

## **APPROVAL OF MANUFACTURED HOMES & FACTORY-BUILT STRUCTURES (RELOCATABLE AND NON-RELOCATABLE)**

*The following bulletin provides guidance on the application Electrical Safety Regulation, Section 21.  
This information bulletin supersedes Directive D-E3 080606 1 issued June 6, 2008.*

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### **General**

**A silver label will only be applied where no other approval process is available.**  
**A silver label will only be applied under a permit.**

Electrical Safety Regulation (ESR) 21 requires all new factory built structures or manufactured homes to display an approval mark from an accredited certification agency prior to sale. When a label is not present, ESR 21(d) allows for used manufactured homes and used factory-built structures to display an approval mark label provided by the appropriate provincial safety manager, (Silver Label).

The authority having jurisdiction may set requirements for equipment that it deems “Approved” as noted in the BC Electrical Code definition part (b) below. Where alterations have been carried out, these structures become a blend of CSA Part 1 and Part II Standards and are deemed acceptable with supporting evidence; supporting evidence will normally include the existing label and a copy of the permit for additional work.

### **Scope**

This bulletin only applies to factory built structures and manufactured homes that are designed to be connected to an external electrical supply. This Bulletin does not apply to Recreational Vehicles. Please see Electrical Directive: Recreational Vehicles D-EL 2015-01 for related information.

### **Definitions**

**Approved** (as applied to electrical equipment)

- (a) equipment that has been certified by a certification organization accredited by the Standards Council of Canada in accordance with the requirements of
  - (i) CSA standards; or
  - (ii) other recognized documents, where such CSA standards do not exist or are not applicable; or
- (b) equipment that conforms to the requirements of the regulatory authority (see Appendix B).

**Approval label** (as used in this bulletin) includes a certification mark or label applied by an accredited certification body, or a silver label.



**Commercially Produced** – a structure produced with the emphasis on salability or profit

**Factory Built Relocatable and Non-relocatable Structures** – see BC Electrical code, rule 70-000 Scope.

**Manufactured home** — a transportable, single- or multiple-section, one-story dwelling ready for occupancy on completion of set-up in accordance with the manufacturer’s instructions. This includes mobile homes.

**Relocatable Structure** – Structure that are towable on their own chassis, for use without permanent foundations and having provisions for connecting to utilities

**Silver label** (as used in this bulletin) is an approval label provided by BC Safety Authority, under a silver label permit and in accordance with Section 21(1)(d) of the Electrical Safety Regulation.

*Note:*

- *Any certification mark or approval label provided for mobile homes or factory built structures only applies to the unit itself and does not cover any consumer plug-in equipment, additions, out-buildings, or any permits required to provide power to the unit at an installation site.*
- *Used structures that have had the electrical installation removed or rendered permanently inoperable, are not required to bear an approval label prior to sale.*

### **New Manufactured Homes**

1. New manufactured homes must conform to certification standards and are required to bear a label (mark) as evidence of conforming to the applicable standard.
2. When a new manufactured home is missing the approval mark, the owner or vendor of that unit must apply to the certification agency for special inspection and labelling. Applications for BC Safety Authority approval of new commercially produced manufactured homes will not be accepted.

### **Used Manufactured Homes**

3. Used manufactured homes (whether de-registered with the Province of BC Manufactured Home Registry or not) may only be offered for sale in the Province of British Columbia when they bear an approval label.
4. A new approval label is required where wiring of a used manufactured home has been completely removed and new wiring has been installed under a permit.
5. Alterations, including additional wiring, to an approved unit must be done under a permit and a new approval label is not required.



6. When an approved manufactured home has had additions or out buildings installed and wired without an electrical installation permit, an electrical contractor must obtain an installation permit, survey the work and submit a declaration confirming that the electrical installation is adequate for the purpose and in good order in accordance with Rule 2-300(1).
7. Alternate documentation, such as a letter from the manufacturer indicating that the unit was originally approved, cannot be accepted in place of an approval label. However, if original documentation exists (for example, a specification sheet with CSA number) and there have been no unpermitted alterations to the unit, a silver label may be applied by a Safety Officer upon notification of an inspection request under a silver label permit and confirmation that the installation is in good order in accordance with Rule 2-300(1). A Used Mobile Home Inspection Report is not required under these circumstances.
8. For BCSA silver label approval, where no evidence of current or previous approval is provided, a licensed electrical contractor must:
  - a. Obtain a silver label permit;
  - b. Survey the electrical installation and bring into compliance with the Used Mobile Home Inspection Report Form, no. 1143 (see p.5) indicating survey results and identifying all work performed to achieve compliance. The survey must include all additions and out buildings installed without a verified permit; and
  - c. Submit a [FRM-0206 Electrical Contractor Authorization and Declaration Form](#) confirming that the installation is adequate for the purpose and in good order in accordance with Rule 2-300(1). Upon acceptance, the BC Safety Authority silver label will be applied to the electrical panel cover.

### **New Factory Built Structures**

9. New commercially built structures are required to bear an acceptable approval label.
10. When a new commercially built structure does not bear an approval label, the owner or vendor of that unit must apply to a certification agency for special inspection and labelling.

### **Used Factory Built Structures**

11. Used factory built structures (including; mobile concession stands, kiosks, construction trailers, and similar structures) may only be offered for sale in the Province of BC provided that they bear an approval mark and that the wiring has not been altered.
12. For BCSA approval, where no evidence of current or previous approval is provided, a licensed electrical contractor must;

- a. Obtain a permit;
  - b. Survey the electrical installation confirming that it is adequate for the purpose and in good order in accordance with Rule 2-300(1).
  - c. Submit a [FRM-0206 Electrical Contractor Authorization and Declaration Form](#) confirming that the installation is in compliance, listing the work completed to gain compliance. Upon acceptance, the BC Safety Authority silver label will be applied.
13. Factory built structures do not require service equipment where installed in accordance with Rule 70-110 (2) of the BC Electrical Code.

### **Exceptions**

Notwithstanding items number 3-13 above, an electrical contractor may apply for a silver label permit if they can demonstrate the following;

- a. No approval is possible through an accredited certification or inspection body,
- b. The Safety Officer is satisfied that units are not commercially produced, and
- c. A permit is obtained and the normal inspection procedure is followed.

Upon acceptance, a Technical Safety BC silver label will be applied to the electrical panel cover.

#### **References:**

Directive No.	D-EL 2015-02
Bill 19 – 2003	Safety Standards Act
B.C. Reg. 100/2004	Electrical Safety Regulation
B.C. Electrical Code	Part 1
CAN/CSA-Z240	MH Series-92

**USED MOBILE HOME INSPECTION REPORT**

The information on this form is collected to administer the provisions of the BC Safety Standards Act. If you have questions about the collection, use, or disclosure of this information, contacts the Records, Information & Privacy Analyst at 1-866-566-SAFE (7233).

**A. Installation** (please PRINT clearly):

**Date:**

**B. Support Information**

	Yes	*Note		Yes	*Note
a) The unit has an approved disconnect and overcurrent protection located in accordance with Rule 70-112;	<input type="checkbox"/>	<input type="checkbox"/>	k) Switches in bathrooms are located in accordance with Rule 30-320;	<input type="checkbox"/>	<input type="checkbox"/>
b) An approved distribution panel board is provided (if the panel board is located in a closet, then it must have a barrier installed to meet the intent of Rule 26-402);	<input type="checkbox"/>	<input type="checkbox"/>	l) Electrical heating equipment, including heat lamps, in bathrooms conforms to Rule 62-110 and Rule 62-202. (For the purposes of rule 62-110(1)(b), bathroom areas covered by the swing of doors and areas within 300mm of shower rods are considered to be locations where combustible material are likely to be placed.)	<input type="checkbox"/>	<input type="checkbox"/>
c) Plug fuses, if used, are of a type that are non-interchangeable with fuses of a higher rating in accordance with Rule 14-204;	<input type="checkbox"/>	<input type="checkbox"/>	m) Dryer circuits are supplied with an approved receptacle in accordance with Rule 26-744(3);	<input type="checkbox"/>	<input type="checkbox"/>
d) The vehicle chassis, metal frame, any continuous conductive piping, and the exterior metal sheathing are bonded to ground at the panel board with a copper conductor sized in accordance with Rule 70-126 (Table 41);	<input type="checkbox"/>	<input type="checkbox"/>	n) Range circuits are supplied with an approved receptacle in accordance with Rule 26-744(4)(5)(6);	<input type="checkbox"/>	<input type="checkbox"/>
e) All outlet boxes and receptacles are bonded to ground in accordance with Section 10 or protected with GFCI in accordance with Rule 26-700(8);	<input type="checkbox"/>	<input type="checkbox"/>	o) A 120 volt smoke alarm is installed and wired in conformance with Rule 32-110;	<input type="checkbox"/>	<input type="checkbox"/>
f) Receptacles rated at 15 amperes are on circuits having overcurrent protection set at not more than 15 amperes in accordance with Rule 14-600;	<input type="checkbox"/>	<input type="checkbox"/>	p) The wiring in the unit has passed an insulation test in accordance with Rule 70-130 (Table 24) (see Appendix B note for Rule 70-130);	<input type="checkbox"/>	<input type="checkbox"/>
g) Any exterior receptacles are GFCI protected in accordance with Rule 26-710(n);	<input type="checkbox"/>	<input type="checkbox"/>	q) All wiring and equipment is in good condition according to Rule 2-300; (including additions)	<input type="checkbox"/>	<input type="checkbox"/>
h) Heating cable sets shall be protected by a GFCI receptacle or breaker accessible for testing in accordance with rule 70-122(4) ( <b>Receptacles located beneath the home are not considered accessible for testing</b> )	<input type="checkbox"/>	<input type="checkbox"/>	r) For additions, an exterior luminaire, controlled by a wall switch located within the building, shall be provided at every exterior entrance to the addition in accordance with Rule 30-500;	<input type="checkbox"/>	<input type="checkbox"/>
i) All receptacles within 1.5m of a sink are GFCI protected in accordance with Rule 26-700(11), except for existing split-receptacles in a kitchen;	<input type="checkbox"/>	<input type="checkbox"/>	s) All permanently connected appliances (built in cord connected air conditioners) require a circuit in accordance with Rule 70-120(1)(2); and	<input type="checkbox"/>	<input type="checkbox"/>
j) Each bathroom, or washroom, shall have at least one receptacle within 1m of any wash basin in accordance with Rules 26-710(f), 26-710(g), and 26-700(11);	<input type="checkbox"/>	<input type="checkbox"/>	t) A suitable disconnecting means shall be installed for heating equipment rated at 117 KW and less; in accordance with Rule 26-806 and appendix "B";	<input type="checkbox"/>	<input type="checkbox"/>

\*Note(s): (examples: o) new smoke detector installed in hallway; q) includes existing 4m X 6m addition.)

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**C. Insulation Resistance** (numbering as per panel labelling – If more than one circuit, or all circuits, are “tested” as a unit, document the test in the circuit description below and note that the resistance must meet the requirement for the smallest conductor in the circuit in accordance with Table 24):

<u>Circuit (cct) Description</u>	<u>Result</u>	<u>Circuit (cct) Description</u>	<u>Result</u>
Cct 1 _____	_____	Cct 2 _____	_____
Cct 3 _____	_____	Cct 4 _____	_____
Cct 5 _____	_____	Cct 6 _____	_____
Cct 7 _____	_____	Cct 8 _____	_____
Cct 9 _____	_____	Cct 10 _____	_____
Cct 11 _____	_____	Cct 12 _____	_____
Cct 13 _____	_____	Cct 14 _____	_____
Cct 15 _____	_____	Cct 16 _____	_____
Cct 17 _____	_____	Cct 18 _____	_____
Cct 19 _____	_____	Cct 20 _____	_____
Cct 21 _____	_____	Cct 22 _____	_____
Cct 23 _____	_____	Cct 24 _____	_____
Cct 25 _____	_____	Cct 26 _____	_____
Cct 27 _____	_____	Cct 28 _____	_____
Cct 29 _____	_____	Cct 30 _____	_____
Cct 31 _____	_____	Cct 32 _____	_____

**D. Declaration**

The information supplied is complete and accurate:

Print Name: \_\_\_\_\_ Phone: \_\_\_\_\_ Signature: \_\_\_\_\_

**Rule 70-130 Tests (see Appendix B)**

(1) The following tests shall be performed on the complete assembly at the factory:

- (a) **Continuity** – All circuits, including grounding or bonding circuits, shall be tested for continuity.
- (b) **Insulation resistance** – The insulation resistance between live parts and ground at the completion of a 1 min application of a 500 V dc test voltage shall be not less than that specified in Table 24.

(2) As an alternative to the insulation resistance test specified in Subrule (1)(b), an ac dielectric strength test shall be permitted to be performed, in which case an ac voltage of 900 V shall be applied for 1 min (or 1080 V for 1 s) between all live parts and non-current-carrying metal parts without breakdown occurring.

(3) In performing either the insulation resistance or the dielectric strength test, the neutral shall be disconnected from ground for the test and be reconnected afterwards.

**Table 24**

**Minimum insulation resistances for installations**

Installation, copper or aluminum	Insulation resistance, Ω
For circuits of No. 14 or No. 12 AWG	1 000 000
For circuits of No. 10 AWG or larger:	
25 to 50 A	250 000
51 to 100 A	100 000
101 to 200 A	50 000
201 to 400 A	25 000
401 to 800 A	12 000
Over 800 A	5 000

*Note: Where lampholders, receptacles, fixtures, baseboard heaters, or other appliances are connected to the installation or where excessive humidity exists, lower insulation resistance values may be expected.*

**Appendix B note to Rule 70-130:** When insulation resistance or ac dielectric strength tests are performed, precautions should be taken to ensure that voltage-sensitive devices such as ground fault circuit interrupters are not subjected to voltages that will damage the device.