Improving Building Design for Persons with Low Vision

National Institute of Building Sciences

September 29th – 30th, 2010
Low Vision Workshop

Existing Standards and Design Guidance

Jeanne Halloin, IES
Harts Design Inc.
Okemos, MI
Entrances

- If steps – also a ramp or signage to nearest accessible location
- 36” Clearance
- Threshold edge $\frac{1}{4}”$ or less or beveled edge $\frac{3}{4}”$ or less
- Handles – no higher than 48”
- If automatic door closer – 3 sec. timing
Entrances continued....

- Carpeting & mats –
  - max \( \frac{1}{2} \)” high or less
  - low pile
  - tightly woven
  - secured along edges
Ramps

- Slope 1:12
- Longer than 6’ – railings on both sides
- 36” clearance
- Non-slip surface
- No more than 30” rise between landings
- Landings 5’ long and level
Route of Travel

- No Stairs
- Firm, slip-resistant surface
- 36” wide
- Protruding objects detectable using a cane
  - Within 27” of ground
  - Above 80”
  - Or protrude less than 3” from wall
Rooms & Spaces

■ Carpeting
  ● low pile
  ● tightly woven
  ● securely attached along edges

■ Circulation paths through public spaces
  ● all obstacles cane detectable
  ● 27” from floor or higher than 80”
  ● Or protruding less than 4” from wall
Emergency Egress

- Both flashing lights & audible signals

Missing: Light level requirements
Signage for Goods & Services

- Mounted with center line 60” AFF
- On wall adjacent to latch side of door
- Characters (Room #s, RRs & Exits)
  - Raised
  - Sized between 5/8” and 2” high
  - High contrast
Signage
Directional & Informational

- If above 80” AFF – letters 3” high minimum
- Must comply with legibility reg. unless temporary or building directory
- Non-glare finish, egg shell or matte
Vertical Circulation Stairs

- Uniform treads sizes & riser heights
- Nosing overhangs minimal
- Handrails on both sides
Vertical Circulation
Elevators

■ On accessible routes
■ Automatically self leveling
■ Call buttons
  ● Centered 42” AFF
  ● Min. ¾” diameter
■ Auditory signals
■ Protective door reopening device
Additional standards can be found among voluntary guidelines for public buildings such as the Smithsonian Guidelines for Accessible Exhibitions,

And in grant requirements from such organizations as the NEA, which has a checklist & an Office of Accessibility.