

CERTIFICATE OF ACCREDITATION

This is to attest that

UL LLC

12 LABORATORY DRIVE RESEARCH TRIANGLE PARK, NORTH CAROLINA 27709, U.S.A.

Testing Laboratory TL-304

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories as well as the FDA ASCA Program specifications*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories* and Good Laboratory Practice for Nonclinical Laboratory Studies, Title 21 CFR Part 58 Accreditation Program. This organization is accredited to provide the services specified in the scope of accreditation.

Effective Date July 9, 2024



International Accreditation Service Issued under the authority of IAS management

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Accredited to ISO/IEC 17025:2017 FDA ASCA Program Title 21 CFR Part 58 (excluding Sections 43, 45, 81[B #1, 2, 6, 7, 9, 12], 90, 185[A #7, 8]) Effective Date July 9, 2024

FDA ASCA Pilot Program Scope

Basic Safety and Essential Performance of Medical Electrical Equipment, Medical Electrical Systems and Laboratory Medical Equipment	
ANSI AAMI ES60601- 1:2005/(R)2012 & A1:2012, C1:2009/(R)2012 & A2:2010/(R)2012 (Cons. Text) [Incl. AMD2:2021] [19-46]	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance (IEC 60601-1:2005, MOD) [Including Amendment 2 (2021)]
ANSI AAMI HA60601- 1-11:2015 [Including AMD1:2021 [19-47]	Medical Electrical Equipment Part 1-11: General requirements for basic safety and essential performance Collateral Standard: Requirements for medical electrical equipment and medical electrical equipment and medical electrical systems used in the home healthcare environment (IEC 60601-1-11:2015 MOD) [Including Amendment1 (2021)]
ANSI AAMI IEC 60601-2-2:2017 [6-389]	Medical electrical equipment - part 2-2: particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories
ANSI AAMI IEC 80601-2-30:2018 [3-123]	Medical electrical equipment - part 2-30: particular requirements for the basic safety and essential performance of automated non- invasive sphygmomanometers
ANSI AAMI IEC 80601-2-77:2020 [6-438]	Medical electrical equipment - Part 2-77: Particular requirements for the basic safety and essential performance of robotically assisted surgical equipment
IEC 60601-1-6 Edition 3.2 2020-07 CONSOLIDATED VERSION [5-132]	Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability
IEC 60601-1-8 Edition 2.1 2012-11	Medical electrical equipment - Part 1-8: General requirements for basic safety and essential performance - Collateral Standard: General requirements, tests and

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[5-76]	guidance for alarm systems in medical electrical equipment and medical electrical systems
IEC 60601-1-8 Edition 2.2 2020-07 CONSOLIDATED VERSION [5-131]	Medical electrical equipment - Part 1-8: General requirements for basic safety and essential performance - Collateral Standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems
IEC 60601-1-11 Edition 2.1 2020-07 CONSOLIDATED VERSION [19-38]	Medical electrical equipment - Part 1-11: General requirements for basic safety and essential performance - Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment
IEC 60601-2-2 Edition 6.0 2017-03 [6-389]	Medical electrical equipment - part 2-2: particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories
IEC 60601-2-8 Edition 2.1 b:2015 [12-301]	Medical electrical equipment - part 2-8: particular requirements for basic safety and essential performance of therapeutic x-ray equipment operating in the range 10 kV to 1 MV
IEC 60601-2-10 Edition 2.1 2016-04 [17-16]	Medical electrical equipment - part 2-10: particular requirements for the basic safety and essential performance of nerve and muscle stimulators
IEC 60601-2-11 Edition 3.0 2013-01 [12-255]	Medical electrical equipment - part 2-11: particular requirements for the basic safety and essential performance of gamma beam therapy equipment
IEC 60601-2-18: Edition 3.0 2009-08 [9-114]	Medical electrical equipment - part 2-18: particular requirements for the basic safety and essential performance of endoscopic equipment
IEC 60601-2-22 Edition 3.1 2012-10 [12-268]	Medical electrical equipment - part 2-22: particular requirements for the basic safety and essential performance of surgical cosmetic therapeutic and diagnostic laser equipment
IEC 60601-2-28 Edition 3.0 2017-06 [12-309]	Medical electrical equipment - part 2-28: particular requirements for the basic safety and essential performance of x-ray tube assemblies for medical diagnosis
IEC 60601-2-29 Edition 3.0 2008-06 [12-211]	Medical electrical equipment - part 2-29: particular requirements for the basic safety and essential performance of radiotherapy simulators
IEC 60601-2-34 Edition 3.0 2011-05 [3-115]	Medical electrical equipment - part 2-34: particular requirements for the basic safety and essential performance of invasive blood pressure monitoring equipment





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IEC 60601-2-43 Edition 2.2 2019-10 CONSOLIDATED VERSION [12-329]	Medical electrical equipment - part 2-43: particular requirements for the basic safety and essential performance of X-ray equipment for interventional procedures
IEC 60601-2-44 Edition 3.2: 2016 [12-302]	Medical electrical equipment - part 2-44: particular requirements for the basic safety and essential performance of x-ray equipment for computed tomography
IEC 60601-2-52 Edition 1.0 2009-12 [6-321]	Medical electrical equipment – part 2-52: particular requirements for the basic safety and essential performance of medical beds [Including: Technical Corrigendum 1 (2010)]
IEC 60601-2-52 Edition 1.1 2015-03 CONSOLIDATED VERSION [6-489]	Medical electrical equipment – part 2-52: particular requirements for the basic safety and essential performance of medical beds
IEC 61010-1 Edition 3.1 2017-01 CONSOLIDATED VERSION [19-34]	Safety requirements for electrical equipment for measurement control and laboratory use – Part 1: General requirements [Including: Corrigendum 1 (2019)]
IEC 80601-2-30: Edition 2.0 2018-03 [3-123]	Medical electrical equipment - part 2-30: particular requirements for the basic safety and essential performance of automated non- invasive sphygmomanometers
IEC 80601-2-60 Edition 2.0 2019-06 [4-262]	Medical electrical equipment - part 2-60: particular requirements for the basic safety and essential performance of dental equipment
IEC 80601-2-77 Edition 1.0 2019-07 [6-438]	Medical electrical equipment - Part 2-77: Particular requirements for the basic safety and essential performance of robotically assisted surgical equipment
ISO 80601-2-61 Second edition 2017-12 (Corrected version 2018-02) [1-139]	Medical electrical equipment - part 2-61: particular requirements for the basic safety and essential performance of pulse oximeter equipment

Regular Scope

Acoustical	
	Household and similar electrical appliances – Test code for the determination of airborne acoustical noise – Part 1: General requirements (only method ISO 3744)



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IEC 60704-2-1	Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-1: Particular requirements for vacuum cleaners
IEC 60704-2-9	Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-9: Particular requirements for electric hair care appliances
IEC 60704-2-11	Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-11: Particular requirements for electrically-operated food preparation appliances
ISO 3744	Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering methods for an essentially free field over a reflecting plane
NBR 13910-1	Guidelines for the determination of airborne acoustical noise emitted by household and similar electrical appliances - Part 1: General requirements
NBR 13910-2-2	Guidelines for the determination of airborne acoustical noise emitted by household and similar electrical appliances - Part 2: Particular requirements for hair dryers
NBR 13910-2-3	Guidelines for the determination of airborne acoustical noise emitted by household and similar electrical appliances - Part 2: Particular requirements for blenders
Electrical	
16 CFR 1263	Safety standard for button cell or coin batteries and consumer products containing such batteries
ANSI/AAMI 80601-2-77	Medical electrical equipment - Part 2-77: Particular requirements for the basic safety and essential performance of robotically assisted surgical equipment
ANSI/AAMI ES60601-1	Medical electrical equipment - part 1: general requirements for basic safety and essential performance
ANSI/AAMI HA60601- 1-11	Medical electrical equipment part 1-11: general requirements for basic safety and essential performance collateral standard: requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment
ANSI/AAMI/IEC 60601- 1-8	Medical electrical equipment – part 1-8: general requirements for basic safety and essential performance – collateral standard: general requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems
ANSI/AAMI/IEC 60601- 2-2	Corrigendum 1 - medical electrical equipment - part 2-2: particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories
ANSI/AAMI/IEC 80601- 2-30	Medical electrical equipment – part 2-30: particular requirements for the basic safety and essential performance of automated non-invasive sphygmomanometers



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ANSI AAMI IEC 80601-2-30:2009 & A1:2013 (R2016)	Medical electrical equipment - part 2-30: particular requirements for the basic safety and essential performance of automated non- invasive sphygmomanometers
ANSI UL 61010-1 3rd Ed, dated May 12, 2012 with revision through July 19, 2019	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements [Including: Corrigendum 1 (2019)]
AS 62052-31	Electricity metering equipment (AC) – General Requirements, tests and test conditions – Part 31: Product safety requirements and tests
EN/IEC 60079-28	Explosive atmospheres - part 28: protection of equipment and transmission systems using optical radiation
IEC 60065	Audio, video and similar electronic apparatus - safety requirements
IEC 60598-1	Luminaires - part 1: general requirements and tests
IEC 60598-2-1	Luminaires- part 2: particular requirements- section one: fixed general purpose luminaires
IEC 60598-2-2	Luminaires - part 2-2: particular requirements - recessed luminaires
IEC 60598-2-3	Luminaires - part 2-3: particular requirements - luminaires for road and street lighting
IEC 60598-2-4	Luminaires - part 2: particular requirements - section 4: portable general purpose luminaires
IEC 60598-2-5	Luminaires - part 2-5: particular requirements – floodlights
IEC 60601-1	Medical electrical equipment - part 1: general requirements for basic safety and essential performance
IEC 60601-1-1	Medical electrical equipment - part 1-1: general requirements for safety - collateral standard: safety requirements for medical electrical systems
IEC 60601-1-3	Medical electrical equipment - part 1-3: general requirements for basic safety and essential performance - collateral standard: radiation protection in diagnostic x-ray equipment
IEC 60601-1-6	Medical electrical equipment - part 1-6: general requirements for basic safety and essential performance - collateral standard: usability
IEC 60601-1-11	Medical electrical equipment part 1-11: general requirements for basic safety and essential performance collateral standard: requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment
IEC 60601-2-7	Medical electrical equipment - part 2-7: particular requirements for the safety of high-voltage generators of diagnostic X-ray generators



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IEC 60601-2-8	Medical electrical equipment - part 2-8: particular requirements for basic safety and essential performance of therapeutic x-ray equipment operating in the range 10 kV to 1 mV
IEC 60601-2-10	Medical electrical equipment - part 2-10: particular requirements for the basic safety and essential performance of nerve and muscle stimulators
IEC 60601-2-11	Medical electrical equipment - part 2-11: particular requirements for the basic safety and essential performance of gamma beam therapy equipment
IEC 60601-2-18	Medical electrical equipment - part 2-18: particular requirements for the basic safety and essential performance of endoscopic equipment
IEC 60601-2-22	Medical electrical equipment - part 2-22: particular requirements for basic safety and essential performance of surgical, cosmetic, therapeutic and diagnostic laser equipment
IEC 60601-2-28	Medical electrical equipment - part 2-28: particular requirements for the basic safety and essential performance of X-ray tube assemblies for medical diagnosis
IEC 60601-2-28 Edition 2.0 2010-03	Medical electrical equipment - Part 2-28: Particular requirements for the basic safety and essential performance of X-ray tube assemblies for medical diagnosis
IEC 60601-2-29	Medical electrical equipment - part 2-29: particular requirements for the basic safety and essential performance of radiotherapy simulators
IEC 60601-2-30	Medical electrical equipment – part 2-30: particular requirements for the safety, including essential performance, of automatic cycling non-invasive blood pressure monitoring equipment
IEC 60601-2-32	Medical electrical equipment – Part 2: Particular requirements for the safety of associated equipment of X-ray equipment
IEC 60601-2-35	Medical electrical equipment - particular requirements for the safety of blankets, pads and mattresses intended for heating in medical use
IEC 60601-2-41	Medical electrical equipment - part 2-41: particular requirements for the basic safety and essential performance of surgical luminaires and luminaires for diagnosis
IEC 60601-2-43	Medical electrical equipment - part 2-43: particular requirements for the basic safety and essential performance of X-ray equipment for interventional procedures
IEC 60601-2-43 Edition 2.1 2017-05 CONSOLIDATED VERSION	Medical electrical equipment - part 2-43: particular requirements for the basic safety and essential performance of X-ray equipment for interventional procedures
IEC 60601-2-44	Medical electrical equipment - part 2-44: particular requirements for the basic safety and essential performance of X-ray equipment for computed tomography
IEC 60601-2-46	Medical electrical equipment - part 2-46: particular requirements for basic safety and essential performance of operating tables



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IEC 60601-2-52	Medical electrical equipment – part 2-52: particular requirements for the basic safety and essential performance of medical beds
IEC 60601-2-54	Medical electrical equipment - part 2-54: particular requirements for the basic safety and essential performance of x-ray equipment for radiography and radioscopy
IEC 60601-2-54 Edition 1.2 2018-06 CONSOLIDATED VERSION	Medical electrical equipment - part 2-50: particular requirements for the basic safety and essential performance of infant phototherapy equipment
IEC 60601-2-65	Medical electrical equipment - part 2-65: particular requirements for the basic safety and essential performance of dental intra-oral x-ray equipment
IEC 60825-1	Safety of laser products - part 1: equipment classification and requirements
IEC 60950-1	Information technology equipment – safety – part 1: general requirements
IEC 60968	Self-ballasted fluorescent lamps for general lighting services - safety requirements
IEC 61010-031	Safety requirements for electrical equipment for measurement, control and laboratory use - part 031: safety requirements for hand-held probe assemblies for electrical measurement and test
IEC 61010-1	Safety requirements for electrical equipment for measurement, control, and laboratory use - part 1: general requirements
IEC 61010-2-010	Safety requirements for electrical equipment for measurement, control and laboratory use - part 2-010: particular requirements for laboratory equipment for the heating of materials
IEC 61010-2-020	Safety requirements for electrical equipment for measurement, control, and laboratory use - part 2-020: particular requirements for laboratory centrifuges
IEC 61010-2-030	Safety requirements for electrical equipment for measurement, control, and laboratory use - part 2-030: particular requirements for testing and measuring circuits
IEC 61010-2-032	Safety requirements for electrical equipment for measurement, control and laboratory use - part 2-032: particular requirements for hand-held and hand-manipulated current sensors for electrical test and measurement (except sections 6.9.101.5 and 6.9.101.7)
IEC 61010-2-033	Safety requirements for electrical equipment for measurement, control, and laboratory use - part 2-033: particular requirements for hand-held multimeters and other meters, for domestic and professional use, capable of measuring mains voltage
IEC 61010-2-040	Safety requirements for electrical equipment for measurement, control, and laboratory use - part 2-040: particular requirements for sterilizers and washer-disinfectors used to treat medical materials



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IEC 61010-2-051	Safety requirements for electrical equipment for measurement, control and laboratory use - part 2-051: particular requirements for laboratory equipment for mixing and stirring
IEC 61010-2-081	Safety requirements for electrical equipment for measurement, control and laboratory use - part 2-081: particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes
IEC 61010-2-091	Safety requirements for electrical equipment for measurement, control and laboratory use - part 2-091: particular requirements for cabinet x-ray systems
IEC 61010-2-101	Safety requirements for electrical equipment for measurement, control and laboratory use - part 2-101: particular requirements for in vitro diagnostic (IVD) medical equipment
IEC 61347-1	Amendment 1 - lamp control gear - part 1: general and safety requirements
IEC 61347-2-11	Lamp control gear - part 2-11: particular requirements for miscellaneous electronic circuits used with luminaires
IEC 61347-2-13	Lamp control gear - part 2-13: particular requirements for D.C. or A.C. supplied electronic control gear for led modules
IEC 62031	LED modules for general lighting - safety specifications
IEC 62052-31	Electricity metering equipment (AC) – General requirements, tests and test conditions – Part 31: Product safety requirements and tests
IEC 62384	DC or AC supplied electronic control gear for LED modules - Performance Requirements
IEC 62471	Photo-biological safety of lamps and lamp systems
IEC 62560	Self-ballasted LED-lamps for general lighting services by voltage > 50 V - safety specifications
IEC 62841-1	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 1: General requirements
IEC 62841-2-1	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2: Particular requirements for hand-held drills and impact drills
IEC 62841-2-2	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2: Particular requirements for hand-held screwdrivers and impact wrenches
IEC 62841-2-3	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2: Particular requirements for hand-held grinders, disctype polishers and disc-type sanders



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IEC 62841-2-4	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2: Particular requirements for hand-held sanders and polishers other than disc type
IEC 62841-2-5	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2: Particular requirements for hand-held circular saws
IEC 62841-2-6	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2: Particular requirements for hand-held hammers
IEC 62841-2-8	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2: Particular requirements for hand-held shears and nibblers
IEC 62841-2-9	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2: Particular requirements for hand-held tappers and threaders
IEC 62841-2-10	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2: Particular requirements for hand-held mixers
IEC 62841-2-11	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2: Particular requirements for hand-held reciprocating saws
IEC 62841-2-14	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2: Particular requirements for hand-held planers
IEC 62841-2-17	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2: Particular requirements for hand-held routers
IEC 62841-2-21	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2: Particular requirements for hand-held drain cleaners
IEC 62841-3-1	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 3: Particular requirements for transportable table saws
IEC 62841-3-4	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 3: Particular requirements for transportable bench grinders
IEC 62841-3-6	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 3: Particular requirements for transportable diamond drills with liquid system
IEC 62841-3-9	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 3: Particular requirements for tansportable mitre saws
IEC 62841-3-10	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 3: Particular requirements for transportable cut-off machines



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IEC 62841-3-12	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 3: Particular requirements for transportable threading machines
IEC 62841-3-13	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 3: Particular requirements for transportable drills
IEC 62841-3-14	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 3: Particular requirements for transportable drain cleaners
IEC 62841-4-1	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 4: Particular requirements for chain saws
IEC 62841-4-2	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 4: Particular requirements for hedge trimmers
IEC 62841-4-4	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 4: Particular requirements for lawn trimmers, lawn edge trimmers, grass trimmers, brush cutters and brush saws
IEC 80601-2-30 Edition 1.1 2013-07	Medical electrical equipment - part 2-30: particular requirements for the basic safety and essential performance of automated non- invasive sphygmomanometers
IEC 80601-2-60	Medical electrical equipment - part 2-60: particular requirements for basic safety and essential performance of dental equipment
IEC 80601-2-61	Medical electrical equipment - part 2-60: particular requirements for the basic safety and essential performance of pulse oximeter equipment
IEC 80601-2-77	Medical electrical equipment - Part 2-77: Particular requirements for the basic safety and essential performance of robotically assisted surgical equipment
IEC EN 60335-1	Household and similar electrical appliances - safety - part 1: general requirements
IEC EN 60335-2-2	Household and similar electrical appliances - safety - part 2-2: particular requirements for vacuum cleaners and water-suction cleaning appliances
IEC EN 60335-2-3	Household and similar electrical appliances - safety - part 2-3: particular requirements for electric irons
IEC EN 60335-2-8	Household and similar electrical appliances - safety - part 2-8: particular requirements for shavers, hair clippers and similar appliances
IEC EN 60335-2-9	Household and similar electrical appliances - safety - part 2-9: particular requirements for grills, toasters and similar portable cooking appliances
IEC EN 60335-2-10	Household and similar electrical appliances - safety - part 2-10: particular requirements for floor treatment machines and wet scrubbing machines
IEC EN 60335-2-12	Household and similar electrical appliances - safety - part 2-12: particular requirements for warming plates and similar appliances





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IEC EN 60335-2-13	Household and similar electrical appliances - safety - part 2-13: particular requirements for deep fat fryers, frying pans and similar appliances
IEC EN 60335-2-14	Household and similar electrical appliances - safety - part 2-14: particular requirements for kitchen machines
IEC EN 60335-2-15	Household and similar electrical appliances - safety - part 2-15: particular requirements for appliances for heating liquids
IEC EN 60335-2-23	Household and similar electrical appliances - safety - part 2-23: particular requirements for appliances for skin or hair care
IEC EN 60335-2-28	Household and similar electrical appliances - Safety - Part 2-28: Particular requirements for sewing machines
IEC EN 60335-2-29	Household and similar electrical appliances - safety - part 2-29: particular requirements for battery chargers
IEC EN 60335-2-30	Household and similar electrical appliances - safety -part 2-30: particular requirements for room heaters
IEC EN 60335-2-32	Household and similar electrical appliances - safety - part 2-32: particular requirements for massage appliances
IEC EN 60335-2-43	Household and similar electrical appliances - safety - part 2-43: particular requirements for appliances for clothes dryers and towel rails
IEC EN 60335-2-44	Household and similar electrical appliances - safety - part 2-44: particular requirements for ironers
IEC EN 60335-2-45	Household and similar electrical appliances - safety - part 2-45: particular requirements for portable heating tools and similar appliances
IEC EN 60335-2-52	Household and similar electrical appliances - safety - Part 2-52: Particular requirements for oral hygiene appliances
IEC EN 60335-2-54	Household and similar electrical appliances - safety - part 2-54: particular requirements for surface-cleaning appliances for household use employing liquids or steam
IEC EN 60335-2-55	Household and similar electrical appliances - safety - part 2-55: particular requirements for electrical appliances for use with aquariums and garden ponds
IEC EN 60335-2-59	Household and similar electrical appliances - safety - part 2-59: particular requirements for insect killers
IEC EN 60335-2-64	Household and similar electrical appliances - safety - part 2-64: particular requirements for commercial electric kitchen machines
IEC EN 60335-2-65	Household and similar electrical appliances – Safety – Part 2-65: Particular requirements for air-cleaning appliances
IEC EN 60335-2-67	Household and similar electrical appliances - safety - part 2-67: particular requirements for floor treatment machines, for commercial use





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IEC EN 60335-2-68	Household and similar electrical appliances - safety - part 2-68: particular requirements for spray extraction machines, for commercial use
IEC EN 60335-2-69	Household and similar electrical appliances - safety - part 2-69: particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use
IEC EN 60335-2-72	Household and similar electrical appliances - safety - part 2-72: particular requirements for floor treatment machines with or without traction drive, for commercial use
IEC EN 60335-2-78	Household and similar electrical appliances - safety - Part 2-78: Particular requirements for outdoor barbecues
IEC EN 60335-2-80	Household and similar electrical appliances – Safety – Part 2-80: Particular requirements for fans
IEC EN 60335-2-85	Household and similar electrical appliances - safety - Part 2-85: Particular requirements for fabric steamers
IEC EN 60335-2-98	Household and similar electrical appliances - safety - part 2-98: particular requirements for humidifiers
IEC EN 60335-2-100	Household and similar electrical appliances - safety - part 2-100: particular requirements for hand-held mains-operated garden blowers, vacuums and blower vacuums
IEC EN 60335-2-101	Household and similar electrical appliances - safety - part 2-101: particular requirements for vaporizers
IEC/EN 60529	Degrees of protection provided by enclosures (IP code), except IPx8 – continuous immersion in water and IPx9 – high pressure and temperature water jets
IEC/EN 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements
IEC/EN 62368-3	Audio/video, information and communication technology equipment - Part 3: Safety aspects for DC power transfer through communication cables and ports
IEC TR 62778	Application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires
UL 4200A	Products incorporating button batteries or coin cell batteries
Physical	
ANSI/AAMI PB 70	Liquid barrier performance and classification of protective apparel and drapes intended for use in health care facilities
ANSI/AHRI 1210 I-P	Performance rating of variable frequency drives
ANSI/ASSP Z359.1	Fall protection code (version 3.0)
ANSI/ASSP Z359.3	Safety requirements for positioning and travel restraint systems





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ANSI/ASSP Z359.4	Safety requirements for assisted-rescue and self-rescue systems, subsystems and components
ANSI/ASSP Z359.7	Qualification and verification testing of fall protection products
ANSI/ASSP Z359.9	Personal equipment for protection against falls - descent controllers
ANSI/ASSP Z359.11	Safety requirements for full body harnesses
ANSI/ASSP Z359.12	Connecting components for personal fall arrest systems
ANSI/ASSP Z359.13	Personal energy absorbers and energy absorbing lanyards
ANSI/ASSP Z359.15	Safety requirements for single anchor lifelines and fall arresters for personal fall arrest and rescue systems
ANSI/ASSP Z359.18	Safety Requirements for Anchorage Connectors for Active Fall Protection Systems
ANSI/ASSP Z459.1	Safety Requirements for Rope Access Systems
ANSI/CAN/UL 12402-5	Personal flotation devices - Part 5: Buoyancy aids (level 50) — Safety requirements
ANSI/CAN/UL 12402-9	Personal flotation devices - Part 9: Test methods
ANSI/ISEA Z87.1	Standard for occupational and educational personal face and eye protection
ANSI/ISEA Z89.1	Industrial head protection
AS 4758.1	Personal flotation devices - general requirements
AS 4758.2	Lifejackets - materials and components - requirements and test methods
AS 4758.3	Lifejackets - test methods
ASTM D3578	Standard Specification for Rubber Examination Gloves (except sections 8.2, 8.8, 8.9)
ASTM D6319	Standard Specification for Nitrile Examination Gloves for Medical Application (except sections 7.2, 7.7)
ASTM F1414	Standard Test Method for Measurement of Cut Resistance to Chainsaw in Lower Body (Legs) Protective Clothing
ASTM F1506	Standard Performance Specification for Flame Resistant and Electric Arc Rated Protective Clothing Worn by Workers Exposed to Flames and Electric Arcs
ASTM F2412	Standard test methods for foot protection
ASTM F3324	Standard Test Method for Measurement of Cut Resistance to Chainsaw in Leg- Protective Devices
ASTM F3352	Standard Specification for Isolation Gowns Intended for Use in Healthcare Facilities





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ASTM G154	Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials
CAN/CGSB 65.7	Life jackets
CAN/CGSB 155.20	Workwear for protection against hydrocarbon flash fire
CAN/CGSB 155.22	Fireline workwear for wildland firefighters
CGSB 65.16	Immersion suit systems
CGSB 65.19	Textile components of lifejackets and personal flotation devices
CSA Z195	Protective footwear (except chainsaw protective footwear)
CSA Z259.1	Body belts and saddles for work positioning and travel restraint
CSA Z259.10	Full body harnesses
CSA Z259.11	Energy absorbers and lanyards
CSA Z259.12	Connecting components for personal fall arrest systems (PFAS)
CSA Z259.2.2	Self-retracting devices
CSA Z259.2.3	Descent devices (adopted ISO 22159:2007, first edition, 2007-05-15, with Canadian deviations)
EN 341	Personal fall protection equipment - Descender devices for rescue
EN 353-2	Personal protective equipment against falls from a height - Part 2: Guided type fall arresters including a flexible anchor line
EN 354	Personal fall protection equipment - Lanyards
EN 355	Personal protective equipment against falls from a height - Energy absorbers
EN 358	Personal protective equipment for work positioning and prevention of falls from a height - Belts and lanyards for work positioning or restraint
EN 360	Personal protective equipment against falls from a height - Retractable type fall arresters
EN 361	Personal protective equipment against falls from a height - Full body harnesses
EN 362	Personal protective equipment against falls from a height – Connectors
EN 566	Mountaineering equipment - Slings - Safety requirements and test methods
EN 813	Personal fall protection equipment - Sit harnesses
EN 1497	Personal fall protection equipment - Rescue harnesses
EN 1498	Personal fall protection equipment - Rescue loops



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EN 12275	Mountaineering equipment - Connectors - Safety requirements and test methods
EN 12278	Mountaineering equipment - Pulleys - Safety requirements and test methods
EN 15151-1	Mountaineering equipment - Braking devices - Part 1: Braking devices with manually assisted locking, safety requirements and test methods
EN 15151-2	Mountaineering equipment - Braking devices - Part 2: Manual braking devices, safety requirements and test methods
ISO 11999-3	PPE for firefighters — Test methods and requirements for PPE used by firefighters who are at risk of exposure to high levels of heat and/or flame while fighting fires occurring in structures — Part 3: Clothing
ISO 12402-2	Personal flotation devices - Part 2: Lifejackets, performance level 275 — Safety requirements
ISO 12402-3	Personal flotation devices - Part 3: Lifejackets, performance level 150 — Safety requirements
ISO 12402-4	Personal flotation devices - Part 4: Lifejackets, performance level 100 — Safety requirements
ISO 12402-5	Personal flotation devices - Part 5: Buoyancy aids (level 50) — Safety requirements
ISO 12402-6	Personal flotation devices - Part 6: Special purpose lifejackets and buoyancy aids — Safety requirements and additional test methods
ISO 12402-7	Personal flotation devices - Part 7: Materials and components — Safety requirements and test methods
ISO 12402-8	Personal flotation devices - Part 8: Accessories — Safety requirements and test methods
ISO 12402-9	Personal flotation devices - Part 9: Test methods
ISO 12402-10	Personal flotation devices - part 10: selection and application of personal flotation devices and other relevant devices
NFPA 1851	Standard on selection, care, and maintenance of protective ensembles for structural firefighting and proximity fire fighting
NFPA 1855	Standard for selection, care, and maintenance of protective ensembles for technical rescue incidents
NFPA 1877	Standard on Selection, Care, and Maintenance of Wildland Firefighting Protective Clothing and Equipment
NFPA 1951	Standard on protective ensembles for technical rescue incidents
NFPA 1952	Standard on surface water operations protective clothing and equipment



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NFPA 1953	Standard on protective ensembles for contaminated water diving (except sections
	8.9 and 8.10)
NFPA 1971	Standard on protective ensembles for structural fire fighting and proximity fire fighting
NFPA 1975	Standard on station/work uniforms for emergency services
NFPA 1977	Standard on protective clothing and equipment for wildland fire fighting
NAPA 1981	Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services
NFPA 1982	Standard on Personal Alert Safety Systems (PASS)
NFPA 1986	Standard on Respiratory Protection Equipment for Tactical and Technical Operations
NFPA 1990	Standard for Protective Ensembles for Hazardous Materials and CBRN Operations
NFPA 1999	Standard on protective clothing and ensembles for emergency medical operations (except sections 8.17 and 8.34)
NFPA 2112	Standard on flame-resistant garments for protection of industrial personnel against flash fire (except section 8.5)
NFPA 2500	Standard for Operations and Training for Technical Search and Rescue Incidents and Life Safety Rope and Equipment for Emergency Services
SOLAS 1974	International Maritime Organization – Life Saving Appliances (LSA code)
Microbiological	
AAMI TIR30	A compendium of processes, materials, test methods, and acceptance criteria for cleaning reusable medical devices
ANSI/AAMI ST98	Cleaning validation of health care products—Requirements for development and validation of a cleaning process for medical devices
ASTM C1338	Standard Test Method for Determining Fungi Resistance of Insulation Materials and Facings
ASTM E1053	Standard Practice to Assess Virucidal Activity of Chemicals Intended for Disinfection of Inanimate, Nonporous Environmental Surfaces
ASTM E1837	Standard Test Method to Determine Efficacy of Disinfection Processes for Reusable Medical Devices (Simulated Use Test)
ASTM E2274	Standard Test Method for Evaluation of Laundry Sanitizers and Disinfectants
ASTM E2314	Standard Test Method for Determination of Effectiveness of Cleaning Processes for Reusable Medical Instruments using a Microbiologic Method (Simulated Use Test)



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ASTM E2315	Standard Guide for Assessment of Antimicrobial Activity Using a Time-Kill Procedure
ASTM F2100	Standard Specification for Performance of Materials Used in Medical Face Masks
ASTM F2101	Standard Test Method for Evaluating the Bacterial Filtration Efficiency (BFE) of Medical Face Mask Materials, Using a Biological Aerosol of Staphylococcus aureus
ASTM G21	Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi
ISO 11737-1	Sterilization of health care products - Microbiological methods - Part 1: Determination of a population of microorganisms on products
ISO 10993-1	Biological evaluation of medical devices — Part 1: Evaluation and testing within a risk management process
ISO 10993-5	Biological evaluation of medical devices — Part 5: Tests for in vitro cytotoxicity
ISO 10993-12	Biological evaluation of medical devices — Part 12: Sample preparation and reference materials
ISO 10993-17	Biological evaluation of medical devices — Part 17: Establishment of allowable limits for leachable substances
ISO 11737-2	Sterilization of health care products - Microbiological methods - Part 2: Tests of sterility performed in the definition, validation and maintenance of a sterilization process
ISO 16604	Clothing for protection against contact with blood and body fluids — Determination of resistance of protective clothing materials to penetration by blood-borne pathogens — Test method using Phi-X174 bacteriophage
ISO 17664-1	Processing of health care products - Information to be provided by the medical device manufacturer for the processing of medical devices - Part 1: Critical and semicritical medical devices
ISO 17664-2	Processing of health care products — Information to be provided by the medical device manufacturer for the processing of medical devices — Part 2: Non-critical medical devices
ISO 17665-1	Sterilization of health care products — Moist heat — Part 1: Requirements for the development, validation, and routine control of a sterilization process for medical devices
ISO 22196	Measurement of antibacterial activity on plastics and other non-porous surfaces
USP 61	Microbiological examination of nonsterile products: microbial enumeration tests
USP 62	Microbiological examination of nonsterile products: tests for specified microorganisms





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USP 71	Sterility tests	
USP 87	Biological Reactivity Extraction Solvents Tests, In Vitro	
USP NF (85)	Bacterial Endotoxins Test (Gel Clot Technique, Qualitative)	
Chemical		
ASTM D5712	Standard Test Method for Analysis of Aqueous Extractable Protein in Latex, Natural Rubber, and Elastomeric Products Using the Modified Lowry Method	
ASTM F2299	Standard Test Method for Determining the Initial Efficiency of Materials Used in Medical Face Masks to Penetration by Particulates Using Latex Spheres	
EN ISO 14362-1	Textiles – Methods for determination of certain aromatic amines derived from azo colorants - Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres	
ISO 3071	Textiles - Determination of pH of aqueous extract	
ISO 4045	Leather - Chemical tests Determination of pH and difference figure	
ISO 6529	Protective clothing - Protection against chemicals - Determination of resistance of protective clothing materials to permeation by liquids and gases	
ISO 6530	Protective clothing Protection against liquid chemicals Test method for resistance of materials to penetration by liquids	
ISO 10993-18	Biological evaluation of medical devices — Part 18: Chemical characterization of medical device materials within a risk management process	
ISO 16190	Footwear - Critical substances potentially present in footwear and footwear components	
ISO 17234-1	Leather - Chemical tests for the determination of certain azo colourants in dyed leathers	
ISO 18562-4	Biocompatibility evaluation of breathing gas pathways in healthcare applications — Part 4: Tests for leachables in condensate	
USP 643	Total Organic Carbon	
Structural	1	
ICC ES AC156	Seismic certification by shake-table testing of nonstructural components (test methods referenced in section 6.0)	
Performance	•	
10 CFR Part 430, Subpart B, Appendix U	Uniform Test Method for Measuring the Energy Consumption of Ceiling Fans	
16 CFR 1610	Standard for the Flammability of Clothing Textiles	





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AHAM AC-1	Method for Measuring Performance of Portable Household Electric Room Air Cleaners
AHAM AC-7	Energy Test Method for Consumer Room Air Cleaners
ASTM F558	Standard Test Method for Measuring Air Performance Characteristics of Vacuum Cleaners
ASTM F608	Standard Test Method for Evaluation of Carpet Embedded Dirt Removal Effectiveness of Household/Commercial Vacuum Cleaners
ASTM F1409	Standard Test Method for Straight Line Movement of Vacuum Cleaners While Cleaning Carpets
ASTM F2607	Standard Test Method for Measuring the Hard Surface Floor-Cleaning Ability of Household/Commercial Vacuum Cleaners
EN 50564	Electrical and electronic household and office equipment – Measurement of low power consumption
ENERGY STAR	Program Requirements Product Specification for Residential Ceiling Fans Eligibility Criteria Version 4.1
IEC 60312-1 (2010)	Vacuum cleaners for household use – Part 1: Dry vacuum cleaners – Method for measuring performance
IEC 62301	Household electrical appliances – Measurement of standby power
IEC 62885-2	Surface cleaning appliances – Part 2: Dry vacuum cleaners for household or similar use – Methods for measuring the performance
IEC 62885-6	Surface cleaning appliances – Part 6: Wet hard floor cleaning appliances for household or similar use – Methods for measuring the performance
IEC 62929	Cleaning robots for household use - Dry cleaning: Methods of measuring performance
IEC/ASTM 62885-7	Surface cleaning appliances - Part 7: Dry-cleaning robots for household or similar use - Methods for measuring the performance (Only Clauses 5.4, 5.5, 5.6, 5.7, 5.8, 5.9)
IEC TS 62885-1	Surface cleaning appliances – Part 1: General requirements on test material and test equipment

