

**LABORATORY RAISED FLOOR CARPET CLEANING  
SPECIFICATIONS  
CT-E-101731**

**FOR**

**THE FEDERAL AVIATION ADMINISTRATION  
WILLIAM J. HUGHES TECHNICAL CENTER  
ATLANTIC CITY, NJ 08405**

# LABORATORY CARPET CLEANING - SPECIFICATIONS

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# LABORATORY CARPET CLEANING - SPECIFICATIONS

## 1.0 SCOPE OF WORK

### 1.1 SCOPE

This specification is intended to describe the minimally acceptable basic materials and installation methods to be applied in cleaning the accessible carpeting in the FAA William J. Hughes Technical Center Laboratories located in Buildings 300, 2nd and 3rd floors, 316, 3rd floor, including the connecting bridges, Atlantic City, NJ 08405.

Contractor shall furnish all necessary labor, equipment, supplies, materials and supervision to perform carpet cleaning of the accessible flooring of the laboratories. The flooring is removable carpeted tiles adhered with water soluble glue. Cleaning methods must comply with the manufacturers recommend specifications and industry standard practices. The area to be cleaned is approximately 100,000 square feet (see design drawings for detail).

### 1.2 PRE-BID SITE SURVEY

Contractors shall attend a pre-bid site survey at a date specified by the Contracting Officer. At this time, all contractors shall be escorted through the areas covered under this contract. In addition, each contractor shall perform a cleaning test on a sample tile provided by the Government. There shall be no cost to the Government for the contractor's attendance at the pre-bid site survey or the sample cleaning test.

### 1.3 APPLICATION METHODS AND MATERIALS

All materials and equipment shall be listed and labeled by a licensed nationally recognized testing laboratory and used for the specific purpose, environment or application for which it was tested and approved. No field modifications and/or non-compliant installation whatsoever shall be made to any materials and equipment that would violate the listing and labeling.

A low moisture, encapsulation method shall be used for cleaning the carpeted areas covered under this specification. All materials and equipment shall be listed and labeled by a licensed nationally recognized testing laboratory and used for the specific purpose, environment or application for which it was tested and approved.

Stains shall be pre-treated prior to general cleaning according to industry recognized standard method for products assembled with water-based adhesive. General spot cleaning shall be in accordance with manufacturer approved methods and industry standards for products assembled with water based adhesive. All areas shall be vacuumed prior to cleaning.

Carpet tiles are adhered with water soluble adhesives therefore, only industry recognized standard cleaning methods shall be used. Under no circumstances shall any of the following items be used for any cleaning function:

- Hot water extraction
- Optical brighteners

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- Silicon based oil treatments
- Spinning bonnet cleaning machines
- Powders & propellants that compromise electronic equipment

### Inaccessible Areas:

Cleaning personnel shall avoid bumping and/or touching lab equipment in anyway. Areas with less than 2' clearance for cleaning equipment shall be manually spot cleaned and vacuumed. Areas that are obstructed by work in progress shall be cleaned at a later date or disregarded if accommodations are not made.

### Accessible Areas:

Cleaning areas shall be restricted to those areas defined by laboratory drawings and schedule.

Unless otherwise agreed in writing, all areas shall be returned to original state prior to the end of work period (daily).

## **1.4 EQUIPMENT POWER**

Reference drawings shall be provided to define convenience outlets authorized for cleaning equipment use. Only CE or UL approved extension cords will be permitted. All electrical devices used by contractor shall be sized in accordance with NEC codes. Electrical devices shall only be plugged into designated and scheduled work area receptacles within taped boundaries.

## **1.5 CONTRACT DURATION**

Contract shall commence on/or about Dec 3, 2007 and end on August 1 2008 and include two cleanings approximately six months apart. The first cleaning shall be scheduled in December 2007 and be completed no later than January 4, 2008. The second cleaning shall be scheduled in June or July 2008 and be completed no later than August 1, 2008. All contract obligations shall be completed by August 1, 2008.

## **1.6 PLANNED CONTRACT SCHEDULES**

### **1.6.1 SCHEDULE**

The Contractor shall, within five (5) calendar days from the date of contract award, submit to the Contracting Officer (CO) for approval a practical schedule. The schedule shall show the order in which the contractor proposes to carry out the scope of work, the date on which he/she will start the several salient milestones featured, and the contemplated dates for completing the work. The schedule shall be in the form of a progress chart of suitable scale to indicate the approximate percentage of work scheduled for completion at any time. The contractor shall enter on the chart the actual progress at such intervals as directed by the Resident Engineer (RE) or CO.

The contractor shall be required to provide all necessary labor and equipment necessary to perform work as described hitherto. The contractor shall be responsible for the provision of the entire scope. Contractor shall comply with facility schedule. Because of various testing requirements, it is anticipated that work shall be accomplished during weekends and night shift.

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Delivery, storage, assembly, erection, testing, and related activities shall be performed during the hours of 15:30 – 24:00, Monday through Friday; and Saturday and Sundays between the hours of 7:00 – 15:30.

Because of the dynamic nature of the facility, cleaning schedule and area authorizations are subject to change. Bid amounts shall reflect this possibility, as no change orders will be funded.

Contractor shall confirm times prior to cleaning and must coordinate with the RE when the work will be performed and allow time to complete each cleaning.

### **1.6.2            PROGRESS SCHEDULE**

The contractor, if requested by the CO, shall submit a progress schedule at such intervals as directed by the RE. If the contractor fails to submit a progress schedule within two business days, the CO may withhold approval of progress payment estimate until the contractor submits the required progress schedule.

### **1.7                SALIENT FEATURES MILESTONE**

Carpet Cleaning Schedule for Bldg. 300, 2nd floor laboratory  
Carpet Cleaning Schedule for Bldg. 300, 3rd floor laboratory  
Carpet Cleaning Schedule for Bldg. 316, 3rd floor laboratory  
Carpet Cleaning Schedule for Bldg. 300/316, 3<sup>rd</sup> floor connecting bridges

### **1.8                PRE-CONSTRUCTION CONFERENCE**

The Contractor shall attend a pre-construction conference at the time and location specified by the Contracting Officer. Local procedures related to ingress, egress, FAA security will be discussed. Requirements for material disposal, security, vehicles on the FAA premises, and safety will also be discussed. Compliance with these procedures while on-site is mandatory.

### **1.9                CONFLICT RESOLUTION**

The contractor shall meet standards, specifications, and drawings as specified herein. These specifications and drawings shall rule in all cases. Specifications shall govern over drawings. If any conflict should exist between site drawings (location specific drawings) and standard drawing (drawing not referring to a particular location), the site drawings shall govern. In the event of dimensional discrepancies or omissions, the CO will render an interpretation and decision in writing.

### **1.10             ACCESS FOR INSPECTION**

The contractor shall allow the FAA/resident engineer or site inspector (RE/SI) complete access to all portions of the work. In all cases the RE/SI shall be informed accordingly through the CO and given access to the work.

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### **1.11 PROJECT COORDINATION**

The contractor shall be required to coordinate his construction activities with the FAA. All work that affects FAA shall be coordinated and approved by the CO at least twenty-four (24) hours in advance of the scheduled work. Failure to notify and obtain the necessary approval may result in a rescheduling of the work. If weather conditions precluded shutdown of an existing FAA facility, the contractor shall reschedule the work.

### **1.12 LAYOUT OF WORK**

The contractor shall layout his work as indicated on the drawings and shall be responsible for all measurements in connection therewith. The contractor shall furnish, at his own expense, all equipment, tools, materials, and labor as may be required in laying out any part of the work from the outline. The contractor will be held responsible for the execution of the work to such outlines as may be established by the RE/SI. It shall be the responsibility of the contractor to maintain and preserve all marks established until authorized to remove them.

The contractor shall restore all disturbed objects to their original condition.

### **1.13 PERMITS, INSPECTION, LICENSE, CERTIFICATES**

The contractor shall obtain and pay fees for permits, inspection, licenses, or certificates required by FAA, State, County and Local officials as necessary to perform the work, prior to starting construction, and in a timely manner to avoid delays in starting work.

### **1.14 COMPLIANCE WITH LOCAL AND OTHER BUILDING CODES**

The contractor shall comply with local and other codes and standards; where the requirements of the specifications and drawings exceed those of the local building codes; the contractor shall comply with the requirements of the specifications and drawings.

### **1.15 CONTRACTORS ACCEPTANCE INSPECTION (CAI)**

After 100% completion of all work, a CAI will be conducted between the contractor and the Government (FAA). The CO will review the contract documents and verify the contractor has completed all required work. If work remains to be completed, an itemized list will be prepared. A Joint Acceptance Inspection (JAI), which is an internal approval within the FAA, may be held concurrently with the CAI.

### **1.16 APPLICABLE DOCUMENTS**

All FAA Military, Federal, and Industrial Standards referenced in this and the following sections form a part of this specification and apply where specified. All references to standards refer to the latest editions (and any supplements) in effect on the date of the contract.

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## LIST OF DRAWINGS

LIST	DRAWING NO.	DESCRIPTION
Sheet 1 of 4	CT-E-101731-G01	Cover
Sheet 2 of 4	CT-E-101731-A01	Building 300 2 <sup>nd</sup> floor lab area
Sheet 3 of 4	CT-E-101732-A02	Building 300 3 <sup>rd</sup> floor lab area
Sheet 4 of 4	CT-E-101733-A03	Building 316 3 <sup>rd</sup> floor lab area

### 1.17 APPLICABLE PUBLICATIONS

The publications listed below form a part of this specification to the extent referenced. The publications are referenced to in this text by basic designation only.

#### 1.17.1 CODE OF FEDERAL REGULATIONS (CFR) AND AGENCIES

- Life Safety Code NFPA 101
- Underwriters' Laboratories, Inc. (UL)
- Local Inspection authorities (Egg Harbor Township and the FAA (ACT-600) for Building; the FAA (ACT-600) only for FAA Buildings)
- OSHA General Industry Safety and Health (29 CFR 1910), OSHA Construction Industry Standards (29 CFR 1926), OSHA 2202 is a condensed version of 29 CFR 1926. Each can be obtained by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.
- National Emission Standards for Hazardous Air Pollutants (40 CFR Part 6D).

### 1.18 GENERAL SAFETY

OSHA, FAA Safety Standard will be enforced. In keeping with such standards, the contractor shall, at a minimum, provide the following:

#### 1.18.1 SAFETY PLAN

The contractor shall have a safety plan with the purpose of maintaining a safe working environment for construction workers employed on the project. Two (2) copies of the plan shall be submitted to the CO for review before notice to proceed. As a minimum, the safety plan shall require tailgate meetings at least once per week, scheduled inspections of equipment which check for potential hazards created by wear, damage etc., and a statement that the current (OSHA) Occupation Safety and Health Act Regulations on Safety in the Construction Industry, as well as FAA Safety Regulations, are followed. The plan will be used by the RE/SI to insure that the work is accomplished in accordance with accepted safety practices.

- Contractor is responsible for the moving and replacing chairs in areas designated for cleaning.
- Contractor is responsible for defining work areas with cones and/or caution tape.

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### **1.18.2 MATERIAL SAFETY DATA SHEETS (MSDS)**

The contractor shall have (MSDS) conforming to Federal Standard 313A written by the manufacturer for all materials containing chemicals or other substances which may pose a hazard. One copy of each (MSDS) shall be submitted to the CO and one copy shall be kept on site. The contractor or subcontractor will be prohibited from handling any material which does not have an applicable MSDS on the job site.

### **1.18.3 HAZCOM PROGRAM**

Although OSHA regulations and the contractor safety plan will usually apply, the CO may consider certain work practices to be unsafe in accordance with the FAA, OSHA and local authority rules and regulations. The RE/SI through the CO will stop any operation that is in violation of the FAA and OSHA standards or fails to comply with the safety plan or other safe work practices.

### **1.19 TRAINED PERSONNEL**

Installation of materials and equipment covered under this contract shall be performed by practitioners with not less than two years' experience in the appropriate field or trade. Trained field personnel employed for not less than two years with the contractor in assembly, erection, and installation procedures shall supervise installation personnel. Contractor supervisory personnel shall be on-site at any time material are being delivered, unpacked, installed, or tested, as it is not acceptable for government personnel to function as de facto supervisors or superintendents for the installation and startup functions attendant with the work contemplated in this contract.

### **1.20 DESIGNATED SUPERVISOR**

When any construction or maintenance activity is conducted at the job site, the presence of a designated competent, badged contractor's supervisor is required at the job site. The supervisor foreman must be qualified and capable of organizing and coordinating all activities of the contractor, and keeping a safe job site.

The contractor shall at all times, when construction activities are conducted, have a substantial number of workers for each task to proceed expeditiously and with out generating delay, due to lack of manpower.

### **1.21 STOP WORK ORDERS**

When the contractors are notified by the contracting officer (CO) or the resident engineer (RE) of any non-compliance with the provisions of the contract and the action(s) to be taken, the contractor shall correct the unsafe or unhealthy condition. Life threatening or other serious violations shall be corrected immediately. Non-serious violations shall be corrected within 24 hours of the non-compliance notice. If the contractor fails to comply promptly, all or any part of the work being performed may be stopped by the CO or the RE with a "Stop Work Order". When, in the opinion of the CO or RE, satisfactory corrective action has been taken to correct the unsafe and unhealthy condition, the contractor may resume work operation. The contractor shall



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not be allowed any extension of time or compensation for damages by reason of or in connection with such work stoppage.

### **1.22 FAA SECURITY**

The Contractor shall comply with all safety requirements of the FAA operator for material disposal, badges, vehicular operations, special insurance requirements, and construction safety plans according to OSHA or FAA requirements. The contractor shall meet and comply with the items discussed during the pre-construction conference.

### **1.23 WORK LIMITATION**

Should increased traffic activity or adverse weather conditions require discontinuance of work which would interfere with the laboratory equipment or site towers, the contractor will be required to stop such work promptly and remove any equipment or materials which may constitute interference. Said potential delay should not result in any additional cost to the government (FAA). In addition, no open floor tiles shall be allowed to remain open in the area overnight. All equipment and material which constitutes an obstruction shall be removed from the job site when not required for immediate prosecution of the scope of work.

### **1.24 COMMUNICATIONS**

The RE designee will continuously monitor the progress of work within the work area. The contractor, whenever working in the work area, will be required to have a minimum of one (1) designated employee (foreman) coordinate all work through the RE. If the RE is not present as a rule, the contractor shall maintain continuous communication with the CO.

### **1.25 SITE ACCESS**

Access to the site will be pre-determined and agreed upon at the pre-construction conference.

### **1.26 SPECIAL PERMITS**

The contractor shall obtain all required permits (if any) for the work. The contractor shall abide by all requirements dictated by the municipality for such permits without any additional cost to the government.

### **1.27 SUBMITTALS**

Three (3) sets of submittals are required to the contracting officer for approval:

- (1) Safety plan
- (2) Schedule
- (3) Contractor furnished material
- (4) Material Safety Data Sheets (MSDS)
- (5) Step by Step Method of Cleaning Document

The (CO) will keep two sets and return one set to the contractor with the approval status noted.

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### **1.28 EXCESS PROPERTY**

Upon completion of all work under these specifications, the contractor, together with the RE shall make sure that all unused material shall be disposed of off-site by the contractor at no cost to the government (FAA).

### **1.29 MATERIAL**

#### **1.29.1 MATERIAL DELIVERIES**

All material deliveries made under the contract shall be arranged for delivery to the contractor's material staging areas. This area shall be determined during the pre-construction conference. Delivery vehicles shall be directed to the material staging area and wait at that location until arrangement for an escort is made.

#### **1.29.2 STORAGE AND PROTECTION**

The contractor, through the RE/CO, shall schedule all necessary clearances for storage areas within Building 316, including any time limitations upon the use of such areas. The storage and protection of contractor material shall be the sole responsibility of the contractor. The contractor shall provide at his/her own expense all shelter and security personnel as may be necessary for protection of the material and equipment.

#### **1.29.3 SUBSTITUTE MATERIAL**

The contractor may submit for approval material other than that specified if it meets the following:

- Meets or exceeds the specifications as determined by FAA.
- Material is available on a timely basis.
- Substitution of material shall not obligate FAA for any additional costs which may be associated with furnishing and installing the substitute material.

### **1.30 NOISE LEVELS**

Select equipment with minimum standard noise levels satisfactory for each type of application. Noise levels shall be subject to approval of the FAA. The minimum noise level should be below 85 (equipment exposure level).

### **1.31 CLEAN UP**

The contractor shall be required to clean up work areas on a daily-basis. Trash, packaging materials, and related debris shall not be permitted to accumulate in work areas, staging areas, or storage areas. The contractor shall be required to recycle cardboard. The contractor shall provide appropriate means of storing and containing these items until they are removed from the Technical Center. It is not the responsibility of the Technical Center or any of its in-house contractors to remove unused and waste material from this project. This responsibility rests entirely with the contractor and the contractor's personnel.

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### **1.32 WARRANTIES**

The manufacturer shall warrant all products to be free from defects in design, material and workmanship.

### **1.33 PATCHING AND REPAIR**

Contractor shall be responsible for any damage to the building which occurs during delivery, storage, staging, installation and testing which results from actions or inactions by contractor personnel or methods.

Contractor shall provide personnel to accompany government representatives on a pre-installation walk through to determine existing conditions in all areas to be used or impacted during this contract. Damaged areas shall be immediately called to the attention of the government representative.

Contractor shall repair or replace, at the government's option, damaged areas and/or restore said areas to their original condition.

Contractor shall repair painted areas with identical paint, repair masonry, metal or glazed surfaces with identical materials, and restore or replace damaged ceiling tiles or gypsum board areas to their original condition. The government shall provide information to the contractor to enable identical materials to be procured for patching and repair work.

Personnel with not less than two years experience in the relevant trade shall undertake all repair work.

Contractor shall repair all loose edges with manufacturer approved adhesive. Carpet adhesive shall be water based containing low volatile organic compounds.

### **1.34 TERMINOLOGY AND DEFINITIONS**

Underscored words or passages indicate particular emphasis and shall be carefully noted.

The following applies throughout the specification:

"Furnish" means Furnish Only

"SI" means Site Inspector

"Install" means Install Only

"RBB" means Red Brick Building

"Provide," means Furnish and Install

"GFE" means Government Furnished Equipment

"CO" means Contracting Officer

"RE" means Resident Engineer