



## FACILITIES MANAGEMENT AND ANCILLARY SERVICES

**INSTRUCTIONS - DIVISION 01** 

Exterior Enclosure Performance Requirements - 01 83 16

## Part 1 Thermal Resistance

## 1.1 Performance

For new construction and major renovations projects, the thermal envelope shall be designed following the performance-based code compliance pathway and a lifecycle analysis of the building envelope materials. Thus, each assembly of the thermal envelope of a building shall be designed taking total space conditioning energy and embodied carbon into account. The thermal transmittance and the total embodied carbon of the proposed assemblies should be optimized such that the proposed design has lower lifecycle greenhouse gas emissions while consuming equivalent, or less, energy for space heating and cooling when compared to a baseline building with an envelope designed according to the prescriptive RSI values of the building code.

## Part 2 Airtightness

.1 Airtightness

New buildings and projects changing building envelope composition for more than 50% of the vertical façades are to test for envelope airtightness according to EN13829 Method A and achieve infiltration rates inferior to 1.0 m³/(h.m²) at 50 Pa positive and negative pressures. Note that interior surface area of the external building envelope is used for m² calculation.

**END OF SECTION**