

**Statement of Work (Revised 8/17/09)**  
**For**  
**Tropical Storm Restoration**  
**Ft. Pierce Airport (FPR), Ft. Pierce, Florida**

---

**1 Introduction and Overview:**

These documents cover the requirements of the Federal Aviation Administration (FAA) for hurricane restoration for FPR ATCT, located in Melbourne, Florida.

**1.1 Background**

FPR Air Traffic Control Tower was moderately damaged during the events of Tropical Storm Fay during August 2008. Damage included water intrusion in to the control tower cab, thus destroying the carpet. PVC pipe, used to operate the defogger, attached to the exterior of the tower was damaged due to winds, and will need replacing as well as the catwalk access door. This Statement of Work is to provide an avenue to refurbish the tower cab carpet into sustainable condition, so as to repair damaged areas and improve areas to be better resistant to similar storms in the future.

**1.2 Scope of Work**

The work shall include, but not limited to, furnishing all labor, equipment, material, taxes, etc to complete the FPR ATCT restoration project.

The contractor shall complete the description of work listed in the Tasked listed below in section 3.1.

**1.3 Objectives**

Repair the FPR ATCT site from hurricane damage and strengthen it for future storms, by resealing areas where sealants have proven to be insufficient, or beyond their effective life.

**2 References**

Documents attached.

**3 Requirements**

This section defines the requirements in terms of tasks to be performed, the end results/deliverables to be achieved, and the schedule of the key dates. Important compliance requirements are included with the task descriptions and deliverables.

### 3.1 Tasks

Furnish all labor, materials, equipment and services necessary to repair FPR ATCT site from storm damage and strengthen it for future storms. The contractor shall keep the inside of the ATCT building protected from weather during any demolition/construction activities.

The contractor shall perform the following tasks:

1. Replace Catwalk access door and waterproof against future water intrusion.
  - a. Replace the existing door and associated hardware with similar. According to existing drawings the door dimensions are to be determined by site visit. Suitable sealing materials shall be used to form tight bond between door and jamb. Field verify prior to procurement.
  - b. Door hardware is to be designed to make a tight waterproof seal, as to prevent water intrusion during driving rain condition. Consult with RE for acceptance of materials.
  - c. Install door cap over access door to eliminate water weeping into top of door.
2. Replace carpet in cab, cab access level, (**add 7<sup>th</sup> floor and 8<sup>th</sup> floor an additional 50 sq.yrds**).
  - a. Carpet is to be static free carpet.
  - b. Color and style is to match existing, unless otherwise determined by RE.
3. Cab window wash system PVC replacement.
  - a. Approximately 100' of outdoor rated PVC conduit shall be mounted vertically, replacing the existing conduit running from the base equipment enclosure to the cab. Tower height approx. 87'-5". Conduit is to be secured to building at 10' increments using stainless steel hardware.
  - b. PVC pipe sections shall be sealed and tested prior to acceptance by RE and facility managers.

### **SUBMITTALS:**

The Contractor shall submit product information for FAA approval regarding the unitary units, and other key items of material and information regarding all aspects of this project.

The above submittals will be reviewed by the Government and be approved, disapproved or approved as noted. The

Contractor shall not proceed with procurement of material and equipment until the Government approves the submittals.

**WARRANTIES:**

As part of the base bid, the Contractor shall obtain a factory warranty on all materials and labor for all work performed under this contract. The warranty shall be unconditional and the contractor's local service organization shall furnish all labor and materials required to repair or replace defective or failed portions of the contract work. Any required warranty repairs shall be mobilized and on-site within a maximum of 24 hours after notification by the Government of an equipment service problem.

The Contractor shall furnish to the Resident Engineer (RE) or Technical Contact the manufacturer's certificate of this warranty stating the beginning and ending dates of the period of coverage. Also, guarantee that each piece of apparatus shall have a capacity or performance of not less than that specified when the apparatus is operating under specified design conditions.

**PERFORMANCE TIME:**

The contractor shall complete the entire scope of the Job within 45 days after the Notice-To-Proceed. The time required for the Government to review, comment and approve the submittals, and equipment ordering lead-time will not be included in the Contractor's performance time.

Notice-To-Proceed with the construction phase will not be granted until the Contractor certifies to the Contracting Officer that all required materials and equipment, as approved by the Government, are in his possession and ready for installation.

**SAFETY:**

All fall protection and safety equipment installation shall be coordinated with the FAA Resident Engineer and in compliance with latest OSHA standards. A fall protection plan shall be submitted to the SSC Contact and the Technical Contact before starting work.

**DEMOLITION:**

Any equipment obstructing the Contractor's access to the work area shall either be temporarily relocated by the Contractor to a storage area designated by the RE or Technical Contact or

be covered in a manner as to provide suitable access while protecting the Government property from construction damage. At the completion of all work, the Contractor shall return all such items to their original location.

The contractor shall dispose of any unused or removed hardware, waste, or other materials associated with this job.

Any equipment or material to be removed, unless specified to remain the property of the FAA, shall become the property of the Contractor and shall be transported from the site and disposed of in a legal manner.

### 3.2 End Results/Deliverables

All work accomplished and tasks completed as outlined in this document. FAA personnel onsite, and from the SSC will sign off that work has been completed satisfactorily.

## 4 List of Deliverables by Task

1. New catwalk door and associated hardware.
2. New carpet on 7<sup>th</sup>, 8<sup>th</sup>, cab and cab access levels.
3. New PVC for cab window wash system.

### 4.1 SCHEDULES/MILESTONES

The FAA Logistics Center shall maintain a single project schedule from which previous project reports shall be produced.

### 4.2 REPORTS

The monthly report shall be provided to the FAA Logistics Center with the initial submission, and then again following negotiations. This report will be used by the Customer to assess the adequacy of the resources proposed by the FAA Logistics Center to accomplish the SOW. Specialty reports shall be identified with enough detail to allow the FAA Logistics Center to develop and populate, as instructed. Customer requires an Activity report that is detail driven.

## 5 Other Considerations

### 5.1 SCHEDULE OF WORK:

All work shall be performed during normal daytime hours of 7:30 AM to 4:00 PM unless otherwise approved by the RE or Technical Contact.

### 5.2 AVAILABILITY OF UTILITIES:

Electricity is available for the Contractor's use.

- 5.3 **SITE VISIT:**  
The bidder may make arrangements to visit the site by contacting the SSC Contact listed below.

## **6 Progress/Compliance**

The Customer requires the following from FAA Logistics Center in order to monitor progress and ensure compliance (identify action):

- 6.1 Weekly/Monthly Status Report
- 6.2 Weekly Meetings
- 6.3 Monthly Progress Report
- 6.4 Project Management Team (PMT) Meetings
- 6.5 Quarterly Program Reviews
- 6.6 Outlines and Drafts

## **7 Transmittal/Delivery/Accessibility**

The FAA Logistics Center shall provide (1) hard copies of each deliverable and one electronic version.

## **8 Notes**

- 8.1 Technical Contact:  
Allah E Christmas  
AJW-E15D  
Federal Aviation Administration  
1701 Columbia Avenue  
College Park, GA 30337  
Office: 404-305-6676  
Fax: 404-305-6588

- 8.2 Contracting Officer  
Rachel C. Hier  
AMQ-210  
Federal Aviation Administration  
6500 South Mac Arthur Blvd.  
Oklahoma City, OK 73169  
Office: 405-954-0526

**Tropical Storm Fay Restoration**

**August 17, 2009**

[Rachel.hier@faa.gov](mailto:Rachel.hier@faa.gov)

SECTION 08110  
METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 Work Included: Furnish labor, materials, equipment, and incidentals necessary to fabricate and erect hollow metal doors, door frames, borrow lights, vision panels, and transom frames.

1.2 Quality Assurance

A. Suggested Manufacturers: Hollow metal work shall be constructed, as specified by the following manufacturers:

1. Ceco Corp., Chicago, Illinois
2. Steelcraft Manufacturing Co., Cincinnati, Ohio
3. Republic Steel Corp., Youngstown, Ohio
4. Approved equal

B. Design Criteria:

1. Metal doors and frames shall be SDI Grade III heavy duty.
2. Doors and frames installed on the exterior or exposed to weather shall be fabricated of galvanized steel.
3. Exterior doors, doors at equipment rooms and conference room doors shall have polyurethane or polystyrene formed cores. Interior doors shall have resin impregnated Kraft honeycomb cores.

1.3 Submittals: Submittals shall be in accordance with Section 01300, SUBMITTALS and shall include:

A. Manufacturer's product data sheets

B. Shop drawings with schedules.

1.4 Standards: Doors and frames shall be manufactured in accordance with the following standards:

Commercial Standard CS 242-62

SDI-100 "Recommended Specifications for Standard Steel Doors and Frames"

SDI-111 and 111A - Recommended Steel Door Details

SDI-107 - Hardware for Steel Doors

SDI-117 - Manufacturer's Tolerance Standard for Steel Doors and Frames

- 1.5 Delivery and Storage: Doors shall be individually packaged in cardboard cartons during shipment and shall remain packaged until erected. Store in an upright position inside the building or on a platform raised above grade and protected by waterproof coverings.
- 1.6 Job Conditions: Obtain hardware templates and machine doors and frames to fit the specified hinges and lock set.

*PART 2 - PRODUCTS*

2.1 Materials

- A. Steel Stock: Commercial quality, cold rolled or pickled stretcher level steel having the following minimum gauges:
1. Doors: Panels - No. 18 gauge  
Top and Bottom Channels - No. 16 gauge
  2. Hollow Metal Frames - No. 16 gauge
  3. Hardware Reinforcement:  
Hinge Reinforcements - No. 9 gauge  
Closure Reinforcement - No. 12 gauge  
Surface Applied Hardware - No. 14 gauge  
Strike Reinforcement - No. 12 gauge
- B. Shop Paint: Factory prime coat of red zinc, chromate iron oxide conforming to Fed. Spec. TT-P57 (Type III).

2.2 Fabrications

- A. Hollow Metal Frames:
1. Brake form frames to the sizes noted on the drawings, with all bends having clean, sharp edges. Miter frame corners and internally weld, fill, and grind smooth.
  2. Hinge and strike mortises shall match door preparation, in accordance with hardware templates. Drill and tap to fit hardware. Provide 26 gauge, galvanized plaster guards over all mortises. Punch door frames and provide three (3) rubber silencers per jamb



for single swing door frames, and two (2) rubber silencers per jamb for double swing door frames.

3. Ship door frames with angle spreaders tack welded across the bottom of all frames. Leave spreaders in place until frames have been set and securely anchored in position.

4. Furnish anchors and fastening devices required to install frames in place. Each frame leg shall have a floor anchor to secure the leg firmly to the floor to prevent twisting or warpage. Frames installed in masonry partitions shall have a minimum of three (3) adjustable "T" anchors for each jamb installed in masonry courses, as the work progresses. Provide wood, metal stud, or other appropriate anchors necessary for particular partition types.

5. Sidelights, borrowed lights, and transom frames shall be as detailed on the drawings and shall be fabricated in accordance with standard practice. Accurately form bends. Surface weld all joints and grind smooth. Furnish glazing beads where required, and fit and attach with metal screws. Fabricate frames in one piece where possible. Where splices are necessary for shipping purposes, field weld splices, fill and grind smooth.

**B. Metal Doors:**

1. Fabricate doors of two roller, leveled, prime quality, cold rolled, steel sheets formed with flush, seamless face sheets. Completely fill the vertical edge joint between sheets and grind smooth to give the appearance of a seamless door.

2. Channels at top and bottom shall not be inverted type. Bevel edges 1/8" inch in two (2") inches for proper clearance and fit. Insulate doors with a solid core of rigid, self-extinguishing polyurethane formed in place to completely fill the door cavity.

3. Provide openings for vision panels and louvers where scheduled. Moldings shall be integral and welded into the door flush with face of door. Inside moldings shall be removable for glass replacement. Stamp louvers for exterior doors into door panel. Interior door louvers shall be fixed grid inserted into recessed moldings. All moldings shall have close fitting, mitered corners. Extend astragals the full door height, and install on inactive leaf of door pairs.

- 2.4 Hardware Location: Hardware locations shall conform to templates or hardware submittals furnished by the General Contractor. Mounting heights shall conform to Industry Standards, unless noted otherwise.
- 2.5 Finish: Paint metal doors and frames as shown in the paint schedule in Section 09900 PAINTING.

PART 3 - EXECUTION

- 3.1 Installation
- A. Set frames in place plumb and in alignment with partition. Secure floor anchors to floor with two (2) power-activated fasteners per anchor. Brace tops of frames temporarily until partitions are erected. Provide appropriate jamb anchors for the type of partition in which the frame is installed. Each jamb shall have no less than three (3) anchors. Slush voids between concrete and frame with grout.
  - B. Provide proper anchors for all jamb conditions and anchor to partitions, as required. Install doors onto frames with proper hardware. Doors shall swing without binding and shall clear the floor throughout the swing.
- 3.2 Clean and Adjust: After assembly, clean thoroughly, removing all rust, scale, grease and rough spots. Chemically treat surfaces to assure paint adherence, and provide shop coat of rust-inhibitive, oven-baked paint.

END OF SECTION

08710  
DOOR HARDWARE

PART 1 - GENERAL

1.1 Work Included

- A. Furnish labor, materials, equipment and incidentals necessary to install hardware. Coordinate this work with the supplier of hollow metal and aluminum doors by furnishing necessary blue print templates, properly annotated to the approved hardware schedule.
- B. Furnish incidental hardware items such as brackets, arms, strikes, inserts and plates necessary for the proper operation of the hardware specified, along with bolts, screws, anchors or other fastening devices necessary.
- C. Furnish hardware necessary to comply with applicable State, Federal and local building codes, including requirements of the Americans with Disabilities Act of 1990 (ADA).

1.2 Related Work Covered Elsewhere

Metal doors and frames	Section 08110
Wood Doors	Section 08210
Weatherstripping	Section 08731

1.3 Quality Assurance

- A. Suggested Manufacturers: Products specified form a basis of minimal acceptable quality. Substitutions will be considered for approval providing requested substituted product meets or exceeds specified item with regards to construction, design, material, gauge, function, operation and warranty. Provide all necessary data sheets and submit in accordance with Section 01600 - No Exceptions.
- B. Design Criteria: Finish of all hardware, unless otherwise noted, shall be US32D. Powder coated and painted components shall match generally.
- C. Erector's Qualifications: Refer to Section 01040.
- D. Fire Ratings: Doors scheduled to be "labeled" fire doors shall be provided with hardware conforming to applicable NFPA standards. All exit devices shall be UL listed for life safety.

1.4 Submittals

- A. Submittals shall be in accordance with Section 01300 SUBMITTALS, and shall include:
1. Product data sheets for each item
  2. Hardware schedule
  3. Certificate of compliance
  4. Keying schedule
  5. Wiring diagrams for electrical components
  6. Hardware templates
- B. Submit listing of each separate hardware set and corresponding reference to the manufacturer's catalog page number. Provide catalog cut sheet for each item of hardware in the schedule.
- C. Provide a description of zones and schematic riser diagrams for doors having electrical devices as part of the hardware. Furnish wiring diagrams as appropriate.
- D. Furnish a sample of each lockset type proposed for this project, in the specified finish. Samples of other hardware shall be submitted only if requested. Samples will be returned after review and approved samples may be used in the project.
- E. Furnish six (6) complete submittals, complete with catalog cut sheets for each hardware item, along with installation instructions, maintenance instructions and parts lists.

1.5 Standards

Finish hardware shall conform to the latest editions of the following standards and referenced descriptions as specified elsewhere in this section:

- A. American National Standards Institute (ANSI) publications:
- ANSI/BHMA A156.1 - Butts & Hinges
- ANSI/BHMA A156.2 - Locks & Lock Trim
- ANSI/BHMA A156.3 - Exit Devices

ANSI/BHMA A156.4 - Door Closers

ANSI/BHMA A156.5 - Auxiliary Locks & Associated Products

ANSI/BHMA A156.6 - Architectural Door Trim

ANSI/BHMA A156.13 - Mortise Locks & Latches

ANSI/BHMA A156.16 - Auxiliary Hardware

- B. Builder's Hardware Manufacturer's Association (BHMA):
  - Section F - Door Locks and Latches; Functions
- C. Door Hardware Institute (DHI) publications:
  - DHI "Keying Procedures, Systems, and Nomenclature"
  - DHI "Recommended Locations for Builders Hardware"
- D. National Fire Protection Administration (NFPA) publications:
  - NFPA #101 "Life Safety Code:
  - NFPA #80 "Fire Doors and Windows"
- E. Uniform Building Code, 1991 edition (UBC):
  - UBC "Uniform Building Code:
- F. Federal Specifications (Fed Spec):
  - FF-H-106 "Hardware, Builders, Locks and Door Frames"
  - FF-H-111 "Hardware, Builders, Shelf and Miscellaneous"
  - FF-H-116 "Hinges, Hardware, Builders"
- G. Underwriters' Laboratory, Inc. (UL) Publications:

UL Labeled Fire Doors

**1.5 Delivery and Storage**

- A. Order material so that availability is assured at the time required for installation. Do not deliver hardware to the job site until provisions are made for its security.
  
- B. Each hardware item shall be packaged separately and identified with a tag that identifies its particular location in the construction. Door hardware shall be identified by door number, heading number, hand, and keyset.

**1.6 Job Conditions**

- A. Furnish templates and other data to suppliers of doors and frames as necessary to reinforce, drill, tap and install hardware.
  
- B. Furnish hardware and incidentals necessary to complete each hardware set. Subcontractor shall prepare his own hardware schedule, which is all hardware of every type needed for a complete installation. Where doors are part of a fire rated assembly, the hardware shall be an appropriate type in accordance with NBFU Pamphlet No. 80 and NFPA No. 80 and 101. Fire hardware shall have been tested and approved by an authorized testing agency for the types and sizes of doors required, and shall be U.L. classified.
  
- C. The supplier will be responsible for providing all necessary and required hardware for the individual application, including accessories, optional accessories, and fasteners that may be required to complete the installation.
  
- D. A key schedule shall be developed after a conference with the Subcontract Administrator, who shall have final approval of keying methods.
  
- E. Do not mix different manufacturer's products for the same type of hardware unless otherwise shown.
  
- F. Electrician shall be responsible for installation of all conduit and wiring and making all connections to electrical wiring devices. Subcontractor shall coordinate all work between trades.

PART 2 - PRODUCTS

2.1 Materials

- A. Hinges: Full mortise, anti-friction, concealed bearing hinges conforming to ANSI A156.1, complete with fasteners of the proper type for each application. Hinges used on exterior doors or security doors which swing outward shall have non-removable pins. Sizes of hinges shall be as follows unless otherwise specified:

Exterior and Vestibule doors - 5" x 4.5"  
Interior doors up thru 36" wide - 4.5" x 4.5"

- B. Door Closers: Provide factory sized and handed closers complete with cardboard template to insure correct installation. Cylinder body shall be heavy duty cast iron with steel piston. Hydraulic fluid shall maintain a constant viscosity for a temperature range of 110 deg. F to -30 deg. F. At parallel arm applications provide extra duty solid forged steel arms and extra duty knuckles. Closers shall be independently certified to a minimum of 10,000,000 cycles.

C. Locksets:

1. Provide Heavy Duty Cylindrical Locks, ANSI 93K-7AB-626; as manufactured by Best Lock Corporation of Indianapolis, Indiana; or FAA approved equal. Any substitutions for the Best Lock, 93K Series Cylindrical Locks must accept the 7-pin Best Lock Corporation cores. Submit specifications for any substituted heavy duty cylindrical locks to the FAA contracting officer for approval.
2. Provide cylinders and temporary cores. Permanent cores to be supplied by FAA.

- D. Levers and Roses: Levers and roses shall be similar to Best 14L.

- E. Strike Plate: Furnish a strike plate for each lock or latch set. Strikes shall be curved lip standard ANSI A-115.3, 1-1/4" x 4-7/8" inches for mortise locksets, having the same finish as lockset.
- F. Controlled Exit Devices: Provide "Chexit" controlled exit devices, along with all controls for auxiliary locking, local alarm, and remote signaling output, all self-contained in the device. Controlled devices shall have egress monitoring only, no delay. All devices shall be furnished by a single manufacturer, and shall be non-handed. Construction will be essentially the same as described above. Vertical rod devices shall also contain latch retraction latches. Where used on fire rated doors, the device shall be U.L. listed for the equivalent rating. Provide "T" style touchpads stainless steel with fluid dampeners.
- G. Magnetic Door Locks: Provide magnetic door locks as indicated. Locks shall be low voltage dual coil with 1800 pounds holding force. Provide slotted mounting brackets and dovetail construction. Provide built in electronics to eliminate residual magnetism and to provide transient suppression.
- H. Magnetic Switch: Provide a SPDT concealed magnetic door position switch in coordination with controlled exit devices for rearm and door position control and monitor.
  - I. Door Stops: Provide stainless steel overhead stops with metallic slides, end caps, shock blocks, and components. As manufactured by Glynn-Johnson or equal.
- J. Wall Bumpers: Concave rubber cones mounted in stainless steel brackets complete with appropriate fasteners for conditions, BHMSL02252, as manufactured by Glynn-Johnson, or equal.
- K. Cylinder: A two-way keyed cylinder suitable for use on aluminum doors and compatible with the specified locking device; finish shall match aluminum door.
- L. Kick Plates: Eight (8") inches high with a width two (2") inches less than the width of the door to which it is applied. Kick plates shall be .050" thickness stainless steel, satin finish and bevelled edges, applied to face of door with FHWS wood screws.
- M. Flush Bolts: Flush-mounted extension bolt, 1-1/4" X 6-3/4" inches with 1/2" inch round rod X 7/8" inch throw; square face plate design with US26D finish, BHMA L04082 except at labeled doors use BHMA L04201, furnish dust proof strikes.



- N. Push and Pull Plates: Square face, square edge, wrought push pull plates, stainless steel satin finish and attached to face of door with wood screws.
- O. Door Silencers: Fed Spec FF-H-111, Type 1337A, Manufacturer's standard rubber silencers. Provide silencers at all hollow metal door frames.
- P. Automatic Flush Bolt: Steel component conforming with ANSI requirements for fire rated doors operated in pairs. When operating door opens, the latching bolt of the flush bolts or the opposite leaf shall retract automatically. Provide investment cast cam triggers.
- Q. Coordinator: Manufacturer's standard door coordinator for doors opening as pair and requiring one door to close ahead of the other leaf. Provide adjustable override safety feature. Flushbolts, coordinators, and stops to be by one manufacturer.
- R. Electro-Magnetic Holder: A single point electro-mechanical holder having track assembly consisting of an arm roller and solenoid operated hold open mechanism. Device shall have provision for connecting to smoke detectors and shall be similar to LCN 4040 SED Series. Electro-magnetic units and closers to be by one manufacturer.
- S. Fasteners: Size, quantity and finish necessary by the specific conditions. Use machine screws and expansion anchors at concrete or masonry, flush headed wood screws at wood surfaces and machine screws or other appropriate fasteners at metal.

### 2.3 FINISHES

Provide finishes as shown in hardware schedule. The finishes correspond to the ANSI numbers as follows:

600	Primed for paint
626	Brushed chrome
628	Aluminum
630	Brushed stainless steel
652	Satin chrome on steel base

Any product that does not come with the appropriate finish as standard may be furnished in a finish that matches that specified as close as possible. Painted finishes shall be a color that matches this finish as near as possible.

2.4 MANUFACTURED PRODUCTS

KEY CABINET: Provide one security key monitor (SKM) cabinet with pin code access and memory. Provide battery back up and remote monitoring capability. Provide size as indicated in schedule, as manufactured by Key Systems, Rochester, New York, or approved equal.

2.5 LOCKSETS

- A. All locks shall have seven pin removable and interchangeable cores as manufactured by Best Lock Company, Indianapolis, Indiana, or approved equal.
- B. LOCKSETS: Provide Heavy Duty Cylindrical Locks, 83K-7AB4-A-S3-626, as manufactured by Best Lock Corporation of Indianapolis, Indiana; or FAA approved equal. Any substitutions for the Best Lock, 83K Series Cylindrical Locks must accept the 7-pin Best Lock Corporation cores. Submit specifications for any substituted heavy duty cylindrical locks to the FAA contracting officer for approval.
  - 1. Locks shall have removable construction cores.
  - 2. Furnish "knurled" levers at mechanical, electrical, janitor, and other hazardous spaces as required by the "authority having jurisdiction". Abrasive coating will not be acceptable. Lever trim shall be stainless steel with return.
  - 3. Provide two construction core master keys and one construction core control key to the Subcontract Administrator.
  - 4. Final keying will be completed by the FAA at the site.
- C. Locks and latchsets of one manufacturer shall have standardized faces, cases and strikes, so that locks with varying functions will be interchangeable.
- D. Locksets and latchsets, except as otherwise specified, having operation and function as specified herein.

PART 3 - EXECUTION

3.1 PREPARATION

Provide solid backing for all wall mounted door stops. Refer to Section 06101 CARPENTRY.

3.2 INSTALLATION

- A. Mount hardware units at standard heights, as recommended by BHMA, "Recommended Locations or Builder's Hardware", unless noted otherwise. Set units level, plumb and true to line.
- B. Use templates to make cuts into doors. Drill holes to accurate diameter. Mortise hinges in butt of door using special door jigs and routers. Hinges shall be flush to edges of door.
- C. Adjust and check operation of hardware and doors to insure proper operation. Lubricate moving parts with graphite-type lubrication recommended by the manufacturer.
- D. Provide stops to protect wall surfaces at all doors. Unless otherwise specified use wall bumpers wherever possible, otherwise install overhead stops. Provide wood back-up at all wall bumpers.
- E. Provide all special mounting and brackets where interference with other hardware occurs. Provide door coordinators where required.

3.3 LOCKS AND KEYS

- A. Maintain security of locks during construction until keys are turned over to the Owner. For exterior doors, provide a system of construction locks which can be changed out to a different keying method for Owner's use. The subcontractor may install temporary cores during construction, which are replaced just prior to Owner's acceptance.
- B. Keys shall be master keyed. Furnish four (4) master keys and two (2) keys for each separate key set. Locks shall be keyed to conform to the keying schedule approved by the Subcontract Administrator.

3.4 CLEAN AND ADJUST

- A. Where it is necessary to perform cutting and fitting of hardware on surfaces which will be finished at a later date, Subcontractor shall remove hardware and store in a safe place until finish has been completed, then replace the hardware. Do not install hardware until finishes have been applied.
- B. Prior to Owner's acceptance of the building, return and check work and make final adjustment. Clean and re-lubricate working parts. Adjust door control devices for proper action.
- C. Install surface mounted door closers on room side of corridors. Vestibule and interior side of exterior doors. Do not mount closer body to jamb in any location.



- C. Submit a six inch length of each type of weatherstripping.

## **1.5 STANDARDS AND REFERENCES**

The applicable provision of the following standards and reference shall apply to this section as if written herein in its entirety:

Architectural Aluminum Manufacturer's Association (AAMA):  
Specification No. 809-1.

## **1.6 DELIVERY AND STORAGE**

Deliver products to the site in protective cartons and store packaged until installation.

## **1.7 JOB CONDITIONS**

Coordinate weatherstripping with the door manufacturer. Where hardware requires special rabbets or recesses in metal doors, provide template to door manufacturer. Machine wood doors as necessary to fit recessed weatherstripping.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- A. BRONZE, SPRING: Alloy 85015 or 90-10 commercial bronze, hardener A-4.
- B. BRONZE, CAST: Alloy 385, mill finish.
- C. VINYL: High quality, virgin vinyl conforming to CS-230. Cold weather vinyl shall remain flexible to 30 degrees F.
- D. ALUMINUM: 6063-T5 alloy; finish as specified.
- E. FASTENERS: Corrosive-resistant screws, expansion bolts and other appropriate fasteners. Fasteners used with copper and bronze shall be non-ferrous.
- F. ABRASIVE SURFACE: Abrasive, non-skid surfaces on thresholds shall be a stainless steel abrasive surface equal to Pemko "Pemkote".

- G. BEDDING COMPOUNDS: Gun grade, non drying compound complying with AAMA Specification 809.1, Pecora "BR.96", Tremco "Curtain Wall Sealant; or equal.

## **2.2 MANUFACTURED PRODUCTS**

- A. Weatherstripping for exterior hollow metal doors at heads and jambs shall be one of the following:
  - 1. Reese No. 350, Bronze and DS114-DUR
  - 2. Zero No. 19W, Bronze and No. 270, Bronze
  - 3. Pemko No. 74B, Bronze and No. 306AU-D.
- B. Astragals for meeting stiles of pairs of metal doors shall be Reese No. 275D or approved equal.
- C. Sill weatherstripping at exterior door shall be Reese No. DB-595-D, or equal.
- D. Thresholds for exterior doors shall be heavy duty aluminum extension of the type shown on the drawings. Color of aluminum shall be dark bronze anodized or bronze.
- E. Sound Seals shall be a follows:
  - 1. Head at joint - Reese No. 599-DUR, or equal.
  - 2. Door bottom - Reese No. 521-DUR, or equal.
- F. Smoke gasket shall be installed where indicated and shall be Reese 897B polyprene, or equal.
- G. Raincaps over each exterior hollow metal door shall be Reese R201-D or approved equal.

## **PART 3 - EXECUTION**

### **3.1 INSTALLATION**

- A. WEATHERSTRIPPINGS:

1. Weatherstrippings shall form a weathertight seal at every point when the opening is closed. Weatherstrippings shall adjust themselves to the swelling, shrinkage and warping of doors and frames, without impairing efficiency or the best operation of the doors.
  2. Install weatherstrippings so that doors operate freely, close tightly and provide for normal expansion of the doors. Machine woodwork, as necessary, without injurious cutting. Anchor bronze weatherstrippings to metal with fasteners spaced two (2") inches on center. At wood doors, nail bronze weatherstrippings at one (1") inch centers.
- B. GASKETS: Gaskets on fire doors shall conform to U.L. requirements, rated to comply with door fire resistance classification.
- C. THRESHOLDS AND SWEEPS:
1. Set thresholds in a solid bed of asphaltic mastic and fasten with No. 10 screws in expansion shields set in concrete at 14" inch o.c. spacing.
  2. Install door bottoms or sweeps on doors which swing into the building so that the sweep clears the floor for the entire swing of the door.

### **3.2 SCHEDULES**

- A. Subcontractor shall submit a schedule which identifies each location where threshold, weatherstripping, sound seals or smoke gaskets are to be applied, along with proposed product for each location. Schedule shall have a catalog product data sheet for each product to be used.
- B. Subcontractor shall comply with the following requirement:
1. Thresholds: - Install a threshold at every exterior door and as otherwise indicated.
  2. Weatherstripping: - Install weatherstripping at heads and jambs of every exterior door.



3. Sound Seals - Install sound seals at head, jambs and door bottoms at mechanical rooms, engine generator room and elevator equipment rooms as or otherwise indicated.
4. Smoke Gasket: - Install smoke gaskets at heads and jambs for fire rated doors, stair doors, doors at chases and as indicated on drawings.
5. Door Sills: - Install door sills at each exterior door.

6. Raincap: - Install a raincap at each exterior door which is not under a canopy or other cover.

**END OF SECTION**