1-25-05

U.S. Consumer Product Safety Commission
LOG OF MEETING

Subject: Window Safety Task Force

Date of Meeting:	**6 January 2005 (10:00 a.m. CST)**
Log Entry Source:	**Tim Smith**
Date of Log Entry:	**6 January 2005**
Location:	**Web-cast from Itasca, IL**
CPSC Attendees:	**Tim Smith (ESHF)** **Sue Kyle (EXPE)**
Non-CPSC Attendees:	**(see attached list of participants from National Safety Counsel)**

Summary Of Meeting:

The Window Safety Task Force, sponsored by the National Safety Council, has launched an ad hoc committee to address window safety issues related to escape (egress), rescue (ingress), and accidental falls. This kick-off meeting of the committee/group, originally scheduled to take place at the National Safety Council headquarters in Itasca, IL, was changed to a Web-cast (i.e., over the Internet) due to poor weather in the Chicago area.

Andrea Nordaune, of Andersen Corporation, presented a PowerPoint slideshow (16 slides total); copies of the slides are attached to this meeting log (printed on eight pages with two slides per page). First, Ms. Nordaune described the intended goal of the committee: To investigate and analyze issues that affect fire escape and rescue, and window fall prevention, and to develop recommendations regarding the best preventive measures to address life-safety concerns related to fire and window safety. The proposed scope of this investigation, and the history of related window-safety activities were also summarized, and appear in the attached slideshow.

Ms. Nordaune described the findings of research that was completed on updated data from the National Center for Health Statistics, NEISS (CPSC), and the National Fire Protection Association. According to the NSC, the data for 1990 to 2000 show that fall-related injuries and deaths for the most vulnerable age group (1 to 4 years of age) have declined by about 50%. Fire-related injuries and deaths for this same age group are reported to show a similar decline.

Current code requirements for emergency escape and rescue were summarized, and appear in the attached slideshow. Recently, a code was approved requiring a minimum window sill height of 24 inches above finished floors, with certain exceptions. It is believed that this will reduce the number of child falls from windows.

Ms. Nordaune ended by proposing that the committee do the following:

- Study window dimensions (e.g., height and width) related to egress and ingress. Are the current requirements adequate, and if not, what minimum dimensions or opening size should be required?
- Study the impact of window sill height on both child falls from windows and egress/ingress in the event of a fire.

- Analyze the most recent death and injury data, collected by the National Safety Council in 2004, related to fire and window falls.
- Evaluate existing models, such as the Boston Fall Prevention Program, and educational programs to determine their effectiveness.

The meeting closed with the committee members agreeing to think about what was discussed during the meeting until the committee could meet again in person. The committee agreed on a tentative date of Thursday, February 3rd of this year for the next meeting, to be held at the National Safety Council headquarters in Itasca, IL.

(DRAFT – 1/7/2005)

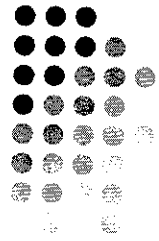
Window Safety Task Force Ad Hoc Study Committee
List of Web Cast Participants on January 6, 2005

	NAME:	ORGANIZATION:
1.	Tim Smith	Consumer Product Safety Commission
2.	Sue Kyle	Consumer Product Safety Commission
3.	Jim McMullen	The McMullen Company
4.	Erin Christiansen	Boston Public Health Commission
5.	Lisa Braxton	National Fire Protection Association
6.	Michael Fischer	Window and Door Manufacturers Association
7.	Janice Charletta	American Architectural Manufacturer's Association
8.	Angela Dickson	American Architectural Manufacturer's Association
9.	John Woestman	Pella Corporation
10.	Jeff Inks	National Association of Home Builders
11.	Jim Krahn	Marvin Windows
12.	Jeff Sawyers	Homeshield (AMSCO)
13.	Kathleen Almand	The Fire Protection Research Foundation
14.	Donald LeBrun	Indiana Building Codes
15.	Kara McGee	University of North Carolina Research
16.	Chief Gary Fisher	Uniform Fire Code Association/Vista Fire Department
17.	Andrea Nordaune	Andersen Corporation
18.	Kathy Coen	Andersen Corporation
19.	Mark Mikkelson	Andersen Corporation
20.	Steve Johnson	Andersen Corporation
21.	Stacy Einck	Andersen Corporation
22.	Amy Peisker	National Safety Council
23.	Joel Riemer	National Safety Council
24.	Marlin Pando	Building Manufacturers Hardware Association

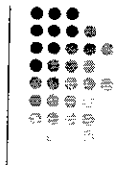
Window Safety Task Force Ad Hoc Study Committee

National Safety Council

January 6, 2005

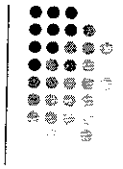


Overview



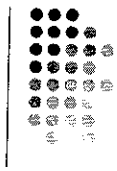
- Goal
- Scope
- History of Window Safety Activities
- Data
- Code Requirements for Emergency Escape & Rescue
- Minimum sill height code language
- Review Goal
- Review Scope
- Proposal
- Next steps

Goal



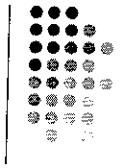
- To investigate and analyze the issues affecting fire escape and rescue and window fall prevention and to develop recommendations regarding best preventive measures to address and not compromise life safety concerns related to fire and window safety.

Scope



- Fall injuries and deaths
- Fire entrapments
- Fire injuries and deaths
- Egress sizing
- Sill height
- Window fall prevention devices
- Educational efforts
- Audience: children age 10 and under

History of Window Safety Activities



1972

- NYC Fall Prevention Program
  - Window Guards
  - Community Outreach & Education
  - Reporting

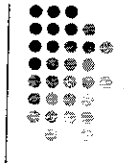
1977

- BOSTI Study
  - Sponsored by CPSC
  - Performance Design for Safer Windows

1980

- CPSC
  - Protect Your Child Brochure

History of Window Safety Activities



1985

- SMA
  - Kids Can't Fly Conference

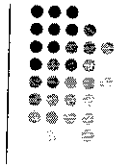
1987

- Home Falls Council and Brochure

1992

- Insect Screen Warning Labels
- ICBO
- Building Code proposal for minimum sill height

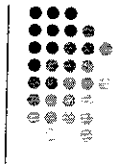
History of Window Safety Activities



1992 con't

- **Window Safety Study Committee formed**
  - Studied two issues
    1) Potential for falls from windows
    2) Danger of entrapment if windows cannot be used for emergency escape and rescue
- **Participants**
  1. NAHB
  2. WDMA
  3. ICBO building code official
  4. Fire safety consultant
  5. Andersen
- **Result**
  - Report-entitled "Window Safety: Data and Patterns Related to Entrapments and Accidental Falls from Windows"
- **Findings**
  1. Among children, most vulnerable age group for injury or death from fires and falls is group 1-4 years of age
  2. Incidence of injuries and deaths related to fire is much higher than incidence of injuries and deaths associated with window falls

History of Window Safety Activities



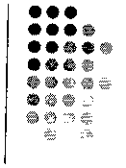
1993

- NFPA – Technical Advisory Committee for Learn Not To Burn Foundation
  - Task group formed to study use of illegal bars and gates on windows
- Boston Fall Prevention Program
  - Window guards (releasable where windows required for escape and rescue)
  - Education

1994

- CPSC – Window Fall Round Table
  - ASTM development of performance standard for window guards
    - F2006-00 Standard Safety Specification for Window Fall Prevention Devices for Non-Emergency Escape (Egress) and Rescue (Ingress) Windows
    - F2090-01a "Specification for Window Fall Prevention Devices with Emergency Escape (Egress) Release Mechanisms"
  - Industry Education Program through National Safety Council

History of Window Safety Activities



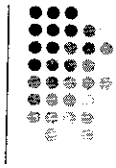
1995 to present

- National Safety Council (industry education task force – Window Safety Task Force)
  - Objective: bring education and awareness of window safety to parents and caregivers of young children
  - "Keeping the Promise" brochure
  - Window Safety Tips
  - Window Safety Checklist
  - News releases
  - Website
  - Articles and presentations
  - National Window Safety Week (last week in April each year)

1997

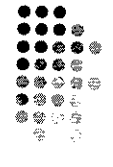
- NFPA Risk Watch

Updated Data



- 1990-2000: Fall injuries and deaths for most vulnerable age group (1-4) declined by approximately 50%
- 1990-2000: Fire injuries and deaths for most vulnerable age group (1-4) declined by approximately 50%

Code Requirements for Emergency Escape & Rescue



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SECTION 1025
EMERGENCY ESCAPE AND RESCUE

1025.1 General. In addition to the means of egress required by this chapter, provisions shall be made for emergency escape and rescue in Group R as applicable in Section 101.2 and Group 1-1 occupancies. Basements and sleeping rooms below the fourth story above grade plane shall have at least one exterior emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Such opening shall open directly into a public street, public alley, yard or court.

Exceptions: ...

1025.2 Minimum size. Emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet (0.53 m²).

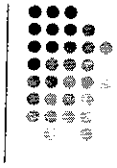
Exception: The minimum net clear opening for emergency escape and rescue grade-floor openings shall be 5 square feet (0.46 m²).

1025.2.1 Minimum dimensions. The minimum net clear opening height dimension shall be 24 inches (610 mm). The minimum net clear opening width dimension shall be 20 inches (508 mm). The net clear opening dimensions shall be the result of normal operation of the opening.

1025.3 Maximum height from floor. Emergency escape and rescue openings shall have the bottom of the clear opening not greater than 44 inches (1118 mm) measured from the floor.

1025.4 Operational constraints. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates or similar devices are permitted to be placed over emergency escape and rescue openings provided the minimum net clear opening size complies with Section 1025.2 and such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening. Where such bars, grilles, grates or similar devices are installed in existing building, smoke alarms shall be installed in accordance with Section 907.2.10 regardless of the valuation of the alteration.

Code Requirements for Emergency Escape & Rescue



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SECTION R310
EMERGENCY ESCAPE AND RESCUE OPENINGS

R310.1 Emergency escape and rescue required. Basements with habitable space and every sleeping room shall have at least one openable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Where emergency escape and rescue openings are provided they shall have a sill height of not more than 44 inches (1118 mm) above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section 310.3. The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside. Emergency escape and rescue openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2.

R310.1.1 Minimum opening area. All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet (0.530 m²)

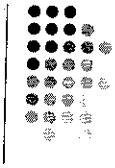
Exception: Grade floor openings shall have a minimum net clear opening of 5 square feet (0.0465 m²).

R310.1.2 Minimum opening height. The minimum net clear opening height shall be 24 inches (610 mm).

R310.1.3 Minimum opening width. The minimum net clear opening width shall be 20 inches (508 mm).

R310.1.4 Operational constraints. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.

Code Requirements for Emergency Escape & Rescue

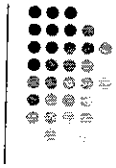


NFPA 5000

22.2.2.4.3* The secondary means of escape shall be an outside window or door operable from the inside without the use of tools, keys, or special effort and shall provide a clear opening of not less than 5.7 ft² (0.53 m²).

(A) The width of the opening described in 22.2.2.4.3 shall be not less than 20 in. (510 mm), the height shall be not less than 24 in. (610 mm), and the bottom of the opening shall be not more than 44 in. (1120 mm) above the floor.

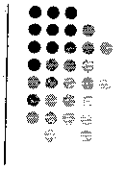
Minimum Sill Height Code Language



1405.12.2 Window sills. In Occupancy Group R, one- and two- family and multiple single-family dwellings, where the rough opening for the sill portion of an operable window is located more than 72 inches above the grade or other surface below, the rough opening for the sill, or lowest part of the operable portion of the window, shall be a minimum of 24 inches above the finished floor of the room in which the window is located.

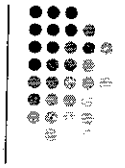
Exception: Windows whose openings will not allow a 4 inch diameter sphere to pass through the opening when the opening is in its largest opened position.

Proposal



- Study egress sizing
- Study impact of sill height
- Analyze data collected
- Evaluate existing models
  - Boston
- Evaluate current education efforts

Next steps



- Form working groups
  - Deliverables
- Timeline
- Next meeting date