

Industry Standards, Regulations & Safety Resources

Category	Standard / Regulation	Title	Notes	Web Link
AISC	AISC	American Institute of Steel Construction	To serve the structural steel design community and construction industry in the United States.	https://www.aisc.org/
ALI	ALI	American Ladders Institute	Developer of safety standards for the ladder industry.	https://www.americanladderinstitute.org/
ALI	ANSI/ASC A14.3	Ladders - Fixed - Safety Requirements	Standard prescribes minimum requirements for the design, construction, and use of fixed ladders, and sets forth requirements for cages, wells, and ladder safety systems used with fixed ladders, in order to minimize personal injuries.	https://webstore.ansi.org/Standards/ALI/ANSI-ASCA142008R2018-1719324
ANSI	ANSI	American National Standards Institute	Oversees standards and conformity assessment activities in the U.S.	https://ansi.org/
ANSI	ANSI Z49.1:2012	Safety in Welding, Cutting and Allied Processes	Foot protection.	https://webstore.ansi.org/Standards/AWS/ANSI-Z492012
ASME	ASME	The American Society of Mechanical Engineers	Promotes the art, science, and practice of multidisciplinary engineering and allied sciences around the globe.	https://www.asme.org/
ASME	ANSI/ASME B30.12	Handling Loads Suspended from Rotorcraft	Applies to the construction, installation, operation, inspection, testing, maintenance, and use of cranes and other lifting and material-movement related equipment.	https://webstore.ansi.org/Standards/ASME/ASMEB30122011
ASME	ANSI/ASME B30.20	Below the Hook Lifting Devices	Safety standard for cableways, cranes, derricks, hoists, hooks, jacks, and slings.	https://www.asme.org/codes-standards/find-codes-standards/b30-20-hook-lifting-devices
ASME	ANSI/ASME B30.23	Personnel Lifting Systems	Applies to hoisting equipment used to lift, lower or transport personnel.	https://webstore.ansi.org/Standards/ASME/ASMEB30232016?gclid=CjwKCA-jw7J6EBhBDEiwA5UUM2iqFBBeyaC-c23c9ENpFPNvE-RVJdz2a5ZwgxqtUSY-YoWS6iBr4A0txoCog0QAvD_BwE
ASME	ANSI/ASME B30.26	Rigging Hardware	Construction, installation, operation, inspection and maintenance of rigging hardware used for load handling activities. Standard for any hardware component used while hoisting within the industry.	https://global.ihs.com/doc_detail.cfm?&item_s_key=00454787&item_key_date=840224&input_doc_number=ANSI%20ASME%20B30%2F26&input_doc_title=
ASME	ANSI/ASME B30.30	Ropes	Selection, installation, attachment, testing, inspection, maintenance, repair, use, and replacement of all types of rope. Ropes used in rigging configuration.	https://global.ihs.com/doc_detail.cfm?&item_s_key=00778410&item_key_date=801231&input_doc_number=ANSI%20ASME%20B30%2E30&input_doc_title=
ASME	ANSI/ASME B30.7	Winches (base mounted hoists)	Base mounted hoist standard applies to the construction, installation, operation, inspection, testing and maintenance of winches arranged for mounting on a foundation or other supporting structure for moving loads.	https://global.ihs.com/doc_detail.cfm?&item_s_key=00007376&item_key_date=830315&input_doc_number=ANSI%20ASME%20B30%2E7&input_doc_title=

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ASME	ANSI/ASME B30.9	Slings	Applies to the fabrication, attachment, use, inspection, testing, and maintenance of slings used for load handling purposes, used in conjunction with equipment described in other volumes of the B30 Standard.	https://global.ihs.com/doc_detail.cfm?&item_s_key=00007378&item_key_date=810716&input_doc_number=ANSI%20ASME%20B30%2E9&input_doc_title=
ASSP	ASSP	American Society of Safety Professionals	Global association for occupational safety and health professionals.	https://www.assp.org/
ASSP	ANSI/ASSP Z359	The Fall Protection and Arrest Standards Package	The standards included in the Z359 Fall Protection and Arrest Package provide organizations with a comprehensive resource for protecting workers at heights.	https://webstore.ansi.org/Standards/ASSE/ANSIASSEZ359FallProtection
ASSP	ANSI/ASSP A10.32	Personal Fall Protection Used in Construction and Demolition Operations	Standard establishes performance criteria for personal fall protection equipment and systems in construction and demolition and provides guidelines, recommendations for their use and inspection.	https://webstore.ansi.org/Standards/ASSE/ANSIASSEA10322012
ASSP	ANSI/ASSP A10.33	Safety and Health Program Requirements for Multi-Employer Projects	Multi-employer projects.	https://webstore.ansi.org/standards/asse/ansiassea10332011r2016?gclid=C-jwKCAjwu5CDBhB9EiwA0w6sLdok-k1JjjBqfdPq-ID9OqFtMgVWo6hpf3vKU-vtueHnvpZ9-9tdfIRRoCNLgQAvD_BwE
ASSP	ANSI/ASSP A10.34	Protection of the Public on or Adjacent to Construction Sites	Public safety.	https://store.assp.org/PersonifyEbusiness/Store/Product-Details/productId/5872
ASSP	ANSI/ASSP A10.4	Safety Requirements for Personnel Hoists and Employee Elevators on Construction and Demolition Sites	Personnel hoists and employee elevators.	https://webstore.ansi.org/Standards/ASSE/ANSIASSEA102016
ASSP	ANSI/ASSP A10.42	Safety Requirements for Rigging Qualifications and Responsibilities	Rigging.	https://store.assp.org/PersonifyEbusiness/Store/Product-Details/productId/31442893
ASSP	ANSI/ASSP A10.44	Control of Energy Sources (Lockout/Tagout) for Construction & Demolition Operations	Electrical safety.	https://store.assp.org/PersonifyEbusiness/Store/Product-Details/productId/205476568
ASSP	ANSI/ASSP A10.48	Criteria for Safety Practices with the Construction, Demolition, Modification and Maintenance of Communication Structures	Means and methods for working on communications structures.	https://natehome.com/regulations-standards/standards/ansi-asse-a10-48/
ASSP	ANSI/ASSP A10.5	Safety Requirements for Material Hoists	Hoist requirements.	https://webstore.ansi.org/standards/asse/ansiassea102013-1452307
ASSP	ANSI/ASSP Z490.1	Criteria for Accepted Practices in Safety, Health, and Environmental Training	This standard establishes criteria for safety, health and environmental training programs, including program management, development, delivery, evaluation and documentation.	https://webstore.ansi.org/Standards/ASSE/ANSIASSEZ4902016
ASSP	ANSI/ASSP Z87.1	Occupational and Educational Personal Eye and Face Protection Devices	Eye protection/safety glasses.	https://webstore.ansi.org/Standards/ASSE/ANSIASSEZ872003
ASTM	ASTM	American Society for Testing and Materials	Standard developing partner.	https://www.astm.org/

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AWS	AWS D1.1/D1.1M	Structural Welding Code-Steel	This code covers the welding requirements for any type of welded structure made from the commonly used carbon and low-alloy constructional steels.	https://pubs.aws.org/p/1959/d11d11m2020-structural-welding-code-steel?utm_source=aws%20print&utm_medium=publications%20catalog?utm_source=welding%20productivity&utm_medium=interstitial
AWS	AWS	American Welding Society	To advance the science, technology and application of welding and allied joining and cutting processes, including brazing, soldering and thermal spraying.	https://www.aws.org/
AWS	AWS D1.2/D1.2M	Structural Welding Code-Aluminum	This code covers the welding requirements for any type structure made from aluminum structural alloys, except for aluminum pressure vessels and pressure piping.	https://pubs.aws.org/p/1277/d12d12m2014-structural-welding-code-aluminum
CFR	CFR	Code of Federal Regulation	The codification of the general and permanent rules published in the Federal Register by the departments and agencies of the Federal Government produced by the Office of the Federal Register (OFR) and the Government Publishing Office.	https://www.ecfr.gov/cgi-bin/ECFR?page=browse
CFR	14 CFR Part 107	Small Unmanned Aircraft Systems	FAA Part 107- rules for small unmanned aircraft systems (UAS), or “drone,” operations cover a broad spectrum of commercial and government uses for drones weighing less than 55 pounds.	https://www.ecfr.gov/cgi-bin/text-idx?SID=d-c908fb739912b0e6dcb7d7d88cfe6a7&mc=TRUE&node=pt14.2.107&rgn=div5
CFR	47 CFR 1.1310	Radiofrequency Radiation Exposure Limits	Regulation on RF exposure limits.	https://www.govinfo.gov/app/details/CFR-2010-title47-vol1/CFR-2010-title47-vol1-sec1-1310/summary
CFR	47 CFR 74.30	Antenna Structure Marking and Lighting	Regulation on marking and lighting, tower owners, and lighting/painting work.	https://www.govinfo.gov/app/details/CFR-2010-title47-vol4/CFR-2010-title47-vol4-sec74-30/context
CFR	FMCSA - 49 CFR - Part 390	FMCSR, General Regulations	Applicable to all employers, employees, and commercial motor vehicles that transport property or passengers in interstate commerce.	https://www.ecfr.gov/cgi-bin/retrieveECFR?g-p=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.390
CI	Cordage Institute	Rope, twine, and related manufacturers, suppliers, and industries association.	International Association dedicated to the advancement of rope and cordage products.	https://www.ropecord.com/new/index.php
CI	CI 1801	Performance Requirements for Low Stretch and Static Life Safety Rope	Requirements for manufacturers on low stretch/static kernmantle safety rope.	https://www.ropecord.com/cart/cartpubs_n.asp
CI	CI 1805	Standard: 3-Strand Life Safety Rope, Moderate Stretch	Standard for manufacturers on requirements.	https://www.ropecord.com/cart/cartpubs_n.asp
CI	CI 2005	Guideline: Inspection of Kernmantle Ropes for Life Safety Applications	Guide for inspection.	https://www.ropecord.com/cart/cartpubs_n.asp
FAA	FAA	Federal Aviation Administration	To provide the safest, most efficient aerospace system in the world.	https://www.faa.gov/

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FAA	FAA AC 70/7460-1M	Obstruction Marking and Lighting with Change 2	Standard for structure owners to meet the lighting and marking requirements for structures. Working on lighting/painting.	https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.current/documentnumber/70_7460-1
FAA	FAA, Rotorcraft External-Load Operations	Rotorcraft External-Load Operations, Part 133	Rotorcraft.	https://www.faa.gov/hazmat/air_carriers/operations/part_133/
FCC	FCC	Federal Communications Commission	Regulates interstate and international communications by radio, television, wire, satellite and cable in all 50 states, the District of Columbia, and U.S. Territories.	https://www.fcc.gov/
FCC	FCC OET Bulletin Number 56	Questions and Answers about Biological Effects and Potential Hazards of Radio Frequency Electromagnetic Fields	Understanding potential effects that RF may cause from exposure. Employee exposure to RF.	https://www.fcc.gov/general/oet-bulletins-line
FCC	FCC OET Bulletin Number 65	Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields	Allowable limitations of RF exposure.	https://www.fcc.gov/general/oet-bulletins-line
FMCSA	FMCSA	Federal Motor Carrier Safety Administration (FMCSA)	Improving the safety of commercial motor vehicles.	https://www.fmcsa.dot.gov/
IEEE	IEEE	Institute of Electrical and Electronics Engineers - Advancing Technology for Humanity	To foster technological innovation and excellence for the benefit of humanity.	https://www.ieee.org/
IEEE	ANSI/IEEE C95.1-2005	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 KHz to 300 GHz	Radiofrequency.	https://webstore.ansi.org/standards/ieee/ieeec952005?gclid=CjwKCAjw7J6EBhBDEi-wA5UUM2peeHIFhFON_hyKEh5TLUkdV9DcxQ9iKdUY_8tY4YAjN0KFWUELahoCZhY-QAvD_BwE
IEEE	ANSI/IEEE C95.1-2019	Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz	Radiofrequency.	https://webstore.ansi.org/Standards/IEEE/IEEEC952019
IRATA	IRATA	Industrial Rope Access Trade Association	To promote and maintain high standards, safety, work quality and working practices for the industrial rope access industry.	https://irata.org/
ISEA	ISEA	International Safety Equipment Association	Association for personal protective equipment and technologies that enable people to work in hazardous environments. ISEA is an ANSI accredited standards developing organization.	https://safetyequipment.org/
ISEA	ANSI/ISEA 107	Standard for High Visibility Safety Apparel and Headwear	Standard for high visibility garments when required.	https://webstore.ansi.org/Standards/ISEA/ANSI/ISEA1072020
ISEA	ANSI/ISEA 121	Standard for Dropped Object Prevention Solutions	Standard for hoist buckets and tool tethering devices.	https://webstore.ansi.org/Standards/ISEA/ANSI/ISEA1212018

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ISEA	ANSI/ISEA Standard 121-2018	American National Standard for Dropped Object Prevention Solutions	Dropped object prevention.	https://webstore.ansi.org/Standards/ISEA/ANSI/ISEA1212018
ISEA	ANSI/ISEA Z89.1	American National Standard for Industrial Head Protection	Head protection.	https://webstore.ansi.org/Standards/ISEA/ANSI/ISEAZ892014R2019
NATE	NATE	NATE: The Communications Infrastructure Contractors Association	Trade organization to provide a unified voice for companies in the diverse tower and communications infrastructure construction, service and maintenance industries.	https://natehome.com/
NATE	NATE - Anchor Inspection/Safe to Climb Guide	Anchor Inspection/Safe to Climb Guide	Reference when making a “judgment call” on whether or not to climb without foreknowledge of the condition of the underground anchors.	https://natehome.com/safety-education/safety-resources/anchor-inspection-safe-to-climb-guide/
NATE	NATE - Base Mounted Hoists Used for Overhead Lifting and Personnel Lifting Standard	Base Mounted Hoists Used for Overhead Material Lifting and Personnel Lifting Standard	Hoists.	https://natehome.com/member-services-login/safety-resources-members/base-mounted-hoists-used-for-overhead-lifting-and-personnel-lifting-standard/
NATE	NATE - CTS	NATE - Tower Climber Fall Protection Training Standard (CTS)	Climbing training standard.	https://natehome.com/safety-education/safety-resources/product/nate-tower-climber-fall-protection-training-standard-nate-cts-nonmember/
NATE	NATE - Guideline, Inspection of Guy Anchors in Direct Contact with Soil	Guideline, Inspection of Guy Anchors in Direct Contact with Soil	Guy towers.	https://natehome.com/safety-education/safety-resources/nate-guideline-inspection-of-guy-anchors-in-direct-contact-with-soil/
NATE	NATE - PAN's	Planning Advisory Notices	To advise and educate the many stakeholders of the industry. Safety Resources.	https://natehome.com/safety-education/safety-resources/planning-advisory-notice/
NATE	NATE - RF Awareness Booklet	Resource Reference for RF Awareness	Radiofrequency.	https://natehome.com/safety-education/safety-resources/product/nate-resource-reference-for-rf-awareness-2/
NATE	NATE - Safety Equipment Manufacturers Committee Guide	2020 Guide for Wire Rope Safety Climbs on Antenna Supporting Structures	Wire rope safety climb.	https://natehome.com/safety-equipment-manufacturers-committee-semc-initiatives/safety-equipment-manufacturers-committee-semc/
NATE	NATE - sUAS Operations Best Practices Advisory	sUAS Operations Best Practices Advisory Resource	Drone best practices in telecommunications industry.	https://natehome.com/safety-education/uas-operations/
NATE	NATE- Glossary of Tower and Communications Terminology (2020) Third Edition	Glossary of Tower and Communications Terminology	Common industry terminology.	https://natehome.com/safety-education/safety-resources/product/nate-glossary-of-tower-and-communications-terminology-2/
NATE	NATE- Migratory Birds and Telecommunications Facilities: A Guide for Contractors	Migratory Birds and Telecommunications Facilities: a Guide for Contractors	Working on bird nest sites.	https://natehome.com/safety-education/working-on-bird-nest-sites/

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NATE	NATE- Suggested Fall Protection - Rooftop Work Area Protocol	Suggested Fall Protection - Rooftop Work Area Protocol	Rooftop fall protection.	https://natehome.com/safety-education/safety-resources/product/nate-suggested-fall-protection-rooftop-work-area-protocol-2/
NATE	NATE- Tower Site Hazard Recognition Guide	Tower Site Hazard Recognition Guide	Hazard recognition.	https://natehome.com/safety-education/safety-resources/nate-tower-site-hazard-recognition-guide/
NFPA	NFPA	National Fire Protection Association	To minimize the possibility and effects of fire and other risks. Fire/electrical safety.	https://www.nfpa.org/
NFPA	NFPA 10	Standard for Portable Fire Extinguishers	Covers the selection, installation, inspection, maintenance, and testing of portable extinguishing equipment.	https://catalog.nfpa.org/NFPA-10-Standard-for-Portable-Fire-Extinguishers-P9075.aspx?icid=D729
NFPA	NFPA 1061	Standard for Public Safety Telecommunications Personnel Professional Qualifications	Specify the minimum job performance requirements for service as public safety telecommunications personnel.	https://catalog.nfpa.org/NFPA-1061-Standard-for-Public-Safety-Telecommunications-Personnel-Professional-Qualifications-P1402.aspx?icid=D729
NFPA	NFPA 70	National Electrical Code	Code for electrical (national). Local codes may supersede.	https://catalog.nfpa.org/NFPA-70-National-Electrical-Code-NEC-Softbound-P1194.aspx
NFPA	NFPA 70E	Standard for Electrical Safety in the Workplace	Electrical safety.	https://catalog.nfpa.org/NFPA-70E-Standard-for-Electrical-Safety-in-the-Workplace-P1197.aspx?icid=D729
OSHA	OSHA	Occupational Safety and Health Administration	To ensure safe and healthful working conditions for workers by setting and enforcing standards and by providing training, outreach, education and assistance.	https://www.osha.gov/
OSHA	OSHA 1910	Occupational Safety and Health Standards	Applies to general industry (non-construction).	https://www.osha.gov/laws-regs/regulations/standardnumber/1910
OSHA	OSHA 1926	Safety and Health Regulations for Construction	Applies to construction.	https://www.osha.gov/laws-regs/regulations/standardnumber/1926
OSHA	OSHA CPL 02-01-056	Inspection Procedures for Accessing Communication Towers by Hoist	Personnel hoisting by use of gin pole (Riding the Line).	https://www.osha.gov/enforcement/directives/cpl-02-01-056
OSHA	OSHA-FCC Communication Tower Best Practices	Communication Tower Best Practices	Communication tower best practices safety document.	https://natehome.com/safety-education/osha-fcc-communication-tower-best-practices/
SAIA	ANSI/SAIA A92.22	Safe Use of Mobile Elevating Work Platforms (MEWPs)	Specifies requirements for application, inspection, training, maintenance, repair and safe operation of mobile elevating work platforms (aerial lifts). Aerial lift / MEWP use.	https://webstore.ansi.org/Standards/SIA/ANSI-SAIAA92222020
SAIA	SAIA	Scaffold & Access Industry Association	Organization that administers and coordinates the U.S. voluntary standardization and conformity assessment system.	https://www.saiaonline.org/ansi
SPRAT	SPRAT	Society of Professional Rope Access Technicians	Organization that advances the safe use of rope access through education, standards development, and certification administration.	https://sprat.org/

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STAC	STAC	Structure, Tower and Antenna Council (STAC)	Helps ensure communications antennas in Canada continue to be constructed with the highest regard to worker safety.	https://www.stacouncil.ca/
STATE	Construction Safety & Health Standards Part 29 & 30	Construction Safety & Health Standards	State of Michigan specific communication towers and telecommunications safety standards.	https://www.michigan.gov/leo/0,5863,7-336-94422_11407_15368-39938--,00.html
STATE	13 NCAC 07F.0600	Communication Tower Standards	State of North Carolina specific communication tower standards.	http://reports.oah.state.nc.us/ncac.asp?folderName=/Title%2013%20-%20Labor/Chapter%2007%20-%20Office%20of%20Occupational%20Safety%20and%20Health
STATE	Washington Administrative Code Chapter 296-32	Safety Standards for Telecommunications	State of Washington specific safety standards for telecommunications.	https://app.leg.wa.gov/wac/default.aspx?cite=296-32
TIA	TIA	Telecommunications Industry Association	Standards developing organization.	https://tiaonline.org/
TIA	ANSI/TIA 222-H	Structural Standard for Antenna Supporting Structures, Antennas and Small Wind Turbine Support Structures	Communications structures engineering and maintenance standard. International Building Code recognized standard for structures and maintenance of those structures.	https://global.ihs.com/doc_detail.cfm?&rid=IHS&item_s_key=00122271&item_key_date=821231&input_doc_number=-TIA%2D222&input_doc_title=
TIA	ANSI/TIA 5053	Mounting System Classification	Requirements for mounting systems supporting antennas and related appurtenances. Mount classification to standardize nomenclature on mounts.	https://global.ihs.com/doc_detail.cfm?document_name=TIA%2D5053&item_s_key=00735312
TIA	ANSI/TIA-322	Loading Criteria, Analysis, and Design Related to the Installation, Alteration and Maintenance of Communication Structures	Standard for engineers to verify structural loading during construction and gin pole loading. Modifying and introducing forces into a structure (engineering).	https://natehome.com/regulations-standards/standards/tia-1019/
TIF	TIF	Telecommunications Industry Foundation	Facilitates the development of and publication of Planning Advisory Notices (PAN) and White Papers.	http://tifonline.org/white-papers/
USDOT	USDOT	United States Department Of Transportation	Driving commercial vehicle. To ensure America has the safest, most efficient and modern transportation system in the world, which boosts our economic productivity and global competitiveness and enhances the quality of life in communities both rural and urban.	https://www.transportation.gov/about
WIA	WIA	Wireless Infrastructure Association	Regularly publishes white papers covering a variety of topics – from new technologies to potential regulatory issues.	https://wia.org/resource-library/