

Padded Surfaces by B&E - Master Guide Specification

SECTION 11190

DETENTION SURFACE PADDING SYSTEM

*Note to specifiers. This is a guide specification. Edit carefully for your current project. In case of questions, contact **Padded Surfaces by B & E** at 888-243-8788 or 317-243-2233.*

PART I GENERAL

1.1 SECTION INCLUDES

- A. Surface padding system for floors, walls, doors and frames of detention spaces.
- B. System shall consist of field-applied MF-SILTEC, covered with bullet resistant Kevlar by DuPont and a protective top coat of high-build liquid vinyl.

1.2 RELATED SECTIONS

Edit the following list for your current project.

- A. Division 8: Doors and frames.
- B. Division 15: Floor toilets and clamping devices. Padded Surfaces by B&E will provide waste ring if requested.
- C. Division 15: Air outlets and diffusers for ventilation.
- D. Division 16: Lighting fixtures and fixture lenses.
- E. Division 16: Security wall and ceiling mounted call button stations and security cameras.

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.

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- 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 Contributed | 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. CSS 12-100-1 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.
- 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

- A. Provide detention padded surface system fabricated by Padded Surfaces by B&E. Telephone 888-243-8788 or 317-243-2233, Fax 317-248-2832
- 1 . Substitutions will not be accepted.**

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
 - c. California Technical Bulletin 117..... Pass
 - d. FMVSS 302..... Pass
 - e. ASTM E662 (Flaming Mode) Ds @ 1.5 min. < 50
 - f. ASTM E662 (Non Flaming Mode)..... Ds @ 4 min. < 100
 - g. Bombardier SMP 800-C Pass
 - h. ASTM D573 Pass
 - 3. Compression Set, % ASTM D-1056 22 hours @ 100 C...5 %
 - 4. Compression Deflection, psi @ 25 % 4 psi.
 - 5. Tensile Strength, psi 25 psi minimum
 - 6. Elongation, %60 % minimum
 - 7. Water Absorption, %10 % maximum
 - 8. 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 %
- C. Encapsulate: High-build liquid vinyl of consistency to permit spray or field application.
Architect's color choice
- D. Adhesive: Type compatible with the materials to adhered.

PART 3 EXECUTION

3.1 EXAMINATION

- 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.

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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 entire floor and walls with padding system in areas noted to receive padding.
- B. Use foam sheets in as large sizes as possible to make a continuous surface to substrate. Fully adhere the sheets to floor and wall surfaces.
- C. Cover padding with Kevlar bullet resistant material. Apply top coating of the vinyl encapsulate at least 8 mils thick over entire padded surface. Color as selected by Architect.
- D. Temperature must be 60 degrees Fahrenheit at time of installation and maintained for the duration of the construction period and a 30 day cure time.
- E. At penetrations of padding system for plumbing fixtures, air diffusers, lighting fixtures and security devices, 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.

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 a MFSiltec 500 sheet cemented to a 3/4" thick fire resistant plywood backing board and covered with Kev-Koat.
- C. Provide openings for glazed observation openings and food slots.

3.5 CLEANING AND PROTECTION

- 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

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