

**CHAPTER 5: GENERAL SITE AND BUILDING ELEMENTS (CONT.)**

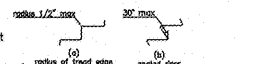
503.5 Vertical Clearance. Vehicle pull-up spaces, access areas serving them, and a vehicular route from an entrance to the passenger loading zone, and from the passenger loading zone to a vehicular exit shall provide a vertical clearance of 14 feet (4265 mm) minimum.

504 Stairways  
504.1 General. Stairs shall comply with 504.

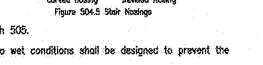
504.2 Treads and Risers. All steps on a flight of stairs shall have uniform riser heights and uniform tread depths. Risers shall be 4 inches (100 mm) high minimum and 7 inches (180 mm) high maximum. Treads shall be 11 inches (280 mm) deep minimum.

504.3 Open Risers. Open risers are not permitted.

504.4 Tread Surface. Stair treads shall comply with 302. Changes in level are permitted.



504.5 Nosings. The radius of curvature at the leading edge of the tread shall be 1/2 inch (13 mm) maximum. Nosings that project beyond risers shall have the underside of the leading edge beveled. Nosings shall be permitted to slope under the tread at an angle of 30 degrees maximum from vertical. The permitted projection of the nosing shall extend 1/2 inches (38 mm) maximum over the tread below.



504.6 Handrails. Stairs shall have handrails complying with 505.

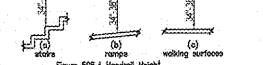
504.7 Wet Conditions. Stair treads and landings subject to wet conditions shall be designed to prevent the accumulation of water.

505 Handrails  
505.1 General. Handrails provided along walking surfaces complying with 403, required at ramps complying with 402, and required at stairs complying with 504 shall comply with 505.

505.2 Where Required. Handrails shall be provided on both sides of stairs and ramps.

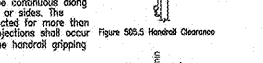
505.3 Continuity. Handrails shall be continuous within the full length of each stair flight or ramp run. Inside handrails on switchback or dogleg stairs and ramps shall be continuous between flights or runs.

505.4 Height. Top of gripping surfaces of handrails shall be 34 inches (865 mm) minimum and 38 inches (965 mm) maximum vertically above walking surfaces, stair nosings, and ramp surfaces. Handrails shall be of a consistent height above walking surfaces, stair nosings, and ramp surfaces.

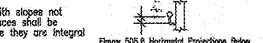


505.5 Clearances. Clearances between handrail gripping surfaces and adjacent surfaces shall be 1/2 inch (38 mm) minimum.

505.6 Gripping Surface. Handrail gripping surfaces shall be continuous along their length and shall not be obstructed along their tops or sides.



505.7 Horizontal Projections. Handrails shall be permitted to have horizontal projections that occur 1/2 inches (38 mm) minimum below the bottom of the handrail gripping surface.

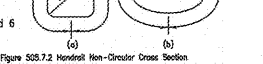


505.8 Surfaces. Handrail gripping surfaces and any surface adjacent to them shall be free of sharp protrusions and shall have rounded ends.

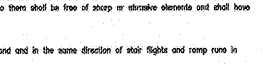
505.9 Ramps. Handrails shall not intrude within their Ranges.

505.10 Landing Extensions. Handrail gripping surfaces shall extend beyond end in the same direction of stair flight and ramp runs in accordance with 505.1.

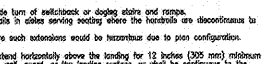
505.11 Top and Bottom Extension of Ramps. Handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beyond the top and bottom of the ramp runs. Extensions shall extend to a wall, post, or other vertical surface.



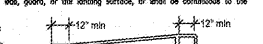
505.12 Top Extension at Stairs. At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beyond the top of the stair nosing. Extensions shall extend to a wall, post, or other vertical surface.



505.13 Bottom Extension at Stairs. At the bottom of a stair flight, handrails shall extend horizontally below the landing for 12 inches (305 mm) minimum beyond the bottom of the stair nosing. Extensions shall extend to a wall, post, or other vertical surface.



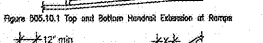
505.14 Bottom Extension of Stairs. At the bottom of a stair flight, handrails shall extend horizontally below the landing for 12 inches (305 mm) minimum beyond the bottom of the stair nosing. Extensions shall extend to a wall, post, or other vertical surface.



505.15 Top and Bottom Extension of Ramps. Handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beyond the top and bottom of the ramp runs. Extensions shall extend to a wall, post, or other vertical surface.



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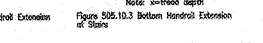
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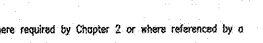
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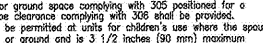
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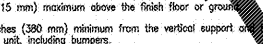
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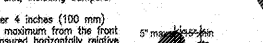
505.23 Bottom Extension of Stairs. At the bottom of a stair flight, handrails shall extend horizontally below the landing for 12 inches (305 mm) minimum beyond the bottom of the stair nosing. Extensions shall extend to a wall, post, or other vertical surface.



505.24 Top and Bottom Extension of Ramps. Handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beyond the top and bottom of the ramp runs. Extensions shall extend to a wall, post, or other vertical surface.



505.25 Top and Bottom Extension of Stairs. At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beyond the top of the stair nosing. Extensions shall extend to a wall, post, or other vertical surface.



505.26 Bottom Extension of Stairs. At the bottom of a stair flight, handrails shall extend horizontally below the landing for 12 inches (305 mm) minimum beyond the bottom of the stair nosing. Extensions shall extend to a wall, post, or other vertical surface.



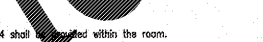
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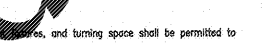
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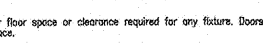
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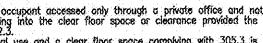
505.30 Top and Bottom Extension of Ramps. Handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beyond the top and bottom of the ramp runs. Extensions shall extend to a wall, post, or other vertical surface.



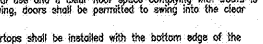
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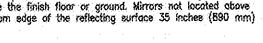
505.32 Bottom Extension of Stairs. At the bottom of a stair flight, handrails shall extend horizontally below the landing for 12 inches (305 mm) minimum beyond the bottom of the stair nosing. Extensions shall extend to a wall, post, or other vertical surface.



505.33 Top and Bottom Extension of Ramps. Handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beyond the top and bottom of the ramp runs. Extensions shall extend to a wall, post, or other vertical surface.



505.34 Top and Bottom Extension of Stairs. At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beyond the top of the stair nosing. Extensions shall extend to a wall, post, or other vertical surface.



505.35 Bottom Extension of Stairs. At the bottom of a stair flight, handrails shall extend horizontally below the landing for 12 inches (305 mm) minimum beyond the bottom of the stair nosing. Extensions shall extend to a wall, post, or other vertical surface.

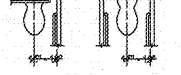


604.4 Coat Hooks and Shelves. Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the finish floor.

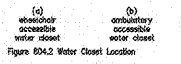
604.5 Water Closets and Toilet Compartments  
604.1 General. Water closets and toilet compartments shall comply with 604.2 through 604.9.



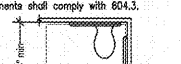
604.2 Location. The water closet shall be positioned with a wall or partition to the rear and to one side. The centerline of the water closet shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in 604.8.2. Water closets shall be arranged for a left-hand or right-hand approach.



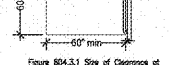
604.3 Location. The water closet shall be located with a wall or partition to the rear and to one side. The centerline of the water closet shall be 12 inches (305 mm) minimum and 18 inches (455 mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in 604.8.2. Water closets shall be arranged for a left-hand or right-hand approach to the water closet.



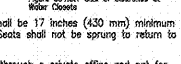
604.3.1 Size. Clearances around a water closet shall be 60 inches (1525 mm) minimum measured perpendicular from the side wall and 36 inches (915 mm) minimum measured perpendicular from the rear wall.



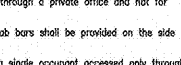
604.3.2 Overlap. The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, dispensers, sanitary napkin disposal units, coat hooks, shelves, accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearances.



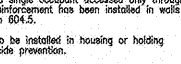
604.4 Seats. The seat height of a water closet above the finish floor shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum measured to the top of the seat. Seats shall not be sprung to return to a third position.



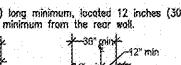
604.5 Grab Bars. Grab bars for water closets shall comply with 609. Grab bars shall be provided on the side wall to the water closet and on the rear wall to the toilet compartment.



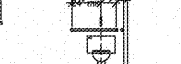
604.6 Flush Controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall be located within the required water closet clearances above the finish floor. Flush controls shall be located on the open side of the water closet except in ambulatory accessible compartments complying with 604.8.2.



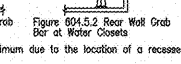
604.7 Dispensers. Toilet paper dispensers shall comply with 309.4 and shall be 7 inches (180 mm) minimum and 18 inches (455 mm) maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 14 inches (355 mm) minimum and 19 inches (485 mm) maximum above the finish floor. There shall be a clearance of 1 1/2 inches (38 mm) minimum below the grab bar. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.



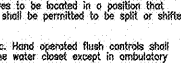
604.8 Toilet Compartments. Wheelchair accessible toilet compartments shall meet the requirements of 604.8.1 and 604.8.3. Compartments containing more than one plumbing fixture shall comply with 603. Ambulatory accessible compartments shall comply with 604.8.2 and 604.8.3.



604.8.1 Size. Wheelchair accessible compartments shall be 60 inches (1525 mm) side minimum measured perpendicular to the side wall, and 56 inches (1420 mm) deep minimum for wall-mounted water closets and 59 inches (1500 mm) deep minimum for floor-mounted water closets measured perpendicular to the rear wall. Wheelchair accessible compartments for children's use shall be 60 inches (1525 mm) wide minimum measured perpendicular to the side wall, and 58 inches (1470 mm) deep minimum for wall-hung and floor-mounted water closets measured perpendicular to the rear wall.



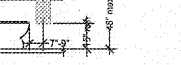
604.8.2 Approach. Compartments shall be arranged for a forward approach to the water closet.



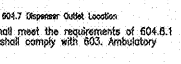
604.8.3 Clearances. The front partition and side wall partition shall provide a toe clearance of 9 inches (230 mm) minimum above the finish floor, and 9 inches (230 mm) minimum beyond the compartment-side face of the partition, exclusive of the partition surface. Clearances for children's use shall provide a toe clearance of 7 inches (178 mm) minimum above the finish floor, and 7 inches (178 mm) minimum beyond the compartment-side face of the partition, exclusive of the partition surface. The floor surface shall be 2 inches (51 mm) deep, 1/4 inch (6 mm) thick, and 1/4 inch (6 mm) high with a floor-mounted water closet. Toe clearance at the side wall partition shall be 2 inches (51 mm) greater than 62 inches (1575 mm) deep. Clearances at the rear wall partition shall be 2 inches (51 mm) greater than 65 inches (1675 mm) wide. Toe clearance at the side wall partition shall be 2 inches (51 mm) greater than 65 inches (1675 mm) wide. Toe clearance at the rear wall partition shall be 2 inches (51 mm) greater than 65 inches (1675 mm) wide.



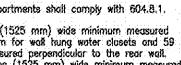
604.8.4 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.8.1 shall be provided with 604.8.2. In addition, a rear-wall grab bar complying with 604.8.2 shall be provided.



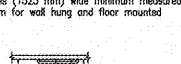
604.8.5 Ambulatory Accessible Compartments. Ambulatory accessible compartments shall comply with 604.8.2.



604.8.6 Approach. Compartments shall be arranged for a forward approach to the water closet.



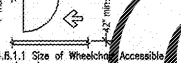
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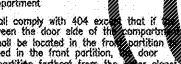
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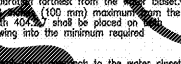
604.8.9 Ambulatory Accessible Compartments. Ambulatory accessible compartments shall comply with 604.8.2.



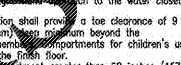
604.8.10 Approach. Compartments shall be arranged for a forward approach to the water closet.



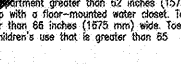
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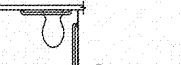
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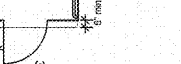
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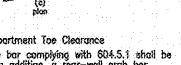
604.8.14 Approach. Compartments shall be arranged for a forward approach to the water closet.



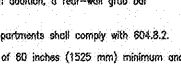
604.8.15 Clearances. The front partition and side wall partition shall provide a toe clearance of 9 inches (230 mm) minimum above the finish floor, and 9 inches (230 mm) minimum beyond the compartment-side face of the partition, exclusive of the partition surface. Clearances for children's use shall provide a toe clearance of 7 inches (178 mm) minimum above the finish floor, and 7 inches (178 mm) minimum beyond the compartment-side face of the partition, exclusive of the partition surface. The floor surface shall be 2 inches (51 mm) deep, 1/4 inch (6 mm) thick, and 1/4 inch (6 mm) high with a floor-mounted water closet. Toe clearance at the side wall partition shall be 2 inches (51 mm) greater than 62 inches (1575 mm) deep. Clearances at the rear wall partition shall be 2 inches (51 mm) greater than 65 inches (1675 mm) wide. Toe clearance at the side wall partition shall be 2 inches (51 mm) greater than 65 inches (1675 mm) wide. Toe clearance at the rear wall partition shall be 2 inches (51 mm) greater than 65 inches (1675 mm) wide.



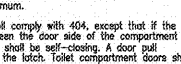
604.8.16 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.8.1 shall be provided with 604.8.2. In addition, a rear-wall grab bar complying with 604.8.2 shall be provided.



604.8.17 Ambulatory Accessible Compartments. Ambulatory accessible compartments shall comply with 604.8.2.



604.8.18 Approach. Compartments shall be arranged for a forward approach to the water closet.



604.8.19 Clearances. The front partition and side wall partition shall provide a toe clearance of 9 inches (230 mm) minimum above the finish floor, and 9 inches (230 mm) minimum beyond the compartment-side face of the partition, exclusive of the partition surface. Clearances for children's use shall provide a toe clearance of 7 inches (178 mm) minimum above the finish floor, and 7 inches (178 mm) minimum beyond the compartment-side face of the partition, exclusive of the partition surface. The floor surface shall be 2 inches (51 mm) deep, 1/4 inch (6 mm) thick, and 1/4 inch (6 mm) high with a floor-mounted water closet. Toe clearance at the side wall partition shall be 2 inches (51 mm) greater than 62 inches (1575 mm) deep. Clearances at the rear wall partition shall be 2 inches (51 mm) greater than 65 inches (1675 mm) wide. Toe clearance at the side wall partition shall be 2 inches (51 mm) greater than 65 inches (1675 mm) wide. Toe clearance at the rear wall partition shall be 2 inches (51 mm) greater than 65 inches (1675 mm) wide.



604.8.20 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.8.1 shall be provided with 604.8.2. In addition, a rear-wall grab bar complying with 604.8.2 shall be provided.



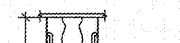
604.8.21 Ambulatory Accessible Compartments. Ambulatory accessible compartments shall comply with 604.8.2.



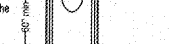
604.8.22 Approach. Compartments shall be arranged for a forward approach to the water closet.



604.8.2.3 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.8.1 shall be provided on both sides of the compartment.



604.8.3 Coat Hooks and Shelves. Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the finish floor.



604.9 Water Closets and Toilet Compartments for Children's Use. Water closets and toilet compartments for children's use shall comply with 604.9.

604.9.1 Location. The water closet shall be located with a wall or partition to the rear and to one side. The centerline of the water closet shall be 12 inches (305 mm) minimum and 18 inches (455 mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in 604.8.2. Water closets shall be arranged for a left-hand or right-hand approach to the water closet.

604.9.2 Location. The water closet shall be located with a wall or partition to the rear and to one side. The centerline of the water closet shall be 12 inches (305 mm) minimum and 18 inches (455 mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in 604.8.2. Water closets shall be arranged for a left-hand or right-hand approach to the water closet.

604.9.3 Height. The height of water closets shall be 11 inches (280 mm) minimum and 17 inches (430 mm) maximum measured to the top of the seat. Seats shall not be sprung to return to a fitted position.

604.9.4 Grab Bars. Grab bars for water closets shall comply with 604.9.