



Scope of Work

Electrical Specifications

TABLE OF CONTENTS:

1.1	HEALTH AND SAFETY	2
1.2	LIABILITY INSURANCE	2
1.1.2	WSIB ISSUED CLEARANCE CERTIFICATE	2
1.1.4	REGISTRATION	3
2.1	SERVICE/WARRANTY	3
2.2	SERVICE - PDI	3
2.3	WARRANTY/SERVICE (POST CLOSING)	3
2.4	SUBCONTRACTOR INFORMATION GUIDE	3
2.5	EQUIPMENT CERTIFICATION AND OPERATORS TRAINING	4
2.6	SITE SCHEDULE	4
3.0	CONTRACTORS RESPONSIBILITIES	4
3.1.2	ELECTRICAL AUTHORITIES REQUIREMENTS	4
3.1.3	SERVICES	4
3.1.4	SERVICE GROUND	4
3.1.5	METER BASE	4
3.1.6	PANEL LOCATION	4
3.1.7	PANEL MOUNT	4
3.1.8	CIRCUIT BREAKER PANEL	5
3.1.9	PANEL IDENTIFICATION	5
3.1.10	INSPECTIONS	5
3.1.11	ENERGIZING HOUSE	5
3.1.12	WIRE	5
3.1.13	HEAVY-DUTY WIRE	5
3.1.14	RECEPTACLES	5
3.1.15	HRV/ERV	5
3.1.16	SWITCHES	5
3.1.17	SWITCH LOCATION	6
3.1.18	SWITCH ORDER	6
3.1.19	SWITCH CONTROLLED RECEPTACLES	6
3.1.20	SWITCH LABELS	6
3.1.21	3 WAY SWITCHES	6
3.1.22	SWITCH AND OUTLET COLOURS	6
3.1.23	HOT WATER TANK	6
3.1.24	WATER SOFTENER R.I.	6
3.1.25	SUMP PUMP RECEPTACLE	6
3.1.26	SEPARATE CIRCUITS	7
3.1.27	DISHWASHER ROUGH-IN	7
3.1.28	THERMOSTAT	7
3.1.29	RANGE EXHAUST	7
3.1.30	BATHROOM EXHAUST	7
3.1.31	DOOR CHIME	7
3.1.32	EXTERIOR RECEPTACLES	8
3.1.36	GARAGE LIGHTS	8

3.1.37	STANDARD LIGHT FIXTURES.....	8
3.1.39	STAIR LANDINGS.....	8
3.1.40	HANGING FIXTURES.....	8
3.1.41	EXTERIOR LIGHTS.....	8
3.1.42	POT LIGHTS.....	8
3.1.43	SMOKE DETECTORS.....	9
3.1.44	CARBON MONOXIDE DETECTORS.....	9
3.1.45	PAYMENT TERMS.....	9
3.2	CLEAN UP.....	9
4.0	SIGNATURES.....	10

Prior to work commencement, Signature Communities advises Sub-Contractors to become thoroughly familiar with all terms and conditions set out in “Scope of Work” and “Price Sheets”. It is understood the commencement of work by the Sub-Contractor is mutually considered acceptance of the terms of this agreement¹ and associated Price Sheets.

1.0 Health and Safety

The subcontractor shall respect and comply with a) the rules, regulations and practices required by the applicable construction health and safety legislation, and b) the health and safety policies and programs of Signature Communities.

1.1 Liability Insurance

1.1.1 WSIB – I.O.S. Registration of Constructors

As a sub-trade providing labour on any of our job sites, you are required to provide Signature Communities with an up to date “Certificate of Insurance” issued by your insurance broker/company, for Liability Insurance for your business, for a minimum of \$2,000,000.00. This certificate will expire at the same time your policy expires.

It is your responsibility to ensure Signature Communities is in possession of a current Certificate of Insurance. If this document has expired, we can no longer allow you on our sites and payment will be withheld due to lack of insurance. Once we have a current document place, we will release payments.

Note:

Partial payments will not be processed and all monies due will be held until a current Certificate of Insurance are received.

As a sub-trade providing labour on any of our job sites, you are required, in accordance with the rules and regulations of the Workers’ Safety & Insurance Board, to provide us with the following documents:

1.1.2 WSIB issued Clearance Certificate

For companies that have employees. The certificate is valid for 60 days from the date of issue and we must have a current certificate on file when we make payment to you.

¹ Scope Of Work

1.1.3 Registration Constructors and Employers Engaged in Construction Form

Before beginning work, the Ontario Ministry of Labour, Pursuant to Section 5 of the Construction Regulations made under the Ontario Health and Safety Act, requires that you complete a “Registration of Constructors and Employers Engaged in Construction” form.

2.1 Service/Warranty

2.1 Service - PDI

Upon notification by Site Supervisor you have 24 HRS or upon notification by the Customer Care Department you have 7 days to complete the following:

- Incomplete Work
- Defects in Materials and/or Workmanship

When Service work has been completed you must notify Site Supervisor or the Customer Care Department that the required work has been completed. If work is not completed within specified time period you will be back charged the cost to have work completed by another contractor.

2.2 Warranty/Service (Post closing)

Warranty coverage is set out under the Tarion Warranty Plan Act. This coverage takes effect from the date the Homeowner takes possession of the new home and remains in effect until the warranty period expires as per Tarion Warranty states One, Two and Seven years. As part of the agreement of the contract with Signature Communities you are accepting responsibility to complete deficiencies reported to you through the Site Supervisor or Customer Care department for the full warranty coverage period as specified by Tarion or as per agreement with Signature Communities and sub-contractors warranty. If the required work is **not** a defect in materials, workmanship or is not the initial work of sub-contractor who has received work order the item(s) are chargeable service to Signature Communities, we will process any applicable back charges. All required work must be completed and the Site Supervisor or Customer Care department must be notified within Seven (7) days from date of notification of service work order.

2.3 Subcontractor Information Guide

It is recommended all trades and suppliers review Signature Communities - *Subcontractor Information Guide* outlining procedures we expect you to follow. The *Subcontractor information Guide* is an information extension of the *Scope of Work*. Acceptance of the *Scope of Work* and associated Contract is mutually considered acceptance of the *Signature Communities - Subcontractor Information Guide* terms and conditions. This guide is currently being developed but the basic message is to work with a professional attitude and professional craftsmanship expected from a skilled tradesman. “Respect and teamwork” are the backbone of every Signature site, please conduct yourselves accordingly. Disputes will be settled in a cordial manner.

2.4 Equipment Certification and Operators Training

All subcontractors must have current and valid certification of equipment being used on the construction site. Operators of the equipment also must have a valid and current certificate of training to operate equipment as required by applicable legislation (OHSA, MOL). Copies of Certification and Training must accompany equipment and operator while on site.

2.5 Site Schedule

Trades and suppliers shall follow site schedule and communicate with Site Supervisor to ensure work and/or delivery schedule is current and up to date.

3.1 Contractors Responsibilities

Note:

Supply all labour, materials, tools, equipment, pay for and obtain all required permits, inspections as necessary to complete Electrical Work. Work to be completed as per the following specifications.

3.1.2 Electrical Authorities Requirements

Complete all Electrical work as per the Authorities having jurisdiction, Municipal and Ontario Hydro. Electrical Contractor will be provided with an Electrical plan to provide a quotation and/or to complete installation. Work shall be completed as per electrical code and as per plan. Attention to location of Switches, Pot Lights, Pre-Wire and other items locations is important as purchasers may have specifically requested placement of these items. If there are issues with the location of specified items communicate them with the Site Supervisor. All sleeving for electrical are to be complete by the electrical contractor.

3.1.3 Services

Supply and Install all material and labour to install standard 200 AMP service including extended service (beyond 8'0") where required. Supply and install temporary power and lighting for construction use.

3.1.4 Service Ground

Electrical Service shall be grounded to copper water service. In site that have plastic water service Electrical contractor is responsible to supply and install "grounding Plate" including bonding to gas line.

3.1.5 Meter Base

Ensure TYVEK is installed behind meter base.

3.1.6 Panel Location

All panels shall be installed in basements, unless the basement location is not feasible or the specific purchaser has requested panel to be located in garage area. Verify location on drawing and /or with the Site Supervisor. When panel is installed in garage, rough-in two 14-3 line to basement utility room for future finishing

Towns only- When the electrical panel is installed in garage and media (media panel) located in basement to have one duplex installed beside it.

3.1.7 Panel Mount

Install panel mount to foundation wall or the framed wall when placed in garage. 32"x48" x 5/8"
Plywood panel mount must have TYVEK installed on back side when fastened to foundation wall.
Panel mount materials will be supplied by builder, Electrical Contractor is responsible for building and
Installing a well equally cut and clean panel mount

3.1.8 Circuit Breaker Panel

Fasten panel to mounting unit. Standard panel to be supplied and installed by Electrical Contractor, and be sized to accommodate the 200 AMP service complete with 48 circuits. Panel may need to be upgraded to 64 circuits to accommodate larger houses and shall be noted on quote. Panel shall be installed in an upright position, not to be installed on the side. At the completion of all electrical work, a minimum 4-6 free breaker spaces must remain for future electrical upgrades.

3.1.9 Panel Identification

All circuits within panel must be clearly identified with printed labels, hand written labels will not be accepted.

3.1.10 Inspections

Electrical inspections are required and shall be the responsibility of the Electrical Contractor to coordinate and schedule the inspections.

3.1.11 Energizing House

House shall be energized upon the installation of the Hydro meter, along with the furnace being operational at the same time. Electrical Contractor shall supply and Install G.F.I. receptacle at panel location and 2nd floor for use during construction. At rough-in ensure Stove and Dryer receptacles are energized during heating seasons. Provide temporary lighting in all work spaces.

3.1.12 Wire

Supply and Install Copper wire. Wiring shall be installed as neatly as possible and fastened/supported as per electrical code.

3.1.13 Heavy-Duty Wire

Supply and Install Heavy-Duty wiring and receptacle for Range and Dryer/Washer location (220v)
Stove plug shall be placed maximum of 5-inches from floor to middle of receptacle box

3.1.14 Receptacles

Supply and Install standard metal outlet boxes on exterior and interior walls, as well as ceilings. Receptacles boxes shall be placed **16-inches** from sub-floor to bottom of receptacle box. All exterior wall/ceiling rough-ins must be mounted in a Vapour Barrier box or wrapped with 6 mm poly with sufficient overlap to be sealed to the vapour barrier at time of Insulating by other trades.

3.1.15 HRV/ERV

Place receptacles for HRV/ERV's as specified on electrical plans and extra sheets.

3.1.16 Switches

Internal white Décor switches and white Decor outlet with plates Switches shall be placed 6 inches to maximum of 8-inches from R.S.O. (rough Stud Opening) and **51-inches** from sub-floor to the bottom

of switch box. All exterior wall/ceiling rough-ins must be mounted in a Vapour Barrier box or wrapped with 6 mm poly and sufficient amount of overlap must be left to insure proper seal to the vapour barrier at time of Insulating by other trades.

3.1.17 Switch Location

All switches must be placed 1 meter from the “water’s edge” (Tubs and showers), this does not apply to sinks. Switches shall be placed on latch side of a door when required.

3.1.18 Switch Order

When multiple switches are placed at entrances and bathrooms, first switch shall control outside light or bathroom light, 2nd switch shall control interior lights or bathroom exhaust fan.

3.1.19 Switch Controlled Receptacles

Supply and install switch controlled receptacle in Living room and Master bedroom.

3.1.20 Switch Labels

Clearly label principal exhaust fan, furnace switch and switched receptacles, printed labels are required.

3.1.21 3 way Switches

Provide 3 –way switches for lighting at top and bottom of stairways in finished areas. All other 3-way switches as per electrical plans, code and extras or where area can be accessed from multiple directions

3.1.22 Switch and Outlet Colours

Switches and outlets, premium lighting fixtures as specified on colour selection sheets.

3.1.23 Hot Water Tank

Receptacle for the Hot Water tank shall be placed 30-inches from the bottom of floor joist.

3.1.24 Water Softener R.I.

When required water softener can share receptacle with hot water tank, Softener does not required separate receptacle unless water softener location differs from hot water tank location. Reference electrical plans and extras

3.1.25 Sump Pump Receptacle

Place sump pump receptacle 24-inches off of top of concrete floor where applicable.

3.1.26 Separate Circuits

Install separate circuits for the following locations:

- Automatic Washing Machine.
- Refrigerator.
- Dishwasher
- Temporary G.F.I. receptacles at electrical panel and 2nd flr for construction use, to be replaced with standard receptacle before closing.
- Gas Furnace connection, including high voltage wiring for gas furnace and power vented hot water tank.
- Single car garage: one receptacles minimum in garage including one in the ceiling for future garage door opener when required
- Double car garage: two receptacles minimum in garage including one in the ceiling for future garage door opener when required. Larger- 3 receptacles and 3 OH door plugs.
- Interconnected combo Smoke and Carbon Monoxide detectors (model type to be specified)
- Microwave Receptacles, located as per plan and electrical code.
- Gas Range
- Receptacles in all bathrooms shall be GFI protected.
- HRV/ERV's units

3.1.27 Dishwasher Rough-In and Installation

Rough-In wiring for dishwasher **including** the breaker in the panel. Wiring to be run from dishwasher location to the panel, sufficient amount of wiring to be left at dishwasher location to make connection to appliance. Dishwasher to be power connected by Electrical contractor.

3.1.28 Thermostat

Install Thermostat in approved locations (supplied by others) including low voltage wiring.

3.1.29 Range Exhaust

Supply and install builders specified Range Hoods, ducted to exterior (Ducting by others). Range hood from choice of standard colours.

3.1.30 Bathroom Exhaust

Wiring to all bathrooms and laundry rooms. Main bathroom fan to be certified, 90 CFM also operated by a switch beside thermostat which shall be marked by this electrical contractor as "Principal Fan", with a sound level of 2.5 sones or less. Supplementary fans to be certified, 50 CFM with a sound level of 2.5 sones or less. Fan to be supplied by Electrical contractor.

3.1.31 Door Chime

Supply and install door chime as per plan, chime to be wired complete with 18-2 LVT wiring and transformer. Ensure "Door Bell" is installed square, level and flush on masonry.

3.1.32 Exterior Receptacles

Supply and Install two (2) G.F.I. receptacles at front door and patio door and at all other exterior door locations as per Electrical Code and plans. Exterior soffit complete with 1 holiday receptacle. All outlets on exterior to be installed using CSA approved plastic boxes

3.1.33 Garage Lights

Single car garages shall receive one (1) keyless fixture, double car garages to receive two (2) keyless fixtures, etc...

3.1.34 Standard Light Fixtures

Supply and install Galaxy light fixture as specified. Standard light fixtures to be supplied are:

<u>Package 1</u>	<u>Model Number</u>
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To be specified separately

When installing the Powder room and bathroom vanity fixtures, ensure that the glass bowls are facing up towards the ceiling as standard, not facing down towards the vanity as standard.

3.1.35 Stair Landings

Any stair with a landing shall receive a light and switch, reference electrical plans; if you are unsure see Site Supervisor. When light fixture interferes with door to basement pot light must be substituted.

3.1.36 Hanging Fixtures

All hanging fixtures (foyers, open to below and cathedral ceiling areas) must be sized correctly and allow for proper hanging height, foyers, open to below and cathedral ceiling areas, see Site Supervisor to confirm correct height. Dinette hanging fixture to be placed 60-inches off of finished floor when chain is extended. Hanging light in foyer must be cantered in area and not installed near stair for ease of installation.

3.1.37 Exterior Lights

The installation of light boxes for exterior fixtures must be cut in with saw, not smashed out with hammer. Location as per plan and confirmation by site super.

3.1.38 Pot Lights

Supply and install pot light as per extra and Electrical plans. All Pot Light trims must match manufacturer housing; after-market trims are not acceptable. Supply and install waterproof pot lights in all bathtub and shower locations.

3.1.39 Smoke Detectors

Supply and install smoke detectors as per code. Smoke detectors must have dust covers installed.

3.1.40 Carbon Monoxide Detectors

Supply and install C.O. detectors as per code. Combination smoke/C.O. detectors are acceptable.

3.1.41 Payment Terms

Payment terms as per agreement, progress draws as per the following:

- Rough-In Draw: 40% of base contract
- Completion Draw: 60% of base contract plus extras
- Light Fixtures: Invoiced on Completion Draw

3.2 Clean Up

- All scrap material must be cleaned-up daily and placed in bins provided. Ensure all boxes and packing from items installed at completion, such as fixtures and cover plates are put into garbage containers provided.
- Failure to comply with clean-up will result in a back-charge for incomplete work.

4.0 Signatures

Privacy Obligations²

For the purposes of this part, "Personal Information" means any information, other than publicly available information, recorded in any form, about an identified individual or an individual whose identity may be inferred or determined from such information.

The Subcontractor will not collect or use the Personal Information provided by Signature Communities for a purpose other than for which Signature Communities provided the Personal Information.

The Subcontractor will not disclose any Personal Information provided by Signature Communities to any other party without the consent of Signature Communities.

The Subcontractor will at all times comply with applicable privacy legislation and regulations.

Signature Communities reserves the right to update all "Scope of Work" documents in compliance with Municipal building codes, "O.B.C.", "Tarion Warranty", pertinent health and safety legislation and including Signature Communities initiated product and procedure improvements. Revised "Scope of Work" documents will be released to each trade group as required.

Signature Communities	Date
	06/05/2014

Sub-Contractor	Date
	06/05/2014

² Personal Information Protection and Electronic Documents Act (PIPEDA) compliance requirement