ATLANTA AIRLINES TERMINAL COMPANY

HARTSFIELD-JACKSON ATLANTA INTERNATIONAL AIRPORT

CONSTRUCTION GUIDELINES

COMPANY HISTORY

Atlanta Airlines Terminal Company was officially formed on September 5, 1979 by several major airlines, the principal shareholder being Delta Air Lines. AATC was established for the primary purpose of operating and maintaining the Central Passenger Terminal Complex at Hartsfield- Jackson Atlanta International Airport. AATC's responsibilities include: heating, ventilation, air conditioning, general building maintenance, fire alarm and suppression system maintenance, vertical transportation maintenance, utility management, cleaning services, refuse removal, window cleaning, pest control, public address system maintenance, ramp sweeping, snow and ice removal services within the Non-Licensed Vehicle Roadway (NLVR) designated ramp and employee parking areas.

MISSION STATEMENT

We resolve to deliver "world class" performance in airport facility maintenance and operations. Our passion for innovation, responsiveness and excellence will provide outstanding value to our shareholder and our customers.

CONSTRUCTION GUIDELINES

1 AATC LOGISTICS ASSISTANCE

1.1 KEY CHECK-OUT PROCEDURES

Keys will only be checked out to persons who possess a valid "ATL" badge and who have been previously authorized by their managing entity. To authorize your agents to check out keys to utility closets, a Key Check-out Authorization Form must be completed and submitted at the AATC Communication Center. Persons checking out keys will be required to leave their driver's license until the key(s) are returned.

1.1.1 LOST KEYS

The authorized agent will be responsible for all checked out keys and must agree to reimburse AATC for costs associated with lost keys and/or key cores which need replacing due to this process.

1.2 ELEVATOR USAGE

Material deliveries and some construction use are limited to the Freight Elevators Only. The use of passenger elevators is prohibited and could result in liability for property damage.

1.3 STORAGE OF EQUIPMENT

No equipment and/or supplies can be stored in any electrical or mechanical rooms. These rooms must remain at a cleanliness level that is equal or better to the level prior to work starting. All costs incurred by AATC for cleaning, removal of equipment and/or supplies will be billed to the contractor.

1.4 LIFT STORAGE

Lift storage must be coordinated with AATC and the Department of Aviation. Lifts must be barricaded and stored away from passenger traffic.

1.5 TRASH REMOVAL

The following are some companies currently having ATL badges to access the airport property for trash removal:

Waste Management www.wm.com
Republic Services www.republicservices.com

Placement for any new construction open tops/dumpsters must be coordinated with DOA.

1.5.1 COMPACTORS/DUMPSTERS

Please do not block compactors and dumpster. This prevents the scheduled trash removal. Dumpsters pick up typically occurs between midnight and 0500 hours.

1.6 AIRPORT ACCESS

Access to the airport property is through Guard Post #70. Guard Post #70 is located 1485 Sullivan Road Atlanta, Ga 30337. Material deliveries are also made at Guard Post #70.

1.7 CONSTRUCTION WORK SCHEDULE

Each contractor must provide a work schedule to AATC prior to work beginning and notify AATC a minimum of 24 hours prior to demolition or construction start. Schedules **must** be emailed to shutdowns@aatc.org.

1.8 ADDED STOCK

At the close of a project, attic stock materials are usually required and should be turned over to the proper authority. Below are the requirements if your project requires AATC to receive added stock materials.

1.8.1 ACCESS

Requires an AATC escort and must be scheduled at least one week in advance with the AATC Contractor Liaison @liaisons@aatc.org.

1.8.2 TURNOVER

The project team or contractor must provide the following for turnover of Added Stock materials:

1. A transmittal of items to be received prior to delivery
2. Transportation of any materials
3. Identification/Label on each package (i.e. pallet, box, roll, or piece of material) to be received
    a. Labeling must consist of the following:
        i. Date
        ii. Project Name
        iii. Quantity
        iv. Project Number
        v. Product Name
        vi. Location(s) of product installed

1.9 CLEANING

There are no cleaning services for spaces under construction. Each contractor is responsible for cleaning their work space. Floor mats are to be used inside spaces under construction. Restrooms and other facilities must be prepared for passengers.

1.10 AATC SUBCONTRACTORS

AATC subcontractors and may be contacted through our communications center **only**.

1.11 IMPORTANT AIRPORT NUMBERS

AATC 24 hour Dispatch Communication Center ..... (404) 530-2112
AATC Shift Supervisors .... (404) 530-2112
AATC Fax Number..... (404) 530-2106
Atlanta Fire Department ..... (404) 530-6639
Atlanta Police Department..... (404) 530-6630
Airport Security..... (404) 530-6667
Technical Campus.....(404) 530-5500

2 AATC DOCUMENT CONTROL SERVICES

AATC Document Control offers the following services: These forms are available through the AATC website www.aatc.org

2.1 ARCHITECTURAL FINISHES REQUESTS

AATC may, at its discretion, make available finishes (for a fee) from on-hand inventory for project completion in and adjacent to common use areas. Floor, wall and specialty ceiling components are the most common examples but others may be available. Only if on-hand quantities are above minimum levels required for M&O responsibilities will AATC make finish components available for purchase. AATC is not obligated to provide on-hand inventories required for project completion.

3 UTILITY SERVICE REQUESTS

AATC requires a minimum of 5-business days and up to a maximum of 15 days notification for utility service requests that involve tie-ins/service interruptions to airport systems and exclusive spaces. Reviewed service interruptions must be conducted between the hours of 11:00 p.m. - 5:00 a.m; drive lane closure must be conducted between the hours of 12:00 a.m. - 4:00 a.m. Sunday through Thursday. (NO DAYTIME HOURS). The 5 days notification begins upon the submission of a completed and correct request. Requests may be sent to shutdowns@aatc.org.

It is the tenant, owner and/or general contractor's responsibility to coordinate with immediate affected entities and get approval from these entities for the submitted Utility Notification. Verbiage such as "coordinated with XXX (name of the entity) and received approval" must be included in the Utility Notification. AATC will review the request and verify that the request is properly submitted and that there is no conflict with AATC operation and maintenance scope. After the screening is completed, AATC will forward the request to tenants for review. Tenants will review for conflicts within their own operations and notify AATC immediately if the shutdown should be denied for any reason.

Utility Service Requests are required for, but are not limited to: roof access, roof work, ceiling access, switchgear room access, electrical system shutdown, electrical system activation, mechanical systems shutdown, sprinkler shutdown, fire alarm impairment (system or device), water system shutdown, coring, lane closure, and escalator and elevator interruptions.

All projects requesting service requests must be Reviewed by the Department of Aviation Planning and Development and permitted by the City of Atlanta. A building permit is not required for repair work with a total valuation of less than **$2,500 ;** provided such work is otherwise lawful. Repair work means in-kind repairs which do not add to, alter, or otherwise modify the building or structure.

1. All service requests must be submitted by the general contractor or authorized representative.
2. All life safety system requests must provide contractor information and license certification number.
3. The contractor cannot commence work without an email confirmation of the Reviewed Utility Service Request.
4. Each request is only valid for two weeks. For work extending beyond two weeks a new request must be submitted.
5. The contractor assumes all liability for any repairs, disruptions, loss of service, etc. associated with the utility service request. AATC assumes no liability for work performed by the contractor.
6. Contractors can request assistance with locating Utility Rooms by submitting a Utility Service Request. This service can only be performed on Wednesday nights at a rate of **$55.86** per hour.
7. Prior to any service / work beginning, all contractors must check in at the AATC Comm Center @ (404) 530-2112. Conversely, all contractors must check out (daily) with the Comm Center when the work is done and before leaving the site.

3.1.1 UTILITY SERVICE REQUEST SCHEDULE

If submitted on…		**The earliest scheduled date is...**
Saturday-Monday 4pm	=	Sunday PM
Tuesday 4 pm	=	Sunday PM
Wednesday 4 pm	=	Monday PM
Thursday 4 pm	=	Tuesday PM
Friday 4 pm	=	Wednesday PM

3.1.2 FEES

Utility service requests that require AATC maintenance assistance will be charged at the actual hours spent and the current labor rate plus a 20% overhead fee. Unless AATC is notified of a cancellation no later than 12 hours prior to the scheduled shutdown, contractor will be billed for a "no show" fee of **$500.00.** All costs shall be the responsibility of the contractor. Failure to pay all applicable fees may delay future Utility Service Request.

3.1.3 UTILITY SERVICE REQUESTS PROCEDURES

3.1.3.1 ELECTRICAL SYSTEM UTILITY REQUESTS

All requests must include a detailed description of the affected electrical service including all breakers and switches that will be disconnected and the electrical loads that will be interrupted. Contractors must provide the nomenclature ,the room number(s) and submit copies of the panel directories associated with the request. The Contractor is required to remain on site until the verified system are restored. Verification will start at 5:00 am.

3.1.3.2 FIRE PROTECTION SYSTEM UTILITY REQUESTS

All fire alarm device/system shutdowns must have an independent contract with AFA. AATC's policy REQUIRES that AFA be contracted to tie-in and connect all devices/systems and that all contractors must coordinate activities with AFA prior to submitting a request. In addition, AFA must purchase all equipment, fire alarm panels, and perform programming and testing. The electrical subcontractor must provide all cable and labor to install cable and devices. The contractor is REQUIRED to remain on site until the devices are restored and proper operations are verified. Verification will start at 5:00 am.

3.1.3.3 SPRINKLER SHUTDOWN REQUESTS

1. All sprinkler work (wet or dry) must be performed by a contractor with a current State Certification number.
2. Sprinkler shutdowns are limited and are on a first come first serve basis.
3. All sprinkler work is scheduled nightly from Sunday night through Friday morning. Wednesday is dedicated for inspections and testing. Shutdowns will not be scheduled for Wednesday nights.
4. Utility Service Request form identifying the correct sprinkler valve(s) affected **must** be submitted and approved, otherwise work will not be performed, and contractor will assume all AATC costs.
5. A Wet Sprinkler System shutdown cannot be performed when the temperature is less than 35 degrees Fahrenheit unless directly drained into a floor drain (inside the building), manhole, etc. This will be determined on a case by case basis. NO water should be drained onto the ramp when the temperature is less than 35 degrees Fahrenheit.
6. The Contractor is required to remain on site until verified system are restored. Verification will start at 5:00 am.
7. For new sprinkler heads; provide drawing(s) that identify the locations.
8. For the relocation of sprinkler heads; provide drawing(s) that identify the current and future locations.
9. Recalculations are required for 10 % increase in heads or area coverage.
10. Fees for any contractor requiring sprinkler services will be billed accordingly at **$55.86** per hour.

3.1.3.4 HVAC SYSTEM UTILITY REQUESTS

The Contractor is required to remain on site until verified system are restored. Verification will start at 5:00 am.

1. Any interruptions to the BMS communications bus require a Utility Service

Request form. Any required BMS bus repairs that result from contractors' work will be billed accordingly at **$55.86** per hour. Any additional third-party service required to restore BMS service will be billed at cost plus 20%.

2. All return air intakes must be covered with MERV 8 filter media during allphases of construction.

3. List mechanical equipment number(s), room number of equipment, and name of area(s) or location(s) affected.

3.1.3.5 PIPING SYSTEM UTILITY REQUESTS

All requests must include a detailed description of the affected piping service including all valves that will be closed and the operational services that will be interrupted. The Contractor is required to remain on site until verified system are restored. Verification will start at 5:00 am.

3.1.3.6 ROOF WORK UTILITY REQUESTS

All roof work must be coordinated and approved by AATC. An AATC authorized roofing company must be utilized for any proposed roof work. Please submit the following for approval.

1. A roof work authorization form
2. A site location map identifying the work area.
3. Cut-sheet of equipment being installed.
4. Pre-work photos of the area with tape or caulk markings.

AATC Contractor Liaison:

a. Verifies that the roofing contractor scheduled for work is currently certified to work on designated system.
b. Submits a request to the roof manufacturer for authorization ofwork.

5. Post work photos of the area at completion.

The integrity of the roof should remain the same after the installation and any penetrations in the ceilings must be fire proofed.

3.1.3.7 CORING UTILITY REQUEST

All penetrations must be coordinated and reviewed by AATC. The Contractor is required to remain on site until verified system are restored. Verification will start at 5:00 am. All penetrations, must be sealed with fire rated barrier.

There are three types of penetration:

a. Floor penetration
b. Roof penetration
c. Wall penetration

Please submit the following for review:

1. Utility Service Request form identifying the type of penetration and tenant below.
2. Utility Service Request form for ceiling access if there is penetration through a ceiling below.
3. Ultrasound report (scans) of the work area. It is the responsibility of the General Contractor to review and verify that there are no obstructions in the affected area
4. Cut sheets of equipment(s) or material(s) being installed (if applicable)
5. Site location drawing identifying the work area
6. Pre-work photos of the area being penetrated, the opposite side of the penetration location and inside the ceiling if applicable.
7. Post work photos of the area being penetrated, the opposite side of the penetration location and inside the ceiling if applicable
8. Quantity and depth of penetration in inches
9. Contractor must have a person in the space below monitoring while work is being conducted

3.1.4 HOT WORK REQUESTS

All hot work must be authorized by AATC Contractor Liaison. Hot work is defined as:

1. Welding
2. Brazing
3. Saw cutting or grinding metal

The following must be submitted for approval.

1. Hot work permit (Issued by the Atlanta Airport Fire Department - yearly)
2. Hot work application (available from AATC Contractor Liaison)
3. Contractor must call the AATC Communication Center at 404-530-2112 prior to starting Hot Work and at the completion of Hot Work.
4. Contractor must perform Fire Watch at a minimum of two (2) hours after Hot Work is completed. Contractor must call the AATC Communication Center at 404-530-2112 every hour during Fire Watch.

Hot work permits must be purchased from the Atlanta Airport Fire Department prior to start of hot work. The AFD office is located at 720 Doug Davis Drive, Hapeville, GA 30354. A copy of the permit must be on file with AATC Contractor Liaison in order to receive a hot work permit “tag”. These tags will be issued by AATC and only for one occurrence of hot work. The permit tag must be visible at the job site and must move with all hot work locations.

3.1.4.1 OTHER UTILITY REQUESTS

Other utility requests include the following:

1. Lane Closures
   Consist of Concourse Drive Lanes and Ramp Access Roads Only. Terminal curbside and Non-SIDA Lane Closures should be reviewed by Landside Ops and the Atlanta Police Department.
   Identify the following:
   a. Inbound or Outbound lanes
   b. Direction - North / South / East / West
   c. Starting at midnight until 4:00 am
   d. Flagmen will be in place to provide signage and redirect traffic

2. Flood Test
   a. Any space such as concession and public restroom that is being flood tested must be monitored 24 hours prior to, during and after the test (3 days minimum).

b. The owner of the space is responsible for all cost associated with leaks and will be billed accordingly for any damages.
c. Contractor must contact occupants in the space below prior to and after performing flood test.

3. Vertical Transportation
   a. All vertical transportation (escalator, elevator, moving sidewalk) requests will be completed by KONE. Requesting contractor must have an independent contract with KONE. All requested activity will be coordinated with KONE prior to submitting.
   b. All units will be turned off by KONE prior to start of work and back on after completion of work.
   c. Flagmen must be in place to provide signage and redirect traffic during shutdown.

3.1.5 ACCESS TO HIGH RISK AREAS

1. In order to guarantee the Integrity of the Facility at all times AATC will require prior notification and request for gaining access to certain portions of the facility.

2. An escort will be required for high risk areas. High Risk Areas are defined as sensitive locations housing key equipment and systems vital to the operation of the facility.

3. Submit a Utility Service Request form identifying area to access.

4. High Risk Areas include but are not limited to:

   - Central Utility Plants
   - Main Equipment Rooms
   - Sub Stations
   - Georgia Power Utility Vaults
   - Main Switchgear Rooms

5. Fees for any contractor requiring escort services will be billed accordingly at **$55.86** per hour.

3.1.6 ROOF ACCESS

AATC requires all roof access be coordinated through AATC. Requests must be sent to roofing@aatc.org. All roof access must be coordinated through the AATC Contractor Liaison. Procedures are as follows:

1. Submit a Roof Access Request form identifying the space name, spacenumber and/ or nearest gate number.

2. AATC Roofing Maintenance Provider may wait up to fifteen minutes after the scheduled time before departing the location. Wait time will be upon our provider discretion. A new roof access will need to be re-submitted if time lapse.

3. AATC staff will provide Emergency Access upon availability of personnel. Supplementary fines will be implemented for all Emergency Roof Access. (See Roof Access and Roof Work Fees refer to 3.1.2).

4. Roof Access cannot be provided during inclement weather when the threat of lightning, high winds, rain, sleet or snow is present. Roof access will not be permitted if it is actively raining or the percentage chance of rain is higher than 30% (reference AccuWeather). This will be determined on a case by case basis and is up to the discretion of the escort.

3.1.7 CEILING ACCESS

All personnel requiring access to the CPTC (Main Terminal, T, A, B, C, D, E, F and the APM Mall) ceiling systems must coordinate with the AATC Contractor Liaison. Unauthorized access or access by untrained individuals will result in the manufacturer's recertification of the ceiling system in question, with all costs associated payable by the party at fault. Any action, with or without authorized access to ceiling systems, that affects manufacturer's warranties will result in recertification of the ceiling system in question, with all associated costs payable by the party at fault.

1. All Ceiling Access Requests will need to be coordinated with DOA DIT Department prior to AATC's review. You may contact DIT via email at nocoperators@atlanta-airport.com or at 404-209-5550 (verify is contact email and number is correct). Once cleared with DOA DIT, please forward email from them to proceed to liaisons@aatc.org. For the Main Terminal Access, contractor must also provide Verification of Completion of AATC training on the ceiling system.

2. If contractor needs to remove large portions of ceiling system over a period of time, contractor must properly secure all remaining fixtures that are temporarily supported and tag each item to verify that it has been checked and is secure.

3.1.7.2 TRAINING

Access to the Main Terminal Metal Ceiling System requires training. Contact AATC Engineering at liasons@aatc.org for a current schedule.

Accessing the new ceilings on Concourse T-South, A, B, C and the AGT may require engaging the installer. Currently access protocols for these ceilings have yet to be determined. Please contact the AATC Contractor Liaison for information on accessing these ceiling systems.

Access to the ceilings in Concourse T-North, D and E does not require training, however, notification prior to access is required. To coordinate access, contractors must contact AATC at liaisons@aatc.org

4 CONSTRUCTION TURNOVER METHODS, GUIDELINES ANDREQUIREMENTS

4.1 PRE-CONSTRUCTION

4.1.1 DOCUMENT SUBMITTAL AND REVIEW

1. No less than 30 days before site work begins, project manager / contractor must submit drawings and documentation to projectmangers@aatc.org for review and feedback. This documentation should include, but it is not limited to:

   - Project scope narrative, including project purpose, and critical equipment installed.
   - Project schedule, including site preparation / staging, demolition, closure of ceilings and walls, critical utility tie-ins, equipment activation, commissioning, substantial completion, occupancy, and closure.
   - Construction drawings, including all Architectural and Mechanical / Electrical/Plumbing construction documentation.

2. AATC will have no less than 7 days to review drawings for questions and comments to be submitted to the project manager /contractor.

3. The project manager / contractor will reply to questions and comments in no more than 7 days and will make every effort to accommodate AATC needs and concerns.

4.2 DURING CONSTRUCTION

The following are basic guidelines for construction methods during construction. These guidelines are not comprehensive and do not supersede local building codes or design documents. All work performed must adhere to published DOA standards and any applicable codes.

4.2.1 ELECTRICAL WORK

4.2.1.1 NEW INSTALLATIONS

1. Minimum size for EMT/conduit is ¾ of an inch
2. If EMT is used, only compression type fittings are permitted.
3. Under no circumstances can set screws be used.
4. MC cable, BX cable, or armored cables assemblies are not allowed for permanent installations.
5. All electrical installations should meet the DOA design guidelines.

4.2.1.2 EXISTING CONDITIONS

Contractor shall notify AATC of any existing electrical work not up to current code or Department of Aviation standards.

4.2.1.3 CONCESSION ELECTRICAL WORK

All concession power must be fed from a concession's switchboard. The disconnect on the concession's switchboard must be labeled with the concession name and space number.

4.2.1.4 CONCESSION METERING

All concessionaires are required to provide an electrical meter for monitoring their electrical use.

4.2.1.4.1 METER CONVERSION NEW BUILD-OUTS AND CONCESSION KIOSKS

All concessions (existing, new build outs, new kiosks, and renovations) meters **must be**…

1. Tied into the airport building maintenance system (BMS).
2. All concessions (existing, new build outs, new kiosks, and renovations) except meters that are not tied directly into a Siemens concessions metering switchboard or metered panel must be converted to the digital display electrical meter that are BACnet compatible and tie into the airport building management system. EMON DMON 3200 minimum, meets this requirement.
3. All concessions (existing, new build outs, new kiosks, and renovations) that will be installed on Concourses C, D & F will be tied directly into a Siemens concessions metering switchboard or metered panelboard. Electrical Engineer must contact AATC Concessions Coordinator (liaisons@aatc.org) prior to design, to ensure proper location and application is properly coordinated and associated Fees are determined.
4. Electrical Contractor shall contact AATC Concessions Coordinator (liaisons@aatc.org) prior to installation to verify Layout, Equipment Location, and for AATC-Siemens Power Monitoring Equipment and installation pricing from an AATC Authorized Installer and scheduling.
5. All concession power must be fed from a concession switchboard or concession panelboard. **Please identify panel correctly.**
6. Both concession meters and breakers must be identified, labeled with the

concessions name and space number and communicated to AATC Program Management prior to opening the concession.

7. Please contact AATC Facilities Project Coordinator at liaisons@aatc.org with the closing date of the closing concession and the current/final meter reading. Please notify AATC Program Management with the activation date, meter number and location of the new meter.
8. Please ensure that all Panel boards, Transformers and Disconnects have a permanent label listing the panel and breaker number. Consult AATC for Panel Directory format and Conduit Labeling.
9. Remove all abandoned junction boxes, raceways, electrical conduit and data cables back to point of service.

4.2.1.4.2 METER LABELING

All concession meters must be properly labeled with the concession name and space number.

4.2.1.4.3 FINAL METER READING AND METER START-UP

Contractors must document and submit to AATC's Facilities Project Coordinator at liaisons@aatc.org, the date and final meter reading when a space closes for renovation. After renovations contractors must test the meter for operation and contact the Program Department with the start-up date of the new meter.

4.2.2 HVAC WORK

4.2.2.1 ADDITIONS AND DELETIONS

The addition or deletion devices/equipment/sensors or other inputs to/from the BMS system or associated field devices require the following:

1. Additions
    a. New data points must follow naming conventions of like points on same supervisory controller
    b. New data points must have complete descriptions
    c. If on an existing controller, all programming/logic must be backed up prior to addition of new point
    d. Notification must be sent to AATC liaisons@aatc.org prior to and upon completion of addition of new points or modification of existing points to include full network address of point/field device and a screen shot from the BMS of new point upon completion
    e. Database on ADX/ADS must be updated to include new edits
    f. All logic or programming that requires or would need to incorporate new data points shall be updated and backed up
    g. BMS graphics must be updated

2. Deletions
    a. For an existing controller, all programming/logic must be backed up prior to deletion of points and prior to demo
    b. Prior to Demo, notification must be sent to AATC liaisons@aatc.org (confirm) identifying field devices or data points that are going off line, to include network addresses
    c. Field devices/data points shall be removed from the system databases (Server & Supervisory level) and backed up
    d. All logic or programming that requires or uses data from deleted devices/data points shall be updated and backed up
    e. Upon completion, notification must be sent to AATC liaisons@aatc.org (confirm) to include screen shots and a list of all points removed and logic edited

If no floor plan exists for building level and project is single tenant, no graphic update is required.

4.2.2.2 HVAC EQUIPMENT

1. Demolition of terminal boxes
    a. Demolition of sensors and field devices associated with terminal boxes shall be coordinated with to AATC liaisons@aatc.org (confirm) (see 3.1.3.4 and 4.2.1.4.1 for BMS requirements) for salvage of BMS equipment. Please allow for 72 hours for retrieval. If after 72 hours has expired AATC has not retrieved the items please discard them.
2. HVAC tie-ins
    a. AATC **must** be notified of affected system (air or water) and duration. The project shall provide documentation of impacts to associated system (load added/removed) and demonstrate that system balancing, set points, and programming have been adjusted accordingly (i.e. TAB, commissioning, etc)

4.2.2.3 CONCESSION HVAC EQUIPMENT

1. All concession roof HVAC equipment must be labeled with the concession space number. Engraved name plates must be legible and adhered near the base of the equipment.
2. Rooftop exhaust fans must be located a minimum of 10’ away from the air intake of roof mounted units (RMU’s).

4.2.2.4 TEST AND BALANCE REPORTS

Test and balance must be performed by an independent test and balance company certified by Associate Air Balance Council (AABC) or National Environmental Balancing Bureau (NEBB). AATC requires a certified Pre-Testing Adjusting and Balance (Pre-TAB) report **prior** to the start of a project and Post-TAB report at the completion of a project to validate design parameters have been met without system impacts.

4.2.3 FIRE PROTECTION WORK

4.2.3.1 TIE-INS

Fire alarm system tie-ins must be coordinated, tested and reviewed by AATC and the Atlanta Fire Department.

4.2.3.2 FIRE ALARM DEVICES

1. All conduit, junction boxes, and covers must be painted red.
2. Removal and replacement of devices must be performed by AFA Protection.
3. The contractor must have an independent contract and coordinate with AFA Protection prior to submitting a Utility Service Request. This request will not be reviewed until the contractor includes the AFA Protection contact and information as proof of coordination.

4.2.3.3 CONCESSION FIRE PROTECTION WORK

New concession build-outs are required to tie into a new fire main.

4.2.3.4 FEES

All contractors should estimate a fee to include 6-8 hours for each sprinkler system shutdown. Contact AATC Accounting for current rates.

4.2.4 ROOF WORK

Roof work is defined as:

1. Roof coring
2. Repair of membrane
3. Replacement of membrane
4. Service, installation, replacement or abandonment of HVAC units, satellites and antennas. All abandoned equipment must be removed.
5. Once any mechanical work is complete on the roof, a roofing contractor is required to inspect the area.

4.2.4.1 ROOF GUIDELINES

1. An AATC authorized roofing company is required for any proposed roof work.(See Roof Work guidelines at aatc.org)
2. Personal Protective Equipment (PPE) is required for all edge work.
3. Protect your area of work with boards or drop clothes.
4. Do not put any tools or sharp objects directly on the roof.
5. Use walk pads when walking on the roof.
6. Step over all expansion joints or use ramps when walking on the roof.
7. Use ramps to roll any equipment over expansion joints.
8. Do not leave materials and/or debris on the roof.
9. Do not store materials in the roof mounted units or the stairwells.
10. Do not smoke on the roof.
11. Report any problems on the roof to the AATC Communications Center.
12. Clean PVC and TPO roofs with the following products only:
    1. Simple Green
    2. 409

4.2.5 LIGHTNING PROTECTION REQUIREMENTS

New equipment installed on any roof section will require lightning protection. All installations and modifications must be supervised by a UL listed installer. Contact AATC Contractor Liaison for installation companies.

4.2.5.1 LIGHTNING PROTECTION GUIDELINES

Primary metal bodies (conductance) located about the roof (exhaust fans, condenser units, RMU's) **must** be bonded with full size conductor and fitted with air terminals if they are as high, or higher, than the adjacent air terminals, unless they are located entirely within a "zone of protection" as defined by UL96A standards.

Secondary metal bodies (inductance) located about the roof (flashings, gravel stops, roof drains, soil pipe vents, louvers, door frames) within six feet of the main conductor or bonded body must be interconnected with secondary conductor as defined by UL96A standards.

A reviewed bimetallic transition must be used anywhere that dissimilar metals might contact each other. Bare copper cannot be used on aluminum and vice- versa.

4.2.6 OVERHEAD WORK (ESCALATORS/SCAFFOLDING)

When conducting overhead work it may be necessary for escalators to be taken out of service. AATC requests the following:

1. Contractor will place plywood on escalator steps and place scaffolding on plywood.
2. Escalators will only be turned on and off by AATC or KONE.
3. Escalators will be protected at all times while overhead work is being performed.
4. Escalators well be off only when actual work is being performed above them.
5. Contractor will provide signage for passengers.
6. Contractor will provide Flagmen to redirect traffic during this shutdown.

4.2.7 OBSERVATIONS/WALK-THROUGHS

AATC reserves the right to conduct walk-throughs of work sites during demolition, construction and commissioning. AATC will schedule walk-throughs with the Project Manager or Contractor and will provide written documentation to the Project Manager of adverse conditions that require attention.

4.2.8 DEMOLITION OBSERVATIONS/WALK-THROUGHS

During demolition walk-throughs AATC will principally focus on ensuring that existing services are not disrupted or damaged and that unsafe conditions do not exist. AATC will document discrepancies and forward in writing to the Project Manager. AATC expects that discrepancies that affect existing services be resolved in a timely fashion with an agreed-upon solution. Further, AATC expects that all discrepancies be resolved prior AATC's acceptance of the project at completion.

4.2.9 CONSTRUCTION OBSERVATIONS/WALK-THROUGHS

Construction walk-throughs will principally focus on ensuring that existing services are not disrupted or damaged, that unsafe conditions do not exist, gaining familiarity with new equipment and design, and validating construction methods. AATC will document discrepancies and forward in writing to the Project Manager. AATC expects that all discrepancies be resolved prior AATC's acceptance of the project at completion.

4.3 SUBSTANTIAL COMPLETION

The Project Manager shall notify AATC in writing when they are ready for a substantial completion walk-through.

4.3.1 SUBSTANTIAL COMPLETION OBSERVATIONS/WALK-THROUGHS

Substantial Completion walk-throughs will principally focus on validating that construction operations and newly installed equipment does not negatively impact normal maintenance or facility operation and that it is compliant with applicable regulatory requirements. AATC will document discrepancies and forward in writing to the Project Manager. AATC expects that all discrepancies be resolved prior to AATC's acceptance of the project at completion.

4.4 100% INSPECTION

The Project or Construction Manager will notify AATC in writing when the project is ready for a 100% inspection. AATC will identify any outstanding issues on a punch list and provide a completion date that these items are to be resolved.

4.5 FINAL ACCEPTANCE

AATC will accept a project only after all issues identified during walk-throughs have been resolved, and after all documentation has been received and accepted. All requested

documentation and resolution of walk-through findings must be provided a minimum of two weeks prior to AATC acceptance of new installations. AATC will formally notify the Project or Construction Managers when such acceptance has taken place.

4.5.1 RESOLUTION OF OBSERVATIONS/WALK-THROUGHS FINDINGS

1. AATC will conduct walk-throughs at various stages in the project. AATC expects that projects either resolve identified issues or come to a mutually agreed upon solution with AATC.
2. If a mutually agreed upon solution is not reached between projects and AATC to resolve walk-through findings, AATC reserves the right to resolve issues using contracted resources, the cost of which will be billed back to project end-users.

4.5.2 DOCUMENTATION

AATC expects that critical project documentation be submitted in one package. This documentation includes, but is not limited to:

4.5.2.1 AS-BUILTS

As-builts should be provided to AATC

1. Two CD's of the drawings in Adobe PDF and CADD

4.5.2.2 Warranty Details

4.5.2.3 SYSTEM CONFIGURATION / PROGRAMMING DOCUMENTATION

Contractor shall provide soft copy of system configuration files on CD ROM or jump drive. Such configuration includes, but is not limited to:

1. PLC programming / ladder logic files
2. GUI configuration files
3. Loop controller programming logic (such as function block configuration) files
4. JCI BMS configuration files that do not reside on the system server
5. Sequences of Operation

4.5.2.4 COMMISSIONING REPORTS

4.5.2.5 TEST AND BALANCE REPORTS

4.5.2.6 CLOSE OUT PROCEDURES

4.5.2.7 OPERATION & MAINTENANCE DATA

4.5.2.8 START-UP & COMMISSIONING REPORTS

4.5.2.9 TABLE OF EQUIPMENT

All data must be field validated to ensure data is accurate to actual installation (schedules from design drawings are not acceptable), and must be provided in a Microsoft Excel document. Data should be presented in table format, with no merged cells. Columns should only contain a single data point, and separate tables should be created for each unique class of asset. Data should include, at minimum, the following details for each asset (by column):

1. Asset ID: As shown on as-built drawings
2. Asset ID: As shown on field labeling
3. Asset class/type (i.e. AHU, VAV, Panel, etc)
4. Installed location: Building

5. Installed location: Level
6. Installed location: Nearest column line (east/west)
7. Installed location: Nearest column line (north/south)
8. Installing project number
9. Manufacturer
10. Model Number
11. Serial Number
12. Other name plate data/characteristics (add columns as needed to capture details such as motor frame, RPM, tonnage, etc; will vary by asset class)
13. Commission Date
14. Warranty Date
15. Initial purchase price/value
16. Design performance data (add columns as needed; will vary by asset class)
17. Drawing/sheet reference

5 CONSTRUCTION CONTRACTED BY AATC

When contracted with AATC the following applies:

5.1 CERTIFICATE OF LIABILITY INSURANCE REQUIREMENTS

As a contractor of AATC the following insurance coverage shall be carried during the term of the project.

- Workmen's Compensation Insurance under the laws of the State of Georgia and Employer's Liability Insurance with limits of not less than $100,000 each accident, covering all Contractors' employees engaged in any work hereunder.

- Comprehensive Liability - Up to $1,000,000 dollars ($500,000) single limit per occurrence including:

Bodily Injury Liability - All sums which the company shall become legally obligated to pay as damages because at any time resulting there from, sustained by any person other than its employees and caused by occurrence.

Property Damage Liability - All sums which the company shall become legally obligated to pay as damages because of injury to or destruction of property, caused by occurrence.

Professional liability, premises and operations, independent contractors, or product liability.

- Automotive Liability Insurance covering all automotive units used in the work with limits of not less than $10,000,000 each person and $10,000,000 each accident as to bodily injury or death, and $10,000,000 as to property damage.

    - Certificate Holder box must state the following:
      City of Atlanta, Department of Aviation
      Hartsfield-Jackson Atlanta International Airport
      PO BOX 20509
      Atlanta, GA 30320

    - Special Previsions box must state the following:
      "AATC, its shareholders, the Airlines, the Department of Aviation and the City of Atlanta are listed as Additional Insured with regards to the General Liability policy and Automobile Liability policy.

5.2 SPONSORSHIP FOR AIRPORT BADGES

Every vendor/contractor doing business with the Airport is required to have a sponsoring company. To sponsor a company AATC must have direct business with that vendor/contractor. They must meet the insurance requirements and authorize one point of contact from their company by letterhead. Note: If appointed authorized signatory is new to doing business at the airport, they must attend DOA Security Department New Company Orientation Training. Please coordinate with the Security Department for scheduling.

5.3 CONSTRUCTION WORK HOURS

Construction work hours are 2300 hours to 0500 hours beginning Sunday night through Friday morning. Any variation requires prior approval from AATC and other airport stakeholders.