# FEASIBILITY CHECKLIST FOR EXISTING NON-RESIDENTIAL BUILDINGS

The following checklist is used to assess the applicability of the LightLouver™ Daylighting System to existing commercial (non-residential) buildings. This checklist must be used with judgment based on experience and understanding of the unique conditions of the building being assessed.

## PROJECT INFORMATION

### NAME OF BUILDING

Building Address

City, State, Zip Code

### BUILDING OWNER

Contact Person

Phone Number & E-mail

### PROPERTY MANAGER

Contact Person

Phone Number & E-mail

### BUILDING ENGINEER

Contact Person

Phone Number & E-mail

### ARCHITECT

Contact Person

Phone Number & E-mail

### OTHER RELEVANT CONTACTS

Phone Number & E-mail

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## BUILDING SHADING

- Access of windows to sunlight.
  Do the windows on the east, south and west facades of the building have access to sunlight throughout the year?
  Use the following definitions to describe the type of access that the windows on each façade have.
  – FULL – Windows where LightLouver units will be installed will receive unobstructed sunlight.
  – PARTIAL – Windows where LightLouver units will be installed will be shaded during a portion of the year.
  Indicate the percentage of year that the windows will be shaded by surrounding buildings or vegetation.
  – NONE – Windows are fully shaded (receive no direct sunlight) throughout the year.

| | Full | Partial | None | Notes: |
|---|---|---|---|---|
| East Facade | ☐ | ☐ | ☐ | _____ |
| South Facade | ☐ | ☐ | ☐ | _____ |
| West Facade | ☐ | ☐ | ☐ | _____ |

## WINDOW PROPERTIES AND SIZE

- Adequate visible light transmission of window glazing.
  Is the visible light transmission of the window glazing 50% or higher? List glazing specifications, if available.
  – Visible light transmission (Tvis) is a measure of the amount of visible light that will pass through the glazing.
  – Solar heat gain coefficient (SHGC) is a measure of the amount of heat that will pass through the glazing.
  – U-value is a measure of the thermal conductance of the glazing.

☐ Yes Tvis _____ SHGC _____ U-value _____

☐ No

- Adequate area of daylight window glazing 7'-0" above finished floor.
  Is daylight window-to-floor area ratio 2–3% or higher? List or calculate the daylight window-to-floor area ratio in the proposed daylit space. For this calculation, the daylight window is only the portion of the glazing that is 7'-0" or more above the finished floor? (Divide window area above 7'-0" by the floor area of the proposed daylit space.)

☐ Yes Window area 7'-0" above finished floor _____ ÷ Floor area of targeted daylit space _____

☐ No = _____ Window/floor area ratio

- Sufficient mullion depth to accept mounting of LightLouver units.
  Is the distance from the glass to interior edge of mullion 1.5" or greater? List the depth.

☐ Yes Specify _____

☐ No

## PROPOSED DAYLIT SPACE CHARACTERISTICS

- Sufficiently open space without interior obstructions.
  Is the proposed daylit space sufficiently large with minimal interior obstructions higher than 5'-0", or are transom windows planned in the partition walls to allow daylight reflected by the LightLouver units to penetrate deep into the floor plate?

☐ Yes ☐ No

- Sufficient floor-to-ceiling height.
  Is the floor-to-ceiling height approximately 9'-0" or higher?

☐ Yes Specify _____

☐ No

- Sufficient light reflection from interior walls and partitions.
  Are the wall and partition colors sufficiently light to reflect daylight or could they be made sufficiently light?

☐ Yes ☐ No

- Sufficient light reflection from ceiling.
  Is the ceiling color sufficiently light to reflect daylight, or could it be made sufficiently light? Ceiling reflectance must be 80% or greater.

☐ Yes Specify _____

☐ No

- Proper ceiling surface and structural characteristics.
  Does the ceiling have a smooth, matte finish, with no heavy patterns or textures, and no protruding architectural or structural elements that would act as "light dams," blocking daylight from a LightLouver unit from "washing" daylight across the ceiling surface deep into the proposed daylit space?

☐ Yes Describe or make a sketch:

☐ No _____
_____
_____
_____
_____
_____

## ELECTRIC LIGHTING SYSTEM

- Ability to dim existing electric lighting system.
  Is it possible to add daylight dimming control to the existing electric lighting system?

☐ Yes ☐ No

- Ability to specify daylight dimming control.
  If LightLouver units are to be added as part of a renovation/retrofit, is it possible to specify daylight dimming control in the new electric lighting system?

☐ Yes ☐ No

## BUILDING IMAGES

- As appropriate, please attach exterior and interior images (photos) of the building to further explain or establish the existing design conditions.

☐ Interior images attached

☐ Exterior images attached