

Third-Party Facade Structural Engineering Review as part of the Contract Specification

1. General Requirement

The General Contractor shall retain an independent, qualified third-party Facade Structural Engineer to perform a comprehensive engineering review of the delegated design submittals prepared by the Glazing Contractor.

The third-party Facade Structural Engineer shall be JEI Structural Façade Engineering or minimally, shall not be the Glazing Contractor's engineer of record and shall act as an independent reviewer, but shall have more than 10 years of experience in the structural design of glazing systems.

2. Scope of Review

The third-party review shall include, at a minimum:

- Review of glazing system structural calculations and code required standards
- Verification of design loads, including wind, seismic drift, and thermal effects
- Review of anchorage design and load paths to primary structure
- Coordination with structural movement criteria provided by the Structural Engineer of Record
- Verification of movement accommodation (vertical, lateral, and interstory drift)
- Sealant movement joint design at curtain wall head joints and jambs
- Review of glass and framing member stresses
- Review of testing requirements and referenced standards (e.g., AAMA)
- 3D modeling at corners of buildings (positive and negative pressures) with weak axis bending and transfer of loads through horizontal mullions
- Analysis of mullion extensions with appropriate snow and wind loads

The review is intended to identify errors, omissions, and inconsistencies prior to fabrication and installation.

3. Submittal Requirements

The third-party Facade Structural Engineer shall provide a written, sealed report that includes:

- Summary of documents reviewed
- Confirmation of compliance with contract documents, or
- Identification of deficiencies and required corrective actions
- Confirmation that glazing system design accommodates specified structural movements

The report shall be submitted to the Architect and Structural Engineer of Record for review.

4. Timing

The third-party review shall be completed and accepted prior to release of glazing materials for fabrication.

5. Qualifications

The third-party Facade Structural Engineer shall be:

- A licensed Professional Engineer in the project jurisdiction
 - Experienced in curtain wall and storefront structural design and review
 - Demonstrably independent from the Glazing Contractor
-

6. Basis of Design (Optional Requirement)

Where specified in the Contract Documents, the third-party Facade Structural Engineer shall be:

- JEI Structural Facade Engineering and Drafting, or
- Another qualified firm approved by the Architect and Structural Engineer of Record

Requests for substitution shall be submitted in accordance with Division 01 requirements and shall demonstrate equivalent qualifications and experience.

7. End of Section