This MANU-SPEC® utilizes the Construction Specifications Institute (CSI) Manual of Practice®, including MasterFormat™, SectionFormat™, and PageFormat™. A MANU-SPEC® is a manufacturer-specific proprietary product specification using the proprietary method of specifying applicable to project specifications and master guide specifications. Optional text indicated by brackets []; delete optional text in final copy of specification.

This MANU-SPEC® specifies cork wall coverings, marketed under the Bulletin Board brand name, as manufactured by Forbo Flooring. Revise MANU-SPEC® section number and title below to suit project requirements, specification practices, and section content. Refer to CSI MasterFormat™ for other section numbers and titles, including 097000 Wall Finishes; 097200 Wall Coverings.

SECTION 09 72 13
CORK WALL COVERINGS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: Cork Wall Coverings
   2. Resilient Transition Accessories.

Specifier Note: Revise paragraph below to suit project requirements. Add section numbers and titles per CSI MasterFormat™ and specifier’s practice.

B. Related Sections: Section(s) related to this section include:
   1. Marker boards and tack boards: Refer to Division 10 Specialties Section.
   2. Resilient Flooring Accessories: Refer to Division 9 Finishes Sections for resilient wall bases, reducer strips, metal edge strips and other resilient flooring accessories.

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain Reference Article when specifying products and installation by an industry reference standard. If retained, list standard(s) referenced in this section. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. "Conditions of the Contract" or Division 1 References Section may establish the edition date of standards. This article does not require compliance with standard, but is merely a listing of references used. Article below should list only those industry standards referenced in this section.

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM):

B. National Fire Protection Association (NFPA):

C. International Standards and Training Alliance (INSTALL):
   1. INSTALL Resilient Certification.
Specifier Note: Article below should be restricted to statements describing design or performance requirements and functional (not dimensional) tolerances of a complete system. Limit descriptions to composite and operational properties to extent necessary to link multiple components of a system, and to interface with other systems.

1.03 SYSTEM DESCRIPTION

A. Performance Requirements: Provide material which has been manufactured, fabricated and installed to performance criteria certified by manufacturer without defects, damage, or failure.

Specifier Note: Article below includes submittal of relevant data to be furnished by Contractor either before, during, or after construction. Coordinate this article with Architect's and Contractor's duties and responsibilities in "Conditions of the Contract" and Division 1 Submittal Procedures Section.

1.04 SUBMITTALS

A. General: Submit listed submittals in accordance with "Conditions of the Contract" and Division 1 Submittal Procedures Section.

B. Product Data: Submit product data, including manufacturer's SPEC-DATA product sheet, for specified products.

C. Shop Drawings: Submit shop drawings showing layout, profiles, and product components, including anchorage, accessories, finish colors, patterns and textures.

D. Samples: Submit selection and verification samples for finishes, colors, and textures.

E. Quality Assurance Submittals: Submit the following:
   1. Certification of compliance: Letter of compliance signed by manufacturer certifying materials comply with specified performance characteristics and criteria, and physical requirements.
   2. Manufacturer's Instructions: Manufacturer's installation instructions.

Specifier Note: Coordinate paragraph below with Part 3 Field Quality Requirements Article herein. Retain or delete as applicable.

   3. Manufacturer's Field Reports: Manufacturer's field reports specified herein.

F. Sustainable Submittals
   1. Product data for Credit MR 4.1 and Credit MR 4.2 for products having recycled content, including documentation indicating percentages by weight of post-consumer and pre-consumer recycled content.
      a. Include statement indicating costs for each product having recycled content.
   2. Product data for Credit MR6 for products having rapidly renewable content, including documentation indicating percentages by weight of rapidly renewable content as required by Division 01.
      a. Include statement indicating costs for each product having Rapidly Renewable content.
   3. Product data for Credit EQ 4.1 for adhesives and sealants, including printed statement of VOC content as required by Division 01.
   4. Confirm that each product complies with the testing and product requirements of the California Department of Health Services Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small Scale Environmental Chambers, including 2004 Addenda. If a product specified has not been tested as noted, provide a substitution to the Architect for review and approval of an equal product meeting noted California Department of Health standard.
   5. Product data and certification of SMART sustainable product certification pursuant to LEED innovation credit.

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 Operation 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.
Specifier Note: Article below should include prerequisites, standards, limitations, and criteria which establish an overall level of quality for products and workmanship for this section. Coordinate below article with Division 1 Quality Assurance Section.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Installer experienced in performing work of this section who has specialized in installation of work similar to that required for this project.

1. Engage installer certified as a [Forbo “Associate Mechanic” or INSTALL certified Resilient Installer (standard installations)] [Forbo “Master Mechanic” (complex installations)].

Specifier Note: Retain paragraph below to suit project requirements; otherwise delete paragraph below.

2. Certificate: Submit certificate indicating installer qualification.

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 the Contract" and Division 1 Regulatory Requirements Section. Repetitive statements should be avoided.

B. Regulatory Requirements:

1. Fire Performance Characteristics: Provide material with the following fire performance characteristics as determined by testing products in accordance with ASTM method indicated below by a certified testing laboratory or another testing and inspecting agency acceptable to authorities having jurisdiction:

   a. Tunnel Furnace Test Method: Class B Rating (ASTM E 84/NFPA 255)

Specifier Note: Retain paragraph below for erected assemblies (either on-site or off-site) required for review of construction, coordination of work of several sections, testing, or observation of operation. Mock-ups, when accepted or approved, establish standards by which work will be judged. Coordinate below with Division 1 Quality Control (Mock-Up Requirements) Section.

C. Mock-Ups: Install at project site a job mock-up using acceptable products and manufacturer approved installation methods. Obtain Owner's and Architect's acceptance of finish color, texture and pattern, and workmanship standard. Comply with Division 1 Quality Control (Mock-Up Requirements) Section.

Specifier Note: Edit paragraph below to specify mock-up requirements.

1. Mock-Up Size: [Specify mock-up size.]
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.

Specifier Note: Coordinate paragraph below with Division 1 Project Management And Coordination (Project Meetings) Section.

D. Pre-Installation Meetings: Conduct pre-installation meeting to verify project requirements, substrate conditions, manufacturer's installation instructions, and manufacturer's warranty requirements. Comply with Division 1 Project Management and Coordination (Project Meetings) Section.

E. Pre-Installation Testing: Conduct pre-installation testing as follows: [Specify testing (i.e. bond test, etc.).]

Specifier Note: Article below should include special and unique requirements. Coordinate article below with Division 1 Product Requirements Section.

1.06 DELIVERY, STORAGE, AND 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 protected from exposure to harmful weather conditions and at temperature and humidity conditions recommended by manufacturer.
   1. Material should be stored in areas that are fully enclosed and weathertight. The permanent HVAC should be fully operational, controlled and set at a minimum of 68°F (20°C) for at least 48 hours prior to the installation.

1.07 PROJECT CONDITIONS

A. Environmental Requirements/Conditions: In accordance with manufacturer's recommendations, areas to receive material should be clean, fully enclosed and weathertight. The permanent HVAC must be fully operational, controlled and set at a minimum of 68°F (20°C) for a minimum of seven days prior to, during, and seven days after the installation. The material should be conditioned in the same manner for at least 48 hours prior to the installation. Areas to receive material shall be adequately lighted to allow for proper inspection of the substrate, installation and seaming, and for final inspection.

B. Temperature Requirements: Maintain air temperature in spaces where products will be installed for time period before, during, and after installation as recommended by manufacturer.
   1. Temperature Conditions: 68°F (20°C) for a minimum of seven days prior to, during, and seven days after the installation.

C. Existing Conditions: [Specify existing conditions affecting product use and installation.]

D. 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.

Specifier Note: Article below is a combination of two CSI SectionFormat article titles.

1.08 SEQUENCING AND SCHEDULING

A. Finishing Operations: Install material after finishing operations, including painting and ceiling operations, have been completed.

B. Concrete Curing: Do not install over concrete substrates until substrates have cured and are dry to bond with adhesive as determined by manufacturer's recommended bond test.
   1. [Owner assigned responsibility.]
   2. [Flooring Contractor assigned to report responsibility back to owner/architect.]

Specifier Note: Coordinate article below with "Conditions of the Contract" and with Division 1 Closeout Submittals (Warranty) Section. Below warranty article assumes the use of The American Institute of Architects document A201 "Conditions of the Contract for Construction." If other "Conditions" are used for the project, revise article below accordingly.

1.09 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: Five (5) year limited warranty commencing on Date of Substantial Completion.

Specifier Note: Coordinate article below with Division 1 Closeout Submittals (Maintenance Materials) Section.

1.10 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.

Specifier Note: Revise paragraph below specifying size and percentage as required for project.

1. Quantity: Furnish quantity of material units equal to 5% of amount installed.
2. Delivery, Storage and Protection: Comply with Owner's requirements for delivery, storage and protection of extra materials.
PART 2 PRODUCTS

Specifier Note: Retain article below for proprietary method specification. Add product attributes performance characteristics, material standards, and descriptions as applicable. Use of such phrases as "Equal" or "Approved Equal," or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal, and regulatory) and assignment of responsibility for determining "Equal" products.

2.01 CORK WALL COVERINGS

A. Manufacturer: Forbo Flooring, Inc.

Specifier Note: Paragraph below is an addition to CSI Section Format and a supplement to MANU-SPEC®. Retain or delete paragraph below per project requirements and specifier's practice.

1. Contact: 8 Maplewood Dr., Humboldt Industrial Park, P.O. Box 667, Hazleton, PA 18202; Telephone +800 842 7839 or +570 459 0771; Fax + 570 450 0258

Specifier Note: Paragraph below is an addition to CSI Section Format and a supplement to MANU-SPEC®. Retain or delete paragraph below per project requirements and specifier's practice.

2. Representative Contact: [Specify representative contact information.]

B. Proprietary Product(s): Bulletin Board Sheet and Adhesive.

1. Description: Homogeneous tackable surface material made of primary natural materials consisting of linseed oil, cork, rosin binders and dry pigments mixed and calendared onto a natural jute backing. The uni-color extends throughout the thickness of the material.

2. Width: [122cm (48")] [183cm (72")]

3. Length: 27 Meters (90 Linear Feet)

4. Gauge: 6.0mm (1/4")

5. Backing: Jute

6. Pattern and Color: [As selected by Architect from manufacturer's standard patterns and colors.]


Specifier Note: Paragraph below is an addition to CSI Section Format and a supplement to MANU-SPEC®. Retain or delete paragraph below per project requirements and specifier's practice.

C. Product Criteria Forms: Refer to Product Criteria Forms as an attachment to this section.

1. Product Forms: Subject to compliance with specified requirements, provide products specified in each Product Data Sheet at end of this section.

Specifier Note: Edit article below to suit project requirements. If substitutions are permitted, edit text below. Add text to refer to Division 1 Project Requirements (Product Substitutions Procedures) Section.

2.02 PRODUCT SUBSTITUTIONS

A. Substitutions: No substitutions permitted.

Specifier Note: Add article below for alternates required for project; state work covered. Coordinate with Part 1 General Summary Article herein, applicable Division 1 Sections, and other Bid and Contract Documents.

2.03 RELATED MATERIALS

A. Related Materials: Refer to other sections for related materials as follows:

1. Resilient Flooring Accessories: Refer to Division 9 Finishes Sections for resilient flooring accessories.

2.04 SOURCE QUALITY

A. Source Quality: Obtain product materials from a single manufacturer.

PART 3 EXECUTION

Specifier Note: Article below is an addition to the CSI Section Format and a supplement to MANU-SPEC®. Revise article below to suit project requirements and specifier's practice.

3.01 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.
3.02 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 (i.e. bond test, etc.).
B. Material Inspection: In accordance with manufacturer's installation requirements, visually inspect materials prior to installation. Material with visual defects shall not be installed and shall not be considered as a legitimate claim.

3.03 PREPARATION
A. Adjacent Surfaces Protection: Protect adjacent work areas and finish surfaces from damage during product installation.
B. Surface Preparation:
   1. General: Prepare substrate in accordance with manufacturer's instructions.
   2. Substrate: Substrate shall be sound, smooth, flat, permanently dry, clean, and free of all foreign materials including, but not limited to, dust, paint, grease, oils, solvents, curing and hardening compounds, sealers, asphalt and old adhesive residue.

Specifier Note: Coordinate article below with manufacturer's recommended installation details and requirements.

3.04 INSTALLATION
A. Adhesive Installation: Cut required length from roll, allowing 2-3 inches overlap. Lay sheets flat to acclimate, preferably 24 hours prior to installation. Back roll sheets once in reverse direction to release roll stretch. Remove the factory edge from both sides of the material. Apply adhesive and place sheet into wet adhesive and roll with a 100 pound roller.
   1. Adhesive Material Installation: Use trowel as recommended by manufacturer for specific adhesive. Spread at a rate of approximately 150 ft²/gallon, as recommended by manufacturer.
B. Installation Techniques:
   1. Adhere material to substrate without producing open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, or other surface imperfections in completed installation.
      a. Use adhesive applied to substrate in compliance with manufacturer's recommendations, including those for trowel notching, adhesive mixing, and adhesive open and working times.
   2. Roll material as required by manufacturer.
C. Finish Patterns: As selected by Architect.

Specifier Note: Coordinate article below with Division 1 Quality Assurance and Quality Control Sections.

3.05 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.
A. Manufacturer's Field Services: Upon Owner's request and with at least 72 hours notice, 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.]

Specifier Note: Coordinate article below with Division 1 Execution Requirements (Cleaning) Section.

3.06 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.
   1. Remove visible adhesive and other surface blemishes using cleaning methods recommended by floor manufacturer.
   2. Dust or wipe with a damp cloth.
Specifier Note: Coordinate article below with Division 1 Execution Requirements Section.

3.07 PROTECTION

A. Protection: Protect installed product and finish surfaces from damage during construction. Remove and legally dispose of protective covering at time of Substantial Completion.

Specifier Note: Add or delete article below to suit project requirements.

3.08 INITIAL MAINTENANCE PROCEDURES

A. General: Include in Contract Sum Amount cost for initial maintenance procedures, and execute procedures after installation as recommended by manufacturer.

B. Initial maintenance to be conducted by contractor.

C. Drying Room Yellowing: Expose installed linoleum to either natural or artificial light to allow "drying room yellowing" (the film is a natural occurrence of the oxidation of the linseed oil in linoleum products) on installed linoleum to disappear prior to initiating temporary protection procedures.

Specifier Note: Retain article below to suit project requirements. CSI PageFormat allows for Schedules, Forms, and Tables to be located at the end of a section. Article may be used to describe specific criteria requirements of similar products or equipment.

3.09 SCHEDULES AND (PRODUCT CRITERIA) FORMS

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.]

Specifier Note: Retain paragraph below to suit project requirements. Include forms as an attachment which indicates product criteria.

B. Product Criteria Forms Attachments: Refer to Product Criteria Form(s) [No.] of [No.], dated [specify date], attached herewith.

END OF SECTION

Manufacturer's Obligatory Disclaimer Statement (For Electronic Media; Not Print Media)