

# Audubon Bridge (USA)



## Project description

In 2011, The John James Audubon Bridge opened in southern Louisiana. With a 1,581 ft (482 m) main span supported by two 492 ft (150 m) towers, and an overall length of 12,883 ft (3,927 m), the John J. Audubon Bridge became the longest cable stayed bridge in North America. The structure carries four lanes of traffic 65 ft (20 m) above the Mississippi River and replaces the unreliable ferry service. It is the only Mississippi crossing between Natchez and Baton Rouge, a distance of approximately 93 mi (150 km).

## mageba scope

TENSA®FINGER sliding finger joints, type GF and type RSFD, were selected to fulfill the requirements of both the client and the designer. Finger joints were preferred by the client for their low maintenance demands,

and the specific type of finger joint was determined by the movement demands of the bridge at each joint location. Cantilever finger joints, type RSFD, were chosen to facilitate the smaller movements of 12 in (305 mm) at one bridge axis, while sliding finger joints, type GF, were chosen for the bridge axes requiring movements of 28 in (710 mm) and 49 in (1,240 mm).

The GF joints feature sliding support for the ends of the finger plates which span across the bridge gap, and a downward pre-tensioning of the finger plates to ensure that they remain in contact with the sliding surface below.

Weighing 24 tons each, the joints, which allow 49 in (1,240 mm) of movement, are the largest sliding finger joints of their type ever manufactured.

## Highlights & Facts

### mageba products:

Type: TENSA®FINGER joints of type GF (sliding) and type RSFD (cantilever)

Installation: 2010

### Structure:

City: New Roads, LA

Country: USA

Built: 2007–2011

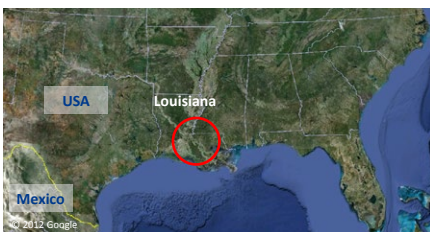
Type: Cable stayed bridge

Length: 2.44 mi (3,927 m)  
Main span 1,581 ft (482 m)

Contractor: Audubon Bridge Constructors (Flatiron and others)

Owner: LA DOT

The bridge spans the Mississippi River in Louisiana, upriver from New Orleans



Sliding finger joint with transportation and installation on frame, ready for delivery



Installation of a TENSA®FINGER sliding finger joint

