structurally SECRET sound MISSION



PERHAPS IRONICALLY, the International Spy Museum is becoming more conspicuous.

Currently housed in a series of renovated 19th-century buildings in Washington, D.C.'s Penn Quarter neighborhood, the museum is expected to move into its new home—a 140,000-sq.-ft, seven-story steel-framed structure at L'Enfant Plaza—next year. Designed by architect Rogers Stirk Harbour+ Partners and structural engineer SK&A Group, the building incorporates approximately 1,500 tons of structural steel, much of it exposed, with SteelFab, Inc. (AISC member and certified) as the prime fabricator and AISC member Prodraft, Inc., as the detailer.

The building encompasses a two-story lobby, three floors of exhibition space and two floors of event space including a rooftop terrace with sweeping views in all directions. The façade of the exhibition levels slopes outward as it rises on two sides and is accented by bright red diagonal columns, with one side of the building featuring a curtain wall that creates perimeter circulation space outside of the galleries. The design intent is for the building to "hide in plain sight," with its striking exterior on prominent display but its true intent concealed within. Above these levels, the event space appears as a glowing box on top of the structure.

And this is where one structural element stays true to the museum's clandestine roots. While the vibration performance for the event space framing exceeds serviceability requirements, four steel tension rods, hidden from view, were incorporated to further dampen vibrations to essentially imperceptible levels. The idea is that during events involving large numbers of guests, especially with dancing involved, noticeable vibration could be alarming. And like the spies featured in the exhibits, the museum's owners don't want anyone to suspect a thing.