

Building Envelope Compliance Documentation

Project Name:		
Project Address:		Date:
Designer of Record:	Email:	Telephone:
Contact Person:	Email:	Telephone:
City:	Climate Zone:	Criteria Table:

Mandatory Provisions Checklist

Insulation (Section 5.4.1 and 5.8.1)

- Insulation materials are installed in accordance with manufacturer's recommendations and in such a manner as to achieve rated R-value of insulation.
 - Exception: for metal building roofs or metal building walls.
- Loose-fill insulation is not used in attic roof spaces when the slope of the ceiling is more than three in twelve.
- Attic eave vents have baffling to deflect the incoming air above the surface of the insulation.
- Insulation is installed in a permanent manner in substantial contact with the inside surface.
- Batt insulation installed in floor cavities is supported in a permanent manner by supports no greater than 24 in. (600 mm) on center.
- Lighting fixtures, HVAC, and other equipment are not recessed into the building envelope in such a manner to affect the insulation thickness.
 - Exceptions:
 - The recessed area is less than 1% of the total opaque area of the assembly.
 - The entire roof, wall, or floor is covered with insulation to the full depth required.
 - The effects of reduced insulation are included in calculations using an area-weighted average.
- Roof insulation is not installed over a suspended ceiling with removable ceiling panels.
- Exterior insulation is covered with a protective material to prevent damage. Insulation is protected in attics and mechanical rooms where access is needed.
- Foundation vents do not interfere with the insulation.
- Insulation materials in ground contact have a water absorption rate no greater than 0.3%.
- Where two or more layers of rigid insulation board are used in a construction assembly, the edge joints between each layer of boards is staggered.

Fenestration and Doors (Section 5.4.2 and 5.8.2)

- U-factors are determined in accordance with NFRC 100. U-factors for skylights shall be determined for a slope of 20° above the horizontal.
 - Exceptions:
 - U-factors are taken from Section A.8.1 for skylights.
 - U-factors are taken from Section A.8.2 for vertical fenestration.
 - U-factors are taken from Section A.7 for opaque doors.
 - U-factors are derived from DASMA 105 for sectional garage doors and metal coiling doors.
- Solar heat gain coefficient (SHGC) is determined in accordance with NFRC 200.
 - Exceptions:
 - SHGC is determined by multiplying the shading coefficient (SC) of the center of the glass by 0.86. Shading coefficient is determined using a spectral data file determined in accordance with NFRC 300.
 - SHGC for the center of glass is used. SHGC is determined using a spectral data file determined in accordance with NFRC 300.
 - SHGC is taken from Section A8.1 for skylights.
 - SHGC is taken from Section A8.2 for vertical fenestration.
- Visible transmittance (VT) is determined in accordance with NFRC 200.
 - Exception:
 - For skylights whose transmittances are not within the scope of NFRC 200, their transmittance is the solar photometric transmittance of the skylight glazing materials determined in accordance with ASTM E972.

Building Envelope Compliance Documentation**Air Leakage (Section 5.4.3)**

- The building envelope has a continuous air barrier meeting the requirements of Section 5.4.3.1.
- Air leakage through fenestration and doors meets the requirements of Section 5.4.3.2.

Exceptions:

- Field-fabricated fenestration and doors.
 - Metal coiling doors in semiheated spaces in Climate Zones 0 through 6.
 - Products that comply with the maximum whole-building leakage rate per Exception 3 to Section 5.4.3.2.
- Cargo doors and loading dock doors are equipped with weatherseals in Climate Zone 0 and Climate Zones 4 through 8.
 - Building entrances have vestibules.
- Exceptions:
- Building entrances have revolving doors.
 - Doors not intended as building entrance.
 - Doors opening directly from a dwelling unit.
 - Building entrances in buildings located in Climate Zone 1 or 2.
 - Building entrances in buildings located in Climate Zone 3 that are both (1) less than four stories and (2) smaller than 10,000 ft² (1,000 m²) in gross conditioned floor area.
 - Building entrances in buildings located in Climate Zones 4, 5, 6, 7, and 8 less than 1,000 ft² (100 m²) in gross floor area.
 - Doors separate from the building entrance that open into spaces smaller than 3,000 ft² (300 m²) in gross conditioned floor area.
 - Semiheated spaces.
 - Enclosed elevator lobbies for building entrances directly from parking garages.