



On the Use of US and EU Certifications in Lieu of Annex Eight Inspections: A Preliminary Memo

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I. Background

Article 69 of Ministerial Decree 770/2005 states that products listed in Annex Eight of the Decree must be inspected by GOEIC in accordance with Section II of the Decree. If relevant mandatory standards have been issued by the Egyptian Government, then GOEIC must conduct the inspection in accordance with those standards. However, GOEIC inspection could be based on standards from other countries if there are no relevant Egyptian mandatory standards.

Under Ministerial Decree 180/1996, producers and importers can base product development for goods that are not subject to Egyptian mandatory standards on standards listed in any one of six standards sets: Egypt, international (ISO/IEC), US (ANSI), Europe (either EU or UK, France or Germany), Japan or the Codex Alimentarius. These six sets all include standards covering a wide range of issues and products.

Decree 552/2000 authorizes GOEIC to accept inspection certificates that have been based on US, EU, Japanese, international and Egyptian standards and issued by approved foreign government agencies or inspection companies. I understand that two certification agencies have been approved, one in Switzerland and one in France.

The Government of Egypt is interested in expanding the scope of participation in the foreign certification program established under Decree 552/2000. The qualified test houses would be authorized to issue certifications that could be used in lieu of EOS testing to prove that a product conforms to the relevant standards. To implement this policy, GOEIC would have to develop the criteria for selecting the qualified test houses.

The following recommendations were offered in my previous memo, Thoughts on the Implementation of Decree 770/2005, 180/1996 and 552/2000 (unreleased draft)

Recommendation 1: GOEIC should determine whether the purpose of Decree 180 is to enhance product safety or whether it is intended to ensure other product attributes. If product safety is the primary concern, then only standards addressing safety issues should be used to implement Decree 180.

Recommendation 7: GOEIC should develop a list of third party certifications issued by US conformity assessment bodies that are accepted as equivalent to domestic testing under Decree 552

Recommendation 8: GOEIC could limit their acceptance to US certifications issued by conformity assessment bodies which:

- a. Are accredited by NVLAP or AALA,
- b. Have a declared policy of emphasizing safety issues in their conformity assessment reviews, or that
- c. Issue certifications that are accepted by government agencies as proof of conformity to safety – related technical requirements.

Recommendation 9: GOEIC should consider accepting declarations of conformity issued by manufacturers in accordance with the requirements of the CE marking system as proof of product safety under Decree 552/2000.

This memo analyzes the use of European CE mark certifications and American certifications in lieu of GOEIC inspections of products on the Annex Eight list. For the purposes of this report, I am assuming these recommendations will be implemented.

II. EU and US certifications which are potentially applicable to products on the Annex Eight list.

1. Marble, granite, monument building stone and their products

EU: Construction Products Directive

US: ICC-ES

US: Omega Point Laboratories

US: Underwriters Laboratory

US: ICBO Evaluation Service

US: SGS Testing

2. Cement

EU: Construction Products Directive

US : ICC-ES

US: Omega Point Laboratories

US: Underwriters Laboratory

US: ICBO Evaluation Service

US: SGS Testing

3..Lithophone and other pigments and preparations based on zinc

EU: Construction Products Directive

US: DL Laboratories

US: Underwriters Laboratory

4. Varnishes and paints
 - EU: Construction Products Directive
 - US: ICC-ES
 - US: Art and Creative Materials Institute
 - US: DL Laboratories
 - US: Omega Point Laboratories
 - US: Southwest Research Institute
 - US: Underwriters Laboratory
5. Printing and writing ink
 - US: Art and Creative Materials Institute
6. Soap
7. Organic detergents out up for sale and not for retail sale
8. Gelatin (except for licensed pharmaceutical industry items)
9. Glue
 - US: Art and Creative Materials Institute
 - US: PFS Corporation
10. Matches
11. Preparations and charges for fire extinguishers; charged fire extinguishing grenades
 - EU: Pressure Equipment Directive
 - US: Underwriters Laboratory
12. Phenolic molding compounds (formaldehyde)
13. Plastic tubes, pipes, hoses and fittings (for example; joints, elbows and flanges)
 - EU: Construction Products Directive
 - US: ICC-ES
 - US: Underwriters Laboratory
13. Plastic tableware, kitchenware, toilet articles
14. Wall and floor coverings and floor Formica sheets
 - EU: Construction Products Directive
 - US: Omega Point Laboratories
 - US: Southwest Research Institute
 - US: Underwriters Laboratory
 - US: SGS Testing Company
 - US: Independent Textile Testing Service
 - US: ICBO Evaluation Service
15. Plastic sheets (acrylic)

US: ICC-ES
US: Omega Point Laboratories

16. Conveyor and transmission belts

17. Fire hoses

EU: Pressure Equipment Directive
US: Underwriters Laboratory
US: ICBO Evaluation Service

18. Pneumatic tires and tubes for bicycles, motorcycles and the like

18. Gaskets, washers and other sealants

US: Automotive Manufacturers Equipment Compliance Agency

19. Wood, wood for parquet flooring and prefabricated wooden facilities

EU: Construction Products Directive
US: ICC-ES
US: Omega Point Laboratories
US: Independent Textile Testing Service
US: PFS Corporation
US: ICBO Evaluation Service

20. Paper (for printing, writing, packing, duplicating), boxes, bags, sacks and packs

EU: Toy Directive
US: Art and Creative Materials Institute
US: Gaynes Testing

21. Textiles, fabrics, carpets, apparels, blankets, towels, curtains, bed linens and covers, not for medical purposes

US: Omega Point Laboratories
US: Independent Textile Testing Service
US: MEA Corporation

22. Footwear and components

EU: Personal Protective Equipment Directive

23. Cutting and polishing stones

24. Natural or artificial abrasive powder

25. Articles of cement

US: Omega Point Laboratories
US: ICBO Evaluation Service
US: ICC-ES

US: SGS Testing

26. Articles of asbestos or mixtures with an asbestos base
27. Brake pads, friction materials for brakes, clutches and the like
US: Automotive Manufacturers Equipment Compliance Agency
28. Ceramic and china pipes, conduits, guttering and fittings
EU: Construction Products Directive
29. Ceramics
30. Toilet articles of ceramics
31. Tableware, household items of porcelain, china or glass
32. Flat glass, glass mirrors for transportation means, insulating glass and safety glass
US: Omega Point Laboratories
US: Window and Door Manufacturers Association
33. Flat rolled products of iron and steel, rods, bars, angles, shapes and sections; steel construction reinforcing sections, rods and bars
US: ICBO Evaluation Service
34. Tubes, pipes and fittings of iron
EU: Construction Products Directive
US: International Association of Plumbing and Mechanical Officials
35. Aerosol cans
EU: Pressure Equipment Directive
US: The American Society of Mechanical Engineers
US: National Board of Boiler and Pressure Vessel Inspectors
36. Containers for packing butagas
EU: Pressure Equipment Directive
US: The American Society of Mechanical Engineers
US: National Board of Boiler and Pressure Vessel Inspectors
37. Iron and steel springs and leaves for springs
38. Stoves, heaters, house cookers, and parts and grates thereof
EU: Appliances Burning Gaseous Fuels directive
EU: Machinery Directive, Low Voltage Directive, EMC Directive
US: International Association of Plumbing and Mechanical Officials
US: ENTELA
39. Household steam cooking pots
US: ENTELA
US: International Association of Plumbing and Mechanical Officials ”

40. Cast iron or stainless steel sanitary ware
41. Copper cables and wires
US: Underwriters Laboratory
42. Copper bars, rods, profiles, angles, pipes, tubes and fittings
43. Non-electric heating or cooking apparatus and parts thereof
44. Nickel rods, bars, angles, shapes, tubes and fittings
45. Aluminum bars, rods, angles, profiles, pipes, tubes and fittings
46. Razors and razorblades
47. Tableware (spoons, forks, ladles)
48. Padlocks, locks and parts thereof
EU: Construction Products Directive
US: Window and Door Manufacturers Association
US: Builders Hardware Manufacturers Association
US: Omega Point
49. Mountings and fittings for furniture and doors
EU: Construction Products Directive
US: Omega Point Laboratories
US: Window and Door Manufacturers Association
50. Flexible pipes and tubes
EU: Construction Products Directive
EU: Pressure Equipment Directive
US: Underwriters Laboratory
51. Arc welding electrodes
US: SGS Testing Company
52. Engines and separate parts thereof
EU: Machinery Directive, Low Voltage Directive, EMC Directive
US: Automotive Manufacturers Equipment Compliance Agency
53. All types of pumps and parts thereof
54. Air conditioners and parts thereof
EU: Machinery Directive, Low Voltage Directive, EMC Directive
EU: Pressure Equipment Directive
US: ENTELA
55. Refrigerators and refrigerating equipment for domestic use as well as heat insulating containers and parts thereof
EU: Machinery, Low Voltage, EMC and Pressure Equipment directives

US: International Association of Plumbing and Mechanical Officials
US: ENTELA
US: National Board of Boiler and Pressure Vessel Inspectors

56. Fans and electric ventilators and parts
EU: Machinery Directive, Low Voltage Directive, EMC Directive
US: International Association of Plumbing and Mechanical Officials
US: ENTELA
57. Instantaneous or storage non-electric water heaters and parts
EU: Appliances Burning Gaseous Fuels directive
US: International Association of Plumbing and Mechanical Officials
US: ENTELA
58. Fire extinguishers and parts
EU: Pressure Equipment Directive
US: Underwriters Laboratory
59. Taps (mixers, cocks and valves for domestic use) for pipes, boiler shells, tanks, vats, including pressure reducing valves and thermostatically controlled valves and gas valves, Butagas regulating valves and parts thereof
EU: Pressure Equipment Directive
US: The American Society of Mechanical Engineers
US: National Board of Boiler and Pressure Vessel Inspectors
59. Hydraulic jacks and hoists for raising vehicles
EU: Pressure Equipment Directive
US: National Board of Boiler and Pressure Vessel Inspectors
60. Roller and ball bearings
61. Transmission shafts, bearing housings, gears and gearing, ball or roller screws, gear boxes and other speed changers, flywheels, pulleys, clutches, shaft couplings and parts thereof
EU: Machinery Directive
US: Automotive Manufacturers Equipment Compliance Agency
62. Filtering or purifying machinery and apparatus for liquids or gasses and parts
EU: Machinery Directive, Low Voltage Directive, EMC Directive
EU: Pressure Equipment Directive
63. Household washing machines and parts; household drying machines and parts
EU: Machinery Directive, Low Voltage Directive, EMC Directive
US: International Association of Plumbing and Mechanical Officials
US: ENTELA

64. Elevators and parts; household or laundry-type washing machines, including machines that both wash and dry; machines with a dry linen capacity not to exceed 10 kg.
EU: Lifts Directive
65. Electric devices (electric motors, generators and transformers) and parts
EU: Machinery Directive, Low Voltage Directive, EMC Directive
66. Ballasts
EU: Low Voltage and EMC directives
67. Electric primary cells
EU: Low Voltage and EMC directives
68. Electricity accumulators (batteries)
EU: Low Voltage and EMC directives
69. Electro-mechanical domestic appliances with self-contained electric motors
EU: Machinery Directive, Low Voltage Directive, EMC Directive
70. Sparking plugs
EU: Low Voltage and EMC directives
71. Domestic electric smoothing irons, electric heating plates, electric water immersion heaters, electro-thermic appliances for domestic use, driers and hair driers and parts
EU: Machinery Directive, Low Voltage Directive, EMC Directive
US: International Association of Plumbing and Mechanical Officials
US: ENTELA
72. Radio and TV receivers, broadcasting, recorders, radio and TV cassette players and TV antenna and parts
EU: Low Voltage and EMC directives
73. Switches, plugs, twin switch and plug fuses, lamp holders, starter base, multi-outlet units, circuit breakers and florescent lamp starters
EU: Low Voltage and EMC directives
US: ENTELA
74. Electric lamps
EU: Low Voltage and EMC directives
US: International Association of Plumbing and Mechanical Officials
US: ENTELA
75. Prepared unrecorded media for sound and picture recording, magnetic discs

- for computer recording
US: Media Sciences
76. Electric shavers, hair clippers, hair removing appliances with self-contained electric motors
EU: Machinery Directive, Low Voltage Directive, EMC Directive
77. Electric ignition or engine starting equipment, generators, and engine current cut- outs
EU: Low Voltage and EMC directives
US: Automotive Manufacturers Equipment Compliance Agency
78. Portable electric lights designed to function with their own sources of energy
EU: Low Voltage and EMC directives
US: International Association of Plumbing and Mechanical Officials
US: ENTELA
79. Microphones, loudspeakers, audio amplifiers and electric sound amplification sets
EU: Low Voltage and EMC directives
US: ENTELA
80. Electric sound or visual signaling apparatus and burglar or fire alarm devices
EU: Low Voltage and EMC directives
81. Fixed or variable capacitors, other than for heating, printed circuits, electric cut-outs for protecting circuits, electrical control panels and parts
EU: Low Voltage and EMC directives
82. Carbon brushes
EU: Low Voltage directive
83. Electric insulators
EU: Low Voltage directive
84. Domestic water heaters and parts
EU: Low Voltage and EMC directives
US: International Association of Plumbing and Mechanical Officials
US: ENTELA
85. Parts and accessories for motor vehicles
US: Automotive Manufacturers Equipment Compliance Agency
86. Parts of motorcycles, including mopeds and bicycles with additional engines
US: Automotive Manufacturers Equipment Compliance Agency
87. Un-motorized bicycles and non-assembled parts
88. Spectacle lenses
EU : Medical Device Directive

89. Spectacles and parts
EU : Medical Device Directive
90. Tromostats
EU: Pressure Equipment Directive
US: American Society of Mechanical Engineers
US: International Association of Plumbing and Mechanical Officials
91. Manostats
EU: Pressure Equipment Directive
US: American Society of Mechanical Engineers
US: International Association of Plumbing and Mechanical Officials
92. All kinds of watches and parts
93. Illuminated signs and lighting fixtures, illuminated name plates and parts
EU: Low Voltage and EMC directives
US: ENTELA
94. Burning petroleum gas household lighting apparatus
EU: Appliances Burning Gaseous Fuels directive
US: International Association of Plumbing and Mechanical Officials
US: ENTELA
95. Tooth brushes
96. Ball point pens
US: Art and Creative Materials Institute
97. Pencils and crayons
EU: Toy Directive
US: Art and Creative Materials Institute
98. Lighters
99. Ball point pens, felt-tipped markers, refills therefore
EU: Toy Directive
US: Art and Creative Materials Institute
100. Black or colored pencil leads
EU: Toy Directive
US: Art and Creative Materials Institute
101. Vacuum flasks or vessels complete with cases and parts
EU: Pressure Equipment Directive
US: National Board of Boiler and Pressure Vessel Inspectors
US: American Society for Mechanical Engineers

III. The US certifications.

Information sources. The information on US product certifications in this file is based on the Directory of U.S. Private Sector Product Certification Programs (NIST Special Publication 903, 2001 Edition). This information was then updated through a search of the internet. This strategy is likely to have identified almost every certification program that was active in 2001 with national recognition. It would not identify any significant programs that have been developed since 2001.

Criteria for inclusion; the NIST report lists literally hundreds of organizations offering product certification services in the US market. The criteria used for identifying the relevant certifications have been based on the three Hanson memos.

The first criterion is that the certification must cover at least some of the products listed in Annex Eight. A degree of judgment is involved in making these decisions. The definitions of the products included in Annex Eight are generally far broader than the description of the products covered by a US certification. In many cases, it is difficult to determine whether the types of Annex Eight products that are actually imported in to Egypt are also covered by the US certification mark.

A certification mark is excluded from this list if the description of the products eligible for certification seems to cover only a very small fraction of the products covered in the relevant Annex Eight category. For example, Annex Eight includes “pumps and parts”. The American Bureau of Shipping can certify the safety of pumps used in marine applications. I am assuming that only a few pumps are likely to be imported into Egypt per year for marine purposes, the ABS is not included in the list of US certifications.

The second criterion states that the standards on which the conformity assessment and certifications are based must address product safety issues. This information is usually taken from the statement of purpose and range of activities undertaken by the certifying agency. This criterion eliminates certifications by organizations that are primarily concerned about product quality, performance or environmental impact. Although these issues may have safety implications, documenting safety is usually not a motive for the assessment. This criterion also eliminates several major test houses that provide certifications to a very wide range of standards and issues. However, the distinction between a conformity assessment organization that will certify to any standard and one that only tests against safety standards is somewhat arbitrary.

The results of this search strategy are probably weakest in the area of “risk areas considered”. The conclusions in this report as to the relevant risk areas addressed in the certification process are generally based on a review of the mission of the certifying agency and their scope of work. A complete analysis of the risk areas considered would require a review of the specific standards on which the certifications are based. These data are not readily available.

The safety certification requirement has been relaxed when the intrinsic risks presented by the Annex Eight would seem to be negligible. For example, we have included a certification service that validates the accuracy of blank computer disks and CD- roms.

The third criterion limits the list to certification marks that are provided by accredited conformity assessment bodies. The marks must also be accepted by a US government entity as proof of conformity to some government requirement. Again, the data in this report on accreditation and government recognition have been taken from the NIST report.

This is a preliminary report that is based on secondary sources. A more accurate and comprehensive analysis will have to be based on direct contacts with the certification agencies. This will be the only way to verify the range of products that are actually certified, the purpose of the standards on which the certifications are based and the reputation of the resulting certifications in the business community.

1. Certification agency (41)

The American Society of Mechanical Engineers

3 Park Avenue
New York, New York 100016

a. Products certified

Boilers and pressure vessels
Pressure relief devices
Nuclear components
Nuclear materials

b. Standards used; ASME codes

c. Risk areas considered: all relevant to product

d. Certification documentation: logo is attached

e. Government acceptances; in virtually every government agency and state

f. Annex Eight coverage;

- 35. Aerosol cans
- 36. Containers for packing butagas
- 59. Taps, cocks and valves for pipes, boiler shells, including pressure reducing valves and thermostatically controlled valves and gas valves and parts
- 90 Tromostats
- 91 Manostats

2. Certification agency (53)

The Art and Creative Materials Institute

1280 Main Street

2nd floor

Hanson, Massachusetts 02341

a. Products certified; art and craft related materials, particularly

Adhesives

Ceramics

Chalk

Charcoal

Clays and modeling compounds

Crayons

Drawing/lettering inks and mediums

Drawing and writing instruments

Gessos and painting grauods

Markers

Varnishes

Sealers and fixatives

Paints

Pastels

Printing inks and supplies

Sculpture materials and solvents

b. Risk areas considered; toxicology

c. Government acceptance; certifications recognized by the US Consumer Product Safety Commission

d. Certification documentation; the logo is on the next page

e. Annex Eight coverage

- 4. Varnishes and paints
- 5. Printing and writing inks
- 9. Glue
- 20. Paper (for printing, writing, packing, duplicating), boxes, bags, sacks and packs
- 96. Ball point pens
- 97. Pencils and crayons
- 99. Ball point pens, felt-tipped markers, refills therefore
- 100. Black or colored pencil leads

3. Certification agency: (65)

Automotive Manufacturers Equipment Compliance Agency
1101 15th Street, NW
Suite 607
Washington, D.C. 20005

a. Products certified: automotive products

b. Risk areas considered; conformity to specifications, safety, durability

c. Government acceptances: US General Services Administration, US national Highway Traffic Safety Administration, many state governments

d. Certification documentation: see logo on next page

e. Annex eight coverage

- 18. Pneumatic tires and tubes
- 27. Brake pads, friction materials for brakes, clutches and the like
- 52. Engines and separate parts thereof
- 61. Transmission shafts, bearing housings, gears and gearing, ball or roller screws, gear boxes and other speed changers, flywheels, pulleys, clutches, shaft couplings and parts thereof
- 77. Electric ignition or engine starting equipment, generators, and engine current cut- outs
- 85. Parts and accessories for motor vehicles
- 86. Parts of motorcycles, including mopeds and bicycles with engines

4. Certification agency (75)

Builders Hardware Manufacturers Association

355 Lexington Avenue

17th Floor

New York, New York 10017

a. Products certified

Door closers, closer controls and release devices
Locks, electromagnetic locks, delayed egress locks
Bored and pre-assembled locks and latches
Interconnected and auxiliary locks and latches
Exit devices
Door thresholds, gaskets and gasket systems

b. Standards used: BHMA test standards

c. Risk areas considered; all relevant to building closures

d.. Government acceptances; non listed

e. Certification documentation: logo is attached

f. Annex Eight coverage;

48. Padlocks, locks and parts thereof

5. Certification agency (95)

DL Laboratories

116 East 16th Street
New York, New York, 10003

- a. Products certified; coatings, sealants and waterproofing materials,
 - b. Risk areas considered: performance, application, resistance and durability
 - c, Government acceptance; certificates are recognized by:
 - US Department of Defense
 - US General Services Administration
 - Massachusetts Department of Health
 - d. Certification documentation; logo is on the next page
 - e. Annex eight coverage;
- : 3.Lithophone and other pigments and preparations based on zinc
 4. Varnishes and paints

6. Certification agency (109)

ENTE LA, Inc
3033 Madison Avenue S.E.
Grand Rapids, Michigan 45948

a. Products certified:

Commercial and household appliances
Industrial controls and controls
Electrical lawn and garden equipment
Entertainment electronics
Laboratory equipment
Lamps and lighting
Medical and electronic medical devices
Office, commercial and residential furnishings
Showcases
Tools

b. Standards used; Underwriters Laboratory, Canadian Standards Association, IEC safety standards

c. Risk areas considered; all relevant safety aspects

d. Government acceptances; not available

e. Certification documentation: see attached logo

f. Annex Eight coverage:

- 39. Household steam cooking pots
- 54. Air conditioners and parts thereof
- 55. Refrigerators and refrigerating equipment for domestic use as well as heat insulating containers and parts thereof
- 56. Fans and electric ventilators and parts
- 57. Instantaneous or storage non-electric water heaters and parts
- 63. Household washing machines and parts; household drying machines and parts
- 71. Domestic electric smoothing irons, electric heating plates, electric water immersion heaters, electro-thermic appliances for domestic use, driers and hair driers and parts
- 73. Switches, plugs, twin switch and plug fuses, lamp holders, starter base, multi-outlet units, circuit breakers and florescent lamp starters

- 74. Electric lamps
- 78. Portable electric lights designed to function with their own sources of energy
- 79. Microphones, loudspeakers, audio amplifiers and electric sound amplification sets
- 84. Domestic water heaters and parts
- 93. Illuminated signs and lighting fixtures, illuminated name plates and parts
- 94. Burning petroleum gas household lighting apparatus

7. Certification agency (113)

Gaynes Laboratories

9708 Industrial Drive
Bridgeview, Illinois 60455

a. Products certified:

Packaging and packaging materials
Fiberboard boxes
Plastic and metal drums and pails
Plastic and glass bottles and jars
Paper, plastic and fiber bags
Infectious substances shippers
Radioactive substances shippers
Pallet and bulk loading systems
Metal, plastic and fiberboard
Intermediate bulk containers

b. Risks assessed; mechanical, chemical integrity

c. Government acceptances: US Department of Transportation.

d. Certification documentation: agency report

e. Annex eight coverage;

20. Paper for writing, packaging, duplicating and industrial uses

8. Certification agency (123)

ICBO Evaluation Service
5360 Workman Road
Whittier, California 90601

a. Products certified

Admixtures and blocking
Bridging and/or bracing
Ceiling and soffit board
Cement, steel and wood
Drainage systems and ducts
Electrical outlets and conduits
Exit signs
Exterior coatings, insulations and finish systems
Fasteners for adhesives
Concrete and masonry anchors
Gypsum wallboard
Pneumatic or power driven steel studs and nails
Screws, sheer connectors, staples and nails
Steel gusset plates and tile fasteners
Wood, wood hangers and framing anchors
Fire detection alarm devices
Fireplaces and un-vented gas appliances
Fire protected openings and construction
Fire retardant treated wood
Flashing and flue liners
Gas logs and gas vents
Interior finish insulation
Plaster reinforcement
Roof coverings
Skylights and smoke vents
Suspended ceilings
Swimming pools and spas

b. Standards used in international and US building codes,

c. Risk areas; those that are generally associated with construction products

d. Government acceptances: approximately 3000 federal, state and local agencies that review products for building code conformity .

e. Certification documentation. Logo is attached

f. Annex Eight coverage

1. Marble, granite, monument building stone and their products
2. Cement
4. Varnishes and paints
14. Wall and floor coverings and floor Formica sheets

- 17. Fire hoses
- 19. Wood, wood for parquet flooring and prefabricated wooden facilities
- 25. Articles of cement
- 33. Flat rolled products of iron and steel, rods, bars, angles, shapes and sections; steel construction reinforcing sections, rods and bars

9. Certification agency (215)

ICC-ES
900 Montclair Road
Suite A
Birmingham, Alabama 35213
www.ICC-ES.org

ICC-ES is a non-profit construction product evaluation system that was created with the merger of the four leading building product evaluation services in 2003. It is sponsored by the International Code Council.

a. Products certified; potentially all construction products subject to a building code requirement.

b. Risk areas considered: varies with the product. In general, fire, electrical, mechanical, insulation, toxicity, durability.

c. Legal standing: products are reviewed for conformity with the model building codes which are developed by the parent organization, the International Code Council. The ICC-ES certifications of product conformity to building code requirements are accepted very widely by government agencies in the US.

There are no routine retesting or surveillance requirements. Retesting is mandated only when standards are changed.

d. Certification documentation; although there is a logo, the ICC-ES report on a particular product is the best documentation of conformity assessment. Copies of reports are available over the internet. The web site is www.icc-es.org

e. Annex Eight coverage

1. Marble, granite, monumental building stone and their products
2. Cement, concrete
13. Plastic household pipes, kitchenware and toilet articles
14. Wall and floor coverings and floor Formica sheets
19. Wood, wood for parquet flooring and prefabricated wooden facilities
25. Articles of cement
28. Ceramic pipes, conduits, guttering and fittings
32. Flat glass, glass mirrors for transportation use, insulating glass and safety glass
49. Mountings and fittings for furniture and doors

10. Certification agency (125)

Independent Textile Testing Service

P.O. Box 1848
Dalton, Georgia 30722

a. Products certified

Carpets
Upholster
Fabric
Leather

Plastics
sheet flooring

b. Risk areas considered; durability, flammability, toxicity,

Random testing is required

c. Government acceptances: US Department of Housing and Urban Development,
US Federal Home Administration

d. Certification documentation; report to manufacturer

e. Annex eight coverage

12. Phenolic molding compounds

14. Wall and floor coverings and floor Formica sheets

19. Wood, wood for parquet flooring and prefabricated wooden facilities

12. Phenolic molding compounds

21. Textiles, fabrics, carpets, apparels, blankets, towels, curtains, bed
linens and covers, not for medical purposes

11. Certification agency (129)

International Association of Plumbing and Mechanical Officials

20001 Walnut Drive'

Walnut, California 91789

a. Products certified

Appliances

Metal pipes and pipe fittings, non-metallic pipes and pipe fittings

Plastic pipes and fittings

Septic systems

Vacuum breakers

Valves and faucets

Water heaters

b. Standards used: IAPMO code, American Society of Sanitary Engineering and Engineers, Insulated Glass Council, ASME, ANSI

c. Risks considered: all associated with products

d. Government acceptances; US Department of Energy, US Federal Trade Commission, Massachusetts, Michigan, Texas, California

e. Certification documentation: logo is attached

f. Annex Eight coverage

- 34. Tubes, pipes and fittings of iron
- 38. Stoves, heaters, house cookers, and parts and grates thereof
- 39. Household steam cooking pots
- 54. Air conditioners and parts thereof
- 55. Refrigerators and refrigerating equipment for domestic use as well as heat insulating containers and parts thereof
- 56. Fans and electric ventilators and parts
- 57. Instantaneous or storage non-electric water heaters and parts
- 63. Household washing machines and parts; household drying machines and parts
- 71. Domestic electric smoothing irons, electric heating plates, electric water immersion heaters, electro-thermic appliances for domestic use, driers and hair driers and parts
- 74. Electric lamps
- 78. Portable electric lights designed to function with their own sources of energy
- 84. Domestic water heaters
- 94. Burning petroleum gas household lighting apparatus

11. Certification agency: (147)

MEA Corporation

P. O. Box 1330

Rosewell, Georgia 30077

a. Products certified: carpet and carpet cushion

b. Risk areas; durability, color stability, flammability

Retesting is required

c. Government acceptances; US Department of Housing and Urban Development, state of Virginia

d. Certification documentation: logo is on attached sheet

e. Annex Eight coverage;

- 21. Textiles, carpets, apparel, blankets and towels, curtains, bed liners

and covers

12. Certification agency (149)

Media Sciences

221 Boston Post Road East

Suite 470

Marlborough, Massachusetts 01752

a. Products certified

CD-Rom optical disks

CD-R optical disks

Flexible disk cartridges

Recorded flexible disk cartridges

Recorded diskettes

b. Standards used; relevant ISO standards

c. Risk areas considered: undetermined

d. Certification documentation: logo is attached

e. Government acceptances; not available

f. Annex Eight coverage:

75. Blank sound, picture and computer recording discs

13. Certification agency (157)

National Board of Boiler and Pressure Vessel Inspectors
1055 Crupper Avenue
Columbus, Ohio 43229

a. Products certified

Pressure relief valves
Power boilers, heating boilers, pressure vessels

b. Standards used; ASME Boiler and Pressure Vessel Code

c. Risk areas considered; those associated with ruptures and explosions

d. Government acceptances; US Department of Transportation, most US states

e. Certification documentation: logo is attached

f. Annex Eight coverage:

- 35. Aerosol cans
- 36. Containers for packing butagas
- 55. Refrigerators and refrigerating equipment for domestic use as well as heat insulating containers and parts thereof
- 59. Taps, cocks and valves for pipes, boiler shells, including pressure reducing valves and thermostatically controlled valves and gas valves

- and parts
- 90. Tromostats
- 91. Manostats
- 101. Vacuum flasks or vessels complete with cases and parts

14. Certification agency (175)

,

Omega Point Laboratories
16015 Shady Falls Road
Elmendorf, Texas 78112

Omega Point is now a part of: Intertek-Etl Semko

a. Products certified; building materials and products, in particular

- Concrete and masonry
- Metals, woods and plastics
- Thermal and moisture protection
- Doors and windows
- Finishes
- Furnishings
- Conveying systems

b. Risk areas considered; diverse, especially fire

c. Government acceptance; certificates are recognized by model building code associations, fifteen states, US General Services Administration, US Environmental Protection Agency, US Federal Communications Commission, US Department of Defense, US Federal Aviation Administration, US Coast Guard, US Department Commerce,

d. Certification documentation: logo is on next page

e. Annex eight coverage

1. Marble, granite, monument building stone and their products
2. Cement

- 4. Varnishes and paints
- 14. Wall and floor coverings and floor Formica sheets
- 15. Plastic sheets (acrylic)
- 19. Wood, wood for parquet flooring and prefabricated wooden facilities
- 21. Textiles, fabrics, carpets, apparels, blankets, towels, curtains, bed linens and covers, not for medical purposes
- 25. Articles of cement
- 32. Flat glass, glass mirrors for transportation means, insulating glass and safety glass
- 48. Padlocks, locks and parts thereof
- 49. Mountings and fittings for furniture and doors

15. Certification agency (183)

PFS Corporation
 2402 Daniels Street
 Madison, Wisconsin 53704

a. Products certified

- Modular structures
- Building components
- Structural insulated panels
- Engineered wood products
- Permanent wood foundations
- Fire tested products
- Treated wood
- Windows and doors
- Hardwood plywood panels
- Composite assemblies
- Trusses
- Adhesives
- Structural use panels

b. Risk areas considered; structural integrity, fire safety, toxicity, durability, vapor barrier properties

Random testing is required

c. Government acceptances; US Department of Housing and Urban Development, US Environmental Protection Agency, US Department of Defense, most states

d. Certification documentation: logo is on attached sheet

e. Annex Eight coverage

- 9. Glue
- 19. Wood for prefabricated floors

16. Certification agency: (207)

SGS U.S. Testing Company

291 Fairfield Avenue
Fairfield, New Jersey 07004

a. Products certified

Whirlpools, bathtubs, showers
Recreational vehicles
Arc welding machines
Audio equipment
Electric heaters
Commercial electric dishwashers
Power supplies
Battery chargers
Gas detectors
Carbon monoxide detectors
Building materials
Roofs and overheads
Insulation
Manufactured housing
Personal protection equipment
Drinking water systems
Flooring materials

b. Risk areas considered; covers general product quality and associated risk areas.
Risk areas considered depends on product being tested.

c. Government acceptances; US Occupational Health and Safety Administration,
four US states

d. Certification documentation

e. Annex eight coverage

1. Marble, granite, monumental building stone
2. Cement
14. Wall and floor coverings and floor Formica sheets
25. Articles of cement
28. Ceramic pipes, conduits, guttering and fittings

51. Arc welding electrodes

17 Certification agency (219)

Southwest Research Institute
6220 Culebra Road
San Antonio, Texas 78228,

- a. Products certified;
 - Above ground storage tanks
 - Exterior and interior wall panels
 - Fire-rated doors
 - Fired-rated walls
 - Insulated composite panels
 - Interior acoustical panels
 - Fire extinguishing systems
 - Penetration sealants

- b. Risk areas considered; diverse, especially fire

- c. Government acceptance; US Occupational Health and Safety Administration State fire marshal offices

- d. Certification documentation: logo on next page

- e. Annex eight coverage
 - 4. Varnishes and paints
 - 14. Wall and floor coverings and floor Formica sheets

18. Certification agency (247)

Underwriters Laboratory

333 Pflingsten Road
Northbrook, Illinois 60026

a. Products certified

Building materials
Fire protection equipment
Electrical appliances
Electrical construction materials
Marine equipment
Gas and oil equipment
Automobile burglary protection equipment
Hazardous location equipment
Building assemblies for fire resistance
Safety related software
Water treatment chemicals
Water system components

b. Risk areas considered; hazards affecting life and property, especially fire and electrical risks

c. Government acceptances; virtually all government levels

d. Certification documentation: logo on next page

e. Annex eight coverage

1. Marble, granite, monument building stone and their products
2. Cement
- 3..Lithophone and other pigments and preparations based on zinc
4. Varnishes and paints
11. Preparations and charges for fire extinguishers; charged fire extinguishing grenades
13. Plastic tubes, pipes, hoses and fittings (for example; joints, elbows and flanges)
14. Wall and floor coverings and floor Formica sheets
17. Fire hoses
28. Ceramic pipes, conduits, guttering and fititngs
41. Copper cables and wires
50. Flexible pipes and tubes
58. Fire extinguishers and parts

19. Certification agency (257)

Window and Door Manufacturers Association

1400 East Toughy Avenue
Suite 1470
Des Plaines, Illinois 60018

- a. Products certified: windows, doors and skylights
- b. Risk areas considered; general
- c. Government acceptances; US Department of Housing and Urban Development
- d. Certification documentation: logo (not available)
- e. Annex Eight coverage

32. Flat glass, glass mirrors for transportation means, insulating glass and safety glass

48. Padlocks, locks and parts thereof

49. Mountings and fittings for furniture and doors

IV. The CE Mark certifications

The information in this report was taken from the texts of the relevant new approach directives. Only the new approach directives that are primarily concerned with product safety have been included in this analysis. The Packaging and Packaging Waste Directive has been omitted because it is primarily concerned with

environmental issues. The Hot Water Boiler directive has been omitted because it is primarily concerned with equipment efficiency.

In my original memos, I suggested that GOEIC should accept certifications meet three criteria. They must address safety issues, they must be developed by accredited third party organizations and the certifications must be accepted by a government for regulatory purposes. The CE mark certificates of conformity (or certificates of incorporation for components) issued for the directives listed below meet the first and third criteria. However, many of these certificates will be based on the manufacturers' self-assessments (conformity assessment Module A). However, these criteria set forth in the governing new approach directives are generally too complex for convenient use by an outside organization. We therefore recommend that GOEIC accept all CE certifications, including those that are based on the manufacturers self-certifications.

The three "horizontal" directives, Machinery, Low Voltage and EMC, apply to specific aspects of many types of products. Usually, two or all of the directives apply to a particular product. I have therefore listed the Annex Eight coverage for all three directives together and then for the Low Voltage and EMC directives.

Each directive lists the "essential requirements" that products must meet. Some of these requirements specify design features that must be incorporated into the product. Other requirements list risk aspects that must be addressed in the design and manufacture process. The list of risk areas that must be addressed under each directive are based on analyses of the essential requirements.

The three European standardization agencies, CEN, CENELEC and ETSI, have developed a series of "harmonized standards" that can be used to implement the essential requirements. Their use is encouraged but not required. We are assuming that any standard that is acceptable to the European surveillance authorities to implement the essential requirements would be acceptable for GOEIC.

The authors of the CE marking system have largely standardized the alternatives available for conformity assessments under the new approach directives into a series of eight modules. The module system covers both the design and manufacture of products covered by the CE marking requirements.

Most of the modules require the services of a "notified body". A notified body is an entity, usually in the private sector, that has been authorized by an EU member

state government to certify the conformity of a product to the requirements of specified provisions of the CE marking system.

The modules are:

Module A: the manufacturer self-declares that the states that the design and manufacture of the product conforms to the CE mark requirements.

Module B: a notified body reviews the design to make sure that it conforms to the CE mark requirements. This is terms an “EU type examination”.
Module B will be combined with some other module that covers product manufacture

Module C: The manufacturer self-declares that the manufacturing process has the necessary controls in place to assure product safety,

Module D: A notified body reviews and approves the manufacturer’s quality assurance system. The review is based on the elements of ISO 9002.

Module E: A notified body reviews and approves the manufacturer’s quality assurance system. The review is based on the elements of ISO 9003.

Module F: A notified body inspects products to and certifies that they conform to the provisions of the module B EC type examination.

Module G: A notified body reviews the design phase and tests every product to assure conformity to CE mark requirements.

Module H: A notified body reviews the design phase and tests every product to assure conformity to CE mark requirements and reviews the manufacturer’s design and manufacturing systems in accordance with the requirements of ISO 9001.

There are at least two variations on each module so there are, in total, around twenty four different sets of conformity assessment requirements. However, most of the variations from the eight modules are relatively minor.

We assume that importers relying on CE mark certifications in lieu of GOEIC inspections will provide the standard CE mark documentation to verify compliance. This documentation is standardized across all directives. It consists of the declaration of conformity and the technical file.

C. The directives

a. 90/896/EEC Appliances Burning Gaseous Fuels Directive

1. Coverage; all appliances for home use that burn gaseous fuel are used for cooking, heating, hot water production, refrigeration, lighting or washing that normally involve water temperatures under 105 c, and associated safety devices.

2. Risk areas; fire, explosion, hot surfaces, flue gas release, electrical and shock hazards.

3. Conformity assessment: gas fired appliances manufactured in series production and their fittings must be subject to module B EC type examination and either modules C, D or E (manufacturers' choice). ed boilers

4. Annex Eight coverage

38. Stoves, heaters, house cookers, and parts and grates thereof

39. Household steam cooking pots

57. Non-electric water heaters and parts

94. Gas fired household lighting apparatus

b. 89/106/EEC: Construction Products Directive

1. Coverage; all products that are intended to be incorporated permanently into buildings, including industrial facilities.

2. Risk areas; mechanical resistance and stability, fire safety, hygiene, health and the environment, safety in use, sound nuisance abatement, energy savings and heat retention.

3. Conformity assessment: varies from self-assessment to third party review, depending on the intrinsic risk of the product and whether it was manufactured in accordance with relevant standards.

4. Annex eight coverage

1. Marble, granite, monumental building stone and their products
2. Cement
4. Varnishes and paints
13. Plastic household pipes, kitchenware and toilet articles
14. Wall and floor coverings and floor Formica sheets
19. Wood for prefabricated floors
28. Ceramic pipes, conduits, guttering and fittings
34. Tubes, pipes and fittings of iron
40. Cast iron or stainless steel sanitary ware
48. Padlocks, locks and parts thereof
49. Mountings and fittings for furniture and doors

c. 98/37/EEC: Machinery Safety Directive

1. Coverage: all “machines”, which are defined as an assembly of linked parts, one of which moves, with an external power source, for a common purpose, typically the handling or processing of materials.

2. Risk areas; all non-electrical risks that could be encountered during the process of installation, maintenance, operation and disposal of a machine.

3. Conformity assessment; mostly self-assessment. A notified body type examination is required for some materials cutting or forming machinery.

4. Annex Eight coverage. See below.

d. 73/23/EEC Low Voltage Directive

1. Coverage: all products with line voltages between 50 and 1,000 volts DC and 75 to 1,500 volts AC.

2. Risk areas; electrical shock and injuries caused by electricity c

3. Conformity assessment: self-certification

4. Annex Eight coverage: see below

e. 89/336/EEC: Electromagnetic Compatibility Directive

1. Coverage: all products capable of creating or being affected by electromagnetic interference.
2. Risk areas; consequences of electromagnetic interference
3. Conformity assessment; self-declaration if built in accordance with relevant standards, otherwise must have a “competent body “,(notified body), type assessment.

d.1. Annex Eight coverage for the Machinery Safety Directive, the Low Voltage Directive and the Electromagnetic Compatibility Directive

39. Household steam cooking pots
53. Pumps and parts thereof
54. Air conditioners and parts thereof
55. Refrigerators and refrigerating equipment for domestic use
56. Fans and electric ventilators and parts
61. Transmission shafts, bearing housings, gears and gearing, gear boxes and other speed changing devices, flywheels, pulleys, shaft couplings and parts thereof
62. Filtering or purifying machinery for liquids or gasses and parts
63. Household washing machines and parts
63. Household drying machines and parts
65. Electric motors, generators and transformers
69. Electro-mechanical domestic appliances with electric motors
71. Domestic electric irons, water immersion heaters, driers and hair driers and parts
76. Electric shavers, hair clippers, hair removing appliances

d.2. Annex Eight coverage for the Low Voltage Directive and the Electromagnetic Compatibility Directive

66. Ballasts
67. Electric primary cells
68. Batteries
70. Sparking plugs
72. Radio and TV receivers, radio and TV cassette players and antenna
73. Switches, plugs, fuses, lamp holders, circuit breakers, florescent lamp starters
74. Electric lamps
77. Electric ignition or engine starting equipment, generators, and engine cut- outs
78. Portable electric lights with their own sources of energy
79. Microphones, loudspeakers, audio amplifiers and electric sound amplification sets
80. Electric sound or visual signaling apparatus and burglar or fire alarms
81. Fixed or variable capacitors, other than for heating, printed circuits,

- electric cut-outs for protecting circuits, electrical control panels and parts
- 82. Carbon brushes
- 83. Electric insulators
- 84. Domestic water heaters
- 93. Illuminated signs and lighting fixtures, illuminated name plates and parts

f. 88/348/EEC Toy Safety Directive

1. Coverage; all products intended for use in play for children below the age of fourteen.
2. Risk areas; all health hazards associated with the toy, taking into account the normal patterns of children’s play. This includes hazards arising from; mechanical properties, flammability risks, chemical risks, electrical risks, hygiene risks and radioactive risks. :
3. Conformity assessment; if the toys are not designed and manufactured in accordance with the relevant harmonized standards, then the manufacturer must retain a notified body for a Module B EC type examination review.

d. Annex Eight coverage:

- 20. Paper for writing, packaging and industrial uses
- 97. Pencils and crayons
- 99. Ball point pens, felt-tipped markers, refills therefore
- 100. Black or colored pencil leads

g. 89/686/EEC Personal Protective Equipment Directive

1. Coverage; any device or appliance designed to be worn or held by an individual as protection against one or more health and safety hazards and any devices which combine with other devices to provide personal protective equipment functions.
2. Risk areas: equipment must provide adequate protection against all relevant risks. The device may have classes of risk abatement. Device must also not present any intrinsic risk to the user and must minimize impediments to the user.
3. Conformity assessment: personal protective equipment or a “simple design” may be self certified by the manufacturer under module A. All other equipment must under go a module B EC type examination. Personal protective equipment that is a “complex design” must also undergo either Module C or module D by a notified body.
4. Annex Eight coverage

22. Footwear and components

h. 97/23/EC Pressure Equipment Directive

1. Coverage; pressure vessels, piping, measuring instruments, safety devices intended to hold pressures greater than .5 bar.
2. Risk areas; consequences of pressure induced fractures
3. Conformity assessment; varies from self-assessment to complete notified body review, depending on the volume, pressure and working fluid of the system.
4. Annex Eight coverage;
 11. Preparations and charges for fire extinguishers
 17. Fire hoses
 35. Aerosol cans
 36. Containers for packing butagas
 50. Flexible pipes and tubes
 58. Fire extinguishers and parts
 59. Taps, cocks and valves for pipes, boiler shells, including pressure reducing valves and thermostatically controlled valves and gas valves and parts
 59. Hydraulic jacks for vehicles
 62. Filtering or purifying machinery for liquids or gasses and parts
 90. Tromstats
 91. Manostats
 101. Vacuum flasks or vessels with containers and parts

i. 95/16/EC Lift Directive

1. Coverage: appliances moving people and/or equipment to specified levels than move on rigid tracks at an angle greater than 15 degrees from horizontal
2. Risk areas: doors must be safe for entry and exit, car must be safe for users, overall system must be safe in event of failures, lift system must be safe for maintenance personnel. Note: most of the essential requirements are design features.
3. Conformity assessment: safety components of lifts must either go through a module H full quality assurance or A module B type examination together with either Module C or middle E. The design of lift components that do not have a safety function must go through a Module B EC type examination or equivalent or and undergo a notified body review of installations under modules D or E.
4. Annex eight coverage

64. Elevators and parts

j. 93/42/EC Medical Device Directive

1. Coverage; any instrument, apparatus, material or other article intended for use on human beings for the

- Diagnosis, prevention, treatment or alleviation of disease;
- Diagnosis, monitoring, treatment, alleviation or compensation for an injury or handicap;
- Investigation, replacement or modification of the anatomy of a physiological process, and the
- Control conception.

2. Risk areas;

3. Conformity assessment: directive includes rules for classifying medical devices into four risk categories; 1, 2a, 2b and 3. Conformity assessment rules vary from manufacturer's self-declaration under Module A for category 1 devices to a full module H review by a notified body for a category three medical device.

4. Annex eight coverage

88. Spectacle lenses

89. Spectacles and parts

V. European regulation of transportation equipment. Several categories of products included in the Annex Eight list could be covered by the European transportation equipment regulations. These include;

18	Pneumatic tires
27	Brake pads
52	Engines and parts
59	Hydraulic jacks
61	Transmissions and shafts
70	Sparking plugs
77	Electric ignition or engine starting equipment
86	Parts for motorcycles

In the EU, the regulation of transportation equipment is coordinated through the UNECE, the United Nations Economic Commission for Europe. The key document is the 1958 Agreement Concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts. This Agreement is becoming the basis for the world wide coordination of technical regulations for transportation equipment. Signatories to the Agreement include many non-European countries, including the United States.

The harmonization of transportation regulations under the 1958 Agreement is managed by the UNECE Inland Transport Committee. That portion of the work that concerns technical regulations for road vehicles and components is under the direction of a subcommittee, the World Forum for the Harmonization of Vehicle Regulations.

The work on the harmonization of technical regulations for transport equipment carried out through UNECE results in the drafting of “regulations”, a series of mini-conventions that the member organizations have to ratify. Currently, UNECE has issued 120 regulations and nine more proposals are under discussion. Several EU countries have ratified at least one of the regulations with reservations. As a result, there are still a few gaps in the development of a truly uniform European system of technical regulations for vehicles.