



City of Urbandale
3600 86th Street
Urbandale, IA 50322-4057
www.urbandale.org
Building Department (515) 278-3935



Commercial Handicap Ramp Handout

Required Inspections

1. **Footings/Setback Inspection** before the footings are poured. Lot pins should be located at this time to verify setbacks.
2. **Foundation Inspection (concrete)** after forms are set and before concrete is poured.
3. **Framing Inspection (wooden)** before deck surface is installed if framing cannot be observed at final due to height.
4. **Final Inspection** – Please schedule once work has been completed to close permit.

Requirements

Commercial buildings and multifamily structures – Permits are required for the installation of ramps; designs must meet International Building Code and ICC A117.1-2009 specifications.

Zoning

For specific setback requirements for your property, please contact the Zoning Department at (515) 278-3935.

Design

- **Ramp Construction-** All ramps must be built of materials consistent with the types permitted for the type of construction of the building, except that wood handrails shall be permitted for all types of construction. (IBC 1012.7)
Slope- When used a part of a means of egress must have a running slope not steeper than 1 unit in 12 units horizontal (8 percent). **Exception:** pedestrian ramps 1-unit vertical in 8 units horizontal (12.5 percent). (IBC 1012.2)
Cross Slope- A maximum of 1-unit vertical in 48 units horizontal (2 percent). (IBC 1012.3)
Vertical Rise- The rise for any ramp run is required to be 30 in. maximum. (IBC 1012.4)
Ramp Surface- The surface of ramps must be of slip-resistant materials that are securely attached. (IBC 1012.7.1)
Outdoor conditions- Outdoor ramps and outdoor approaches to ramps must be designed so that water will not accumulate on walking surfaces. (IBC1012.7.2)
- **Minimum Dimensions**
Headroom- The minimum headroom in all parts of the means of egress ramp and landings must be not less than 80 inches for the full width of the ramp. (IBC 1012.5.2)
Width Restrictions- Means of egress ramps cannot reduce in width in the direction of egress travel. Projections into the required ramp and landing with are prohibited. Doors opening onto a landing cannot reduce the clear width to less than 42 in. Refer to **Table 1020.2**. (IBC 1012.5.3 & T.1020.2)

- **Landings-** Ramps must have landings at the bottom and top of each ramp, points of turning, entrance, exits and at doors. (IBC 1012.6)
 - Slope-** may not be steeper than 1-unit vertical in 48 units horizontal. (2 percent) Changes in level are not permitted.
 - Width-** must be as wide as the widest ramp run adjoining the landing.
 - Length-** must be 60 in. minimum. *Exception:* may be 48 in. if not part of a means of egress.
- **Change in Direction-** Where the changes in direction of travel occur at landings provided between ramp runs, the landing is required to be 60 in. by 60 in. minimum. (1012.6.4)
- **Doorways-** Where doorways are located adjacent to a ramp landing, maneuvering clearances required by ICC A117.1 are permitted to overlap the required landing area. (IBC 1012.6.5)
- **Handrails-** Ramps with a rise greater than 6 in. shall have handrails on both sides. Exception handrails for aisles. Handrails must be designed to resist a linear load of 50 pounds per linear foot. (IBC 1012.8)
- **Guards-** Guards must be provided along open sided ramps and landings that are located more than 30in. measured vertically to the floor or grade below at any point within 36in. horizontally to the edge of the open side. Guards must be designed to resist a linear load of 50 pounds per linear foot. (IBC1012.9 & 1015)
- **Edge protection-** is required to be provided on each side of ramp runs and at each side of ramp landings. (IBC1012.10)
- **Curb, rail, wall, or barrier-** a curb, rail, wall or barrier must be provided to serve as edge protection. A curb must be 4in. in height. Barriers must be constructed so that the barrier prevents the passage of a 4 in. sphere, where any portion of the sphere is within 4 in. of the floor or ground surface. (IBC 1012.10.1)
- **Interior Ramps for required Egress-** All exit ramps must be enclosed having a fire rating not less than the floor assembly penetrated but need not exceed 2 hours.
- **Extended floor or ground surface-** The floor or ground surface of the ramp run, or landing must extend 12 in. minimum beyond the inside face of a handrail. (IBC 1012.10.2)

Table 1020.2

Minimum Corridor Width

Occupancy	Width (MIN)
Any facilities not listed below	44"
Access to and utilization of mechanical, plumbing, or electrical systems or equipment	24"
With a required occupancy capacity less than 50	36"
Within a dwelling unit	36"
In a group E with a corridor having a required capacity of 100 or more	72"
In corridors and areas serving stretcher traffic in ambulatory care facilities.	72"
Group I-2 in areas where required for bed movement	96"

Details

