

COMMERCIAL DECKS, RAMPS, AND STAIRS HANDOUT

Deck Structures

1. Framing plans designed to meet required live load for egress (100 psf) or use (varies), whichever is greater. IBC table 1607.1
 - Materials, depth and details of attachments sized sufficiently and designed to resist forces from wind, gravity and seismic loading. IBC 1603.1.
2. 42" high guard where deck height exceeds 30 inches above adjacent grade. IBC section 1013.2
 - Framing details, structural connections, and materials of guards and handrails to show resistance of 50 pounds per linear foot or concentrated load of 200 pounds. IBC section 1607.8.1
 - Elevations of maximum spacing of openings. IBC section 1013.4

Exterior Ramps and Stairs

1. Minimum 44 inch access width dimensioned on drawings. IBC section 1101.2.2 **Washington State Amendment*
 - Handrails projections into the required width should not reduce that width by more than 4 ½ inches each side. IBC section 1012.8
2. 42" high guard where ramp or stair height exceeds 30 inches above adjacent grade. IBC section 1013.2
 - Framing details, structural connections, and materials of guards and handrails to show resistance of 50 pounds per linear foot or concentrated load of 200 pounds. IBC section 1607.8.1
 - Elevations of maximum spacing of openings. IBC section 1013.4
3. 34"-36" handrails (one each side) at any stair riser and where ramp exceeds six inches. IBC sections 1009.15, 1012.1, ICC A117.1-2009 section 405.8
 - Structural connections to show resistance of 50 pounds per linear foot or concentrated load of 200 pounds. IBC section 1607.8.1
 - Plan of handrail extensions at top and bottom of ramp or stair. IBC section 1012.6
4. Ramp length dimensioned with maximum 1:12 slope. ICC A117.1-2009 section 405.2
 - Rise dimensioned maximum 30 inches for each run. ICC A117.1-2009 section 405.6
 - Edge protection of a curb or extended floor surface. ICC A117.1-2009 section 405.9
 - Landing length dimensioned minimum 60 inches. ICC A117.1-2009 section 405.7.3
 - Turning diameter dimensioned 60 inches at change in direction. ICC A117.1-2009 section 405.7.4
5. Stair solid riser maximum 7 inches for maximum vertical rise of 12 feet per flight, tread minimum 11 inches. IBC sections 1009.7.2, 1009.7.5.3, 1009.10

APPLICABLE CODES AND REFERENCES

- International Building Code (IBC), 2015 Edition & WAC 51-50
- International Existing Building Code (IEBC), 2015 Edition & WAC 51-50
- Accessible and Usable Buildings & Facilities, ANSI A117.1-2009 & WAC 51-50-005
- International Fire Code (IFC), 2015 Edition & WAC 51-54