

## TECHNICAL SPECIFICATIONS – Temporary Barriers and Enclosures

### SECTION 015613 - TEMPORARY BARRIERS AND ENCLOSURES

#### PART 1 - GENERAL

##### 1.1 SECTION INCLUDES

- A. Temporary construction barriers, enclosures and passageways.
  - 1. Dust and debris barriers.
  - 2. Construction containment.
  - 3. Security barriers.
- B. Protection of completed Work.
- C. Removal of construction facilities and temporary controls.

##### 1.2 CODES AND REGULATIONS

- A. State and local code requirements.
- B. Fire Regulations: Comply with state and local requirements to maintain ASTM-E84 rating on all components of the system. Additional code requirements may apply per NFPA 101, the IBC or other local or national codes.
- C. Safety Regulations: Comply with requirements of all applicable Federal, State and local safety rules and regulations. Contractor shall be solely responsible for jobsite safety.
- D. Barricades and Barriers: As required by governing authorities having jurisdiction, provide substantial barriers, guardrails and enclosures around Work areas and adjacent to embankments and excavations for protection of workers and the public.

##### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For temporary barriers and enclosures.
  - 1. Include plans, elevations, sections, attachment details[, **and numbered panel installation sequence**].
  - 2. Indicate stacking and operating clearances. Indicate location and installation requirements for hardware and track, blocking, and direction of travel.
- C. Samples for Selection: For each type of exposed material, finish, covering, or facing.
  - 1. Include Samples of accessories involving color selection.

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### 1.4 INFORMATIONAL SUBMITTALS

- A. Product Test Reports: For each barrier assembly, for tests performed by a qualified testing agency.

### 1.5 PROTECTION OF EXISTING CONDITIONS

- A. Protection of Adjacent Facilities: Contractor shall restrict Work to limits indicated on the Drawings and as specified in Section 011000 “Summary”: Protect existing, adjacent facilities from damage, including soiling and debris accumulation, dust and airborne contamination caused by construction activities.
- B. Protection of Existing Furniture, Fixtures and Equipment: As applicable, provide temporary enclosures, barriers and covers to protect existing furniture, fixtures and equipment remaining in Project area during construction.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Suggested vendor to meet criteria: LiteBarrier™ from STARC Systems Inc– 112 Orion Drive, Brunswick, ME 04111. 844-596-1784 Starcsystems.com

### 2.2 PERFORMANCE REQUIREMENTS

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

### 2.3 TEMPORARY BARRIERS AND ENCLOSURES

- A. Temporary Partitions: Erect and maintain rigid panel temporary partitions and temporary closures to limit dust and dirt migration, including migration into existing facilities; to separate areas from dust, mold, odors and noise and to maintain security.

- 1. Prefabricated modular rigid wall system:

- a. Wall Panel modules:

- 1) Lightweight durable FRP panel, permanently bonded to the frame.
    - 2) Anodized aluminum frame with integral tongue and groove joint / connection details
    - 3) Adjustable telescoping height from 6’-10” to 10’-3”. Optionally extend heights to 13ft
    - 4) Concealed height locks.
    - 5) Lift and Drop module connections – require no external hardware for connections
    - 6) Multiple widths of panels and doors to meet layout requirements
    - 7) Top gasket to meet ceiling

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- 8) Bottom gasket to avoid marking floor.
  - 9) '360 degree' T-slot attachment system.
  - 10) '360 degree' Ceiling grid clip.
- b. Negative Air Panel modules:
- 1) Features of the Wall Panel Modules plus
  - 2) Integrated pressure ports for differential pressure monitoring.
  - 3) Supports mounting for optional differential pressure monitor.
  - 4) Exhaust port with Standard 12" dia duct collar, integral radial shutter and diffuser grille or plate.
- c. Doors:
- 1) Hinged Doors:
    - a) Features of the Wall Panel Modules Plus
    - b) Multiple widths
    - c) Superior 4 way hinge system: Swing in / out / left / right.
    - d) Adjustable threshold and sweep.
    - e) Optional removable threshold for passage of heavy carts / gurneys
    - f) Modular "Over the Door" kit for airtight flexible panel above the door
    - g) Grade 3 hardware
    - h) Lock hardware Options:
      - Electronic keypad options
  - 2) Sliding Doors:
    - a) Features of the Wall Panel Modules Plus
    - b) Multiple widths
    - c) Slide left or right.
    - d) Adjustable threshold and sweep.
    - e) Flat threshold for passage of heavy carts / gurneys
    - f) Modular "Over the Door" kit for airtight flexible panel above the door
    - g) Grade 3 hardware
    - h) Lock hardware Options:
      - Electronic keypad options
- d. Accessories:
- 1) Provide accessories as required for a complete installation:
  - 2) Provide adaptable wall interface modules providing up to 2-1/2" of adjustability at either end of a wall system
  - 3) Provide an adaptable 'filler panel' option either at wall termination or inline the wall panel system for uneven wall termination, passage of utilities or other special needs.
  - 4) Provide a 'flexible' telescoping corner capable of 90-165 degrees of motion to adapt to specific installation requirements.
  - 5) Provide floor and ceiling / deck bracing for free standing wall systems

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2. Joints must be interlocking and/or sealed to prevent dust mitigation without use of tape or other consumables.
  3. Barriers must have sound isolation properties to reduce the transfer of construction noise to adjacent occupied areas.
  4. System shall be 100% reusable and have a track record of durability over years of use and reuse.
- B. Temporary barrier passages: Where passage through dust barrier is necessary, provide gasketed doors that effectively prevent air passage. Doors must be self-closing and positive-latching
1. Depending on the level of risk of contamination, as required, construct a vestibule and airlock at each entrance to temporary enclosure with not less than 48 inches between doors.
  2. Maintain water-dampened or tack foot mats in vestibule where passage leads to existing occupied spaces.
  3. Equip doors with security locks and closers.
- C. Negative Air & Air Filtration: All construction areas shall create and maintain a negative pressure in relation to the adjacent occupied space.
1. Temporary partitions shall have an integrated air management panel to accept negative air and air monitor without modification of the wall system
  2. Produce negative air pressure with the use of a HEPA class air blower discharging through a ducted port in the modular wall system or to the exterior of the building through a window or wall port.
  3. Monitor the negative air pressure via a digital recording differential pressure manometer. Ideally the monitor will provide live alerts and data access through a web portal via Wi-Fi or cellular communications.
  4. Temporary partitions shall be able to withhold a minimum of  $-.03''$  w.c. per ASHRAE and ICRA standards with typical airflow generated by the HEPA exhaust blower (500 CFM minimum).
  5. Negative air shall be maintained throughout construction and documented daily to ensure zero cross contamination.
- D. HVAC Protection: Provide dust barriers at HVAC return grilles and air inlets to prevent spread of dust and clogging of filters. Maintain clean pre-filters at all return grilles in areas where the HVAC system must remain in service during construction.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Review existing conditions prior to installation. Ensure that all adjacent walls, floors, ceilings etc, are properly installed, structurally sound and ready to accept temporary walls and enclosures. Prior to any work the contractor shall be responsible to perform, with the owner or owner's agent, a preconstruction checklist or ICRA, as directed by the owner.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

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### 3.2 PREPARATION

- A. Protection of Installed Work, General: Provide temporary protection for installed products. Control traffic in immediate area to minimize damage.
- B. Protective Coverings: Provide protective coverings at walls, projections, jambs, sills, and soffits of openings as necessary to prevent damage from construction activities, such as coatings applications, and as necessary to prevent other than normal atmospheric soiling.

### 3.3 INSTALLATION

- A. Installation: Install barriers per manufacturer's direction. Comply with all local and national code requirements.

### 3.4 MAINTENANCE SERVICE

- A. Maintenance: Use all means necessary to maintain temporary barriers and enclosures in proper and safe condition throughout progress of the Work.
- B. Replacement: In the event of loss or damage, promptly restore temporary barriers and enclosures by repair or replacement at no change in the Contract Sum or Contract Time.
- C. Cleanliness: Contractor shall be responsible for maintaining the cleanliness of the temporary wall system and all areas within and around. Wall system must be able to be non-porous and cleanable to ensure zero cross contamination.

### 3.5 REMOVAL OF TEMPORARY BARRIERS AND ENCLOSURES

- A. Removal of Temporary Barriers and Enclosures: Construction area must be cleaned to the level of the adjacent occupied areas. Final Cleaning should include the Modular Wall panel system - they must be vacuumed, wiped down and cleaned to prevent dust accumulation to mitigate into occupied space during removal and mobilization.
- B. Cleaning and Repairs: Clean and repair damage, soiling and marring caused by installation or use of temporary barriers and enclosures. Panels shall be wiped down and covered to be in a clean state for reuse.

### 3.6 STORAGE

- A. Storage: Refer to manufacturer's directions on proper procedures and recommendations for the stacking and storage of the modular components

END OF SECTION 015613