

Citizens Financial Group, developed with Liberty Mutual Design Guidelines for Risk Reduction

Prevention through Design (PtD)

Apply as many of these guidelines into new build or remodel projects to reduce risk of workplace injuries to guests and colleagues. Seek feedback during projects to add and adjust guidelines for future projects.

*Denotes guidelines of highest value return on risk reduction, based on past loss history.

Focus Areas	Risk Reduction
<p>Walking Surfaces and Entrance/Lobby:</p> <ul style="list-style-type: none"> - * All hard Flooring (regardless of material type or location) has a coefficient of friction ≥ 0.5 for both dry and wet conditions, inclusive of final sealant product application. - * Floor Matting (recessed or surface) in vestibules/entrances should provide unbroken path to interior lobby (≥ 10-12 steps). - * Floor Transition points are $< \frac{1}{4}$" in height. - * Avoid one-step and two-step changes in elevation using gradual slopes and ramps. Entryways are typical locations for this situation. - Use varied colors/patterns to distinguish transition points between different surface materials and areas leading to a ramp. - Provide a visual differentiation from stair treads to landings – this could be in the form of color difference, choice of materials, or tread lighting. - Doors are easy to open and allow visibility to other side - Distinguish glass side lights and doors with decal markings - Walkways are protected from falling snow and ice along walkways and rain water is directed away from walking surfaces. 	<ul style="list-style-type: none"> - Slips/Falls - Slips/Falls - Trips/Falls - Trips/Falls - Trips/Falls - Slips/Trips/Falls - Strains; Struck-against - Struck-against - Slips/Falls
<p>Lighting:</p> <ul style="list-style-type: none"> - * Light fixtures are positioned to allow easy access for maintenance (no special equipment needed) - * Lighting selection minimizes replacement schedule (e.g. LED's for longer burn time) - Lighting is adequate for area functions (based on ANSI standards): <ul style="list-style-type: none"> o Entrances > 50 Lux o Office areas 250-400 Lux o Stairs 20-50 Lux 	<ul style="list-style-type: none"> - Falls from heights - Falls from heights - Slips/Trips/Falls

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<p>Office Work Space:</p> <ul style="list-style-type: none"> - * Consider location of power sources to minimize cord trip hazards. <ul style="list-style-type: none"> o Wall outlets in small conference rooms are installed on the opposite wall from the entry point. o Provide power at work surface level, especially for shared workstations. (minimize bending to floor/wall receptacles). o Power and data (if not wireless) is provided along the center of conference room tables, based on # of expected occupants. - Allow space between back-to-back chairs so they will not hit each other, or alternate spacing so they are not back-to-back. - Cable management is either built into the workstation or designed to minimize cord trip hazards. - File cabinets are self-closing. - Provide articulating monitor arms designed for the expected weight on monitors (easy adjustment). - Access to white boards allows an easy reach to use and clean. - Storage space is located near conference rooms where furniture is removable (minimize material transporting distances) - AV equipment is remote operated (push a button for screen, etc...) - Ceiling mounted AV equipment is easily accessible for maintenance - Position of HVAC filters are easily accessible for maintenance 	<ul style="list-style-type: none"> - Trips/Falls - Bending - Struck-by - Trips/Falls - Falls/Struck-by - Ergonomics/Visual - Falls/Strains - Strains - Ease of use/Reach - Falls from Heights - Falls from Heights
<p>Break Rooms/Pantries:</p> <ul style="list-style-type: none"> - Paper towel dispensers are located directly next to sink (minimize dripping on floor), near microwave & anything else that could spill - Position cabinets to minimize reach for colleagues and facilities. - Pitch sink counter slightly backward to prevent water run-off and dripping onto the floor (or use bull nose front edge). 	<ul style="list-style-type: none"> - Slips/Falls - Reach/Strains - Slips/Falls
<p>Restrooms:</p> <ul style="list-style-type: none"> - Paper towel dispensers are located directly next to sink (minimize dripping on floor) - Pitch sink counter slightly backward to prevent water run-off and dripping onto the floor (or use bull nose front edge). - Trash bins are located near sink and near door 	<ul style="list-style-type: none"> - Slips/Falls - Slips/Falls - Slips/Falls/Hygiene
<p>Telephone/Data Room:</p> <ul style="list-style-type: none"> - Provide adequate space for expected equipment to allow easy movement and service. - Minimize trip hazards, such as where/how equipment is fastened to the floor (concrete pads or base of equipment). - Lighting covers all areas of room for expected work. - Easy access to equipment and eye-level to read any critical data (no need for a ladder to perform routine functions) 	<ul style="list-style-type: none"> - Trips/Struck-by - Trips/Falls - Visual/Trips/Falls - Trips/Struck-by/Falls from heights

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<p>Lower levels:</p> <ul style="list-style-type: none"> - * Consider no carpeting/carpet tiles, perhaps some sort of padded vinyl tile in lower levels. (avoid wool carpet products) - * Measure and monitor moisture in floor slaps, during build or renovation, per ASTM standards <ul style="list-style-type: none"> o Proper moisture content to allow successful installation of floor coverings o Testing confirms moisture is not traveling up through slab (more than it should; that moisture barrier is acceptable) - Install all wallboard ½” - 1” off slab to prevent wicking. Same for ground floor or floors with potential for water damage. - Consider where dehumidification is needed to avoid indoor air quality concerns 	<ul style="list-style-type: none"> - Mold from water incursion - Mold from water incursion/IAQ - Mold from water incursion - IAQ
<p>Stairs:</p> <ul style="list-style-type: none"> - * Avoid one or two step transitions where ramps/grading could accommodate the transition. - * Create a visual differentiation from stair treads to landings – this could be in the form of color difference, choice of materials, or tread lighting. - *Stair tread depths and riser heights are consistent and with-in code - Provide stair railings on both sides wherever possible, even if not required by code. 	<ul style="list-style-type: none"> - Slips/Trips/Falls - Slips/Trips/Falls - Slips/Trips/Falls - Slips/Trips/Falls
<p>Doors:</p> <ul style="list-style-type: none"> - * Door swing minimizes struck-by incidents with occupants (away from traffic whenever possible). - * Distinguish glass side lights and doors with decal markings. - Are there places currently equipped with a door which could be eliminated; example off-set openings into restrooms. - Provide vision panels on all doors, use privacy glass where needed (restrooms, mothers’ rooms, etc.). - Glass panels are tempered and laminated. 	<ul style="list-style-type: none"> - Struck-by - Struck-against - Struck-by - Struck-by - Cuts/Struck-against
<p>HVAC:</p> <ul style="list-style-type: none"> - Equipment requiring filter replacements/adjustments are positioned to provide easy access. - If gages or instruments must be monitored, are they accessible from ground level; avoid use of ladders. - HVAC does not pull make-up air from basement/lower levels or close to outside contaminated sources. 	<ul style="list-style-type: none"> - Falls from heights - Falls from heights - IAQ
<p>Custodial Supplies/Equipment:</p> <ul style="list-style-type: none"> - Provide adequate space for expected equipment to allow easy movement and service. Are all custodial care needs provided? - Eliminate storage above shoulder height and below knees. - Chemical storage is in cabinet or rack to minimize spillage. - If utility sink, use moisture resistant wallboard/finish. 	<ul style="list-style-type: none"> - Struck-by - Strains/Reach/Bend - Chemical burn - Mold/IAQ
	<ul style="list-style-type: none"> -

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<p>Additional Topics:</p> <ul style="list-style-type: none"> - Conference Room Furniture is designed for easy assembly/disassembly if required to be moved frequently, including tables/chairs; conference room doors are wide enough to handle movable furniture. - Teller Workstations – adequate temperature control is provided at the feet of workstations. - Teller Workstations/Customer Service Counters – adjustable work surface height is provided (or considered). - Teller Workstations – consider height placement of teller vaults to minimize bending and reaching. - Teller Workstations – consider chairs that allow sitting/standing/perching to encourage posture changes and support. - Vaults – consider vault design to allow placement/handling of coin at heights between thigh and chest. Avoid bending and reaching. - Branches – consider placement of printers so that access to replace print cartridges and general use minimize bending and awkward postures. - Branches – consider space and placement to take lunch break that allows for seating, comfort, and space intended for use. - Branch Entrance – avoid transition trip hazards ($\geq \frac{1}{4}$"), especially in heavy traffic areas. Example, entry security-door track may create a recessed trip hazard (2"-3" in width). - Branch Furniture – consider furniture that minimizes awkward body postures for colleagues as they interact with customers. Example, use articulating monitor arms to allow more adjustability of monitors by colleagues and use with customers. Example, oval (or rounded tables) may force awkward leaning postures for colleagues. Provide adjustable height work surface for "hoteling" workstation in back room. 	<ul style="list-style-type: none"> - Manual Handling - Comfort; avoid space heaters - Ergonomics - Ergonomics - Extended sitting/standing - Manual handling - Ergonomics - Comfort/experience - Trip/Fall - Ergonomics