**PART 1 - GENERAL**

**1.01 SUMMARY**

A. Provisions of Division 01 apply to this section.

B. Section Includes:

1. Folding tables and benches in fully recessed storage pockets or surface mounted as indicated on Drawings.

2. Mobile folding tables and benches where indicated on Drawings.

* 1. **SYSTEM DESCRIPTION**

A. Automatic Latch & Lock Safety Feature: folding tables and benches shall be designed to automatically latch and lock when placed into the wall pockets without use of a key. Manual locking device is not acceptable.

1. Provide folding tables and bench seats with integral wall pockets and unitized under structure.

C. Table and bench opening and closing devices must incorporate a spring-assisted safety mechanism, which will prevent tables from crashing to floor and reduce lifting requirements to close tables.

D. Tables and Benches shall be provided with key operated lock/s.

E. Opening of tables from the wall pockets shall be by manually releasing a latching retainer mechanism, which automatically locks when tables and benches are folded into wall pockets. Cabinet locking holes or tabs shall be aligned with the table and bench locking devises so as not to require excessive force to fold into cabinet.

F. Each pocket unit shall be installed with two mullion locking devises.

G. Operating mechanisms for tables and benches must allow tables to be secure in semi-open position for ease of cleaning and movement.

H. Latches that lock tables and benches in down position (automatic anti-jack knife) must be designed so that they cannot be disabled and be adjustable. They must be fail-safe. The automatic safety down lock latch must operate from either side for ease of operation and set-up.

I. Finished surfaces of tables and benches shall be free of lock holes. Keyways with automatic covers are acceptable. Vertical clearance between tables and benches shall be minimal to prevent passage of food and debris.

J. Provide an arrow (bold 2” x 3”, contrasting color) on the end of each table and bench to indicate the direction tables and benches are to be oriented into wall pockets.

**1.03 SUBMITTALS**

A. Shop Drawings: Submit Shop Drawings indicating complete layout, anchorage, and installation details.

B. Product Data: Submit manufacturer's catalog data for each item proposed for use.

C. Certificates: Furnish manufacturer's certification that materials meet or exceed Specifications requirements.

**1.04 QUALITY ASSURANCE**

A. Qualifications: Manufacturer: Folding tables, benches, frames and components shall be standard products which have been successfully manufactured for not less than 5 years.

**1.05 DELIVERY, STORAGE AND HANDLING**

A. Deliver materials to the Project site in original unopened packages or containers, with manufacturer's labels intact and legible.

B. Provide all means to protect folding tables, benches, and recessed cabinet, before, during and after installation. In case of damage, immediately provide necessary repairs and/or replacements.

**1.06 WARRANTY**

1. Manufacturer shall provide a 5 year material warranty.
2. Manufacturer shall provide a 10 year performance warranty on factory performed welds.

**PART 2 - PRODUCTS**

**2.01 PERFORMANCE**

A. Tables and benches shall incorporate an automatic latch and lock safety feature without use of a key.

B. Table and bench opening and closing devices must incorporate a hydraulic assembly, or a spring-assisted safety mechanism, which will prevent tables from crashing to floor and reduce lifting requirements to close tables.

C. Operating mechanisms for tables and benches must allow tables to be secured in semi-open position for ease of cleaning and movement.

D. Latches that lock tables and benches in down position (automatic anti-jack knife) must be designed so that they cannot be disabled and must be adjustable. They must be fail-safe. The automatic safety down lock latch must operate from either side for ease of operation and set-up.

E. Finished surfaces of tables and benches shall be free of lock holes for reasons of sanitation and appearance. Keyways with automatic covers are acceptable. Vertical clearance between tables and benches shall be minimized in order to reduce food and debris falling on the floor and increase safety.

**2.02 ACCEPTABLE MANUFACTURERS**

A. Nelson Adams – AEL8100

B. Or Equal

**2.03 CONFIGURATION**

A. Wall-Mounted Folding Tables and Benches:

1. Folding table and bench sets shall be single, or multiple sets per design; fitting completely in fully recessed single steel pocket. Single tables and benches shall be between 13’-9” and 14 feet long; double tables and benches between 27’-6” and 28 feet long. Tables shall be not less than 29 inches wide and benches shall be not less than 11-1/2 inches wide, unless otherwise specified.

2. Provide accessible wheelchair spaces at table ends and sides, with bench seat removed at double table unit adjoining a wall.

3. Heights shall be as indicated for the following locations:

a. Accessible: tables - 30 inches; benches - 20 inches.

b. Elementary schools: tables, between 27 and 28 inches; benches, between 15 and 18 inches.

c. Middle, High and Adult schools: tables, between 29 and 30 inches; benches, between 17 and 20 inches.

d. Heights shall be applicable to the age of the users.

4. Tables and benches shall have a minimum of 5 point (includes mullion locks) multiple locking system. Table and benches shall have an automatic locking devise when folded into the cabinet. Operating lock linkage shall have a minimum of 3/8” hardened steel pins, 5/16” steel arms and 14 gage swivel plates. Locks shall be easy to reach and centrally located. The locking system shall lock tables and benches in either open or closed positions. Lock handles shall be furnished with over-center cam action to extend or retract lock bolts for positive locking and unlocking. Lock handles shall be parallel to underside of tables or benches when properly locked or unlocked. Provide safety feature to visibly indicate that the lock bolts are engaged in the wall pockets. Proper alignment with the pockets must be achieved before units are used or stored.

1. Provide 3 keys that operate tables and benches.
2. Provide one lock box with 3 lock box keys to be installed in a secure location next to the table pocket/s for the table and benches operating keys.
3. Any key with restrictive procedures for its replacement will not be accepted.
4. Load bearing latching components shall be securely attached to the table and bench frame. Connections to the table and bench sheet material only will not be accepted.
5. When Pull rings are used they shall be a tamper resistant type. Example; 3/32” stainless steel braided cable formed to a ring with a 3/32” crimped sleeve.
6. Storing of tables and benches into pockets shall not require excessive force by users.
7. Establish a numbering system for pockets, tables and benches. Numbers shall correspond with each pocket and table and bench units. One 2 inch tall number attached to the exterior upper trim of the cabinet and a 2 inch number to be attached to all center legs of the corresponding tables and benches. Numbers are to be tamper proof (No decals). Pockets with multiple tables and benches shall be listed as 1A, 1B, 1C, etc.

B. Mobile Folding Tables and Benches:

1. Mobile folding tables and bench sets shall be single piece. Mobile tables and benches shall be 12 feet long and fabricated to provide the same safety features as the wall-mounted tables and benches.

2. Mobile tables shall have heights of 27 inches to 29 inches available. Tables shall be furnished to the specified heights.

**2.04 MATERIALS**

A. Table and Bench Tops: 3/4 inch thick; 45-pound minimum density particleboard core; surfaced with laminated plastic bonded to underside by plastic balancing sheet. Laminated plastic surfacing shall be NEMA Type 1, colors and patterns as selected by the Architect from manufacturer's standard patterns and colors.

B. Edge treatments shall be a poly coating which bonds to tabletops and benches, providing a sealed, sanitary edge and superior abrasion resistance.

C. Table and Bench Undercarriages: Constructed of dual 1-1/4 inch x 2-1/8 inch steel box channels; bench frames shall be dual 1-1/4 inch x 16 gage steel angle with returned edges for strength and added safety. Frames shall provide support horizontally through entire length of table and bench leaves. Tubular members shall be 16 gage by one inch diameter steel tubing. Benches shall be furnished with a 16 gage hat channel down the center for extra strength. End legs shall be furnished with 2-inch fixed casters and center legs shall be furnished with steel cushion glides to provide stability to tables and benches when detached from storage pocket.

D. Wall Pockets: Fabricate with minimum 16 gage sill and minimum 16 gage vertical columns. Wall facing shall be furnished with 2-inch overlaps at jambs. Pocket cabinets shall be furnished with manufacturer's standard rust-inhibitive primer.

**2.05 FINISH**

A. Metal parts shall be thoroughly cleaned in detergent-phosphate combination plus an acid rinse to resist corrosion and provide maximum paint adhesion, then finished with high-grade electrostatically installed baked-on epoxy powder coat finish. Color as selected by Architect from manufacturer’s standard colors.

**PART 3 - EXECUTION**

**3.01 INSTALLATION AND ADJUSTMENT**

A. Install wall pockets level, true, and plumb in accordance with manufacturer’s installation instructions. Install anchors, screws and fasteners where indicated by manufacturer. Screws shall be oval-head where exposed. Fasteners to be installed on face of jambs, between each table and bench to prevent them from accidentally falling out of the wall pocket. Fasteners shall not prevent positive closure. Submit details to Architect for review or provide physical Sample to be reviewed before fabrication.

B. Upon completion, tables, and benches shall be installed in wall pockets and adjusted for proper alignment and operation.

**3.02 CLEANUP AND REPAIR**

1. Before Substantial Completion, repair any damage and clean exposed surfaces.
2. Remove rubbish, debris, and waste materials and legally dispose of off the Project site.
   1. **PROTECTION**

A. Protect the Work of this section until Substantial Completion.

**END OF SECTION**