

DIVISION 11- EQUIPMENT



116845 Exterior Scoreboards

DIVISION 14- CONVEYING SYSTEMS (NOT INCLUDED)

DIVISION 21- AUTOMATIC FIRE SPRINKLER SYSTEM (NOT INCLUDED)

DIVISION 22- PLUMBING

220510	Codes and Standards
220517	Supports, Anchors, and Seals
220523	Piping Specialties (Plumbing)
220540	Plumbing Demolition
220553	Identification
221116	Piping (Plumbing)
220700	Plumbing System Insulation
223300	Water Heaters
224000	Plumbing Fixtures, Trim, and Supports
224100	Drains and Cleanouts

DIVISION 23- HVAC

230510	Codes and Supports
230517	Supports, Anchors, and Seals
230520	General Completion (HVAC)
230540	Mechanical Demolition
230553	Identificaiton
230593	Testing and Balancing
230700	Mechanical Systems Insulation
230900	HVAC Control System
232300	Piping (HVAC)
233113	Ductwork
233350	Vibration Isolation
233300	Duct Accessories
233400	Air Moving Equipment
233600	Air Terminals
233713	Outlets (HVAC)
233743	Air Filtration Equipment
237413	Roof Mounted Single Packaged Air-Conditioning Units

DIVISION 26- ELECTRICAL

260500	Common Work Results for Electrical
260519	Low-Voltage Electrical Power Conductors and Cables
260526	Grounding and Bonding for Electrical Systems
260529	Hangers and Supports for Electrical Systems
260533	Raceways and Boxes for Electrical Systems

## SECTION 116845 – EXTERIOR SCOREBOARDS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:

- 1. Baseball and Softball field scoreboards

- B. Related Sections:

- 1. Division 26 Sections for wiring and other electrical work for exterior scoreboards-baseball and softball fields.

#### 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): 120 deg F, ambient; 180 deg F, material surfaces.

- B. Structural Performance: Provide scoreboard support system capable of withstanding design loads within limits and required in compliance with current FBC and local Building Code requirements applicable to this project, and not limited to live loads, dead 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 scoreboards. 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, and locations for attachment of exterior scoreboards-baseball and softball fields 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 tests performed by a qualified testing agency, for surface-burning characteristics of fabrics.
- F. Maintenance Data: For exterior scoreboards, operating hardware, and illuminated units to 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 testing agency, and marked for intended location and application.
  - 1. ETL/CSA listed.
  - 2. FCC Class A requirements
  - 3. NEC Compliant
- C. Preinstallation 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 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-baseball and softball components with other construction.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

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

Sportable Scoreboards  
106 Max Hurt Drive  
Murray, KY 42071  
Tel: (800) 323-7745  
Fax: (270) 759-4112  
[www.sportablescoreboards.com](http://www.sportablescoreboards.com)

or a comparable product by one of the following:

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

2.2 SCOREBOARD

- A. Sportable Scoreboards Model 3308LED single-sided scoreboard shall score Home and Guest to 99, Inning to 9, and Ball, Strike, Out information.
- B. General Information:
  - 1. Dimensions: 3' height x 8' width x 8" depth
  - 2. Weight: Hanging weight 190 lbs; Shipping weight 225lbs.
  - 3. Power Requirement: 20-amp, 120-volt, 60 hertz, grounded AC circuit connected to an ON/OFF switch and/or circuit breaker; Controller, standard hand-held controller powered through scoreboards control cable.

4. Color: Seven (7) standard colors to choose from.

C. Construction:

1. 18-gauge galvanized steel cabinet with powder coat finish for strength, durability, and lasting appearance.

D. Overview:

1. Large 20" 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 18-gauge galvanized 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. 20.0" tall, 160 degrees visibility, red, 100,000 hour-rated, outdoor Super-Bright LED (light emitting diode) displays Lexan Protective Digit Shields and Adjustable LED Intensity Included

F. Captions:

1. Home and Guest captions shall be 5.5" tall
2. Ball, Strike and Out caption shall be 5.0" tall
3. All captions: Polymeric Calendared Vinyl Lettering

## 2.3 SCOREBOARD CONTROLLER

A. General Information:

1. Dimensions: 1.25" height x 6.75" width x 6.0 depth
2. Weight: 1lb

B. Overview:

1. The universal keyboard controller available with this scoreboard is microprocessor-controlled, molded of high-impact ABS plastic, has a tactile membrane keypad, Options include 2.4 GHz wireless control and external battery pack with automatic battery charger.

C. Cable-Controlled System (standard) Includes:

1. Keyboard controller
2. Baseball/Softball keypad insert
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 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.

### 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 116845