



## CSI | Exceed Studio

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**DIVISION 9 Finishes - SECTION 09 65 66 Resilient Athletic Flooring  
PLAE Exceed Rubber Back Sheet Vinyl**

### **PART 1.0 – GENERAL**

#### **1.1 SUMMARY**

- A. The work of this section includes:
  - 1. PLAE Exceed Studio – Rubber back sheet vinyl
  - 2. Welding Rod (If used on project.)
  - 3. Adhesives
- B. Related Sections: Section(s) related to this section include:
  - 1. Concrete Substrate: Division 3 Concrete Section(s)
  - 2. Plywood Substrate: Division 6

#### **1.2 REFERENCES**

- A. Standards listed by reference, including revisions by issuing authority, form a part of this specification section to extent indicated. Standards listed are identified by issuing authority, authority abbreviation, designation number, title or other designation established by issuing authority. Standards subsequently referenced herein are referred to by issuing authority abbreviation and standard designation.
- B. American Society for Testing and Materials (ASTM):
  - 1. ASTM F970 Standard Test Method for Static Load Limit
  - 2. ASTM F1303-99 Standard Test Method for Resistance to Chemicals of Resilient Flooring
  - 3. ASTM F1514 Standard Test Method for Measuring Heat Stability of Resilient Flooring by Color Change
  - 4. ASTM F1515 Standard Test Method for Measuring Light Stability of Resilient Flooring by Color Change
  - 5. ASTM D2047 Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as measured by the James Machine
  - 6. ASTM E648 Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source
  - 7. ASTM F2199 Standard Test Method for Determining Dimensional Stability of Resilient Floor Tile after Exposure to Heat
  - 8. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers – Tension
  - 9. ASTM F137 Standard Test Method for Flexibility of Resilient Flooring Materials with Cylindrical Mandrel Apparatus
  - 10. ASTM C518 Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
  - 11. ASTM F2753 Standard test method for dynamic rolling load
  - 12. ASTM F2772 Standard Specification for Athletic Performance Properties of Indoor Sports Floors Systems. Includes ASTM F2569, ASTM F2117, ASTM F2157, and ASTM E303
- C. European Committee for Standardization (EN)
  - 1. EN649 / EN ISO 10582 Resilient Floor Coverings Heterogeneous polyvinyl chloride floor coverings – Specification for Abrasion Resistance.
- D. Leadership in Energy and Environmental Design – LEED™
  - 1. International Organization for Standardization™ document, ISO 14021 - Provides guidance on the terminology, symbols, testing and verification methodologies that an organization should use for self-declaration of the environmental aspects of its products and services.



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### 1.3 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide rubber back sheet vinyl resilient flooring, which has been manufactured and installed to maintain performance criteria stated by manufacturer without defects, damage or failure.

### 1.4 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. LEED: Provide documentation of how the requirements for credit will be met.
  - 1. List of proposed materials with recycled content. Indicate pre-consumer and post-consumer content.
  - 2. Product data and certification letter indicating percentage of recycled content for both pre-consumer and post-consumer content.
  - 3. Recycled content is defined in accordance with the International Organization for Standardization document, ISO 14021 Environmental labels and declarations.
    - a. Post-consumer material - waste materials diverted from the waste stream after consumer or commercial use.
    - b. Pre-consumer material - materials diverted from the waste stream during the manufacturing process. Excluded are regrind, rework, and scrap.
- C. Product Data: Submit product data, including manufacturer's guide specifications product sheet, for specified products.
- D. Shop Drawings: Submit shop drawings showing layout, profiles and product components, including anchorage, accessories, finish colors, patterns and textures.
- E. Samples: Submit selection and verification samples for finishes, colors and textures.
- F. Quality Assurance Submittals: Submit the following:
  - 1. Certificates: If required, certification of performance characteristics specified in this document shall be provided by the manufacturer.
  - 2. Manufacturer's Instructions: Manufacturer's installation instructions Specifier Note: Coordinate paragraph below with Part 3.5 Field Quality Requirements Article herein. Retain or delete as applicable.
  - 3. Manufacturer's Field Reports: Manufacturer's field reports specified herein.
- G. Closeout Submittals: Submit the following:
  - 1. Operation and Maintenance Data: Operation and maintenance data for installed products in accordance with Division 1 Closeout Submittals (Maintenance Data and Operational Data) Section. Include methods for maintaining installed products and precautions against cleaning materials and methods detrimental to finishes and performance.
  - 2. Warranty: Warranty documents specified herein.

### 1.5 QUALITY ASSURANCE

- A. Qualifications:
  - 1. Installer Qualifications: Installer experienced in performing work of this section who has specialized in installation of work similar to that required for this project.
    - a. Certificate: When requested, submit certificate indicating qualification.
  - 2. Manufacturer's Qualifications: Manufacturer capable of providing field service representation during construction and approving application method. Specifier Note: Paragraph below should list obligations for compliance with specific code requirements particular to this section. General statements to comply with a particular code are typically addressed in Conditions of Contract and Division 1 Regulatory Requirements Section. Regulatory Requirements: [specify applicable requirements of regulatory agencies].
- B. Mock-Ups: Install at project site a job mock-up using acceptable products and manufacturer-approved installation methods. Obtain Owner and Architect's acceptance of finish color, texture and pattern, and workmanship standard. Comply with Division 1 Quality Control (Mock-Up Requirements) Section.
  - 1. Mock-Up Size: [specify mock-up size].



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2. Maintenance: Maintain mock-up during construction for workmanship comparison; remove and legally dispose of mock-up when no longer required.
3. Incorporation: Mock-up may be incorporated into final construction upon Owner's approval.
- C. Pre-installation Meetings: Conduct pre-installation meeting to verify project requirements, substrate conditions, manufacturer's instructions and manufacturer's warranty requirements. Comply with Division 1 Project Management and Coordination (Project Meetings) Section.
- D. Pre-installation Testing: Conduct pre-installation testing as follows: [specify substrate testing; consult with flooring manufacturer].

### **1.6 DELIVERY, STORAGE & HANDLING**

- A. General: Comply with Division 1 Product Requirements Sections.
- B. Ordering: Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.
- C. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- D. Storage and Protection: Store materials at temperature and humidity conditions recommended by manufacturer and protect from exposure to harmful weather conditions.

### **1.7 PROJECT CONDITIONS**

- A. Temperature Requirements: Maintain air temperature in spaces where products will be installed for time period before, during and after installation as recommended by manufacturer.
- B. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.

### **1.8 WARRANTY**

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to and not a limitation of, other rights Owner may have under Contract Documents. Specifier Note: Coordinate paragraph below with manufacturer's warranty requirements.
  1. Warranty Period: Specify years commencing on Date of Substantial Completion.

### **1.9 MAINTENANCE**

- A. Extra Materials: Deliver to Owner extra materials from same production run as products installed. Package products with protective covering and identify with descriptive labels. Comply with Division 1 Closeout Submittals (Maintenance Materials) Section.
  1. Quantity: Furnish quantity of resilient flooring units equal to [specify %] of amount installed.
  2. Delivery, Storage and Protection: Comply with Owner's requirements for delivery, storage and protection of extra materials.
  3. Cleaning: Furnish flooring manufacturer's neutral cleaner for initial cleaning and maintenance of finished floor surface.

## **PART 2.0 – PROPRIETARY PRODUCTS**

### **2.1 MATERIALS AND ATTRIBUTES**

Recycled SBR rubber and embossed, coated vinyl. Factory-fused, dual-layer rolls: natural wood grain texture printed onto vinyl, which is laminated to a recycled rubber underlayment. System provides long-lasting support and dynamic texture for greater coefficient of friction.



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### 2.2 PROPRIETARY PRODUCT

1. PLAE Exceed Studio 7mm rolls.
2. PLAE Clutch adhesive.

#### 2.2.1 Exceed Studio 7mm Flooring

PERFORMANCE	STANDARDS	7MM
Flexibility	ASTM F137	Pass
Thermal Conductivity	ASTM C518	0.7721 Btu in/h ft <sup>2</sup> F
Static Load @ 1000 psi	ASTM F970	Pass
COF James Machine	ASTM D2047	Dry=0.92/Wet=0.95
Dimensional Stability	ASTM F2199	Length=-0.056%/Width=-0.063%
Resistance to Light	ASTM F1515	Pass
Resistance to Heat	ASTM 1514	Pass
Rolling Load Effects: 500 cycles	ASTM F2753	Slight gloss change/Slight indentation
Vertical Rebound (ASTM F2772)	ASTM F2127	99%
Deformation (ASTM F2772)	ASTM F2157	0.8mm
Force Reduction (ASTM 2772)	ASTM F2569	19.10%
Surface Frictional Properties (ASTM 2772)	ASTM E303	Dry=99/Wet=62
Taber Abrasion	ASTM D4060	Good
Radiant Flux	ASTM E-648-10	Class 1

#### 2.2.2 PLAE Exceed Weld Rod (If used on project.)

- A. Product Name: Welding rod under this specification shall be Exceed distributed by PLAE.
- B. Material: Vinyl
- C. Colors: Specify color from PLAE standard colors.
- D. Dimensions: Standard lengths of 328 LF [100 M] by 3mm in thickness. Custom lengths not available.
- E. Spool Weight: 11.023 lbs (5 kg)

#### 2.2.3 PLAE Clutch Adhesive

##### DESCRIPTION

CLUTCH is a high-strength, one-part urethane that spreads easily. CLUTCH has a non-slump formula that will help ensure contact and adhesive transfer because the ridges will bridge normal gaps between the flooring and substrate. It allows fast installation even with complicated patterns due to its strong green grab. No flash time is required, so installation can commence immediately. It offers superior flexibility and is designed to adapt to seasonal changes. CLUTCH offers high shear strength and antimicrobial protection, which makes it suitable for outdoor and indoor use.

##### SPECIAL FEATURES

- Single component and no mixing required
- Zero VOCs (per SCAQMD Rule 1168)
- High-strength polyurethane formula
- Indoor and outdoor applications
- No moisture vapor limitations / unlimited RH (withstands 100% RH)

NOTE: This adhesive will maintain its integrity and performance even when high levels of moisture or water are present.



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### SUBFLOOR EXAMINATION

Prior to installation, the subfloor must be checked according to national standards. It must be solid and sound, level, free of indentations as well as resistant to pressure and tension. Follow the appropriate industry standards, including ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring. Should areas require patching, leveling, and/or moisture mitigation, follow the manufacturers' Technical Data Sheets for the for the installation instructions. Concrete substrate should NOT be smooth and reflective; it must have a concrete surface profile of CSP 1-3 as defined by International Concrete Repair Institute (ICRI, Guideline No. 03732). It also must be tested in accordance with ASTM F3191 and be found porous, where a ¼" drop of water must absorb into the concrete within 1 minute.

### APPROVED SUBSTRATES

- Concrete
- Cement patching and self-leveling compounds
- APA-grade plywood
- Asphalt\*

\*Not all flooring types are compatible with asphalt; refer to the installation instructions of the flooring before installation.

### APPROVED FLOORING TYPES

- Rubber tiles
- Rubber underlayment
- Foam-and urethane-backed turf
- Sports flooring
- Hardwood flooring
- Rubber-backed vinyl

### INSTALLATION PROCEDURE (NON-HARDWOOD)

Spread the adhesive with the appropriate notched trowel, or use a glue box to spread the adhesive onto the seaming tape. Lay the flooring into the adhesive and press down firmly. Do not allow the adhesive to skin over prior to flooring installation. Skinning (cured adhesive) will prevent the proper transfer of the adhesive to the substrate and flooring.

Roll the installation using the flooring manufacturer's recommendations. Periodically check to ensure that there is enough coverage of the adhesive to the flooring; most flooring types will require >80% coverage and transfer. Tape and/or weigh seams to keep contact until the adhesive sets.

Always test an area to ensure product satisfaction and adhesion to the substrate.

### INSTALLATION PROCEDURE (HARDWOOD)

Spread the adhesive with the appropriate notched trowel, and immediately begin installation of hardwood flooring. Hardwood flooring must be installed using a "wet-lay" method. Do not allow the adhesive to skin over prior to flooring installation. Skinning (cured adhesive) will prevent the proper transfer of the adhesive to the substrate and flooring. Periodically check to ensure that there is enough coverage of the adhesive to the flooring; engineered hardwood flooring requires 80% coverage and transfer for proper bonding. Solid hardwood flooring requires >95% coverage and transfer for proper bonding.

***For moisture-vapor protection of engineered floors, 100% substrate coverage and transfer is required.***

Always test an area to ensure product satisfaction and adhesion to the substrate.

### LIMITATIONS

- Slab temperature should be between 40oF and 100oF during installation. Large fluctuations in temperature during



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installation and cure should be avoided.

- Do not use on wet, dusty, contaminated, or friable substrates; do not use over substrates/slabs treated with sealers or curing compounds; do not use in areas subject to hydrostatic head.
- Do not allow heavy traffic or rolling loads for a minimum of 24 hours.
- Hardwood installations are limited to above- or on-grade.
- Refer to flooring manufacturer's recommendations and NWFA's specifications for proper acclimation, verification of moisture content of flooring with a moisture meter, and expansion relief around perimeter throughout installation.
- High humidity and temperatures will shorten open and working times.

The foregoing representations are based on the results of most current product and material testing within a controlled environment and are of a nonobligatory advisory nature only. As such, they do not constitute an express or implied warranty of any kind including the Warranty of Merchantability and/or Fitness for a Particular Purpose. Because we have no control over the actual quality of workmanship, materials used, and worksite conditions, PLAE will in no event be liable for any incidental and/or consequential damages. Therefore, we strongly recommend that prior on-site testing be conducted to refer to and study the suitability of the product for the intended purpose. With the release of this technical information sheet, all prior versions become invalid.

### GENERAL FEATURES

- Provides sound-dampening properties
- Provides unlimited moisture-vapor protection for wood flooring
- Contains no water
- High-solids content
- Freeze/Thaw stable
- May contribute to LEED

### INSTALLATION FEATURES

- "Wet-Lay" and no flash time required
- Strong grab
- Good ridge retention
- Very low odor
- Easy-to-spread polyurethane adhesive

### LONG-TERM FEATURES

Excellent warranty with multiple flooring types

### SHELF LIFE

The industry shelf life for a urethane adhesive is 1 year from date of production. PLAE urges to not use Clutch adhesive outside of the 1 year of production and cannot be held liable for adhesive failure if installed past the 1 year of being produced. Production date is stamped onto each individual pail of Clutch.

### FLASH TIME

No flash required, 0 minutes

### OPEN TIME

Approximately 45 minutes at 70°F and 50% humidity

### INSTALLATION APPROXIMATE COVERAGE RATES

- Glue Box: approx. 50 SF/gal.



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- Trowel #4 (outdoor on rough surface): up to 50 SF/gal.
- Minimum Run Length: 110 LF/pail (glue 9" wide)
- Recommended Run Length: 160 lf/pail (glue 9" wide)
- Maximum Run Length: 210 lf/pail (glue 9" wide)
- 3/32" x 3/32" x 3/32" V-Notch Trowel: 130 SF/gal
- 1/16" x 1/16" x 1/16" Square-Notch Trowel: 95 SF/gal
- 1/8" x 1/8" x 1/8" Square-Notch Trowel: 80 SF/gal
- Engineered Wood Flooring: 1/4" x 1/4" (V-Notch): 30-35 SF/gal

PLEASE NOTE: It is up to the installer to determine the proper trowel for the job. Larger trowel sizes may be required to reach the minimum adhesive coverage.

**KEEP OUT OF REACH OF CHILDREN  
FOR PROFESSIONAL USE ONLY  
NOT LABELED FOR CONSUMER USE  
SEE SAFETY DATA SHEET**

### **PART 3.0 – EXECUTION**

SPECIFIER NOTE: Revise article below to suit project requirements and specifier's practice.

#### **3.1 MANUFACTURER'S INSTRUCTIONS**

- A. Compliance: Comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions and product carton instructions for installation.

#### **3.2 EXAMINATION**

- A. Site Verification of Conditions: Verify substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer's instructions.

#### **3.3 PREPARATION**

- A. Surface Preparation: [specify applicable product preparation requirements].

SPECIFIER NOTE: Coordinate article below with manufacturer's recommended installation details and requirements.

#### **3.4 ERECTION / INSTALLATION / APPLICATION / CONSTRUCTION**

- A. Rubber Backed Vinyl Flooring Installation: Comply with PLAE Exceed Technical Manual for installation procedures and techniques.
- B. Finish Color/Textures/Patterns: [specify installation finishes coordinated with finishes specified in Part 2 Products].
- C. Related Products Installation: Refer to other sections listed in Related Sections paragraph herein for related products installation.

#### **3.5 FIELD QUALITY REQUIREMENTS**

SPECIFIER NOTE: Edit paragraph below. Establish number and duration of periodic site visits with Owner and manufacturer, and specify below. Consult with manufacturer for services required. Coordinate paragraph below with Division 1 Quality Assurance Section and Part 1 Quality Assurance Submittals herein. Delete if manufacturer's field service not required.



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- A. Manufacturer's Field Services: Upon Owner's request, provide manufacturer's field service consisting of product use recommendations and periodic site visit for inspection of product installation in accordance with manufacturer's instructions.
  - 1. Site Visits: [specify number and duration of periodic site visits].

### **3.6 CLEANING**

- A. Cleaning: Remove temporary coverings and protection of adjacent work areas. Repair or replace damaged installed products. Clean installed products in accordance with manufacturer's instructions prior to Owner's acceptance. Remove construction debris from project site and legally dispose of debris.

### **3.7 PROTECTION**

- A. Protection: Protect installed product and finish surfaces from damage during construction.  
SPECIFIER NOTE: Retain article below to suit project requirements. Article may be used to describe specific criteria requirements of similar products or equipment.

### **3.8 SCHEDULES**

SPECIFIER NOTE: Retain paragraph below to suit project requirements. Reference a schedule or include a schedule as an attachment, which indicates where to locate products and equipment.

- A. Schedules: [Specify reference to applicable schedules].

### **END OF SECTION**