Weight Resistant Wear Surface: Manufactured with Nitrile Rubber, 65% recycled/renewable cork, environmentally safe, fade resistant pigments and natural fillers. Surface has increased resistance to damage from accidental dropping of free weights. Use of drop off mats is required where heavy free weights are dropped regularly.
3. Meets ASTM F 1344 Standard Specification for Rubber Tile Flooring Type IIA
4. Warranty: 1 Year Manufacturing Defect, 20 Year Wear Through
5. Overall thickness (Specify Thickness):
 - 1) 6.0mm
 - 2) 9.0mm
6. Tile size (Specify Size):
 - 1) 38" x 38"
 - 2) 19" x 38"
 - 3) 19" x 19"
 - 4) 9.5" x 38"
 - 5) 4.6" x 38"
 - 6) Specify other size as required
7. Color (Specify):
 - 1) (Specify manufacturers Numerical Reference)
 - 2) Custom Color (Specify color using manufacturers custom sample code)

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8. ASTM D 3389 Standard Test Method for Coated Fabrics Abrasion Resistance: < 1.00 gram weight loss.
9. ASTM D 2047, Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring: Exceeds Federal Standards and A.D.A. requirements for slip-resistance.
10. ASTM F 970, Standard Test Method for Static Load Limit. Min 350 psi with 0.002 inch residual indentation.
11. ASTM E 648, Standard Test method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source – Class I
12. ASTM D2240, Shore A Hardness:
 - 1) Wear Layer: Min 86
 - 2) Backing: Min 40
13. ASTM F 925, Chemical Resistance: No more than slight: change in surface color, dulling or attack.
14. ASTM E 662, Smoke Density: <450
15. ASTM G 21, Mold Growth: Anti-Microbial
16. ASTM E90/413 – Acoustical Behavior STC – 55 dB
17. ASTM E492/989 – Acoustical Behavior IIC – 54 dB
18. ASTM E2179 – Acoustical Behavior Delta IIC – 23 dB
19. Meets California Section 01350 indoor air quality test
20. PVC, Virgin SBR, Phthalate, chlorine and halogen-free.
21. Declare Red List Chemical Free.
22. Meets qualification criteria for LEED credits MR4.1, MR4.2, MR 6.0 and IEQ4.3.
23. Initial Maintenance: Follow manufacturer's instructions prior to use to remove any manufacturing residues that may keep floor from performing optimally as specified in manufacturers Care and Maintenance documentation.
24. Regular Maintenance: Following manufacturer's instructions, clean floor using recommended or approved system as specified in manufacturers Care and Maintenance documentation.

B. SOLID RUBBER ATHLETIC FLOORING

1. FLEX SPORT SOLID RUBBER ATHLETIC FLOORING Manufactured By:

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26 Kelley Dr		610.932.4390
Front Royal, VA 22630	Tech:	888.397.2656
Web: www.zandur.com	Samples:	888.397.2656
email: sales@zandur.com	Fax:	540.987.5049

2. Product shall have the following physical characteristics:
 1. Manufactured with a vulcanized backing, made with recycled rubber and permanently vulcanized to the wear layer.
 2. Wear Layer Type (Specify):
 - 1) Standard Wear Surface: Manufactured with Nitrile Rubber, environmentally safe, fade resistant pigments and natural fillers.

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- 2) Skate and Spike Resistant Wear Surface: Manufactured with Nitrile Rubber, environmentally safe, fade resistant pigments and natural fillers. Wear layer resists excessive wear caused by ice skates and non-metallic shoe spikes.
- 3) Heavy Duty Weight Resistant Wear Surface: Manufactured with Nitrile Rubber, environmentally safe, fade resistant pigments and natural fillers. Wear layer has increased resistance to damage from accidental dropping of free weights. Use of drop off mats is required where heavy free weights are dropped regularly.
3. Meets ASTM F 1344 Standard Specification for Rubber Tile Flooring Type IIA
4. Warranty: 1 Year Manufacturing Defect, 20 Year Wear Through
5. Overall thickness (Specify Thickness):
 - 1) 7.0mm
 - 2) 10.0mm
6. Tile size (Specify Size):
 - 1) 38" x 38"
 - 2) 19" x 38"
 - 3) 19" x 19"
 - 4) 9.5" x 38"
 - 5) 4.6" x 38"
 - 6) Specify other size as required
7. Color (Specify):
 - 1) (Specify manufacturers Color Name and Numerical Reference)
 - 2) Custom Color (Specify color using manufacturers custom sample code)
8. ASTM D 3389 Standard Test Method for Coated Fabrics Abrasion Resistance: < 1.00 gram weight loss.
9. ASTM D 2047, Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring: Exceeds Federal Standards and A.D.A. requirements for slip-resistance.
10. ASTM F 970, Standard Test Method for Static Load Limit. Min 350 psi with 0.002 inch residual indentation.
11. ASTM E 648, Standard Test method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source – Class I
12. ASTM D2240, Shore A Hardness: Min 85
13. ASTM F 925, Chemical Resistance: No more than slight: change in surface color, dulling or attack.
14. ASTM E 662, Smoke Density: <450
15. ASTM G 21, Mold Growth: Anti-Microbial
16. Meets California Section 01350 indoor air quality test
17. PVC, SBR (Virgin), Phthalate, chlorine and halogen-free.
18. Meets qualification criteria for LEED credits MR4.1, MR4.2, MR 6.0 and IEQ4.3.
19. Regular Maintenance: Following manufacturer's instructions, clean floor using Zandur recommended or approved system as specified in Zandur Care and Maintenance documentation.

2.1 INSTALLATION MATERIALS

- B. Trowelable Leveling and Patching Compounds: Latex-modified, **Portland** cement based or blended hydraulic cement based formulation.
- C. Adhesives: As recommended in current manufacturers installation instructions.
 1. Manufacturers recommended Two Part Urethane for moderate and heavy traffic and/or exposure to elevated levels of surface moisture.

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2. Manufacturers recommended Acrylic adhesive for light use applications absent of heavy rolling loads or free weights.
3. Interlock tiles are intended to be loose laid without adhesive.

3.EXECUTION

1. EXAMINATION

- A. Examine substrates, with installer present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the work.
- B. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks and other imperfections, are smooth and level within tolerance specified by manufacturer and are free of oils, waxes, paint or other materials that might interfere with adhesion of resilient products.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

2. PREPARATION & RESPONSIBILITIES

A. SITE REQUIREMENTS – GLUE DOWN APPLICATIONS:

1. **WARNING:** Do not sand, dry sweep, dry scrape, drill, saw, bead-blast, or mechanically chip or pulverize existing resilient flooring, backing, lining felt, asphalt “cutback” adhesive, or other adhesive. These products may contain asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the product is a non-asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content.
2. Flooring must be installed on a substrate that is permanently dry, clean, smooth, and structurally sound. It must be free of contaminants such as paint, oil, wax, mold, adhesive residues, sealers or any other materials that may interfere with adhesive bonding.
3. Prior to installation an adhesive bond test must be performed by gluing a 24” x 24” or larger piece of product to the substrate. Allow adhesive to cure overnight. If bond is sufficient, product will be laying flat and it will not be possible to remove by hand.
4. Flooring is not intended to be installed over existing floor coverings and are not warranted for such use. Existing flooring must be removed or (if installed on a wood subfloor) covered with 1/4” or 1/2” plywood.
5. All Sub-floors shall be flat to within 3/16” in 10’ and shall be patched or skim coated with a hard setting underlayment compound to ensure substrate is completely smooth. Cementitious underlayments must have a minimum compressive strength of 3,000 psi. Do not apply patching material over existing adhesives. Manufacturer is not responsible for any claims submitted on floors where patching materials have been applied over adhesive residue or existing floor coverings regardless of manufacturer instructions. After patching or skimming is complete, floor must be sanded or scraped to remove any trowel marks or other inconsistencies which may telegraph through the finished flooring

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material. Follow manufacturer's guidelines for product mixing and use instructions. Gypsum products are not approved for use.

6. Preparation of Wood Sub-Floors
 - a. Prepare wood sub-floor per ASTM F 710, *Standard practice for installation and preparation of panel type underlayment to receive resilient flooring*, as it relates only to approved wood underlayments.
 - b. Floor covering products may be installed over 3/8" or greater A/C grade plywood or underlayment board such as Tecply or Halex (Arctic or Baltic Birch).
 - c. Products are not approved for installation over panel underlayments such as Masonite, luan, particle board, OSB, cementitious underlayment panel, wood underlayment with knots or coated wood.
 - d. Follow manufacturers' instructions for installation regarding fastening pattern and joint spacing. Do not install underlayment with screws.
 - e. Once installed, patch subfloor with cementitious material as instructed in current manufacturers' instructions.
7. Preparation of Concrete Sub-Floors
 - a. Concrete sub-floors shall be prepared in accordance with ASTM F 710 *Standard practice for preparing concrete sub-floors to receive resilient flooring*.
 - b. Concrete sub-floors must be clean as specified. Pay specific attention to possible presence of a sealer which must be removed. It is highly recommended to shot blast or bead blast existing concrete sub-floors prior to installation to remove sealers, adhesives and/or any other surface contaminants.
 - c. Concrete sub-floors on or below grade must have a moisture retarder and all concrete subfloors, regardless of age, must be tested for the moisture vapor emission rate and relative humidity to ensure the sub-floor is suitable for floor covering installation.
 - d. Testing of concrete shall be performed **ONLY** when the building is enclosed and when the HVAC system has been in operation for at least 7 days. Furthermore, job-site temperature and humidity must be at the level expected during normal use or in the range of 65°F to 85°F and 45% to 55% relative humidity.
 - e. Moisture tests must be performed at a rate of 3 for the first 1,000 square feet and then 1 additional test per additional 1,000 square feet. Results of moisture tests must meet manufacturers requirements published in its current installation guidelines and shall not exceed moisture limits set forth by floor covering manufacturer.
 - h. Sub-Floor pH must be tested with wide range pH paper and verified to be no greater than 9. Test as per ASTM F-710.
 - i. Level sub-floor as specified
 - j. Allow patching materials to dry naturally without the use of direct air or temporary HVAC.
 - k. Flooring may be installed over terrazzo floors, however terrazzo must be bead or shot blasted to ensure adhesion.
 - l. Flooring may be installed over in-floor, hot water radiant heat systems. Specific installation instructions shall be obtained from manufacturer and implemented accordingly.

B. SITE REQUIREMENTS – LOOSE LAY/INTERLOCK APPLICATIONS:

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1. WARNING: Do not sand, dry sweep, dry scrape, drill, saw, bead-blast, or mechanically chip or pulverize existing resilient flooring, backing, lining felt, asphalt “cutback” adhesive, or other adhesive. These products may contain asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the product is a non-asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content.
 2. Floor Tile must be installed on a substrate that is permanently dry, clean, smooth, and structurally sound.
 3. Product may be installed over existing floor coverings. However, existing flooring must be properly secured, smooth and level. Product shall not be installed over carpet or similar soft surfaces.
 4. All Sub-floors shall be flat to within 3/16” in 10’. Any holes or voids shall be patched or skim coated with a hard setting underlayment compound to ensure substrate is completely smooth. Cementitious underlayments must have a minimum compressive strength of 3,000 psi. Do not apply patching material over existing adhesives. Manufacturer is not responsible for any claims submitted on floors where patching materials have been applied over adhesive residue or existing floor coverings regardless of manufacturer instructions. After patching or skimming is complete, floor must be sanded or scraped to remove any trowel marks or other inconsistencies which may telegraph through the finished flooring material. Follow manufacturer’s guidelines for product mixing and use instructions.
 5. Preparation of Wood Sub-Floors
 - a. Prepare wood sub-floor per ASTM F 710, *Standard practice for installation and preparation of panel type underlayment to receive resilient flooring*, as it relates only to approved wood underlayments.
 - b. Floor covering products may be installed over 3/8” or greater A/C grade plywood or underlayment board such as Tecply or Halex (Arctic or Baltic Birch).
 - c. Follow manufacturers’ instructions for installation regarding fastening pattern and joint spacing. Do not install underlayment with screws.
 - d. Once installed, patch subfloor with cementitious material as instructed in current manufacturers’ instructions.
 6. Preparation of Concrete Sub-Floors
 - a. Concrete sub-floors shall be prepared in accordance with ASTM F 710 *Standard practice for preparing concrete sub-floors to receive resilient flooring*.
 - b. Concrete sub-floors must be clean as specified.
 - c. Level sub-floor as specified
 - d. Allow patching materials to dry naturally without the use of direct air or temporary HVAC.
 - e. Flooring products may be installed over in-floor, hot water radiant heat systems. Specific installation instructions shall be obtained from manufacturer and implemented accordingly.
3. RESILIENT SPORTS TILE INSTALLATION – GLUE DOWN APPLICATIONS
- A. Comply with manufacturer's written instructions for installing resilient rubber sport tile flooring.
 - B. Install with the appropriate adhesive depending upon use and exposure to surface moisture. Follow up to date instructions for recommendations and for proper use.
 - C. Roll the flooring in both directions using a 100 pound three-section roller and a hand roller.

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- D. Use of bricks or other suitable heavy weights may be required for seams that do not lay flat due to undulations in sub-floor.

3.4 RESILIENT SPORTS TILE INSTALLATION – INTERLOCK LOOSE LAY

- A. Comply with manufacturer's written instructions for installing resilient rubber sport tile flooring.
- B. Install without adhesive on a properly prepared sub-floor. Follow up to date instructions for recommendations and for proper use.

5. CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protection of resilient products.
- B. Perform the following operations immediately after completing resilient product installation:
 - 1. Remove adhesive and other blemishes from exposed surfaces.
 - 2. Sweep and vacuum surfaces thoroughly.
 - 3. Damp-mop surfaces to remove marks and soil.
- C. Protect resilient products from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period.
- D. Limit traffic for 24 hours after installation. Interlock loose lay applications may have immediate traffic
- E. No heavy traffic, rolling loads, or furniture placement for 72 hours after installation. Interlock loose lay applications may have immediate traffic
- F. Wait 72 hours after installation before performing initial cleaning. Interlock loose lay applications may be immediately cleaned.
- G. Initial maintenance of the flooring shall be performed according to manufacturers instruction using manufacturers recommended cleaning products.
- H. A regular maintenance program must be started after the initial cleaning.

END OF SECTION 09.65.0