

APPENDIX 12

Recommended Guidelines for the UIA Accord on Codes, Standards, Production Information, Specifications and Other Construction Documents

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Accord Policy on the Practice of Architecture

Definition:

The practice of architecture consists of the provision of professional services in connection with town planning and the design, construction, enlargement, conservation, restoration, or alteration of a building or group of buildings. These professional services include, but are not limited to, planning and land-use planning, urban design, provision of preliminary studies, designs, models, drawings, specifications and technical documentation, coordination of technical documentation prepared by others (consulting engineers, urban planners, landscape architects and other specialist consultants) as appropriate and without limitation, construction economics, contract administration, monitoring of construction (referred to as "supervision" in some countries), and project management.

Background:

Architects have been practicing their art and science since antiquity. The profession as we know it today has undergone extensive growth and change. The profile of architects' work has become more demanding, clients' requirements and technological advances have become more complex, and social and ecological imperatives have grown more pressing. These changes have spawned changes in services and collaboration among the many parties, which are best responded to by architects who have demonstrated through education, experience and examination their ability to provide the professional services needed to protect the health, safety and welfare of the public..

Policy:

That the practice of architecture as defined above be adopted for use in the development of UIA International Standards.

Introduction

The interrelationships among building codes, standards, production information, specifications,

other construction documents and the many other resources available to architects are critical to the design, construction and occupancy of safe buildings and other structures that provide the levels of performance sought by the owner and required by public policy. Building codes are generally defined as a collection of laws enacted by a government authority that pertain to health, safety and general welfare of the public. Standards are an agreed upon way of defining or measuring the performance or prescriptive characteristics of a product, design, or process. Production information, a less universally defined term, includes, for the purpose of this *Guideline*, the practices and tools that aid the production of architectural documents and products such as drawings, specifications and models. Specifications, as they pertain to the design and construction of a building, define the quality or performance of the construction and are a part of the contract for construction.

UIA member sections have an important role to play in contributing to the establishment, use, monitoring and revision of these areas of professional concern. In order to assure continued avenues for long-term UIA input to these types of criteria, it is desirable that the UIA as an international organization become actively engaged in their development and maintenance at the international level.

Another important issue is the interrelationship among the types of documents addressed in this *Guideline*. Many standards are adopted by reference (i.e. specifically named by title and edition) in building codes, specifications and other technical criteria; thus, serving the regulatory, procurement, manufacturing and design functions of the building process.

Finally, architects in the forefront of developing model codes, standards, specifications, and construction documents have an obligation to convey the content and importance of these criteria to the students in the architectural schools in their respective countries.

Building Codes

Building Codes, for the purpose of this *Guideline*, include two types of documents:

- § A “Building Code” is established by a governmental authority having jurisdiction (AHJ) is a collection of laws that prescribe specific mandatory requirements for the construction of buildings and other defined structures that cover public health, safety and general welfare issues. The purpose of building code provisions is to provide a minimum level of protection, safety or other performance needs for the building’s occupants and the public.
- § “Model Building Code” is a document or set of documents produced by an organization through a public process to serve as a comprehensive set of model documents (model building code, model fire code, model plumbing code, model energy code, etc.) that are available for voluntary adoption by a governmental authority having jurisdiction, such as a municipality or a state. Upon such an adoption, the “Code Model Building” becomes the adopting governmental authority’s “Building Code.”

In recent years, there has been a desire to employ “performance codes” to allow greater design flexibility and to afford greater latitude in meeting the intent of the code. In those countries where a performance-based code has been adopted or is under consideration, there is an absolute need to concurrently develop the design and construction skills to effectively use this type of building code.

What are the desirability and advantage of having uniform national building codes?

In most countries, geographical, geological and climatological variations necessitate that the code provisions address the attendant performance needs associated with these differences. By dealing with these variations at the national level, it has been shown in the U.S. and many other countries that a nationally applicable code is better able to serve the entire nation. The focus and effort of affected and knowledgeable interests attendant to the development of a nationally applicable model building code ensures consistency and fairness in addressing and accommodating the diverse and common needs of all jurisdictions and allows the focus of the nation’s best technical expertise to most effectively serve the entire nation.

In most countries, the most concentrated governmental leadership is provided at the federal or national level. Under the U. S. Constitution for example, the states hold the police power, which includes the responsibility to regulate construction in order to provide for the public health, safety and general welfare. As a result, states either adopt a Building Code or empower the local governments to do so. The U. S., the development and maintenance of a Model Building Code evolved as a private sector initiative to serve the needs of and with the widespread involvement by thousands of state and local government representatives, design professionals and industry. The resulting Model Building Codes have been adopted by nearly all governmental jurisdictions that have and enforce a Building Code.

Why should architects get involved?

Inasmuch as building codes greatly affect architects’ services to their clients and their responsibilities as professionals, it is important that architects be involved in the code development process in the countries in which they practice. Fundamentally, building codes are an expression of acceptable means and technology to meet prescribed needs at a point in time. Over time, alternative means and advanced technologies must be considered or the building code can needlessly constrain technological advances and eliminate more suitable alternatives and practices. By incorporating architects’ knowledge and experience in the code development process, code interpretation and enforcement practices of a jurisdiction can be significantly improved. It is through an open code development processes that new technologies are fairly evaluated, recognized, and more rapidly utilized.

UIA and its members associations at the national level are well positioned to educate their members about the building codes affecting the practice of architecture in their countries and in other countries. The UIA’s member organizations, can help architects worldwide to improve their access to information about building codes and standards, encourage participation in the available code development process and thereby improve their services to their clients and the public.

How can UIA member sections best deal on an ongoing basis with building codes?

In the U.S., Architects can be involved in the code development process as individuals or through the American Institute of Architects at the national, state and component levels. While most architects have limited time and resources travel to and participate in frequent code committee meetings and hearings, electronic communication technologies enable participation without the need to travel. Thus, architects are now better able and positioned to actively participate in U. S. code development processes than in the past. In countries with code development processes allowing open participation by architects and other building community professionals, the resulting codes are of far greater benefit to society.

Examples of nationally recognized codes and model code systems:

Building Code of Australia (BCA) – The principles of the BCA are:

1. to safeguard people from possible injury, illness, or loss of amenity in the course of the use of any building, including the reasonable expectations of any person who is authorized by law to enter the building for the purpose of activities related to an emergency, such as rescue operations and fire fighting;
2. to facilitate access and circulation by all people by requiring reasonable provision for such access and circulation in the design of a building, having regard to its use and location; and
3. to protect adjoining buildings from structural damage, or damage as the result of a fire in the building.

For more information, go to: <http://www.abcb.gov.au/content/codes/>

The International Family of Building Codes, 2003 Editions, are published by the International Code Council (ICC) located in the U.S. The ICC was formed in 1995 by three regional organizations each of which had produced a competing family of model building codes for 50 to 75 years. The three regionally-based organization have ceased their code development activities and were dissolved in early 2003. For more information about the ICC and its publications, go to: <http://www.intlcode.org>. (NOTE: the ICC is expected to change its website address to www.iccsafe.org.)

The purpose of the ICC is to produce a comprehensive and coordinated set of model codes that serve the building process and the public interest in the U.S. and other countries. This includes, architects, engineers and other design professionals, code enforcement officials, contractors, product manufacturers, educators, and others fostering safe and efficient buildings. The ICC publishes the following model codes:

International Building Code

International Fire Code

International Mechanical Code

International Private Sewage Disposal Code

International Residential Code

ICC Electrical Code

International Energy Conservation Code

International Fuel Gas Code

International Plumbing Code

International Property Maintenance Code

International Zoning Code

International Performance Code

International Existing Building Code

International Urban-Wildland Interface Code

The ICC model codes are maintained through an established code-change process that affords everyone an opportunity to submit code change proposals and to participate in its committee-based process to change and update its codes.

The ICC, through its offices throughout the United States and in Latin America provides the following products and services:

Code application assistance	Educational programs
Certification programs	Technical handbooks and workbooks
Plan reviews	Automated products
Monthly magazines and newsletters	Publication of proposed code changes
Training and Informational videos	Evaluation services

NFPA 5000: Building Construction and Safety Code, 2003 Edition, published by the National Fire Protection Association (NFPA), located in the U.S. NFPA, established in 1896, has published fire- and electrical-safety standards that are widely used in the U.S. *NFPA 5000*, first published in 2003 is NFPA's first comprehensive model building code.

The NFPA presents its new model code as a scientifically based and supported building code developed through an ANSI-accredited process. Organized by occupancy, *NFPA 5000* combines regulations controlling design, construction, quality of materials, use and occupancy, location, and maintenance of buildings and structures, with fire and life safety requirements found in NFPA codes and standards such as the widely used *Life Safety Code*, also published by NFPA. Other model code-related publications of NFPA include:

NFPA 54: National Fuel Gas Code

NFPA 70: National Electrical Code

NFPA 101: Life Safety Code

NFPA 72: National Fire Alarm Code

NFPA 13: Installation of Sprinkler Systems

Europe: The European Union, comprised of some 15 member countries, operates through the programs of the European Commission (EC). The EC has issued the Construction Products Directive. In support of the Construction Products Directive, the Commission has issued mandates to the Committee on European Normalization (CEN) to develop the appropriate performance and product standards (European Norms, i.e., ENs) to effect compliance with this Directive. ISO standards (see the Standards Section herein) have served in several cases as the basic references for these CEN standards.

Standards

Standards are an agreed upon way of defining or measuring the performance or prescriptive characteristics of a product, design, or process. Standards and the processes through which they are developed are essential components of domestic and international trade, in that standards are one of the most effective means of technology transfer, international standards provide a World-wide transfer mechanism.

In the U.S., standards are published by several hundred private organizations. Some of these standards are adopted by reference (that is the standards' titles, editions and intended application are printed in the referencing documents) in U.S. model building codes, jurisdiction-specific building codes, and publicly and privately available guide specifications. When a standard is adopted by reference in a building code or contract specification, the applicable provisions of that standard require the same degree of compliance as do the building code or the contract specifications themselves.

In the U.S., standards are developed through voluntary consensus processes that are overseen by the American National Standards Institute (ANSI). Some standards writing organizations use standard formats for their standards that enable users to better understand and find information therein. Perhaps the most important feature of the U.S. standards development process is that ANSI has developed and maintains procedures through which standards are produced to ensure fairness, openness and due process. Participation can be by personally attending meetings, electronic communication and teleconferencing. By actively participating, architects and other professionals have the opportunity to influence the standards and ensure they address the issues and needs of all users, including the public.

Of course the specific organizations with which a UIA member nation's architects need to interact varies with the standards used in the building process, the standards setting practices, and standards setting organizational structures in each country. In the U.S., there are several hundred standards development organizations (SDO). However, many SWOs address topics in which few architects have interest or responsibility. For the many U.S. standards that relate to the responsibilities of architecture, a sufficient number of technically knowledgeable architects, often with the support of the American Institute of Architects and their architectural firms, are involved in the development and maintenance of standards to ensure they meet the needs of architects, building owners, and the public.

ISO Standards: The process through which standards are developed by the International Standardization Organization is through committees, such as ISO TC 92 for fire standards. Committees exist also for building products and other performance requirements (e.g. acoustical, environmental). Participation by individuals is via the Technical Advisory Group (TAG) in each member country. These standards are of particular interest to countries who emphasize world trade, such as Japan, China, and European Union countries.

In other UIA member countries, a different process may be followed. *[NOTE TO REVIEWERS: The drafting panel solicits summary descriptions of the procedures applicable in each member country for inclusion in this guideline.]*

What are the desirability and advantage of having uniform national standards?

One of an architect's best protections from the liability associated with the practice of architecture is to follow the "prevalent standard of care." One aspect of this legal principal is to produce designs for clients that employ recognized standards that help to ensure the buildings being designed will perform as the client desires and be safe for use by the public.

How can UIA member sections be organized to deal on an ongoing basis with standards?

In the U.S., Architects can be involved as individuals or through the American Institute of Architects at the national, state and component levels. While most architects have limited time and resources travel to and participate in frequent standards committee meetings, with today's electronic communication avenues, architects are better positioned to participate in standards writing programs than they have been in past years.

With the increased emphasis on international commerce in today's shrinking global environment, the UIA and its's members associations at the national level are well positioned to educate their members about the standards, procedures and other nuances of practicing architecture in other countries. The UIA is well positioned, through its practice Commissions and member organizations to help architects worldwide to improve their access to information, production aids, and the support available systems, thereby improving their service to their clients and society.

A list of major U.S. standards writing organizations is appended.

Production Information

Production information includes aids and tools useful for the development of design concepts, contract documents (working drawings and specifications in the U.S.). Such support tools and aids could include computers, and associated software programs for CADD, discipline-related design analysis tools (architectural, structural, geo-technical, mechanical, plumbing, electrical, fire protection, cost estimating, specification writing, scheduling, etc.), standards for such systems (CAD standards) and the like.

An example of a new standard that is improving the organization of U.S. contract documents and facilitating the use of electronic tools, is the *U.S. National CAD Standard*. The NCS includes The American Institute of Architects' CAD Layer Guidelines, the Construction Specifications Institute's Uniform Drawing System, Plotting Guidelines developed by the U.S. government, and an other useful information. For more information about the NCS, go to www.nationalcadstandard.org.

Specifications

The primary function performed by project specifications – defining the quality of the project – is essential to the success of any building construction project. In the U.S., project specifications, sometimes called contract specifications, are one of the key parts of the “contract documents,” a set of legal and binding documents that define the responsibilities of the parties to a construction contract.

In the U.S., project specifications have evolved from documents – initially organized in a variety of formats – that defined the quality of products, materials and systems to be incorporated in a building project. Today, project specifications in the U.S., often included in a “project manual,” almost universally follow Masterformat[®], a nationally recognized and utilized structured format that organizes specification information into divisions and sections that relate to the trades and construction specialties that traditionally install them. Masterformat is also used prevalently in Canada. For more information about Masterformat[®], see the website of the Construction Specifications Institute at www.csinet.org. Currently, Masterformat[®] is under review by CSI to make significant expansions and changes to reflect new needs and performance issues.

Specification formats, due to national and local customs, often differ in other countries. Some countries use a quantity-based specification format that may require more effort in developing the specifications than the performance-based specification prevalent in the U. S. Further, measurement systems (English, S.I., etc.) are important factors as are language and translation issues.

A privately developed guide specification system, MASTERSPEC[®], is available from the American Institute of Architects. For information about MASTERSPEC[®], go to www.arcomnet.com/visitor/masterspec/ms.html. In addition, several U. S. federal agencies issue and require the use of guide specifications systems by the architects and engineers they hire to design their facilities.

For a guide specification to be an effective tool, it must reflect the traditional business of building buildings. As is the case with building codes, in most countries, as is the case in the U.S., geographical, geological and climatological variations and different delivery methods necessitate that the many appropriate and available design options needed to accommodate these differences be included in guide specifications. Similarly, the broad array of generic products, materials, systems and subsystems must be included in order to assure that the architects and engineers and other designers are not restricted from considering all available options. Also, when public funds are used to construct buildings, it often prevents the naming of brands in the specifications. Thus, guide specifications should include a “generic” option as well as a “brand specific” one.

Is there value in developing nationally applicable guide specifications?

Most developed countries have time honored practices that have evolved by making changes to solve problematic language, omissions and conflicts that arise through their use. In developing countries, there may be opportunities by their architectural associations to develop a guide

specifications for use by the organization's members. When developing such guide specifications systems, a more thorough and correct product is usually produced if a broad-based and representative body of experienced and knowledgeable volunteers is directly involved in its development and keeping the guide updated to reflect new technologies and design concepts. This includes, in addition to architects, engineers (civil, structural, mechanical, electrical, fire protection, etc.), product manufacturers, contractors and subcontractors, and the like. Further, professional, trade and material associations and governmental and private research organizations typically have information highly useful to the development and maintenance of guide specifications systems.

How can UIA Member Sections get involved?

For a UIA member section to effectively manage a guide specification program, it should contact its counterparts in other countries that successfully manage similar programs. Of course establishing an efficient committee structure, populating the committees with effective leaders and knowledgeable and experienced members and a capable staff are key ingredients. Once the program is underway, an effective marketing effort is needed to spread the word that the product is available. The associations and other organizations involved in the development and maintenance of the guide specification system are usually helpful marketing partners.

Other International Sources: The International Construction Information Society (ICIS) is an association of organizations which provide national master specification systems and cost information systems. Members of the Society benefit from the direct exchange of information and ideas at the Society annual assembly and working group meetings. ICIS members are neutral in status (i.e., not political), technically authoritative, and solidly rooted in the construction industry. Currently, ICIS consists of 17 member organizations in 14 countries from four continents. ICIS' Internet site at www.icis.org, provides access to technical papers and links to related web sites.

Other Construction Documents

In the U.S., the "contract documents" for the traditional design-bid-build delivery process includes 1) the agreement between the owner and the contractor, 2) the general conditions of the contract, 3) the supplementary conditions of the contract, 4) the contract drawings, 5) the contract specifications, 6) addenda, and 7) amendments to the contract.

The American Institute of Architects publishes specialized forms of agreement and other standard parts of the contract documents. The documents, which are prevalently used in the U.S., include forms of agreement between the owner and the architect, the owner and the contractor, the architect and typical consultants, and construction administration forms. Where applicable, these documents are published in cooperation with the Associated General Contractors of America, a nationally recognized contractor association. For more information about the AIA documents, go to: <http://www.aia.org/documents/home.asp>.

In addition to the contract documents available from the AIA, the Engineers Joint Contract Documents Committee (EJCDC), an initiative of several U. S. engineering associations, publishes a series of standard contract documents for use between the parties in a design and construction projects. See the EJCDC site at: <https://ascestore.aip.org>.

Related Initiatives

International Alliance for Interoperability (www.iai-international.org)

Formed in 1994, IAI promotes the development and use of international standards for the exchange of data among computer software platforms and applications (CADD, cost estimating, permitting, scheduling, O&M, etc.), to improve architecture, engineering, construction, facility management and related activities. The IAI councils are membership-based organizations representing AEC firms, software developers/vendors, product manufacturers, associations and government agencies. IAI chapters are active in North American, Europe, Asia, and Australia.

Organizations such as IAI have the ability to support automated access to and enhanced use of documents such as codes, standards and specifications. Membership and participation in such organizations can be extremely useful to UIA member organizations in effectively addressing local, national and international issues affecting their day-to-day professional activities.

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U.S. Standards and Guidelines

Adopted by Reference in Privately Available and Federal Agency Issued Building and Construction-related Guide Specifications in the U.S.

American Concrete Institute	Cast Iron Soil Pipe Institute
Air Conditioning & Refrigeration Institute	Cedar Shake and Shingle Bureau
Air Conditioning Contractors of America	Ceilings & Interior Systems Construction Assn.
Air Diffusion Council	Centers for Disease Control & Prevention
Air Movement & Control Assn. International Inc.	Chain Link Fence Manufacturers Institute
Aluminum Assn.	Chemical Fabrics & Film Assn.
American Architectural Manufacturers Assn.	Chlorine Institute
American Assn. of State Highway & Transportation Officials	Composite Panel Assn.
American Assn. of Textile Chemists & Colorists	Compressed Air and Gas Institute
American Bearing Manufacturing Assn.	Compressed Gas Assn.
American Boiler Manufacturers Assn.	Concrete Plant Manufacturers Bureau
American Concrete Pipe Assn.	Concrete Reinforcing Steel Institute
American Conference of Governmental Industrial Hygienists	Consumer Product Safety Commission
American Forest & Paper Assn.	Conveyer Equipment Manufacturers Assn.
American Gas Assn.	Cooling Technology Institute
American Gas Assn. Laboratories	Copper Development Assn.
American Gear Manufacturers Assn.	Crane Manufacturers Assn. of America
American Hardboard Assn.	Decorative Laminate Products Assn.
American Institute for Hollow Structural Sections	Diesel Engine Manufacturers Assn.
American Institute of Steel Construction	District of Columbia Municipal Regulations
American Institute of Timber Construction	Door & Access System Manufacturers Assn.
American Iron & Steel Institute	Door & Hardware Institute
American National Standards Institute	Ductile Iron Pipe Research Assn.
American Nursery & Landscape Assn.	EIFS Industry Members Assn.
American Petroleum Institute	Electrical Generating Systems Assn.
American Public Health Assn.	Electronic Industries Alliance
American Railway Engineering & Maintenance of Way Assn.	Engine Manufacturers Assn.
American Society for Nondestructive Testing	ETL Testing Laboratories
American Society for Quality	European Committee for Electrotechnical Standardization
American Society of Civil Engineers	Expansion Joint Manufacturers Assn.
American Society of Heating, Refrigerating & Air-Conditioning Engineers, Inc.	Fluid Sealing Assn.
American Society of Sanitary Engineering	FM Approvals
American Water Works Assn.	Forest Products Society
American Welding Society	Forestry Suppliers, Inc.
American Wood Preservers' Assn.	Foundation for Cross-Connection Control & Hydraulic Research
American Wood Preservers Bureau	Foundation of the Wall & Ceiling Industries
APA - The Engineered Wood Assn.	Geological Society of America
Architectural & Transportation Barriers Compliance Board	Geosynthetic Institute
Architectural Woodwork Institute	Glass Assn. of North America
Asbestos Cement Pipe Producers Assn.	Gypsum Assn.
ASM International	Hardwood Plywood & Veneer Assn.
ASME International	Heat Exchange Institute
Asphalt Institute	Hoist Manufacturers Institute
Asphalt Roofing Manufacturers Assn.	HP White Laboratory
Associated Air Balance Council	Hydraulic Institute
Assn. for the Advancement of Medical Instrumentation	Hydronics Institute - Division of GAMA
Assn. of Edison Illuminating Companies	IBM Corporation
Assn. of Home Appliance Manufacturers	Illuminating Engineering Society of North America
Assn. of Iron & Steel Engineers	Indiana Limestone Institute of America
Assn. of the Wall & Ceiling Industries	Industrial Fasteners Institute
ASTM International	Insect Screening Weavers Assn.
Business & Institutional Furniture Manufacturer's Assn.	Institute of Clean Air Companies
Biocycle, Journal of Composting & Recycling by JG Press Inc.	Institute of Electrical & Electronics Engineers, Inc.
Brick Industry Assn.	Institute of Environmental Sciences & Technology
British Standards Institute	Insulated Cable Engineers Assn.
Builders Hardware Manufacturers Assn.	Insulated Steel Door Institute
Building Systems Industry Forum	Insulating Glass Manufacturers Alliance
Carpet and Rug Institute	International Approval Services
	International Assn. of Plumbing & Mechanical Officials

International Code Council
International Concrete Repair Institute
International Conference of Building Officials
International Electrical Testing Assn.
International Electrotechnical Commission
Iron and Steel Society
The Instrumentation, Systems & Automation Society
Joint Industrial Council
Kitchen Cabinet Manufacturers Assn.
L.H. Bailey Hortorium
Lightning Protection Institute
Mfgs. Standardization Society of the Valve & Fittings Industry
Maple Flooring Manufacturers Assn.
Marble Institute of America
Master Painters Institute
Material Handling Industry of America
Metal Building Manufacturers Assn.
Metal Lath/Steel Framing Assn.
Midwest Insulation Contractors Assn.
Monorail Manufacturers Assn.
NACE International
National Asphalt Pavement Assn.
National Assn. of Architectural Metal Manufacturers
National Board of Boiler & Pressure Vessel Inspectors
National Building Granite Quarries Assn.
National Cable Telecommunications Assn.
National Concrete Masonry Assn.
National Council on Radiation Protection & Measurements
National Drilling Assn.
National Electrical Manufacturers Assn.
National Environmental Balancing Bureau
National Fenestration Rating Council
National Fire Protection Assn.
National Fluid Power Assn.
National Hardwood Lumber Assn.
National Institute for Certification in Engineering Technologies
National Lime Assn.
National Oak Flooring Manufacturers Assn.
National Pest Management Assn.
National Ready Mixed Concrete Assn.
National Roofing Contractors Assn.
National Terrazzo & Mosaic Assn.
Natural Resource, Agriculture, & Engineering Service
North American Insulation Manufacturers Assn.
Northeastern Lumber Manufacturers Assn.
NSF International
Pipe Fabrication Institute
Plastic Pipe and Fittings Assn.
Plastics Pipe Institute
Plumbing and Drainage Institute
Plumbing & Mechanical Contractors Assn.
Plumbing-Heating-Cooling Contractors National Assn.
Porcelain Enamel Institute
Post-Tensioning Institute
Precast/Prestressed Concrete Institute
Redwood Inspection Service of the California Redwood Assn.
Resilient Floor Covering Institute
Rubber Manufacturers Assn.
Safety Glazing Certification Council
Scientific Certification Systems
Screen Manufacturers Assn.
Sealant, Waterproofing & Restoration Institute
Semiconductor Equipment & Materials International
Sheet Metal & Air-Conditioning Contractors' National Assn.
Society for Protective Coatings

International Ground Source Heat Pump Assn.
International Institute of Ammonia Refrigeration
International Municipal Signal Assn.
International Slurry Surfacing Assn.
Assn. of Connecting Electronics Industries

Society of Automotive Engineers International
Society of Cable Telecommunications Engineers
Society of Motion Picture & Television Engineers
Society of the Plastics Industry
Solar Rating & Certification Corporation
Southern Cypress Manufacturers Assn.
Southern Pine Inspection Bureau
Spray Polyurethane Foam Alliance
Single Ply Roofing Institute
Steel Deck Institute
Steel Door Institute
Steel Joist Institute
Steel Tank Institute
Steel Window Institute
Technical Assn. of the Pulp & Paper Industry
Tile Council of America
Truck Mixer Manufacturers Bureau
Truss Plate Institute
Tubular Exchanger Manufacturers Assn.
Turfgrass Producers International
Underwriters Laboratories
Uni-Bell PVC Pipe Assn.
Univ. of California Division of Agricultural & Natural Resources
Water Environment Federation
Water Quality Assn.
West Coast Lumber Inspection Bureau
Western Wood Preservers Institute
Western Wood Products Assn.
Window & Door Manufacturers Assn.
Wood & Synthetic Flooring Institute
Wood Moulding & Millwork Producers Assn.
Woodwork Institute of California

Note: This list excludes federal and state government agencies that publish standards and guidelines adopted by reference in privately available and federal agency issued building and construction-related guide specifications in the U.S.