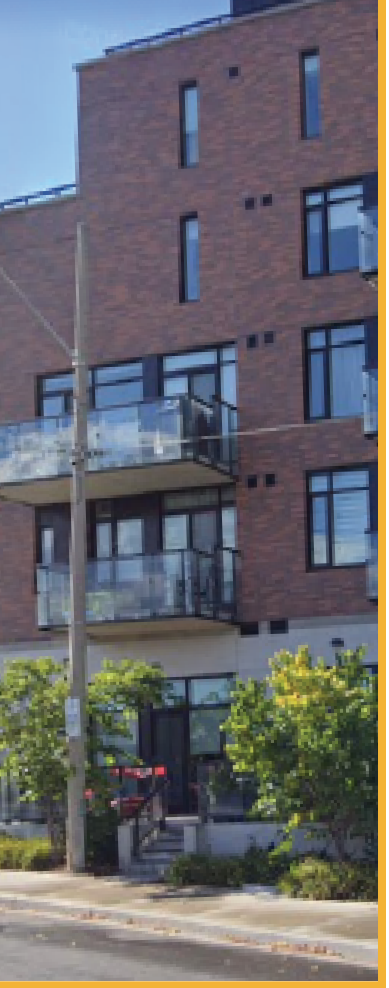
CLEARANCES TO OVERHEAD ELECTRICAL INFRASTRUCTURE

Communication is key between all parties involved in building and structural design, as well as construction and renovation activities near overhead (OH) electrical infrastructure. Planners, architects, developers/contractors and property owners must be informed and work together to ensure all laws, regulations and local requirements are met for the safety of workers and occupants.

TORONTO HYDRO®



Customers can contact Toronto Hydro to determine clearance requirements during the design stage.

Maintaining minimum clearances ensures public and construction crew safety. Horizontal and vertical clearances take into account space required for contractors and Toronto Hydro crew members to safely inspect, install and maintain the OH distribution system.

New buildings or additions to buildings

Toronto Hydro must be notified about proposed projects early in the design phase to identify any potential conflicts with nearby overhead powerlines. Site plan applications should be provided, including the drawings, before any permits are issued by the municipality. Ideally, Toronto Hydro will have the opportunity to provide feedback prior to or during the pre-design stage.

Clearance required from OH powerlines

To ensure compliance with all applicable standards and regulations, customers and contractors are required to follow two types of clearances:

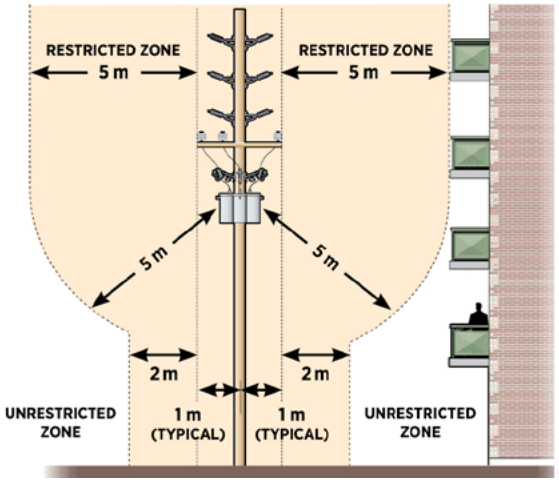
1. **Working clearance requirement**
   People and equipment operation (e.g. cranes) cannot come within **3 metres** of OH powerlines. Anyone who is operating equipment in this area must have the necessary training and qualifications.
2. **Permanent structure clearance**
   All permanent structures (including awnings, balconies, flag posts and signs) must maintain a clearance of **5 metres** from OH powerlines. This clearance takes into account the working clearance requirement of 3 metres plus an extra 2 metres for "maximum conductor swing" (the greatest horizontal displacement of a conductor from its standard, resting position).

   The permanent structure clearance of 5 metres applies to all OH powerlines. Toronto Hydro's powerlines have voltage levels ranging from 120 V to 27,600 V. Equipment and lines greater than 750 V are considered to be medium voltage. Below 750 V is considered low voltage and typically requires smaller clearances, provided they don't infringe on clearances for higher voltage powerlines. However, given the continuous developments across the city, electrical and pole equipment changes over time and therefore clearances outlined in this guide generally apply to all OH powerlines.

This diagram illustrates Toronto Hydro's clearance standards and its requirements.

MEDIUM VOLTAGE (>750 V) LINE CLEARANCES

Clearance from powerline (radial to conductor): **5 m**



Toronto Hydro must be contacted prior to any activity within **3 metres** of OH electrical infrastructure, such as tree trimming or working on the sides of a building (e.g. window washing, painting, window installation). According to the Electrical Utility Safety Rules and the Ontario Electrical Safety Code, only Toronto Hydro's employees or approved contractors can work in proximity to these lines.

Where clearances to OH powerlines can't be met, customers must contact Toronto Hydro for alternative solutions. Toronto Hydro may require the requesting party to pay for the relocation of existing OH powerlines to ensure clearances are met for public safety and access.

Prior to beginning a project, customers may request the relocation of existing OH powerlines by submitting a Service Request to Toronto Hydro at **torontohydro.com/servicerequest**.

For more information, call
416-542-8000
For safety tips, visit
torontohydro.com/safety

USF UTILITIES STANDARDS FORUM

TORONTO HYDRO®