The $2.5 billion project was designed by Washington architectural firm, KressCox Associates (now Cox, Graae + Spack).

The most architecturally interesting aspect is the bridge’s ship-like operator’s tower, an arresting vertical presence in curved glass that emulates the look of an ocean-going ship’s smoke stacks.

Cricursa Curvados S.A., a world-renowned manufacturer of curved and specialty glass products in Barcelona, Spain, created the multi-panel sections of bent layered glass in a “dot” frit pattern. Thirteen bullet-resistant curved low-e glass panels and one flat panel totaled 1,500 sq. ft. in glazed surface. Each of the trapezoid shaped panels measure 6’ 6” wide by 19’ high. Each of the outboard sections have four glass layers; the inboard ones, two.

IG fabrication and installation of the tower sections was handled by Midwest Curtainwalls Inc., Cleveland, Ohio. “This project was small, compared with our typical high-rise towers, but it was perhaps the most challenging job we’ve ever done,” says company president Don Kelly. “We field-assembled the IG using Super Spacer® TriSeal™ and raised each assembled panel, weighing over 800 pounds, into place using a unique 12-cup lifting apparatus, which we built especially for this project.

“This was our first experience working with Quanex’s structural warm edge spacer,” notes Kelly, “but it won’t be the last. We feel that with flexible Super Spacer Tri Seal, you have much better chance of getting a continuous primary seal around the perimeter of the glass on both sides of the spacer, adding significantly greater years of service without worry of seal failure.”
TECHNICAL DETAILS OF THE PROJECT

THE CLIENT

Woodrow Wilson Bridge

THE PROJECT

Control Tower

CONSTRUCTION

Structural Glazed curved glass construction with Super Spacer TriSeal™ fabricated by Cricursa Curvados, SA. Bullet resistant, bent laminated low e glass panels.

ARCHITECT

KressCox Associates
Midwest Curtainwalls Inc.