

# GORDON WINLOK™ ACCESSIBLE SECURITY CEILING SYSTEM<sup>1</sup>

## SECTION 09 54 00

### **PART 1 – GENERAL**

#### **1.01 SECTION INCLUDES:**

- A. This section includes WinLok™ Accessible Security Ceiling System<sup>1</sup> as shown on the Architectural Drawings.
- B. Related sections include the following: (list applicable sections).

#### **1.02 RELATED DOCUMENTS/SECTIONS:**

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions.
- B. Division 1 Specification sections apply to work of this Section.
- C. Finish Schedule or Finish Legend applies to work of this Section.

#### **1.03 REFERENCES:**

- A. GENERAL
  - 1. Comply with applicable requirements of the following, except where more stringent requirements are indicated by building codes.
- B. ASTM (American Society for Testing and Materials)
  - 1. ASTM B209, Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
  - 2. ASTM C635, Standard Specifications for Metal Suspension Systems for Acoustical Tile and Lay-In Panel Ceilings.
  - 3. ASTM C636, Recommended Practice for Installation of Metal Suspension System for Acoustical Tile and Lay-In Panels.
- C. New York State Office of Mental Health (NYSOMH) Patient Safety Standards, Materials and Systems Guidelines.
- D. Aluminum Standards and Data provided by The Aluminum Association, Inc.
- E. CISCA Ceiling Systems Installation Handbook.

#### **1.04 DESIGN/PERFORMANCE REQUIREMENTS:**

- A. All components of the WinLok™ Accessible Security Ceiling System<sup>1</sup> shall be provided by one (1) Manufacturer to ensure single source responsibility and quality control.
- B. The WinLok™ Accessible Security Ceiling System<sup>1</sup> is fully accessible. The System consists of a Suspension System made of extruded aluminum members, WinLok™ Spring Clips/Brackets, and aluminum Panels to form a continuous ceiling surface.
- C. Specified Panel engages the WinLok™ Spring Clips/Brackets Torsion Spring suspension assembly. All fasteners are concealed.

<sup>1</sup>U.S. Patent No: U.S. 10,113,317 B1

## 1.05 **SUBMITTALS:**

- A. Submission must be made within ten (10) working days of the General Contract Award to avoid project delay.
- B. Product Data: Submit Manufacturer's WinLok™ Accessible Security Ceiling System<sup>1</sup> product specifications, detail drawings, and Installation Instructions for each component required.
- C. Shop Drawings shall show location of WinLok™ Accessible Security Ceiling System<sup>1</sup> as well as specified finish, tolerance, Panel thickness, perforation pattern, and Panel size.
- D. Samples: Submit three (3) samples consisting of curved members with Panels and Torsion Springs attached.
- E. Sustainability:
  - 1. Materials and Resources
    - a. Building Life-Cycle Impact Reduction
      - i. LCAs for aluminum and steel are available.
        - a) Aluminum - [http://www.gordon-inc.com/literature/pdf/cisca\\_background\\_report\\_aluminum\\_2020-04-24.pdf](http://www.gordon-inc.com/literature/pdf/cisca_background_report_aluminum_2020-04-24.pdf)
        - b) Steel - [http://www.gordon-inc.com/literature/pdf/cisca\\_background\\_report\\_steel\\_2020-04-24.pdf](http://www.gordon-inc.com/literature/pdf/cisca_background_report_steel_2020-04-24.pdf)
    - b. Building Product Disclosure and Optimization - Environmental Product Declarations
      - i. Industry-average EPDs for aluminum and steel are available.
        - a) Aluminum - [http://www.gordon-inc.com/literature/pdf/101.1\\_cisca\\_industry\\_wide\\_epd\\_aluminum\\_specialty\\_products.pdf](http://www.gordon-inc.com/literature/pdf/101.1_cisca_industry_wide_epd_aluminum_specialty_products.pdf)
        - b) Steel - [http://www.gordon-inc.com/literature/pdf/102.1\\_cisca\\_industry\\_wide\\_epd\\_steel\\_specialty\\_products.pdf](http://www.gordon-inc.com/literature/pdf/102.1_cisca_industry_wide_epd_steel_specialty_products.pdf)
    - c. Building Product Disclosure and Optimization - Sourcing of Raw Materials
      - i. Regional Materials – Raw materials can be purchased from Vendors within 100 miles of the project location and fabrication of all materials in Bossier City, LA, U.S.A.
      - ii. Gordon's mission is to locate recycled materials that are not only of high recycled content, but extracted, produced, or extruded in the U.S.A.
    - d. Building Product Disclosure and Optimization - Material Ingredients
      - i. Full disclosure of material recycled content is available.
    - e. Construction and Demolition Waste Management
      - i. Most products shipped from our plant are engineered to fit and reduce field cutting during installation.
        - a) Fewer indoor air quality problems
        - b) Less scrap and debris – cleaner work environment

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- c) Less noise pollution caused by field cutting of materials
- d) Maintain comfort and well-being of workers and occupants

## 2. Indoor Environmental Quality

### a. Low-Emitting Materials

- i. Gordon's State-of-the-art Powder Coating line produces the highest quality powder coated surfaces while also contributing to our sustainability drive.
  - a) No heavy Metals used in pre-treatment
  - b) Processed water is fully compliant for introducing into waste stream
  - c) Extremely efficient use of powder coating through reclamation system reducing powder wastage
  - d) Factory finished products shipped from our plant eliminates field painting
    - 1. Prevents odorous and irritating air contaminants
    - 2. Introduces no hazardous waste
    - 3. Contributes no VOCs
    - 4. Maintains comfort and well-being of workers and occupants

### b. Thermal Comfort

- i. Gordon acoustical ceilings and walls aid in providing Thermal Comfort Control with encapsulated acoustical media containing insulation or nonwoven acoustical fabric for insulative purposes to meet the requirements of ASHRAE Standard 55–2010, Thermal Comfort Conditions for Human Occupancy.

### c. Interior Lighting

- i. Gordon's AAMA 2604 powder coat finishes can provide the proper light reflectance to improve illumination in the space and reduce lumen output requirements.

### d. Acoustic Performance

- i. Gordon manufactures a vast array of ceiling systems that provide acoustical performance to meet Noise Reduction Coefficient (NRC) requirements.

## 3. Innovation

### a. Innovation

- i. Gordon is a strategic partner with the design community and continuously finds ways to design products that can aid in improving environmental performance.

### b. LEED Accredited Professional

- i. Gordon has LEED Accredited Professionals on staff to assist with your sustainability requirements

- 4. Detailed explanation of LEED Credits and Gordon, Inc.'s Contribution can be located at <http://www.gordon-inc.com/company/sustainability/>.

- F. Certification: Submit certification from Manufacturer of ceiling panels attesting that product complies with specified requirements including finish as specified.
- G. Qualification Data:
  - 1. Firms specified in "Quality Assurance" Article must demonstrate their capabilities and experience by including lists of completed projects with project names and addresses, names and addresses of Architects and owners, and other information specified.
- H. Warranty:
  - 1. Provide product warranty for one (1) year from date of material shipment.

**1.06 QUALITY ASSURANCE:**

- A. Manufacturer: Furnish components from one (1) manufacturer with a minimum of ten (10) years of experience in the fabrication of extruded aluminum ceiling specialties, utilizing systems, materials, and techniques as herein specified.
- B. Installer: Firm with not less than three (3) years of successful experience in the installation of systems similar to those required by this project and acceptable to Manufacturer of the system.

**1.07 PRODUCT DELIVERY, STORAGE AND HANDLING:**

- A. All materials shall be protected during fabrication, shipment, site storage, and erection to prevent damage from other trades. Store WinLok™ Accessible Security Ceiling System<sup>1</sup> and components inside a well-ventilated area, away from uncured concrete and masonry, and protected from the weather, moisture, soiling, abrasion, extreme temperatures, and humidity.

**1.08 WARRANTY:**

- A. Furnish Manufacturer's:
  - 1. Warranty that materials furnished will perform as specified for a period of not less than one (1) year from date of material shipment when installed in accordance with Manufacturer's recommendations.

**PART 2 - PRODUCTS**

**2.01 MANUFACTURERS:**

- A. Acceptable System: WinLok™ Accessible Security Ceiling System<sup>1</sup> shall be manufactured by Gordon, Inc. For all inquiries contact, Gordon, Inc., 5023 Hazel Jones Road, Bossier City, LA 71111, (800) 747-8954.
- B. The products specified herein are standard manufactured products of the listed Manufacturer. The aluminum system has been carefully selected to produce functional and aesthetic considerations.
- C. System must be manufactured in the U.S.A.

**2.02 PRODUCT CONSTRUCTION:**

- A. Ceiling System shall be WinLok™ Accessible Security Ceiling System<sup>1</sup> manufactured of metal components.

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B. Materials:

1. Suspension Components shall be extruded aluminum of standard 6063 T-5 or T-6 aluminum alloy. Torsion Spring Brackets are field installed to the Suspension System assembly at the appropriate module size.
2. Panels shall be either aluminum, steel, or stainless steel:
  - a. Aluminum 3003-H14, 5005-H14, or 5052-H32
    - NYSOMH Tested / Approved
    - Minimum thickness of .050 inches
  - b. Galvanized Steel
    - Although testing by NYSOMH has not been conducted, Gordon believes this material type would be approved.
    - Minimum thickness of 20 gauge.
  - c. Stainless Steel
    - Although testing by NYSOMH has not been conducted, Gordon believes this material type would be approved.
    - Minimum thickness of 20 gauge.
3. Panels engage the Suspension System with concealed WinLok™ Spring Clips/Brackets. Panels are perforated or non-perforated based on the Architectural Drawings. Panels have up-turned edges with engagement slots for WinLok™ Torsion Spring engagement.
4. WinLok™ Removal Tools shall be provided for installation of system. Installer to provide WinLok™ Removal Tools to Facility Maintenance / Owner upon completion of project.

C. Optional Accessories:

1. Brake formed Perimeter Trim to conform to the profile of the WinLok™ Security Ceiling System to provide a finished edge detail or Wall Angle. Contact factory for more details.
2. PVC wrapped acoustical pad (1" thick x 1.5 lb density) is available as specified. Contact factory for suitability with specified Panel

**2.03 FINISHES:**

A. Finishes

1. Exposed surfaces of Extrusions and Panels shall receive 5-stage pretreatment with dried-in-place conversion coating prior to receiving an electrostatically applied AAMA 2604 compliant, antimicrobial powder coating.
2. All cut edges, including perforated holes, must be coated. Finish shall oven baked to ensure complete curing, paint adhesion, and uniform surface hardness.
3. Paint color to be selected from Gordon Inc.'s list of Standard Colors (Custom Colors also available).

B. Pre-Coated Coil finishes (PVDF) available for Panels.

C. Stainless Steel finishes are brush #4, #8, custom mechanical, or custom options available.

D. Panels may have a factory-applied wood-look finish:

1. Laminated Wood-Look Films – Series 1
2. Laminated Wood-Look Films – Series 2
3. Wood-Look Paints

## **2.04 FABRICATION:**

- A. Provide factory WinLok™ Suspension for the specified module.
- B. Panels engage via the WinLok™ Spring Clips/Brackets.
- C. Acoustical panel shall be perforated with ½” nominal non-perforated borders.
  - 1. Standard Perforation Pattern is R564-732DG10 which is NYSOMH Tested/Approved
  - 2. Other Perforation Patterns are available, but may not perform for anti-ligature requirements.
  - 3.

## **PART 3 - EXECUTION**

### **3.01 EXAMINATION:**

- A. Examination of Surfaces: Installer must examine conditions under which work is to be performed and must notify Contractor in writing of unsatisfactory conditions.
- B. Verify that field measurements and block-out dimensions are as shown on Shop Drawings.

### **3.02 PREPARATION:**

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the Manufacturer to achieving the best result for the project conditions.

### **3.03 INSTALLATION:**

- A. General: Comply with Manufacturer's printed instructions and any special instructions provided.
- B. Space Enclosure: Do not install any work until space is enclosed and weatherproofed, wet-work in space is completed and nominally dry, work above ceilings is complete, and temperature and humidity shall be continuously maintained at values near those of final occupancy.

### **3.04 CLEANING:**

- A. Follow Manufacturer's cleaning instructions for specified finish.

### **3.05 PROTECTION:**

- A. Procedures: Protection of WinLok™ Accessible Security Ceiling System<sup>1</sup> from damage by other trades after installation to be provided by General Contractor.
- B. Damage to Finished Work: Finished units shall be without damage. Damage shall be repaired by the Contractor at the expense of the party damaging the material, as in accordance with the contract requirements.

## **END OF SECTION**

<sup>1</sup>U.S. Patent No: U.S. 10,113,317 B1