

**ASME A17.2-2014**  
(Revision of ASME A17.2-2012)

# **Guide for Inspection of Elevators, Escalators, and Moving Walks**

**Includes Inspection Procedures  
for Electric Traction and Winding  
Drum Elevators, Hydraulic  
Elevators, Inclined Elevators,  
Limited-Use/Limited-Application  
Elevators, Private Residence  
Elevators, and Escalators and  
Moving Walks**

**AN AMERICAN NATIONAL STANDARD**



**The American Society of  
Mechanical Engineers**

Copyright © 2015 by the American Society of Mechanical Engineers.  
No reproduction may be made of this material without written consent of ASME.



**ASME A17.2-2014**  
**(Revision of ASME A17.2-2012)**

# **Guide for Inspection of Elevators, Escalators, and Moving Walks**

**Includes Inspection Procedures  
for Electric Traction and Winding  
Drum Elevators, Hydraulic  
Elevators, Inclined Elevators,  
Limited-Use/Limited-Application  
Elevators, Private Residence  
Elevators, and Escalators and  
Moving Walks**

---

**AN AMERICAN NATIONAL STANDARD**



**The American Society of  
Mechanical Engineers**

**Two Park Avenue • New York, NY • 10016 USA**

Copyright © 2015 by the American Society of Mechanical Engineers.  
No reproduction may be made of this material without written consent of ASME.



Date of Issuance: March 13, 2015

The next edition of this Guide is scheduled for publication in 2017.

ASME issues written replies to inquiries concerning interpretations of technical aspects of this Guide. Interpretations are published on the ASME Web site under the Committee Pages at <http://cstools.asme.org/> as they are issued.

Errata to codes and standards may be posted on the ASME Web site under the Committee Pages to provide corrections to incorrectly published items, or to correct typographical or grammatical errors in codes and standards. Such errata shall be used on the date posted.

The Committee Pages can be found at <http://cstools.asme.org/>. There is an option available to automatically receive an e-mail notification when errata are posted to a particular code or standard. This option can be found on the appropriate Committee Page after selecting “Errata” in the “Publication Information” section.

ASME is the registered trademark of The American Society of Mechanical Engineers.

This Guide was developed under procedures accredited as meeting the criteria for American National Standards. The Standards Committee that approved the Guide was balanced to assure that individuals from competent and concerned interests have had an opportunity to participate. The proposed Guide was made available for public review and comment that provides an opportunity for additional public input from industry, academia, regulatory agencies, and the public-at-large.

ASME does not “approve,” “rate,” or “endorse” any item, construction, proprietary device, or activity.

ASME does not take any position with respect to the validity of any patent rights asserted in connection with any items mentioned in this document, and does not undertake to insure anyone utilizing a standard against liability for infringement of any applicable letters patent, nor assumes any such liability. Users are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, is entirely their own responsibility.

Participation by federal agency representative(s) or person(s) affiliated with industry is not to be interpreted as government or industry endorsement of this Guide.

ASME accepts responsibility for only those interpretations of this document issued in accordance with the established ASME procedures and policies, which precludes the issuance of interpretations by individuals.

No part of this document may be reproduced in any form,  
in an electronic retrieval system or otherwise,  
without the prior written permission of the publisher.

The American Society of Mechanical Engineers  
Two Park Avenue, New York, NY 10016-5990

Copyright © 2015 by  
THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
All rights reserved  
Printed in U.S.A.



# CONTENTS

|  |           |
|--|-----------|
| Foreword .....   | x         |
| Committee Roster .....   | xiii      |
| Preface .....  | xviii     |
| Summary of Changes .....   | xxi       |
| <b>Introduction</b> .....  | <b>1</b>  |
| 1 Scope .....  | 1         |
| 2 Application .....  | 2         |
| 3 Qualifications of Inspectors .....   | 2         |
| 4 Personal Safety .....  | 2         |
| 5 Duties of Inspectors .....   | 2         |
| 6 Arrangement for Inspection .....   | 3         |
| 7 Recommended Equipment .....  | 3         |
| 8 Reference Documents .....  | 3         |
| <b>Part 1 Elevator — Inside of Car</b> .....   | <b>5</b>  |
| 1.1 Door Reopening Device .....  | 5         |
| 1.2 Stop Switches .....  | 5         |
| 1.3 Operating Control Devices .....  | 6         |
| 1.4 Sills and Car Floor .....  | 7         |
| 1.5 Car Lighting and Receptacles .....   | 7         |
| 1.6 Car Emergency Signal .....   | 8         |
| 1.7 Car Door or Gate .....   | 9         |
| 1.8 Door Closing Force .....   | 9         |
| 1.9 Power Closing of Doors or Gates .....  | 10        |
| 1.10 Power Opening of Doors or Gates .....   | 10        |
| 1.11 Car Vision Panels and Glass Car Doors .....                                     | 12        |
| 1.12 Car Enclosure .....   | 13        |
| 1.13 Emergency Exit .....  | 14        |
| 1.14 Ventilation .....   | 15        |
| 1.15 Signs and Operating Device Symbols .....  | 15        |
| 1.16 Rated Load, Platform Area, and Data Plate .....                                 | 15        |
| 1.17 Standby Power Operation .....   | 16        |
| 1.18 Restricted Opening of Car or Hoistway Doors .....                               | 17        |
| 1.19 Car Ride .....  | 18        |
| 1.20 Earthquake Inspection and Tests (Seismic Risk Zone 2 or Greater) .....          | 18        |
| <b>Part 2 Elevator — Machine Room</b> .....  | <b>19</b> |
| 2.1 Access to Machine Space .....  | 19        |
| 2.2 Headroom .....   | 19        |
| 2.3 Lighting and Receptacles .....   | 20        |
| 2.4 Machine Space .....  | 20        |
| 2.5 Housekeeping .....   | 21        |
| 2.6 Ventilation .....  | 21        |
| 2.7 Fire Extinguisher .....  | 22        |
| 2.8 Pipes, Wiring, and Ducts .....   | 22        |
| 2.9 Guarding of Exposed Auxiliary Equipment .....                                    | 23        |
| 2.10 Numbering of Elevators, Machines, Controllers, and Disconnect<br>Switches ..... | 23        |
| 2.11 Disconnecting Means and Control .....   | 24        |
| 2.12 Controller Wiring, Fuses, Grounding, etc. ....                                  | 25        |



|               |   |           |
|---------------|---|-----------|
| 2.13          | Governor, Overspeed Switch, and Seal .....  | 26        |
| 2.14          | Code Data Plate .....   | 31        |
| 2.15          | Static Control .....  | 31        |
| 2.16          | Overhead Beam and Fastenings .....  | 31        |
| 2.17          | Drive Machine Brake .....   | 32        |
| 2.18          | Traction Drive Machines .....   | 33        |
| 2.19          | Gears, Bearings, and Flexible Couplings .....   | 34        |
| 2.20          | Winding Drum Machine and Slack Rope Device, Stop Motion Switch, and<br>Rope Fastening ..... | 34        |
| 2.21          | Belt- or Chain-Drive Machine .....  | 35        |
| 2.22          | Motor Generator .....   | 36        |
| 2.23          | Absorption of Regenerated Power .....   | 36        |
| 2.24          | AC Drives From a DC Source .....  | 37        |
| 2.25          | Traction Sheaves .....  | 37        |
| 2.26          | Secondary and Deflector Sheaves .....   | 38        |
| 2.27          | Rope Fastenings .....   | 38        |
| 2.28          | Terminal Stopping Devices .....   | 38        |
| 2.29          | Car and Counterweight Safeties .....  | 40        |
| 2.30          | Hydraulic Power Unit .....  | 45        |
| 2.31          | Relief Valves .....   | 46        |
| 2.32          | Control Valve .....   | 46        |
| 2.33          | Tanks .....   | 47        |
| 2.34          | Flexible Hydraulic Hose and Fitting Assemblies .....  | 48        |
| 2.35          | Supply Line and Shutoff Valve .....   | 48        |
| 2.36          | Hydraulic Cylinders .....   | 49        |
| 2.37          | Pressure Switch .....   | 49        |
| 2.38          | Roped Water Hydraulic Elevators .....   | 50        |
| 2.39          | Low Oil Protection .....  | 50        |
| 2.40          | Maintenance Records .....   | 50        |
| 2.41          | Hydraulic Control .....   | 51        |
| 2.42          | Earthquake Inspection and Tests (Seismic Risk Zone 2 or Greater) .....                      | 51        |
| 2.43          | Emergency Brake, Ascending Car Overspeed, and Unintended Car<br>Movement Protection .....   | 52        |
| <b>Part 3</b> | <b>Elevator — Top of Car</b> .....  | <b>54</b> |
| 3.1           | Top-of-Car Stop Switch .....  | 54        |
| 3.2           | Car Top Light and Outlet .....  | 54        |
| 3.3           | Top-of-Car Operating Device .....   | 55        |
| 3.4           | Top-of-Car Clearance, Refuge Space, and Standard Railing .....                              | 55        |
| 3.5           | Normal Terminal Stopping Devices .....  | 57        |
| 3.6           | Final and Emergency Terminal Stopping Devices .....   | 58        |
| 3.7           | Car Leveling and Anticreep Devices .....  | 59        |
| 3.8           | Top Emergency Exit .....  | 59        |
| 3.9           | Floor and Emergency Identification Numbering .....  | 60        |
| 3.10          | Hoistway Construction .....   | 60        |
| 3.11          | Hoistway Smoke Control .....  | 61        |
| 3.12          | Pipes, Wiring, and Ducts .....  | 61        |
| 3.13          | Windows, Projections, Recesses, and Setbacks .....  | 62        |
| 3.14          | Hoistway Clearances .....   | 62        |
| 3.15          | Multiple Hoistways .....  | 64        |
| 3.16          | Traveling Cables and Junction Boxes .....   | 64        |
| 3.17          | Door and Gate Equipment .....   | 65        |
| 3.18          | Car Frame and Stiles .....  | 67        |
| 3.19          | Guide Rails Fastening and Equipment .....   | 67        |
| 3.20          | Governor Rope .....   | 68        |
| 3.21          | Governor Releasing Carrier .....  | 68        |
| 3.22          | Wire Rope Fastening and Hitch Plate .....   | 69        |



|               |   |           |
|---------------|---|-----------|
| 3.23          | Suspension Means .....  | 71        |
| 3.24          | Top Counterweight Clearance .....   | 75        |
| 3.25          | Car, Overhead, and Deflector Sheaves .....  | 75        |
| 3.26          | Broken Rope, Chain, or Tape Switch .....  | 76        |
| 3.27          | Crosshead Data Plate and Rope Data Tags .....   | 76        |
| 3.28          | Counterweight and Counterweight Buffer .....  | 76        |
| 3.29          | Counterweight Safeties .....  | 77        |
| 3.30          | Speed Test .....  | 78        |
| 3.31          | Slack Rope Device — Roped-Hydraulic Elevators Installed Under<br>A17.1b–1989 and Later Editions .....   | 78        |
| 3.32          | Traveling Sheave — Roped-Hydraulic Elevators Installed Under<br>A17.1b–1989 and Later Editions .....  | 78        |
| 3.33          | Compensating Ropes and Chains .....   | 79        |
| 3.34          | Earthquake Inspection and Tests (Seismic Risk Zone 2 or Greater) .....  | 79        |
| <b>Part 4</b> | <b>Elevator — Outside Hoistway</b> .....  | <b>81</b> |
| 4.1           | Car Platform Guard .....  | 81        |
| 4.2           | Hoistway Doors .....  | 81        |
| 4.3           | Vision Panels .....   | 82        |
| 4.4           | Hoistway Door Locking Devices .....   | 83        |
| 4.5           | Access to Hoistway .....  | 83        |
| 4.6           | Power Closing of Hoistway Doors .....   | 84        |
| 4.7           | Sequence Operation .....  | 84        |
| 4.8           | Hoistway Enclosure .....  | 84        |
| 4.9           | Elevator Parking Devices .....  | 85        |
| 4.10          | Emergency Doors in Blind Hoistways .....  | 85        |
| 4.11          | Separate Counterweight Hoistway .....   | 86        |
| 4.12          | Standby Power Selection Switch .....  | 86        |
| <b>Part 5</b> | <b>Elevator — Pit</b> .....   | <b>87</b> |
| 5.1           | Pit Access, Lighting, Stop Switch, and Condition .....  | 87        |
| 5.2           | Bottom Clearance, Runby, and Minimum Refuge Space .....   | 88        |
| 5.3           | Final and Emergency Terminal Stopping Devices .....   | 90        |
| 5.4           | Normal Terminal Stopping Devices .....  | 90        |
| 5.5           | Traveling Cables .....  | 91        |
| 5.6           | Governor-Rope Tension Devices .....   | 91        |
| 5.7           | Car Frame and Platform .....  | 92        |
| 5.8           | Car and Counterweight Safeties and Guiding Members — Including<br>Roped-Hydraulic Elevators Installed Under A17.1b–1989 and Later<br>Editions ..... | 92        |
| 5.9           | Buffer and Emergency Terminal Speed Limiting Devices .....  | 94        |
| 5.10          | Compensating Chains, Ropes, and Sheaves .....   | 95        |
| 5.11          | Plunger and Cylinder .....  | 96        |
| 5.12          | Car Buffer .....  | 96        |
| 5.13          | Guiding Members .....   | 97        |
| 5.14          | Supply Piping .....   | 97        |
| 5.15          | Overspeed Valve .....   | 97        |
| 5.16          | Earthquake Inspection and Tests (Seismic Risk Zone 2 or Greater) .....  | 98        |
| <b>Part 6</b> | <b>Elevator — Firefighters’ Service</b> .....   | <b>99</b> |
| 6.1           | Operation of Elevators Under Fire and Other Emergency Conditions<br>(A17.1b–1973 Through A17.1b–1980) .....   | 99        |
| 6.2           | Operation of Elevators Under Fire and Other Emergency Conditions<br>(A17.1–1981 Through A17.1b–1983) .....  | 101       |
| 6.3           | Firefighters’ Service (A17.1–1984 Through A17.1a–1988 and A17.3) .....  | 103       |
| 6.4           | Firefighters’ Service (A17.1b–1989 Through A17.1d–2000) .....   | 105       |
| 6.5           | Acceptance Checklist for Firefighters’ Service (ASME A17.1–2000 and<br>CSA B44-00): Automatic Elevators .....                                       | 109       |



|               |  |     |
|---------------|--|-----|
| <b>Part 7</b> | <b>Escalator — External</b> .....                                      | 113 |
| 7.1           | General Fire Protection .....  | 113 |
| 7.2           | Geometry .....   | 113 |
| 7.3           | Handrails .....  | 117 |
| 7.4           | Entrance and Egress Ends .....   | 117 |
| 7.5           | Lighting .....   | 118 |
| 7.6           | Caution Signs .....  | 118 |
| 7.7           | Combplate and Comb Step Impact Device .....                            | 118 |
| 7.8           | Deck Barricades and Antislid e Devices .....                           | 120 |
| 7.9           | Steps and Upthrust Device .....  | 122 |
| 7.10          | Operating and Safety Devices .....                                     | 124 |
| 7.11          | Skirt Obstruction Device .....   | 126 |
| 7.12          | (Reserved) .....   | 126 |
| 7.13          | Egress Restriction (Rolling Shutter) Device .....                      | 126 |
| 7.14          | Speed .....  | 126 |
| 7.15          | Balustrades .....  | 128 |
| 7.16          | Ceiling Intersection Guards .....                                      | 128 |
| 7.17          | Step/Skirt Clearances, Panels, and Performance Index .....             | 128 |
| 7.18          | Outdoor Protection .....   | 131 |
| 7.19          | Maintenance Records .....  | 131 |
| 7.20          | Earthquake Inspection and Tests (Seismic Risk Zone 2 or Greater) ..... | 131 |
| <b>Part 8</b> | <b>Escalator — Internal</b> .....                                      | 133 |
| 8.1           | Machinery Space Access, Lighting, Receptacle, and Condition .....      | 133 |
| 8.2           | Machinery Space Stop Switches and Inspection Control .....             | 133 |
| 8.3           | Controller and Wiring .....  | 134 |
| 8.4           | Drive Machine and Brake .....  | 134 |
| 8.5           | Speed Governor .....   | 136 |
| 8.6           | Broken Drive Chain and Disconnected Motor Safety Device .....          | 136 |
| 8.7           | Reversal Stop Switch .....   | 136 |
| 8.8           | Broken Step Chain Device .....   | 137 |
| 8.9           | Step Upthrust Device .....   | 137 |
| 8.10          | Missing Step Device .....  | 137 |
| 8.11          | Step Level Device .....  | 138 |
| 8.12          | Steps, Step Chains, and Trusses .....                                  | 138 |
| 8.13          | Handrail Systems and Safety Devices .....                              | 140 |
| 8.14          | Code Data Plate .....  | 140 |
| 8.15          | Response to Smoke Detectors .....                                      | 140 |
| 8.16          | Step Lateral Displacement Device .....                                 | 141 |
| 8.17          | Inspection Control .....   | 141 |
| 8.18          | Earthquake Inspection and Tests (Seismic Risk Zone 2 or Greater) ..... | 141 |
| <b>Part 9</b> | <b>Moving Walk — External</b> .....                                    | 142 |
| 9.1           | General Fire Protection .....  | 142 |
| 9.2           | Geometry .....   | 142 |
| 9.3           | Handrails .....  | 142 |
| 9.4           | Entrance and Egress Ends .....   | 145 |
| 9.5           | Lighting .....   | 146 |
| 9.6           | Caution Signs .....  | 146 |
| 9.7           | Combplate and Comb Step Impact Device .....                            | 146 |
| 9.8           | Deck Barricades .....  | 147 |
| 9.9           | Treadways .....  | 147 |
| 9.10          | Operating and Safety Devices .....                                     | 148 |
| 9.11          | (Reserved) .....   | 149 |
| 9.12          | (Reserved) .....   | 149 |
| 9.13          | Egress Restriction (Rolling Shutter) Device .....                      | 149 |
| 9.14          | Speed .....  | 149 |
| 9.15          | Balustrades .....  | 150 |



|                |   |     |
|----------------|---|-----|
| 9.16           | Ceiling Intersection Guards .....   | 151 |
| 9.17           | Skirt Panels .....  | 151 |
| 9.18           | Outdoor Protection .....  | 152 |
| 9.19           | Maintenance Records .....   | 152 |
| 9.20           | Earthquake Inspection and Tests (Seismic Risk Zone 2 or Greater) .....  | 152 |
| <b>Part 10</b> | <b>Moving Walk – Internal</b> .....   | 154 |
| 10.1           | Machinery Space Access, Lighting, Receptacle, and Condition .....   | 154 |
| 10.2           | Stop Switch and Inspection Control .....  | 154 |
| 10.3           | Controller and Wiring .....   | 155 |
| 10.4           | Drive Machine and Brake .....   | 155 |
| 10.5           | Speed Governor .....  | 156 |
| 10.6           | Broken Drive Chain and Disconnected Motor Safety Device .....   | 157 |
| 10.7           | Reversal Stop Switch .....  | 157 |
| 10.8           | Broken Treadway Device .....  | 158 |
| 10.9           | (Reserved) .....  | 158 |
| 10.10          | Missing Pallet Device .....   | 158 |
| 10.11          | Pallet Level Device .....   | 158 |
| 10.12          | Pallets, Pallet Chains, and Trusses .....   | 159 |
| 10.13          | Handrail Systems and Safety Devices .....   | 160 |
| 10.14          | Code Data Plate .....   | 160 |
| 10.15          | Response to Smoke Detectors .....   | 160 |
| 10.16          | Inspection Control .....  | 161 |
| 10.17          | Earthquake Inspection and Tests (Seismic Risk Zone 2 or Greater) .....  | 161 |
| <b>Part 11</b> | <b>Elevator – Machine-Room-Less (MRL)</b> .....   | 162 |
| 11.1           | Access to Machine Room/Machinery Space/Control Room/Control<br>Space .....  | 162 |
| 11.2           | Access Door and Openings .....  | 162 |
| 11.3           | Enclosure of Rooms and Spaces .....   | 162 |
| 11.4           | Maintenance Path and Clearance .....  | 163 |
| 11.5           | Machine/Control Rooms Containing Overhead Drive Machines .....  | 163 |
| 11.6           | Temperature/Humidity .....  | 163 |
| 11.7           | Disconnecting Means .....   | 163 |
| 11.8           | Remote Machine Rooms and Control Rooms .....  | 163 |
| 11.9           | Inspection and Test Panels .....  | 164 |
| 11.10          | Governor, Overspeed Switch .....  | 164 |
| 11.11          | Emergency Brake .....   | 164 |
| 11.12          | Traction Sheaves .....  | 165 |
| 11.13          | Secondary and Deflector Sheaves .....   | 165 |
| 11.14          | Terminal Stopping Devices .....   | 165 |
| 11.15          | Working Areas Inside the Hoistway and in the Pit .....  | 165 |
| 11.16          | Location of Machinery Spaces, Machine Rooms, Control Spaces,<br>Control Rooms, and Equipment .....  | 166 |
| 11.17          | Hydraulic Elevators — Shutoff/Manual Lowering Valves .....  | 166 |
| 11.18          | Hydraulic Elevators — Pressure Gage Fittings .....  | 166 |
| 11.19          | Hydraulic Elevators — Atmosphere Storage and Discharge Tanks .....  | 166 |
| 11.20          | Hydraulic Elevators — Pressure Piping .....   | 167 |
| 11.21          | Explanatory Figures for Definitions of Elevator Machinery Space, Machine<br>Room, Control Space, Control Room, Remote Machine Room, or Remote<br>Control Room ..... | 167 |
| 11.22          | Inspection Operation and Hoistway Access Switch Operation<br>Hierarchy .....  | 167 |
| <b>Figures</b> |   |     |
| 1.10.2         | Door Operation Relative to Car Position .....   | 11  |
| 2.13.2.1       | Dynamometer Connections for Testing the Pull-Through of<br>Governor Jaws .....  | 28  |



|               |   |     |
|---------------|---|-----|
| 2.29.2(a)     | Safety Marks on Guide Rails, Poor Illumination .....  | 44  |
| 2.29.2(b)     | Safety Marks on Guide Rails, Good Illumination .....  | 44  |
| 3.4.1.2       | Top Car Clearance and Runby (A17.1–1978 and Later Editions) .....   | 56  |
| 3.16.1        | Self-Tightening Grips .....   | 65  |
| 3.22.1        | Cross-Section Through Tapered Rope Socket Showing Maximum and<br>Minimum Projection of Loops Above Embedment Medium ..... | 70  |
| 3.23.1        | Types of Lay .....  | 72  |
| 3.23.2        | Cross Sections of Typical Wire Ropes .....  | 73  |
| 3.23.3        | Inspection and Replacement of Steel Wire Ropes .....  | 74  |
| 5.2.3         | Bottom Car Clearance Hydraulic Elevators .....  | 89  |
| 6.4.2(b)(9)   | Visual Signal .....   | 106 |
| 6.4.2(g)(1)   | Phase I Instructions .....  | 107 |
| 6.4.2(g)(2)   | Phase II Instructions (A17.1b–1989 Through A17.1b–1995) .....   | 108 |
| 6.4.2(g)(3)   | Phase II Instructions (A17.1–1996 Through A17.1d–2000) .....  | 108 |
| 7.2.1(a)      | Dimensions for Existing Escalators (for Escalators Installed Under<br>A17.1–1955 and A17.1–1960 Editions) .....           | 114 |
| 7.2.1(b)      | Dimensions for Existing Escalators (for Escalators Installed Under<br>A17.1–1965 Through A17.1–1981) .....                | 115 |
| 7.2.1(c)      | Relationship of Escalator Parts (A17.1a–1982 and Later Editions) .....  | 116 |
| 7.2.3         | Checking Incline .....  | 116 |
| 7.4.1         | Safety Zone .....   | 117 |
| 7.7.1         | Checking Step/Combplate Mesh .....  | 119 |
| 7.7.3         | Test of Combplate/Landing Plate Assembly .....  | 120 |
| 7.8.1(a)      | Deck Barricade .....  | 121 |
| 7.8.1(b)      | High Deck Balustrade Antislip Devices .....   | 121 |
| 7.9.1(a)      | Smooth Riser .....  | 122 |
| 7.9.1(b)      | Cleated Riser .....   | 123 |
| 7.9.1(c)      | Escalator Step Riser .....  | 123 |
| 7.9.1(d)      | Escalator Step Tread [A17.1–1955 Through A17.1–1990, Rule 802.5<br>(Requirement 6.1.3.5)] .....                           | 124 |
| 7.9.3         | Example of Two Flat Steps .....   | 125 |
| 7.11.1        | Typical Skirt Obstruction Device .....  | 127 |
| 7.16.1        | Ceiling or Soffit Guard [Requirements 6.1.3.3.9 and 6.2.3.3.7<br>(Rules 802.3g and 902.3g)] .....                         | 129 |
| 7.17.1        | Measuring Gap Between Step and Skirt .....  | 129 |
| 7.17.2        | Angle of Skirt Panel .....  | 130 |
| 7.18.3        | Escalator Cover Overlap .....   | 132 |
| 8.9.2         | Typical Step Upthrust Device .....  | 138 |
| 8.12.2        | Positioning of Steps for Inspection of Truss .....  | 139 |
| 9.2.1(a)      | Moving Walk Geometry (for Moving Walks Installed Under<br>A17.1–1965 Through A17.1b–1980) .....                           | 143 |
| 9.2.1(b)      | Moving Walk Geometry (for Moving Walks Installed Under<br>A17.1–1981 Through A17.1a–1991) .....                           | 144 |
| 9.2.3         | Maximum Treadway Angle .....  | 144 |
| 9.3.3         | Moving Walk Handrail Extension (A17.1–1971 and Later Editions) .....  | 146 |
| 9.9.1         | Moving Walk Treadway Slots .....  | 148 |
| 9.17.1        | Treadway Clearances .....   | 151 |
| 11.21-1       | Configuration A .....   | 167 |
| 11.21-2       | Configuration B .....   | 167 |
| 11.21-3       | Configuration C .....   | 168 |
| 11.21-4       | Configuration D .....   | 168 |
| 11.21-5       | Configuration E .....   | 169 |
| 11.21-6       | Configuration F .....   | 169 |
| <b>Tables</b> |   |     |
| 1             | Procurement Information .....   | 4   |
| 2.13.2.1      | Governor Adjustment Settings .....  | 27  |



|                                |   |     |
|--------------------------------|---|-----|
| 2.29.2(a)                      | Maximum Safety Rope Pullout .....   | 40  |
| 2.29.2(b)                      | Minimum and Maximum Stopping Distances for Type B Car Safeties<br>With Rated Load, and Type B Counterweight Safeties With No Load<br>in the Car ..... | 43  |
| 2.29.2(c)                      | Gradual Wedge Clamp Safety .....  | 43  |
| 2.29.2(d)                      | Flexible Guide Clamp Safety .....   | 43  |
| 2.29.2(e)                      | Wedge Clamp Safety (Constant Retarding Force) .....   | 44  |
| 2.34.3                         | Minimum Bend Radius for SAE 100R2 Hose .....  | 48  |
| 2.43.3.1                       | Traction Elevator Brake Type, Function, and Performance .....   | 53  |
| 3.14.3(a)                      | Horizontal Clearances .....   | 63  |
| 3.14.3(b)                      | Horizontal Distances .....  | 63  |
| 3.22.1                         | Projection of Rope Strands Above Embedment Medium for 6- and<br>8-Strand Ropes .....  | 70  |
| 9.2.3(a)                       | Treadway Width (A17.1–1965 Through A17.1d–1970) .....   | 145 |
| 9.2.3(b)                       | Treadway Width (A17.1–1971 and Later Editions) .....  | 145 |
| 9.2.3(c)                       | Minimum Treadway Width .....  | 145 |
| 9.14.1(a)                      | Treadway Speed (A17.1–1981 and Later Editions) .....  | 150 |
| 9.14.1(b)                      | Treadway Speed (A17.1–1965 Through A17.1b–1980) .....   | 150 |
| 9.14.1(c)                      | Treadway Speed (A17.1–1965 Through A17.1b–1980) .....   | 150 |
| 11.21                          | Definitions of Elevator Machinery Space, Machine Room, Control Space,<br>Control Room, Remote Machine Room, or Remote Control<br>Room .....           | 170 |
| 11.22                          | Inspection Operation and Hoistway Access Switch Operation<br>Hierarchy .....  | 171 |
| <b>Mandatory Appendices</b>    |   |     |
| I                              | Guide for Inspection of Inclined Elevators .....  | 173 |
| II                             | Guide for Inspection of Private Residence Electric<br>and Hydraulic Elevators .....   | 188 |
| III                            | Guide for Inspection of Private Residence Inclined Elevators .....  | 205 |
| <b>Nonmandatory Appendices</b> |   |     |
| A                              | Inspection Checklists .....   | 209 |
| B                              | Acceptance Checklist .....  | 251 |
| C                              | Guidelines for B44.1/A17.5–2004 .....   | 308 |
| D                              | Checklists for Electric and Hydraulic Elevators, Escalators, and Moving<br>Walks .....  | 310 |
| E                              | Checklists and Reports for Inspection of Electric and Hydraulic<br>Elevators, Escalators, and Moving Walks .....                                      | 370 |
| F                              | Inspection Checklists for Limited-Use/Limited-Application Electric and<br>Hydraulic Elevators .....   | 375 |
| G                              | Guide for Typical Door Closing Times .....  | 389 |

