

# SPECIFICATION A

## MATTRESS CORES

### **CONTRACT SCOPE/OVERVIEW:**

This invitation for Bid 6100042263 (identified here and in other documents as the “Contract”) is being issued by the Pennsylvania Department of General Services (DGS), Bureau of Procurement (BOP), on behalf of the Pennsylvania Department of Corrections (DOC), Pennsylvania Correctional Industries (PCI) at Dallas to cover their requirements for Densified Polyester Fiber Mattress Cores and Foam Mattress Cores.

### **TERM OF CONTRACT:**

The contract shall commence on the Effective Date, no earlier than September 1, 2017 and expire on August 31, 2019, unless renewed or extended.

### **AWARD:**

Award will be made by line item to the lowest responsible and responsive bidder. However, the Commonwealth reserves the right to follow section **III.2 III-IFB-006.1h Method of Award** as outlined in the Terms and Conditions.

### **ESTIMATED QUANTITIES:**

All quantities provided are estimates only and are based on an anticipated annual usage. Actual usage may vary.

### **SPECIFICATIONS AND QUALITY CONFORMANCE:**

***Bidders should attach their company’s product specifications to their bid electronically.***

The awarded supplier(s) is required to provide materials in conformance with the specifications listed herein. If during the term of the contract, material provided by the awarded supplier fails to meet specifications, PCI reserves the right to obtain the contract materials from an alternate source. Should it be necessary to do so, the awarded contractor may be held liable for any incremental material costs in excess of the contract price.

PCI reserves the right to return or refuse delivery of any material with obvious defects or material that is later determined to be outside of specification. If damage is not initially noticed the Commonwealth of Pennsylvania will follow section **V.14 CONTRACT-010.1a Acceptance (Oct 2006)** of the Terms and Conditions. If payment for such defective material has already been made, the contractor will be required to reimburse Correctional Industries the total amount paid for the unused material.

### **MATERIAL SPECIFICATIONS:**

The following material specifications cover minimum requirements only. If mattresses having additional good features are furnished at no additional cost, they will be accepted. All details as to materials,

measurements of manufacture not specifically stated herein, shall conform to accepted standards covering the manufacture of the applicable grade mattress.

### **1) Densified Polyester Fiber Mattress Core**

**Application:** To be used at Correctional Facilities throughout the Commonwealth of Pennsylvania.

**Color:** White

**Description:** New material consisting of 100% thermally bonded polyester fiber including conjugated and low melt fibers.

**Weight:** minimum 12 oz./sq. ft. +/- 7%

**Thickness:** Thickness is dependent upon the size requested and should be within +/- ¼ inch the size requested. For example, a 4.5" mattress should be a minimum 4.5 inches +/- ¼ inch and a 3" mattress should be a minimum of 3 inches +/- ¼ inch.

**Sizing:** +/- 1/4 inch

**Compression:** 110-130 ILD (Indentation Load Deflection), ASTM-D3574, tested at 50%

**Flammability:** Shall comply with California TB 117

#### **Characteristics:**

- Odor Free
- Non-Toxic
- Hypo-Allergenic
- Moisture Resistant
- 100% flameproof densified poly fibers

**Sizes:** 27" X 75" X 4.5"      27" X 80" X 3"      36" X 75" X 4.5"

*Other sizes may be required and should be bid by Board Foot on the attached Price Item Bid Sheet  
The Price Item Bid Sheet document must be attached electronically to all bid submissions.*

### **2) Foam Mattress Core or Topper, Solid Neoprene**

#### **General**

Solid neoprene mattress cores and toppers shall maximize safety and demonstrate durability. The base material of the mattress cores and toppers shall be a one piece, neoprene foam material resistant to flame. Flame resistant properties shall be not affected by water or other compatible cleaning agents. Foam core and topper materials shall be low-smoke producing and shall be flame-resistant. The flammability properties shall conform to the requirements listed in Flammability Characteristics. The

foam core shall be open-cell and breathable, and shall not exhibit any migration or leaching of flame-resistant chemicals. It shall be made of 100% new material, free from substances that would accelerate aging or deterioration, and shall contain no natural or styrene-butadiene rubber (SBR) or harmful or injurious ingredients. It shall be formulated for resistance to fungi growth.

**Physical Properties, Solid Neoprene (Color: gray)**

Property	Requirement	Test Method
Density	6.2 to 6.7 lbs./ft <sup>3</sup>	ASTM D3574
Indentation	40 ± 5 lbs. (medium)	ASTM D3574 Tested at 3" thickness
Compression Set	10% maximum	ASTM D3574 50% constant deflection Reference section 42.1.1
Tensile	8 lbs./in <sup>2</sup> minimum	ASTM D3574 Test E
Tear Strength	2.0 lbs./in <sup>2</sup> minimum	ASTM D3574
Elongation	150% minimum	ASTM D3574
Resiliency	30% minimum	ASTM D3574
Fungal Growth	No growth	ASTM G21

**Flammability Characteristics, Solid Neoprene**

Test	Requirement	Test Method
Radiant Panel	Maximum Flame Spread Index – 5 No melting or dripping	ASTM D3675 <u>or</u> ASTM E162
NBS Smoke Chamber Flaming and non-flaming modes 1" sample	D <sub>s</sub> 90 seconds – 100 maximum D <sub>s</sub> 4 minutes – 175 maximum D <sub>max</sub> – 200 maximum	ASTM E662
Rate of Heat Release (a) Radiant Flux 35 kW/m <sup>2</sup> (b) Horizontal Mode (2" sample)	Peak Heat Release Rate – 75kW/m <sup>2</sup> 3 Minute Average Heat Release Rate – 30 kW/m <sup>2</sup> maximum	ASTM E1354
Mattress Insert Test Michigan Roll (Insert Only) Total Weight Loss (%)	7% maximum weight loss Must maintain shape with no generation of molten material	ASTM F1085 Annex 3 <u>or</u> ASTM F1870
Burn Test	Pass	16 CFR Part 1633

**Sizes:** Foam Topper Size: 3/8" X 42" X 85"

*Other sizes may be required for these mattress and/or toppers and should be bid as Board Foot on the attached Price Item Bid Sheet.*

*The Price Item Bid Sheet document must be attached electronically to all bid submissions.*

### 3) Foam Mattress Cores: Inner Core Polyurethane and Exterior Neoprene

#### General

Mattress cores with inner core polyurethane and exterior neoprene shall have a flexible, high density conventional polyfoam as the inner core.

This inner polyurethane shall be made without polybrominated diphenyl ethers (PBDEs), tris(1,3-dichloro-2-propyl) phosphate (TDCPP), or Tris(2-carboxyethyl) phosphine (TCEP) flame retardants; without mercury, lead, or other heavy metals; without formaldehyde; and without phthalates regulated by the Consumer Product Safety Commission. It shall have low Volatile Organic Compound (VOC) emissions of less than 0.5 ppm.

A 1/2" minimum thickness of medium firmness neoprene shall completely encapsulate the polyurethane by means of a "neoprene" water based adhesive. The high-density, fire-resistant neoprene shall be used to ensure compliance to applicable full scale mattress performance criteria and to enhance the support, integrity, and longevity of the mattress.

The finished/covered mattress core shall comply with the established full scale fire performance criteria.

#### Physical Properties, Polyurethane, Inner Core (Color: N/A, covered)

Property	Requirement	Test Method
Average Density	1.8 lbs./ft <sup>3</sup>	ASTM D3574 Test A
Average 25% IFD and Tolerance	±3 lbs. or ± 10% maximum	ASTM D3574 Test B
25% IFD loss after Fatigue Test	Loss < 6 lbs.	ASTM D3574 Test I <sub>3</sub> (Procedure A)
75% Compression Set	10.0% maximum	ASTM D3574 Test D
Humid Aged 75% Compression Set	10.0% maximum	ASTM D3574 Test D and J

#### Physical Properties, Neoprene, Core Exterior

Property	Requirement	Test Method
Density	6.2 to 6.7 lbs./ft <sup>3</sup>	ASTM D3574
Indentation	40 ± 5 lbs. (medium)	ASTM D3574 Tested at 3" thickness
Compression Set	10% maximum	ASTM D3574 50% constant deflection Reference section 42.1.1
Tensile	8 lbs./in <sup>2</sup> minimum	ASTM D3574 Test E
Tear Strength	2.0 lbs./in <sup>2</sup> minimum	ASTM D3574
Elongation	150% minimum	ASTM D3574
Resiliency	30% minimum	ASTM D3574
Fungal Growth	No growth	ASTM G21

## Flammability Characteristics, Inner Core Polyurethane, and Exterior Neoprene

Test	Requirement	Test Method
Radiant Panel	Maximum Flame Spread Index – 5 No melting or dripping	ASTM D3675 <u>or</u> ASTM E162
NBS Smoke Chamber Flaming and non-flaming modes 1" sample	D <sub>s</sub> 90 seconds – 100 maximum D <sub>s</sub> 4 minutes – 175 maximum D <sub>max</sub> – 200 maximum	ASTM E662
Rate of Heat Release (a) Radiant Flux 35 kW/m <sup>2</sup> (b) Horizontal Mode (2" sample)	Peak Heat Release Rate – 75kW/m <sup>2</sup> 3 Minute Average Heat Release Rate – 30 kW/m <sup>2</sup> maximum	ASTM E1354
Mattress Insert Test Michigan Roll (Insert Only) Total Weight Loss (%)	7% maximum weight loss Must maintain shape with no generation of molten material	ASTM F1085 Annex 3 or ASTM F1870
Burn Test	Pass	16 CFR Part 1633

**Sizes:** Sizes will vary and should be bid by Board Foot on the attached Price Item Bid Sheet.

*The Price Item Bid Sheet document must be attached electronically to all bid submissions.*

### **DESCRIPTIVE LITERATURE:**

Bidders may be required upon request by PCI to submit information such as cuts, illustrations, drawings, prints, test data sheets, specification sheets and brochures which detail construction features, design, components, materials used, applicable dimensions and any other pertinent information for the Commonwealth to evaluate the product(s) offered by the bidders. Failure to submit this information when requested may cause the bid to be rejected as non-responsive. Bidders shall also indicate any known specification deviations from the referenced product.

### **SAMPLING AND TESTING:**

Pre-Award Sample: Samples may be required prior to an award being made. If required, bidders should submit a sample according to the sample sizes listed below within ten (10) calendar days of being notified. Bidders should include their company name, solicitation number 6100042263, and a description on each item being submitted with their packing slip.

*Required sample sizes are as follows:*

Densified Polyester Fiber Mattress Core: 12" x 12" x 4.5"

Foam Mattress Core/Foam Toppers (Solid Neoprene): 12" x 12" x 3"

Foam Mattress Cores (Inner Core Polyurethane and Exterior Neoprene): 12" x 12" x 5"

Pre-award Testing: Samples evaluated that are found not to meet the specifications as outlined in this document, may require testing by an independent, non-affiliated certified laboratory. At which time, PCI may require a full-size mattress of each item being bid. A testing sample should be received within ten (10) calendar days of being notified. Bidders should include their company name, solicitation number 6100042263, and a description on each item being submitted with their packing slip. Should the test results conclude that the samples do not meet specs, the cost for the testing shall be borne by the bidder, and the lowest bidder may be dismissed and the bid may be rejected. Bidders shall grant the Commonwealth permission to discuss the test results with the laboratory.

Post-Award: Awarded supplier's sample(s) should be representative of materials produced and delivered to Dallas on all shipments. PCI reserves the right to perform laboratory analyses to confirm conformance to specifications at any time. Should additional testing be necessary to address quality problems or contract disputes, this testing shall be done by an independent, non-affiliated certified testing laboratory. Should the material be found not to meet the specifications as outlined in this document, the purchase order may be rejected, and the cost for any independent laboratory testing of the material shall be borne by the supplier. The awarded supplier(s) shall grant the Commonwealth permission to discuss the test results with the laboratory.

#### **DELIVERIES:**

Delivery shall be made F.O.B. Destination to PCI at Dallas, Pennsylvania. Bid prices shall include all transportation, delivery, and handling charges. Delivery shall be made within normal delivery lead times as indicated below after receipt of the purchase order, unless otherwise agreed to, in writing, between the DOC and the awarded supplier.

Deliveries must be made between 8:30 AM and 1:30 PM. Awarded suppliers are required to notify the PCI Dallas Shop one (1) day prior to delivery, and provide the name of the freight carrier. Drivers wearing shorts will not be permitted inside the prison. Only PCI delivery items are to be on the truck. Trucks must be empty when leaving the institution or they will be required to sit until the next count/security check upon exiting the prison.

All drivers who utilize regular delivery transportation, are required to submit clearance checks through the original awarded supplier, regardless of whether the delivery is inside or outside the fence. Common carriers are not required to render clearance checks but are subject to search and escort procedures. All carriers reporting to the outside warehouse must secure their vehicle (windows closed and doors locked), then sign in at warehouse, and wait for further directions from correctional staff. If these instructions are not followed, neither the truck nor the driver will be permitted to enter the institution.

Bidders may refer to the clearance and general search procedures documents attached to this IFB which provide an overview of what is required. Inspection and clearance regulations may change slightly over time, all inspection and clearance regulations shall be met by the awarded supplier.

**IDENTIFICATION OF PRODUCTS ORDERED:**

Each mattress shall have a label stating all new material, consisting of name and address of the awarded supplier, the manufacturer, registry number, finished size and net weight filling material required.

**EMERGENCY ORDER(S) DELIVERIES:**

Except in cases of emergency, material will be called for in reasonable lots and normal delivery times. However, there may be emergencies during the life of the contract that may necessitate overnight deliveries. For emergency orders, awarded suppliers are permitted to charge additional freight needed to ensure overnight delivery. The supplier is to prepay freight charges and may add the charges to the invoice. Receipts for freight or express bills must accompany the invoice.

**MINIMUM ORDERS:**

Delivery shall be made F.O.B. Destination

*Densified Polyester Fiber Mattress Cores:* minimum order for normal orders is \$800.00 or 500 lbs., whichever is greater. The minimum emergency order is 500 lbs.

*Foam Mattress Cores and Foam Mattress Toppers:* no minimum order required.

**PRICE ADJUSTMENT:**

During the term of this contract, prices will be adjusted based on the cumulative change to the US Department of Labor, Bureau of Labor Statistics Producer Price Index (PPI), WPU03820312, Other Textiles, Incl. Towels, and Bed Textiles, by comparing the current PPI value to an established base value. The established base value for this contract shall be the yet to be determined actual value for July 2017.

Pricing may be adjusted up or down on March 1, 2018 and every six (6) months thereafter for the duration of the contract, including any exercised renewal options. A price adjustment multiplier will be determined by dividing the most current preliminary or actual PPI value available at the time of the adjustment by the established base. The adjusted price shall be the original bid price times the multiplier.

**INCURRING COSTS:**

The Commonwealth of Pennsylvania is not liable for any costs or expenses incurred by bidders in the preparation of their bids, samples, or testing, etc.

**INQUIRIES:**

Please direct all questions concerning this contract to:

Shelbie Pickering, PA Department of General Services, Bureau of Procurement  
555 Walnut Street, 6<sup>th</sup> Floor Forum Place Building, Harrisburg, PA 17101  
717-703-2947 or at [spickering@pa.gov](mailto:spickering@pa.gov)