

INDEX

A

Acetylene Cylinders	137
Alcohol/Drug Use (Vehicle Safety)	164
Allowable Concentrated Loads on	
American Standard Beams (Chart)	182
Allowable Loads for Beams (Chart)	184
Allowable Loads for Wood Planks (Chart)	183
Allowable Number of Broken Strands for	
Wire Ropes Used in Hoisting Equipment	94
Anchor, Safety Harness (Illustration)	30
Asbestos (HAZCOM)	145

B

Babbitting (HAZCOM)	143
Barricade (Illustration)	39
Batteries, Sulfuric Acid Type (HAZCOM)	147
Beam Clamps – Vertical Pull Only (Illustration)	92
Beam Clamps	124
Beams, Allowable Concentrated Loads	
on American Standard (Chart)	182
Beams, Allowable Loads for (Chart)	184
Beams, Suspending Needle or Scaffolds (Illustration)	100
Beams, Timber Used for	181
Blocking and Ramping of Material	89
Body Harness, Full (Illustration)	30

C

Capacitors, Color Code for Jan Fixed MICA (Illustration) . . .	180
Carbon Dust (HAZCOM)	147
Cars, Temporary	79
Car-Top Safety	56
Chain Hoists	96
Chain Sling Capacities Lbs (Illustration).	109, 110
Chain Slings, Inspection of	105
Chemicals, Working With.	139
Chisels, Use Only Properly Dressed (Illustration)	71
Chokers, Use of (Illustration)	100
Clamps, Beam	124
Cleaners (HAZCOM)	142
Clothing, Proper	22
Color Code for Fixed Resistors – Values in OHMS (Illustration)	179
Communication Devices (Vehicle Safety)	165
Competent Person	160
Crosby Lifting Guide	97
Cutting, Welding and	135

D

Double Saddle Clips.	95
Driving and Vehicle Safety.	164
Drug/Substance Abuse	164
Dumbwaiters.	155

E

Electric, Portable Tools.	71
Electrical Safety – General Precautions	40
Elevator Car Speeds in Ft/Min to M/M and M/S (Chart)	175

Elevator Maintenance Barricades	39
Employee Responsibilities	8
Endless Sling Assembly (Illustration)	97
Escalator/Moving Walk Barricades	38
Escalators and Moving Walks	152
Escalators and Moving Walks, Lockout Procedures for	54
Extension Cords, Approved Markings for	72
Eye and Face Protection	23, 159
Eye Bolts (Illustration)	100

F

Fall Arrest Equipment, Personal	26
Fall Protection	29
Fall-Arrest System, Personal	29
Falls, Five- Six- & Seven-Part (Illustration)	125, 126
False Car (Illustration)	80
False Car with Optional Debris Net (Illustration)	81
False Cars and Other Devices Used in the Hoistway	79
Fastenings, Wire Rope	95
Filter Lens Shade Number for Protection Against Radiant Energy (Chart)	24
Fire, Precautions Against (Welding and Cutting)	135
Five-Part Falls (Illustration)	125, 126
Fixed Resistors, Color Code for (Values in OHMS) (Illustration)	179
Flammable Liquids and Solvents (HAZCOM)	146
Foot and Leg Protection	158
Foot Protection, Occupational	25
Fuel Gas Cylinders	137
Full-Body Harness (Illustration)	30

G

Gallons to Liters (Chart)	174
Glossary of Terms	167
Grease, Oils and (HAZCOM)	141
Guardrail Systems (Illustration).....	36, 37
Guardrail Systems	33

H

Hand Protection	27, 160
Hand Signals, Hoisting (Illustration)	98, 99
Hand Tools	70
Hardware, Rigging (Illustration)	114, 115, 116, 118
Harness, Full-Body (Illustration)	30
Hazard Communications (HAZCOM).....	139
Asbestos	145
Babbitting.....	143
Carbon Dust	147
Chemicals, Working with	139
Cleaners	142
Flammable Liquids and Solvents.....	146
Oils and Grease	141
Painting	144
Sulfuric Acid Type Batteries	147
Welding	145
Head Protection	25, 158
Headbeams, Timber Used for (Chart)	181
Hearing Protection.....	26, 158
Helpful Hints for On and Off the Job (Illustration)	87, 88
Hitches, Slings and.....	96
Hoisting and Rigging	89
Hoisting Structural Steel (Illustration)	101
Hoisting, Hand Signals (Illustration)	98, 99

Hoists, Chain	96
Hoistway Screening	67
Hoistway, False Cars and Other Devices Used in the Hoistway	79
Hoistways and Machine Rooms	56
Hook Slings (Illustration)	101

I

Inclined Elevators	151
Inspecting for Hazards	17
Inspecting Manila Rope (Illustration)	128
Inspection, Safety Checklist	17
Inspections, Need for Routine Safety	17

J

Job Hazard Assessment, Service and Repair (Chart)	162, 163
Job Hazard Assessment, Service and Repair Job	157
Jumpers, Door Bypass Procedure	48
Jumpers, Maintenance and Troubleshooting	46
Jumpers, Modernization and New Construction	47
Jumpers, Proper Use of	45

K

Knots Are Weak	129
Knots: (Illustrations)	
Bowline on the Bight	132
Bowline	134
Carrick Bend	134
Catspaw	131

Clove Hitch (Builder's Hitch)	132
Figure Eight Follow Through	133
Figure Eight Knot	131
Figure Eight on a Bight	133
Reef Knot or Square Knot	131
Rolling Hitch	134
Round Turn and Two Half Hitches	133
Running Bowline	132
Sheepshank	134
Timber Hitch	131

L

Ladder, Proper Placement of (Illustration)	77
Ladders, Portable	75
Lens Shade Numbers, Filter (Chart)	24
Lifeline, Typical Top Anchorage of (Illustration)	29
Lifting Loads	85
Lifting, Positions for (Illustration)	86
Lights, Portable Electric	71
Liquids and Solvents, Flammable	146
Loads, Lifting	85
Lockout/Tagout (Illustration)	50
Lockout/Tagout Procedures for Escalators and Moving Walks	54
Lockout/Tagout Procedures	49
Lockout/Tagout, Supervisory/Emergency Removal	53

M

Machine Rooms, Hoistways and	56
Maintenance, Vehicle	165

Manila Rope Knots, Approximate Efficiency (Illustration)	130
Manila Rope	128
Manila Rope, Inspecting (Illustration)	125
Material Handling	85
Materials Handling – Ramping and Blocking of	89
Mechanic/Mechanic-In-Charge Responsibilities of	13
Moving Walks, Escalators and	152

O

Occupational Foot Protection	25
Occupational Head Protection	25
Oils and Grease (HAZCOM)	141
Overhead Protection	68
Oxygen Cylinders	137

P

Painting (HAZCOM)	144
Personal Fall Arrest Equipment	26
Personal Fall Arrest System	159
Personal Protective Equipment	22
Pit Safety	61
Planks, Allowable Loads for Wood (Chart)	183
Platforms, Running (Moving)	78
Platforms, Working	78
Portable Electric Tools and Lights	71
Portable Ladders	75
Pounds to Kilograms (Chart)	173
PPE Training	161
Pre-startup Safety Survey	19

R

Ramping and Blocking of Material	89
Resistors, Fixed Color Code for – Values in OHMS (Chart)	179
Respiratory Protection	27, 159
Rigging Hardware (Illustration)	114, 115, 116, 118
Rigging Plan, The Basic	103
Rigging Practices, Right and Wrong (Illustration) ...	100, 101
Rigging, Hoisting and	89
Rope Knots, Approximately Efficiency	130
Rope, Inspecting Manila (Illustration)	128
Rope, Manila	127
Running Platforms	78

S

Safety Belts (Vehicle Safety)	164
Safety Inspection Checklist	17
Safety Inspections, Need for Routine	17
Safety Responsibilities of the Mechanic/ Mechanic-In-Charge	13
Safety, Driving and Vehicle	164
Safety, Electrical – General Precautions	40
Scaffolds	74
Screening, Hoistway	67
Service and Repair Job Hazard Assessment (Chart)	162, 163
Service and Repair Job Hazard Assessment	157
Seven-Part Falls (Illustration)	126, 127
Signals, Hand Hoisting (Illustration)	98, 99
Six-Part Falls (Illustration)	126, 127
Sling Angles (Illustration)	113

Sling Capacities, Chain Lbs (Illustration)	109, 110
Sling Capacities, Web (Illustration)	111
Sling Capacities, Wire Rope Lbs. (Illustration)	106
Sling Capacities, Wire Rope Tons (Illustration).	107
Sling Loading, Center of Gravity (Illustration).	112
Sling Operating Practices	117
Slings and Connections to Fittings, Wire Rope	108
Slings and Hitches	96
Slings, Endless Assembly (Illustration)	97
Slings, Inspection of Chain	105
Slings, Inspection of Synthetic.	105
Slings, Inspection of Wire Rope	104
Slings, Synthetic Webbing	119
Soldering.	138
Solvents, Flammable Liquids and	146
Structural Steel, Hoisting (Illustration).	101
Substance Abuse	164
Sulfuric Acid Type Batteries (HAZCOM)	147
Suspending Needle Beams or Scaffolds (Illustration)	100
Synthetic Rope	128
Synthetic Slings, Inspection of.	105
Synthetic Webbing Slings	119

T

Tagout Procedure, Lockout/.	49
Temporary Cars	79
Timber Used for Headbeams (Chart).	181
Tools, Hand	70
Tools, Portable Electric.	71

V

Vehicle Maintenance	165
Vehicle Safety, Driving and	164
Vertical Pull Only – Beam Clamps (Illustration)	92

W

Web Sling Capacities (Illustration)	111
Welding (HAZCOM)	145
Welding, Cutting and Soldering	135
Wire Rope Deterioration	94
Wire Rope Sling Capacities Lbs. (Illustration)	106
Wire Rope Sling Capacities Tons (Illustration)	107
Wire Rope Slings and Connections to Fittings	108
Wire Rope Slings, Inspection of	104
Wire Ropes, Allowable Number of Broken Strands for Use in Hoisting Equipment	94
Wire Rope Failure, Causes of	94
Wire Rope Fastenings	95
Working Platforms	78
Workplace Hazards, Assessing	160

Free Safety Programs for Children and Adults



Safe-T Rider® teaches young children safety rules for riding on elevators, escalators and moving walks. An 8-minute video uses “rap” music and a little magic to show how to safely ride industry equipment. The classroom program contains one poster, video and guide, 25 each: activity book, sticker, certificate and test. Call EESF for your classroom package. Also, visit the interactive version at: www.safetrider.org

The Center for Education and Research in Safety evaluated the Safe-T-Rider program and confirmed that its use improved riding behavior of children by 42%. See complete report at [www. EESF.org](http://www.EESF.org)

A Safe Ride® is based on a stand-alone video and stand-alone printed materials. The video is aimed at the general public, while the safety workbooks target specific audiences, i.e., senior citizens, parents of young children, etc. Call EESF for materials.



Also, visit the interactive version at:
www.asaferide.org

Elevator Escalator Safety Foundation
362 Pinehill Drive
Mobile, AL 36606

(251) 479-2199
E-mail: info@eesf.org
Website: www.eesf.org

ELEVATOR WORLD

The Magazine of the International Building Transportation Industry

Digital Subscription ONLY \$25.00

Twelve monthly issues of ELEVATOR WORLD magazine e-mailed to your computer. This format offers enhanced features such as search a function, the ability to highlight text and electronic notes.

Continuing Education Courses (CEC), More time on the JOB . . . Time is MONEY . . . Let us SAVE you both! We offer numerous industry-specific, self-study continuing-education choices that you can take from the comfort of your own home or office; no more travel expenses or seminars required. With each successfully completed test, a certificate will be issued. For more information, visit www.elevatorbooks.com.

• FREE Industry E-Mail Newsletter ELENET®

(Register at www.elevator-world.com)

• www.elevator-world.com

- *News and information every business day*
- *Find-A-Part*: Get information on parts and services from the most well known and respected companies.
- *The Elevator World Source® Online*: Directory of industry manufacturers, suppliers, products, contractors, consultants and associations.
- *Message Board*
- *Books, videos, training materials and CD's*
(Subscribers receive 15% discount at www.elevatorbooks.com)
- *Research Center*
- *Classifieds*

• www.theelevatormuseum.org

- A virtual tour through elevator history
- Donate your historical pictures or knowledge

Elevator World, Inc.

PUBLISHER FOR THE INTERNATIONAL BUILDING TRANSPORTATION INDUSTRY

E-mail: sales@elevator-world.com

Website: www.elevator-world.com

Phone: (251) 479-4514, Fax: (251) 479-7043