



Project Description

The Delegation of the European Commission to the USA (DECUSA) opened as an information office in Washington in 1954 in recognition of American support for European integration. The structure housing the current Washington Delegation staff was originally constructed of conventionally reinforced concrete. In order to accommodate new and higher service loads, several structural concrete floors (i.e., slabs) required strengthening.

Kline's primary objective was to design the strengthening system that would allow the existing slabs to carry higher loads than what they were originally designed to carry. For existing slabs, usually, the most effective strengthening system is the fiber-reinforced polymer (FRP) laminate due to its lightweight and high strength properties, and ease of installation.

The 9th, 8th, 6th, and ground levels required strengthening. Kline performed a complete structural analysis of the floors to determine the design moments. Generally, CFRP strengthening was suitable at most locations, but where CFRP still remained unsuitable, additional rebar was used instead.



Washington, DC

CAPABILITIES

- Evaluation and Restoration

Developer/Owner:

DECUSA

Architect:

Fox Architects

Project completion:

2017

Industry:

Governmental

Project type:

STRENGTHENING