

SECTION 101100
VISUAL DISPLAY UNITS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Vertical sliding visual display units.

1.02 REFERENCE STANDARDS

- A. ANSI A135.4 - Basic Hardboard; 2012 (Reaffirmed 2020).
- B. ANSI A208.1 - American National Standard for Particleboard; 2022.
- C. ASTM A424/A424M - Standard Specification for Steel, Sheet, for Porcelain Enameling; 2018.
- D. ASTM C208 - Standard Specification for Cellulosic Fiber Insulating Board; 2022.
- E. ASTM F793/F793M - Standard Classification of Wall Coverings and Ceiling Coverings by Use Characteristics; 2025.

1.03 SUBMITTALS

- A. Product Data: Submit construction details, descriptions of materials, dimensions of each component and profile, finishes, and accessories for all visual display units.
 - 1. Indicate panel joint locations, including field-assembled joints for factory units exceeding shipping size, if applicable.
- B. Shop Drawings: Indicate plans, wall elevations, dimensions, joint locations.
 - 1. Indicate panel joint locations, including field-assembled joints for factory units exceeding shipping size, if applicable.
- C. Samples: Color charts for selection of color and texture of Sliding Visual Displays.
- D. Samples: Two, 10" by 10" inches (254 by 254 mm) in size illustrating materials and finish, color and texture of Sliding Visual Displays.
- E. Manufacturer's printed installation instructions.
- F. Manufacturer's Qualification Statement.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum 20 years documented experience.

1.05 WARRANTY

- A. Provide Life Time warranty for chalkboard and markerboard and [Five Year] warranty for tackboard to include warranty against discoloration due to cleaning, crazing or cracking, and staining.
- B. The warranty excludes labor and any additional material expenses related to the removal or reinstallation of markerboards.
- C. When properly installed per manufacturer instructions, Sliding Visual Display Units are warranted for one year against workmanship defects. This warranty excludes damage from misuse, vandalism, or improper handling and covers only material replacement, not removal or reinstallation costs.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. **Visual Display Units**
 - 1. Nelson Adams NACO.
 - 2. Address: 420 S E st, San Bernardino, CA, 92401.
 - 3. P. (877) 810-4080.
 - 4. Web Page: <https://www.nelsonadamsnaco.com>

2.02 Vertical Sliding Visual Display Unit: Cabinet with vertical sliding panels and fix rear panel

- A. **HOUSING**
 - 1. **Housing:** Nelson Adams NACO Aluminum.
 - a. **Height:** As indicated on drawings.
 - b. **Length:** As indicated on drawings.
 - c. **Mounting:** [Wall mounted][Floor Mounted].
 - d. **Operation:** Manual, with ball bearing pulleys and counterweights.
 - e. **Frame:** Extruded aluminum.
 - f. **Frame Profile:** As indicated on drawings.
 - g. **Frame Finish:** [Anodized, natural][Powder Coating].
- B. **Configuration (Alternate Configurations are Available):**
 - 1. One-Track:
 - a. Fixed Rear Panel: Full height of unit.
 - b. One Sliding Panel: Panel not less than one-half of unit height.
 - 2. Two-Track:
 - a. Fixed Rear Panel: Full height of unit.
 - b. Two Sliding Panels: Each panel not less than one-half of unit height.
 - 3. Three-Track:
 - a. Fixed Rear Panel: Full height of unit.
 - b. Three Sliding Panels: Each panel not less than one-half of unit height.
- C. **Sliding Panels:** [Markerboard][Chalkboard][Tackboard].
- D. **Fixed Rear Panel:** [Chalkboard][Chalkboard][Tackboard][Forbo Bulletin Board].

E. **Sliding Panels - General:**

1. Height: As indicated on drawings.
2. Length: As indicated on drawings.
3. Frame: Extruded aluminum .
4. Frame Profile: As indicated on drawings.
5. Frame Finish: Anodized, natural.
6. Ball Bearing Rollers: Four per panel.
7. Finger Pulls: One pair per sliding panel.

F. **Sliding Panel Options:**

1. **Chalkboard Panels:** Porcelain enamel on steel, laminated to core.
 - a. Color: [Green][Black].
 - b. Steel Face Sheet Thickness: 24 gauge, 0.0239 inch (0.61 mm).
 - c. **Core:** [Fiberboard], [1/2" Inch Thick (12.7 mm)], laminated to face sheet.
 - 1) **Alternate Cores – Available:**
 - a) Particleboard.
 - b) Fiberboard.
 - c) Hardboard.
 - d) MDF.
 - e) Honey Comb
 - 2) **Alternate Thicknesses – Available:**
 - a) 7/16" Inch Thick ([11.11 mm])
 - b) 1/2" Inch Thick (12.7 mm)
 - c) 3/8" Inch Thick ([9.52 mm])
 - d) 1/4" Inch Thick ([6.35 mm])
 - d. **Backing:** Aluminum foil [0.015 in (0.381 mm)][0.005 in (0.127 mm)], laminated to core.
2. **Markerboard Panels:** Porcelain enamel on steel, laminated to core.
 - a. **Color:** White.
 - b. **Steel Face Sheet Thickness:** 24 gauge, 0.0239 inch (0.61 mm).
 - c. **Core:** [Fiberboard], [1/2" Inch Thick (12.7 mm)], laminated to face sheet.
 - 1) **Alternate Cores – Available:**
 - a) Particleboard.
 - b) Fiberboard.
 - c) Hardboard.
 - d) MDF.
 - e) Honey Comb
 - 2) **Alternate Thicknesses – Available:**
 - a) 7/16" Inch Thick ([11.11 mm])
 - b) 1/2" Inch Thick (12.7 mm)
 - c) 3/8" Inch Thick ([9.52 mm])
 - d) 1/4" Inch Thick ([6.35 mm])
 - d. **Backing:** Aluminum foil [0.015 in (0.381 mm)][0.005 in (0.127 mm)], laminated to core.
3. **Tackboard Panels:** Vinyl or Fabric on Natural Cork and MDF.
 - a. **Material Facing:** [Vinyl][Fabric].
 - b. **Options Available:**
 - 1) Koroseal - Vinyl

- 2) Carnegie Xorel - Fabric
- 3) Guildford of Maine - Fabric
- 4) Maharam - Vinyl
- c. **Color:** As selected from manufacturer's full range.
- d. **Core:** [1/4" Inch (6 mm) Natural Cork on 1/4" Inch (6 mm) MDF]
 - 1) **Alternate Cores:**
 - a) 1/4" Inch (6 mm) Natural Cork on 1/4" Inch (6 mm) MDF
 - b) 1/4" Inch (6 mm) Natural Cork on 1/4" Inch (6 mm) Hardboard
 - c) 1/2" Inch (12.7 mm) Fiberboard
- 4. **Tackboards:** Forbo Bulletin Board
 - a. **Options:** [1/4" Inch (6 mm) Forbo on 1/4 Inch MDF]
 - 1) **Alternate Options:**
 - a) 1/4" Inch (6 mm) Forbo on 1/4 Inch MDF] [1/4" Inch (6 mm) Forbo on 1/4 Inch Hardboard.
 - b) 1/4" Inch (6 mm) Forbo on 1/4 Inch Hardboard.
 - b. **Color:** As indicated on drawings.

2.03 MATERIALS

- A. Porcelain Enameled Steel Sheet: ASTM A424/A424M, Type I, Commercial Steel, with fired-on vitreous finish.
- B. Hardboard for Chalk Surface: ANSI A135.4 Tempered type.
- C. Vinyl-Coated Fabric: ASTM F793 Category VI.
- D. Hardboard for Cores: ANSI A135.4, Class 1 - Tempered, S2S (smooth two sides).
- E. Particleboard: ANSI A208.1; wood chips, set with waterproof resin binder, sanded faces.
- F. Fiber Board: ASTM C208, cellulosic fiber board.
- G. Foil Backing: Aluminum foil sheet, 0.005 inch thick (0.13 mm thick).
- H. Aluminum Sheet Backing: 27 gauge, 0.014 inch (0.36 mm) thick.
- I. Adhesives: Type used by manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that internal wall blocking is ready to receive work and positioning dimensions are as indicated on shop drawings.

3.02 PREPARATION

- A. Remove switchplates, wall plates, and surface-mounted fixtures where tackable wall paneling is applied. Reinstall items on completion of installation. [**By Others**]

- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions. [**By Others**]

3.03 **INSTALLATION**

- A. Install boards in accordance with manufacturer's instructions.
- B. Secure units level and plumb.

3.04 **CLEANING**

- A. Clean board surfaces in accordance with manufacturer's instructions.
- B. Cover with protective cover, taped to frame.
- C. Remove temporary protective cover at Date of Substantial Completion.

END OF SECTION