

Compare thermal evidence

Read heat transfer, solar heat gain and daylight as separate measures. Then request evidence for the exact proposed assembly.

U-FACTOR

Thermal transmittance. Lower values mean less heat transfer at the same temperature difference. Confirm units.

SHGC

Solar heat gain coefficient. Describes admitted solar heat; it does not measure insulation.

VT

Visible transmittance. Describes admitted visible light, separately from solar heat gain.

Suggested review checklist

- ☐ Record climate, orientation, glazing area, occupancy and applicable local requirements.
- ☐ Request the exact window or curtain-wall configuration and glazing build-up.
- ☐ Distinguish a whole-assembly rating from a centre-of-glass figure.
- ☐ Record the rating method, scope, units, report reference and proposed substitutions.
- ☐ Ask the design team to evaluate energy, glare, condensation and envelope interfaces together.

The DOE source concerns residential purchasing. Its numerical thresholds are not commercial facade requirements. This checklist is original procurement guidance, not a standard or compliance assessment.

PRIMARY SOURCES / FACTUAL DEFINITIONS

DOE / FEMP: window-performance definitions (residential scope)

NFRC: Understanding Window U-Factor (whole-product scope)

Develop the shading brief

Assess external shading together with glazing, daylight and HVAC performance. A blade pattern alone does not demonstrate energy or comfort performance.

ORIENTATION

Map each elevation and adjacent buildings or landscape that may obstruct the sun.

OCCUPIED HOURS

Compare geometry at actual occupied times and across seasons, not a single attractive sun angle.

OPERATION

Define control ownership, manual override, power-loss behaviour and service access.

Suggested review checklist

- ☐ Compare shade depth, spacing and blade angle for each facade orientation.
- ☐ Review solar exposure, useful daylight, glare and external views together.
- ☐ Check the selected glazing's VT and SHGC as distinct measures.
- ☐ Coordinate service access, structural checks and moving-part clearances with the responsible professionals.
- ☐ Record simulation inputs, assumptions and results before selecting an option.

The website animation and the IFC/DXF schematics illustrate geometry only. They contain no solar-path calculation, load verification or prediction of building performance. This operating checklist is suggested practice, not a prescribed standard.

Coordinate a useful BIM exchange

IFC is buildingSMART's open, vendor-neutral standard for built-asset information. Agree the receiving workflow before export.

EXCHANGE PURPOSE

Record receiving software, IFC version, coordinates, units, required objects and properties.

FILE CONFORMITY

IFC validation checks syntax, schema and normative rules. It does not establish project-specific compliance.

COORDINATION

A valid IFC can still contain unsuitable locations, unresolved interfaces or incorrect project information.

Suggested review checklist

- ☐ Open the export in the receiving application and confirm scale and location.
- ☐ Check storey assignment, element identifiers and the agreed properties.
- ☐ Review slab edges, anchors, openings, movement allowances, seal continuity and access.
- ☐ Give each issue an owner, status and due date; confirm closure in the next exchange.
- ☐ Keep illustrative example geometry separate from approved fabrication information.

The ALUCORE IFC uses metre units and example dimensions only. The DXF is an English millimetre schematic. Neither contains approved anchors, tolerances, drainage design, installation instructions or certified product properties.

PRIMARY SOURCES / FACTUAL DEFINITIONS

buildingSMART: Industry Foundation Classes (IFC)

buildingSMART: IFC Validation Service and its scope