



Start Right Smart Guide

BC Single Family Unit



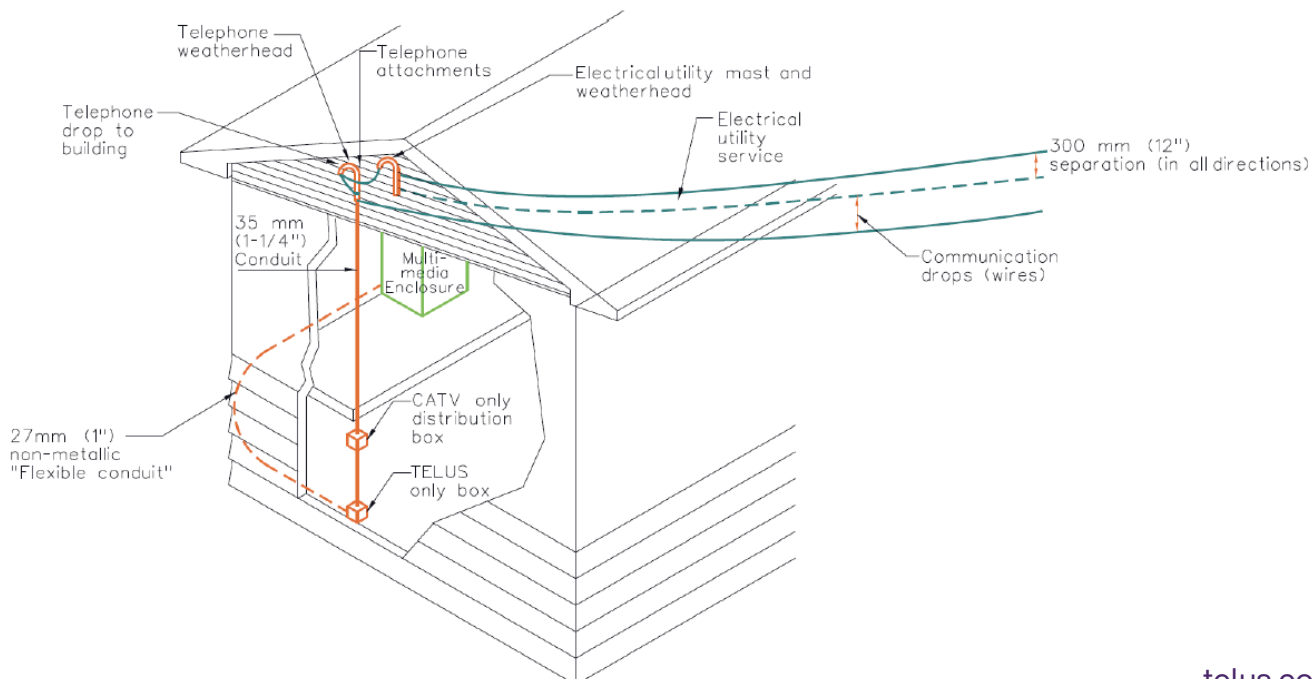
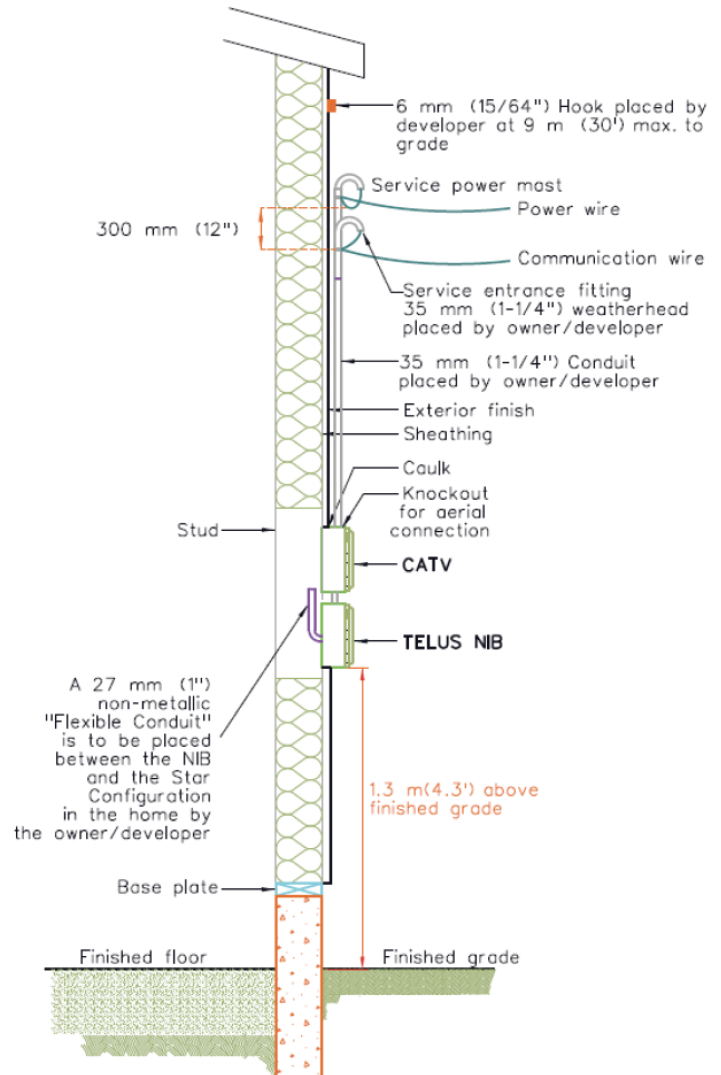
telus.com/Build

Aerial Service

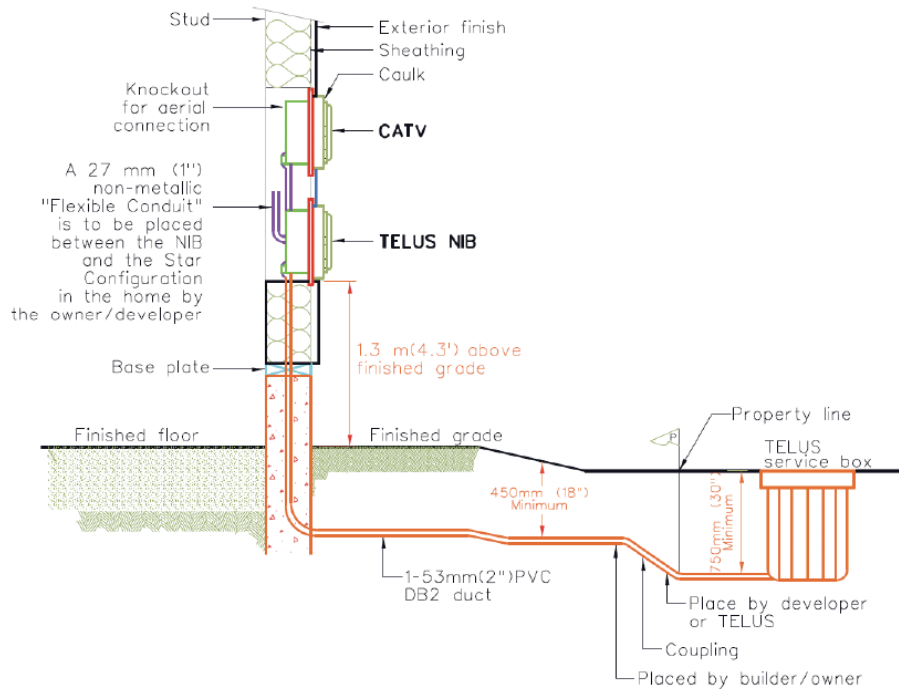
1. For aerial service, the following materials, available at electrical suppliers, are required: weatherhead, EMT (metal) or PVC (plastic) with UV inhibitor conduit, pull string and a Network Interface Box (NIB). A conduit size of 35 mm (1 1/4") minimum allows for placing of TELUS service wire to the building.
2. If the drop wire crosses a street or lane to reach the house, the minimum placing clearance is:
 - 5.3 m (17'5") above the crown of the road.
 - For additional clearances, please refer to the Aerial Building Entrance Specifications found on the TELUS New Market Operations Web site, or contact a representative at 4DEV@telus.com.

If the minimum road clearance cannot be maintained, TELUS will request the installation of a clearance pole. This will provide the minimum required CSA clearance in all weather conditions. For example, if your house is a low ranch style, it may be necessary to place a mast to ensure adequate road clearance. Telephone drop wire may attach to the same mast as electrical utility. If this is done, a minimum of a 300 mm (12") separation must be kept between electrical utility and TELUS wires (refer to dotted line below).

3. If the conduit is to support the drop wire from the pole then a minimum of 50 mm (2") rigid steel pipe must be used.
4. If the network wire (drop) is anchored to the building or to the Service Power mast, the telecommunication conduit must be 35 mm (1 1/4") PVC Schedule 40 with a weatherhead.



Underground Service



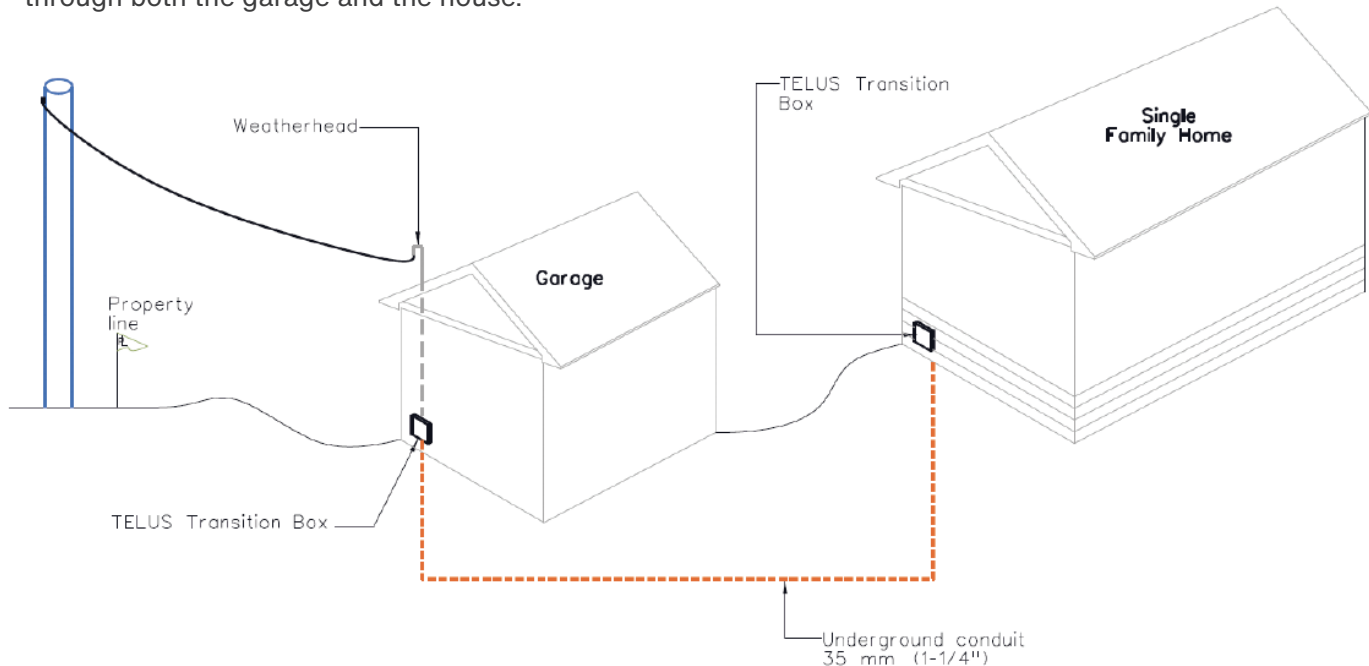
1. The owner/builder is responsible for supplying all material and civil work (to TELUS specifications) on private property.
2. All duct material will be orange in colour (53 mm (2") PVC-DB2 conduit; 53 mm (2") PVC-DB2 coupler).
3. Where the conduit transitions between horizontal and vertical, a 53 mm (2") PVC-DB2 300 mm (12") radius bend or 90° 53 mm (2") PVC J-bend (may be either DB2 duct or Schedule 40) must be used.
4. The owner/builder is to make the physical connection at the TELUS specified point of connection.
5. TELUS conduit must be on the property line side of the trench with 300 mm (12") separation from the electrical utility conduit. No crossover of TELUS conduit and electrical utility is permitted.
6. The minimum depth of cover above TELUS conduit is 450 mm (18"). This is the same minimum depth as the electrical utility.
7. All material used for back filling must be select fill, clear of all rocks and sharp stones unless otherwise specified for the first 200 mm (8") around the conduit, with the remainder being native fill free of rock larger than 150 mm (6").
8. Extend conduit 1.3 m (4'3") above the final grade into the NIB. The pull string is to be 3 mm (1/32") braided nylon cord.
9. Owner/builder is to provide a drain in the 90° bend into drain rock by perforating the bend on the bottom side.
10. No installation can have more than two 90° or equivalent bends ($2 \times 45^\circ = 1 \times 90^\circ$) without the use of a pull box. Pull boxes or L-bends must not be used in place of a bend.
11. Maximum pulling length is 60 m (200') through two 90° (300 mm radius) bends, or 90 m (300') on a straight pull.
12. Owner/builder to provide and install the plastic in-wall or surface NIB.
13. Owner/builder to ensure that TELUS and electrical utility conduit exit the concrete at minimum 300 mm (12") separation.
14. Depending upon foundation type and local bylaws, conduit can be attached to the exterior of the home or dwelling (all exposed PVC conduit must have UV inhibitors).
15. The exposed 53 mm (2") orange conduit may be reduced to 27 mm (1") grey conduit above the finished grade level. Do not glue the coupler reducer to the 53 mm (2") conduit, as access to the larger conduit may be required in the future.
16. All above requirements are subject to local building inspector approval.
17. A 27 mm (1") non-metallic 'Flexible Conduit', complete with pull string, is to be placed from the NIB to the inside wiring Star Configuration location inside the home. For CATV shared conduit, a 35 mm (1 1/4") conduit shall be used.

No Internal Conduit Pathway: If the builder decides NOT to provide a non-metallic conduit between the NIB and the inside wiring Star Configuration or multimedia enclosure inside the home, pre-wire 2 CAT-6 cables along with a single Bend Insensitive Fibre (BIF) (ITU-T-G657 compliant, indoor/outdoor rated). Conduit is the preferred option, and if conduit is not installed, additional services to the home owner may not be possible.

Garage/Laneway Home

Transitional Drop

Transitional drop is defined as an aerial or underground service which feeds through both the garage and the house.



1. Transitional drop service may be installed through aerial or buried service, and may attach to either the Single Family Unit, or the Garage/Laneway House.
2. The Builder/Owner is to provide a 35 mm (1¼") underground conduit between the Garage/Laneway Home, and the Single Family Home.
3. Each individual service will require conduit from the transition box to the central wiring location of each independent service (i.e., 3 suites would be 3 separate conduit runs). If the builder decides NOT to provide a non-metallic conduit between the transition box and the central wiring location or multimedia enclosure inside the home, pre-wire 2 CAT6 cables along with a single BIF (ITU-T-G657 compliant, indoor/outdoor rated). Conduit is the preferred option, and if conduit is not installed, additional services to the home owner may not be possible.
4. Transition box shall be weatherproof style minimum 203 mm x 203 mm (8" x 8") and be accessible to TELUS technicians.
5. Primary service must be installed in accordance with the above aerial and buried standards.

For more information please call 310-4DEV (4438)
or email 4dev@telus.com