

SECTION 101100
VISUAL DISPLAY BOARDS

PART 1 – GENERAL

1.01 DESCRIPTION OF WORK

- A. SECTION INCLUDES
 - 1. PORCELAIN ENAMEL STEEL MARKERBOARDS
 - 2. PORCELAIN ENAMEL STEEL MARKERBOARD REPLACEMENT PANELS
 - 3. TACKBOARDS
 - 4. ALUMINUM TRIM

1.02 REFERENCED STANDARDS

- A. AMERICAN SOCIETY FOR TESTING MATERIALS
 - 1. ASTM E84 STANDARD TEST METHOD FOR SURFACE BURNING CHARACTERISTICS FOR BUILDING MATERIALS
 - 2. ASTM B221 STANDARD SPECIFICATION FOR ALUMINUM AND ALUMINUM ALLOY EXTRUDED BARS, RODS, WIRES, PROFILES AND TUBES
- B. PORCELAIN ENAMEL INSTITUTE
 - 1. PEI-1002 MANUAL AND PERFORMANCE SPECIFICATIONS FOR PORCELAIN ENAMEL WRITING SURFACES

1.03 SUBMITTALS

- A. SHOP DRAWINGS: PROVIDE SHOP DRAWINGS FOR EACH TYPE OF VISUAL DISPLAY BOARD REQUIRED.
- B. PRODUCT DATA: PROVIDE TECHNICAL DATA FOR MATERIALS SPECIFIED. INCLUDE MATERIAL SAFETY DATA SHEETS, WHEN APPLICABLE.
- C. SAMPLES AND COLOR CHARTS: PROVIDE MANUFACTURER'S COLOR CHARTS AND COMPOSITION SAMPLES OF FACE, CORE, BACKING AND TRIM TO ILLUSTRATE FINISH, COLOR AND TEXTURE, WHERE REQUIRED.
- D. MANUFACTURER'S INSTRUCTIONS: PROVIDE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

1.04 QUALITY ASSURANCE

- A. MANUFACTURER QUALIFICATIONS:
 - 1. MANUFACTURER SHALL HAVE A MINIMUM OF 5 YEARS EXPERIENCE IN THE MANUFACTURE OF VISUAL DISPLAY BOARDS.
- B. REGULATORY REQUIREMENTS: CONFORMS TO APPLICABLE CODE FOR FLAME/SMOKE RATING IN TACKBOARDS IN ACCORDANCE WITH ASTM E84.
- C. OPERATION AND MAINTENANCE: INCLUDE DATA ON REGULAR CLEANING, STAIN REMOVAL, AND PRECAUTIONS.

1.05 PROJECT CONDITIONS

- A. FIELD MEASURE PRIOR TO PREPARATION OF SHOP DRAWINGS AND FABRICATION TO ENSURE PROPER FIT.
- B. COMPLY WITH MANUFACTURER'S RECOMMENDATIONS FOR ACCLIMATING AREA FOR INTERIOR MOISTURE AND TEMPERATURE TO APPROXIMATE NORMAL OCCUPIED CONDITIONS.

1.06 DELIVERY, STORAGE AND HANDLING

- A. SCHEDULE DELIVERY OF VISUAL DISPLAY BOARDS WITH SPACES SUFFICIENTLY COMPLETE SO THAT VISUAL DISPLAY BOARDS CAN BE INSTALLED UPON DELIVERY.
- B. STORE PRODUCTS IN MANUFACTURER'S UNOPENED PACKAGING UNTIL READY FOR INSTALLATION.
- C. STORE MATERIALS PROTECTED FROM EXPOSURE TO HARMFUL WEATHER CONDITIONS AND AT TEMPERATURES AND HUMIDITY CONDITIONS RECOMMENDED BY MANUFACTURER.

1.07 WARRANTY

- A. SUBMIT LIFE OF THE BUILDING WARRANTY, STATING THAT UNDER NORMAL USAGE AND MAINTENANCE, AND WHEN INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS, PORCELAIN ENAMEL STEEL MARKERBOARD AND CHALKBOARD WRITING SURFACES ARE GUARANTEED FOR THE LIFE OF THE BUILDING. GUARANTEE COVERS REPLACEMENT OF DEFECTIVE BOARDS, BUT DOES NOT INCLUDE COST OR REMOVAL AND REINSTALLATION.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

- A. VISUAL DISPLAY BOARD MANUFACTURER: W. E. NEAL SLATE CO., WATERTOWN MINNESOTA

2.02 MATERIALS FOR MARKERBOARDS PANELS

- A. WRITING SURFACE FACE SHEET: POLYVISION E³ PORCELAIN ENAMEL STEEL WRITING SURFACE
 - 1. PROVIDE ENAMELING GRADE COLD-ROLLED STEEL COATED WITH A THREE COAT PROCESS: BOTTOM GROUND COAT, TOP GROUND COAT AND TOP COLOR COAT.
 - 2. BOTTOM, TOP AND COLOR COAT SHALL BE FIRED AT A TEMPERATURE OF NOT LESS THAN 1200 DEGREES.
- B. WRITING SURFACE CORE
 - 1. ½" FOIL BACK GYPSUM BACKING SHEET (FRAMED BOARDS)
 - 2. 3/8" FOIL BACK GYPSUM BACKING SHEET (REPLACEMENT PANELS)
- C. FACTORY APPLIED TRIM FOR MARKERBOARDS
 - 1. NEAL SLATE PREFRAME #3 EXTRUDED ALUMINUM TRIM OF NOT LESS THAN .062-INCH THICK, TRAY SHALL NOT BE LESS THAN .094-INCH THICK. TRIM SHALL BE MANUFACTURER'S STANDARD J-111R TRAY, J-2R MAP RAIL WITH CORK INSERT AND J-5 JAMBS.

2.03 MATERIALS FOR TACKBOARD PANELS

- A. TACK SURFACE FACE SHEET: FORBO ¼-INCH THICK, VINYL SEALED, HOMOGENEOUS, BURLAP BACKED CORK SHEET, CLASS B RATED
- B. TACK SURFACE CORE:
 - 1. ¼-INCH THICK GYPSUM BACKING SHEET
- C. FACTORY APPLIED TRIM FOR TACKBOARDS
 - 1. NEAL SLATE PREFRAME #3 EXTRUDED ALUMINUM TRIM OF NOT LESS THAN .062-INCH THICK. TRIM SHALL BE MANUFACTURER'S STANDARD J-5 PERIMETER TRIM.

2.04 ALUMINUM TRIM AND ACCESSORIES

- A. ALUMINUM TRIM: PROVIDE NEAL SLATE EXTRUDED ALUMINUM TRIM OF NOT LESS THAN .062-INCH THICK. ALL ALUMINUM TRIM SHALL HAVE A CLEAR ANODIZED FINISH.
 - 1. FIELD APPLIED TRIM: NEAL SLATE SLIP-ON TRIM.
- B. ACCESSORIES
 - 1. MAP RAIL: MT-1 OR MT-2 CONTINUOUS MAP RAIL COMPLETE WITH CORK INSERT AND ENDS AS INDICATED ON DRAWINGS
 - 2. MAP HOOKS: FOR FRAMED MARKERBOARDS PROVIDE 2 UNI-MAP HOOKS WITH FLEXIBLE METAL SPRING FOR EVERY 4 FEET OF MAP RAIL

2.03 FABRICATION

- A. FABRICATORS
 - 1. W. E. NEAL SLATE CO., WATERTOWN MINNESOTA
- B. PORCELAIN ENAMEL STEEL MARKERBOARDS
 - 1. LAMINATE FACE SHEET TO CORE MATERIAL USING MANUFACTURER'S STANDARD THERMOPLASTIC TYPE ADHESIVE AND PINCH ROLLER.
 - 2. ASSEMBLY: PROVIDE SINGLE UNIT, FACTORY ASSEMBLED MARKERBOARDS UP TO 16'-0" EXCEPT WHERE FIELD ASSEMBLED UNITS ARE REQUIRED.
 - 3. MAKE JOINTS ONLY WHERE TOTAL LENGTH EXCEEDS 16'-0". WHERE BOARD SIZE EXCEEDS 16 FEET IN LENGTH, FABRICATE WITH ONE JOINT, BALANCED AROUND THE CENTER OF THE BOARD AS ACCEPTABLE TO THE ARCHITECT.
 - 4. PROVIDE MANUFACTURER'S STANDARD VERTICAL J-4 H-BAR JOINT SYSTEM BETWEEN ABUTTING SECTIONS OF MARKERBOARD.

PART 3 – EXECUTION

3.01 PROJECT CONDITIONS

- A. VERIFY BEFORE INSTALLATION THAT INTERIOR MOISTURE AND TEMPERATURE APPROXIMATE NORMAL OCCUPIED CONDITIONS.
- B. VERIFY THAT WALL SURFACES ARE TRUE AND PLUMB AND ARE PREPARED AND READY TO RECEIVE BOARDS.

3.02 INSTALLATION

- A. DELIVER FACTORY BUILT UNITS COMPLETELY ASSEMBLED AND OF DIMENSIONS SHOWN IN DETAILS AND IN ACCORDANCE WITH MANUFACTURER'S SHOP DREAWINGS AS APPROVED BY THE ARCHITECT.
- B. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR STORAGE AND HANDLING OF UNITS BEFORE INSTALLATION.
- C. DO NOT INSTALL BOARDS ON DAMP WALLS OR IN DAMP AND HUMID WEATHER WITHOUT HEAT IN THE BUILDING.
- D. INSTALL LEVEL AND PLUMB, KEEPING PERIMETER TRIM STRAIGHT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- E. APPROVED INSTALLERS: W. E. NEAL SLATE CO., WATERTOWN MINNESOTA