

## Creating a Safe Environment

### **Color and High Contrast**

Use of highly contrasting colors (a light color against a dark colored background, or the reverse) makes anything more seeable! When applied to rooms and buildings, entire areas become more seeable and safer for those with vision impairment.

For example:

Light walls, Dark handrails.

Light walls, Medium to dark furniture.

Light walls, Dark doorframes and molding.

Light walls, Dark switch plates.

Light walls, Dark baseboards, Medium to Light flooring.

Light countertop, Medium to Dark tile on wall facing the countertop.

### **Furniture**

Furniture should be placed to allow for safe, easy movement, out of the heavy traffic areas.

Don't move furniture frequently! If you need to move furniture, inform those who have a visual impairment about the new layout. This may take quite a few repetitions until they remember the new space.

Avoid the use of knee high tables, objects, and other furniture, especially in heavily traveled areas.

Choose furniture with rounded edges and corners. Furniture, in general, should contrast in color from the floors and walls.

## Creating a Safe Environment (continued)

### Lighting

Controlled lighting is an essential ingredient in making homes and buildings safe for people with vision loss. Use dimmer switches and blinds, light filtering curtains and window shades.

In addition to overall area and building lights, lighting should also be used to accentuate outdoor walkways, entrances, stairs, steps, landings, handrails, and be focused for specific tasks.

Use matte surfaces to reduce glare and reflection on tables, counters, and floors. Light tends to bounce off materials with high gloss finishes.

Nightlights that turn on when light is dim should be used in hallways and bathrooms.

### Kitchen

Avoid patterned table cloths, dishes, and placemats. Choose solid colors in contrast to table.

Tablecloth/tabletop should contrast with dishes.

Cabinet doors that open out at head level can be hazardous if left open. Sliding cabinet doors, self-closing doors, and cabinets without doors are preferred.

Round tables should not be used because of orientation difficulties. Square or rectangular tables with rounded corners are preferred.

Plastic safety corners can be purchased to adapt a square or rectangular table with sharp corners.

Make sure that the corners and edges of counters and center islands are rounded.

Make sure the stove has controls positioned so that the individual doesn't have to reach over the burners.

A stove guard should be used to prevent touching front burners.

Cleaning supplies should be stored in a locked cabinet away from cabinets containing food.

Sharp knives should not be stored in accessible drawers.

## Creating a Safe Environment (continued)

### **Bedroom**

Use tactile symbols for room identification.

Remove footboards.

Use bedding and furniture that contrasts with the walls and floors.

Put lights in closets.

### **Bathroom**

Choose bathroom fixtures that contrast from the walls.

Use color contrast when choosing towels, toilet tissues, soap, and toothbrushes.

Grab bars should contrast with wall color.

Make sure light fixtures do not have exposed light bulbs.

### **Rugs and Flooring**

Avoid the use of scatter rugs that are not secured to the floor as they can pose a tripping hazard. Do not use a rug with fringe as it is easy to trip on.

Wall to wall carpeting should have a low pile and firm pad for ease of stepping.

Waxes on hardwood or other floors should be matte and non glossy to avoid or reduce glare.

Bathroom floors should be of a non skid material or have skid resistant material applied to the floor to prevent slipping and falling when wet.

Flooring, in general, should contrast in color from walls and furniture.

## Creating a Safe Environment (continued)

### **Other Hazards**

Walk through the space keeping in mind that a person with vision loss may be touching (trailing) walls, furniture and handrails as they walk along. Remove any head level or body hazards such as wall shelving, wall decorations that protrude from the wall, bulletin boards or pictures hung by a single hook that move or could fall when bumped, low hanging light fixtures, etc. to be sure that the area is safe.

Avoid protruding objects at waist height and above, such as coat racks, book shelves, fire extinguishers. Recess items as much as possible.

Floor plants may be a tripping hazard, locate them out of the walking area.

Draw attention to large areas of glass, such as picture windows or sliding glass doors with decals or colored bands at appropriate eye level.

### **Doorways**

Paint doors or doorframes a contrasting color from the wall.

Door knobs should be a contrasting color from the door.

Interior doors should open into rooms rather than out into the hallways.

Thresholds at doorways should be completely flat, or meet the ADA Guidelines to prevent tripping and enable wheelchair mobility:

Thresholds at doorways shall not exceed 3/4 in (19 mm) in height for exterior sliding doors or 1/2 in (13 mm) for other types of doors. Raised thresholds and floor level changes at accessible doorways shall be beveled with a slope no greater than 1:2.

### **Exits**

Exits should be well lit and marked.

Environments should be set up for easy movement with simple routes to and from exits and entrances, parking areas, restrooms, dining rooms, etc.

Keep walkways inside and outside well lit and clear of clutter.

Make all exits handicap accessible for safe fire evacuation.

## Creating a Safe Environment (continued)

### **Outdoors**

Install motion detection lighting on all pathways to and from the house.

Pave all walkways away from the house for safe evacuation.

Provide railings if possible for support and independent travel.

Avoid loose surfaces such as stone in driveways and walkways. Follow ADA guidelines for ramps, stairs, and railings.

ADA Guidelines for Stairs, Handrails, Ramps, Grab Bars and More...

Stairs, Handrails, Ramps, Grab Bars, Signage and many other building features have ADA guidelines to ensure that they are as accessible and safe as they can be. For these guidelines please ask your Orientation and Mobility Specialist for a copy, or look online at: [www.ada.gov](http://www.ada.gov)

### **Stairs and Steps**

Highlight the depth of each step. Stairs should be marked with a 1½ inch strip of safety yellow across the top edge and along the runner of each step, from handrail to handrail. (Painted strips should have a non-skid additive to the paint, which is available from the hardware store). Step treads in a variety of colors and styles are also available commercially.

Steps should be of a uniform height and width, and not covered with visually distracting designs.

### **Handrails at Stairs and Ramps**

Handrails should be located on each side of the staircases and ramps and must extend for one foot beyond the top and bottom landings. This insures safer travel when moving toward or away from the staircase or ramp.

Handrails should contrast in color from the area behind them so they are easier to see.

## Creating a Safe Environment (continued)

### **Walkways and Handrails**

Handrails along walkways and specific indoor trailing routes can be extremely useful tools to help promote independent travel for those who have a visual impairment. A person can hold onto the handrail and trail it along a specific route when walking in a hallway. Trailing can also be done along a flat wall surface, but a handrail which provides a concrete cue as to hand placement, arm height, etc. may make trailing easier for some individuals.

Individuals with balance issues benefit from a handrail to trail both indoors and out.

Handrails that are best designed for trailing include those whose ends curve into walls, and are continuous around corners. This eliminates the potential for an individual to lose contact with the trailing surface.

According to ADA, regulations handrails should be 34 inches up from the floor and 1 ½ inches away from the wall.

### **Signage**

Provide raised and Braille signage for elevators, floor numbers and room numbers, and other building signage.

Contrast sign lettering with its background so it is readable.

Be sure to check new signage as it sometimes does not come through as ordered!

According to ADA, signage should be placed 60" up from the floor on the wall adjacent to the latch side of the door.

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Please also see MCB/DDS Partnership handouts:

- Common Signs of Vision Loss
- Dining
- Task Organization