



**TECHNICAL
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Continuing Education: Electrical Field Safety Representative Class A, B and C Syllabus



Technical Training - Electrical
February 2021



Disclaimer:

Please be advised that the decision to adopt or not to adopt the 2021 Canadian Electrical Code (“CEC”), with or without variations, is at the full discretion of the Attorney General and Ministry responsible for Housing.

By supplying you with this information, Technical Safety BC intends to strengthen the availability and readiness of training, in the event that the 2021 CEC is adopted. All information is provided “as-is” and without any warranty of accuracy or reliability. The adoption of the 2021 CEC may be delayed or may not occur at all, and any discussions of dates for the adoption are to be regarded as proposals only. There is no certainty or guarantee with regards to proposed dates, and we request that you do not publish or share any information that contains dates. Technical Safety BC is not responsible for any costs, expenditures, or loss that you or any other person may incur through the use of the information.

1.1 PURPOSE

The purpose of this syllabus is to set the standard for training providers who desire to develop a course for the renewal of certificates of qualification for class A, B, or C Field Safety Representatives (FSRs). FSRs who choose to apply for renewal by passing an examination may use this syllabus as a study guide.

In accordance with s. 15(j) of the *Safety Standards Act*, the provincial safety manager may recognize training for the purpose of qualifying or renewing the qualifications of individuals. Under s. 10.1(3) of the Electrical Safety Regulation, a class A, B or C FSR certificate of qualification may be renewed only if the certificate holder completes at least 8 hours of continuing education, or passes an examination required by the provincial safety manager.





2.1 REQUIREMENTS

Before FSRs renew their certificates of qualification in 2024, they will need to:

- Complete a code update course of a minimum 8 hours of training that has been recognized by Technical Safety BC; or
- Self-study and pass a Technical Safety BC renewal exam. FSRs who do not successfully pass the exam must complete training prior to renewing their certificate of qualification.

FSRs who choose to retake a certification code course on the 2021 Canadian Electrical Code, which covers all sections of the code relevant to their FSR class, not only the updates to the code from the previous version, may also be allowed to renew their certificate of qualification on that basis.

Evidence of course completion will be required to demonstrate that the minimum 8 hours of continuing education has been met.

If a FSR cannot demonstrate these requirements have been met prior to renewal, their certificate of qualification will become invalid, and they will need to apply to have their certificate of qualification re-issued. Depending on the amount of lapsed time, additional requirements may apply.

3.1 SCOPE OF SYLLABUS

- Updates to *Safety Standards Act*, *Safety Standards General Regulation*, *Electrical Safety Regulation* and *Directives*
- Updates to BC Electrical Code: based on the adoption of the Canadian Electrical Code, Part I, Twenty-fifth Edition, *Safety Standard for Electrical Installations*, Canadian Standards Association Standard C22.1:21
- Applicable to the following: FSR Class A; FSR Class B; and FSR Class C





3.2 COURSE RECOGNITION

Training providers shall apply to have their course recognized by the provincial safety manager. The application process requires the submission of the following:

- **List of instructors**, including their names, years of trade experience, and years of teaching experience.
- **Qualifications of instructors**, including copies of trade qualifications and teaching qualifications. The instructor shall hold a valid FSR A or B qualification in British Columbia. Instructors who hold comparable qualifications issued by authorities outside of British Columbia (e.g., Alberta Master Electrician) may apply to the provincial safety manager for equivalency consideration.
- **Course outline and lesson plan** shall:
 - include the learning objectives for the course
 - demonstrate how the content meets the learning objectives
 - demonstrate that content meets 8 hour time requirement
 - identify how students will be assessed on the learning objectives
- **Course delivery method**
- **Course material**, which may include presentations and handouts
- **Sample record of course completion** shall identify:
 - That it is based on the Canadian Electrical Code, Part I, Twenty-fifth Edition, Safety Standard for Electrical Installations, Canadian Standards Association Standard C22.1:21
 - The certificate holder's name
 - The course name
 - The training provider's name
 - The Instructor's name
 - The date of issue or course completion
 - The course length

IMPORTANT: Technical Safety BC assumes all training providers have permission to use CSA Group materials – in whole or in part. This includes use of clauses, figures, tables, and definitions from standards and related documents.





3.3 SUBJECT AREAS OF STUDY

For a course to meet the continuing education requirement for FSRs, it shall consist of a minimum of 8 hours of training.

The continuing education training shall include:

1. Key updates to the 2021 Canadian Electrical Code outlined in section 3.3.1; and
2. Any or a combination of the options for supplementary training outlined in section 3.3.2.

3.3.1 Key Updates to the 2021 Canadian Electrical Code

The continuing education training shall include the following key updates to the 2021 Canadian Electrical Code:

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| 1) Section 0 definition for 'flood elevation' and 'flood hazard zone' & Appendix B notes | 14) 12-2202 |
| 2) Section 0 definition for 'voltage' & Appendix B note | 15) 12-2254 9) |
| 3) 2-032 3) & Appendix B note | 16) 18-104; 18-154; 18-104 and 18-154 Appendix B note; J18-154 |
| 4) 2-134 & Appendix B note | 17) 18-152 1) e); 18-152 2); J18-152 1) e) and 2) notes |
| 5) 2-318 & Appendix B note | 18) 22-800 to 22-808 & Appendix B notes; C22.1-18 22-204 deleted |
| 6) 6-206 1) c) v) & Appendix B note | 19) C22.1-18 26-008 & Appendix B note deleted |
| 7) 6-212 2) & Appendix B note | 20) 26-652 & Appendix B note |
| 8) 10-612 | 21) 26-700 8); 26-700 8) and 26-704 Appendix B note; C22.1-18 26-724 e) deleted |
| 9) 10-616 3) a) | 22) 26-704 2) Appendix B note |
| 10) 12-022 & Appendix B notes | 23) 26-712 & Appendix B notes |
| 11) 12-308; 12-318; 12-320 | 24) 36-208 & Appendix B note; 36-214 3) Appendix B note |
| 12) 12-616 1) | 25) 46-108 5) Appendix B note |
| 13) 12-910 4) 5) & Appendix B note; Tables 6A to 6K; Tables 9A to 9H; C22.1-18 Tables 9A to 9P deleted | |





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| 26) 46-208 1) Appendix B note; 46-208 3) & Appendix B note | Appendix B note; 64-202 4) & 64-202 5) c) Appendix B note; |
| 27) 58-600 to 58-610 & Appendix B note | 64-210 2) 3); 64-212 1) b); 64-214 1) 3) 4); 64-216 1); 64-222; |
| 28) 62-116 1) & Appendix B note; 62-208 & Appendix B note | 64-406 2) and 3) Appendix B note; 64-800 to 64-820 & |
| 29) 62-128; C22.1-18 62-128 Appendix B note deleted | Appendix B notes; 64-900 to 64-928 & Appendix B note; C22.1-18 64-414 deleted |
| 30) 62-202 | 32) 72-112 & Appendix B note |
| 31) 64-000; 64-002 & Appendix B notes; 64-050; 64-060 1) 4) 5) ; 64-062 1); 64-064 & Appendix B notes; 64-074; 64-112 4) e) & | 33) 86-304 & 86-300 1) Appendix B note |
| | 34) Table 19 |

This is the minimum number of code changes that shall be included in the course material. Each training provider will decide which additional codes to include that are not listed in this syllabus.

3.3.2 Other Relevant Topics

To ensure that the training meets the 8 hour continuing education requirement, training providers may supplement the training content with any or a combination from the following:

1. Training providers may choose to include other changes to the BC Electrical Code in their training
2. Technical Safety BC has compiled a list of frequent non-compliances that present a moderate, major, or severe risk to public safety. Training providers may include education on the following codes and regulations as a part of the submission:

- 1) 2-024
- 2) 2-100
- 3) 2-200

- 4) 2-300
- 5) 6-112
- 6) 12-012





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7) 12-506
8) 12-510
9) 12-618
10) 12-3000
11) 12-3010
12) 12-3024

13) 26-654
14) 26-700
15) 26-708
16) 26-724
17) ESR 19(4)
18) 76-006

3. Based on education surveys conducted by Technical Safety BC, the following sections of the code have been identified as training topics of specific interest for FSRs:

- 1) Section 10
- 2) Section 18
- 3) Section 64

4. Training providers may choose to include education on the *Safety Standards Act*, Safety Standards General Regulations, Electrical Safety Regulation and Directives.

