

- *(3) Aesthetics. The effects of the installation and use of resident mobility and transfer equipment on the aesthetics of the resident care space shall be evaluated.

*1.2-3.4 Resident Fall Risk and Prevention

1.2-3.4.1 Requirement

An evaluation of resident fall risk and prevention shall address the following specific design elements:

1.2-3.4.1.1 Flooring characteristics. See Sections 2.4-2.1.2 (Characteristics and Criteria for Selecting Materials and Products) and 2.4-2.3.2 (Flooring and Wall Bases).

A1.2-3.3.2.10 (3) When fixed-lift systems are installed, care should be taken to minimize the visual impact of fixed tracks, slings, hanger bars, and motors on the aesthetics of the physical environment, especially in nursing homes and other long-term care settings where a home-like environment is essential. Use of recessed tracks is suggested. Other suggestions include enclosing lift motors in decorative cabinets and concealing or masking wall-mounted rails for traveling gantry lifts with crown molding or indirect ceiling light covers.

A1.2-3.4 Resident fall risk. Safe environments help prevent falls and mitigate injuries associated with falls. Evaluation of fall risks by an interdisciplinary team should be used to create a coordinated plan that identifies physical environment factors that contribute to resident falls and associated injuries.

A1.2-3.4.2 Resident fall risk prevention measures

a. Environmental design can effectively reduce resident fall risk through these actions:

- Increasing ambient lighting levels
- Reducing light glare
- Reducing use of physical restraints, including bedrails
- Positioning beds to prevent residents from falling out of bed
- Selecting low-height beds or chairs
- Selecting flooring with small motifs and low contrast
- Optimizing the configuration of grab bars near bathing, shower, and toilet areas
- Designing a wander garden that can reduce the frequency and severity of falls for residents with dementia
- Selecting floor surface materials with a uniform value (lightness/darkness). Abutting horizontal materials with highly contrasting values creates an optical illusion of a step or change of level, which contributes to fall risks.
- Using contrasting values between horizontal and vertical surfaces and objects. This helps older adults and the low-vision

1.2-3.4.1.2 Furniture characteristics. See Sections 2.4-2.1.2 (Characteristics and Criteria for Selecting Materials and Products) and 2.4-2.4 (Furnishings).

*1.2-3.4.2 Resident Fall Risk Prevention Measures

*1.2-3.5 Resident Dementia and Mental Health Risks

1.2-3.5.1 Requirement

Each program area shall be evaluated to identify the physical environment features accessible to residents to be addressed as a potential risk. These features shall include architectural details, hardware,

population comprehend the geometry of a space and assists with wayfinding. For example, a 30-percent contrast between floors and walls, between walls and door frames/doors, and between background and furniture/toilets reduces the possibility of walking or moving into objects, thereby increasing independence while reducing fall risk. A 50 percent contrast between a handrail and the wall allows the handrail to be found easily, encouraging use and decreasing fall risk.

Contrast in percentage should be determined by the following formula:

$$\text{Contrast} = [B1 - B2/B1] \times 100; \text{ where } B1 = \text{light reflectance value (LRV) of the lighter area and } B2 = \text{LRV of the darker area}$$

- b. Sleep disorders frequently lead to resident falls, delirium, morbidity, and mortality. Residents' nighttime awakenings and daytime sleep can be significantly reduced by the following:
- Higher lighting levels during the day
 - Exposure to bright light (avoiding glare)
 - Sunlight exposure
 - Improved acoustics to reduce unwanted noise and sounds
 - Access to outdoor nature/wander garden during the day
- c. Research has established that older adults sleep best in total darkness. To minimize resident sleep disruption, night lights should:
- Provide very low levels of illumination.
 - Be located to minimize light scatter and reflections on room surfaces.
 - Have switches the resident can turn off when not needed or desired.
 - Be red or amber in color as research shows these colors are less disruptive to sleep.

A1.2-3.5 Risks from dementia and mental health diagnoses. In its evaluation of the care population, an interdisciplinary team should identify the number of residents with dementia,

APPENDIX