Elderhorst Bells, Inc. 875 Gravel Pike Palm, PA 18070 Phone: 1-800-810-7892 Fax: 215-679-3692 E-Mail: info@elderhorstbells.com Web site: www.elderhorstbells.com

# Item # Interior "Dimensional" Router Cut Surface Mount Dial Clocks, Interior "Dimensional" Router Cut Surface Mount Dial Clocks



# Interior "Dimensional" Router Cut Surface Mount Dial Clocks

Available in 18" to 48" diameters, these clock dials are cut from 1" thick overall, high density polyurethane. All standard dial and hand styles are available (dependent on diameter). Custom dial background and contrasting dial marker/hand colors are available.

# **CLOCK SPECIFICATIONS**

#### INTERIOR CLOCK SPECIFICATIONS - "DIMENSIONAL" ROUTER CUT SURFACE MOUNT DIAL CLOCKS

### PART 1 - General

1.01 Summary

A. Provide clock system consisting of \_\_\_\_\_\_ clock(s), \_\_\_\_\_ in diameter (18" minimum to 48" maximum), as shown on drawings, as specified, and as needed for a complete and proper installation.

B. Coordinate clock system of this section with General Conditions and Supplementary Conditions.

#### 1.02 Submittals

A. Submit shop drawings and wiring diagrams. Upon approval, General Contractor shall send to field or jobsite superintendent copy of final approved shop drawings and wiring diagrams.

B. Submit color sample - for exposed surfaces (if required)

#### 1.03 Quality Assurance

A. Use adequate number of skilled workmen who are thoroughly trained and experienced in the necessary crafts, and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this section.

B. Use materials which shall be free from defects impairing strength, durability, and appearance; shall be of best commercial quality for purpose required; and shall comply with the approved drawings.

C. Use manufacturer who has had ten (10) years of experience in the manufacture of the specified product.

#### 1.04 Warranty

A. Warrant the clock system for one year after the date of delivery of product installed by others. Warranty is not in effect as a result of improper installation or wiring, lightning damages, vandalism, or improper servicing.

#### PART 2 - Products

#### 2.01 Manufacturer

A. Use the DIMENSIONAL Router Cut Surface Mount Dial style clock as manufactured by Elderhorst Bells, Inc. 875 Gravel Pike, Palm, PA 18070, Phone: 800-810-7892, Fax: 215-679-3692

**2.02** Materials A. One EB-106 Clock Movement for each clock is to be provided. The EB-106, impulse type clock drive movements feature all brass square cut spur gears, stainless steel shafts, and bronze bearings The EB-106 clock movements are built on a heavy aluminum frame in a maintenance free design. The movements are driven by a 120 Volt, 60 hz, high- torque motor which is activated by the impulse type clock controller at one minute intervals. The EB-106 clock movements are Listed to applicable U.S. and Canadian safety standards by Underwriters Laboratories.

#### OR (choose one)

A. (up to 36" diameter) One synchronous clock movement is to be provided (front access movement only, fits in 2x4' wall - wall box, 12 hour reset only). B. The Dimensional Router Cut Surface Mount clock dial will be cut from 1" thick high density polyurethane (151b min). The dial will be clean and free of major surface imperfections. Dependent on movement mounting, the dial will be provided with a rosette for front access mounting, or concealed mounting studs and a drilling/mounting template for through the wall type movements.

The dial markings are to be type EB-\_\_\_\_\_ (all standard dial styles are available - higher detail clock dial styles are not recommended for clock dials less than 24" in diameter)

C. Clock hands to be provided for each clock and are to be cut from aluminum. The clock hand hub is to be machine bored for proper fit to the clock movement shaft. Balance rods or counterweights are to be affixed to the clock hands to properly balance the hands. All mounting hardware will be stainless steel. Clock hands are to be type EB-

## 2.03 Accessories

A. Provide an EB-200 series Clock Controller - this is a master-clock with a high degree of accuracy due to the quartz micro-processor time base. The unit incorporates a lithium battery backup for automatic time correction following power failure, and automatic daylight savings time correction. The controller is housed in a NEMA 4X/6P wall mount enclosure. Field wiring diagrams are to be provided. **OPTIONAL ITEMS:** 

C. GPS- Global Positioning Satellite time synchronization system. Includes antenna and receiver for automatic time correction from the GPS time signal. **2.04** Fabrication

A. Fabricate hands and dial markers proportional to diameter of clock noted above.

B. Fabricate clock movement, and test for proper operation with Clock controller.

#### 2.05 Finishes

A. Finish all surfaces exposed to front viewing. Clock hands shall be caustic etched, primed, and finished with industrial enamel. The Dimensional Router Cut Dial will be primed, a dial background color applied and then a contrasting dial marking color applied to the front edge of the markings (Custom colors and finishes available - contact Elderhorst Bells, inc.). All concealed metal to be of mill finish aluminum.

#### 2.06 Caulking

A. Clean and dry all surfaces to be caulked.

B. Apply silicon caulking as required with caulking gun, using nozzle of proper size to fit joint width.

#### PART 3 - Execution

3.01 Project Site Conditions

A. Verify that site conditions are suitable and accessible for delivery and installation.

B. Confirm that all preparatory work is in place in accordance with approved shop drawings prior to installation.

#### 3.02 Installation

A. Use skilled and experienced installation craftsmen familiar with such work, and in accordance with manufacturer's instructions and approved shop drawings.

B. Coordinate with other trades as required to assure proper and adequate installation.

C. Install clock controller in an accessible area.

D. Provide and install separate electrical circuits 120 vac 60 hz for clock system and illumination, in accordance with local building and electrical codes.

#### 3.03 Clean-Up

- A. Clean all soiled and dirty areas, and touch up any scratches or abrasions.
- B. Clean up all debris caused by work of this section, keeping the premises clean and neat at all times.