Electrical Wiring Commercial (Canadian) 9th edition Mullin Solutions Manual

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Unit 1 – Commercial Building Plans and Specifications

REVIEW

Note: Refer to the *CEC* or the blueprint package as necessary.

1. What section of the specifications contains a list of contract documents?

The *General Clauses and Conditions* section

See **Specifications | Proposals | General Conditions**.

2. The requirement for temporary light and power at the job site will be found in what portion of the specifications?

Supplementary General Conditions

See **Supplementary General Conditions**.

3. The electrician uses the Schedule of Drawings for what purpose?

To determine whether all of the drawings are included in the drawing set

See **Supplementary General Conditions | Schedule of Drawings**.

Complete the following items by indicating the letter(s) designating the correct source(s) of information for:

4. Room width	b	**a. Site plan**
5. Grading elevations	c and/or g	**b. Architectural floor plan**
6. Ceiling height	g	**c. Elevations**
7. Panelboard schedules	e	**d. Details**
8. Exterior wall finishes	g	**e. Electrical layout drawings**
9. View of interior wall	g	**f. Specifications**
10. Electrical outlet location	e	**g. Sections**
11. Electrical receptacle style	h	**h. Electrical symbol schedule**
12. Swing of door	b	

See **Supplementary General Conditions | The Drawing Set**.

Match the initialism on the left with the phrase or word that best relates to that organization, document, or person.

13. SCC	c	**a. Accrediting organizations**
14. *CEC*	e	**b. Seal**
15. ULC	d	**c. Manufacturers' standards**

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16. PEng	b	**d. Listing service**
17. CSA	a	**e. Electrical code**

See **Approval of Equipment**, **Registered Professional Engineer (PEng)**, and **Codes and Standards**.

Write the appropriate letters (a, b, c, or d) to indicate the proper interpretation of the *CEC*.

18. Must be done	a	**a. Shall**
19. May be done	d	**b. Special permission**
20. Up to the electrician	d	**c. Not allowed**
21. Can never be done	a	**d. Allowed**
22. With the inspector's approval	d	

See **Codes and Standards | Canadian Electrical Code**.

23. List the drawings that are normally included in an electrical drawing set.

- Legend of symbols
- Site plan
- One-line diagram
- Lighting layout
- Power layout
- Electrical details
- Schematic and wiring diagrams
- Schedules

See **Supplementary General Conditions | The Electrical Drawing Set**.

24. List the steps to be followed when working with a set of drawings.

- Check that the drawing set is complete.
- Review the plans to get a mental view of the project.
- Orient the plans to the site. Add North, South, East, and West to the drawings.
- Check the scale of all drawings.
- Identify the type of construction.
- Read all drawing notes.
- Relate details to larger drawings.
- Note multiple or identical drawings.

See **Supplementary General Conditions | Working with the Drawings**.

25. Measure the length of each line using the scale indicated.

a. 1:100 7.5 m (75 mm × 100 = 7500 mm)

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b.	**1:50**	4.45 m	(89 mm × 50 = 4450 mm)
c.	**1:25**	2.25 m	(90 mm × 25 = 2250 mm)
d.	**1:75**	4.8 m	(64 mm × 75 = 4800 mm)
e.	**1:50**	3.8 m	(76 mm × 50 = 3800 mm)
f.	**1:125**	12.13 m	(97 mm × 125 = 12 125 mm)
g.	**1:100**	7.3 m	(73 mm × 100 = 7300 mm)
h.	**1:25**	2.23 m	(89 mm × 25 = 2225 mm)
i.	**1:50**	4.35 m	(87 mm × 50 = 4350 mm)
j.	**1:25**	2.38 m	(95 mm × 25 = 2375 mm)
k.	**$\frac{1}{8}$″ = 1 ft**	22′ 6″	($2\frac{13}{16} \times \frac{1}{8} = 22'\ 6''$)
l.	**$\frac{1}{4}$″ = 1 ft**	14′	($3\frac{1}{2}'' / \frac{1}{4} = 14'$)
m.	**$\frac{1}{2}$″ = 1 ft**	7′ 6″	($3\frac{3}{4}'' / \frac{1}{2}'' = 7'\ 6''$)
n.	**$1\frac{1}{2}$″ = 1 ft**	1′ 8″	($2\frac{1}{2}'' / 1\frac{1}{2}'' = 1'\ 8''$)
o.	**$\frac{3}{8}$″ = 1 ft**	8′	($3'' / \frac{3}{8}'' = 8'$)
p.	**$\frac{3}{4}$″ = 1 ft**	5′	(3 3/4" / ¾" =5')
q.	**$\frac{1}{4}$″ = 1 ft**	11′ 6″	($2\frac{7}{8}'' / \frac{1}{4}''$ =11′ 6″)
r.	**$\frac{1}{8}$″ = 1 ft**	28′	($3\frac{1}{2}'' / \frac{1}{8}'' = 28'$)
s.	**$\frac{1}{4}$″ = 1 ft**	13′ 9″	($3\frac{7}{16}'' / \frac{1}{4}''$ =13′ 9″)
t.	**$\frac{1}{2}$″ = 1 ft**	7′ 6″	($3\frac{3}{4}'' / \frac{1}{2}'' = 7'\ 6''$)

See **Supplementary General Conditions | Scale** and **Supplementary General Conditions | Types of Scale (Measuring Instruments)**.

26. Which of the following is the symbol for duplex receptacle 5-15?

b. 

See **The Commercial Building Plans**.

27. Which of the following is the symbol for a 4-way switch?

a. 

See **The Commercial Building Plans**.

28. Which of the following is a ceiling outlet?

b. 

See **The Commercial Building Plans**.

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