

SECTION 11685
EXTERIOR SCOREBOARDS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Divisions01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Baseball and Softball field scoreboards

1.3 DEFINITIONS

- A. NFHS: The National Federation of State High School Associations

1.4 PERFORMANCE REQUIREMENTS

- A. Thermal Movements: allow for thermal movements from ambient and surface temperature changes. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
 - 1. Temperature Change (Range): 120deg. F, ambient; 180 deg F, material surfaces.
- B. Structural Performances: Provide scoreboard support system capable of withstanding design loads within limits and require in compliance with current FBC and local Building Code requirements applicable to this project and not limited to live loads, and wind loads.

1.5 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for display cases.
- B. Shop Drawings: for exterior scoreboard include plans, elevations, sections, details and attachments to other work.
 - 1. Show location of seams and joints in visual display surfaces.
 - 2. Include Sections of typical trim members.
 - 3. Wiring Diagrams: For power, signal and control wiring

- C. Structural analysis data signed and sealed by the qualified professional Engineer responsible for their preparation including loads, point reactions, for attachment of exterior scoreboards to structure.
- D. Samples: For the following products:
 - 1. Manufacturer's complete color selection book as selected by Architect and Owner.
- E. Product Test Reports: Based on evaluation of comprehensive test performed by quality testing agency, for surface-burning characteristics of fabrics.
- F. Maintenance Data: For exterior scoreboards, operating hardware, and illuminated units to be include in maintenance manuals.

1.6 QUALITY ASSURANCE

- A. Source Limitations: Obtain scoreboards from single source from single manufacturer.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified agency, and marked for intended location and application.
 - 1. ETL/CSA listed
 - 2. FCC Class A requirements
 - 3. NEC Compliant
- C. Pre-installation Conference: Conduct conference at project site.
- D. Engineering Responsibility: Engage a qualified professional engineer to design scoreboard support system including foundations, and prepare design calculations, shop drawings and other structural data.

1.7 WARRANTY

- A. Warranty: Manufacturer's warranted against defects in materials and workmanship for a period of five (5) years minimum from the date of invoice. This includes factory repair service for parts covered under warranty. Complete warranty details.

1.8 PROJECT CONDITIONS

- A. Environmental Limitations: Installation may proceed within acceptable weather conditions.
- B. Field Measurements: Verify position, elevation and layout for exterior scoreboards.

1.9 COORDINATION

- A. Coordinate layout and installation of exterior scoreboards components with other construction.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide the following:

- 1. Sportable Scoreboards or approved equal
106 Max Hurt Drive
Murray, KY 42071
Tel: (800) 323-7745
Fax: (270) 759-4112
www.sportablescoreboards.com

or a comparable approved product by one of the following:

- 2. Daktronics, Inc.
- 3. Institutional Specialities, Inc.
- 4. Nevco Scoreboard Company

2.2 SCOREBOARD

- A. Sportable Scoreboards Model 7416 LED single-sided scoreboard shall score the following:

- 1. Football:
 - a. HOME Score: 2-digit displays, 0-99
 - b. GUEST Score: 2-digit displays, 0-99
 - c. DOWN: 1-digit display, 0-4
 - d. TO GO: 2-digit display, 0-99
 - e. QTR: 1-digit display, 0-4
 - f. CLOCK: programmable 4-digit clock, counts down/up, 99:59-00:00
- 2. Baseball:
 - a. Home Score: 2-digit displays, 0-99
 - b. Guest Score: 2-digit displays, 0-99
 - c. Balls: 1-digit display, 0-4
 - d. Strikes: 1-digit display, 0-3
 - e. Outs: 1-digit display, 0-4
 - f. Inning: 2-digit displays, 0-99
 - g. At Bat: 2-digit displays, 0-99

- B. General Information:

- 1. Dimensions: 6' height x 16' width x 8" depth

2. Weight: Hanging weight 555 lbs; Shipping Weight 615 lbs
 3. Power Requirement:
 - a. Scoreboard: (1) 20-amp, 120-volt, 60-hertz, grounded AC circuit connected to an ON/OFF switch and/or circuit breaker
 - b. Controller: (1) 20-amp, 120-volt, 60-hertz, grounded AC circuit in standard duplex outlet; standard hand-held controller powered through scoreboards control table
 4. Color: Seven (7) standard colors to choose from.
- C. Construction:
1. 22-gauge galvaneal steel cabinet with powder coat finish for strength, durability, and lasting appearance.
- D. Overview:
1. Large 15" high super-bright 100,000-hour rated LED numerals are the largest, have the widest viewing angle in the industry and visibility is over 300 feet. The 22-gauge galvaneal steel cabinet with powder-coat finish means your scoreboard is the most durable on the market and will look brand new for many years. Scoreboard package includes: operator's keyboard, digit protective shields, junction box cover (cable models only), mounting rails and a complete operation, installation and service manual.
- E. Digits:
1. 15" tall, 160 degrees visibility, red, 100,000 hour-rated, outdoor Super-Bright LED (light emitting diode) displays Lexan Protective Digit Shields and Adjustable LED Brightness included.
- F. Captions for Baseball:
1. Home and Guest captions shall be 10" tall
 2. Ball, Strike and Out caption shall be 10" tall
 3. All captions: Polymeric Calendared Vinyl Lettering
- G. Captions for Football:
1. Home and Guest captions shall be 10" tall
 2. Down, To Go, QTR caption shall be 10" tall
 3. All captions: Polymeric Calendared Vinyl Lettering

2.3 SCOREBOARD CONTROLLER

- A. General Information:
5. Dimensions: 3.5" height x 15.5" width x 7.5" depth
 6. Weight 2 lb.

B. Overview:

1. Universal keyboard controller available with this scoreboard is microprocessor-controlled, molded of high-impact ABS plastic, has a tactile membrane keypad, and is capable of operating any of the manufacturer's scoreboard models. Large backlit LCD display, custom software, and game-specific keypad inserts minimize required input and ensure ease of operation, Fail safe memory stores all scoring information and option settings for over five years. (Options include 2.4 GHz wireless control and external battery pack with automatic battery charger.)

C. Cable-Controlled System (standard) includes:

1. Universal LCD Keyboard controller
2. Baseball and Football keypad inserts
3. 12 volt DC wall transformer
3. Junction box cover with receptacle (to be installed at scorekeeper's location)
4. 20-ft signal cable (used to connect the keyboard to the junction box receptacle.
5. Project-specific length of 4 wire twisted pair, shielded control cable.

D. 2.4GHz Wireless System (optional) includes:

1. Universal LCD keyboard controller (external battery pack with charger optional)
2. Baseball/Softball and Football Keypad inserts
3. 12-volt DC Wall transformer
4. 2.4GHz transmitter (connects to keyboard controller via supplied interface cable)
5. 2.4GHz receiver (connects to the scoreboard, eliminating control cable and junction box installation).

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine walls, with Installer present, for compliance with requirements for installation tolerances, surface conditions of wall, and other conditions affecting performance of the Work.
- B. Examine roughing-in for electrical power system to verify actual locations of connections before installation of illuminated units.
- C. Examine walls and partitions for proper backing for display cases.
- D. Examine walls and partitions for suitable framing depth if recessed units will be installed.

- E. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. This model may be installed between (2) 8" OD steel, schedule 40 poles; or (2) 8" I-beams, minimum. Hole depth and diameter, as well, as pole/concrete specifications must be based on customer's local building codes, soil conditions, and wind loads. Mounting rails are supplied.
 - 1. Install scoreboard at proper location and elevation, plumb, level, according to accepted shop drawings, manufacturer's recommendations, and as specified in this section.
 - 2. Provide accepted fasteners, inserts, and expansion anchors for supports. Place supports in shear position where possible.
 - 3. Scoreboards shall be properly grounded

3.3 CLEANING

- A. After completing exterior scoreboards-inspect components. Remove spots, dirt, and debris and touch up damaged shop-applied finishes according to manufacturer's written instructions.
- B. Replace exterior scoreboards and finishes that cannot be cleaned and repaired, in a manner approved by Architect, before time of Substantial Completion.

3.4 SERVICE

- A. An access panel on the back of the scoreboard allows easy access to the electronic module, (the only working part of the scoreboard), for ease of replacement/servicing. These universal, plug-in electronic modules are used in all of the manufacturer's scoreboards using outdoor LED displays, and are 100% interchangeable between any of the manufacturer's outdoor, permanent LED scoreboards.

END OF SECTION