

# WCG SERVICE REQUIREMENTS

## **EXTERNAL REQUIREMENTS:**

#### 1. SERVICE TO THE BUILDING:

- a. Single Family Unit (SFU 1 unit) and Multiple Unit Dwelling (MUD 2-4 units)
  - i. Underground
    - A 25mm ID HDPE conduit labeled WCG and with a pull string is required from the property line or service point to an external demarcation location on the building. The minimum depth requirement for the conduit is 0.6m. (See Note 3)
  - ii Aerial
    - A service cable will be installed from a location above the external demarcation location of the building to the closest pole with direct line of site. The clearance of the cable across a lane or road must meet CSA/CEC standards.
    - A service mast must be installed on the roof if required to reach the minimum vertical clearance of the cable across a lane or road. It must be easily accessible & safe for installs. Weather head must allow for a minimum cable diameter of 10.2mm.
- b. MUD (Multiple Unit Dwelling 5+ units) and Commercial Buildings
  - i. Underground

A 38mm ID HDPE conduit labeled WCG with a pull string is required from the property line or service point to an external demarcation location on the building. The minimum depth requirement for the conduit is 0.6m. (Note 3)

- ii. Aerial
  - The attachment location for a service cable will be above the external demarcation location of the building to the closest pole with direct line of site. The clearance of the cable across a lane or a road must meet CSA/CEC standards.
  - A service mast must be installed on roof if required to reach the minimum vertical clearance of the cable across a lane or road. It must be easily accessible & safe for installs. Weather head must allow for a minimum cable diameter of 15.5mm.

### 2. EXTERNAL DEMARCATION LOCATION (CABLE/CONDUIT OUTSIDE TO INSIDE TRANSITION):

- a. One or more pieces of equipment may be required on the external walls. (Note 3 & 4)
  - i. For a Single Family Unit (SFU 1 unit) & Multiple Unit Dwelling (MUD 2-4 units), typically the installation of one to two pieces but up to four pieces of equipment (sizes may vary) may be required. (Note 3 & 4)
  - ii. For a MUD (5+ units) with a dog house where the electronics are external, a 19mm thick plywood backboard (1.2m H x 1.2m W) is required mounted 1.2m above the floor at eye-level. (Note 3 & 4)
  - iii. For a MUD (5+ units) where the initial demarcation is actually installed internally, a 50mm X 60mm pull box may be required externally for WCG slack cable. (See Note 5)



## **INTERNAL REQUIREMENTS:**

- 1. INTERNAL DEMARCATION LOCATION TO WIRING CENTRE IN A SINGLE UNIT
  - a. SFU and MUD (2-4 units).
    - i. One 25mm conduit with pull string marked WCG for WCG's exclusive use.
      - Current WCG services as of February 2013 require that a Series 6 or Series 11 coaxial cable (depending on distance) and a Fibre Optic cable (fibre provided by WCG) be installed in the conduit. (See Note 5)
  - b. MUD (5 + units)
    - i. One 25mm conduit with pull string marked WCG for WCG's exclusive use.
      - Current WCG services as of February 2013 require that a Series 6 or Series 11 coaxial cable (depending on distance) and a Fibre Optic cable (fibre provided by WCG) be installed in the conduit. (See Note 5)
- 2. INTERNAL DEMARCATION LOCATION INSIDE A MUD (5+ units):
  - a. 19mm thick plywood backboard (1.2m H x 1.2m W) mounted 1.2m above floor at eye-level.
  - b. 15A, 120V outlet is required within 0.5m of the enclosure and power supply. (See Notes 2 & 6)
- 3. WIRING CENTRE IN A SFU OR INDIVIDUAL UNITS INSIDE A MUD:
  - a. A 19mm thick plywood backboard (1.2m H x1.2m W) mounted 1.2m above floor at eye-level.
  - b. A 15A, 120Vac outlet is required at wiring centre (installed according to CSA standards).
  - c. A series 6 coaxial & two CAT5E cables are required to each outlet. (See Note 1)

## NOTES:

- 1. Required coaxial cable is 100% shield, bonded foil standard construction, 60% aluminum braid, PVC jacket. Series 6 for cable distances up to 50m. Series 11 for cable distances of 50m-100m.
- 2. 15.2cm must be left between items on backboard for cable management and accessibility.
- 3. The footprint of the utilities attachments (includes internal & external demarcation locations) on the building is typically determined by the developer or electrician.
- 4. Available through WCG:
  - a. Required fibre optic cable.
  - b. External conduit.
  - c. External/Internal enclosures pull boxes and electronics.
- 5. Due to the quality and variety of WCG's service, future changes/upgrades in cable may be required. To keep from having to compromise finished walls and basements in the future, the installation of a 25mm conduit is required. Specs for current services have been noted above.
- 6. When internal & external demarcation locations on the same building are not on the opposite side of the wall from each other, a 25mm conduit with pull string, marked WCG for WCG's exclusive use must be installed between the two.
- 7. Grounding of cables & cabinets to be done to CSA/CEC Standards.
- 8. As per the Canadian Electrical Code Standard, all aerial cable crossing a lane or roadway must allow for a 5.5m clearance at the lowest part of the sag of the cable.
- To ensure accurate & safe installation of cable, involve WCG at commencement of construction – call 725-4300. Press # 2 for cable locates otherwise, stay on line for operator.