

SECTION 11 19 00
DETENTION SURFACE PADDING SYSTEM

PART I GENERAL

1.1 SECTION INCLUDES

- A. Surface padding system for floors, walls, doors and frames of detention spaces.

1.2 RELATED SECTIONS

- A. Section 03 30 00 - Cast-In-Place Concrete.
- B. Section 04 20 00 - Unit Masonry.
- C. Section 08 34 60 - S
- D. Division 22 - Plumbing.

1.3 PERFORMANCE AND DESIGN REQUIREMENTS

- A. Provide detention surface padding system which isolates detainees from hard surfaces within the scheduled detention area.
 - 1. Padded surface system shall resist chipping and peeling.
 - 2. Padded surface system shall be easy to clean.
 - 3. Padded surface system shall be water-repellent, impervious to oil, urine and salt.

1.4 QUALITY ASSURANCE

- A. Comply with governing codes and regulations.
- B. Applicator Qualifications: Application shall be performed by an applicator with a minimum of 5 years experience in the successful fabrication and installation of detention surface padding system.
- C. Deliver, handle and store materials in accordance with manufacturer's instructions.
- D. Surface burning characteristics of detention surface system when tested in accordance with UL Standard 723 (ASTM E84) must be equal to or less than:
 - 1. Flame Spread Index 10
 - 2. Fuel Contribution 10
 - 3. Smoke Developed 160
- E. Compression Deflection (ASTM D 1056) 4 psi @ 25 % deflection.
- F. Acute Oral Toxicity Test Non Toxic
- G. Fungus Resistance(ASTM G-21-90) 0 (Completely resistance)
- H. Corner Test Pass

1.5 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions. Include methods of installation of surface padding system for each type of substrate to receive padding.
- B. Shop Drawings: Submit shop drawings showing typical method of padding application.
- C. Maintenance Information: Submit, for Owner's use, information regarding the proper care and maintenance of detention surface padding system.

1.6 WARRANTY

- A. New Installations: A padded surface installed by Padded Surfaces by B&E is guaranteed impenetrable by organic human body parts for a period of three years from date of manufacturer's installation approval

for use. Should penetration occur, the damage will be repaired or the surface replaced at the manufacturer's option.

- B. Conditions: This guarantee does not apply to damage caused by non-organic human body parts, nor damage resulting from use prior to completion of final curing. This product is not intended to replace established management practices, but to supplement those practices, while allowing for a greater degree of protection against client self-injury.

PART 2 PRODUCTS

2.1 MANUFACTURER

- 1. Basis of Design Manufacturer: Provide detention padded surface system fabricated by B&E Padded Surfaces; www.paddedsurfaces.com, or comparable products meeting project requirements by one of the following:
 - a. Advanced Padding: www.advancedpadding.com.
 - b. Gold Metal Safety Padding: goldmetalsafetypadding.com.

2.2 MATERIALS

- A. Foam Sheets: MFSiltec-500
 - 1. Features
 - a. Nonflammable, nontoxic, and inherently durable
 - b. A nonconductive foam polymer with excellent cushioning, fire blocking, thermal insulating and acoustic/vibration dampening properties
 - c. Structurally resilient with low compression set and 100% memory
 - d. Continuous operating temperature range: -70 to +500 degrees F.
 - e. MFSiltec is odorless, tasteless and non corrosive
 - 2. Specifications:
 - a. ASTM D 3674 & E 162..... Pass b. UL-94..... V-O
 - b. California Technical Bulletin 117..... Pass d. FMVSS 302..... Pass
 - c. ASTM E662 (Flaming Mode) Ds @ 1.5 min. < 50
 - d. ASTM E662 (Non Flaming Mode)..... Ds @ 4 min. < 100
 - e. ASTM D573 Pass
 - 3. Compression Set, % ASTM D-1056 22 hours @ 100 C...5 %
 - 4. Compression Deflection, psi @ 25 % 4 psi.
 - 5. Elongation, %60 % minimum
 - 6. Water Absorption, %10 % maximum
 - 7. Thermal Conductivity k Factor 0.30 (BTU in/hr/ft./F)
- B. Reinforcing Mesh: Kevlar bullet resistant material:
 - 1. Tensile Strength (average)..... 25,000 psi.
 - 2. Elongation at break 10 %.
 - 3. Encapsulate: High-build liquid vinyl of consistency to permit spray or field application.
- C. Architect's color choice
- D. Adhesive: Type compatible with the materials to be adhered.

PART 3 EXECUTION

3.1 EXAMINATION

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- A. Examine areas and conditions under which detention surface padding system is to be applied. Verify that substrate is in proper condition for installation of system. Do not proceed with installation until satisfactory conditions have been corrected.

3.2 PREPARATION

- A. Verify that ambient temperatures will be within range required by manufacturer for successful installation and curing of system.
- B. Verify that work of other trades are complete and will not adversely affect curing and protection of detention surface padding system.

3.3 INSTALLATION ON WALLS AND FLOORS

- A. Cover specified areas with Kev-Koat padded material system.
- B. Apply protective top coat to encapsulate entire padded surface. Color as selected by Architect.
- C. If the application is new construction a sixty day curing time is necessary for the concrete floor.
- D. Temperature must be 60 degrees Fahrenheit at time of installation and maintained for the duration of the construction period and 30 day cure time.
- E. At penetrations of padding system for plumbing fixtures, air diffusers, lighting fixtures and security devises, coordinate with requirements of the respective trades for correct mounting.
- F. A 30-day cure time is required before rooms with detention surface padding can be utilized. Use prior to the 30-day cure time will void the 3 year warranty.
- G. Coordinate installation of wall padding with installation of door frame and door.
- H. Coordinate installation of floor padding with installation of floor drain.

3.4 DOOR PADDING PANEL FABRICATION

- A. Fabricate components to comply with performance and design requirements specified and in accordance with approved shop drawings.
- B. Door padding panels shall be composed of Kev-Koat padded material system adhered to a 3/4" thick fire resistant plywood backing board.
- C. Provide openings for glazed observation openings and food slots.

3.5 CLEANING AND PROTECTION

- A. A. Touch up damage.
- B. Clean work area of debris associated with installation.
- C. Surface can be cleaned with a mild, non-abrasive liquid detergent.

END OF SECTION 11 19 00