

# Ushibuka Haiya Bridge



## Architectural Outline

The Amakusa region is characterized by a finely textured topography and clear waters. Design studies conducted by the architects centered on the problem of harmonizing a bridge 13.6 meters wide and 883 meters long with girders 5 meters in height with that landscape. A suspension bridge or a cable-stayed bridge would have been structurally too assertive. A much simpler system of continuous girders was selected instead so that the bridge might appear as a single line floating in the landscape and thus blend in with the natural environment. The curved surfaces of the windbreak and the bottom of the bridge help to break down the five-meter height of the girder into three parts, creating a rhythmical pattern of light and shadow. The bridge is a delicate and highly expressive curved line that floats 19 meters above the water. The white windbreak flaps, which face upward, form a rhythmical series of delicate mirrors, reflecting the changing light and color of the sky.



### Architectural Data

Name	Ushibuka Haiya Bridge
Location	Ushibuka City
Main function	harbor connecting bridge
Developer	Kumamoto Prefecture
Architects	Renzo Piano Building Workshop (Renzo Piano, Noriaki Okabe), Ove Arup & Partners International (Peter Rice) and Maeda engineering
General contractors	joint venture of Hitachi Zosen, Yokogawa Bridge, Goyo Kensetsu, Wakachiku Construction, Saeki Kensetsu Kogyo, Yamato Construction, Ushibuka Construction and Kitatoki Construction
Length of bridge	883 meters
Bridge width	13.6 meters
Structure	
(lower part)	concrete cavity wall

(upper part)	7 span continuous steel deck plate box girder bridge
Construction period	November 1991 - August 1997
Total construction cost	12,200 million

## Profile of architect



### Renzo Piano

- 1937 Born in Genoa, Italy
- 1964 Graduated from School of Architecture, Milan Polytechnic
- 1974 Studied under Franco Albino and Louis Kahn
- 1971-77 Collaborated with Richard Rogers
- 1977-81 Collaborated with Peter Rice
- 1981 Established Renzo Piano Building Workshop (RPBW)

### ●Principal Works

Pompidou Center; The Menil Collection Museum; Kansai International Airport Passenger Terminal Building; IBM Traveling Pavilion; Potsdamer Platz Reconstruction (Berlin); Beyeler Foundation Museum (Basel)

### ●Awards

Legion d'Honneur; RIBA Gold Medal; Kyoto Prize, Inamori Foundation; Premium Imperial; Architectural Institute of Japan Award for Design; Pritzker Architecture Prize



### Noriaki Okabe

- 1947 Born in Shizuoka Prefecture
- 1971 Graduated from Department of Architecture, School of Science and Engineering, Waseda University

- 1974            Worked on design and construction of  
Pompidou Center, IRCAM
- 1981-89        Chief architect, Building Workshop (RPBW),  
Paris
- 1988            Won Kansai International Airport Passenger  
Terminal Building Competition; established  
RPBWJ
- 1994            Established Noriaki Okabe Architecture  
Network
- 1996-          Professor, Kobe Design University

●**Principal Works**

Kansai International Airport Passenger Terminal  
Building; Valeo Unisia Transmission Atsugi

●**Awards**

Architectural Institute of Japan Award; Japan Society of  
Civil Engineers Townscape Design Award



**Peter Rice**

((Structural designer))

- 1935            Born in Dublin, Ireland
- 1956            Graduated from Queen's University; entered  
Ove Arup & Partners
- 1960            In charge of Sydney Opera House
- 1973            In charge of Pompidou Center
- 1978            Established RFR (Paris)
- 1992            Died in London

●**Principal Works**

Pompidou Center, The Menil Collection Museum; Kansai  
International Airport Passenger Terminal Building; IBM  
Traveling Pavilion

●**Awards**

RIBA Gold Medal

PHOTO : Shoichi Ishimaru, K.A.P.