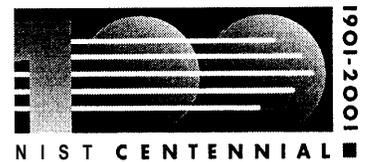


NISTIR 6774

**Workshop On Fire
Testing Measurement Needs:
Proceedings**

William Grosshandler
(Editor)



NIST

National Institute of Standards and Technology
Technology Administration, U.S. Department of Commerce

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August 2001



U.S. Department of Commerce
Donald Evans, Secretary

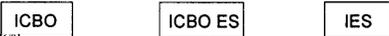
National Institute of Standards and Technology
Dr. Karen H. Brown, Acting Director

NIST Workshop on Fire Testing Measurement Needs

June 18,2001



International Conference of Building Officials



CPR 400CPR 6/01 1

Some Facts About ICBO

- Founded in 1922 in Long Beach, California
- Owned and operated by approximately 3,000 Government Agencies that enforce building laws.
- a non-profit, public-benefit corporation incorporated in California
- full service membership organization
- code development, education, certification, and plan review services

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The 2000 ICC Codes

- International Building Code
- International Fire Code
- International Residential Code



CPR 400CPR 6/01

The 2000 ICC Codes

- International Plumbing Code
- International Private Sewage Disposal Code
- International Mechanical Code
- International Property Maintenance Code
- International Fuel Gas Code
- International Zoning Code
- International Energy Conservation Code



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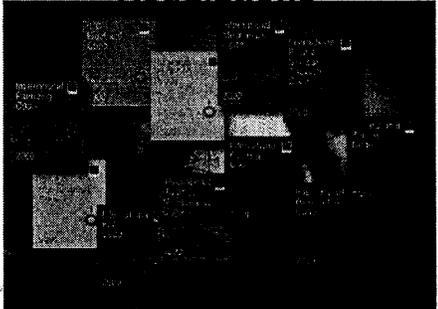
The ICC Codes

- International Existing Building Code, Draft
- IBC Performance Code Draft
- IFC Performance Code Draft

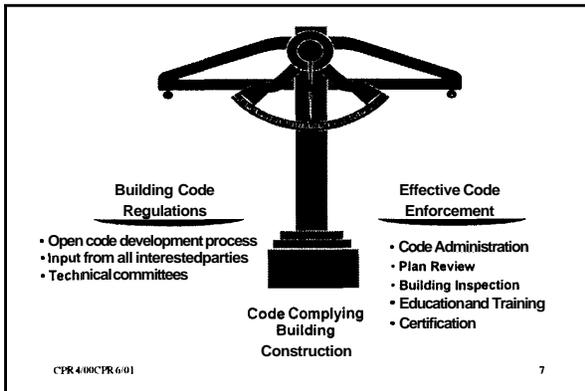


CPR 400CPR 6/01

Develop Building Code Regulations



CPR 4 6



ICBO ES

- Wholly owned by the International Conference of Building Officials (ICBO)
- ICBO owned and controlled by approximately 3,000 building code enforcement agencies at the city, county and state levels
- Product evaluation program since 1931

Purpose of ICBO ES

Provide findings to governmental members with regard to:

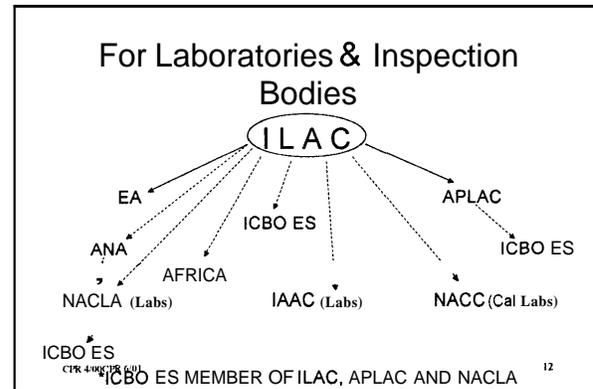
- Alternate materials, products and systems
- Compliance of materials, products and systems with ICBO and ICC codes
- Competence of testing, quality control and conformity assessment agencies
- Competence of Fabricators

ICBO ES Laboratory Accreditation Program

- Requires laboratory compliance with ISO/IEC Guide 25 (EN 45001) (New Standard ISO/IEC 17025)
- ICBO ES accreditation system complies with ISO/IEC Guide 58 (EN 45003) (Proposed new Standard 17011)
- On-site laboratory assessments
 - Initial assessment for accreditation
 - Biennial surveillance assessments
- Periodic Proficiency Testing

Table 1 - The Development of Laboratory Accreditation

ACCREDITATION SCHEME	COUNTRY	DATE	ACCREDITATION SCHEME	COUNTRY	DATE
War-time test-house standards	Australia	1943	AZLA	USA	1978
			RNE	France	1979
NATA	Australia	1946	CSCP (SCC)	Canada	1980
TELARC	New Zealand	1973	NAMAS	UK	1981
STP	Denmark	1973	HOKLAS	Hong Kong	1985
ICBO	USA	1975	EA	European Cooperation	1987
NVLAP	USA	1979	APLAC	Asia Pacific Cooperation	1992
ILAC	International Conference	1977	NACLA	USA	1996



ICBO Evaluation Service, Inc.
 5360 NORMAN MILL ROAD • WHITTIER, CALIFORNIA 90601-2269
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EVALUATION REPORT
 Design of Steel Decking for Joists
 BR-4714
 Revised February 1, 2000

Filing Category: DESIGN—Wood (204)

DESIGN OF STEEL DECKING FOR JOISTS AND THE "SNAP SHEET" CONCRETE PROGRAM FOR DETACHED DESIGN STRESSES
 SUBJECT: DESIGN OF STEEL DECKING FOR JOISTS AND THE "SNAP SHEET" CONCRETE PROGRAM FOR DETACHED DESIGN STRESSES

1.8 SUBJECT
 The GAP 2000 computer program for designing steel-decked joist design stresses is based on ASTM D 3757, and complies with the 1987 Building Building Code® and the 2000 International Building Code® for allowable stress design. The design stresses are based on the 2000 International Building Code® and the 2000 International Building Code®.

1.9 SUBJECT
 The GAP 2000 computer program for designing steel-decked joist design stresses is based on ASTM D 3757, and complies with the 1987 Building Building Code® and the 2000 International Building Code® for allowable stress design. The design stresses are based on the 2000 International Building Code® and the 2000 International Building Code®.

2.0 DESCRIPTION
 The GAP 2000 computer program for designing steel-decked joist design stresses is based on ASTM D 3757, and complies with the 1987 Building Building Code® and the 2000 International Building Code® for allowable stress design. The design stresses are based on the 2000 International Building Code® and the 2000 International Building Code®.

2.1 General
 The GAP 2000 computer program for designing steel-decked joist design stresses is based on ASTM D 3757, and complies with the 1987 Building Building Code® and the 2000 International Building Code® for allowable stress design. The design stresses are based on the 2000 International Building Code® and the 2000 International Building Code®.

2.2 Methodology
 The GAP 2000 computer program for designing steel-decked joist design stresses is based on ASTM D 3757, and complies with the 1987 Building Building Code® and the 2000 International Building Code® for allowable stress design. The design stresses are based on the 2000 International Building Code® and the 2000 International Building Code®.

2.3 Materials
 The GAP 2000 computer program for designing steel-decked joist design stresses is based on ASTM D 3757, and complies with the 1987 Building Building Code® and the 2000 International Building Code® for allowable stress design. The design stresses are based on the 2000 International Building Code® and the 2000 International Building Code®.

2.4 Installation
 The GAP 2000 computer program for designing steel-decked joist design stresses is based on ASTM D 3757, and complies with the 1987 Building Building Code® and the 2000 International Building Code® for allowable stress design. The design stresses are based on the 2000 International Building Code® and the 2000 International Building Code®.

2.5 Maintenance
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2.6 End Notes
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EVALUATION REPORT
 Design of Steel Decking for Joists
 BR-4389
 Revised March 1, 2000

Filing Category: FASTENERS—Concrete and Masonry Anchors (304)

HYBRID ADHESIVE ANCHOR SYSTEM
 SUBJECT: DESIGN OF STEEL DECKING FOR JOISTS AND THE "SNAP SHEET" CONCRETE PROGRAM FOR DETACHED DESIGN STRESSES

1.8 SUBJECT
 The GAP 2000 computer program for designing steel-decked joist design stresses is based on ASTM D 3757, and complies with the 1987 Building Building Code® and the 2000 International Building Code® for allowable stress design. The design stresses are based on the 2000 International Building Code® and the 2000 International Building Code®.

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