

## GLOSSARY

**Building Industry and Land Development Association (BILD):** was formed through the merger of the Greater Toronto Home Builders' Association (GTHBA) and the Urban Development Institute/Ontario. BILD is the voice of the land development, home building and professional renovation industry in the Greater GTA. BILD represents more than 1,400 member companies. Their membership includes: home builders; land developers; professional RenoMark™ renovators; land use and environmental planners; sub-contractors; manufacturers; lawyers; surveyors; architects; suppliers; and representatives of service, professional and financial institutions. For more information, visit <http://www.bildgta.ca>.

**Bird-Window Collisions (BWCs)/Strike:** any occurrence, whether fatal or not, of a bird colliding with a building which are most often associated with glass that reflects vegetation. The reflections can be associated with a natural feature, or can be associated with planted gardens.

**Building Owners and Managers Association (BOMA):** is the voice of the Canadian commercial real estate industry with over 3,200 members in regional associations across Canada. On behalf of the building owners, managers, developers, facilities managers, asset managers, leasing agents, brokers, and the product and service providers to over 2.1 billion square feet of commercial real estate in Canada, BOMA Canada addresses issues of national concern, and promotes excellence in the industry through information, education advocacy and recognition. BOMA has a local Toronto office, for more information, visit <http://www.bomatoronto.org>.

**Contiguous Glass Areas:** is defined as a continuous window construction, including frames or mullions, glazing units, and muntin bars, within a facade and separated in all directions by an opaque facade component. A contiguous glass area can be a glazing panel used for decorative or life-safety purposes and can include, but not be limited to, balcony guards, balcony dividers, louvers or projections made of glass installed in any position other than horizontal, guards, and balustrades. For the purposes of determining areas to be treated, it can also include spandrels: decorative glass that does not provide a window, and which reflects adjacent vegetation. It could also include areas of highly polished marble or stainless steel. For the purpose of these Guidelines, a maximum of 15% of the glass area on a façade can be left without treatment. The 15% would generally be applied primarily to retail window surfaces or building areas where the internal building function requires unimpeded views. Within this 15%, it is preferred that secondary treatments would generally be applied except on areas of contiguous glass less than 2m<sup>2</sup>.

**Endangered Species:** means a species that is listed or categorized as an "Endangered Species" on the Ontario Ministry of Natural Resources official Species At Risk in Ontario List, as updated and amended from time to time.

**Fatal Light Attraction:** the consequence of the increase in artificial lighting by streetlights and buildings, whereby nocturnal migratory bird species are attracted to and disoriented by our cities' glowing night skies. The effects of fatal light attraction are exacerbated in poor weather such as rain or fog.

**Fatal Light Awareness Program Canada (FLAP):** was founded in 1993 to spearhead international efforts to preserve migrating birds from collisions with buildings. This organization has been instrumental in promoting awareness of BWCs in Toronto, where their work is primarily focused, as well as in many other municipalities across Canada and the United States. FLAP Canada has consulted with many landowners, (public and private) to survey and monitor buildings where incidents of strikes have occurred and recommendations on new building construction and retrofitting existing development.

**Frit Patterns:** glass that is manufactured with a visible embedded pattern within the glass.

**Fenestration:** the arrangement of glass panels and/or windows in a wall.

**Heritage Buildings:** buildings that are listed on the Inventory of Heritage Properties for their historical and architectural significance.

**LEED® Canada for New Construction and Major Renovations (2009):** is the Canada Green Building Council's nationally accepted standard of sustainability for the commercial, residential, and institutional building industries. Credits are awarded in six categories: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, Innovation In Design and Regional Priority. For more information, visit <http://www.cagbc.org>.

**Light Pollution:** the unnaturally increased illumination and temporary fluctuations in lighting produced from man-made sources such as building lights, street lamps and vehicles.

**Light Spill:** a form of light pollution resulting from excess artificial light (i.e., lighting fixtures) from a focused source being cast where it is not useful or desired.

**Light Trespass:** a form of light pollution, where potentially unwanted light crosses a property line.

**Migration:** animal species' long distance movement from one habitat to another, according to the seasons and on an annual cycle.

**Mullions:** the bars between panes of glass in a window.

**Natural Area:** means features and areas which are important for their environmental and social values as a legacy of the natural landscapes of an area.

**Opaque Facade Component:** defined as a solid facade construction that is neither reflective nor transparent. Examples can include, but not be limited to, masonry, precast concrete, metal panel, EIFS, or wood facade and rainscreen constructions; spandrel panels with an infill panel of a material other than glass, back-painted or otherwise; or a screen, scrim, or continuous louvers applied over glazing or other construction with openings or spaces no larger than 50mm in at least one direction.

**Treatments:** modifications to windows, window coverings, buildings and landscaping to reduce the potential for BWCs.

**Public Building:** a building that belongs to a town, city or regional office, and is used by the public.

**Primary Treatment:** is defined as a standard based on a minimum visual markers/cues. In order to minimize bird collisions visual marker spacing on clear or reflective surfaces on a structure should not exceed 5cm (2 inches) on the horizontal plane or 10cm (4 inches) on the vertical plane. Primary treatments for new buildings and site plan design may include applying external semitransparent stripes, dots or other patterns. Primary treatments for retrofit of buildings may include blinds, shades and netting.

**Secondary Treatment:** is defined as treatments which allow some flexibility in window design, and have been shown to be somewhat effective in making glass more visible to birds, but do not meet the standards for primary treatments. Secondary treatments may include closely-spaced window mullions, internal blinds and shades, ultraviolet patterns with greater than 20-40% reflectivity, tinting and angling of glass, and judicious placement of vegetation so that it does not reflect in the glass.

**Spandrel Panel:** the opaque portion of a building's exterior between the top of a window and the sill of the window above.

**Up-lighting:** light that is projected directly upward by inefficient lighting fixtures. Direct upward light contributes greatly to artificial sky glow.

**Visual Markers/Cues:** a term used to describe birds' visual perception created by solid/opaque surfaces or physical cues on the exterior of a building which help its surface appear different than reflected sky or habitat.

**Visual Noise:** the effect of the application of visual markers on the appearance of a building. A building with high visual noise will be more visually distinct from reflected habitat or sky, and more easily distinguished and avoided by birds.

**Window-to-Wall Ratio (WWR):** is defined as the area of fenestration, including frame or mullion and glazing, relative to the total area of the facade. Treatment is required on each facade, and as such, the WWR of each facade shall be evaluated independently.  $WWR = \text{Area Glazing} - \text{including frames (m}^2\text{)} / \text{total facade area (m}^2\text{)}$ .