

# Caroline County



## Accessible

## Ramp Details

Based on the 2009 ICC/ANSI A117.1

For Residential non accessible ramps, follow the requirements of the 2015 Virginia Residential Code

View the Virginia ICC Codes online at <https://codes.iccsafe.org/public/>

### Ramps

- Ramp runs shall have a running slope not steeper than 1:12.
- Maximum cross slope of ramps and is 1:48.
- Maximum rise for any ramp run is 30”.
- Ramps may not be less than the required exit width served, with a minimum width of 36” between the handrails. See **Figure 5**.
- Ramps shall be constructed to prevent the accumulation of water on the walking surface and shall be slip resistant.

### Landing

- Landing surfaces shall be slip resistant.
- Landings are required at the top and bottom, changes in direction, at doors, and an intermediate landing for every 30” of ramp rise.
- Ramps that change direction shall have landings sized to provide a 60” turning radius (60”x60”) or a “T” shaped intersection 60” long x 36” wide (36” wide at each arm of the “T”). See **Figure 5**.
- The minimum width of the landing is as wide as the widest ramp leading to the landing.
- Maximum cross slope for landing is 1:48.
- For landings required at doors see **Figure 6** for details on approach.
- Maximum height for a door threshold is 1/2” except for residential 1&2 family dwellings.

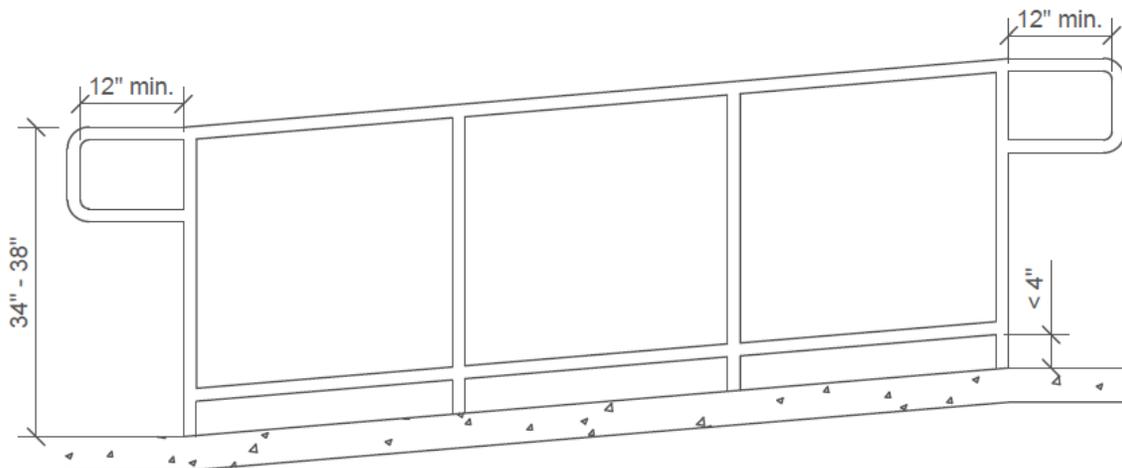
### Ramp and Landing Edge Protection

- Edge protection is required on each side of ramp runs and at each side of ramp landings, by a curb or barrier or by extended floor surface. (An extended floor surface occurs when the surface of ramp or landing extends 12” minimum beyond the inside face of a railing.)  
Exceptions:
  1. Edge protection is not required on ramps not required to have handrails provided they have flared sides complying with ICC/ANSI A117.1-2003, Section 406.3, Sides of Curb Ramps.
  2. Edge protection is not required on sides of ramps serving an adjacent ramp run or stairway.
  3. Sides of ramp landings having a vertical drop-off of 1/2” maximum within 10” horizontally of the minimum landing area.

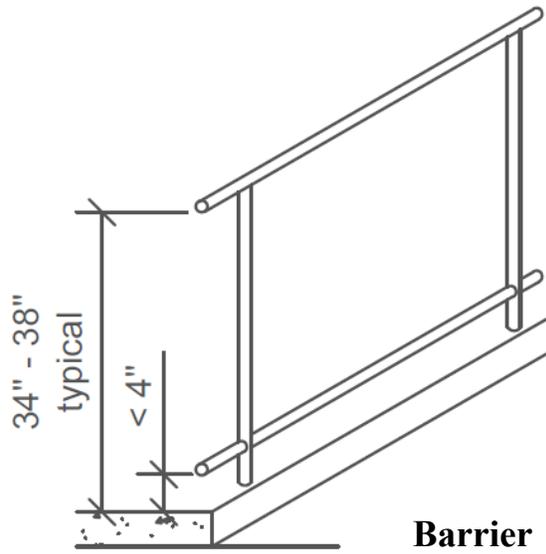
- Edge protection options:
  1. A curb or barrier shall be provided that prevents the passage of a 4" sphere where any portion of the sphere is within 4" of the floor. See **Figures 2 and 3**.
  2. The floor surface of the ramp run or ramp landing shall extend 12" minimum beyond the inside face of the railing. See **Figure 4**.

## Handrails and Guards

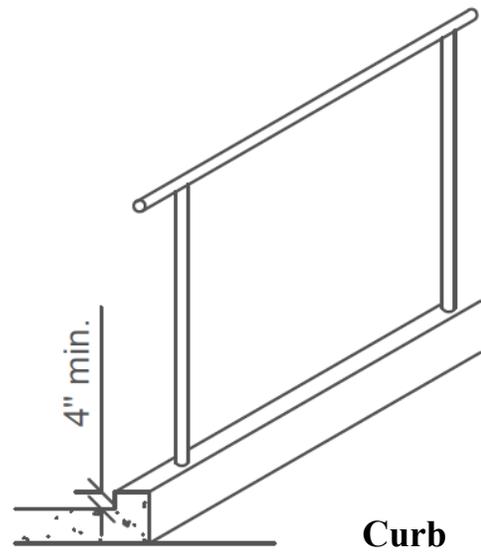
- Ramps with a rise greater than 6" shall have handrails on both sides between 34"-38" in height. See **Figure 1**.
- Handrails shall extend 12" beyond the top and bottom of any ramp run for commercial applications. See **Figure 1**.
- Handrails shall be continuous except at points of access along the ramp.
- Guards shall be installed on landings and ramps that are more than 30" above adjacent grade.
- Guards shall be a minimum of 36" high above the walking surface for residential 1&2 family dwellings. 42" high above the walking surface for all commercial applications.
- Guards shall have a maximum opening of 4".
- Handrails and handrail supports shall not project into the required clear width of the ramp.



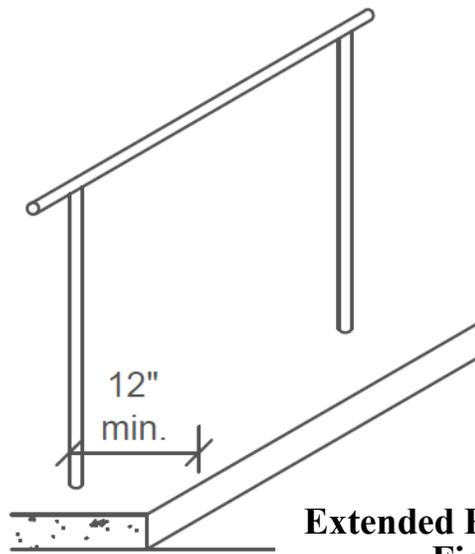
**Handrails**  
**Figure 1**  
 (Shown with edge protection per figure 2)



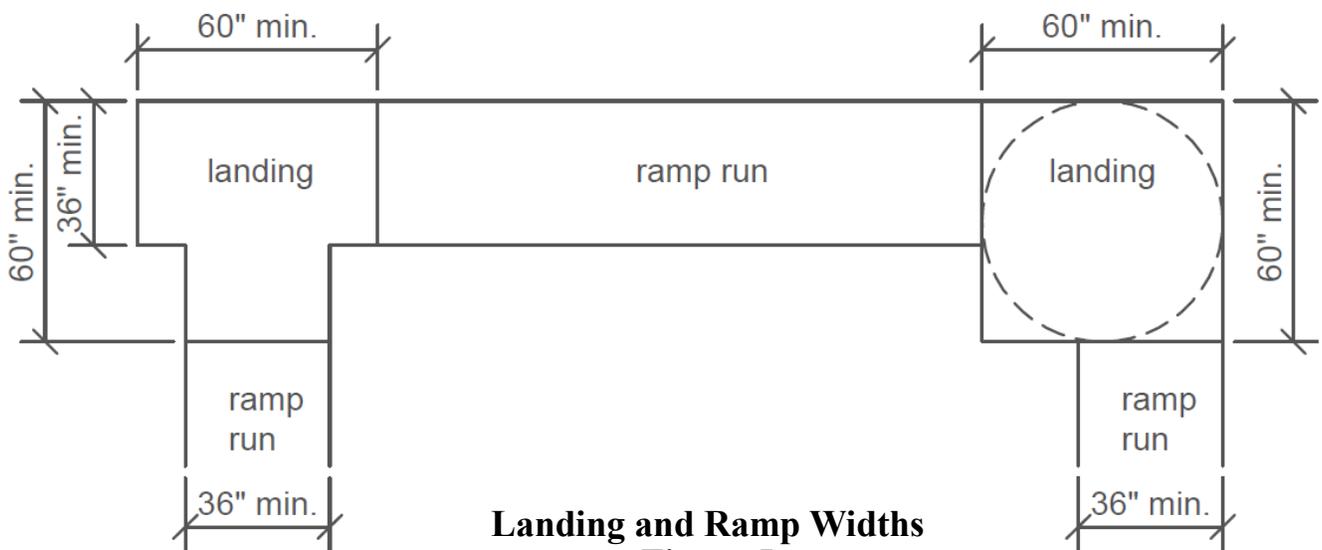
**Barrier  
Figure 2**



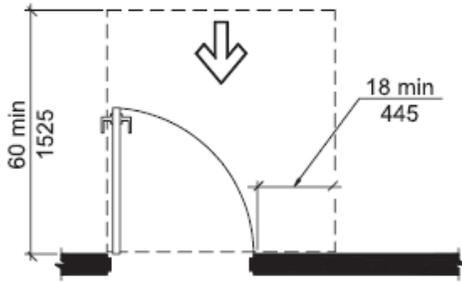
**Curb  
Figure 3**



**Extended Ramp Surface  
Figure 4**

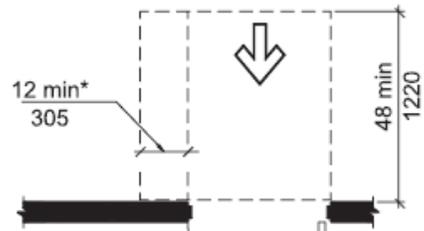


**Landing and Ramp Widths  
Figure 5**

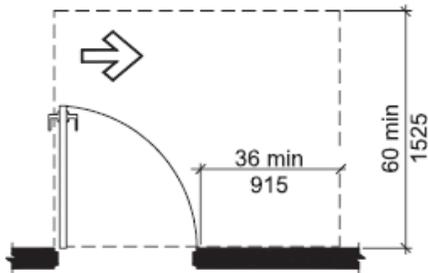


(a) Front Approach, Pull Side

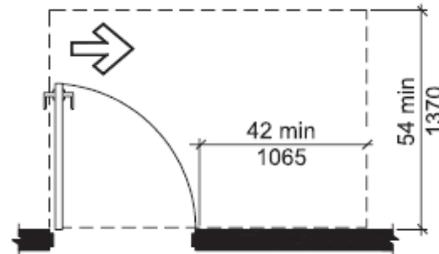
\*If both closer and latch are provided



(b) Front Approach, Push Side

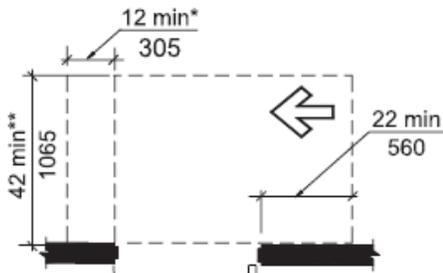


(c) Hinge Approach, Pull Side



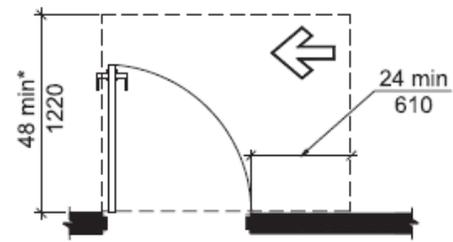
(d) Hinge Approach, Push Side

\* If both closer and latch are provided  
 \*\* 48 min (1220) if both closer and latch provided

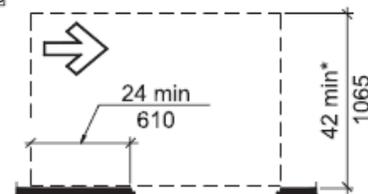


(e) Hinge Approach, Push Side

\*54 min (1370) if closer is provided



(f) Latch Approach, Pull Side



(g) Latch Approach, Push Side

\*48 min (1220) if closer is provided

**Door approach  
 Figure 6**