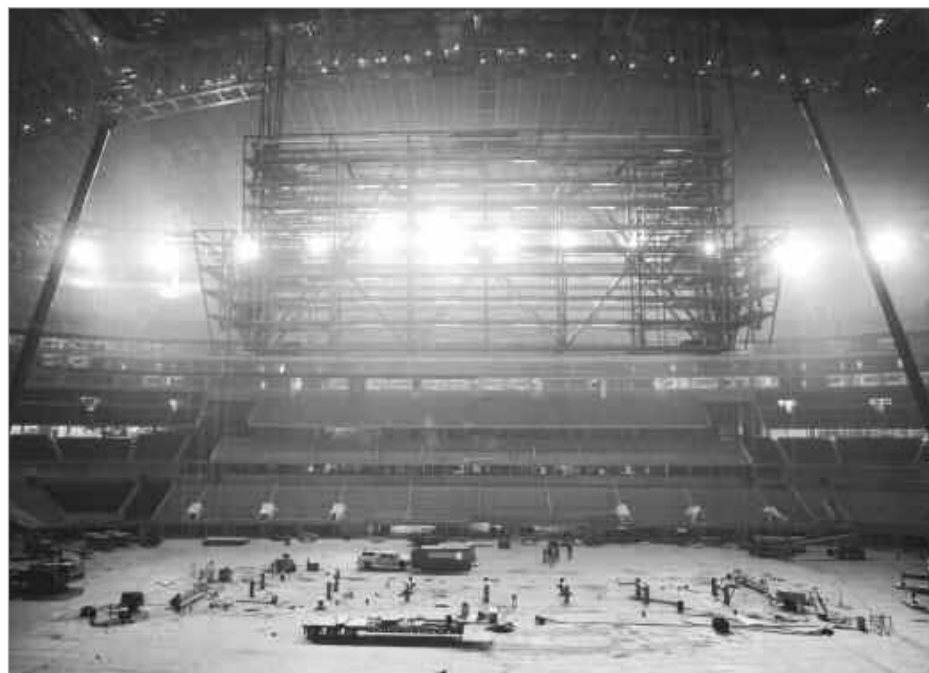


COWBOYS STADIUM



A construction worker in November welded together pieces of the star that sits atop the large video board.

Top left: The framework of the video board began to take shape in September on the stadium's floor.

Top right: Crews lifted the video board into place in December with four hydraulic jacks and a computer that controlled the raising of the structure.

Right: Gabriel Madrid (left) and John Sullivan steered one of the remaining LED video panels into place atop the video board in March.



Photos by
TOM FOX
Staff Photographer

Getting the big picture

Cowboys' new stadium features the largest indoor display in the world

The Cowboys' \$40 million display board may be a referee's worst nightmare if he blows a call. No detail will be missed by the fans because the display stretches from around the 23-yard line on one end of the field to the 23-yard line on the other end. Each main sideline display boasts a viewing area of about 11,380 square feet.

DISPLAY FEATURES

The main sideline displays have a 1920 x 1080 HDTV resolution — the same resolution in many flat-panel TVs.

159 feet, 7 inches: Width of the display

The top of the display will feature a **back-lit star**.

Size of a **35-by-45-foot movie screen** at the AMC NorthPark 15 theater.

71 feet, 4 inches: Height of the display

28 feet, 6 inches: Height

50 feet, 5 inches: Width

End-zone displays have a resolution of 1280 x 720 but can be upscaled to 1920 x 1080.

One of two **motorized platform cages** used to access the display from the field.

Approximately **10.5 million LEDs** are used in each sideline display.

Actual size

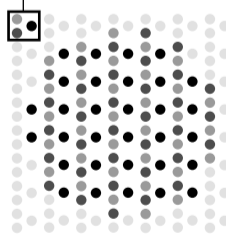
1,024 LEDs are used in each **12-by-12-inch lighting unit**.

24 lighting units make up a **6-by-4-foot module frame**.

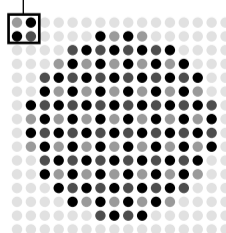
THE RESOLUTION

How the "quad pixel" technology achieves a higher resolution and better color than typical displays:

Typical LED cluster
In a typical display, three LEDs are used to form clusters of red, green and blue.

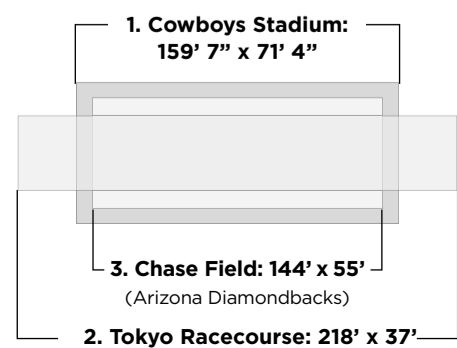


"Quad-pixel" cluster
Four-LED clusters fit more pixels in an area, resulting in a higher resolution and better color.



SIZE COMPARISON

The three largest displays in the world:



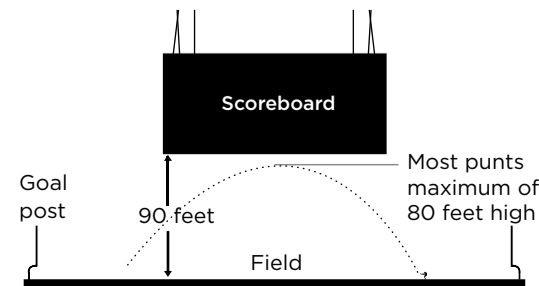
LENGTH COMPARISON

A Dallas Area Rapid Transit bus is 40 feet long. The display is the length of four of those buses and 6½ times the height of one bus.



CLOSE CALLS?

Since most punts reach a maximum height of 80 feet, there may be close calls, but the display is expected to be safe.

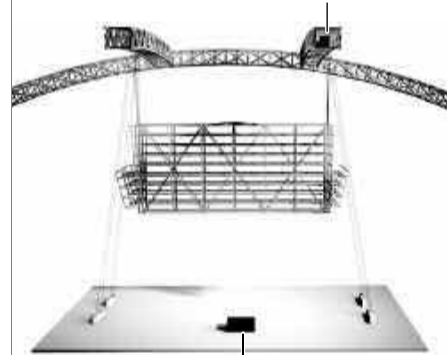


INSTALLING THE DISPLAY

1 The framework of the display is built on the ground directly below the area where it will hang.

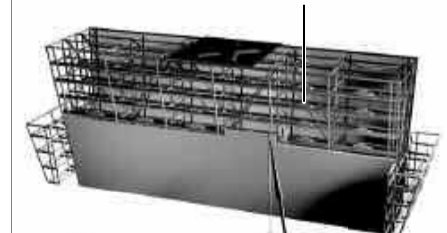


2 The display's frame is hoisted into position using four hydraulic jacks.



A technician controls the hydraulics from an enclosed workstation to ensure that the structure stays level.

3 The structure is loaded with sandbags to keep the frame level and limit structural stress as the LED panels are installed.



4 LED panels are hoisted by crane and installed. The sandbags are removed as the panels are installed.



5 Open areas of the display are closed off with mesh.

