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**Z248-17**  
National Standard of Canada



## Code for tower cranes

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## **Z248-17**

### ***Code for tower cranes***



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# Contents

Technical Committee on Tower Cranes	5
Preface	8
<b>1 Scope</b>	<b>9</b>
1.1 General	9
1.2 Purpose	9
1.3 Application	9
1.4 Terminology	9
1.5 Units of measurement	10
<b>2 Reference publications</b>	<b>10</b>
<b>3 Definitions</b>	<b>12</b>
<b>4 Design and construction</b>	<b>17</b>
4.1 Design evaluation criteria	17
4.1.1 General	17
4.1.2 Out-of-service wind	17
4.1.3 Alternative out-of-service wind for cranes	17
4.2 Modifications and changes in design	17
4.3 Materials	18
4.3.1 General	18
4.3.2 Material testing	18
4.4 Welding	18
4.5 Drainage	18
4.6 Crane supports	18
4.6.1 General	18
4.6.2 Geotechnical report	19
4.6.3 Rails	19
4.6.4 Maximum loading resistance	19
4.6.5 Drawings	20
4.7 Load ratings	20
4.7.1 Load ratings where stability governs lifting performance	20
4.7.2 Load ratings where structural design governs lifting capacity	20
4.7.3 Load rating chart	21
4.8 Crane equipment and mechanisms	21
4.8.1 Swing (jlew) mechanism	21
4.8.2 Load hoisting and boom luffing (boom hoist) equipment	22
4.8.3 Travel equipment	22
4.9 Telescoping and climbing equipment	23
4.10 Trolleys	23
4.11 Crane ropes, rope fittings, and reports	23
4.11.1 Crane rope	23
4.11.2 Rope fittings and terminations	24
4.12 Sheaves	25

4.13	Drums	25
4.14	Gear boxes	26
4.15	Brakes	26
4.15.1	General	26
4.15.2	Hoist brakes	26
4.15.3	Trolley brakes	26
4.15.4	Slewing brakes	26
4.15.5	Travel brakes	26
4.16	Hooks	27
4.17	Operator's cab	27
4.17.1	Provisions of cab	27
4.17.2	Cab location and installation	27
4.17.3	Design and construction	27
4.18	Safety devices	28
4.18.1	Limiting devices	28
4.18.2	Load and radius indicating devices	28
4.19	Counterweights	29
4.20	Guarding of moving parts	29
4.20.1	General	29
4.20.2	Design of fixed guards	29
4.21	Controls	29
4.22	Electrical equipment and wiring	31
4.23	Grounding	32
4.24	Remote control operations	32
4.25	Access and fall protection systems	34
4.25.1	Ladders	34
4.25.2	Footwalks	34
4.25.3	Guardrails	35
4.25.4	Fall protection system	35
<b>5</b>	<b>Erection, dismantling, and climbing</b>	<b>35</b>
5.1	Crane erection crew	35
5.2	Job site preparation and inspection prior to erection of cranes	35
5.2.1	Instruction and written procedures	35
5.2.2	Component integrity	35
5.2.3	Component identification	36
5.3	Foundation and support	36
5.3.1	Foundation inspection report	36
5.3.2	Verification of the compressive strength of the foundation	37
5.3.3	Traveling tower cranes	37
5.4	Main power supply	38
5.5	Transportation	38
5.6	Pre-erection inspection	39
5.7	Site preparation/procedure	39
5.8	Erection, climbing, and dismantling equipment	39
5.9	General erection, climbing, and dismantling procedure	40
5.9.1	General	40
5.9.2	Required data	40
5.9.3	Wind limitation	40

- 5.9.4 Ballast placement 40
- 5.9.5 Counterweight fastening 40
- 5.9.6 Telescoping crane 40
- 5.9.7 Guyed and braced cranes 41
- 5.9.8 Climbing cranes 41

## **6 Inspection, testing, and repairs 42**

- 6.1 General 42
- 6.2 Crane logs 42
  - 6.2.1 General 42
  - 6.2.2 Owner's crane log 42
  - 6.2.3 Operator's crane log 43
  - 6.2.4 Transfer of records 43
- 6.3 Tests 43
  - 6.3.1 Nondestructive test 43
  - 6.3.2 Operational test 43
  - 6.3.3 Load test 44
- 6.4 Inspections 44
  - 6.4.1 General 44
  - 6.4.2 Inspection prior to erection 44
  - 6.4.3 Inspection after erection 45
  - 6.4.4 Daily inspections 45
  - 6.4.5 Weekly inspections 45
  - 6.4.6 Monthly inspections 46
  - 6.4.7 Annual inspections 46
  - 6.4.8 Special inspections 46
- 6.5 Rope inspection, replacement, and maintenance 47
  - 6.5.1 Inspection 47
  - 6.5.2 Rope replacement 49
  - 6.5.3 Rope maintenance 50
  - 6.5.4 Rope sheaves 51

## **7 Maintenance and repair 51**

- 7.1 Maintenance personnel 51
- 7.2 Preventive maintenance 51
- 7.3 Maintenance procedure 52
- 7.4 Adjustments and repairs 52
- 7.5 Lubrication 52

## **8 Safe operation 52**

- 8.1 General considerations 52
  - 8.1.1 Tower crane selection 52
  - 8.1.2 Tower crane siting 53
  - 8.1.3 Rescue plan 53
- 8.2 Operators 53
  - 8.2.1 Authorization 53
  - 8.2.2 Qualifications 54
  - 8.2.3 Hearing and visual acuity 54
- 8.3 Operator responsibilities 54

8.3.1	General	54
8.3.2	Preoperational inspections and tests	55
8.3.3	Limit switches and safety devices	55
8.3.4	Power supply	55
8.3.5	Handling the load	56
8.3.6	Special lifts exceeding rated capacity	56
8.4	Attaching the load	56
8.5	Holding the load	56
8.6	Moving the load	57
8.7	Leaving the crane unattended	58
8.7.1	Out-of-service configuration	58
8.7.2	Warning lights	58
8.7.3	Travel brakes	58
8.7.4	Disconnecting the power supply	58
8.7.5	Secured access	58
8.8	Communication and signalling	59
8.8.1	Designated signaller	59
8.8.2	Signals	59
8.8.3	Radio communication	59
8.9	Special duties	60
8.9.1	Multiple crane lifts	60
8.9.2	Operations imposing impact	60
8.10	Clearance requirements	60
8.10.1	Fixed structures	60
8.10.2	Multiple crane sites	60
8.10.3	Tower cranes and other equipment	61
8.11	Weather conditions	61
8.11.1	Temperature	61
8.11.2	Wind	61
8.11.3	Electrical storms	61
8.11.4	Snow and ice	62
8.12	Visibility	62
8.12.1	Artificial lighting	62
8.12.2	Blind lifts	62
8.12.3	Poor visibility due to weather	62
8.13	Operations near energized conductors	62
8.13.1	General	62
8.13.2	Limits of approach	62
8.13.3	Spotter	62
8.14	Refueling	63
8.15	Signs and other items increasing wind loads	63

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Annex A	(informative) — Hand signals	69
Annex B	(informative) — Examples of tower crane types	72

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# Preface

This is the third edition of CSA Z248, *Code for tower cranes*. It supersedes the previous editions published in 2004 and 1975. It applies to the design, construction, installation, inspection, testing, maintenance, and safe operation of tower cranes.

This new edition of CSA Z248 includes updated requirements to the following:

- design and construction;
- crane supports;
- erection dismantling, and climbing;
- maintenance and repair;
- safe operation and rescue plan;
- out of service wind requirements;
- electrical and brake redundancy;
- foundation and climbing; and
- wire rope.

This Standard was prepared by the Technical Committee on Tower Cranes, under the jurisdiction of the Strategic Steering Committee on Occupational Health and Safety, and has been formally approved by the Technical Committee.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

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  - d) *rationale for the change.*

# Z248-17

## Code for tower cranes

### 1 Scope

#### 1.1 General

This Standard applies to the design, characteristics, construction, installation, dismantling, operation, inspection, testing, and maintenance of tower cranes.

This Standard applies to tower cranes powered by electric motors or internal combustion engines and any variations thereof that retain the same fundamental characteristics. The scope includes cranes of these types that adjust operating radius by means of a

- a) boom-luffing mechanism;
- b) trolley traversing a horizontal boom; or
- c) a combination of the two.

This Standard is also intended to cover self-erecting tower cranes. Tower cranes can be mounted on fixed or travelling bases. Additional mounting means can include arrangements that permit the crane to climb in the structure being built or that permit increasing the tower height as the structure rises.

#### 1.2 Purpose

This Standard is designed to

- a) guard against and minimize injury to workers, and otherwise provide for the protection of life, limb, and property by prescribing safety requirements;
- b) provide direction to owners, employers, supervisors, crane erectors, operators, and others concerned with, or responsible for, its application; and
- c) guide governments and other regulatory bodies in the development, promulgation, and enforcement of appropriate safety directives.

It is also expected that this Standard will have a major application in industry, serving as a guide to manufacturers, purchasers, and users of the equipment.

#### 1.3 Application

This Standard applies to new and existing tower cranes unless otherwise specified in this Standard.

#### 1.4 Terminology

In this Standard, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the Standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the Standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

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