

 BUILDING ENVELOPE**GENERAL INFORMATION****1.1 Whole Building Air Leak Testing and Infiltration Rates**

For *New Building* projects only, envelope to be tested according to ASTM E779. Air tightness to be tested to 0.25cfm/sf @75Pa as a requirement. Air tightness tested to 0.11 cfm/sf @75Pa is encouraged.

1.2 Window and Door Air Leak Testing

For New Building projects with windows and doors within scope, air leakage for fenestration and doors shall be determined in accordance with AAMA/WDMA/CSA 101/I.S.2/A440, NFRC 400, or ASTM E283.

1.3 Vestibules

For all buildings with entrances in scope, building entrances that separate conditioned space from the exterior shall be protected with an enclosed vestibule, with all doors opening into and out of the vestibule equipped with self-closing devices.

Exceptions include building entrances with revolving doors or doors not intended to be used as a building entrance (e.g. egress-only doors, private terrace doors).

DESIGN REQUIREMENTS**2.1 Infiltration and Air Leakage****a. Insulation**

For components included in project scope, design exterior opaque construction and exterior doors to U-values and R-values with a 5% improvement over code

b. Continuous Air Barrier

The building envelope shall be designed with a continuous air barrier. The barrier shall be wrapped, sealed, caulked, gasketed, or taped, in an approved manner to minimize air leakage, at doors, windows, junctions between walls and floors, penetrations, ducts and plenums, and other connections between planes that impact the continuous air barrier. Envelope design is to be reviewed by an external commissioning authority (CxA)

c. Acoustic Properties

For buildings determined to be in an area with high levels of environmental noise (including close proximity to roadways, trains, and subways), design exterior wall systems in compliance with the latest [New York City Environmental Quality Review \(CEQR\) Technical Manual](#) to meet the interior noise levels required for project space types and uses.

CONSTRUCTION REQUIREMENTS

3.1 Refer to [07 08 00 -BUILDING ENVELOPE COMMISSIONING](#)

END OF SECTION