BIDS & CONSTRUCTION

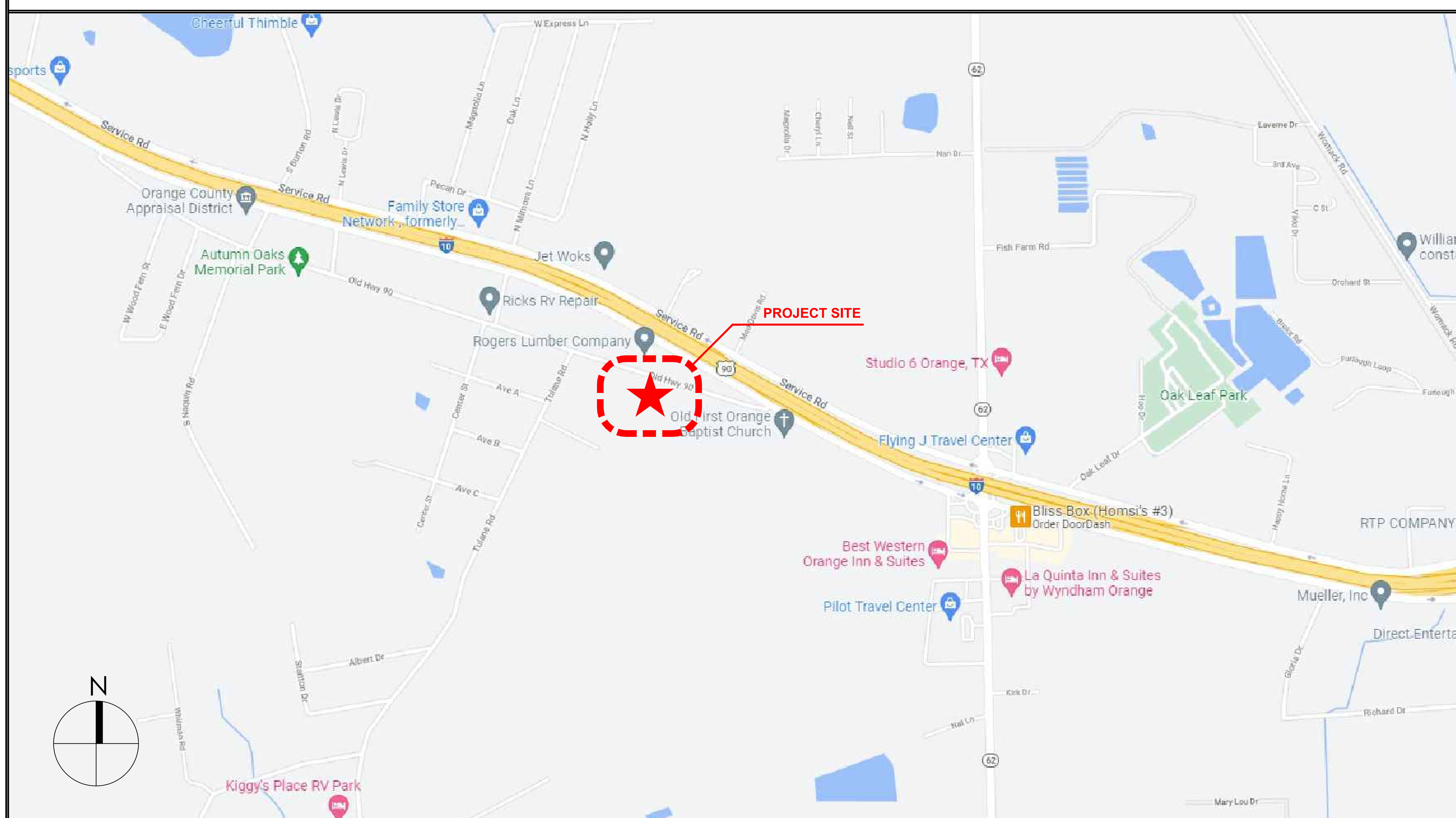
MEN'S TOILET & LOCKER ROOM RENOVATION

FOR THE

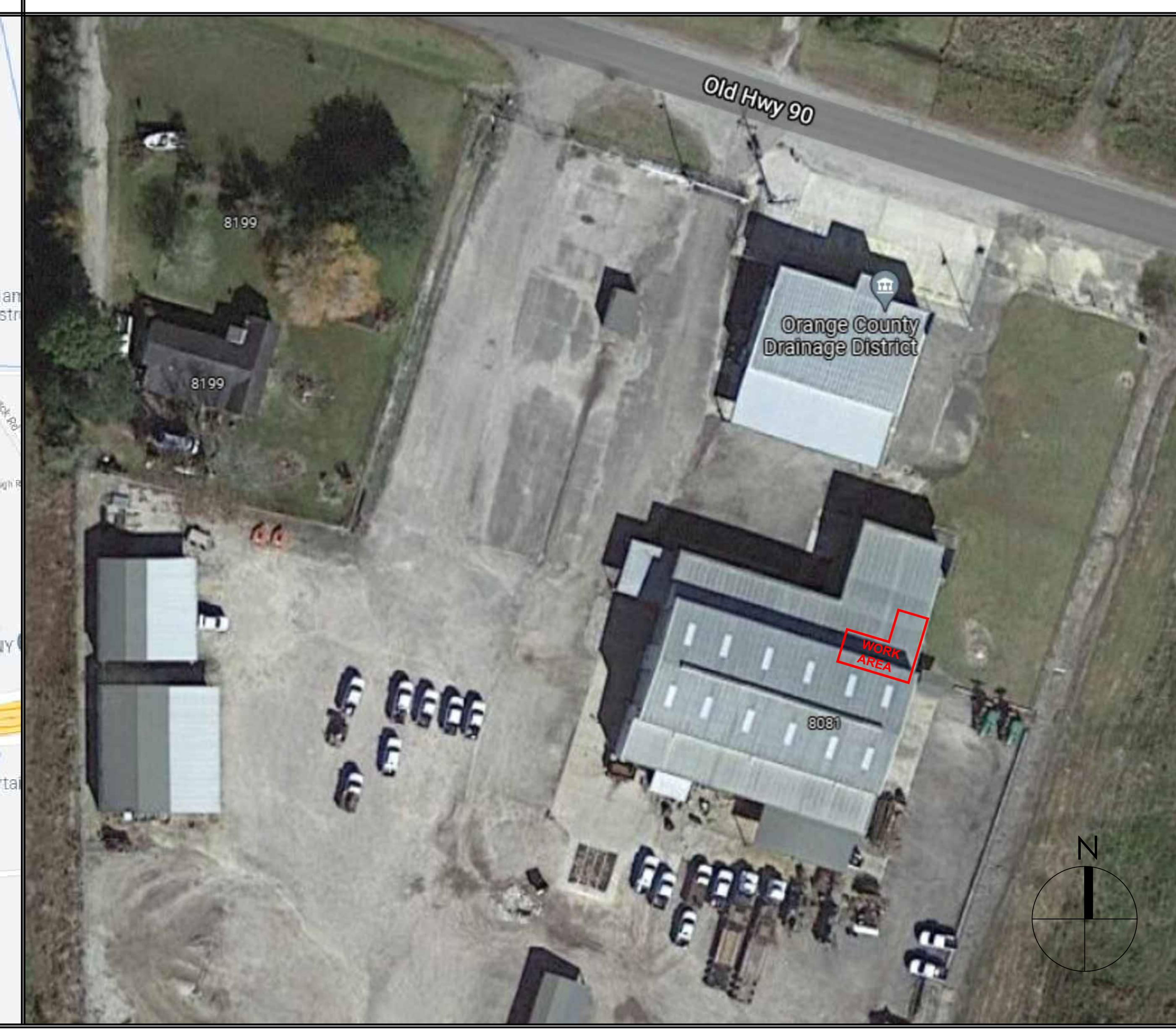
ORANGE COUNTY DRAINAGE DISTRICT

8081 OLD HIGHWAY 90 | ORANGE, TEXAS 77630

SITE LOCATION MAP:



WORK AREA LOCATION MAP:



DRAWINGS INDEX:

DWG NO.	DRAWING NAME	DRAWING ISSUED: BIDS & CONSTRUCTION JANUARY 11, 2022
	GENERAL	
G1.00	COVER SHEET, SITE MAP, & DRAWING INDEX	●
	TEXAS ACCESSIBILITY STANDARDS	
TAS-1	TEXAS ACCESSIBILITY STANDARDS	●
TAS-2	TEXAS ACCESSIBILITY STANDARDS	●
TAS-3	TEXAS ACCESSIBILITY STANDARDS	●
TAS-4	TEXAS ACCESSIBILITY STANDARDS	●
TAS-5	TEXAS ACCESSIBILITY STANDARDS	●
TAS-6	TEXAS ACCESSIBILITY STANDARDS	●
TAS-7	TEXAS ACCESSIBILITY STANDARDS	●
TAS-8	TEXAS ACCESSIBILITY STANDARDS	●
	ARCHITECTURAL	
A2.01	PLANS, INTERIOR ELEVATIONS, NOTES, AND DETAIL	●
	M.E.P.	
MEP.1	MEP DEMO FLOOR PLAN, NOTES, & SITE LOCATION	●
	MECHANICAL	
M.1	MECH. FLOOR PLAN, SCHEDULE, SYMBOLS, NOTES, & SPECS.	●
	ELECTRICAL	
E.1	LTG., P&C FLR. PLANS, SCHED., SYMBOLS, NOTES, & SPECS.	●
	PLUMBING	
P.1	PLUMBING FLOOR PLAN, SYMBOLS, NOTES, & DETAILS	●
P.2	PLUMBING SCHEDULES & SPECS.	●

LONG ARCHITECTURE
5922 Phelan Blvd., Suite L | Beaumont, TX 77706
Phone: 409.866.3443

BID ALTERNATE #1:

INSTALL PREFABRICATED SHOWER UNIT AS SCHEDULED ON MEP DRAWINGS IN LIEU OF TILED SHOWER, LINE DRAIN SYSTEM, AND TILED FLOOR. REF. "SH-1R ADA (ALTERNATE #1) ON SHEET P.2 PLUMBING FIXTURE SCHEDULE. FOLLOW SHOWER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ADJUST FRAMING DIMENSIONS AS NECESSARY TO PROVIDE REQUIRED SHOWER ROUGH OPENING. PROVIDE SLAB RECESS AS REQUIRED TO ENSURE FLOOR-TO-SHOWER FLOOR TRANSITION, INCLUDING THRESHOLD, COMPLIES WITH SECTION 303 OF THE 2012 TEXAS ACCESSIBILITY STANDARDS (REF. SHEET TAS-1). TILED FLOOR AREA OUTSIDE OF SHOWER, AS DETAILED ON 08/A2.01, IS NOT REQUIRED.

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REGISTERED ARCHITECT
CADE L. SPELL
STATE OF TEXAS

JANUARY 11, 2022

MEN'S TOILET & LOCKER ROOM RENOVATION
FOR THE
ORANGE COUNTY DRAINAGE DISTRICT
8081 OLD HIGHWAY 90
ORANGE, TEXAS 77630

ISSUE DATES:

BIDS & CONSTRUCTION
JANUARY 11, 2022

PREPARED BY: CLS

G1.00
SHEET NO.

PROJECT NO. 2021-11

COVER SHEET: LOCATION MAP, SITE MAP, & DRAWINGS INDEX

CHAPTER 3: BUILDING BLOCKS

301 GENERAL
301.1 SCOPE. THE PROVISIONS OF CHAPTER 3 SHALL APPLY WHERE REQUIRED BY CHAPTER 2 OR WHERE REFERENCED BY A REQUIREMENT IN THIS DOCUMENT.

302 FLOOR OR GROUND SURFACES
302.1 GENERAL. FLOOR AND GROUND SURFACES SHALL BE STABLE, FIRM, AND SLIP RESISTANT AND SHALL COMPLY WITH 302.

EXCEPTIONS:
1. WITHIN ANIMAL CONTAINMENT AREAS, FLOOR AND GROUND SURFACES SHALL NOT BE REQUIRED TO BE STABLE, FIRM, AND SLIP RESISTANT.
2. AREAS OF SPORT ACTIVITY SHALL NOT BE REQUIRED TO COMPLY WITH 302.

302.2 CARPET. CARPET OR CARPET TILE SHALL BE SECURELY ATTACHED AND SHALL HAVE A FIRM CUSHION, PAD, OR BACKING OR NO CUSHION OR PAD. CARPET OR CARPET TILE SHALL HAVE A LEVEL LOOP, TEXTURED LOOP, LEVEL CUT PILE, OR LEVEL CUT/UNCUT PILE TEXTURE. PILE HEIGHT SHALL BE 1/2 INCH (13 MM) MAXIMUM. EXPOSED EDGES OF CARPET SHALL BE FASTENED TO FLOOR SURFACES AND SHALL HAVE TRIM ON THE ENTIRE LENGTH OF THE EXPOSED EDGE. CARPET EDGE TRIM SHALL COMPLY WITH 303.

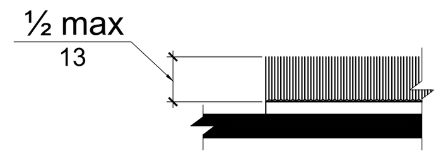


FIGURE 302.2 CARPET PILE HEIGHT

302.3 OPENINGS. OPENINGS IN FLOOR OR GROUND SURFACES SHALL NOT ALLOW PASSAGE OF A SPHERE MORE THAN 1/2 INCH (13 MM) DIAMETER EXCEPT AS ALLOWED IN 407.4.3, 409.4.3, 410.4, 810.5.3 AND 810.10. ELONGATED OPENINGS SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.

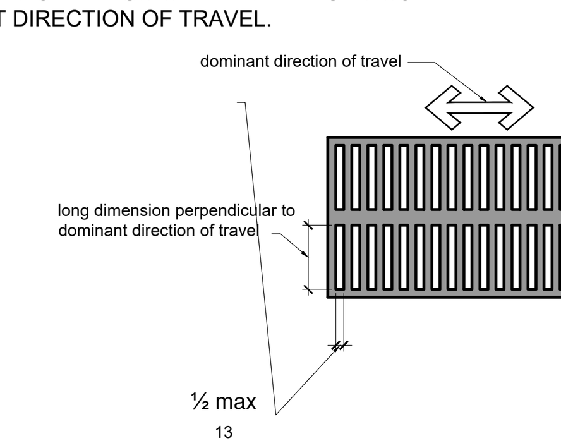


FIGURE 302.3 ELONGATED OPENINGS IN FLOOR OR GROUND SURFACES

303 CHANGES IN LEVEL
303.1 GENERAL. WHERE CHANGES IN LEVEL ARE PERMITTED IN FLOOR OR GROUND SURFACES, THEY SHALL COMPLY WITH 303.

EXCEPTIONS:
1. ANIMAL CONTAINMENT AREAS SHALL NOT BE REQUIRED TO COMPLY WITH 303.
2. AREAS OF SPORT ACTIVITY SHALL NOT BE REQUIRED TO COMPLY WITH 303.

303.2 VERTICAL. CHANGES IN LEVEL OF 1/4 INCH (6.4 MM) HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL.

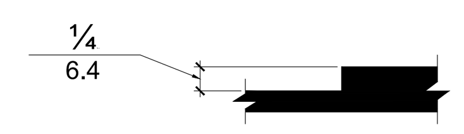


FIGURE 303.2 VERTICAL CHANGE IN LEVEL

303.3 BEVELED. CHANGES IN LEVEL BETWEEN 1/4 INCH (6.4 MM) HIGH MINIMUM AND 1/2 INCH (13 MM) HIGH MAXIMUM SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 1:2.

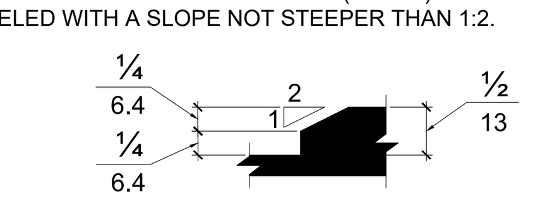


FIGURE 303.3 BEVELED CHANGE IN LEVEL

303.4 RAMPS. CHANGES IN LEVEL GREATER THAN 1/2 INCH (13 MM) HIGH SHALL BE RAMPED, AND SHALL COMPLY WITH 405 OR 406.

304 TURNING SPACE
304.1 GENERAL. TURNING SPACE SHALL COMPLY WITH 304.

304.2 FLOOR OR GROUND SURFACES. FLOOR OR GROUND SURFACES OF A TURNING SPACE SHALL **COMPLY WITH 302.** CHANGES IN LEVEL ARE NOT PERMITTED.

EXCEPTION: SLOPES NOT STEEPER THAN 1:48 SHALL BE PERMITTED.

304.3 SIZE. TURNING SPACE SHALL COMPLY WITH 304.3.1 OR 304.3.2.

304.3.1 CIRCULAR SPACE. THE TURNING SPACE SHALL BE A SPACE OF 60 INCHES (1525 MM) DIAMETER MINIMUM. THE SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPLYING WITH 306.

304.3.2 T-SHAPED SPACE. THE TURNING SPACE SHALL BE A T-SHAPED SPACE WITHIN A 60 INCH (1525 MM) SQUARE MINIMUM WITH ARMS AND BASE 36 INCHES (915 MM) WIDE MINIMUM. EACH ARM OF THE T SHALL BE CLEAR OF OBSTRUCTIONS 12 INCHES (305 MM) MINIMUM IN EACH DIRECTION AND THE BASE SHALL BE CLEAR OF OBSTRUCTIONS 24 INCHES (610 MM) MINIMUM. THE SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPLYING WITH 306 ONLY AT THE END OF EITHER THE BASE OR ONE ARM.

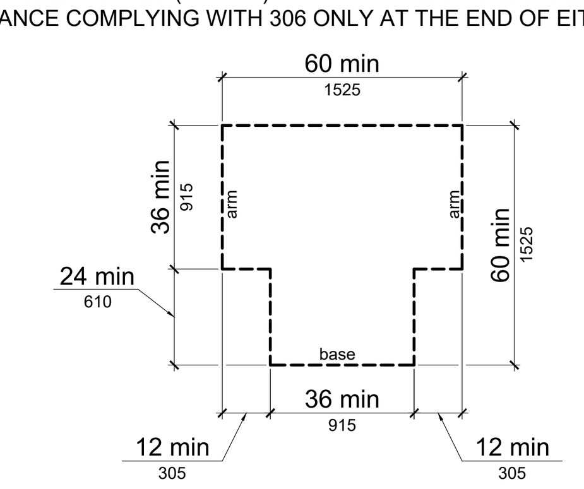


FIGURE 304.3.2 T-SHAPED TURNING SPACE

304.4 DOOR SWING. DOORS SHALL BE PERMITTED TO SWING INTO TURNING SPACES.

305 CLEAR FLOOR OR GROUND SPACE
305.1 GENERAL. CLEAR FLOOR OR GROUND SPACE SHALL COMPLY WITH 305.

305.2 FLOOR OR GROUND SURFACES. FLOOR OR GROUND SURFACES OF A CLEAR FLOOR OR GROUND SPACE SHALL COMPLY WITH 302. CHANGES IN LEVEL ARE NOT PERMITTED.

EXCEPTION: SLOPES NOT STEEPER THAN 1:48 SHALL BE PERMITTED.

305.3 SIZE. THE CLEAR FLOOR OR GROUND SPACE SHALL BE 30 INCHES (760 MM) MINIMUM BY 48 INCHES (1220 MM) MINIMUM.

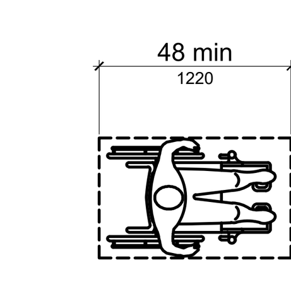


FIGURE 305.3 CLEAR FLOOR OR GROUND SPACE

305.4 KNEE AND TOE CLEARANCE. UNLESS OTHERWISE SPECIFIED, CLEAR FLOOR OR GROUND SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPLYING WITH 306.

305.5 POSITION. UNLESS OTHERWISE SPECIFIED, CLEAR FLOOR OR GROUND SPACE SHALL BE POSITIONED FOR EITHER FORWARD OR PARALLEL APPROACH TO AN ELEMENT.

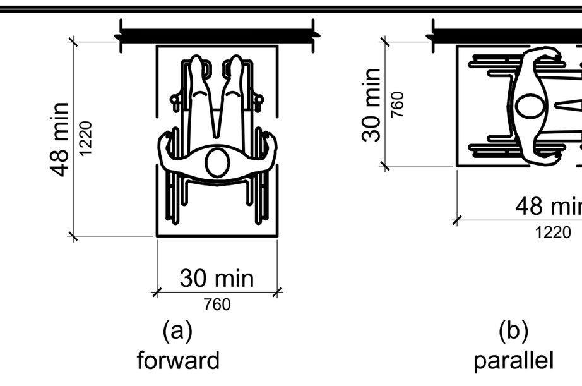


FIGURE 305.5 POSITION OF CLEAR FLOOR OR GROUND SPACE

305.6 APPROACH. ONE FULL UNOBSTRUCTED SIDE OF THE CLEAR FLOOR OR GROUND SPACE SHALL ADJOIN AN ACCESSIBLE ROUTE OR ADJOIN ANOTHER CLEAR FLOOR OR GROUND SPACE

305.7 MANEUVERING CLEARANCE. WHERE A CLEAR FLOOR OR GROUND SPACE IS LOCATED IN AN ALCOVE OR OTHERWISE CONFINED ON ALL OR PART OF THREE SIDES, ADDITIONAL MANEUVERING CLEARANCE SHALL BE PROVIDED IN ACCORDANCE WITH 305.7.1 AND 305.7.2.

305.7.1 FORWARD APPROACH. ALCOVES SHALL BE 36 INCHES (915 MM) WIDE MINIMUM WHERE THE DEPTH EXCEEDS 24 INCHES (610 MM).

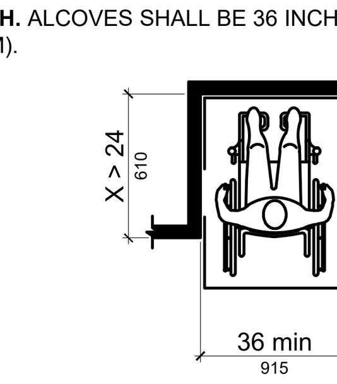


FIGURE 305.7.1 MANEUVERING CLEARANCE IN AN ALCOVE, FORWARD APPROACH

305.7.2 PARALLEL APPROACH. ALCOVES SHALL BE 60 INCHES (1525 MM) WIDE MINIMUM WHERE THE DEPTH EXCEEDS 15 INCHES (380 MM)

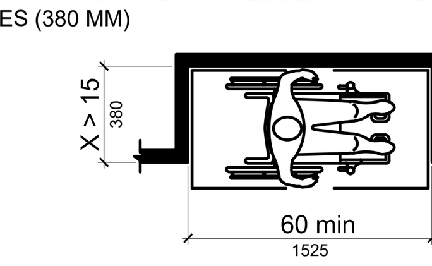


FIGURE 305.7.2 MANEUVERING CLEARANCE IN AN ALCOVE, PARALLEL APPROACH

306 KNEE AND TOE CLEARANCE
306.1 GENERAL. WHERE SPACE BENEATH AN ELEMENT IS INCLUDED AS PART OF CLEAR FLOOR OR GROUND SPACE OR TURNING SPACE, THE SPACE SHALL COMPLY WITH 306. ADDITIONAL SPACE SHALL NOT BE PROHIBITED BENEATH AN ELEMENT BUT SHALL NOT BE CONSIDERED AS PART OF THE CLEAR FLOOR OR GROUND SPACE OR TURNING SPACE.

306.2 TOE CLEARANCE.

306.2.1 GENERAL. SPACE UNDER AN ELEMENT BETWEEN THE FINISH FLOOR OR GROUND AND 9 INCHES (230 MM) ABOVE THE FINISH FLOOR OR GROUND SHALL BE CONSIDERED TOE CLEARANCE AND SHALL COMPLY WITH 306.2.

306.2.2 MAXIMUM DEPTH. TOE CLEARANCE SHALL EXTEND 25 INCHES (635 MM) MAXIMUM UNDER AN ELEMENT.

306.2.3 MAXIMUM REQUIRED DEPTH. WHERE TOE CLEARANCE IS REQUIRED AT AN ELEMENT AS PART OF A CLEAR FLOOR SPACE, THE TOE CLEARANCE SHALL EXTEND 17 INCHES (430 MM) MINIMUM UNDER THE ELEMENT..

306.2.4 ADDITIONAL CLEARANCE. SPACE EXTENDING GREATER THAN 6 INCHES (150 MM) BEYOND THE AVAILABLE KNEE CLEARANCE AT 9 INCHES (230 MM) ABOVE THE FINISH FLOOR OR GROUND SHALL NOT BE CONSIDERED TO CLEARANCE.

306.2.5 WIDTH. TOE CLEARANCE SHALL BE 30 INCHES (760 MM) WIDE MINIMUM.

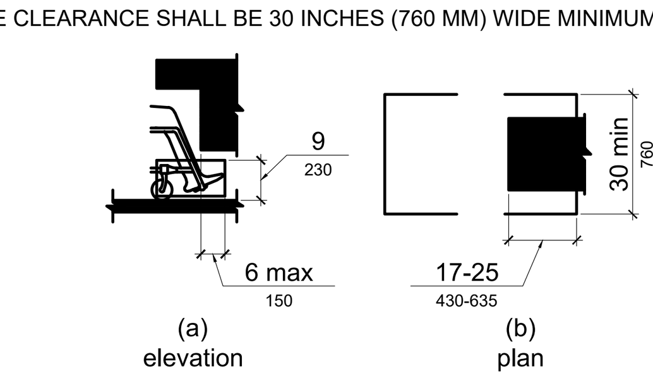


FIGURE 306.2 TOE CLEARANCE

306.3 KNEE CLEARANCE.

306.3.1 GENERAL. SPACE UNDER AN ELEMENT BETWEEN 9 INCHES (230 MM) AND 27 INCHES (685 MM) ABOVE THE FINISH FLOOR OR GROUND SHALL BE CONSIDERED KNEE CLEARANCE AND SHALL COMPLY WITH 306.3.

306.3.2 MAXIMUM DEPTH. KNEE CLEARANCE SHALL EXTEND 25 INCHES (635 MM) MAXIMUM UNDER AN ELEMENT AT 9 INCHES (230 MM) ABOVE THE FINISH FLOOR OR GROUND

306.3.3 MINIMUM REQUIRED DEPTH. WHERE KNEE CLEARANCE IS REQUIRED UNDER AN ELEMENT AS PART OF A CLEAR FLOOR SPACE, THE KNEE CLEARANCE SHALL BE 11 INCHES (280 MM) DEEP MINIMUM AT 9 INCHES (230 MM) ABOVE THE FINISH FLOOR OR GROUND, AND 8 INCHES (205 MM) DEEP MINIMUM AT 27 INCHES (685 MM) ABOVE THE FINISH FLOOR OR GROUND.

306.3.4 CLEARANCE REDUCTION. BETWEEN 9 INCHES (230 MM) AND 27 INCHES (685 MM) ABOVE THE FINISH FLOOR OR GROUND, THE KNEE CLEARANCE SHALL BE PERMITTED TO REDUCE AT A RATE OF 1 INCH (25 MM) IN DEPTH FOR EACH 6 INCHES (150 MM) IN HEIGHT.

306.3.5 WIDTH. KNEE CLEARANCE SHALL BE 30 INCHES (760 MM) WIDE MINIMUM.

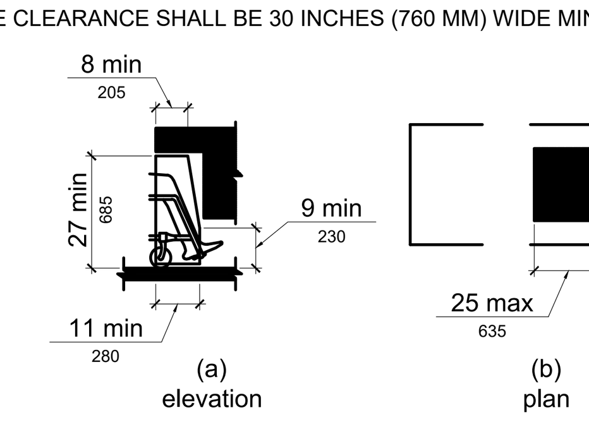
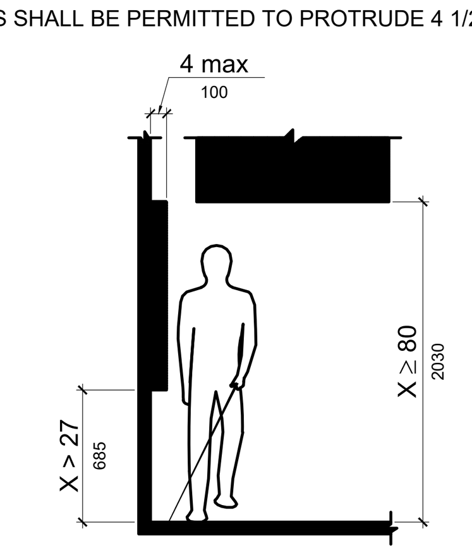


FIGURE 306.3 KNEE CLEARANCE

307 PROTRUDING OBJECTS
307.1 GENERAL. PROTRUDING OBJECTS SHALL COMPLY WITH 307.

307.2 PROTRUSION LIMITS. OBJECTS WITH LEADING EDGES MORE THAN 27 INCHES (685 MM) AND NOT MORE THAN 80 INCHES (2030 MM) ABOVE THE FINISH FLOOR OR GROUND SHALL PROTRUDE 4 INCHES (100 MM) MAXIMUM HORIZONTALLY INTO THE CIRCULATION PATH.

EXCEPTION: HANDRAILS SHALL BE PERMITTED TO PROTRUDE 4 1/2 INCHES (115 MM) MAXIMUM.



307.3 POST-MOUNTED OBJECTS. FREE-STANDING OBJECTS MOUNTED ON POSTS OR PYLONS SHALL OVERHANG CIRCULATION PATHS 12 INCHES (305 MM) MAXIMUM WHEN LOCATED 27 INCHES (685 MM) MINIMUM AND 80 INCHES (2030 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. WHERE A SIGN OR OTHER OBSTRUCTION IS MOUNTED BETWEEN POSTS OR PYLONS AND THE CLEAR DISTANCE BETWEEN THE POSTS OR PYLONS IS GREATER THAN 12 INCHES (305 MM), THE LOWEST EDGE OF SUCH SIGN OR OBSTRUCTION SHALL BE 27 INCHES (685 MM) MAXIMUM OR 80 INCHES (2030 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND.

EXCEPTION: THE SLOPING PORTIONS OF HANDRAILS SERVING STAIRS AND RAMPS SHALL NOT BE REQUIRED TO COMPLY WITH 307.3.

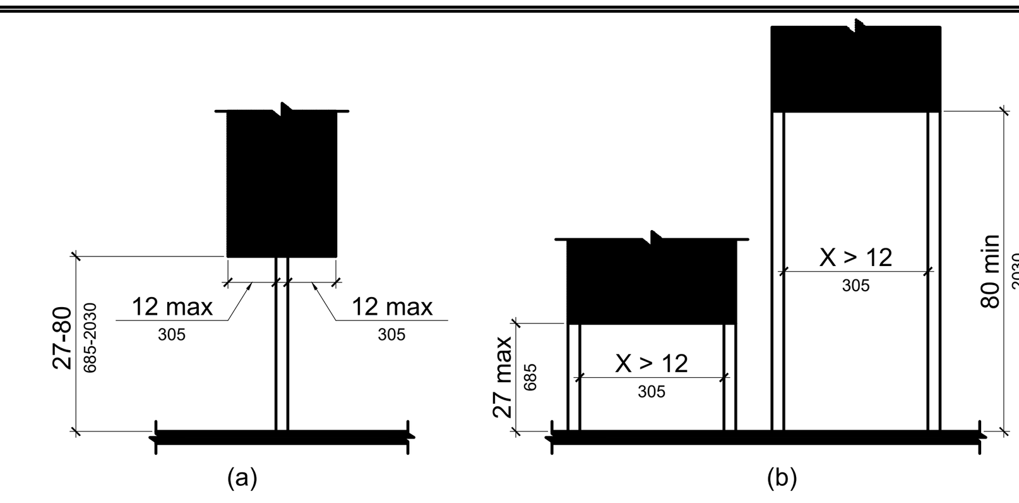


FIGURE 307.3 POST-MOUNTED PROTRUDING OBJECTS

307.4 VERTICAL CLEARANCE. VERTICAL CLEARANCE SHALL BE 80 INCHES (2030 MM) HIGH MINIMUM. GUARDRAILS OR OTHER BARRIERS SHALL BE PROVIDED WHERE THE VERTICAL CLEARANCE IS LESS THAN 80 INCHES (2030 MM) HIGH. THE LEADING EDGE OF SUCH GUARDRAIL OR BARRIER SHALL BE LOCATED 27 INCHES (685 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

EXCEPTION: DOOR CLOSERS AND DOOR STOPS SHALL BE PERMITTED TO BE 78 INCHES (1980 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND.

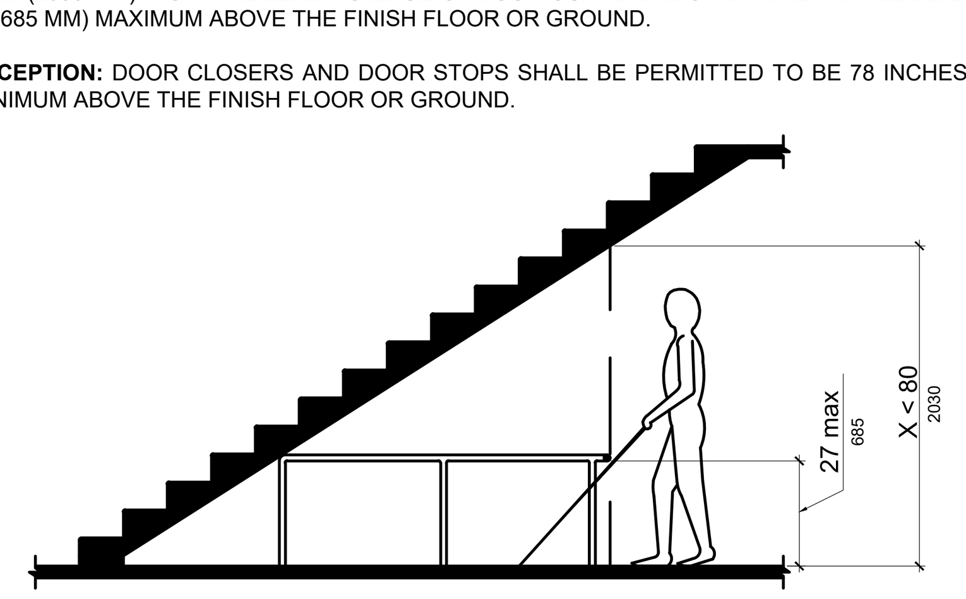


FIGURE 307.4 VERTICAL CLEARANCE

307.5 REQUIRED CLEAR WIDTH. PROTRUDING OBJECTS SHALL NOT REDUCE THE CLEAR WIDTH REQUIRED FOR ACCESSIBLE ROUTES.

308 REACH RANGES
308.1 GENERAL. REACH RANGES SHALL COMPLY WITH 308.

CHILDREN'S REACH RANGES

FORWARD OR SIDE REACH	HIGH (MAXIMUM)	LOW (MAXIMUM)
AGES 3 AND 4	36 IN. (915 MM)	20 IN. (510 MM)
AGES 5 THROUGH 8	40 IN. (1015 MM)	18 IN. (455 MM)
AGES 9 THROUGH 12	44 IN. (1120 MM)	16 IN. (405 MM)

308.2 FORWARD REACH.

308.2.1 UNOBSTRUCTED. WHERE A FORWARD REACH IS UNOBSTRUCTED, THE HIGH FORWARD REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM AND THE LOW FORWARD REACH SHALL BE 15 INCHES (380 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND.

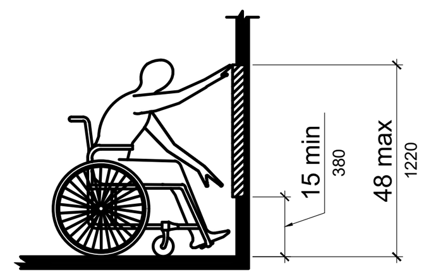


FIGURE 308.2.1 UNOBSTRUCTED FORWARD REACH

308.2.2 OBSTRUCTED HIGH REACH. WHERE A HIGH FORWARD REACH IS OVER AN OBSTRUCTION, THE CLEAR FLOOR SPACE SHALL EXTEND BENEATH THE ELEMENT FOR A DISTANCE NOT LESS THAN THE REQUIRED REACH DEPTH OVER THE OBSTRUCTION. THE HIGH FORWARD REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM WHERE THE REACH DEPTH IS 20 INCHES (510 MM) MAXIMUM. WHERE THE REACH DEPTH EXCEEDS 20 INCHES (510 MM), THE HIGH FORWARD REACH SHALL BE 44 INCHES (1120 MM) MAXIMUM AND THE REACH DEPTH SHALL BE 25 INCHES (635 MM) MAXIMUM.

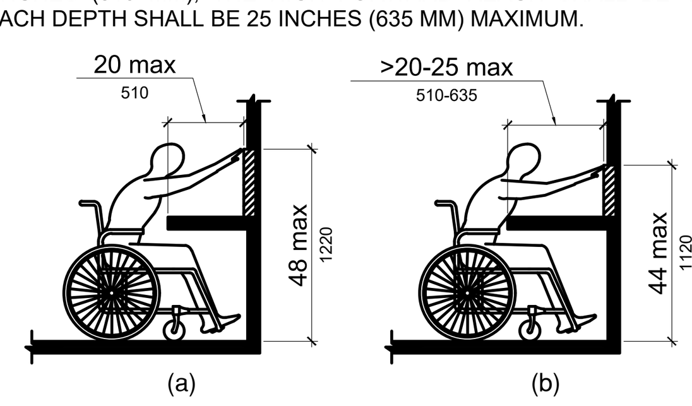


FIGURE 308.2.2 OBSTRUCTED HIGH FORWARD REACH

308.3 SIDE REACH.

308.3.1 UNOBSTRUCTED. WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE SIDE REACH IS UNOBSTRUCTED, THE HIGH SIDE REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM AND THE LOW SIDE REACH SHALL BE 15 INCHES (380 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND.

EXCEPTIONS:
1. AN OBSTRUCTION SHALL BE PERMITTED BETWEEN THE CLEAR FLOOR OR GROUND SPACE AND THE ELEMENT WHERE THE DEPTH OF THE OBSTRUCTION IS 10 INCHES (255 MM) MAXIMUM.
2. OPERABLE PARTS OF FUEL DISPENSERS SHALL BE PERMITTED TO BE 54 INCHES (1370 MM) MAXIMUM MEASURED FROM THE SURFACE OF THE VEHICULAR WAY WHERE FUEL DISPENSERS ARE INSTALLED ON EXISTING CURBS.

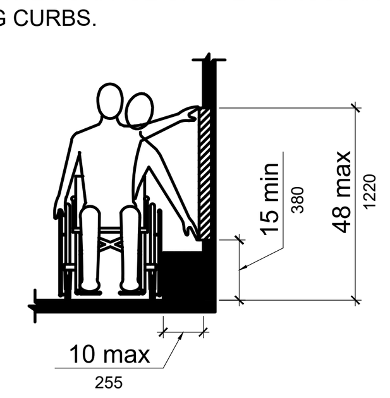


FIGURE 308.3.1 UNOBSTRUCTED SIDE REACH

308.3.2 OBSTRUCTED HIGH REACH. WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE HIGH SIDE REACH IS OVER AN OBSTRUCTION, THE HEIGHT OF THE OBSTRUCTION SHALL BE 34 INCHES (865 MM) MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 24 INCHES (610 MM) MAXIMUM. THE HIGH SIDE REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM FOR A REACH DEPTH OF 10 INCHES (255 MM) MAXIMUM. WHERE THE REACH DEPTH EXCEEDS 10 INCHES (255 MM), THE HIGH SIDE REACH SHALL BE 46 INCHES (1170 MM) MAXIMUM FOR A REACH DEPTH OF 24 INCHES (610 MM) MAXIMUM.

EXCEPTIONS:
1. THE TOP OF WASHING MACHINES AND CLOTHES DRYERS SHALL BE PERMITTED TO BE 36 INCHES (915 MM) MAXIMUM ABOVE THE FINISH FLOOR.
2. OPERABLE PARTS OF FUEL DISPENSERS SHALL BE PERMITTED TO BE 54 INCHES (1370 MM) MAXIMUM MEASURED FROM THE SURFACE OF THE VEHICULAR WAY WHERE FUEL DISPENSERS ARE INSTALLED ON EXISTING CURBS.

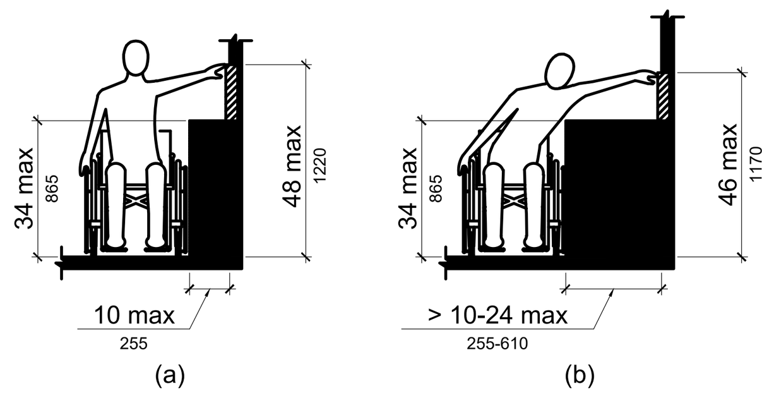


FIGURE 308.3.2 OBSTRUCTED HIGH SIDE REACH

309 OPERABLE PARTS
309.1 GENERAL. OPERABLE PARTS SHALL COMPLY WITH 309.

309.2 CLEAR FLOOR SPACE. A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 SHALL BE PROVIDED.

309.3 HEIGHT. OPERABLE PARTS SHALL BE PLACED WITHIN ONE OR MORE OF THE REACH RANGES SPECIFIED IN 308.

309.4 OPERATION. OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS (22.2 N) MAXIMUM.

EXCEPTION: GAS PUMP NOZZLES SHALL NOT BE REQUIRED TO PROVIDE OPERABLE PARTS THAT HAVE AN ACTIVATING FORCE OF 5 POUNDS (22.2 N) MAXIMUM.

CHAPTER 4: ACCESSIBLE ROUTES

401 GENERAL
401.1 SCOPE. THE PROVISIONS OF CHAPTER 4 SHALL APPLY WHERE REQUIRED BY CHAPTER 2 OR WHERE REFERENCED BY A REQUIREMENT IN THIS DOCUMENT.

402 ACCESSIBLE ROUTES
402.1 GENERAL. ACCESSIBLE ROUTES SHALL COMPLY WITH 402.

402.2 COMPONENTS. ACCESSIBLE ROUTES SHALL CONSIST OF ONE OR MORE OF THE FOLLOWING COMPONENTS: WALKING SURFACES WITH A RUNNING SLOPE NOT STEEPER THAN 1:20, DOORWAYS, RAMPS, CURB RAMPS EXCLUDING THE FLARED SIDES, ELEVATORS, AND PLATFORM LIFTS. ALL COMPONENTS OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF CHAPTER 4.

403 WALKING SURFACES
403.1 GENERAL. WALKING SURFACES THAT ARE A PART OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH 403.

403.2 FLOOR OR GROUND SURFACE. FLOOR OR GROUND SURFACES SHALL COMPLY WITH 302.

403.3 SLOPE. THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20. THE CROSS SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48.

403.4 CHANGES IN LEVEL. CHANGES IN LEVEL SHALL COMPLY WITH 303.

403.5 CLEARANCES. WALKING SURFACES SHALL PROVIDE CLEARANCES COMPLYING WITH 403.5.

EXCEPTION: WITHIN EMPLOYEE WORK AREAS, CLEARANCES ON COMMON USE CIRCULATION PATHS SHALL BE PERMITTED TO BE DECREASED BY WORK AREA EQUIPMENT PROVIDED THAT THE DECREASE IS ESSENTIAL TO THE FUNCTION OF THE WORK BEING PERFORMED.

403.5.1 CLEAR WIDTH. EXCEPT AS PROVIDED IN 403.5.2 AND 403.5.3, THE CLEAR WIDTH OF WALKING SURFACES SHALL BE 36 INCHES (915 MM) MINIMUM.

EXCEPTION: THE CLEAR WIDTH SHALL BE PERMITTED TO BE REDUCED TO 32 INCHES (815 MM) MINIMUM FOR A LENGTH OF 24 INCHES (610 MM) MAXIMUM PROVIDED THAT REDUCED WIDTH SEGMENTS ARE SEPARATED BY SEGMENTS THAT ARE 48 INCHES (1220 MM) LONG MINIMUM AND 36 INCHES (915 MM) WIDE MINIMUM.

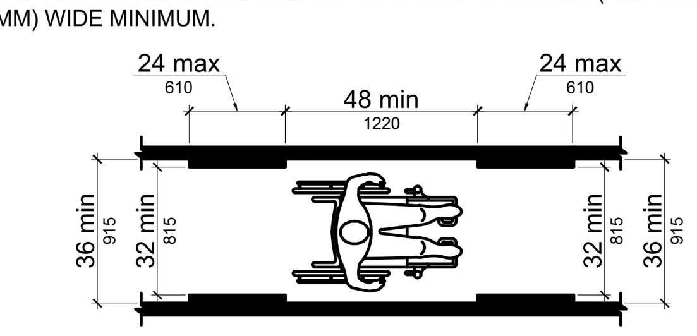


FIGURE 403.5.1 CLEAR WIDTH OF AN ACCESSIBLE ROUTE

403.5.2 CLEAR WIDTH AT TURN. WHERE THE ACCESSIBLE ROUTE MAKES A 180 DEGREE TURN AROUND AN ELEMENT WHICH IS LESS THAN 48 INCHES (1220 MM) WIDE, CLEAR WIDTH SHALL BE 42 INCHES (1065 MM) MINIMUM APPROACHING THE TURN, 48 INCHES (1220 MM) MINIMUM AT THE TURN AND 42 INCHES (1065 MM) MINIMUM LEAVING THE TURN.

EXCEPTION: WHERE THE CLEAR WIDTH AT THE TURN IS 60 INCHES (1525 MM) MINIMUM COMPLIANCE WITH 403.5.2 SHALL NOT BE REQUIRED.

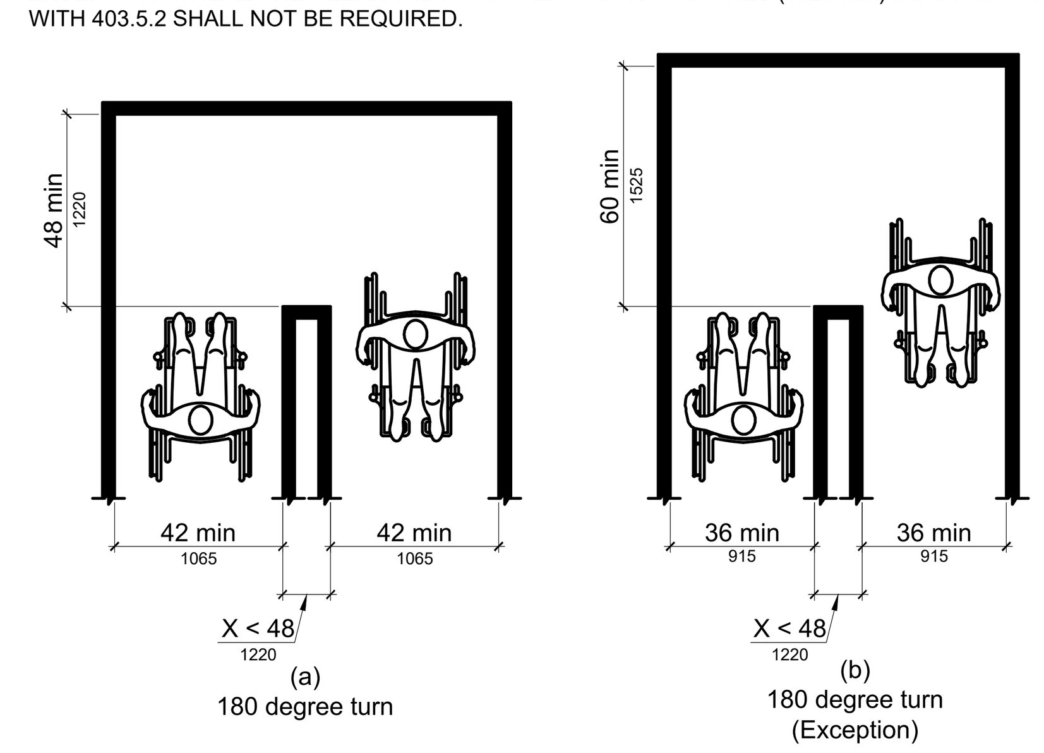


FIGURE 403.5.2 CLEAR WIDTH AT TURN

403.5.3 PASSING SPACES. AN ACCESSIBLE ROUTE WITH A CLEAR WIDTH LESS THAN 60 INCHES (1525 MM) SHALL PROVIDE PASSING SPACES AT INTERVALS OF 200 FEET (61 M) MAXIMUM. PASSING SPACES SHALL BE EITHER: A SPACE 60 INCHES (1525 MM) MINIMUM BY 60 INCHES (1525 MM) MINIMUM; OR, AN INTERSECTION OF TWO WALKING SURFACES PROVIDING A T-SHAPED SPACE COMPLYING WITH 304.3.2 WHERE THE BASE AND ARMS OF THE T-SHAPED SPACE EXTEND 48 INCHES (1220 MM) MINIMUM BEYOND THE INTERSECTION.

403.6 HANDRAILS. WHERE HANDRAILS ARE PROVIDED ALONG WALKING SURFACES WITH RUNNING SLOPES NOT STEEPER THAN 1:20 THEY SHALL COMPLY WITH 505.

404 DOORS, DOORWAYS, AND GATES
404.1 GENERAL. DOORS, DOORWAYS, AND GATES THAT ARE PART OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH 404.

EXCEPTION: DOORS, DOORWAYS, AND GATES DESIGNED TO BE OPERATED ONLY BY SECURITY PERSONNEL SHALL NOT BE REQUIRED TO COMPLY WITH 404.2.7, 404.2.8, 404.2.9, 404.3.2 AND 404.3.4 THROUGH 404.3.7.

404.2 MANUAL DOORS, DOORWAYS, AND MANUAL GATES. MANUAL DOORS AND DOORWAYS AND MANUAL GATES INTENDED FOR USER PASSAGE SHALL COMPLY WITH 404.2.

404.2.1 REVOLVING DOORS, GATES, AND TURNSTILES. REVOLVING DOORS, REVOLVING GATES, AND TURNSTILES SHALL NOT BE PART OF AN ACCESSIBLE ROUTE.

404.2.2 DOUBLE-LEAF DOORS AND GATES. AT LEAST ONE OF THE ACTIVE LEAVES OF DOORWAYS WITH TWO LEAVES SHALL COMPLY WITH 404.2.3 AND 404.2.4.

404.2.3 CLEAR WIDTH. DOOR OPENINGS SHALL PROVIDE A CLEAR WIDTH OF 32 INCHES (815 MM) MINIMUM. CLEAR OPENINGS OF DOORWAYS WITH SWINGING DOORS SHALL BE MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP, WITH THE DOOR OPEN 90 DEGREES. OPENINGS MORE THAN 24 INCHES (610 MM) DEEP SHALL PROVIDE A CLEAR OPENING OF 36 INCHES (915 MM) MINIMUM. THERE SHALL BE NO PROJECTIONS INTO THE REQUIRED CLEAR OPENING WIDTH LOWER THAN 34 INCHES (865 MM) ABOVE THE FINISH FLOOR OR GROUND. PROJECTIONS INTO THE CLEAR OPENING WIDTH BETWEEN 34 INCHES (865 MM) AND 80 INCHES (2030 MM) ABOVE THE FINISH FLOOR OR GROUND SHALL NOT EXCEED 4 INCHES (100 MM).

EXCEPTIONS:
1. IN ALTERATIONS, A PROJECTION OF 5/8 INCH (16 MM) MAXIMUM INTO THE REQUIRED CLEAR WIDTH SHALL BE PERMITTED FOR THE LATCH SIDE STOP.
2. DOOR CLOSERS AND DOOR STOPS SHALL BE PERMITTED TO BE 78 INCHES (1980 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND.

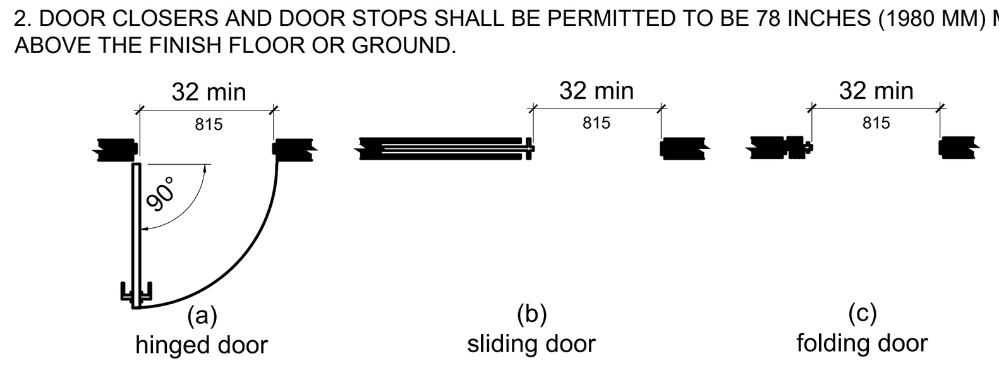


FIGURE 404.2.3 CLEAR WIDTH OF DOORWAYS

404.2.4 MANEUVERING CLEARANCES. MINIMUM MANEUVERING CLEARANCES AT DOORS AND GATES SHALL COMPLY WITH 404.2.4. MANEUVERING CLEARANCES SHALL EXTEND THE FULL WIDTH OF THE DOORWAY AND THE REQUIRED LATCH SIDE OR HINGE SIDE CLEARANCE.

EXCEPTION: ENTRY DOORS TO HOSPITAL PATIENT ROOMS SHALL NOT BE REQUIRED TO PROVIDE THE CLEARANCE BEYOND THE LATCH SIDE OF THE DOOR.

404.2.4.1 SWINGING DOORS AND GATES. SWINGING DOORS AND GATES SHALL HAVE MANEUVERING CLEARANCES COMPLYING WITH TABLE 404.2.4.1.

TABLE 404.2.4.1 MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS AND GATES

TYPE OF USE		MINIMUM MANEUVERING CLEARANCE	
APPROACH DIRECTION	DOOR OR GATE SIDE	PERPENDICULAR TO DOORWAY	PARALLEL TO DOORWAY (BEYOND LATCH SIDE UNLESS NOTED)
FROM FRONT	PULL	60 INCHES (1525 MM)	18 INCHES (455 MM)
FROM FRONT	PUSH	48 INCHES (1220 MM)	0 INCHES (0 MM)[1]
FROM HINGE SIDE	PULL	60 INCHES (1525 MM)	36 INCHES (915 MM)
FROM HINGE SIDE	PULL	54 INCHES (1370 MM)	42 INCHES (1065 MM)
FROM HINGE SIDE	PUSH	42 INCHES (1065 MM)[2]	22 INCHES (560 MM)[3]
FROM LATCH SIDE	PULL	48 INCHES (1220 MM)[4]	24 INCHES (610 MM)
FROM LATCH SIDE	PUSH	42 INCHES (1065 MM)[4]	24 INCHES (610 MM)

1. ADD 12 INCHES (305 MM) IF CLOSER AND LATCH ARE PROVIDED.
2. ADD 6 INCHES (150 MM) IF CLOSER AND LATCH ARE PROVIDED.
3. BEYOND HINGE SIDE.
4. ADD 6 INCHES (150 MM) IF CLOSER IS PROVIDED.

404.2.4.2 DOORWAYS WITHOUT DOORS OR GATES, SLIDING DOORS, AND FOLDING DOORS. DOORWAYS LESS THAN 36 INCHES (915 MM) WIDE WITHOUT DOORS OR GATES, SLIDING DOORS, OR FOLDING DOORS SHALL HAVE MANEUVERING CLEARANCES COMPLYING WITH TABLE 404.2.4.2.

FIGURE 404.2.4.2 MANEUVERING CLEARANCES AT DOORWAYS WITHOUT DOORS OR GATES, MANUAL SLIDING DOORS, AND MANUAL FOLDING DOORS

	MINIMUM MANEUVERING CLEARANCE	
APPROACH DIRECTION	PERPENDICULAR TO DOORWAY	PARALLEL TO DOORWAY (BEYOND STOP/LATCH SIDE UNLESS NOTED)
FROM FRONT	48 INCHES (1220 MM)	0 INCHES (0 MM)
FROM SIDE[1]	42 INCHES (1065 MM)	0 INCHES (0 MM)
FROM POCKET/HINGE SIDE	42 INCHES (1065 MM)	22 INCHES (560 MM)[2]
FROM STOP/LATCH SIDE	42 INCHES (1065 MM)	24 INCHES (610 MM)

1. DOORWAY WITH NO DOOR ONLY.
2. BEYOND POCKET/HINGE SIDE.

404.2.4.3 RECESSED DOORS AND GATES. MANEUVERING CLEARANCES FOR FORWARD APPROACH SHALL BE PROVIDED WHEN ANY OBSTRUCTION WITHIN 18 INCHES (455 MM) OF THE LATCH SIDE OF A DOORWAY PROJECTS MORE THAN 8 INCHES (205 MM) BEYOND THE FACE OF THE DOOR, MEASURED PERPENDICULAR TO THE FACE OF THE DOOR OR GATE.

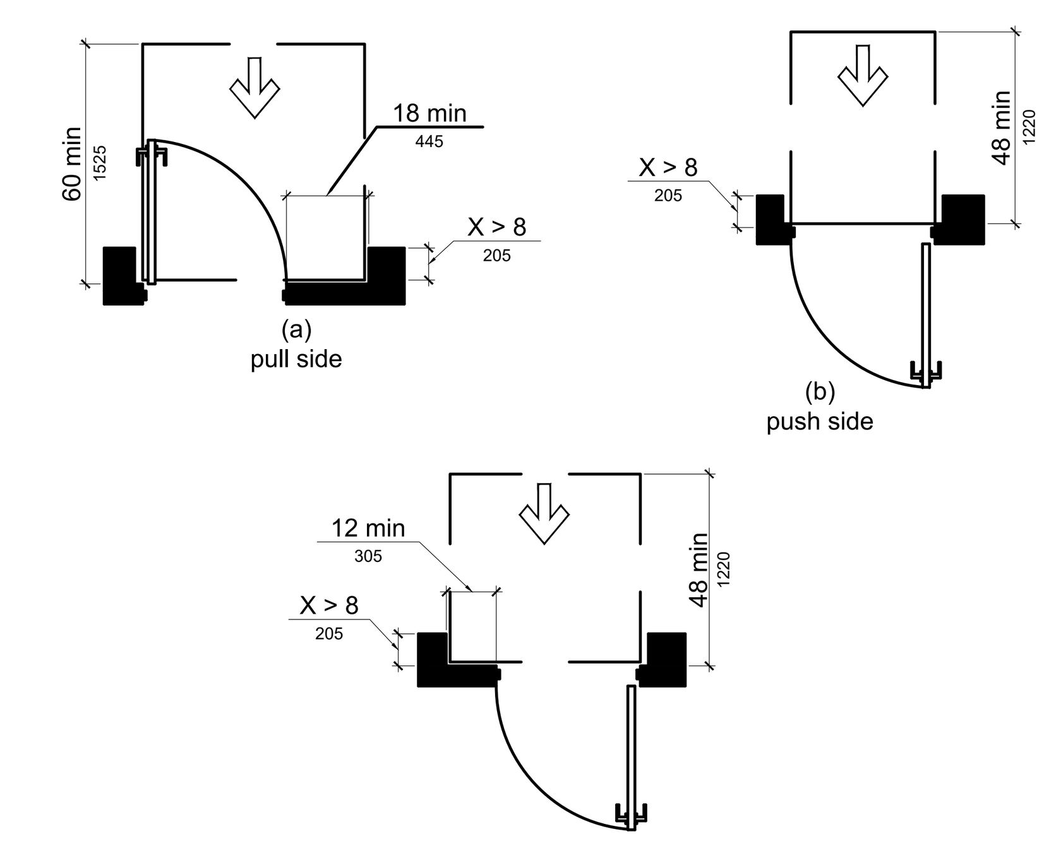


FIGURE 404.2.4.3 MANEUVERING CLEARANCES AT RECESSED DOORS AND GATES

404.2.4.4 FLOOR OR GROUND SURFACE. FLOOR OR GROUND SURFACE WITHIN REQUIRED MANEUVERING CLEARANCES SHALL COMPLY WITH 302. CHANGES IN LEVEL ARE NOT PERMITTED.

EXCEPTIONS:
1. SLOPES NOT STEEPER THAN 1:48 SHALL BE PERMITTED.
2. CHANGES IN LEVEL AT THRESHOLDS COMPLYING WITH 404.2.5 SHALL BE PERMITTED.

404.2.5 THRESHOLDS. THRESHOLDS, IF PROVIDED AT DOORWAYS, SHALL BE 1/2 INCH (13 MM) HIGH MAXIMUM. RAISED THRESHOLDS AND CHANGES IN LEVEL AT DOORWAYS SHALL COMPLY WITH 302 AND 303.

EXCEPTION: EXISTING OR ALTERED THRESHOLDS 3/4 INCH (19 MM) HIGH MAXIMUM THAT HAVE A BEVELED EDGE ON EACH SIDE WITH A SLOPE NOT STEEPER THAN 1:2 SHALL NOT BE REQUIRED TO COMPLY WITH 404.2.5.

404.2.6 DOORS IN SERIES AND GATES IN SERIES. THE DISTANCE BETWEEN TWO HINGED OR PIVOTED DOORS IN SERIES AND GATES IN SERIES SHALL BE 48 INCHES (1220 MM) MINIMUM PLUS THE WIDTH OF DOORS OR GATES SWINGING INTO THE SPACE.

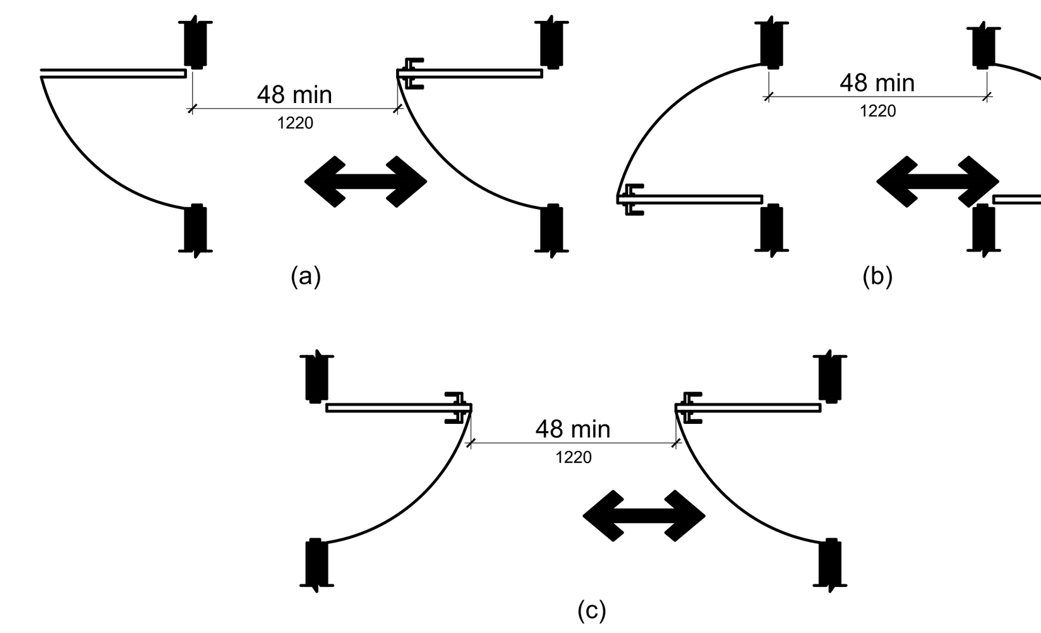


FIGURE 404.2.6 DOORS IN SERIES AND GATES IN SERIES

404.2.7 DOOR AND GATE HARDWARE. HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERABLE PARTS ON DOORS AND GATES SHALL COMPLY WITH 309.4. OPERABLE PARTS OF SUCH HARDWARE SHALL BE 34 INCHES (865 MM) MINIMUM AND 48 INCHES (1220 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. WHERE SLIDING DOORS ARE IN THE FULLY OPEN POSITION, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES.

EXCEPTIONS:
1. EXISTING LOCKS SHALL BE PERMITTED IN ANY LOCATION AT EXISTING GLAZED DOORS WITHOUT STILES, EXISTING OVERHEAD ROLLING DOORS OR GRILLES, AND SIMILAR EXISTING DOORS OR GRILLES THAT ARE DESIGNED WITH LOCKS THAT ARE ACTIVATED ONLY AT THE TOP OR BOTTOM RAIL.
2. ACCESS GATES IN BARRIER WALLS AND FENCES PROTECTING POOLS, SPAS, AND HOT TUBS SHALL BE PERMITTED TO HAVE OPERABLE PARTS OF THE RELEASE OF LATCH ON SELF-LATCHING DEVICES AT 54 INCHES (1370 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND PROVIDED THE SELF-LATCHING DEVICES ARE NOT ALSO SELF-LOCKING DEVICES AND OPERATED BY MEANS OF A KEY, ELECTRONIC OPENER, OR INTEGRAL COMBINATION LOCK.

404.2.8 CLOSING SPEED. DOOR AND GATE CLOSING SPEED SHALL COMPLY WITH 404.2.8.

404.2.8.1 DOOR CLOSERS AND GATE CLOSERS. DOOR CLOSERS AND GATE CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12 DEGREES FROM THE LATCH IS 5 SECONDS MINIMUM.

404.2.8.2 SPRING HINGES. DOOR AND GATE SPRING HINGES SHALL BE ADJUSTED SO THAT FROM THE OPEN POSITION OF 70 DEGREES, THE DOOR OR GATE SHALL MOVE TO THE CLOSED POSITION IN 1.5 SECONDS MINIMUM.

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CADE L. SPELL
25311
STATE OF TEXAS
JANUARY 11, 2022

MEN'S TOILET & LOCKER ROOM RENOVATION FOR THE ORANGE COUNTY DRAINAGE DISTRICT

8081 OLD HIGHWAY 90 ORANGE, TEXAS 77630

ISSUE DATES:

BIDS & CONSTRUCTION
JANUARY 11, 2022

PREPARED BY: CLS

TAS-1
SHEET NO.

PROJECT NO. 2021-11
TEXAS ACCESSIBILITY STANDARDS

404.2.9 DOOR AND GATE OPENING FORCE. FIRE DOORS SHALL HAVE A MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY. THE FORCE FOR PUSHING OR PULLING OPEN A DOOR OR GATE OTHER THAN FIRE DOORS SHALL BE AS FOLLOWS:

1. INTERIOR HINGED DOORS AND GATES: 5 POUNDS (22.2 N) MAXIMUM.
2. SLIDING OR FOLDING DOORS: 5 POUNDS (22.2 N) MAXIMUM.

THESE FORCES DO NOT APPLY TO THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISENGAGE OTHER DEVICES THAT HOLD THE DOOR OR GATE IN A CLOSED POSITION.

404.2.10 DOOR AND GATE SURFACES. SWINGING DOOR AND GATE SURFACES WITHIN 10 INCHES (255 MM) OF THE FINISH FLOOR OR GROUND MEASURED VERTICALLY SHALL HAVE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE DOOR OR GATE. PARTS CREATING HORIZONTAL OR VERTICAL JOINTS IN THESE SURFACES SHALL BE WITHIN 1/16 INCH (1.6 MM) OF THE SAME PLANE AS THE OTHER. CAVITIES CREATED BY ADDED KICK PLATES SHALL BE CAPPED.

EXCEPTIONS:
1. SLIDING DOORS SHALL NOT BE REQUIRED TO COMPLY WITH 404.2.10.
2. TEMPERED GLASS DOORS WITHOUT STILES AND HAVING A BOTTOM RAIL OR SHOE WITH THE TOP LEADING EDGE TAPERED AT 60 DEGREES MINIMUM FROM THE HORIZONTAL SHALL NOT BE REQUIRED TO MEET THE 10 INCH (255 MM) BOTTOM SMOOTH SURFACE HEIGHT REQUIREMENT.
3. DOORS AND GATES THAT DO NOT EXTEND TO WITHIN 10 INCHES (255 MM) OF THE FINISH FLOOR OR GROUND SHALL NOT BE REQUIRED TO COMPLY WITH 404.2.10.
4. EXISTING DOORS AND GATES WITHOUT SMOOTH SURFACES WITHIN 10 INCHES (255 MM) OF THE FINISH FLOOR OR GROUND SHALL NOT BE REQUIRED TO PROVIDE SMOOTH SURFACES COMPLYING WITH 404.2.10 PROVIDED THAT IF ADDED KICK PLATES ARE INSTALLED, CAVITIES CREATED BY SUCH KICK PLATES ARE CAPPED.

404.2.11 VISION LIGHTS. DOORS, GATES, AND SIDE LIGHTS ADJACENT TO DOORS OR GATES, CONTAINING ONE OR MORE GLAZING PANELS THAT PERMIT VIEWING THROUGH THE PANELS SHALL HAVE THE BOTTOM OF AT LEAST ONE GLAZED PANEL LOCATED 43 INCHES (1090 MM) MAXIMUM ABOVE THE FINISH FLOOR.

EXCEPTION: VISION LIGHTS WITH THE LOWEST PART MORE THAN 66 INCHES (1675 MM) FROM THE FINISH FLOOR OR GROUND SHALL NOT BE REQUIRED TO COMPLY WITH 404.2.11.

404.3 AUTOMATIC AND POWER-ASSISTED DOORS AND GATES. AUTOMATIC DOORS AND AUTOMATIC GATES SHALL COMPLY WITH 404.3. FULL-POWERED AUTOMATIC DOORS SHALL COMPLY WITH ANSI/BHMA A156.10 (INCORPORATED BY REFERENCE, SEE "REFERENCED STANDARDS" IN CHAPTER 1). LOW-ENERGY AND POWER-ASSISTED DOORS SHALL COMPLY WITH ANSI/BHMA A156.19 (1997 OR 2002 EDITION) (INCORPORATED BY REFERENCE, SEE "REFERENCED STANDARDS" IN CHAPTER 1).

404.3.1 CLEAR WIDTH. DOORWAYS SHALL PROVIDE A CLEAR OPENING OF 32 INCHES (815 MM) MINIMUM IN POWER-ON AND POWER-OFF MODE. THE MINIMUM CLEAR WIDTH FOR AUTOMATIC DOOR SYSTEMS IN A DOORWAY SHALL BE BASED ON THE CLEAR OPENING PROVIDED BY ALL LEAVES IN THE OPEN POSITION.

404.3.2 MANEUVERING CLEARANCE. CLEARANCES AT POWER-ASSISTED DOORS AND GATES SHALL COMPLY WITH 404.2.4. CLEARANCES AT AUTOMATIC DOORS AND GATES WITHOUT STANDBY POWER AND SERVING AN ACCESSIBLE MEANS OF EGRESS SHALL COMPLY WITH 404.2.4.

EXCEPTION: WHERE AUTOMATIC DOORS AND GATES REMAIN OPEN IN THE POWER-OFF CONDITION, COMPLIANCE WITH 404.2.4 SHALL NOT BE REQUIRED.

404.3.3 THRESHOLDS. THRESHOLDS AND CHANGES IN LEVEL AT DOORWAYS SHALL COMPLY WITH 404.2.5.

404.3.4 DOORS IN SERIES AND GATES IN SERIES. DOORS IN SERIES AND GATES IN SERIES SHALL COMPLY WITH 404.2.6.

404.3.5 CONTROLS. MANUALLY OPERATED CONTROLS SHALL COMPLY WITH 309. THE CLEAR FLOOR SPACE ADJACENT TO THE CONTROL SHALL BE LOCATED BEYOND THE ARC OF THE DOOR SWING.

404.3.6 BREAK OUT OPENING. WHERE DOORS AND GATES WITHOUT STANDBY POWER ARE A PART OF A MEANS OF EGRESS, THE CLEAR BREAK OUT OPENING AT SWINGING OR SLIDING DOORS AND GATES SHALL BE 32 INCHES (815 MM) MINIMUM WHEN OPERATED IN EMERGENCY MODE.

EXCEPTION: WHERE MANUAL SWINGING DOORS AND GATES COMPLY WITH 404.2 AND SERVE THE SAME MEANS OF EGRESS COMPLIANCE WITH 404.3.6 SHALL NOT BE REQUIRED.

404.3.7 REVOLVING DOORS, REVOLVING GATES, AND TURNSTILES. REVOLVING DOORS, REVOLVING GATES, AND TURNSTILES SHALL NOT BE PART OF AN ACCESSIBLE ROUTE.

405 RAMPS
405.1 GENERAL. RAMPS ON ACCESSIBLE ROUTES SHALL COMPLY WITH 405.

EXCEPTION: IN ASSEMBLY AREAS, AISLE RAMPS ADJACENT TO SEATING AND NOT SERVING ELEMENTS REQUIRED TO BE ON AN ACCESSIBLE ROUTE SHALL NOT BE REQUIRED TO COMPLY WITH 405.

405.2 SLOPE. RAMP RUNS SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 1:12.

EXCEPTION: IN EXISTING SITES, BUILDINGS, AND FACILITIES, RAMPS SHALL BE PERMITTED TO HAVE RUNNING SLOPES STEEPER THAN 1:12 COMPLYING WITH TABLE 405.2 WHERE SUCH SLOPES ARE NECESSARY DUE TO SPACE LIMITATIONS.

FIGURE 405.2 MAXIMUM RAMP SLOPE AND RISE FOR EXISTING SITES, BUILDINGS, AND FACILITIES

SLOPE	MAXIMUM RISE
STEEPER THAN 1:10 BUT NOT STEEPER THAN 1:8	3 INCHES (75 MM)
STEEPER THAN 1:12 BUT NOT STEEPER THAN 1:10	6 INCHES (150 MM)

1. DOORWAY WITH NO DOOR ONLY.

405.3 CROSS SLOPE. CROSS SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:48.

405.4 FLOOR OR GROUND SURFACES. FLOOR OR GROUND SURFACES OF RAMP RUNS SHALL COMPLY WITH 302. CHANGES IN LEVEL OTHER THAN THE RUNNING SLOPE AND CROSS SLOPE ARE NOT PERMITTED ON RAMP RUNS.

405.5 CLEAR WIDTH. THE CLEAR WIDTH OF A RAMP RUN AND, WHERE HANDRAILS ARE PROVIDED, THE CLEAR WIDTH BETWEEN HANDRAILS SHALL BE 36 INCHES (915 MM) MINIMUM.

EXCEPTION: WITHIN EMPLOYEE WORK AREAS, THE REQUIRED CLEAR WIDTH OF RAMPS THAT ARE A PART OF COMMON USE CIRCULATION PATHS SHALL BE PERMITTED TO BE DECREASED BY WORK AREA EQUIPMENT PROVIDED THAT THE DECREASE IS ESSENTIAL TO THE FUNCTION OF THE WORK BEING PERFORMED.

405.6 RISE. THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES (760 MM) MAXIMUM.

405.7 LANDINGS. RAMPS SHALL HAVE LANDINGS AT THE TOP AND THE BOTTOM OF EACH RAMP RUN. LANDINGS SHALL COMPLY WITH 405.7.

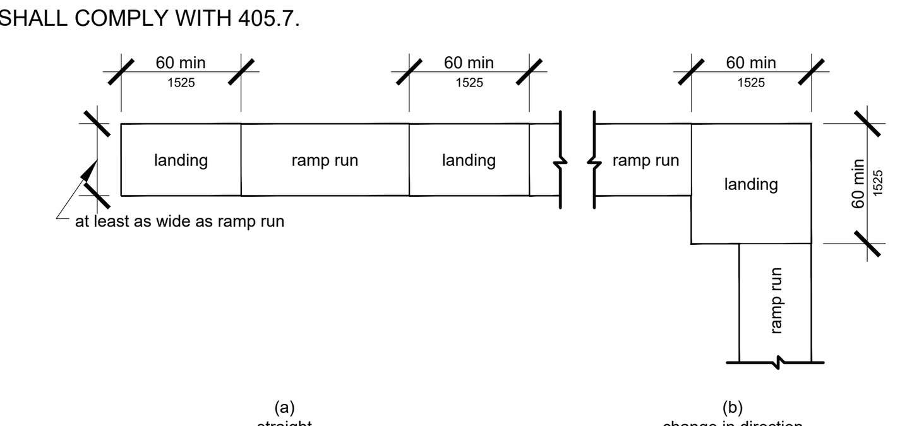

FIGURE 405.7 RAMP LANDINGS

405.7.1 SLOPE. LANDINGS SHALL COMPLY WITH 302. CHANGES IN LEVEL ARE NOT PERMITTED.

EXCEPTION: SLOPES NOT STEEPER THAN 1:48 SHALL BE PERMITTED.

405.7.2 WIDTH. THE LANDING CLEAR WIDTH SHALL BE AT LEAST AS WIDE AS THE WIDEST RAMP RUN LEADING TO THE LANDING.

405.7.3 LENGTH. THE LANDING CLEAR LENGTH SHALL BE 60 INCHES (1525 MM) LONG MINIMUM.

405.7.4 CHANGE IN DIRECTION. RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS SHALL HAVE A CLEAR LANDING 60 INCHES (1525 MM) MINIMUM BY 60 INCHES (1525 MM) MINIMUM.

405.7.5 DOORWAYS. WHERE DOORWAYS ARE LOCATED ADJACENT TO A RAMP LANDING, MANEUVERING CLEARANCES REQUIRED BY 404.2.4 AND 404.3.2 SHALL BE PERMITTED TO OVERLAP THE REQUIRED LANDING AREA.

405.8 HANDRAILS. RAMP RUNS WITH A RISE GREATER THAN 6 INCHES (150 MM) SHALL HAVE HANDRAILS COMPLYING WITH 505.

EXCEPTION: WITHIN EMPLOYEE WORK AREAS, HANDRAILS SHALL NOT BE REQUIRED WHERE RAMPS THAT ARE PART OF COMMON USE CIRCULATION PATHS ARE DESIGNED TO PERMIT THE INSTALLATION OF HANDRAILS COMPLYING WITH 505. RAMPS NOT SUBJECT TO THE EXCEPTION TO 405.5 SHALL BE DESIGNED TO MAINTAIN A 36 INCH (915 MM) MINIMUM CLEAR WIDTH WHEN HANDRAILS ARE INSTALLED.

405.9 EDGE PROTECTION. EDGE PROTECTION COMPLYING WITH 405.9.1 OR 405.9.2 SHALL BE PROVIDED ON EACH SIDE OF RAMP RUNS AND AT EACH SIDE OF RAMP LANDINGS.

EXCEPTIONS:
1. EDGE PROTECTION SHALL NOT BE REQUIRED ON RAMPS THAT ARE NOT REQUIRED TO HAVE HANDRAILS AND HAVE SIDES COMPLYING WITH 406.3.
2. EDGE PROTECTION SHALL NOT BE REQUIRED ON THE SIDES OF RAMP LANDINGS SERVING AN ADJOINING RAMP RUN OR STAIRWAY.
3. EDGE PROTECTION SHALL NOT BE REQUIRED ON THE SIDES OF RAMP LANDINGS HAVING A VERTICAL DROP-OFF OF ½ INCH (13 MM) MAXIMUM WITHIN 10 INCHES (255 MM) HORIZONTALLY OF THE MINIMUM LANDING AREA SPECIFIED IN 405.7.

405.9.1 EXTENDED FLOOR OR GROUND SURFACE. THE FLOOR OR GROUND SURFACE OF THE RAMP RUN OR LANDING SHALL EXTEND 12 INCHES (305 MM) MINIMUM BEYOND THE INSIDE FACE OF A HANDRAIL COMPLYING WITH 505.

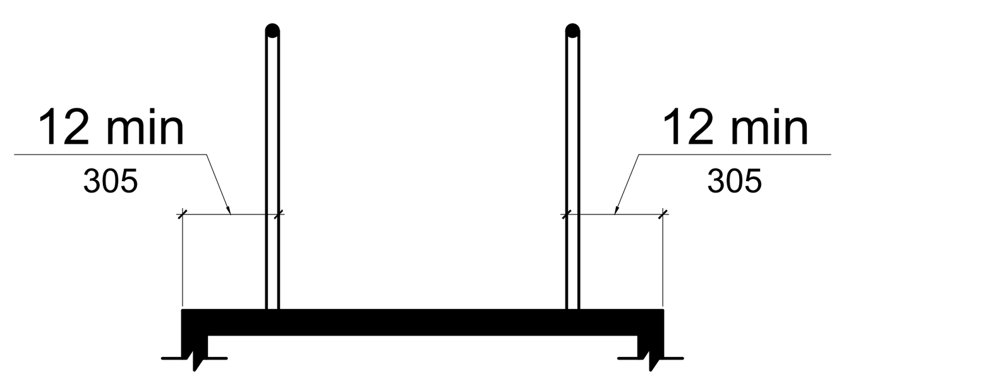

FIGURE 405.9.1 EXTENDED FLOOR OR GROUND SURFACE EDGE PROTECTION

405.9.2 CURB OR BARRIER. A CURB OR BARRIER SHALL BE PROVIDED THAT PREVENTS THE PASSAGE OF A 4 INCH (100 MM) DIAMETER SPHERE, WHERE ANY PORTION OF THE SPHERE IS WITHIN 4 INCHES (100 MM) OF THE FINISH FLOOR OR GROUND SURFACE.

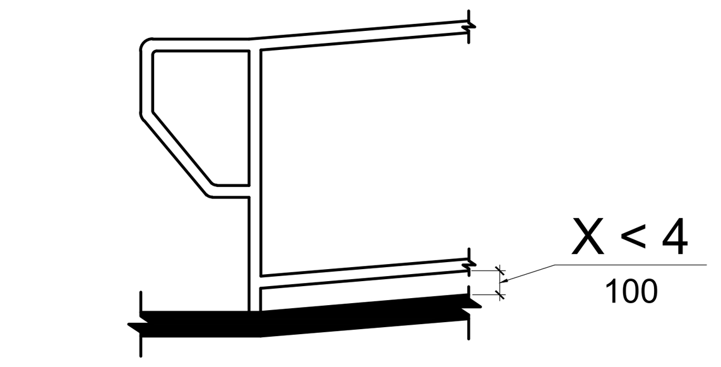

FIGURE 405.9.2 CURB OR BARRIER EDGE PROTECTION

405.10 WET CONDITIONS. LANDINGS SUBJECT TO WET CONDITIONS SHALL BE DESIGNED TO PREVENT THE ACCUMULATION OF WATER.

406 CURB RAMPS
406.1 GENERAL. CURB RAMPS ON ACCESSIBLE ROUTES SHALL COMPLY WITH 406, 405.2 THROUGH 405.5, AND 405.10.

406.2 COUNTER SLOPE. COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 1:20. THE ADJACENT SURFACES AT TRANSITIONS AT CURB RAMPS TO WALKS, GUTTERS, AND STREETS SHALL BE AT THE SAME LEVEL.

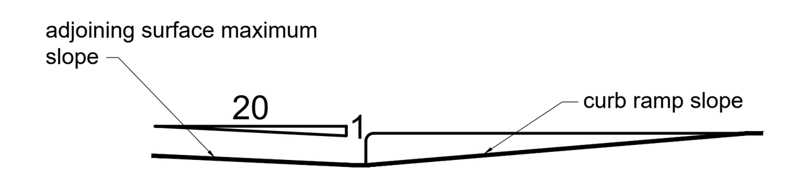

FIGURE 406.2 COUNTER SLOPE OF SURFACES ADJACENT TO CURB RAMPS

406.3 SIDES OF CURB RAMPS. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT BE STEEPER THAN 1:10.

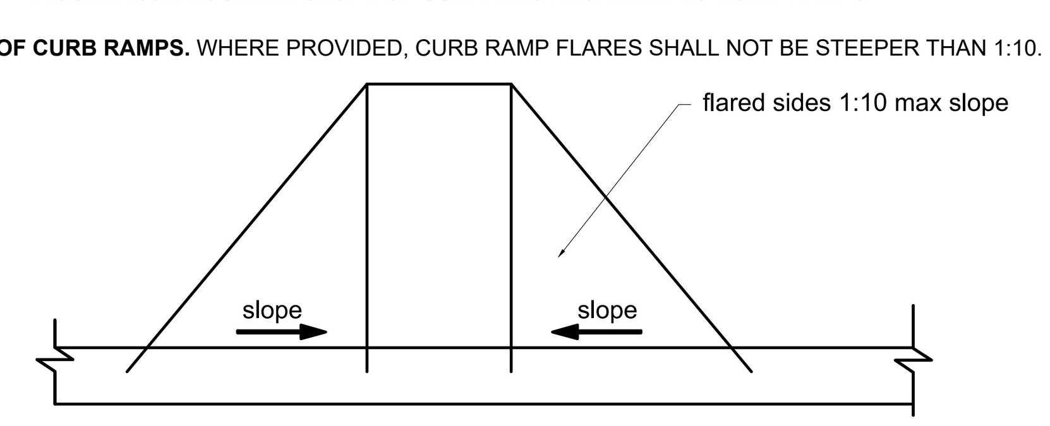

FIGURE 406.3 SIDES OF CURB RAMPS

406.4 LANDINGS. LANDINGS SHALL BE PROVIDED AT THE TOPS OF CURB RAMPS. THE LANDING CLEAR LENGTH SHALL BE 36 INCHES (915 MM) MINIMUM. THE LANDING CLEAR WIDTH SHALL BE AT LEAST AS WIDE AS THE CURB RAMP, EXCLUDING FLARED SIDES, LEADING TO THE LANDING.

EXCEPTION: IN ALTERATIONS, WHERE THERE IS NO LANDING AT THE TOP OF CURB RAMPS, CURB RAMP FLARES SHALL BE PROVIDED AND SHALL NOT BE STEEPER THAN 1:12.

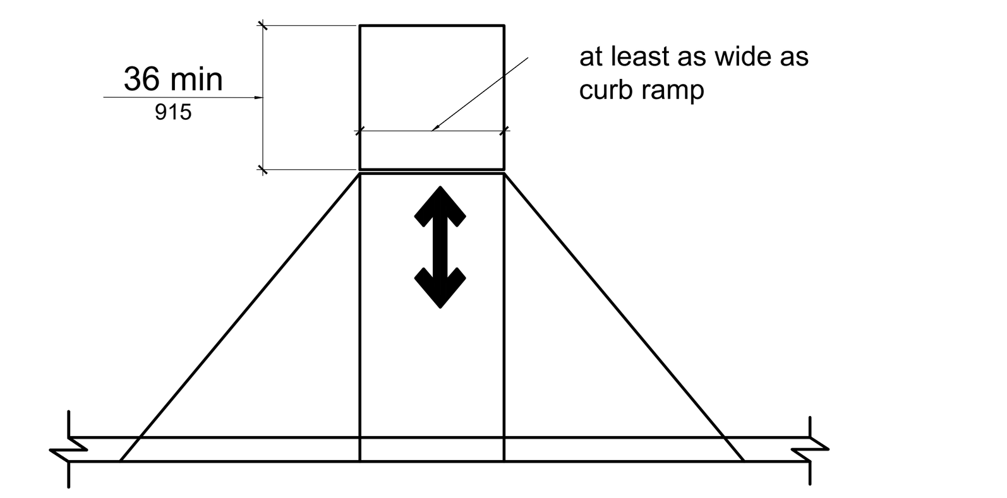

FIGURE 406.4 LANDINGS AT THE TOP OF CURB RAMPS

406.5 LOCATION. CURB RAMPS AND THE FLARED SIDES OF CURB RAMPS SHALL BE LOCATED SO THAT THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES, PARKING SPACES, OR PARKING ACCESS AISLES. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.

406.6 DIAGONAL CURB RAMPS. DIAGONAL OR CORNER TYPE CURB RAMPS WITH RETURNED CURBS OR OTHER WELL-DEFINED EDGES SHALL HAVE THE EDGES PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. THE BOTTOM OF DIAGONAL CURB RAMPS SHALL HAVE A CLEAR SPACE 48 INCHES (1220 MM) MINIMUM OUTSIDE ACTIVE TRAFFIC LANES OF THE ROADWAY. DIAGONAL CURB RAMPS PROVIDED AT MARKED CROSSINGS SHALL PROVIDE THE 48 INCHES (1220 MM) MINIMUM CLEAR SPACE WITHIN THE MARKINGS. DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 24 INCHES (610 MM) LONG MINIMUM LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING.

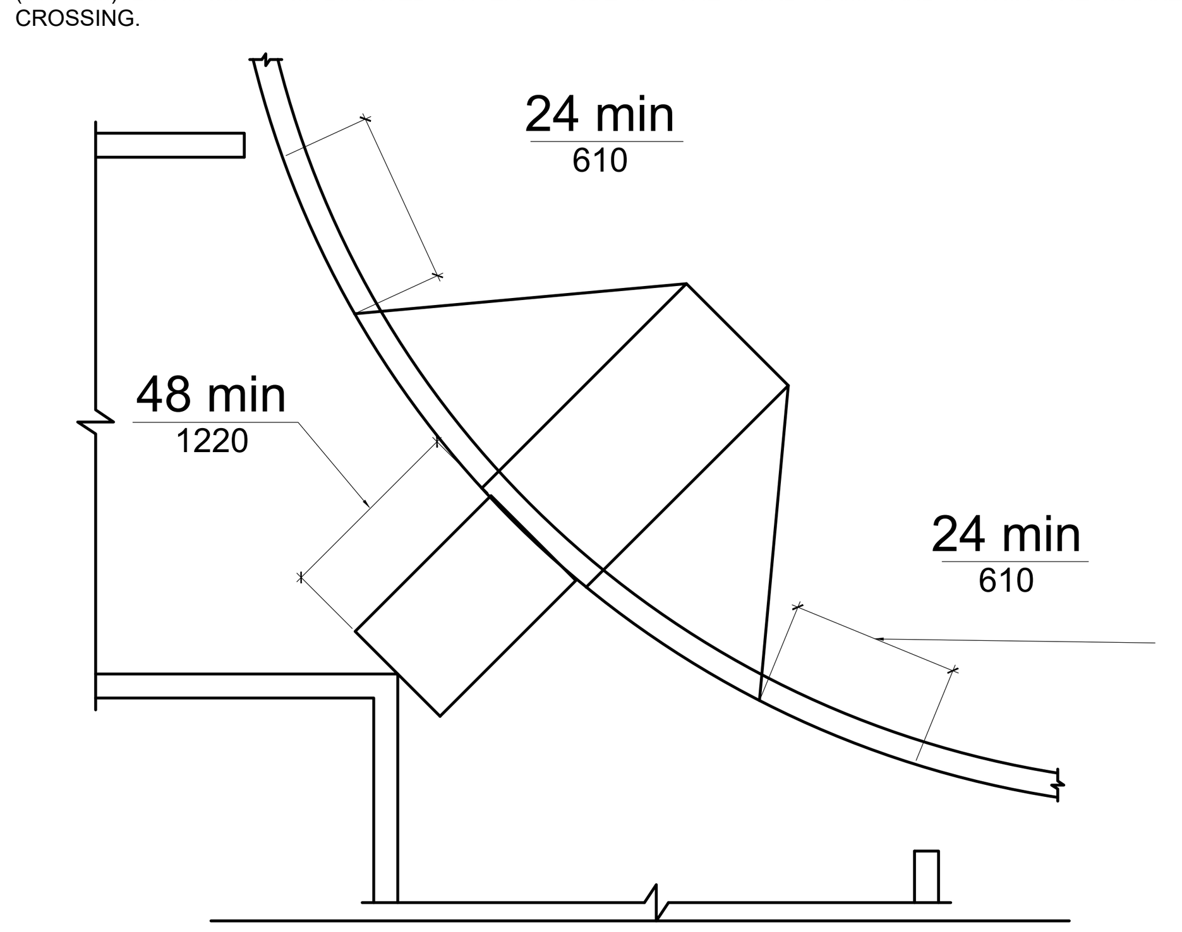

FIGURE 406.3 SIDES OF CURB RAMPS

406.7 ISLANDS. RAISED ISLANDS IN CROSSINGS SHALL BE CUT THROUGH LEVEL WITH THE STREET OR HAVE CURB RAMPS AT BOTH SIDES. EACH CURB RAMP SHALL HAVE A LEVEL AREA 48 INCHES (1220 MM) LONG MINIMUM BY 36 INCHES (915 MM) WIDE MINIMUM AT THE TOP OF THE CURB RAMP IN THE PART OF THE ISLAND INTERSECTED BY THE CROSSINGS. EACH 48 INCH (1220 MM) MINIMUM BY 36 INCH (915 MM) MINIMUM AREA SHALL BE ORIENTED SO THAT THE 48 INCH (1220 MM) MINIMUM LENGTH IS IN THE DIRECTION OF THE RUNNING SLOPE OF THE CURB RAMP IT SERVES. THE 48 INCH (1220 MM) MINIMUM BY 36 INCH (915 MM) MINIMUM AREAS AND THE ACCESSIBLE ROUTE SHALL BE PERMITTED TO OVERLAP.

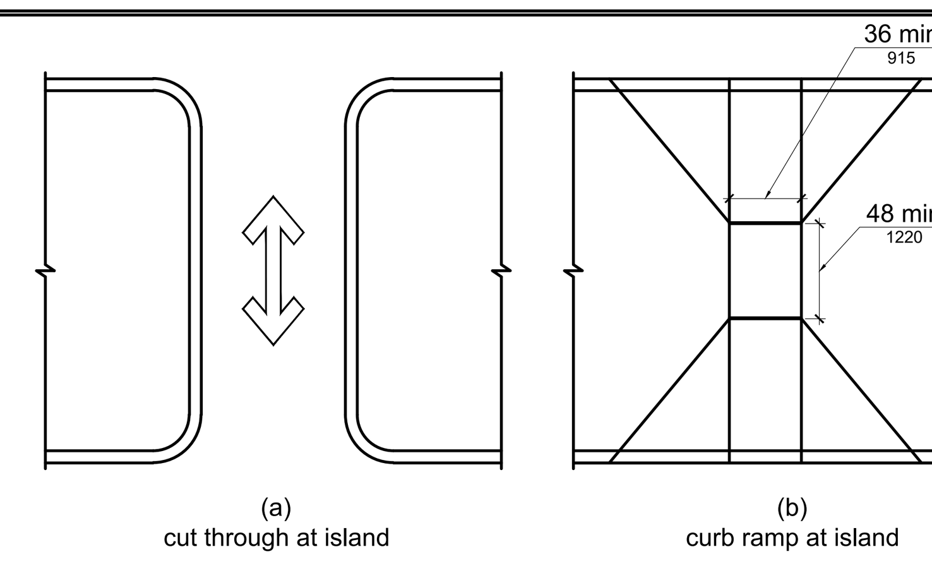

FIGURE 405.9.1 EXTENDED FLOOR OR GROUND SURFACE EDGE PROTECTION

407 ELEVATORS
407.1 GENERAL. ELEVATORS SHALL COMPLY WITH 407 AND WITH ASME A17.1 (INCORPORATED BY REFERENCE, SEE "REFERENCED STANDARDS" IN CHAPTER 1). THEY SHALL BE PASSENGER ELEVATORS AS CLASSIFIED BY ASME A17.1. ELEVATOR OPERATION SHALL BE AUTOMATIC.

407.2 ELEVATOR LANDING REQUIREMENTS. ELEVATOR LANDINGS SHALL COMPLY WITH 407.2.

407.2.1 CALL CONTROLS. WHERE ELEVATOR CALL BUTTONS OR KEYPADS ARE PROVIDED, THEY SHALL COMPLY WITH 407.2.1 AND 309.4. CALL BUTTONS SHALL BE RAISED OR FLUSH.

EXCEPTION: EXISTING ELEVATORS SHALL BE PERMITTED TO HAVE RECESSED CALL BUTTONS.

407.2.1.1 HEIGHT. CALL BUTTONS AND KEYPADS SHALL BE LOCATED WITHIN ONE OF THE REACH RANGES SPECIFIED IN 308, MEASURED TO THE CENTERLINE OF THE HIGHEST OPERABLE PART.

EXCEPTION: EXISTING CALL BUTTONS AND EXISTING KEYPADS SHALL BE PERMITTED TO BE LOCATED AT 54 INCHES (1370 MM) MAXIMUM ABOVE THE FINISH FLOOR, MEASURED TO THE CENTERLINE OF THE HIGHEST OPERABLE PART.

407.2.1.2 SIZE. CALL BUTTONS SHALL BE 3/4 INCH (19 MM) MINIMUM IN THE SMALLEST DIMENSION.

EXCEPTION: EXISTING ELEVATOR CALL BUTTONS SHALL NOT BE REQUIRED TO COMPLY WITH 407.2.1.2.

407.2.1.3 CLEAR FLOOR OR GROUND SPACE. A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 SHALL BE PROVIDED AT CALL CONTROLS.

407.2.1.4 LOCATION. THE CALL BUTTON THAT DESIGNATES THE UP DIRECTION SHALL BE LOCATED ABOVE THE CALL BUTTON THAT DESIGNATES THE DOWN DIRECTION.

EXCEPTION: DESTINATION-ORIENTED ELEVATORS SHALL NOT BE REQUIRED TO COMPLY WITH 407.2.1.4.

407.2.1.5 SIGNALS. CALL BUTTONS SHALL HAVE VISIBLE SIGNALS TO INDICATE WHEN EACH CALL IS REGISTERED AND WHEN EACH CALL IS ANSWERED.

EXCEPTIONS:
1. DESTINATION-ORIENTED ELEVATORS SHALL NOT BE REQUIRED TO COMPLY WITH 407.2.1.5 PROVIDED THAT VISIBLE AND AUDIBLE SIGNALS COMPLYING WITH 407.2.2 INDICATING WHICH ELEVATOR CAR TO ENTER ARE PROVIDED.
2. EXISTING ELEVATORS SHALL NOT BE REQUIRED TO COMPLY WITH 407.2.1.5.

407.2.1.6 KEYPADS. WHERE KEYPADS ARE PROVIDED, KEYPADS SHALL BE IN A STANDARD TELEPHONE KEYPAD ARRANGEMENT AND SHALL COMPLY WITH 407.4.7.2.

407.2.2 HALL SIGNALS. HALL SIGNALS, INCLUDING IN-CAR SIGNALS, SHALL COMPLY WITH 407.2.2.

407.2.2.1 VISIBLE AND AUDIBLE SIGNALS. A VISIBLE AND AUDIBLE SIGNAL SHALL BE PROVIDED AT EACH HOISTWAY ENTRANCE TO INDICATE WHICH CAR IS ANSWERING A CALL AND THE CAR'S DIRECTION OF TRAVEL. WHERE IN-CAR SIGNALS ARE PROVIDED, THEY SHALL BE VISIBLE FROM THE FLOOR AREA ADJACENT TO THE HALL CALL BUTTONS.

EXCEPTIONS:
1. VISIBLE AND AUDIBLE SIGNALS SHALL NOT BE REQUIRED AT EACH DESTINATION-ORIENTED ELEVATOR WHERE A VISIBLE AND AUDIBLE SIGNAL COMPLYING WITH 407.2.2 IS PROVIDED INDICATING THE ELEVATOR CAR DESIGNATION INFORMATION.
2. IN EXISTING ELEVATORS, A SIGNAL INDICATING THE DIRECTION OF CAR TRAVEL SHALL NOT BE REQUIRED.

407.2.2.2 VISIBLE SIGNALS. VISIBLE SIGNAL FIXTURES SHALL BE CENTERED AT 72 INCHES (1830 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND. THE VISIBLE SIGNAL ELEMENTS SHALL BE 2 1/2 INCHES (64 MM) MINIMUM MEASURED ALONG THE VERTICAL CENTERLINE OF THE ELEMENT. SIGNALS SHALL BE VISIBLE FROM THE FLOOR AREA ADJACENT TO THE HALL CALL BUTTON.

EXCEPTIONS:
1. DESTINATION-ORIENTED ELEVATORS SHALL BE PERMITTED TO HAVE SIGNALS VISIBLE FROM THE FLOOR AREA ADJACENT TO THE HOISTWAY ENTRANCE.
2. EXISTING ELEVATORS SHALL NOT BE REQUIRED TO COMPLY WITH 407.2.2.2.

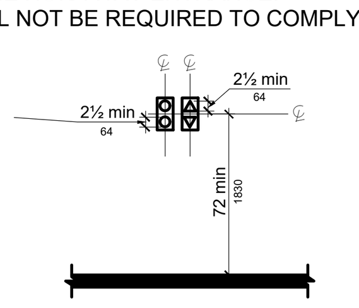

FIGURE 407.2.2.2 VISIBLE HALL SIGNALS

407.2.2.3 AUDIBLE SIGNALS. AUDIBLE SIGNALS SHALL SOUND ONCE FOR THE UP DIRECTION AND TWICE FOR THE DOWN DIRECTION, OR SHALL HAVE VERBAL ANNUNCIATORS THAT INDICATE THE DIRECTION OF ELEVATOR CAR TRAVEL. AUDIBLE SIGNALS SHALL HAVE A FREQUENCY OF 1500 HZ MAXIMUM. VERBAL ANNUNCIATORS SHALL HAVE A FREQUENCY OF 300 HZ MINIMUM AND 3000 HZ MAXIMUM. THE AUDIBLE SIGNAL AND VERBAL ANNUNCIATOR SHALL BE 10 DB MINIMUM ABOVE AMBIENT, BUT SHALL NOT EXCEED 80 DB, MEASURED AT THE HALL CALL BUTTON.

EXCEPTIONS:
1. DESTINATION-ORIENTED ELEVATORS SHALL NOT BE REQUIRED TO COMPLY WITH 407.2.2.3 PROVIDED THAT THE AUDIBLE TONE AND VERBAL ANNOUNCEMENT IS THE SAME AS THOSE GIVEN AT THE CALL BUTTON OR CALL BUTTON KEYPAD.
2. EXISTING ELEVATORS SHALL NOT BE REQUIRED TO COMPLY WITH THE REQUIREMENTS FOR FREQUENCY AND DB RANGE OF AUDIBLE SIGNALS.

407.2.2.4 DIFFERENTIATION. EACH DESTINATION-ORIENTED ELEVATOR IN A BANK OF ELEVATORS SHALL HAVE AUDIBLE AND VISIBLE MEANS FOR DIFFERENTIATION.

407.2.3 HOISTWAY SIGNS. SIGNS AT ELEVATOR HOISTWAYS SHALL COMPLY WITH 407.2.3.

407.2.3.1 FLOOR DESIGNATION. FLOOR DESIGNATIONS COMPLYING WITH 703.2 AND 703.4.1 SHALL BE PROVIDED ON BOTH JAMBS OF ELEVATOR HOISTWAY ENTRANCES. FLOOR DESIGNATIONS SHALL BE PROVIDED IN BOTH TACTILE CHARACTERS AND BRAILLE. TACTILE CHARACTERS SHALL BE 2 INCHES (51 MM) HIGH MINIMUM. A TACTILE STAR SHALL BE PROVIDED ON BOTH JAMBS AT THE MAIN ENTRY LEVEL.

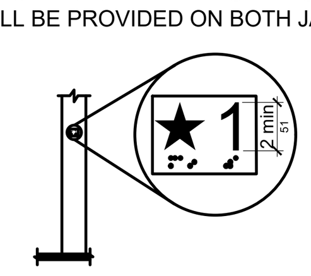

FIGURE 407.2.3.1 FLOOR DESIGNATIONS ON JAMBS OF ELEVATOR HOISTWAY ENTRANCES

407.3 ELEVATOR DOOR REQUIREMENTS. HOISTWAY AND CAR DOORS SHALL COMPLY WITH 407.3.

407.3.1 TYPE. ELEVATOR DOORS SHALL BE THE HORIZONTAL SLIDING TYPE. CAR GATES SHALL BE PROHIBITED.

407.3.2 OPERATION. ELEVATOR HOISTWAY AND CAR DOORS SHALL OPEN AND CLOSE AUTOMATICALLY.

EXCEPTION: EXISTING MANUALLY OPERATED HOISTWAY SWING DOORS SHALL BE PERMITTED PROVIDED THAT THEY COMPLY WITH 404.2.3 AND 404.2.9. CAR DOOR CLOSING SHALL NOT BE INITIATED UNTIL THE HOISTWAY DOOR IS CLOSED.

407.3.3 REOPENING DEVICE. ELEVATOR DOORS SHALL BE PROVIDED WITH A REOPENING DEVICE COMPLYING WITH 407.3.3 THAT SHALL STOP AND REOPEN A CAR DOOR AND HOISTWAY DOOR AUTOMATICALLY IF THE DOOR BECOMES OBSTRUCTED BY AN OBJECT OR PERSON.

EXCEPTION: EXISTING ELEVATORS WITH MANUALLY OPERATED DOORS SHALL NOT BE REQUIRED TO COMPLY WITH 407.3.3.

407.3.3.1 HEIGHT. THE DEVICE SHALL BE ACTIVATED BY SENSING AN OBSTRUCTION PASSING THROUGH THE OPENING AT 5 INCHES (125 MM) NOMINAL AND 29 INCHES (735 MM) NOMINAL ABOVE THE FINISH FLOOR.

407.3.3.2 CONTACT. THE DEVICE SHALL NOT REQUIRE PHYSICAL CONTACT TO BE ACTIVATED, ALTHOUGH CONTACT IS PERMITTED TO OCCUR BEFORE THE DOOR REVERSES.

407.3.3.3 DURATION. DOOR REOPENING DEVICES SHALL REMAIN EFFECTIVE FOR 20 SECONDS MINIMUM.

407.3.4 DOOR AND SIGNAL TIMING. THE MINIMUM ACCEPTABLE TIME FROM NOTIFICATION THAT A CAR IS ANSWERING A CALL OR NOTIFICATION OF THE CAR ASSIGNED AT THE MEANS FOR THE ENTRY OF DESTINATION INFORMATION UNTIL THE DOORS OF THAT CAR START TO CLOSE SHALL BE CALCULATED FROM THE FOLLOWING EQUATION:

T = D/(1.5 FT/S) OR T = D/(455 MM/S) = 5 SECONDS MINIMUM WHERE T EQUALS THE TOTAL TIME IN SECONDS AND D EQUALS THE DISTANCE (IN FEET OR MILLIMETERS) FROM THE POINT IN THE LOBBY OR CORRIDOR 60 INCHES (1525 MM) DIRECTLY IN FRONT OF THE FARTHEST CALL BUTTON CONTROLLING THAT CAR TO THE CENTERLINE OF ITS HOISTWAY DOOR.

EXCEPTIONS:
1. FOR CARS WITH IN-CAR LANTERNS, T SHALL BE PERMITTED TO BEGIN WHEN THE SIGNAL IS VISIBLE FROM THE POINT 60 INCHES (1525 MM) DIRECTLY IN FRONT OF THE FARTHEST HALL CALL BUTTON AND THE AUDIBLE SIGNAL IS SOUNDED.
2. DESTINATION-ORIENTED ELEVATORS SHALL NOT BE REQUIRED TO COMPLY WITH 407.3.4.

407.3.5 DOOR DELAY. ELEVATOR DOORS SHALL REMAIN FULLY OPEN IN RESPONSE TO A CAR CALL FOR 3 SECONDS MINIMUM.

407.3.6 WIDTH. THE WIDTH OF ELEVATOR DOORS SHALL COMPLY WITH TABLE 407.4.1.

EXCEPTION: IN EXISTING ELEVATORS, A POWER-OPERATED CAR DOOR COMPLYING WITH 404.2.3 SHALL BE PERMITTED.

407.4 ELEVATOR CAR REQUIREMENTS. ELEVATOR CARS SHALL COMPLY WITH 407.4.

407.4.1 CAR DIMENSIONS. INSIDE DIMENSIONS OF ELEVATOR CARS AND CLEAR WIDTH OF ELEVATOR DOORS SHALL COMPLY WITH TABLE 407.4.1.

EXCEPTION: EXISTING ELEVATOR CAR CONFIGURATIONS THAT PROVIDE A CLEAR FLOOR AREA OF 16 SQUARE FEET (1.5 M2) MINIMUM AND ALSO PROVIDE AN INSIDE CLEAR DEPTH 54 INCHES (1370 MM) MINIMUM AND A CLEAR WIDTH 36 INCHES (915 MM) MINIMUM SHALL BE PERMITTED.

TABLE 404.2.4.1 MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS AND GATES

		MINIMUM MANEUVERING CLEARANCE		
DOOR LOCATION	DOOR CLEAR WIDTH	INSIDE CAR, SIDE TO SIDE	INSIDE CAR, BACK WALL TO FRONT RETURN	INSIDE CAR, BACK WALL TO INSIDE FACE OF DOOR
CENTERED	42 INCHES (1065 MM)	80 INCHES (2030 MM)	51 INCHES (1295 MM)	54 INCHES (1370 MM)
CENTERED	36 INCHES (915 MM)[1]	68 INCHES (1725 MM)	51 INCHES (1295 MM)	54 INCHES (1370 MM)
CENTERED	36 INCHES (915 MM)[1]	54 INCHES (1370 MM)	80 INCHES (2030 MM)	80 INCHES (2030 MM)
CENTERED	36 INCHES (915 MM)[1]	60 INCHES (1525 MM)[2]	60 INCHES (1525 MM)[2]	60 INCHES (1525 MM)[2]

1. A TOLERANCE OF MINUS ⅝ INCH (16 MM) IS PERMITTED.
2. OTHER CAR CONFIGURATIONS THAT PROVIDE A TURNING SPACE COMPLYING WITH 304 WITH THE DOOR CLOSED SHALL BE PERMITTED.

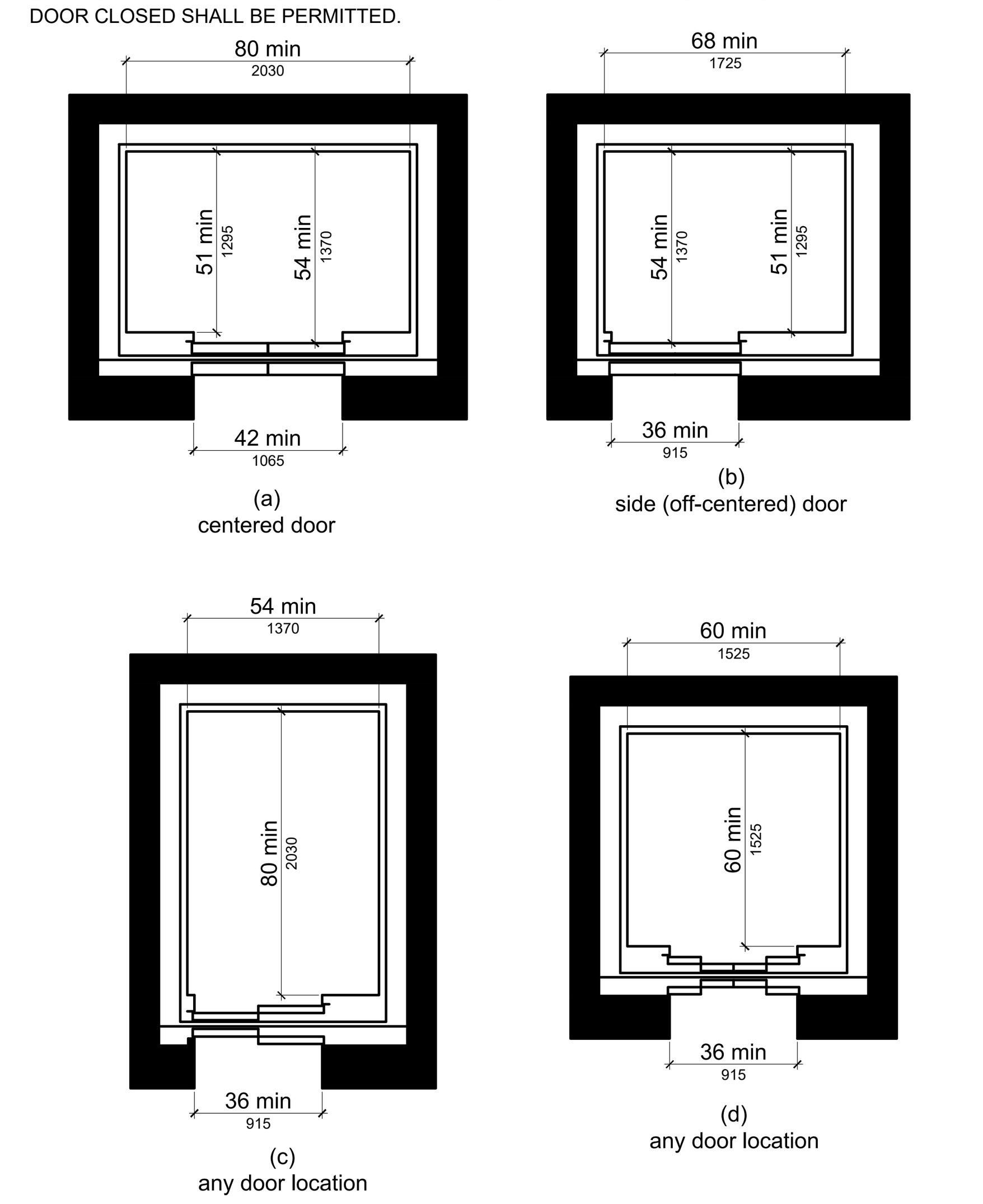

FIGURE 407.4.1 ELEVATOR CAR DIMENSIONS

407.4.2 FLOOR SURFACES. FLOOR SURFACES IN ELEVATOR CARS SHALL COMPLY WITH 302 AND 303.

407.4.3 PLATFORM TO HOISTWAY CLEARANCE. THE CLEARANCE BETWEEN THE CAR PLATFORM SILL AND THE EDGE OF ANY HOISTWAY LANDING SHALL BE 1 1/4 INCH (32 MM) MAXIMUM.

407.4.4 LEVELING. EACH CAR SHALL BE EQUIPPED WITH A SELF-LEVELING FEATURE THAT WILL AUTOMATICALLY BRING AND MAINTAIN THE CAR AT FLOOR LANDINGS WITHIN A TOLERANCE OF 1/2 INCH (13 MM) UNDER RATED LOADING TO ZERO LOADING CONDITIONS.

407.4.5 ILLUMINATION. THE LEVEL OF ILLUMINATION AT THE CAR CONTROLS, PLATFORM, CAR THRESHOLD AND CAR LANDING SILL SHALL BE 5 FOOT CANDLES (54 LUX) MINIMUM.

407.4.6 ELEVATOR CAR CONTROLS. WHERE PROVIDED, ELEVATOR CAR CONTROLS SHALL COMPLY WITH 407.4.6 AND 309.4.

EXCEPTION: IN EXISTING ELEVATORS, WHERE A NEW CAR OPERATING PANEL COMPLYING WITH 407.4.6 IS PROVIDED, EXISTING CAR OPERATING PANELS SHALL NOT BE REQUIRED TO COMPLY WITH 407.4.6.

407.4.6.1 LOCATION. CONTROLS SHALL BE LOCATED WITHIN ONE OF THE REACH RANGES SPECIFIED IN 308.

EXCEPTIONS:
1. WHERE THE ELEVATOR PANEL SERVES MORE THAN 16 OPENINGS AND A PARALLEL APPROACH IS PROVIDED, BUTTONS WITH FLOOR DESIGNATIONS SHALL BE PERMITTED TO BE 54 INCHES (1370 MM) MAXIMUM ABOVE THE FINISH FLOOR.
2. IN EXISTING ELEVATORS, CAR CONTROL BUTTONS WITH FLOOR DESIGNATIONS SHALL BE PERMITTED TO BE LOCATED 54 INCHES (1370 MM) MAXIMUM ABOVE THE FINISH FLOOR WHERE A PARALLEL APPROACH IS PROVIDED.

407.4.6.2 BUTTONS. CAR CONTROL BUTTONS WITH FLOOR DESIGNATIONS SHALL COMPLY WITH 407.4.6.2 AND SHALL BE RAISED OR FLUSH.

EXCEPTION: IN EXISTING ELEVATORS, BUTTONS SHALL BE PERMITTED TO BE RECESSED.

407.4.6.2.1 SIZE. BUTTONS SHALL BE 3/4 INCH (19 MM) MINIMUM IN THEIR SMALLEST DIMENSION.

407.4.6.2.2 ARRANGEMENT. BUTTONS SHALL BE ARRANGED WITH NUMBERS IN ASCENDING ORDER. WHEN TWO OR MORE COLUMNS OF BUTTONS ARE PROVIDED THEY SHALL READ FROM LEFT TO RIGHT.

407.4.6.3 KEYPADS. CAR CONTROL KEYPADS SHALL BE IN A STANDARD TELEPHONE KEYPAD ARRANGEMENT AND SHALL COMPLY WITH 407.4.7.2.

407.4.6.4 EMERGENCY CONTROLS. EMERGENCY CONTROLS SHALL COMPLY WITH 407.4.6.4.

407.4.6.4.1 HEIGHT. EMERGENCY CONTROL BUTTONS SHALL HAVE THEIR CENTERLINES 35 INCHES (890 MM) MINIMUM ABOVE THE FINISH FLOOR.

407.4.6.4.2 LOCATION. EMERGENCY CONTROLS, INCLUDING THE EMERGENCY ALARM, SHALL BE GROUPED AT THE BOTTOM OF THE PANEL.

407.4.7 DESIGNATIONS AND INDICATORS OF CAR CONTROLS. DESIGNATIONS AND INDICATORS OF CAR CONTROLS SHALL COMPLY WITH 407.4.7.

EXCEPTION: IN EXISTING ELEVATORS, WHERE A NEW CAR OPERATING PANEL COMPLYING WITH 407.4.7 IS PROVIDED, EXISTING CAR OPERATING PANELS SHALL NOT BE REQUIRED TO COMPLY WITH 407.4.7.

407.4.7.1 BUTTONS. CAR CONTROL BUTTONS SHALL COMPLY WITH 407.4.7.1.

407.4.7.1.1 TYPE. CONTROL BUTTONS SHALL BE IDENTIFIED BY TACTILE CHARACTERS COMPLYING WITH 703.2.

407.4.7.1.2 LOCATION. RAISED CHARACTER AND BRAILLE DESIGNATIONS SHALL BE PLACED IMMEDIATELY TO THE LEFT OF THE CONTROL BUTTON TO WHICH THE DESIGNATIONS APPLY.

EXCEPTION: WHERE SPACE ON AN EXISTING CAR OPERATING PANEL PRECLUDES TACTILE MARKINGS TO THE LEFT OF THE CONTROLS, MARKINGS SHALL BE PLACED AS NEAR TO THE CONTROL AS POSSIBLE.

407.4.7.1.3 SYMBOLS. THE CONTROL BUTTON FOR THE EMERGENCY STOP, ALARM, DOOR OPEN, DOOR CLOSE, MAIN ENTRY FLOOR, AND PHONE, SHALL BE IDENTIFIED WITH TACTILE SYMBOLS AS SHOWN IN TABLE 407.4.7.1.3.

TABLE 407.4.7.3 ELEVATOR CONTROL BUTTON IDENTIFICATION

CONTROL BUTTON	TACTILE SYMBOL	BRAILLE MESSAGE
EMERGENCY STOP		
ALARM		
DOOR OPEN		
DOOR CLOSE		
MAIN ENTRY FLOOR		
PHONE		

407.4.7.1.4 VISIBLE INDICATORS. BUTTONS WITH FLOOR DESIGNATIONS SHALL BE PROVIDED WITH VISIBLE INDICATORS TO SHOW THAT A CALL HAS BEEN REGISTERED. THE VISIBLE INDICATION SHALL EXTINGUISH WHEN THE CAR ARRIVES AT THE DESIGNATED FLOOR.

407.4.7.2 KEYPADS. KEYPADS SHALL BE IDENTIFIED BY CHARACTERS COMPLYING WITH 703.5 AND SHALL BE CENTERED ON THE CORRESPONDING KEYPAD BUTTON. THE NUMBER FIVE KEY SHALL HAVE A SINGLE RAISED DOT. THE DOT SHALL BE 0.118 INCH (3 MM) TO 0.120 INCH (3.05 MM) BASE DIAMETER AND IN OTHER ASPECTS COMPLY WITH TABLE 703.3.1.

407.4.8 CAR POSITION INDICATORS. AUDIBLE AND VISIBLE CAR POSITION INDICATORS SHALL BE PROVIDED IN ELEVATOR CARS.

407.4.8.1 VISIBLE INDICATORS. VISIBLE INDICATORS SHALL COMPLY WITH 407.4.8.1.

407.4.8.1.1 SIZE. CHARACTERS SHALL BE 1/2 INCH (13 MM) HIGH MINIMUM.

407.4.8.1.2 LOCATION. INDICATORS SHALL BE LOCATED ABOVE THE CAR CONTROL PANEL OR ABOVE THE DOOR.

407.4.8.1.3 FLOOR ARRIVAL. AS THE CAR PASSES A FLOOR AND WHEN A CAR STOPS AT A FLOOR SERVED BY THE ELEVATOR, THE CORRESPONDING CHARACTER SHALL ILLUMINATE.

EXCEPTION: DESTINATION-ORIENTED ELEVATORS SHALL NOT BE REQUIRED TO COMPLY WITH 407.4.8.1.3 PROVIDED THAT THE VISIBLE INDICATORS EXTINGUISH WHEN THE CALL HAS BEEN ANSWERED.

407.4.8.1.4 DESTINATION INDICATOR. IN DESTINATION-ORIENTED ELEVATORS, A DISPLAY SHALL BE PROVIDED IN THE CAR WITH VISIBLE INDICATORS TO SHOW CAR DESTINATIONS.

407.4.8.2 AUDIBLE INDICATORS. AUDIBLE INDICATORS SHALL COMPLY WITH 407.4.8.2.

407.4.8.2.1 SIGNAL TYPE. THE SIGNAL SHALL BE AN AUTOMATIC VERBAL ANNUNCIATOR WHICH ANNOUNCES THE FLOOR AT WHICH THE CAR IS ABOUT TO STOP.

EXCEPTION: FOR ELEVATORS OTHER THAN DESTINATION-ORIENTED ELEVATORS THAT HAVE A RATED SPEED OF 200 FEET PER MINUTE (1 M/S) OR LESS, A NON-VERBAL AUDIBLE SIGNAL WITH A FREQUENCY OF 1500 HZ MAXIMUM WHICH SOUNDS AS THE CAR PASSES OR IS ABOUT TO STOP AT A FLOOR SERVED BY THE ELEVATOR SHALL BE PERMITTED.

407.4.8.2.2 SIGNAL LEVEL. THE VERBAL ANNUNCIATOR SHALL BE 10 DB MINIMUM ABOVE AMBIENT, BUT SHALL NOT EXCEED 80 DB, MEASURED AT THE ANNUNCIATOR.

407.4.8.2.3 FREQUENCY. THE VERBAL ANNUNCIATOR SHALL HAVE A FREQUENCY OF 300 HZ MINIMUM TO 3000 HZ MAXIMUM.

407.4.9 EMERGENCY COMMUNICATION. EMERGENCY TWO-WAY COMMUNICATION SYSTEMS SHALL COMPLY WITH 308. TACTILE SYMBOLS AND CHARACTERS SHALL BE PROVIDED ADJACENT TO THE DEVICE AND SHALL COMPLY WITH 703.2.

408 LIMITED-USE/LIMITED-APPLICATION ELEVATORS
408.1 GENERAL. LIMITED-USE/LIMITED-APPLICATION ELEVATORS SHALL COMPLY WITH 408 AND WITH ASME A17.1 (INCORPORATED BY REFERENCE, SEE "REFERENCED STANDARDS" IN CHAPTER 1). THEY SHALL BE PASSENGER ELEVATORS AS CLASSIFIED BY ASME A17.1. ELEVATOR OPERATION SHALL BE AUTOMATIC.

408.2 ELEVATOR LANDINGS. LANDINGS SERVING LIMITED-USE/LIMITED-APPLICATION ELEVATORS SHALL COMPLY WITH 408.2.

408.2.1 CALL BUTTONS. ELEVATOR CALL BUTTONS AND KEYPADS SHALL COMPLY WITH 407.2.1.

408.2.2 HALL SIGNALS. HALL SIGNALS SHALL COMPLY WITH 407.2.2.

408.2.3 HOISTWAY SIGNS. SIGNS AT ELEVATOR HOISTWAYS SHALL COMPLY WITH 407.2.3.1.

408.3 ELEVATOR DOORS. ELEVATOR HOISTWAY DOORS SHALL COMPLY WITH 408.3.

408.3.1 SLIDING DOORS. SLIDING HOISTWAY AND CAR DOORS SHALL COMPLY WITH 407.3.1 THROUGH 407.3.3 AND 408.4.1.

408.3.2 SWINGING DOORS. SWINGING HOISTWAY DOORS SHALL OPEN AND CLOSE AUTOMATICALLY AND SHALL COMPLY WITH 404, 407.3.2 AND 408.3.2.

408.3.2.1 POWER OPERATION. SWINGING DOORS SHALL BE POWER-OPERATED AND SHALL COMPLY WITH ANSI/BHMA A156.19 (1997 OR 2002 EDITION) (INCORPORATED BY REFERENCE, SEE "REFERENCED STANDARDS" IN CHAPTER 1).

408.3.2.2 DURATION. POWER-OPERATED SWINGING DOORS SHALL REMAIN OPEN FOR 20 SECONDS MINIMUM WHEN ACTIVATED.

408.4 ELEVATOR CARS. ELEVATOR CARS SHALL COMPLY WITH 408.4.

408.4.1 CAR DIMENSIONS AND DOORS. ELEVATOR CARS SHALL PROVIDE A CLEAR WIDTH 42 INCHES (1065 MM) MINIMUM AND A CLEAR DEPTH 54 INCHES (1370 MM) MINIMUM. CAR DOORS SHALL BE POSITIONED AT THE NARROW ENDS OF CARS AND SHALL PROVIDE 32 INCHES (815 MM) MINIMUM CLEAR WIDTH.

EXCEPTIONS:
1. CARS THAT PROVIDE A CLEAR WIDTH 51 INCHES (1295 MM) MINIMUM SHALL BE PERMITTED TO PROVIDE A CLEAR DEPTH 51 INCHES (1295 MM) MINIMUM PROVIDED THAT CAR DOORS PROVIDE A CLEAR OPENING 36 INCHES (915 MM) WIDE MINIMUM.
2. EXISTING ELEVATOR CARS SHALL BE PERMITTED TO PROVIDE A CLEAR WIDTH 36 INCHES (915 MM) MINIMUM, CLEAR DEPTH 54 INCHES (1370 MM) MINIMUM, AND A NET CLEAR PLATFORM AREA 15 SQUARE FEET (1.4 M²) MINIMUM.

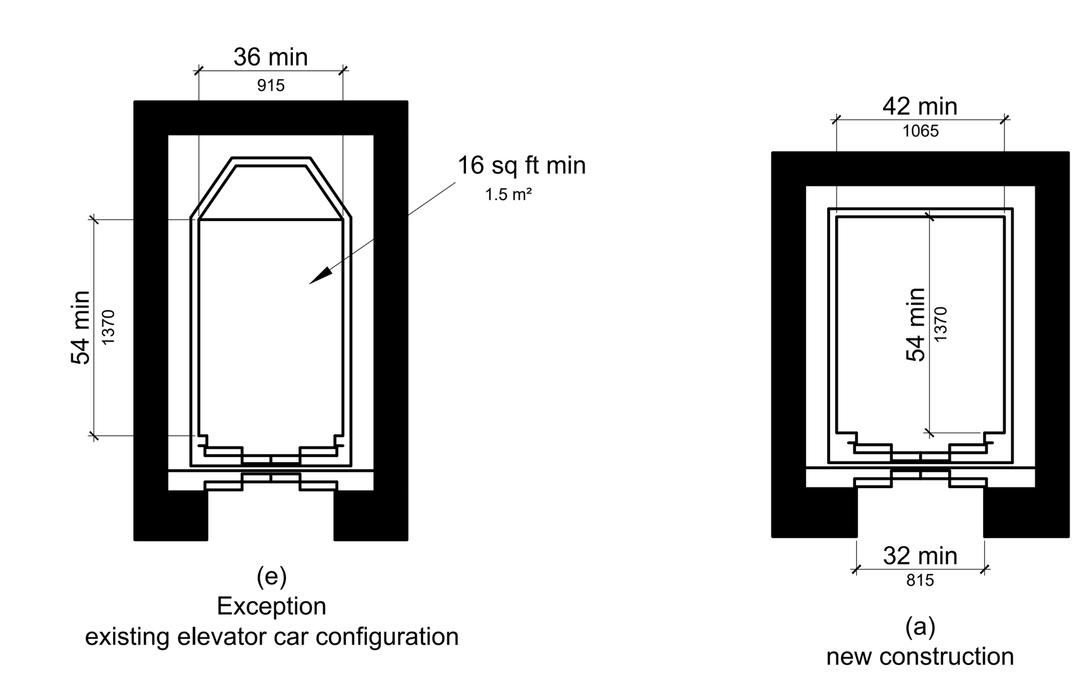

FIGURE 408.4.1 LIMITED-USE/LIMITED-APPLICATION (LULA) ELEVATOR CAR DIMENSIONS

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CADE L. SPELL
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STATE OF TEXAS

JANUARY 11, 2022

MEN'S TOILET & LOCKER ROOM RENOVATION
FOR THE
ORANGE COUNTY DRAINAGE DISTRICT
8081 OLD HIGHWAY 90 ORANGE, TEXAS 77630

ISSUE DATES:

BIDS & CONSTRUCTION
JANUARY 11, 2022

PREPARED BY: CLS

TAS-2
SHEET NO.

PROJECT NO. 2021-11
TEXAS ACCESSIBILITY STANDARDS

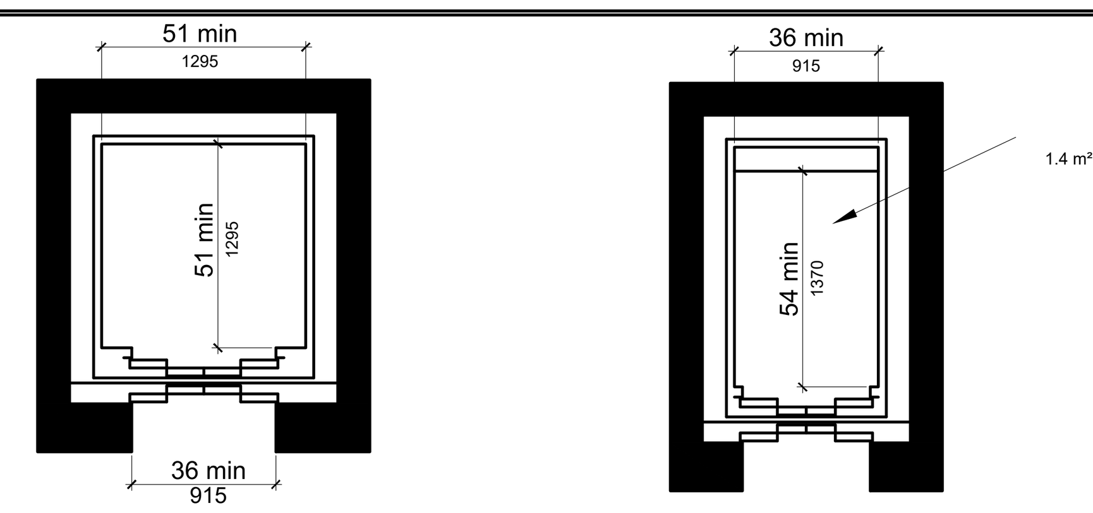

FIGURE 408.4.1 LIMITED-USE/LIMITED-APPLICATION (LULA) ELEVATOR CAR DIMENSIONS (CONT.)

408.4.2 FLOOR SURFACES. FLOOR SURFACES IN ELEVATOR CARS SHALL COMPLY WITH 302 AND 303.

408.4.3 PLATFORM TO HOISTWAY CLEARANCE. THE PLATFORM TO HOISTWAY CLEARANCE SHALL COMPLY WITH 407.4.3.

408.4.4 LEVELING. ELEVATOR CAR LEVELING SHALL COMPLY WITH 407.4.4.

408.4.5 ILLUMINATION. ELEVATOR CAR ILLUMINATION SHALL COMPLY WITH 407.4.5.

408.4.6 CAR CONTROLS. ELEVATOR CAR CONTROLS SHALL COMPLY WITH 407.4.6. CONTROL PANELS SHALL BE CENTERED ON A SIDE WALL.

408.4.7 DESIGNATIONS AND INDICATORS OF CAR CONTROLS. DESIGNATIONS AND INDICATORS OF CAR CONTROLS SHALL COMPLY WITH 407.4.7.

408.4.8 EMERGENCY COMMUNICATIONS. CAR EMERGENCY SIGNALING DEVICES COMPLYING WITH 407.4.9 SHALL BE PROVIDED.

409 PRIVATE RESIDENCE ELEVATORS
409.1 GENERAL. PRIVATE RESIDENCE ELEVATORS THAT ARE PROVIDED WITHIN A RESIDENTIAL DWELLING UNIT REQUIRED TO PROVIDE MOBILITY FEATURES COMPLYING WITH 809.2 THROUGH 809.4 SHALL COMPLY WITH 409 AND WITH ASME A17.1 (INCORPORATED BY REFERENCE, SEE "REFERENCED STANDARDS" IN CHAPTER 1). THEY SHALL BE PASSENGER ELEVATORS AS CLASSIFIED BY ASME A17.1. ELEVATOR OPERATION SHALL BE AUTOMATIC.

409.2 CALL BUTTONS. CALL BUTTONS SHALL BE 3/4 INCH (19 MM) MINIMUM IN THE SMALLEST DIMENSION AND SHALL COMPLY WITH 309.

409.3 ELEVATOR DOORS. HOISTWAY DOORS, CAR DOORS, AND CAR GATES SHALL COMPLY WITH 409.3 AND 404.

EXCEPTION: DOORS SHALL NOT BE REQUIRED TO COMPLY WITH THE MANEUVERING CLEARANCE REQUIREMENTS IN 404.2.4.1 FOR APPROACHES TO THE PUSH SIDE OF SWINGING DOORS.

409.3.1 POWER OPERATION. ELEVATOR CAR AND HOISTWAY DOORS AND GATES SHALL BE POWER OPERATED AND SHALL COMPLY WITH ANSI/BHMA A156.19 (1997 OR 2002 EDITION) (INCORPORATED BY REFERENCE, SEE "REFERENCED STANDARDS" IN CHAPTER 1). POWER OPERATED DOORS AND GATES SHALL REMAIN OPEN FOR 20 SECONDS MINIMUM WHEN ACTIVATED.

EXCEPTION: IN ELEVATOR CARS WITH MORE THAN ONE OPENING, HOISTWAY DOORS AND GATES SHALL BE PERMITTED TO BE OF THE MANUAL-OPEN, SELF-CLOSE TYPE.

409.3.2 LOCATION. ELEVATOR CAR DOORS OR GATES SHALL BE POSITIONED AT THE NARROW END OF THE CLEAR FLOOR SPACES REQUIRED BY 409.4.1.

409.4 ELEVATOR CARS. PRIVATE RESIDENCE ELEVATOR CARS SHALL COMPLY WITH 409.4.

409.4.1 INSIDE DIMENSIONS OF ELEVATOR CARS. ELEVATOR CARS SHALL PROVIDE A CLEAR FLOOR SPACE OF 36 INCHES (915 MM) MINIMUM BY 48 INCHES (1220 MM) MINIMUM AND SHALL COMPLY WITH 305.

409.4.2 FLOOR SURFACES. FLOOR SURFACES IN ELEVATOR CARS SHALL COMPLY WITH 302 AND 303.

409.4.3 PLATFORM TO HOISTWAY CLEARANCE. THE CLEARANCE BETWEEN THE CAR PLATFORM AND THE EDGE OF ANY LANDING SILL SHALL BE 1 1/2 INCH (38 MM) MAXIMUM.

409.4.4 LEVELING. EACH CAR SHALL AUTOMATICALLY STOP AT A FLOOR LANDING WITHIN A OF 1/2 INCH (13 MM) UNDER RATED LOADING TO ZERO LOADING CONDITIONS.

409.4.5 ILLUMINATION LEVELS. ELEVATOR CAR ILLUMINATION SHALL COMPLY WITH 407.4.5.

409.4.6 CAR CONTROLS. ELEVATOR CAR CONTROL BUTTONS SHALL COMPLY WITH 409.4.6, 309.3, 309.4, AND SHALL BE RAISED OR FLUSH.

409.4.6.1 SIZE. CONTROL BUTTONS SHALL BE 3/4 INCH (19 MM) MINIMUM IN THEIR SMALLEST DIMENSION.

409.4.6.2 LOCATION. CONTROL PANELS SHALL BE ON A SIDE WALL, 12 INCHES (305 MM) MINIMUM FROM ANY ADJACENT WALL.

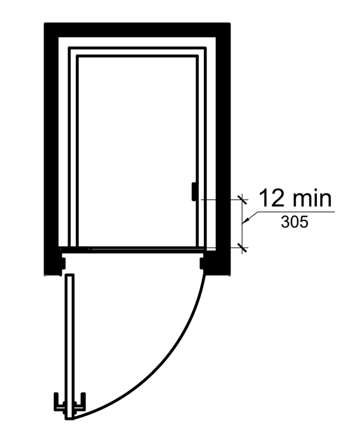

FIGURE 409.4.6.2 LOCATION OF PRIVATE RESIDENCE ELEVATOR CONTROL PANEL

409.4.7 EMERGENCY COMMUNICATIONS. EMERGENCY TWO-WAY COMMUNICATION SYSTEMS SHALL COMPLY WITH 409.4.7.

409.4.7.1 TYPE. A TELEPHONE AND EMERGENCY SIGNAL DEVICE SHALL BE PROVIDED IN THE CAR.

409.4.7.2 OPERABLE PARTS. THE TELEPHONE AND EMERGENCY SIGNALING DEVICE SHALL COMPLY WITH 309.3 AND 309.4.

409.4.7.3 COMPARTMENT. IF THE TELEPHONE OR DEVICE IS IN A CLOSED COMPARTMENT, THE COMPARTMENT DOOR HARDWARE SHALL COMPLY WITH 309.

409.4.7.4 CORD. THE TELEPHONE CORD SHALL BE 29 INCHES (735 MM) LONG MINIMUM.

410 PLATFORM LIFTS
410.1 GENERAL. PLATFORM LIFTS SHALL COMPLY WITH ASME A18.1 (1999 EDITION OR 2003 EDITION) (INCORPORATED BY REFERENCE, SEE "REFERENCED STANDARDS" IN CHAPTER 1). PLATFORM LIFTS SHALL NOT BE ATTENDANT-OPERATED AND SHALL PROVIDE UNASSISTED ENTRY AND EXIT FROM THE LIFT.

410.2 FLOOR SURFACES. FLOOR SURFACES IN PLATFORM LIFTS SHALL COMPLY WITH 302 AND 303.

410.3 CLEAR FLOOR SPACE. CLEAR FLOOR SPACE IN PLATFORM LIFTS SHALL COMPLY WITH 305.

410.4 PLATFORM TO RUNWAY CLEARANCE. THE CLEARANCE BETWEEN THE PLATFORM SILL AND THE EDGE OF ANY RUNWAY LANDING SHALL BE 1 INCH (32 MM) MAXIMUM.

410.5 OPERABLE PARTS. CONTROLS FOR PLATFORM LIFTS SHALL COMPLY WITH 309.

410.6 DOORS AND GATES. PLATFORM LIFTS SHALL HAVE LOW-ENERGY POWER-OPERATED DOORS OR GATES COMPLYING WITH 404.3. DOORS SHALL REMAIN OPEN FOR 20 SECONDS MINIMUM. END DOORS AND GATES SHALL PROVIDE A CLEAR WIDTH 32 INCHES (815 MM) MINIMUM. SIDE DOORS AND GATES SHALL PROVIDE A CLEAR WIDTH 42 INCHES (1065 MM) MINIMUM.

EXCEPTION: PLATFORM LIFTS SERVING TWO LANDINGS MAXIMUM AND HAVING DOORS OR GATES ON OPPOSITE SIDES SHALL BE PERMITTED TO HAVE SELF-CLOSING MANUAL DOORS OR GATES.

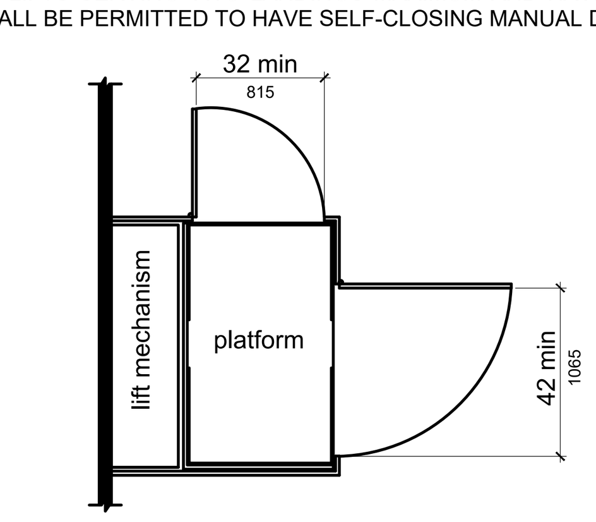

FIGURE 410.6 PLATFORM LIFT DOORS AND GATES

CHAPTER 5: GENERAL SITE AND BUILDING ELEMENTS

501 GENERAL
501.1 SCOPE. THE PROVISIONS OF CHAPTER 5 SHALL APPLY WHERE REQUIRED BY CHAPTER 2 OR WHERE REFERENCED BY A REQUIREMENT IN THIS DOCUMENT.

502 PARKING SPACES
502.1 GENERAL. CAR AND VAN PARKING SPACES SHALL COMPLY WITH 502. WHERE PARKING SPACES ARE MARKED WITH LINES, WIDTH MEASUREMENTS OF PARKING SPACES AND ACCESS AISLES SHALL BE MADE FROM THE CENTERLINE OF THE MARKINGS.

EXCEPTION: WHERE PARKING SPACES OR ACCESS AISLES ARE NOT ADJACENT TO ANOTHER PARKING SPACE OR ACCESS AISLE, MEASUREMENTS SHALL BE PERMITTED TO INCLUDE THE FULL WIDTH OF THE LINE DEFINING THE PARKING SPACE OR ACCESS AISLE.

502.2 VEHICLE SPACES. CAR PARKING SPACES SHALL BE 96 INCHES (2440 MM) WIDE MINIMUM AND VAN PARKING SPACES SHALL BE 132 INCHES (3350 MM) WIDE MINIMUM, SHALL BE MARKED TO DEFINE THE WIDTH, AND SHALL HAVE AN ADJACENT ACCESS AISLE COMPLYING WITH 502.3.

EXCEPTION: VAN PARKING SPACES SHALL BE PERMITTED TO BE 96 INCHES (2440 MM) WIDE MINIMUM WHERE THE ACCESS AISLE IS 96 INCHES (2440 MM) WIDE MINIMUM.

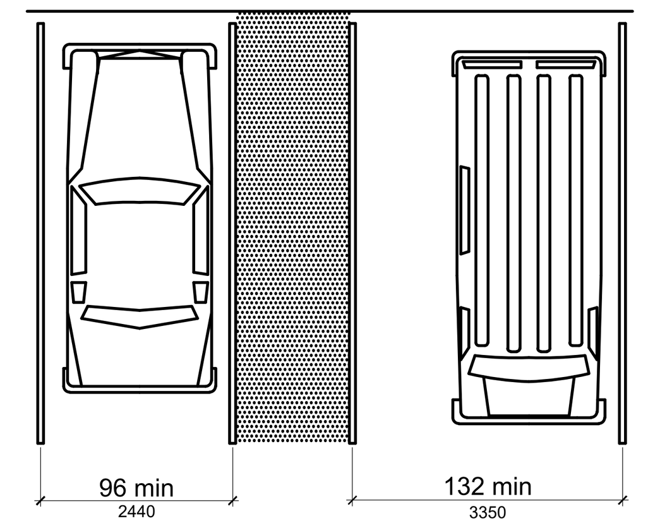

FIGURE 502.2 VEHICLE PARKING SPACES

502.3 ACCESS AISLE. ACCESS AISLES SERVING PARKING SPACES SHALL COMPLY WITH 502.3. ACCESS AISLES SHALL ADJOIN AN ACCESSIBLE ROUTE. TWO PARKING SPACES SHALL BE PERMITTED TO SHARE A COMMON ACCESS AISLE.

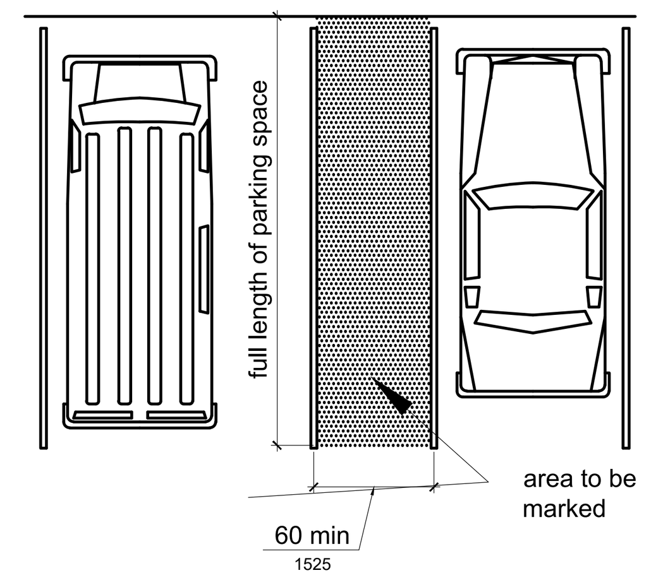

FIGURE 502.3 PARKING SPACE ACCESS AISLE

502.3.1 WIDTH. ACCESS AISLES SERVING CAR AND VAN PARKING SPACES SHALL BE 60 INCHES (1525 MM) WIDE MINIMUM.

502.3.2 LENGTH. ACCESS AISLES SHALL EXTEND THE FULL LENGTH OF THE PARKING SPACES THEY SERVE.

502.3.3 MARKING. ACCESS AISLES SHALL BE MARKED SO AS TO DISCOURAGE PARKING IN THEM.

502.3.4 LOCATION. ACCESS AISLES SHALL NOT OVERLAP THE VEHICULAR WAY. ACCESS AISLES SHALL BE PERMITTED TO BE PLACED ON EITHER SIDE OF THE PARKING SPACE EXCEPT FOR ANGLED VAN PARKING SPACES WHICH SHALL HAVE ACCESS AISLES LOCATED ON THE PASSENGER SIDE OF THE PARKING SPACES.

502.4 FLOOR OR GROUND SURFACES. PARKING SPACES AND ACCESS AISLES SERVING THEM SHALL COMPLY WITH 302. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE PARKING SPACES THEY SERVE. CHANGES IN LEVEL ARE NOT PERMITTED.

EXCEPTION: SLOPES NOT STEEPER THAN 1:48 SHALL BE PERMITTED.

502.5 VERTICAL CLEARANCE. PARKING SPACES FOR VANS AND ACCESS AISLES AND VEHICULAR ROUTES SERVING THEM SHALL PROVIDE A VERTICAL CLEARANCE OF 98 INCHES (2490 MM) MINIMUM.

502.6 IDENTIFICATION. PARKING SPACE IDENTIFICATION SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY COMPLYING WITH 703.7.2.1. SIGNS IDENTIFYING VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE." SIGNS SHALL BE 60 INCHES (1525 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE MEASURED TO THE BOTTOM OF THE SIGN.

502.7 RELATIONSHIP TO ACCESSIBLE ROUTES. PARKING SPACES AND ACCESS AISLES SHALL BE DESIGNED SO THAT CARS AND VANS, WHEN PARKED, CANNOT OBSTRUCT THE REQUIRED CLEAR WIDTH OF ADJACENT ACCESSIBLE ROUTES.

503 PASSENGER LOADING ZONES
503.1 GENERAL. PASSENGER LOADING ZONES SHALL COMPLY WITH 503.

503.2 VEHICLE PULL-UP SPACE. PASSENGER LOADING ZONES SHALL PROVIDE A VEHICULAR PULL-UP SPACE 96 INCHES (2440 MM) WIDE MINIMUM AND 20 FEET (6100 MM) LONG MINIMUM.

503.3 ACCESS AISLE. PASSENGER LOADING ZONES SHALL PROVIDE ACCESS AISLES COMPLYING WITH 503 ADJACENT TO THE VEHICLE PULL-UP SPACE. ACCESS AISLES SHALL ADJOIN AN ACCESSIBLE ROUTE AND SHALL NOT OVERLAP THE VEHICULAR WAY.

503.3.1 WIDTH. ACCESS AISLES SERVING VEHICLE PULL-UP SPACES SHALL BE 60 INCHES (1525 MM) WIDE MINIMUM.

503.3.2 LENGTH. ACCESS AISLES SHALL EXTEND THE FULL LENGTH OF THE VEHICLE PULL-UP SPACES THEY SERVE.

503.3.3 MARKING. ACCESS AISLES SHALL BE MARKED SO AS TO DISCOURAGE PARKING IN THEM.

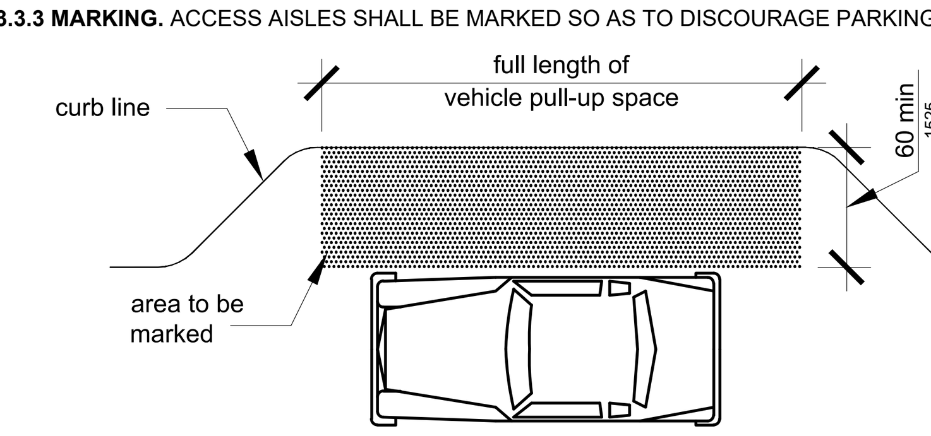

FIGURE 503.3 PASSENGER LOADING ZONE ACCESS AISLE

503.4 FLOOR AND GROUND SURFACES. VEHICLE PULL-UP SPACES AND ACCESS AISLES SERVING THEM SHALL COMPLY WITH 302. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE VEHICLE PULL-UP SPACE THEY SERVE. CHANGES IN LEVEL ARE NOT PERMITTED.

EXCEPTION: SLOPES NOT STEEPER THAN 1:48 SHALL BE PERMITTED.

503.5 VERTICAL CLEARANCE. VEHICLE PULL-UP SPACES, ACCESS AISLES 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 114 INCHES (2895 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 NOT PERMITTED.

EXCEPTION: TREADS SHALL BE PERMITTED TO HAVE A SLOPE NOT STEEPER THAN 1:48.

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 CURVED OR BEVELED. RISERS 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 1/2 INCHES (38 MM) MAXIMUM OVER THE TREAD BELOW.

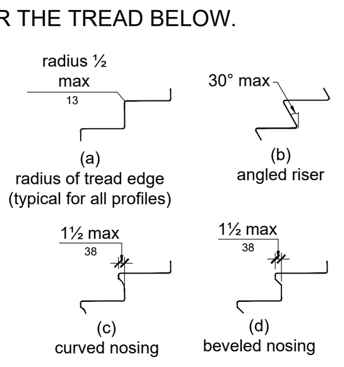

FIGURE 504.5 STAIR NOSINGS

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 405, 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.

EXCEPTION: IN ASSEMBLY AREAS, HANDRAILS SHALL NOT BE REQUIRED ON BOTH SIDES OF AISLE RAMPS WHERE A HANDRAIL IS PROVIDED AT EITHER SIDE OR WITHIN THE AISLE WIDTH.

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.

EXCEPTION: IN ASSEMBLY AREAS, HANDRAILS ON RAMPS SHALL NOT BE REQUIRED TO BE CONTINUOUS IN AISLES SERVING SEATING.

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 AT A CONSISTENT HEIGHT ABOVE WALKING SURFACES, STAIR NOSINGS, AND RAMP SURFACES.

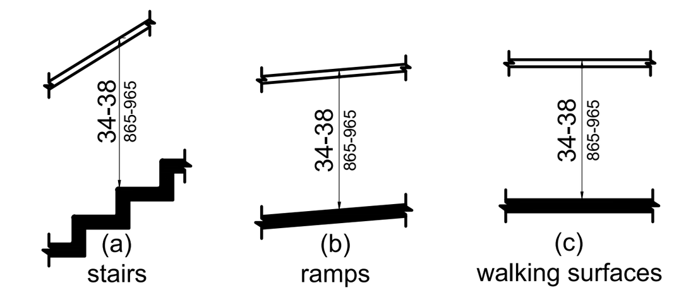

FIGURE 505.4 HANDRAIL HEIGHT

505.5 CLEARANCE. CLEARANCE BETWEEN HANDRAIL GRIPPING SURFACES AND ADJACENT SURFACES SHALL BE 1 1/2 INCHES (38 MM) MINIMUM.

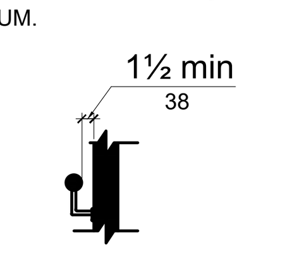

FIGURE 505.5 HANDRAIL CLEARANCE

505.6 GRIPPING SURFACE. HANDRAIL GRIPPING SURFACES SHALL BE CONTINUOUS ALONG THEIR LENGTH AND SHALL NOT BE OBSTRUCTED ALONG THEIR TOPS OR SIDES. THE BOTTOMS OF HANDRAIL GRIPPING SURFACES SHALL NOT BE OBSTRUCTED FOR MORE THAN 20 PERCENT OF THEIR LENGTH. WHERE PROVIDED, HORIZONTAL PROJECTIONS SHALL OCCUR 1 1/2 INCHES (38 MM) MINIMUM BELOW THE BOTTOM OF THE HANDRAIL GRIPPING SURFACE.

EXCEPTIONS:
1. WHERE HANDRAILS ARE PROVIDED ALONG WALKING SURFACES WITH SLOPES NOT STEEPER THAN 1:20, THE BOTTOMS OF HANDRAIL GRIPPING SURFACES SHALL BE PERMITTED TO BE OBSTRUCTED ALONG THEIR ENTIRE LENGTH WHERE THEY ARE INTEGRAL TO CRASH RAILS OR BUMPER GUARDS.
2. THE DISTANCE BETWEEN HORIZONTAL PROJECTIONS AND THE BOTTOM OF THE GRIPPING SURFACE SHALL BE PERMITTED TO BE REDUCED BY 1/8 INCH (3.2 MM) FOR EACH 1/2 INCH (13 MM) OF ADDITIONAL HANDRAIL PERIMETER DIMENSION THAT EXCEEDS 4 INCHES (100 MM).

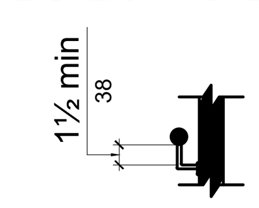

FIGURE 505.6 HORIZONTAL PROJECTIONS BELOW GRIPPING SUFACE

505.7 CROSS SECTION. HANDRAIL GRIPPING SURFACES SHALL HAVE A CROSS SECTION COMPLYING WITH 505.7.1 OR 505.7.2.

505.7.1 CIRCULAR CROSS SECTION. HANDRAIL GRIPPING SURFACES WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF 1 1/4 INCHES (32 MM) MINIMUM AND 2 INCHES (51 MM) MAXIMUM.

505.7.2 NON-CIRCULAR CROSS SECTIONS. HANDRAIL GRIPPING SURFACES WITH A NON-CIRCULAR CROSS SECTION SHALL HAVE A PERIMETER DIMENSION OF 4 INCHES (100 MM) MINIMUM AND 6 1/4 INCHES (160 MM) MAXIMUM, AND A CROSS-SECTION DIMENSION OF 2 1/4 INCHES (57 MM) MAXIMUM.

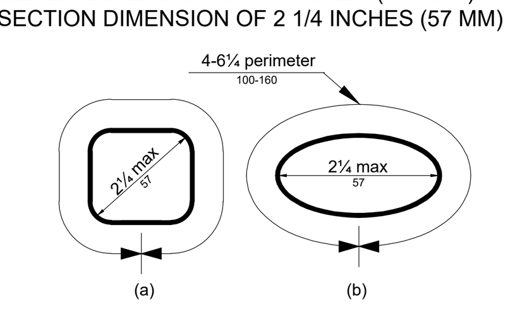

FIGURE 505.7.2 HANDRAIL NON-CIRCULAR CROSS SECTION

505.8 SURFACES. HANDRAIL GRIPPING SURFACES AND ANY SURFACES ADJACENT TO THEM SHALL BE FREE OF SHARP OR ABRASIVE ELEMENTS AND SHALL HAVE ROUNDED EDGES.

505.9 FITTINGS. HANDRAILS SHALL NOT ROTATE WITHIN THEIR FITTINGS.

505.10 HANDRAIL EXTENSIONS. HANDRAIL GRIPPING SURFACES SHALL EXTEND BEYOND AND IN THE SAME DIRECTION OF STAIR FLIGHTS AND RAMP RUNS IN ACCORDANCE WITH 505.10.

EXCEPTIONS:
1. EXTENSIONS SHALL NOT BE REQUIRED FOR CONTINUOUS HANDRAILS AT THE INSIDE TURN OF SWITCHBACK OR DOGLEG STAIRS AND RAMPS.
2. IN ASSEMBLY AREAS, EXTENSIONS SHALL NOT BE REQUIRED FOR RAMP HANDRAILS IN AISLES SERVING SEATING WHERE THE HANDRAILS ARE DISCONTINUOUS TO PROVIDE ACCESS TO SEATING AND TO PERMIT CROSSOVERS WITHIN AISLES.
3. IN ALTERATIONS, FULL EXTENSIONS OF HANDRAILS SHALL NOT BE REQUIRED WHERE SUCH EXTENSIONS WOULD BE HAZARDOUS DUE TO PLAN CONFIGURATION.

505.10.1 TOP AND BOTTOM EXTENSION AT RAMPS. RAMP HANDRAILS SHALL EXTEND HORIZONTALLY ABOVE THE LANDING FOR 12 INCHES (305 MM) MINIMUM BEYOND THE TOP AND BOTTOM OF RAMP RUNS. EXTENSIONS SHALL RETURN TO A WALL, GUARD, OR THE LANDING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT RAMP RUN.

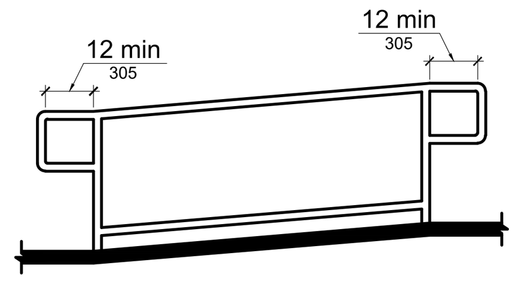

FIGURE 505.10.1 TOP AND BOTTOM HANDRAIL EXTENSIONS AT RAMPS

505.10.2 TOP EXTENSION AT STAIRS. AT THE TOP OF A STAIR FLIGHT, HANDRAILS SHALL EXTEND HORIZONTALLY ABOVE THE LANDING FOR 12 INCHES (305 MM) MINIMUM BEGINNING DIRECTLY ABOVE THE FIRST RISER NOSING. EXTENSIONS SHALL RETURN TO A WALL, GUARD, OR THE LANDING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.

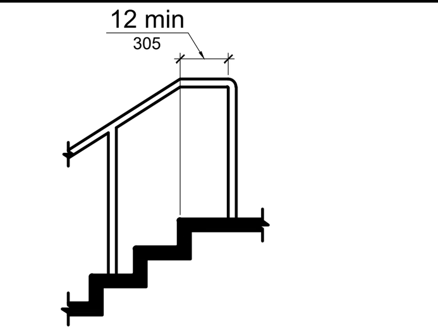

FIGURE 505.10.2 TOP HANDRAIL EXTENSION AT STAIRS

505.10.3 BOTTOM EXTENSION AT STAIRS. AT THE BOTTOM OF A STAIR FLIGHT, HANDRAILS SHALL EXTEND AT THE SLOPE OF THE STAIR FLIGHT FOR A HORIZONTAL DISTANCE AT LEAST EQUAL TO ONE TREAD DEPTH BEYOND THE LAST RISER NOSING. EXTENSION SHALL RETURN TO A WALL, GUARD, OR THE LANDING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.

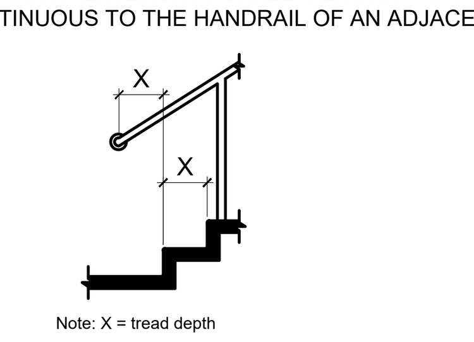

FIGURE 505.10.3 BOTTOM HANDRAIL EXTENSION AT STAIRS

CHAPTER 6: PLUMBING ELEMENTS AND FACILITIES

601 GENERAL
601.1 SCOPE. THE PROVISIONS OF CHAPTER 6 SHALL APPLY WHERE REQUIRED BY CHAPTER 2 OR WHERE REFERENCED BY A REQUIREMENT IN THIS DOCUMENT.

602 DRINKING FOUNTAINS
602.1 GENERAL. DRINKING FOUNTAINS SHALL COMPLY WITH 307 AND 602.

602.2 CLEAR FLOOR SPACE. UNITS SHALL HAVE A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 POSITIONED FOR A FORWARD APPROACH AND CENTERED ON THE UNIT. KNEE AND TOE CLEARANCE COMPLYING WITH 306 SHALL BE PROVIDED.

EXCEPTION: A PARALLEL APPROACH COMPLYING WITH 305 SHALL BE PERMITTED AT UNITS FOR CHILDREN'S USE WHERE THE SPOUT IS 30 INCHES (760 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND AND IS 3 1/2 INCHES (90 MM) MAXIMUM FROM THE FRONT EDGE OF THE UNIT, INCLUDING BUMPERS.

602.3 OPERABLE PARTS. OPERABLE PARTS SHALL COMPLY WITH 309.

602.4 SPOUT HEIGHT. SPOUT OUTLETS SHALL BE 36 INCHES (915 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

602.5 SPOUT LOCATION. THE SPOUT SHALL BE LOCATED 15 INCHES (380 MM) MINIMUM FROM THE VERTICAL SUPPORT AND 5 INCHES (125 MM) MAXIMUM FROM THE FRONT EDGE OF THE UNIT, INCLUDING BUMPERS.

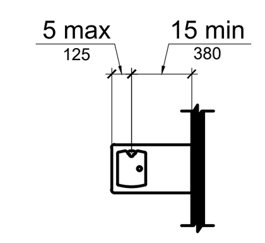

FIGURE 602.5 DRINKING FOUNTAIN SPOUT LOCATION

602.6 WATER FLOW. THE SPOUT SHALL PROVIDE A FLOW OF WATER 4 INCHES (100 MM) HIGH MINIMUM AND SHALL BE LOCATED 5 INCHES (125 MM) MAXIMUM FROM THE FRONT OF THE UNIT. THE ANGLE OF THE WATER STREAM SHALL BE MEASURED HORIZONTALLY RELATIVE TO THE FRONT FACE OF THE UNIT. WHERE SPOUTS ARE LOCATED LESS THAN 3 INCHES (75 MM) OF THE FRONT OF THE UNIT, THE ANGLE OF THE WATER STREAM SHALL BE 30 DEGREES MAXIMUM. WHERE SPOUTS ARE LOCATED BETWEEN 3 INCHES (75 MM) AND 5 INCHES (125 MM) MAXIMUM FROM THE FRONT OF THE UNIT, THE ANGLE OF THE WATER STREAM SHALL BE 15 DEGREES MAXIMUM.

602.7 DRINKING FOUNTAINS FOR STANDING PERSONS. SPOUT OUTLETS OF DRINKING FOUNTAINS FOR STANDING PERSONS SHALL BE 38 INCHES (965 MM) MINIMUM AND 43 INCHES (1090 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

603 TOILET AND BATHING ROOMS
603.1 GENERAL. TOILET AND BATHING ROOMS SHALL COMPLY WITH 603.

603.2 CLEARANCES. CLEARANCES SHALL COMPLY WITH 603.2.

603.2.1 TURNING SPACE. TURNING SPACE COMPLYING WITH 304 SHALL BE PROVIDED WITHIN THE ROOM.

603.2.2 OVERLAP. REQUIRED CLEAR FLOOR SPACES, CLEARANCE AT FIXTURES, AND TURNING SPACE SHALL BE PERMITTED TO OVERLAP.

603.2.3 DOOR SWING. DOORS SHALL NOT SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE REQUIRED FOR ANY FIXTURE. DOORS SHALL BE PERMITTED TO SWING INTO THE REQUIRED TURNING SPACE.

EXCEPTIONS:
1. DOORS TO A TOILET ROOM OR BATHING ROOM FOR A SINGLE OCCUPANT ACCESSED ONLY THROUGH A PRIVATE OFFICE AND NOT FOR COMMON USE OR PUBLIC USE SHALL BE PERMITTED TO SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE PROVIDED THE SWING OF THE DOOR CAN BE REVERSED TO COMPLY WITH 603.2.3.
2. WHERE THE TOILET ROOM OR BATHING ROOM IS FOR INDIVIDUAL USE AND A CLEAR FLOOR SPACE COMPLYING WITH 305.3 IS PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING, DOORS SHALL BE PERMITTED TO SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE REQUIRED FOR ANY FIXTURE.

603.3 MIRRORS. MIRRORS LOCATED ABOVE LAVATORIES OR COUNTERTOPS SHALL BE INSTALLED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE 40 INCHES (1015 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. MIRRORS NOT LOCATED ABOVE LAVATORIES OR COUNTERTOPS SHALL BE INSTALLED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE 35 INCHES (890 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

603.4 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 WATER CLOSETS AND TOILET COMPARTMENTS
604.1 GENERAL. WATER CLOSETS AND TOILET COMPARTMENTS SHALL COMPLY WITH 604.2 THROUGH 604.8.

EXCEPTION: WATER CLOSETS AND TOILET COMPARTMENTS FOR CHILDREN'S USE SHALL BE PERMITTED TO COMPLY WITH 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 16 INCHES (405 MM) MINIMUM TO 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.

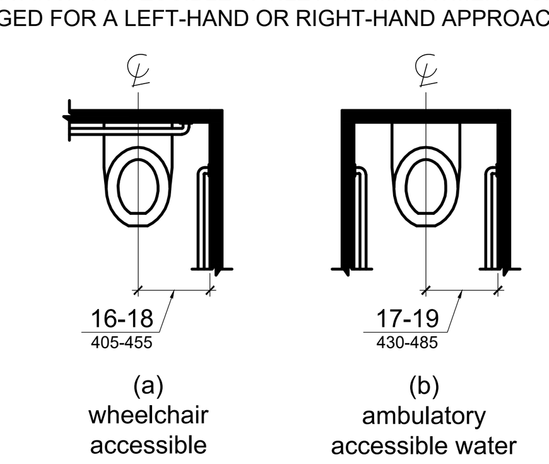

FIGURE 604.2 WATER CLOSET LOCATION

604.3 CLEARANCE. CLEARANCES AROUND WATER CLOSETS AND IN TOILET COMPARTMENTS SHALL COMPLY WITH 604.3.

604.3.1 SIZE. CLEARANCE AROUND A WATER CLOSET SHALL BE 60 INCHES (1525 MM) MINIMUM MEASURED PERPENDICULAR FROM THE SIDE WALL AND 56 INCHES (1420 MM) MINIMUM MEASURED PERPENDICULAR FROM THE REAR WALL.

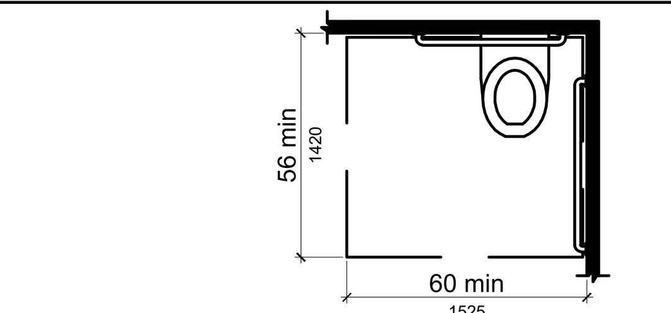

FIGURE 604.3.1 SIZE OF CLEARANCE AT WATER CLOSETS

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 CLEARANCE.

EXCEPTION: IN RESIDENTIAL DWELLING UNITS, A LAVATORY COMPLYING WITH 606 SHALL BE PERMITTED ON THE REAR WALL 18 INCHES (455 MM) MINIMUM FROM THE WATER CLOSET CENTERLINE WHERE THE CLEARANCE AT THE WATER CLOSET IS 66 INCHES (1675 MM) MINIMUM MEASURED PERPENDICULAR FROM THE REAR WALL.

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 LIFTED POSITION.

EXCEPTIONS:
1. A WATER CLOSET IN A TOILET ROOM FOR A SINGLE OCCUPANT ACCESSED ONLY THROUGH A PRIVATE OFFICE AND NOT FOR COMMON USE OR PUBLIC USE SHALL NOT BE REQUIRED TO COMPLY WITH 604.4.
2. IN RESIDENTIAL DWELLING UNITS, THE HEIGHT OF WATER CLOSETS SHALL BE PERMITTED TO BE 15 INCHES (380 MM) MINIMUM AND 19 INCHES (485 MM) MAXIMUM ABOVE THE FINISH FLOOR MEASURED TO THE TOP OF THE SEAT.

604.5 GRAB BARS. GRAB BARS FOR WATER CLOSETS SHALL COMPLY WITH 609. GRAB BARS SHALL BE PROVIDED ON THE SIDE WALL CLOSEST TO THE WATER CLOSET AND ON THE REAR WALL.

EXCEPTIONS:
1. GRAB BARS SHALL NOT BE REQUIRED TO BE INSTALLED IN A TOILET ROOM FOR A SINGLE OCCUPANT ACCESSED ONLY THROUGH A PRIVATE OFFICE AND NOT FOR COMMON USE OR PUBLIC USE PROVIDED THAT REINFORCEMENT HAS BEEN INSTALLED IN WALLS AND LOCATED SO AS TO PERMIT THE INSTALLATION OF GRAB BARS COMPLYING WITH 604.5.
2. IN RESIDENTIAL DWELLING UNITS, GRAB BARS SHALL NOT BE REQUIRED TO BE INSTALLED IN TOILET OR BATHROOMS PROVIDED THAT REINFORCEMENT HAS BEEN INSTALLED IN WALLS AND LOCATED SO AS TO PERMIT THE INSTALLATION OF GRAB BARS COMPLYING WITH 604.5.
3. IN DETENTION OR CORRECTION FACILITIES, GRAB BARS SHALL NOT BE REQUIRED TO BE INSTALLED IN HOUSING OR HOLDING CELLS THAT ARE SPECIALLY DESIGNED WITHOUT PROTRUSIONS FOR PURPOSES OF SUICIDE PREVENTION.

604.5.1 SIDE WALL. THE SIDE WALL GRAB BAR SHALL BE 42 INCHES (1065 MM) LONG MINIMUM, LOCATED 12 INCHES (305 MM) MAXIMUM FROM THE REAR WALL AND EXTENDING 54 INCHES (1370 MM) MINIMUM FROM THE REAR WALL.

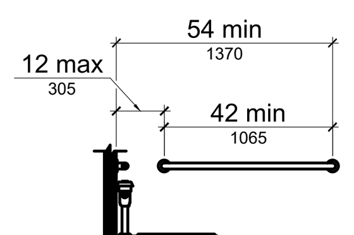

FIGURE 604.5.1 SIDE WALL GRAB BAR AT WATER CLOSETS

604.5.2 REAR WALL. THE REAR WALL GRAB BAR SHALL BE 36 INCHES (915 MM) LONG MINIMUM AND EXTEND FROM THE CENTERLINE OF THE WATER CLOSET 12 INCHES (305 MM) MINIMUM ON ONE SIDE AND 24 INCHES (610 MM) MINIMUM ON THE OTHER SIDE.

EXCEPTIONS:
1. THE REAR GRAB BAR SHALL BE PERMITTED TO BE 24 INCHES (610 MM) LONG MINIMUM, CENTERED ON THE WATER CLOSET, WHERE WALL SPACE DOES NOT PERMIT A LENGTH OF 36 INCHES (915 MM) MINIMUM DUE TO THE LOCATION OF A RECESSED FIXTURE ADJACENT TO THE WATER CLOSET.
2. WHERE AN ADMINISTRATIVE AUTHORITY REQUIRES FLUSH CONTROLS FOR FLUSH VALVES TO BE LOCATED IN A POSITION THAT CONFLICTS WITH THE LOCATION OF THE REAR GRAB BAR, THEN THE REAR GRAB BAR SHALL BE PERMITTED TO BE SPLIT OR SHIFTED TO THE OPEN SIDE OF THE TOILET AREA.

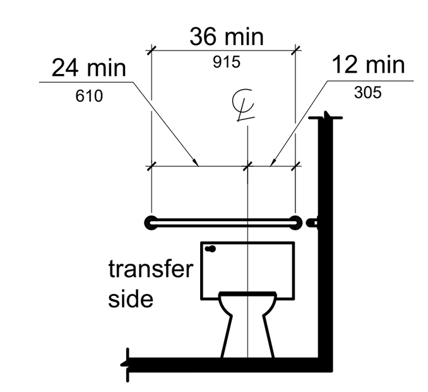

FIGURE 604.5.2 REAR WALL GRAB BAR AT WATER CLOSET

604.6 FLUSH CONTROLS. FLUSH CONTROLS SHALL BE HAND OPERATED OR AUTOMATIC. HAND OPERATED FLUSH CONTROLS SHALL COMPLY WITH 309. 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 9 INCHES (230 MM) MAXIMUM IN FRONT OF THE WATER CLOSET MEASURED TO THE CENTERLINE OF THE DISPENSER. THE OUTLET OF THE DISPENSER SHALL BE 15 INCHES (380 MM) MINIMUM AND 48 INCHES (1220 MM) MAXIMUM ABOVE THE FINISH FLOOR AND SHALL NOT BE LOCATED BEHIND GRAB BARS. DISPENSERS SHALL NOT BE OF A TYPE THAT CONTROLS DELIVERY OR THAT DOES NOT ALLOW CONTINUOUS PAPER FLOW.

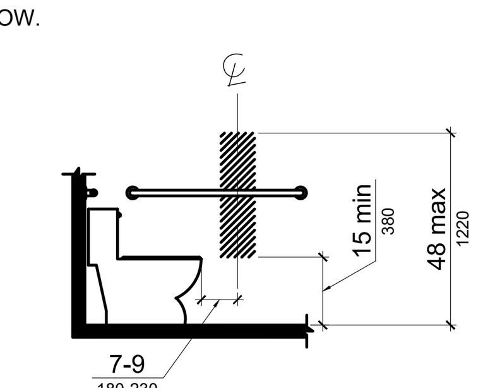

FIGURE 604.7 DISPENSER OUTLET LOCATION

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 WHEELCHAIR ACCESSIBLE COMPARTMENTS. WHEELCHAIR ACCESSIBLE COMPARTMENTS SHALL COMPLY WITH 604.8.1.

604.8.1.1 SIZE. WHEELCHAIR ACCESSIBLE COMPARTMENTS SHALL BE 60 INCHES (1525 MM) WIDE MINIMUM MEASURED PERPENDICULAR TO THE SIDE WALL, AND 56 INCHES (1420 MM) DEEP MINIMUM FOR WALL HUNG 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 59 INCHES (1500 MM) DEEP MINIMUM FOR WALL HUNG AND FLOOR MOUNTED WATER CLOSETS MEASURED PERPENDICULAR TO THE REAR WALL.

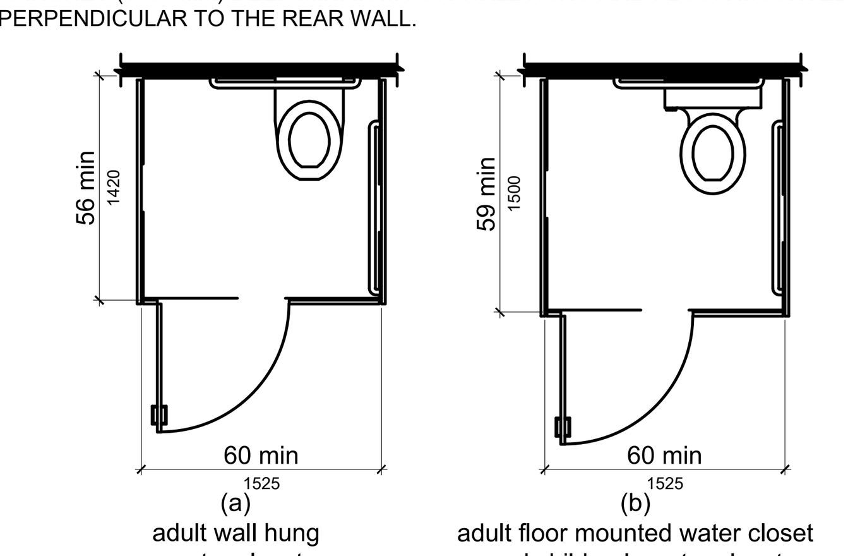

FIGURE 604.8.1.1 SIZE OF WHEELCHAIR ACCESSIBLE TOILET COMPARTMENT

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REGISTERED ARCHITECT
CADE L. SPELL
25311
STATE OF TEXAS
JANUARY 11, 2022

MEN'S TOILET & LOCKER ROOM RENOVATION
FOR THE
ORANGE COUNTY DRAINAGE DISTRICT
8081 OLD HIGHWAY 90 ORANGE, TEXAS 77630

ISSUE DATES:

BIDS & CONSTRUCTION
JANUARY 11, 2022

PREPARED BY: CLS

TAS-3
SHEET NO.

PROJECT NO. 2021-11
TEXAS ACCESSIBILITY STANDARDS

604.8.1.2 DOORS. TOILET COMPARTMENT DOORS, INCLUDING DOOR HARDWARE, SHALL COMPLY WITH 404 EXCEPT THAT IF THE APPROACH IS TO THE LATCH SIDE OF THE COMPARTMENT DOOR, CLEARANCE BETWEEN THE DOOR SIDE OF THE COMPARTMENT AND ANY OBSTRUCTION SHALL BE 42 INCHES (1065 MM) MINIMUM. DOORS SHALL BE LOCATED IN THE FRONT PARTITION OR IN THE SIDE WALL OR PARTITION FARTHEST FROM THE WATER CLOSET. WHERE LOCATED IN THE FRONT PARTITION, THE DOOR OPENING SHALL BE 4 INCHES (100 MM) MAXIMUM FROM THE SIDE WALL OR PARTITION FARTHEST FROM THE WATER CLOSET. WHERE LOCATED IN THE SIDE WALL OR PARTITION, THE DOOR OPENING SHALL BE 4 INCHES (100 MM) MAXIMUM FROM THE FRONT PARTITION. THE DOOR SHALL BE SELF-CLOSING. A DOOR PULL COMPLYING WITH 404.2.7 SHALL BE PLACED ON BOTH SIDES OF THE DOOR NEAR THE LATCH. TOILET COMPARTMENT DOORS SHALL NOT SWING INTO THE MINIMUM REQUIRED COMPARTMENT AREA.

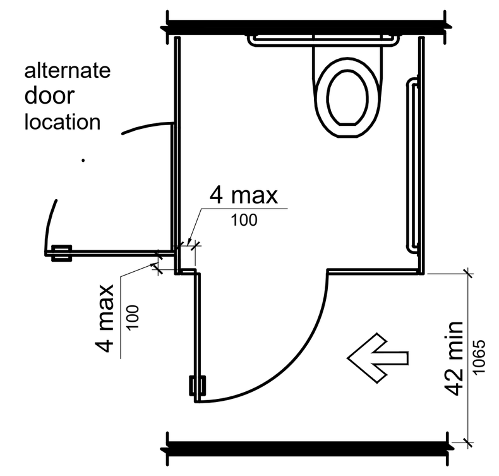


FIGURE 604.8.1.2 WHEELCHAIR ACCESSIBLE TOILET COMPARTMENT DOORS

604.8.1.3 APPROACH. COMPARTMENTS SHALL BE ARRANGED FOR LEFT-HAND OR RIGHT-HAND APPROACH TO THE WATER CLOSET.

604.8.1.4 TOE CLEARANCE. THE FRONT PARTITION AND AT LEAST ONE SIDE PARTITION SHALL PROVIDE A TOE CLEARANCE OF 9 INCHES (230 MM) MINIMUM ABOVE THE FINISH FLOOR AND 6 INCHES (150 MM) DEEP MINIMUM BEYOND THE COMPARTMENT-SIDE FACE OF THE PARTITION, EXCLUSIVE OF PARTITION SUPPORT MEMBERS. COMPARTMENTS FOR CHILDREN'S USE SHALL PROVIDE A TOE CLEARANCE OF 12 INCHES (305 MM) MINIMUM ABOVE THE FINISH FLOOR.

EXCEPTION: TOE CLEARANCE AT THE FRONT PARTITION IS NOT REQUIRED IN A COMPARTMENT GREATER THAN 62 INCHES (1575 MM) DEEP WITH A WALL-HUNG WATER CLOSET OR 65 INCHES (1650 MM) DEEP WITH A FLOOR-MOUNTED WATER CLOSET. TOE CLEARANCE AT THE SIDE PARTITION IS NOT REQUIRED IN A COMPARTMENT GREATER THAN 66 INCHES (1675 MM) WIDE. TOE CLEARANCE AT THE FRONT PARTITION IS NOT REQUIRED IN A COMPARTMENT FOR CHILDREN'S USE THAT IS GREATER THAN 65 INCHES (1650 MM) DEEP.

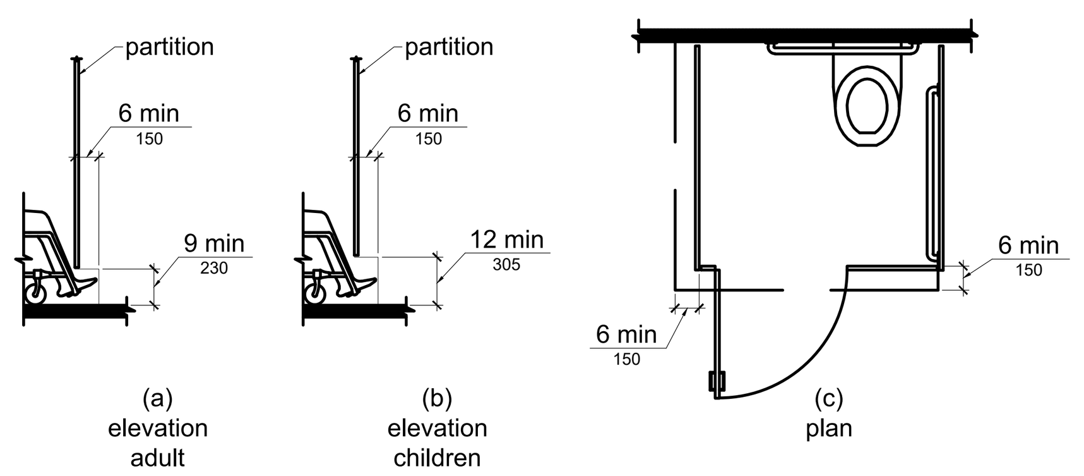


FIGURE 604.8.1.4 WHEELCHAIR ACCESSIBLE TOILET COMPARTMENT TOE CLEARANCE

604.8.1.5 GRAB BARS. GRAB BARS SHALL COMPLY WITH 609. A SIDE-WALL GRAB BAR COMPLYING WITH 604.5.1 SHALL BE PROVIDED AND SHALL BE LOCATED ON THE WALL CLOSEST TO THE WATER CLOSET. IN ADDITION, A REAR-WALL GRAB BAR COMPLYING WITH 604.5.2 SHALL BE PROVIDED.

604.8.2 AMBULATORY ACCESSIBLE COMPARTMENTS. AMBULATORY ACCESSIBLE COMPARTMENTS SHALL COMPLY WITH 604.8.2.

604.8.2.1 SIZE. AMBULATORY ACCESSIBLE COMPARTMENTS SHALL HAVE A DEPTH OF 60 INCHES (1525 MM) MINIMUM AND A WIDTH OF 35 INCHES (890 MM) MINIMUM AND 37 INCHES (940 MM) MAXIMUM.

604.8.2.2 DOORS. TOILET COMPARTMENT DOORS, INCLUDING DOOR HARDWARE, SHALL COMPLY WITH 404, EXCEPT THAT IF THE APPROACH IS TO THE LATCH SIDE OF THE COMPARTMENT DOOR, CLEARANCE BETWEEN THE DOOR SIDE OF THE COMPARTMENT AND ANY OBSTRUCTION SHALL BE 42 INCHES (1065 MM) MINIMUM. THE DOOR SHALL BE SELF-CLOSING. A DOOR PULL COMPLYING WITH 404.2.7 SHALL BE PLACED ON BOTH SIDES OF THE DOOR NEAR THE LATCH. TOILET COMPARTMENT DOORS SHALL NOT SWING INTO THE MINIMUM REQUIRED COMPARTMENT AREA.

604.8.2.3 GRAB BARS. GRAB BARS SHALL COMPLY WITH 609. A SIDE-WALL GRAB BAR COMPLYING WITH 604.5.1 SHALL BE PROVIDED ON BOTH SIDES OF THE COMPARTMENT.

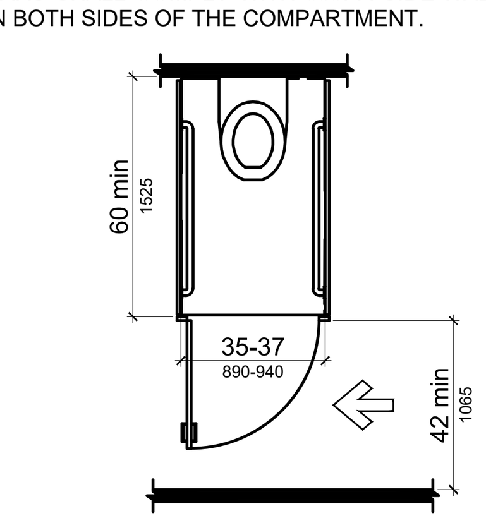


FIGURE 604.8.2 AMBULATORY ACCESSIBLE TOILET COMPARTMENT

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.

	AGES 3 AND 4	AGES 5 THROUGH 8	AGES 9 THROUGH 12
WATER CLOSET CENTERLINE	12 INCHES (305 MM)	12 TO 15 INCHES (305 TO 380 MM)	15 TO 18 INCHES (380 TO 455 MM)
TOILET SEAT HEIGHT	11 TO 12 INCHES (280 TO 305 MM)	12 TO 15 INCHES (305 TO 380 MM)	15 TO 17 INCHES (380 TO 430 MM)
GRAB BAR HEIGHT	18 TO 20 INCHES (455 TO 510 MM)	20 TO 25 INCHES (510 TO 635 MM)	25 TO 27 INCHES (635 TO 685 MM)
DISPENSER HEIGHT	14 INCHES (355 MM)	14 TO 17 INCHES (355 TO 430 MM)	17 TO 19 INCHES (430 TO 485 MM)

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. COMPARTMENTS SHALL BE ARRANGED FOR LEFT-HAND OR RIGHT-HAND APPROACH TO THE WATER CLOSET.

604.9.2 CLEARANCE. CLEARANCE AROUND A WATER CLOSET SHALL COMPLY WITH 604.3.

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 LIFTED POSITION.

604.9.4 GRAB BARS. GRAB BARS FOR WATER CLOSETS SHALL COMPLY WITH 604.5.

604.9.5 FLUSH CONTROLS. FLUSH CONTROLS SHALL BE HAND OPERATED OR AUTOMATIC. HAND OPERATED FLUSH CONTROLS SHALL COMPLY WITH 309.2 AND 309.4 AND SHALL BE INSTALLED 36 INCHES (915 MM) MAXIMUM 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.

604.9.6 DISPENSERS. TOILET PAPER DISPENSERS SHALL COMPLY WITH 309.4 AND SHALL BE 7 INCHES (180 MM) MINIMUM AND 9 INCHES (230 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.

604.9.7 TOILET COMPARTMENTS. TOILET COMPARTMENTS SHALL COMPLY WITH 604.8.

605 URINALS
605.1 GENERAL. URINALS SHALL COMPLY WITH 605.

605.2 HEIGHT AND DEPTH. URINALS SHALL BE THE STALL-TYPE OR THE WALL-HUNG TYPE WITH THE RIM 17 INCHES (430 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. URINALS SHALL BE 13 1/2 INCHES (345 MM) DEEP MINIMUM MEASURED FROM THE OUTER FACE OF THE URINAL RIM TO THE BACK OF THE FIXTURE.

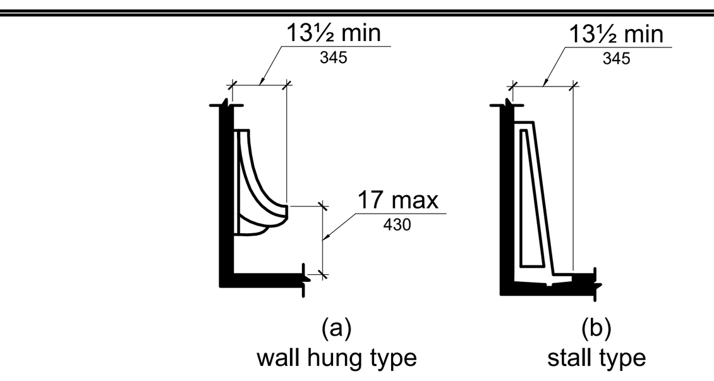


FIGURE 605.2 HEIGHT AND DEPTH OF URINALS

605.3 CLEAR FLOOR SPACE. A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 POSITIONED FOR FORWARD APPROACH SHALL BE PROVIDED.

605.4 FLUSH CONTROLS. FLUSH CONTROLS SHALL BE HAND OPERATED OR AUTOMATIC. HAND OPERATED FLUSH CONTROLS SHALL COMPLY WITH 309.

606 LAVATORIES AND SINKS
606.1 GENERAL. LAVATORIES AND SINKS SHALL COMPLY WITH 606.

ADVISORY 606.1 GENERAL. IF SOAP AND TOWEL DISPENSERS ARE PROVIDED, THEY MUST BE LOCATED WITHIN THE REACH RANGES SPECIFIED IN 308. LOCATE SOAP AND TOWEL DISPENSERS SO THAT THEY ARE CONVENIENTLY USABLE BY A PERSON AT THE ACCESSIBLE LAVATORY.

606.2 CLEAR FLOOR SPACE. A CLEAR FLOOR SPACE COMPLYING WITH 305, POSITIONED FOR A FORWARD APPROACH, AND KNEE AND TOE CLEARANCE COMPLYING WITH 306 SHALL BE PROVIDED.

EXCEPTIONS:
1. A PARALLEL APPROACH COMPLYING WITH 305 SHALL BE PERMITTED TO A KITCHEN SINK IN A SPACE WHERE A COOK TOP OR CONVENTIONAL RANGE IS NOT PROVIDED AND TO WET BARS.
2. A LAVATORY IN A TOILET ROOM OR BATHING FACILITY FOR A SINGLE OCCUPANT ACCESSED ONLY THROUGH A PRIVATE OFFICE AND NOT FOR COMMON USE OR PUBLIC USE SHALL NOT BE REQUIRED TO PROVIDE KNEE AND TOE CLEARANCE COMPLYING WITH 306.
3. IN RESIDENTIAL DWELLING UNITS, CABINETRY SHALL BE PERMITTED UNDER LAVATORIES AND KITCHEN SINKS PROVIDED THAT ALL OF THE FOLLOWING CONDITIONS ARE MET:

(A) THE CABINETRY CAN BE REMOVED WITHOUT REMOVAL OR REPLACEMENT OF THE FIXTURE;
(B) THE FINISH FLOOR EXTENDS UNDER THE CABINETRY; AND
(C) THE WALLS BEHIND AND SURROUNDING THE CABINETRY ARE FINISHED.

4. A KNEE CLEARANCE OF 24 INCHES (610 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND SHALL BE PERMITTED AT LAVATORIES AND SINKS USED PRIMARILY BY CHILDREN 6 THROUGH 12 YEARS WHERE THE RIM OR COUNTER SURFACE IS 31 INCHES (785 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.
5. A PARALLEL APPROACH COMPLYING WITH 305 SHALL BE PERMITTED TO LAVATORIES AND SINKS USED PRIMARILY BY CHILDREN 5 YEARS AND YOUNGER.
6. THE DIP OF THE OVERFLOW SHALL NOT BE CONSIDERED IN DETERMINING KNEE AND TOE CLEARANCES.
7. NO MORE THAN ONE BOWL OF A MULTI-BOWL SINK SHALL BE REQUIRED TO PROVIDE KNEE AND TOE CLEARANCE COMPLYING WITH 306.

606.3 HEIGHT. LAVATORIES AND SINKS SHALL BE INSTALLED WITH THE FRONT OF THE HIGHER OF THE RIM OR COUNTER SURFACE 34 INCHES (865 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

EXCEPTIONS:
1. A LAVATORY IN A TOILET OR BATHING FACILITY FOR A SINGLE OCCUPANT ACCESSED ONLY THROUGH A PRIVATE OFFICE AND NOT FOR COMMON USE OR PUBLIC USE SHALL NOT BE REQUIRED TO COMPLY WITH 606.3.
2. IN RESIDENTIAL DWELLING UNIT KITCHENS, SINKS THAT ARE ADJUSTABLE TO VARIABLE HEIGHTS, 29 INCHES (735 MM) MINIMUM AND 36 INCHES (915 MM) MAXIMUM, SHALL BE PERMITTED WHERE ROUGH-IN PLUMBING PERMITS CONNECTIONS OF SUPPLY AND DRAIN PIPES FOR SINKS MOUNTED AT THE HEIGHT OF 29 INCHES (735 MM).

606.4 FAUCETS. CONTROLS FOR FAUCETS SHALL COMPLY WITH 309. HAND-OPERATED METERING FAUCETS SHALL REMAIN OPEN FOR 10 SECONDS MINIMUM.

606.5 EXPOSED PIPES AND SURFACES. WATER SUPPLY AND DRAIN PIPES UNDER LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES AND SINKS

607 BATHTUBS
607.1 GENERAL. BATHTUBS SHALL COMPLY WITH 607.

607.2 CLEARANCE. CLEARANCE IN FRONT OF BATHTUBS SHALL EXTEND THE LENGTH OF THE BATHTUB AND SHALL BE 30 INCHES (760 MM) WIDE MINIMUM. A LAVATORY COMPLYING WITH 606 SHALL BE PERMITTED AT THE CONTROL END OF THE CLEARANCE. WHERE A PERMANENT SEAT IS PROVIDED AT THE HEAD END OF THE BATHTUB, THE CLEARANCE SHALL EXTEND 12 INCHES (305 MM) MINIMUM BEYOND THE WALL AT THE HEAD END OF THE BATHTUB.

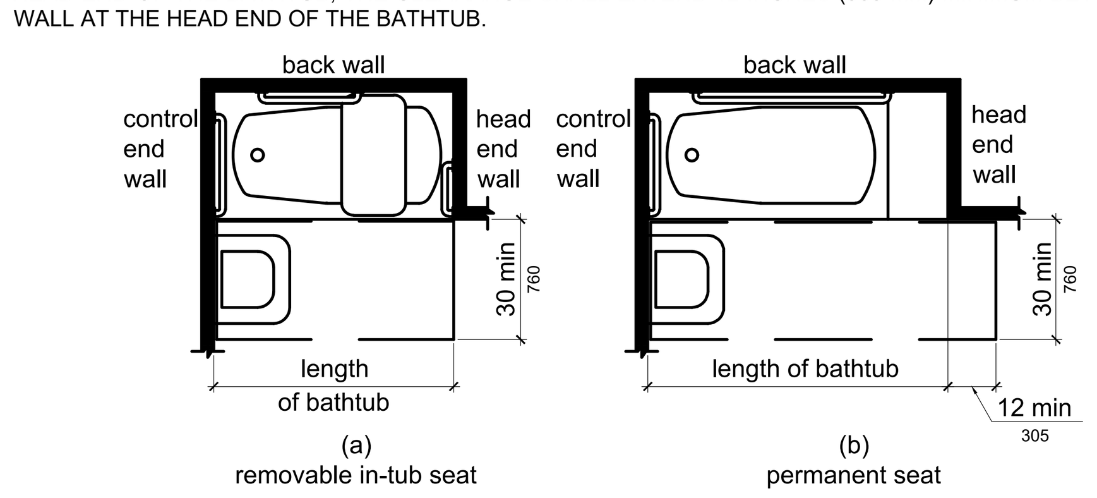


FIGURE 607.2 CLEARANCE FOR BATHTUBS

607.3 SEAT. A PERMANENT SEAT AT THE HEAD END OF THE BATHTUB OR A REMOVABLE IN-TUB SEAT SHALL BE PROVIDED. SEATS SHALL COMPLY WITH 610.

607.4 GRAB BARS. GRAB BARS FOR BATHTUBS SHALL COMPLY WITH 609 AND SHALL BE PROVIDED IN ACCORDANCE WITH 607.4.1 OR 607.4.2.

EXCEPTIONS:
1. GRAB BARS SHALL NOT BE REQUIRED TO BE INSTALLED IN A BATHTUB LOCATED IN A BATHING FACILITY FOR A SINGLE OCCUPANT ACCESSED ONLY THROUGH A PRIVATE OFFICE AND NOT FOR COMMON USE OR PUBLIC USE PROVIDED THAT REINFORCEMENT HAS BEEN INSTALLED IN WALLS AND LOCATED SO AS TO PERMIT THE INSTALLATION OF GRAB BARS COMPLYING WITH 607.4.
2. IN RESIDENTIAL DWELLING UNITS, GRAB BARS SHALL NOT BE REQUIRED TO BE INSTALLED IN BATHTUBS LOCATED IN BATHING FACILITIES PROVIDED THAT REINFORCEMENT HAS BEEN I NSTALLED IN WALLS AND LOCATED SO AS TO PERMIT THE INSTALLATION OF GRAB BARS COMPLYING WITH 607.4.

607.4.1 BATHTUBS WITH PERMANENT SEATS. FOR BATHTUBS WITH PERMANENT SEATS, GRAB BARS SHALL BE PROVIDED IN ACCORDANCE WITH 607.4.1.

607.4.1.1 BACK WALL. TWO GRAB BARS SHALL BE INSTALLED ON THE BACK WALL, ONE LOCATED IN ACCORDANCE WITH 609.4 AND THE OTHER LOCATED 8 INCHES (205 MM) MINIMUM AND 10 INCHES (255 MM) MAXIMUM ABOVE THE RIM OF THE BATHTUB. EACH GRAB BAR SHALL BE INSTALLED 15 INCHES (380 MM) MAXIMUM FROM THE HEAD END WALL AND 12 INCHES (305 MM) MAXIMUM FROM THE CONTROL END WALL.

607.4.1.2 CONTROL END WALL. A GRAB BAR 24 INCHES (610 MM) LONG MINIMUM SHALL BE INSTALLED ON THE CONTROL END WALL AT THE FRONT EDGE OF THE BATHTUB.

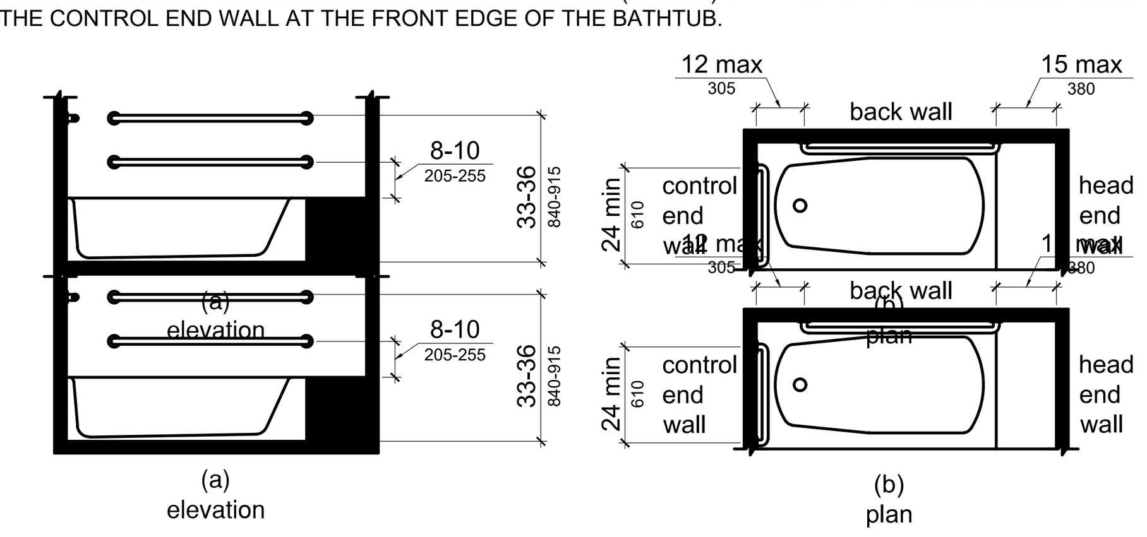


FIGURE 607.2 CLEARANCE FOR BATHTUBS

607.4.2 BATHTUBS WITHOUT PERMANENT SEATS. FOR BATHTUBS WITHOUT PERMANENT SEATS, GRAB BARS SHALL COMPLY WITH 607.4.2.

607.4.2.1 BACK WALL. TWO GRAB BARS SHALL BE INSTALLED ON THE BACK WALL, ONE LOCATED IN ACCORDANCE WITH 609.4 AND OTHER LOCATED 8 INCHES (205 MM) MINIMUM AND 10 INCHES (255 MM) MAXIMUM ABOVE THE RIM OF THE BATHTUB. EACH GRAB BAR SHALL BE 24 INCHES (610 MM) LONG MINIMUM AND SHALL BE INSTALLED 24 INCHES (610 MM) MAXIMUM FROM THE HEAD END WALL AND 12 INCHES (305 MM) MAXIMUM FROM THE CONTROL END WALL.

607.4.2.2 CONTROL END WALL. A GRAB BAR 24 INCHES (610 MM) LONG MINIMUM SHALL BE INSTALLED ON THE CONTROL END WALL AT THE FRONT EDGE OF THE BATHTUB.

607.4.2.3 HEAD END WALL. A GRAB BAR 12 INCHES (305 MM) LONG MINIMUM SHALL BE INSTALLED ON THE HEAD END WALL AT THE FRONT EDGE OF THE BATHTUB.

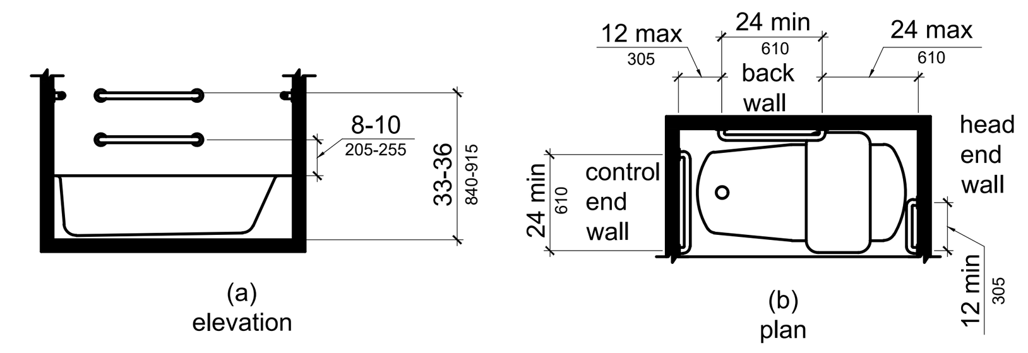


FIGURE 607.4.2 GRAB BARS FOR BATHTUBS WITH REMOVABLE IN-TUB SEATS

607.5 CONTROLS. CONTROLS, OTHER THAN DRAIN STOPPERS, SHALL BE LOCATED ON AN END WALL. CONTROLS SHALL BE BETWEEN THE BATHTUB RIM AND GRAB BAR, AND BETWEEN THE OPEN SIDE OF THE BATHTUB AND THE CENTERLINE OF THE WIDTH OF THE BATHTUB. CONTROLS SHALL COMPLY WITH 309.4.

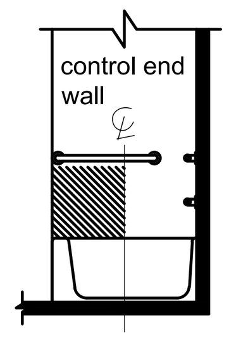


FIGURE 607.5 BATHTUB CONTROL LOCATION

607.6 SHOWER SPRAY UNIT AND WATER. A SHOWER SPRAY UNIT WITH A HOSE 59 INCHES (1500 MM) LONG MINIMUM THAT CAN BE USED BOTH AS A FIXED-POSITION SHOWER HEAD AND AS A HAND-HELD SHOWER SHALL BE PROVIDED. THE SHOWER SPRAY UNIT SHALL HAVE AN ON/OFF CONTROL WITH A NON-POSITIVE SHUT-OFF. IF AN ADJUSTABLE-HEIGHT SHOWER HEAD ON A VERTICAL BAR IS USED, THE BAR SHALL BE INSTALLED SO AS NOT TO OBSTRUCT THE USE OF GRAB BARS. BATHTUB SHOWER SPRAY UNITS SHALL DELIVER WATER THAT IS 120°F (49°C) MAXIMUM.

607.7 BATHTUB ENCLOSURES. ENCLOSURES FOR BATHTUBS SHALL NOT OBSTRUCT CONTROLS, FAUCETS, SHOWER AND SPRAY UNITS OR OBSTRUCT TRANSFER FROM WHEELCHAIRS ONTO BATHTUB SEATS OR INTO BATHTUBS. ENCLOSURES ON BATHTUBS SHALL NOT HAVE TRACKS INSTALLED ON THE RIM OF THE OPEN FACE OF THE BATHTUB.

608 SHOWER COMPARTMENTS
608.1 GENERAL. SHOWER COMPARTMENTS SHALL COMPLY WITH 608.

ADVISORY 608.1 GENERAL. SHOWER STALLS THAT ARE 60 INCHES (1525 MM) WIDE AND HAVE NO CURB MAY INCREASE THE USABILITY OF A BATHROOM BECAUSE THE SHOWER AREA PROVIDES ADDITIONAL MANEUVERING SPACE.

608.2 SIZE AND CLEARANCES FOR SHOWER COMPARTMENTS. SHOWER COMPARTMENTS SHALL HAVE SIZES AND CLEARANCES COMPLYING WITH 608.2.

608.2.1 TRANSFER TYPE SHOWER COMPARTMENTS. TRANSFER TYPE SHOWER COMPARTMENTS SHALL BE 36 INCHES (915 MM) BY 36 INCHES (915 MM) CLEAR INSIDE DIMENSIONS MEASURED AT THE CENTER POINTS OF OPPOSING SIDES AND SHALL HAVE A 36 INCH (915 MM) WIDE MINIMUM ENTRY ON THE FACE OF THE SHOWER COMPARTMENT. CLEARANCE OF 36 INCHES (915 MM) WIDE MINIMUM BY 48 INCHES (1220 MM) LONG MINIMUM MEASURED FROM THE CONTROL WALL SHALL BE PROVIDED.

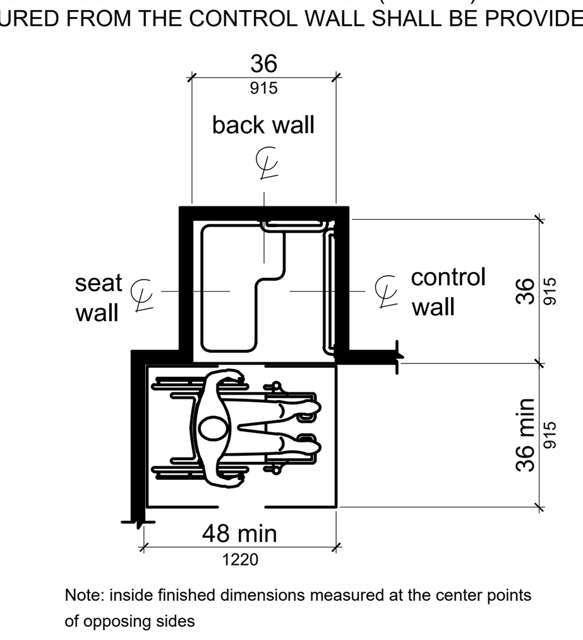


FIGURE 608.2.1 TRANSFER TYPE SHOWER COMPARTMENT SIZE AND CLEARANCE

608.2.2 STANDARD ROLL-IN TYPE SHOWER COMPARTMENTS. STANDARD ROLL-IN TYPE SHOWER COMPARTMENTS SHALL BE 30 INCHES (760 MM) WIDE MINIMUM BY 60 INCHES (1525 MM) DEEP MINIMUM CLEAR INSIDE DIMENSIONS MEASURED AT CENTER POINTS OF OPPOSING SIDES AND SHALL HAVE A 60 INCHES (1525 MM) WIDE MINIMUM ENTRY ON THE FACE OF THE SHOWER COMPARTMENT.

608.2.2.1 CLEARANCE. A 30 INCH (760 MM) WIDE MINIMUM BY 60 INCH (1525 MM) LONG MINIMUM CLEARANCE SHALL BE PROVIDED ADJACENT TO THE OPEN FACE OF THE SHOWER COMPARTMENT.

EXCEPTION: A LAVATORY COMPLYING WITH 606 SHALL BE PERMITTED ON ONE 30 INCH (760 MM) WIDE MINIMUM SIDE OF THE CLEARANCE PROVIDED THAT IT IS NOT ON THE SIDE OF THE CLEARANCE ADJACENT TO THE CONTROLS OR, WHERE PROVIDED, NOT ON THE SIDE OF THE CLEARANCE ADJACENT TO THE SHOWER SEAT.

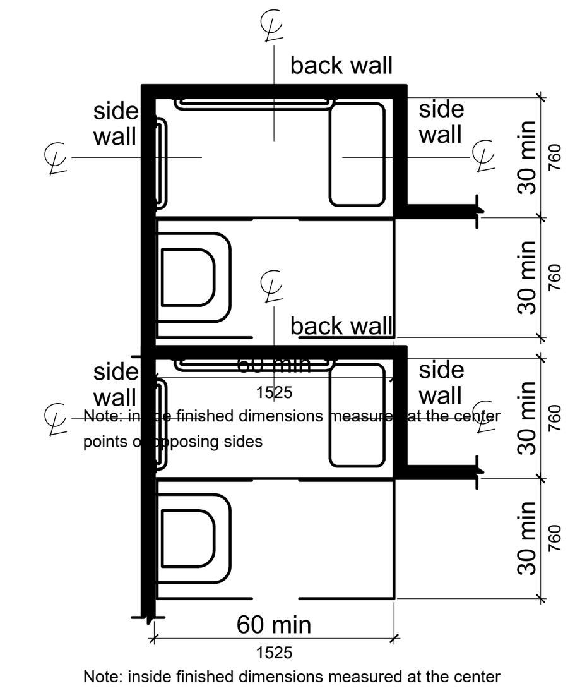


FIGURE 608.2.2 STANDARD ROLL-IN TYPE SHOWER COMPARTMENT SIZE AND CLEARANCE

608.2.3 ALTERNATE ROLL-IN TYPE SHOWER COMPARTMENTS. ALTERNATE ROLL-IN TYPE SHOWER COMPARTMENTS SHALL BE 36 INCHES (915 MM) WIDE AND 60 INCHES (1525 MM) DEEP MINIMUM CLEAR INSIDE DIMENSIONS MEASURED AT CENTER POINTS OF OPPOSING SIDES. A 36 INCH (915 MM) WIDE MINIMUM ENTRY SHALL BE PROVIDED AT ONE END OF THE LONG SIDE OF THE COMPARTMENT.

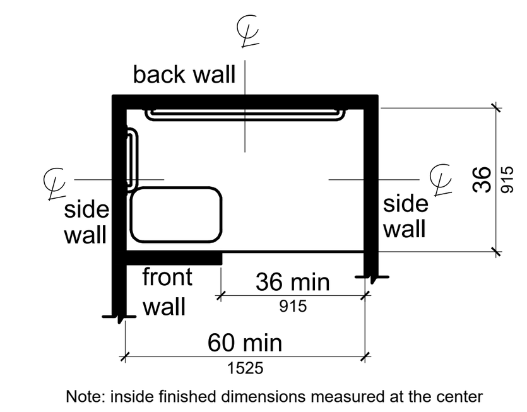


FIGURE 608.2.3 ALTERNATE ROLL-IN TYPE SHOWER COMPARTMENT SIZE AND CLEARANCE

608.3 GRAB BARS. GRAB BARS SHALL COMPLY WITH 609 AND SHALL BE PROVIDED IN ACCORDANCE WITH 608.3. WHERE MULTIPLE GRAB BARS ARE USED, REQUIRED HORIZONTAL GRAB BARS SHALL BE INSTALLED AT THE SAME HEIGHT ABOVE THE FINISH FLOOR.

EXCEPTIONS:
1. GRAB BARS SHALL NOT BE REQUIRED TO BE INSTALLED IN A SHOWER LOCATED IN A BATHING FACILITY FOR A SINGLE OCCUPANT ACCESSED ONLY THROUGH A PRIVATE OFFICE, AND NOT FOR COMMON USE OR PUBLIC USE PROVIDED THAT REINFORCEMENT HAS BEEN INSTALLED IN WALLS AND LOCATED SO AS TO PERMIT THE INSTALLATION OF GRAB BARS COMPLYING WITH 608.3.
2. IN RESIDENTIAL DWELLING UNITS, GRAB BARS SHALL NOT BE REQUIRED TO BE INSTALLED IN SHOWERS LOCATED IN BATHING FACILITIES PROVIDED THAT REINFORCEMENT HAS BEEN INSTALLED IN WALLS AND LOCATED SO AS TO PERMIT THE INSTALLATION OF GRAB BARS COMPLYING WITH 608.3.

608.3.1 TRANSFER TYPE SHOWER COMPARTMENTS. IN TRANSFER TYPE COMPARTMENTS, GRAB BARS SHALL BE PROVIDED ACROSS THE CONTROL WALL AND BACK WALL TO A POINT 18 INCHES (455 MM) FROM THE CONTROL WALL.

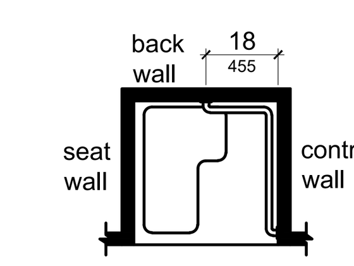


FIGURE 608.3.1 GRAB BARS FOR TRANSFER TYPE SHOWERS

608.3.2 STANDARD ROLL-IN TYPE SHOWER COMPARTMENTS. WHERE A SEAT IS PROVIDED IN STANDARD ROLL-IN TYPE SHOWER COMPARTMENTS, GRAB BARS SHALL BE PROVIDED ON THE BACK WALL AND THE SIDE WALL OPPOSITE THE SEAT. GRAB BARS SHALL NOT BE PROVIDED ABOVE THE SEAT. WHERE A SEAT IS NOT PROVIDED IN STANDARD ROLL-IN TYPE SHOWER COMPARTMENTS, GRAB BARS SHALL BE PROVIDED ON THREE WALLS. GRAB BARS SHALL BE INSTALLED 6 INCHES (150 MM) MAXIMUM FROM ADJACENT WALLS.

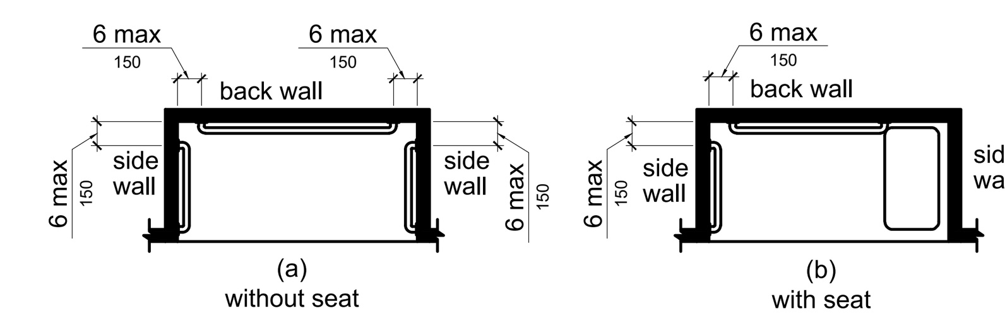


FIGURE 608.3.2 GRAB BARS FOR STANDARD ROLL-IN TYPE SHOWERS

608.3.3 ALTERNATE ROLL-IN TYPE SHOWER COMPARTMENTS. IN ALTERNATE ROLL-IN TYPE SHOWER COMPARTMENTS, GRAB BARS SHALL BE PROVIDED ON THE BACK WALL AND THE SIDE WALL FARTHEST FROM THE COMPARTMENT ENTRY. GRAB BARS SHALL NOT BE PROVIDED ABOVE THE SEAT. GRAB BARS SHALL BE INSTALLED 6 INCHES (150 MM) MAXIMUM FROM ADJACENT WALLS.

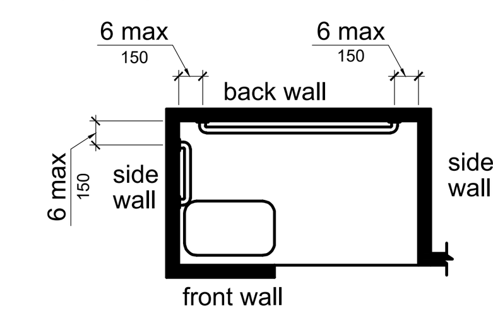


FIGURE 608.3.3 GRAB BARS FOR ALTERNATE ROLL-IN TYPE SHOWERS

608.4 SEATS. A FOLDING OR NON-FOLDING SEAT SHALL BE PROVIDED IN TRANSFER TYPE SHOWER COMPARTMENTS. A FOLDING SEAT SHALL BE PROVIDED IN ROLL-IN TYPE SHOWERS REQUIRED IN TRANSIENT LODGING GUEST ROOMS WITH MOBILITY FEATURES COMPLYING WITH 806.2. SEATS SHALL COMPLY WITH 610.

EXCEPTION: IN RESIDENTIAL DWELLING UNITS, SEATS SHALL NOT BE REQUIRED IN TRANSFER TYPE SHOWER COMPARTMENTS PROVIDED THAT REINFORCEMENT HAS BEEN INSTALLED IN WALLS SO AS TO PERMIT THE INSTALLATION OF SEATS COMPLYING WITH 608.4.

608.5 CONTROLS. CONTROLS, FAUCETS, AND SHOWER SPRAY UNITS SHALL COMPLY WITH 309.4.

608.5.1 TRANSFER TYPE SHOWER COMPARTMENTS. IN TRANSFER TYPE SHOWER COMPARTMENTS, THE CONTROLS, FAUCETS, AND SHOWER SPRAY UNIT SHALL BE INSTALLED ON THE SIDE WALL OPPOSITE THE SEAT 38 INCHES (965 MM) MINIMUM AND 48 INCHES (1220 MM) MAXIMUM ABOVE THE SHOWER FLOOR AND SHALL BE LOCATED ON THE CONTROL WALL 15 INCHES (380 MM) MAXIMUM FROM THE CENTERLINE OF THE SEAT TOWARD THE SHOWER OPENING.

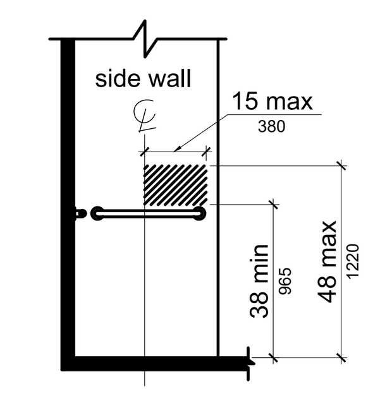


FIGURE 608.5.1 TRANSFER TYPE SHOWER COMPARTMENT CONTROL LOCATION

608.5.2 STANDARD ROLL-IN TYPE SHOWER COMPARTMENTS. IN STANDARD ROLL-IN TYPE SHOWER COMPARTMENTS, THE CONTROLS, FAUCETS, AND SHOWER SPRAY UNIT SHALL BE LOCATED ABOVE THE GRAB BAR, BUT NO HIGHER THAN 48 INCHES (1220 MM) ABOVE THE SHOWER FLOOR. WHERE A SEAT IS PROVIDED, THE CONTROLS, FAUCETS, AND SHOWER SPRAY UNIT SHALL BE INSTALLED ON THE BACK WALL ADJACENT TO THE SEAT WALL AND SHALL BE LOCATED 27 INCHES (685 MM) MAXIMUM FROM THE SEAT WALL.

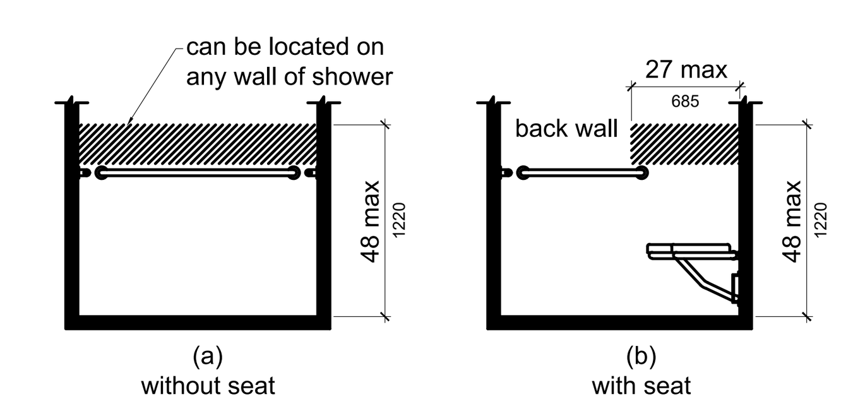
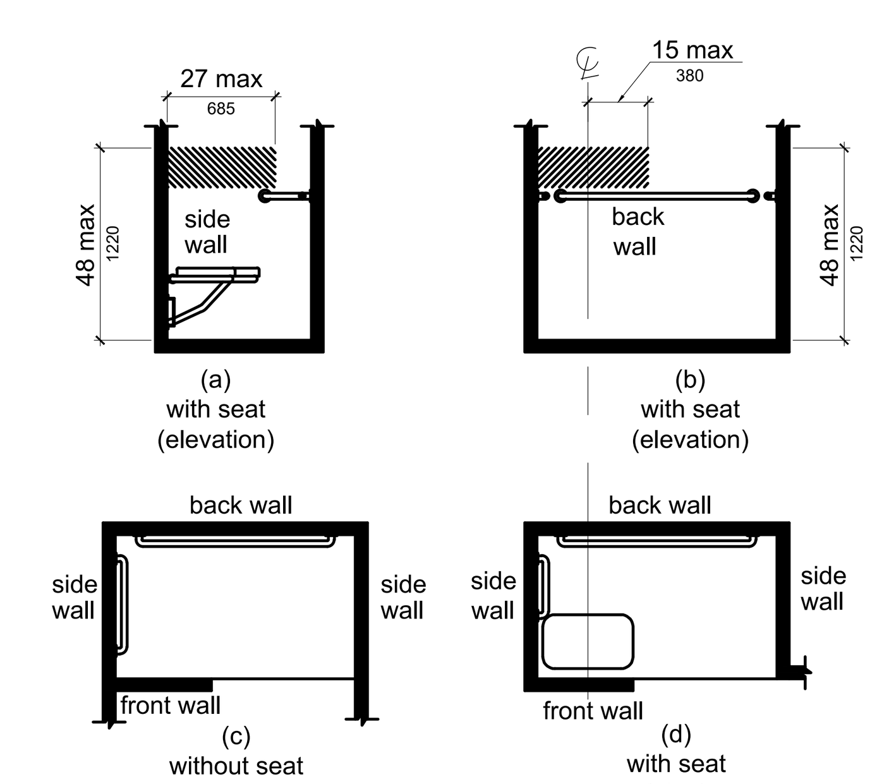


FIGURE 608.5.2 STANDARD ROLL-IN TYPE SHOWER COMPARTMENT CONTROL LOCATION

608.5.3 ALTERNATE ROLL-IN TYPE SHOWER COMPARTMENTS. IN ALTERNATE ROLL-IN TYPE SHOWER COMPARTMENTS, THE CONTROLS, FAUCETS, AND SHOWER SPRAY UNIT SHALL BE LOCATED ABOVE THE GRAB BAR, BUT NO HIGHER THAN 48 INCHES (1220 MM) ABOVE THE SHOWER FLOOR. WHERE A SEAT IS PROVIDED, THE CONTROLS, FAUCETS, AND SHOWER SPRAY UNIT SHALL BE LOCATED ON THE SIDE WALL ADJACENT TO THE SEAT 27 INCHES (685 MM) MAXIMUM FROM THE SIDE WALL BEHIND THE SEAT OR SHALL BE LOCATED ON THE BACK WALL OPPOSITE THE SEAT 15 INCHES (380 MM) MAXIMUM, LEFT OR RIGHT, OF THE CENTERLINE OF THE SEAT. WHERE A SEAT IS NOT PROVIDED, THE CONTROLS, FAUCETS, AND SHOWER SPRAY UNIT SHALL BE INSTALLED ON THE SIDE WALL FARTHEST FROM THE COMPARTMENT ENTRY.



608.6 SHOWER SPRAY UNIT AND WATER. A SHOWER SPRAY UNIT WITH A HOSE 59 INCHES (1500 MM) LONG MINIMUM THAT CAN BE USED BOTH AS A FIXED-POSITION SHOWER HEAD AND AS A HAND-HELD SHOWER SHALL BE PROVIDED. THE SHOWER SPRAY UNIT SHALL HAVE AN ON/OFF CONTROL WITH A NON-POSITIVE SHUT-OFF. IF AN ADJUSTABLE-HEIGHT SHOWER HEAD ON A VERTICAL BAR IS USED, THE BAR SHALL BE INSTALLED SO AS NOT TO OBSTRUCT THE USE OF GRAB BARS. SHOWER SPRAY UNITS SHALL DELIVER WATER THAT IS 120°F (49°C) MAXIMUM.

EXCEPTION: A FIXED SHOWER HEAD LOCATED AT 48 INCHES (1220 MM) MAXIMUM ABOVE THE SHOWER FINISH FLOOR SHALL BE PERMITTED INSTEAD OF A HAND-HELD SPRAY UNIT IN FACILITIES THAT ARE NOT MEDICAL CARE FACILITIES, LONG-TERM CARE FACILITIES, TRANSIENT LODGING GUEST ROOMS, OR RESIDENTIAL DWELLING UNITS.

608.7 THRESHOLDS. THRESHOLDS IN ROLL-IN TYPE SHOWER COMPARTMENTS SHALL BE 1/2 INCH (13 MM) HIGH MAXIMUM IN ACCORDANCE WITH 303. IN TRANSFER TYPE SHOWER COMPARTMENTS, THRESHOLDS 1/2 INCH (13 MM) HIGH MAXIMUM SHALL BE BEVELED, ROUNDED, OR VERTICAL.

EXCEPTION: A THRESHOLD 2 INCHES (51 MM) HIGH MAXIMUM SHALL BE PERMITTED IN TRANSFER TYPE SHOWER COMPARTMENTS IN EXISTING FACILITIES WHERE PROVISION OF A 1/2 INCH (13 MM) HIGH THRESHOLD WOULD DISTURB THE STRUCTURAL REINFORCEMENT OF THE FLOOR SLAB.

608.8 SHOWER ENCLOSURES. ENCLOSURES FOR SHOWER COMPARTMENTS SHALL NOT OBSTRUCT CONTROLS, FAUCETS, AND SHOWER SPRAY UNITS OR OBSTRUCT TRANSFER FROM WHEELCHAIRS ONTO SHOWER SEATS.

609 GRAB BARS
609.1 GENERAL. GRAB BARS IN TOILET FACILITIES AND BATHING FACILITIES SHALL COMPLY WITH 609.

609.2 CROSS SECTION. GRAB BARS SHALL HAVE A CROSS SECTION COMPLYING WITH 609.2.1 OR 609.2.2.

609.2.1 CIRCULAR CROSS SECTION. GRAB BARS WITH CIRCULAR CROSS SECTIONS SHALL HAVE AN OUTSIDE DIAMETER OF 1 1/4 INCHES (32 MM) MINIMUM AND 2 INCHES (51 MM) MAXIMUM.

609.2.2 NON-CIRCULAR CROSS SECTION. GRAB BARS WITH NON-CIRCULAR CROSS SECTIONS SHALL HAVE A CROSS-SECTION DIMENSION OF 2 INCHES (51 MM) MAXIMUM AND A PERIMETER DIMENSION OF 4 INCHES (100 MM) MINIMUM AND 4.8 INCHES (120 MM) MAXIMUM.

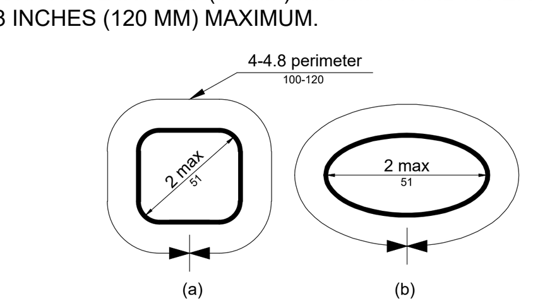


FIGURE 609.2.2 GRAB BAR NON-CIRCULAR CROSS SECTION

609.3 SPACING. THE SPACE BETWEEN THE WALL AND THE GRAB BAR SHALL BE 1 1/2 INCHES (38 MM). THE SPACE BETWEEN THE GRAB BAR AND PROJECTING OBJECTS BELOW AND AT THE ENDS SHALL BE 1 1/2 INCHES (38 MM) MINIMUM. THE SPACE BETWEEN THE GRAB BAR AND PROJECTING OBJECTS ABOVE SHALL BE 12 INCHES (305 MM) MINIMUM.

EXCEPTION: THE SPACE BETWEEN THE GRAB BARS AND SHOWER CONTROLS, SHOWER FITTINGS, AND OTHER GRAB BARS ABOVE SHALL BE PERMITTED TO BE 1 1/2 INCHES (38 MM) MINIMUM.

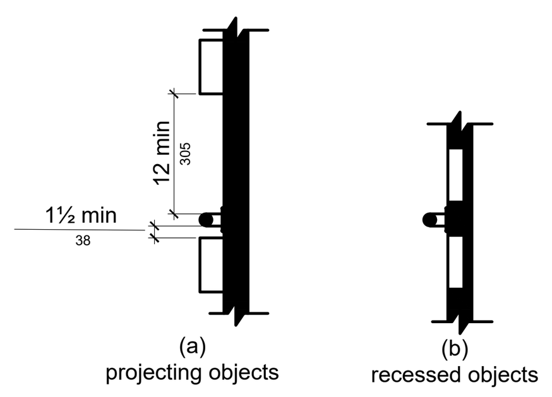


FIGURE 609.3 SPACING OF GRAB BARS

609.4 POSITION OF GRAB BARS. GRAB BARS SHALL BE INSTALLED IN A HORIZONTAL POSITION, 33 INCHES (840 MM) MINIMUM AND 36 INCHES (915 MM) MAXIMUM ABOVE THE FINISH FLOOR MEASURED TO THE TOP OF THE GRIPPING SURFACE, EXCEPT THAT AT WATER CLOSETS FOR CHILDREN'S USE COMPLYING WITH 604.9, GRAB BARS SHALL BE INSTALLED IN A HORIZONTAL POSITION 18 INCHES (455 MM) MINIMUM AND 27 INCHES (685 MM) MAXIMUM ABOVE THE FINISH FLOOR MEASURED TO THE TOP OF THE GRIPPING SURFACE. THE HEIGHT OF THE LOWER GRAB BAR ON THE BACK WALL OF A BATHTUB SHALL COMPLY WITH 607.4.1.1 OR 607.4.2.1.

609.5 SURFACE HAZARDS. GRAB BARS AND ANY WALL OR OTHER SURFACES ADJACENT TO GRAB BARS SHALL BE FREE OF SHARP OR ABRASIVE ELEMENTS AND SHALL HAVE ROUNDED EDGES.

609.6 FITTINGS. GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.

609.7 INSTALLATION. GRAB BARS SHALL BE INSTALLED IN ANY MANNER THAT PROVIDES A GRIPPING SURFACE AT THE SPECIFIED LOCATIONS AND THAT DOES NOT OBSTRUCT THE REQUIRED CLEAR FLOOR SPACE.

609.8 STRUCTURAL STRENGTH. ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHEN A VERTICAL OR HORIZONTAL FORCE OF 250 POUNDS (1112 N) IS APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER, MOUNTING DEVICE, OR SUPPORTING STRUCTURE.

610 SEATS
610.1 GENERAL. SEATS IN BATHTUBS AND SHOWER COMPARTMENTS SHALL COMPLY WITH 610.

610.2 BATHTUB SEATS. THE TOP OF BATHTUB SEATS SHALL BE 17 INCHES (430 MM) MINIMUM AND 19 INCHES (485 MM) MAXIMUM ABOVE THE BATHROOM FINISH FLOOR. THE DEPTH OF A REMOVABLE IN-TUB SEAT SHALL BE 15 INCHES (380 MM) MINIMUM AND 16 INCHES (405 MM) MAXIMUM. THE SEAT SHALL BE CAPABLE OF SECURE PLACEMENT. PERMANENT SEATS AT THE HEAD END OF THE BATHTUB SHALL BE 15 INCHES (380 MM) DEEP MINIMUM AND SHALL EXTEND FROM THE BACK WALL TO OR BEYOND THE OUTER EDGE OF THE BATHTUB.

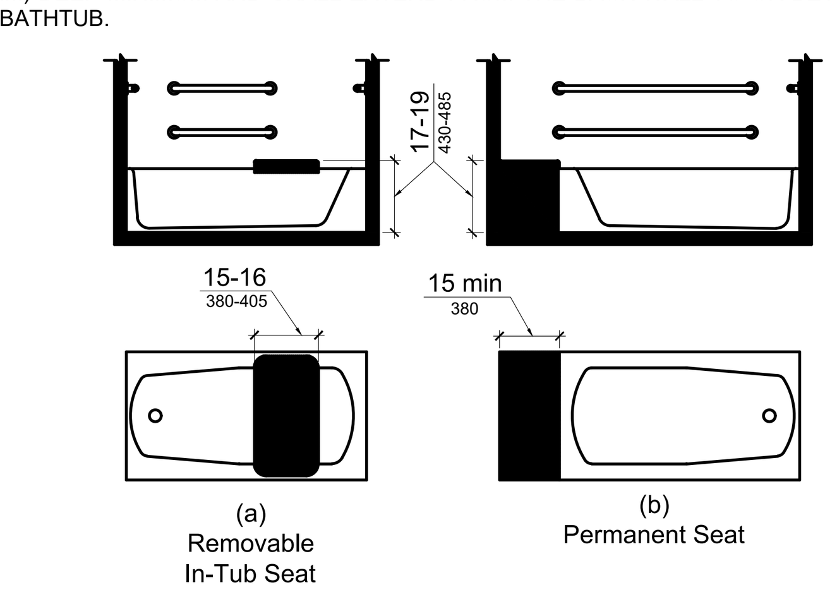


FIGURE 610.2 BATHTUB SEATS

610.3 SHOWER COMPARTMENT SEATS. WHERE A SEAT IS PROVIDED IN A STANDARD ROLL-IN SHOWER COMPARTMENT, IT SHALL BE A FOLDING TYPE, SHALL BE INSTALLED ON THE SIDE WALL ADJACENT TO THE CONTROLS, AND SHALL EXTEND FROM THE BACK WALL TO A POINT WITHIN 3 INCHES (75 MM) OF THE COMPARTMENT ENTRY. WHERE A SEAT IS PROVIDED IN AN ALTERNATE ROLL-IN TYPE SHOWER COMPARTMENT, IT SHALL BE A FOLDING TYPE, SHALL BE INSTALLED ON THE FRONT WALL OPPOSITE THE BACK WALL, AND SHALL EXTEND FROM THE ADJACENT SIDE WALL TO A POINT WITHIN 3 INCHES (75 MM) OF THE COMPARTMENT ENTRY. IN TRANSFER-TYPE SHOWERS, THE SEAT SHALL EXTEND FROM THE BACK WALL TO A POINT WITHIN 3 INCHES (75 MM) OF THE COMPARTMENT ENTRY. THE TOP OF THE SEAT SHALL BE 17 INCHES (430 MM) MINIMUM AND 19 INCHES (485 MM) MAXIMUM ABOVE THE BATHROOM FINISH FLOOR. SEATS SHALL COMPLY WITH 610.3.1 OR 610.3.2.

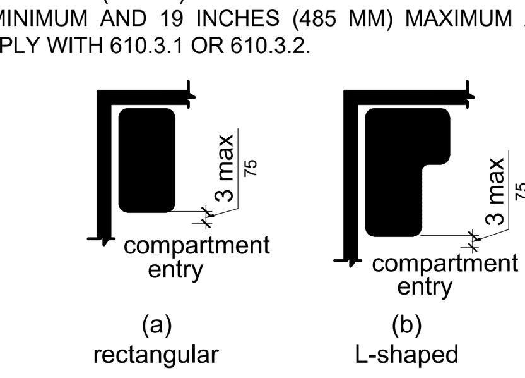


FIGURE 610.3 EXTENT OF SEAT

610.3.1 RECTANGULAR SEATS. THE REAR EDGE OF A RECTANGULAR SEAT SHALL BE 2 1/2 INCHES (64 MM) MAXIMUM AND THE FRONT EDGE 15 INCHES (380 MM) MINIMUM AND 16 INCHES (405 MM) MAXIMUM FROM THE SEAT WALL. THE SIDE EDGE OF THE SEAT SHALL BE 1 1/2 INCHES (38 MM) MAXIMUM FROM THE ADJACENT WALL.

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STATE OF TEXAS

JANUARY 11, 2022

MEN'S TOILET & LOCKER ROOM RENOVATION
FOR THE
ORANGE COUNTY DRAINAGE DISTRICT

8081 OLD HIGHWAY 90 ORANGE, TEXAS 77630

ISSUE DATES:

BIDS & CONSTRUCTION
JANUARY 11, 2022

PREPARED BY: CLS

TAS-4
SHEET NO.

PROJECT NO. 2021-11

TEXAS ACCESSIBILITY STANDARDS

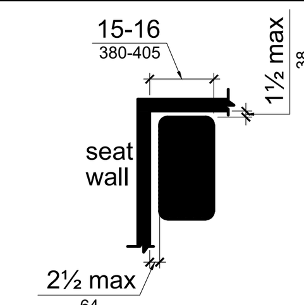

FIGURE 610.3.1 RECTANGULAR SHOWER SEAT

610.3.2 L-SHAPED SEATS. THE REAR EDGE OF AN L-SHAPED SEAT SHALL BE 2 1/2 INCHES (64 MM) MAXIMUM AND THE FRONT EDGE 15 INCHES (380 MM) MINIMUM AND 16 INCHES (405 MM) MAXIMUM FROM THE SEAT WALL. THE REAR EDGE OF THE "L" PORTION OF THE SEAT SHALL BE 1 1/2 INCHES (38 MM) MAXIMUM FROM THE WALL AND THE FRONT EDGE SHALL BE 14 INCHES (355 MM) MINIMUM AND 15 INCHES (380 MM) MAXIMUM FROM THE WALL. THE END OF THE "L" SHALL BE 22 INCHES (560 MM) MINIMUM AND 23 INCHES MAXIMUM (585 MM) FROM THE MAIN SEAT WALL.

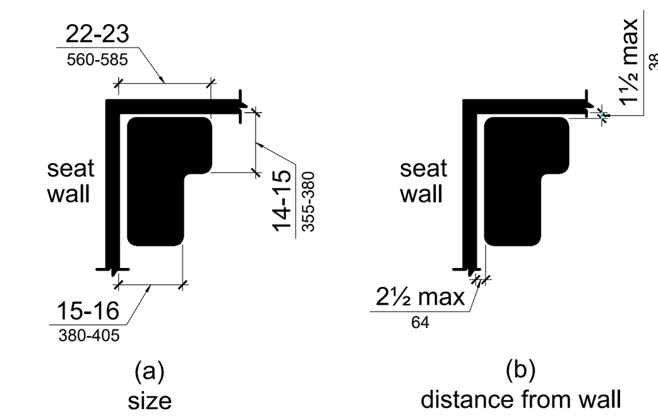

FIGURE 610.3.2 L-SHAPED SHOWER SEAT

610.4 STRUCTURAL STRENGTH. ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHEN A VERTICAL OR HORIZONTAL FORCE OF 250 POUNDS (1112 N) IS APPLIED AT ANY POINT ON THE SEAT, FASTENER, MOUNTING DEVICE, OR SUPPORTING STRUCTURE.

611 WASHING MACHINES AND CLOTHES DRYERS

611.1 GENERAL. WASHING MACHINES AND CLOTHES DRYERS SHALL COMPLY WITH 611.

611.2 CLEAR FLOOR SPACE. A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 POSITIONED FOR PARALLEL APPROACH SHALL BE PROVIDED. THE CLEAR FLOOR OR GROUND SPACE SHALL BE CENTERED ON THE APPLIANCE.

611.3 OPERABLE PARTS. OPERABLE PARTS, INCLUDING DOORS, LINT SCREENS, AND DETERGENT AND BLEACH COMPARTMENTS SHALL COMPLY WITH 309.

611.4 HEIGHT. TOP LOADING MACHINES SHALL HAVE THE DOOR TO THE LAUNDRY COMPARTMENT LOCATED 36 INCHES (915 MM) MAXIMUM ABOVE THE FINISH FLOOR. FRONT LOADING MACHINES SHALL HAVE THE BOTTOM OF THE OPENING TO THE LAUNDRY COMPARTMENT LOCATED 15 INCHES (380 MM) MINIMUM AND 36 INCHES (915 MM) MAXIMUM ABOVE THE FINISH FLOOR.

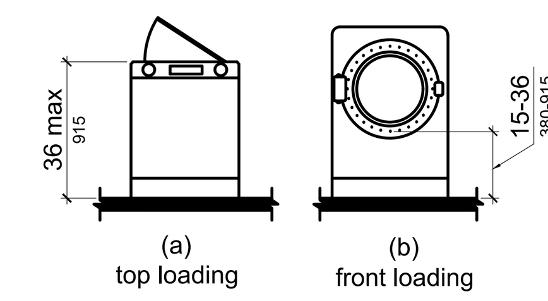

FIGURE 611.4 HEIGHT OF LAUNDRY COMPARTMENT OPENING

612 SAUNAS AND STEAM ROOMS

612.1 GENERAL. SAUNAS AND STEAM ROOMS SHALL COMPLY WITH 612.

612.2 BENCH. WHERE SEATING IS PROVIDED IN SAUNAS AND STEAM ROOMS, AT LEAST ONE BENCH SHALL COMPLY WITH 903. DOORS SHALL NOT SWING INTO THE CLEAR FLOOR SPACE REQUIRED BY 903.2.

EXCEPTION: A READILY REMOVABLE BENCH SHALL BE PERMITTED TO OBSTRUCT THE TURNING SPACE REQUIRED BY 612.3 AND THE CLEAR FLOOR OR GROUND SPACE REQUIRED BY 903.2.

612.3 TURNING SPACE. A TURNING SPACE COMPLYING WITH 304 SHALL BE PROVIDED WITHIN SAUNAS AND STEAM ROOMS.

CHAPTER 7: COMMUNICATION ELEMENTS AND FEATURES

701 GENERAL

701.1 SCOPE. THE PROVISIONS OF CHAPTER 7 SHALL APPLY WHERE REQUIRED BY CHAPTER 2 OR WHERE REFERENCED BY A REQUIREMENT IN THIS DOCUMENT.

702 FIRE ALARM SYSTEMS

702.1 GENERAL. FIRE ALARM SYSTEMS SHALL HAVE PERMANENTLY INSTALLED AUDIBLE AND VISIBLE ALARMS COMPLYING WITH NFPA 72 (1999 OR 2002 EDITION) (INCORPORATED BY REFERENCE, SEE "REFERENCED STANDARDS" IN CHAPTER 1), EXCEPT THAT THE MAXIMUM ALLOWABLE SOUND LEVEL OF AUDIBLE NOTIFICATION APPLIANCES COMPLYING WITH SECTION 4-3.2.1 OF NFPA 72 (1999 EDITION) SHALL HAVE A SOUND LEVEL NO MORE THAN 110 DB AT THE MINIMUM HEARING DISTANCE FROM THE AUDIBLE APPLIANCE. IN ADDITION, ALARMS IN GUEST ROOMS REQUIRED TO PROVIDE COMMUNICATION FEATURES SHALL COMPLY WITH SECTIONS 4-3 AND 4-4 OF NFPA 72 (1999 EDITION) OR SECTIONS 7.4 AND 7.5 OF NFPA 72 (2002 EDITION).

EXCEPTION: FIRE ALARM SYSTEMS IN MEDICAL CARE FACILITIES SHALL BE PERMITTED TO BE PROVIDED IN ACCORDANCE WITH INDUSTRY PRACTICE.

703 SIGNS

703.1 GENERAL. SIGNS SHALL COMPLY WITH 703. WHERE BOTH VISUAL AND TACTILE CHARACTERS ARE REQUIRED, EITHER ONE SIGN WITH BOTH VISUAL AND TACTILE CHARACTERS, OR TWO SEPARATE SIGNS, ONE WITH VISUAL, AND ONE WITH TACTILE CHARACTERS, SHALL BE PROVIDED.

703.2 RAISED CHARACTERS. RAISED CHARACTERS SHALL COMPLY WITH 703.2 AND SHALL BE DUPLICATED IN BRAILLE COMPLYING WITH 703.3. RAISED CHARACTERS SHALL BE INSTALLED IN ACCORDANCE WITH 703.4.

703.2.1 DEPTH. RAISED CHARACTERS SHALL BE 1/32 INCH (0.8 MM) MINIMUM ABOVE THEIR BACKGROUND.

703.2.2 CASE. CHARACTERS SHALL BE UPPERCASE.

703.2.3 STYLE. CHARACTERS SHALL BE SANS SERIF. CHARACTERS SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSUAL FORMS.

703.2.4 CHARACTER PROPORTIONS. CHARACTERS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 55 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I".

703.2.5 CHARACTER HEIGHT. CHARACTER HEIGHT MEASURED VERTICALLY FROM THE BASELINE OF THE CHARACTER SHALL BE 5/8 INCH (16 MM) MINIMUM AND 2 INCHES (51 MM) MAXIMUM BASED ON THE HEIGHT OF THE UPPERCASE LETTER "I".

EXCEPTION: WHERE SEPARATE RAISED AND VISUAL CHARACTERS WITH THE SAME INFORMATION ARE PROVIDED, RAISED CHARACTER HEIGHT SHALL BE PERMITTED TO BE 1/2 INCH (13 MM) MINIMUM.

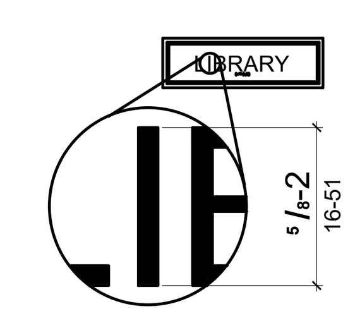

FIGURE 703.2.5 HEIGHT OF RAISED CHARACTERS

703.2.6 STROKE THICKNESS. STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 15 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER.

703.2.7 CHARACTER SPACING. CHARACTER SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST POINTS OF ADJACENT RAISED CHARACTERS WITHIN A MESSAGE, EXCLUDING WORD SPACES. WHERE CHARACTERS HAVE RECTANGULAR CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/8 INCH (3.2 MM) MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM. WHERE CHARACTERS HAVE OTHER CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/16 INCH (1.6 MM) MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE BASE OF THE CROSS SECTIONS, AND 1/8 INCH (3.2 MM) MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE TOP OF THE CROSS SECTIONS. CHARACTERS SHALL BE SEPARATED FROM RAISED BORDERS AND DECORATIVE ELEMENTS 3/8 INCH (9.5 MM) MINIMUM.

703.2.8 LINE SPACING. SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF RAISED CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE RAISED CHARACTER HEIGHT.

703.3 BRAILLE. BRAILLE SHALL BE CONTRACTED (GRADE 2) AND SHALL COMPLY WITH 703.3 AND 703.4.

703.3.1 DIMENSIONS AND CAPITALIZATION. BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND SHALL COMPLY WITH TABLE 703.3.1. THE INDICATION OF AN UPPERCASE LETTER OR LETTERS SHALL ONLY BE USED BEFORE THE FIRST WORD OF SENTENCES, PROPER NOUNS AND NAMES, INDIVIDUAL LETTERS OF THE ALPHABET, INITIALS, AND ACRONYMS.

TABLE 703.3.1 BRAILLE DIMENSIONS

MEASUREMENT RANGE	MINIMUM IN INCHES MAXIMUM IN INCHES
DOT BASE DIAMETER	0.059 (1.5 MM) TO 0.063 (1.6 MM)
DISTANCE BETWEEN TWO DOTS IN THE SAME CELL[1]	0.090 (2.3 MM) TO 0.100 (2.5 MM)
DISTANCE BETWEEN CORRESPONDING DOTS IN ADJACENT CELL[1]	0.241 (6.1 MM) TO 0.300 (7.6 MM)
DOT HEIGHT	0.025 (0.6 MM) TO 0.037 (0.9 MM)
DISTANCE BETWEEN CORRESPONDING DOTS FROM ONE CELL DIRECTLY BELOW[1]	0.395 (10 MM) TO 0.400 (10.2 MM)

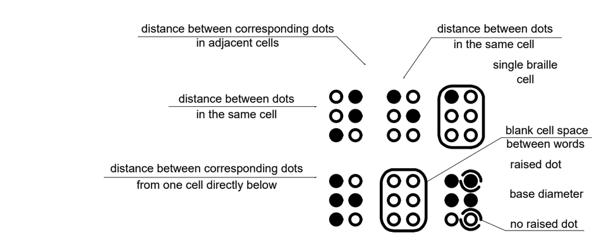

FIGURE 703.3.1 BRAILLE MEASUREMENT

703.3.2 POSITION. BRAILLE SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT. IF TEXT IS MULTI-LINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8 INCH (9.5 MM) MINIMUM FROM ANY OTHER TACTILE CHARACTERS AND 3/8 INCH (9.5 MM) MINIMUM FROM RAISED BORDERS AND DECORATIVE ELEMENTS.

EXCEPTION: BRAILLE PROVIDED ON ELEVATOR CAR CONTROLS SHALL BE SEPARATED 3/16 INCH (4.8 MM) MINIMUM AND SHALL BE LOCATED EITHER DIRECTLY BELOW OR ADJACENT TO THE CORRESPONDING RAISED CHARACTERS OR SYMBOLS.

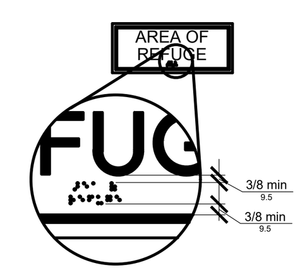

FIGURE 703.3.2 POSITION OF BRAILLE

703.4 INSTALLATION HEIGHT AND LOCATION. SIGNS WITH TACTILE CHARACTERS SHALL COMPLY WITH 703.4.

703.4.1 HEIGHT ABOVE FINISH FLOOR OR GROUND. TACTILE CHARACTERS ON SIGNS SHALL BE LOCATED 48 INCHES (1220 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE LOWEST TACTILE CHARACTER AND 60 INCHES (1525 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE HIGHEST TACTILE CHARACTER.

EXCEPTION: TACTILE CHARACTERS FOR ELEVATOR CAR CONTROLS SHALL NOT BE REQUIRED TO COMPLY WITH 703.4.1.

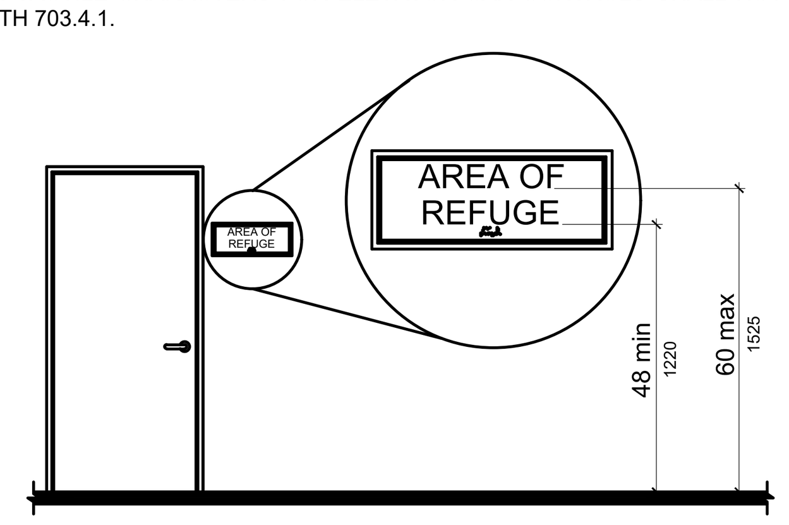

FIGURE 703.4.1 HEIGHT OF TACTILE CHARACTERS ABOVE FINISH FLOOR OR GROUND

703.4.2 LOCATION. WHERE A TACTILE SIGN IS PROVIDED AT A DOOR, THE SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18 INCHES (455 MM) MINIMUM BY 18 INCHES (455 MM) MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.

EXCEPTION: SIGNS WITH TACTILE CHARACTERS SHALL BE PERMITTED ON THE PUSH SIDE OF DOORS WITH CLOSERS AND WITHOUT HOLD-OPEN DEVICES.

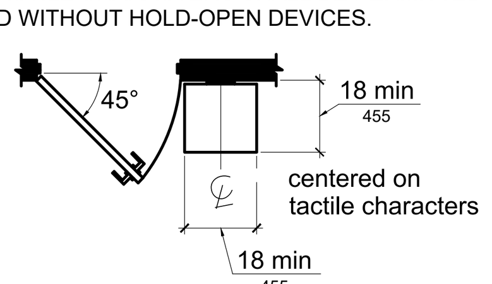

FIGURE 703.4.2 LOCATION OF TACTILE SIGNS AT DOORS

703.5 VISUAL CHARACTERS. VISUAL CHARACTERS SHALL COMPLY WITH 703.5.

EXCEPTION: WHERE VISUAL CHARACTERS COMPLY WITH 703.2 AND ARE ACCOMPANIED BY BRAILLE COMPLYING WITH 703.3, THEY SHALL NOT BE REQUIRED TO COMPLY WITH 703.5.2 THROUGH 703.5.9.

703.5.1 FINISH AND CONTRAST. CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.

703.5.2 CASE. CHARACTERS SHALL BE UPPERCASE OR LOWERCASE OR A COMBINATION OF BOTH.

703.5.3 STYLE. CHARACTERS SHALL BE CONVENTIONAL IN FORM. CHARACTERS SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSUAL FORMS.

703.5.4 CHARACTER PROPORTIONS. CHARACTERS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 55 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I".

703.5.5 CHARACTER HEIGHT. MINIMUM CHARACTER HEIGHT SHALL COMPLY WITH TABLE 703.5.5. VIEWING DISTANCE SHALL BE MEASURED AS THE HORIZONTAL DISTANCE BETWEEN THE CHARACTER AND AN OBSTRUCTION PREVENTING FURTHER APPROACH TOWARDS THE SIGN. CHARACTER HEIGHT SHALL BE BASED ON THE UPPERCASE LETTER "I".

TABLE 703.5.5 VISUAL CHARACTER HEIGHT

HEIGHT TO FINISH FLOOR OR GROUND FROM BASELINE OF CHARACTER	HORIZONTAL VIEWING DISTANCE	MINIMUM CHARACTER HEIGHT
40 INCHES (1015 MM) TO LESS THAN OR EQUAL TO 70 INCHES (1780 MM)	LESS THAN 72 INCHES (1830 MM)	5/8 INCH (16 MM)
40 INCHES (1015 MM) TO LESS THAN OR EQUAL TO 70 INCHES (1780 MM)	72 INCHES (1830 MM) AND GREATER	5/8 INCH (16 MM), PLUS 1/8 (3.2 MM) PER FOOT (305 MM) OF VIEWING DISTANCE ABOVE 72 INCHES (1830 MM)
GREATER THAN 70 INCHES (1780 MM) TO LESS THAN OR EQUAL TO 120 INCHES (3050 MM)	LESS THAN 180 INCHES (4570 MM)	2 INCHES (51 MM)
GREATER THAN 70 INCHES (1780 MM) TO LESS THAN OR EQUAL TO 120 INCHES (3050 MM)	180 INCHES (4570 MM) AND GREATER	2 INCHES (51 MM), PLUS 1/8 INCH (3.2 MM) PER FOOT (305 MM) OF VIEWING DISTANCE ABOVE 180 INCHES (4570 MM)
GREATER THAN 120 INCHES (3050 MM)	LESS THAN 21 FEET (6400 MM)	3 INCHES (75 MM)
GREATER THAN 120 INCHES (3050 MM)	21 FEET (6400 MM) AND GREATER	3 INCHES (75 MM), PLUS 1/8 INCH (3.2 MM) PER FOOT (305 MM) OF VIEWING DISTANCE ABOVE 21 FEET (6400 MM)

703.5.6 HEIGHT FROM FINISH FLOOR OR GROUND. VISUAL CHARACTERS SHALL BE 40 INCHES (1015 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND.

EXCEPTION: VISUAL CHARACTERS INDICATING ELEVATOR CAR CONTROLS SHALL NOT BE REQUIRED TO COMPLY WITH 703.5.6.

703.5.7 STROKE THICKNESS. STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 10 PERCENT MINIMUM AND 30 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER.

703.5.8 CHARACTER SPACING. CHARACTER SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST POINTS OF ADJACENT CHARACTERS, EXCLUDING WORD SPACES. SPACING BETWEEN INDIVIDUAL CHARACTERS SHALL BE 10 PERCENT MINIMUM AND 35 PERCENT MAXIMUM OF CHARACTER HEIGHT.

703.5.9 LINE SPACING. SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE CHARACTER HEIGHT.

703.6 PICTOGRAMS. PICTOGRAMS SHALL COMPLY WITH 703.6.

703.6.1 PICTOGRAM FIELD. PICTOGRAMS SHALL HAVE A FIELD HEIGHT OF 6 INCHES (150 MM) MINIMUM. CHARACTERS AND BRAILLE SHALL NOT BE LOCATED IN THE PICTOGRAM FIELD.

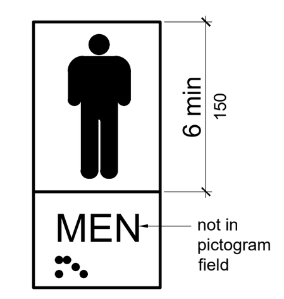

FIGURE 703.6.1 PICTOGRAM FIELD

703.6.2 FINISH AND CONTRAST. PICTOGRAMS AND THEIR FIELD SHALL HAVE A NON-GLARE FINISH. PICTOGRAMS SHALL CONTRAST WITH THEIR FIELD WITH EITHER A LIGHT PICTOGRAM ON A DARK FIELD OR A DARK PICTOGRAM ON A LIGHT FIELD.

703.6.3 TEXT DESCRIPTORS. PICTOGRAMS SHALL HAVE TEXT DESCRIPTORS LOCATED DIRECTLY BELOW THE PICTOGRAM FIELD. TEXT DESCRIPTORS SHALL COMPLY WITH 703.2, 703.3 AND 703.4.

703.7 SYMBOLS OF ACCESSIBILITY. SYMBOLS OF ACCESSIBILITY SHALL COMPLY WITH 703.7.

703.7.1 FINISH AND CONTRAST. SYMBOLS OF ACCESSIBILITY AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. SYMBOLS OF ACCESSIBILITY SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER A LIGHT SYMBOL ON A DARK BACKGROUND OR A DARK SYMBOL ON A LIGHT BACKGROUND.

ADVISORY 703.7.1 FINISH AND CONTRAST. SIGNS ARE MORE LEGIBLE FOR PERSONS WITH LOW VISION WHEN CHARACTERS CONTRAST AS MUCH AS POSSIBLE WITH THEIR BACKGROUND. ADDITIONAL FACTORS AFFECTING THE EASE WITH WHICH THE TEXT CAN BE DISTINGUISHED FROM ITS BACKGROUND INCLUDE SHADOWS CAST BY LIGHTING SOURCES, SURFACE GLARE, AND THE UNIFORMITY OF THE TEXT AND BACKGROUND COLORS AND TEXTURES.

703.7.2 SYMBOLS.

703.7.2.1 INTERNATIONAL SYMBOL OF ACCESSIBILITY. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL COMPLY WITH FIGURE 703.7.2.1.

703.7.2.2 INTERNATIONAL SYMBOL OF TTY. THE INTERNATIONAL SYMBOL OF TTY SHALL COMPLY WITH FIGURE 703.7.2.2.

703.7.2.3 VOLUME CONTROL TELEPHONES. TELEPHONES WITH A VOLUME CONTROL SHALL BE IDENTIFIED BY A PICTOGRAM OF A TELEPHONE HANDSET WITH RADIATING SOUND WAVES ON A SQUARE FIELD SUCH AS SHOWN IN FIGURE 703.7.2.3.

703.7.2.4 ASSISTIVE LISTENING SYSTEMS. ASSISTIVE LISTENING SYSTEMS SHALL BE IDENTIFIED BY THE INTERNATIONAL SYMBOL OF ACCESS FOR HEARING LOSS COMPLYING WITH FIGURE 703.7.2.4.

704 TELEPHONES

704.1 GENERAL. PUBLIC TELEPHONES SHALL COMPLY WITH 704.

704.2 WHEELCHAIR ACCESSIBLE TELEPHONES. WHEELCHAIR ACCESSIBLE TELEPHONES SHALL COMPLY WITH 704.2.

704.2.1 CLEAR FLOOR OR GROUND SPACE. A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 SHALL BE PROVIDED. THE CLEAR FLOOR OR GROUND SPACE SHALL NOT BE OBSTRUCTED BY BASES, ENCLOSURES, OR SEATS.

704.2.1.1 PARALLEL APPROACH. WHERE A PARALLEL APPROACH IS PROVIDED, THE DISTANCE FROM THE EDGE OF THE TELEPHONE ENCLOSURE TO THE FACE OF THE TELEPHONE UNIT SHALL BE 10 INCHES (255 MM) MAXIMUM.

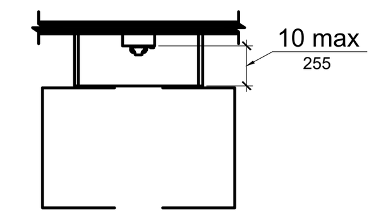

FIGURE 704.2.1.1 PARALLEL APPROACH TO TELEPHONE

704.2.1.2 FORWARD APPROACH. WHERE A FORWARD APPROACH IS PROVIDED, THE DISTANCE FROM THE FRONT EDGE OF A COUNTER WITHIN THE TELEPHONE ENCLOSURE TO THE FACE OF THE TELEPHONE UNIT SHALL BE 20 INCHES (510 MM) MAXIMUM.

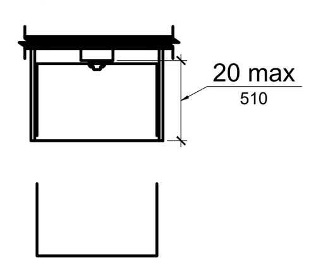

FIGURE 704.2.1.2 FORWARD APPROACH TO TELEPHONE

704.2.2 OPERABLE PARTS. OPERABLE PARTS SHALL COMPLY WITH 309. TELEPHONES SHALL HAVE PUSH-BUTTON CONTROLS WHERE SUCH SERVICE IS AVAILABLE.

704.2.3 TELEPHONE DIRECTORIES. TELEPHONE DIRECTORIES, WHERE PROVIDED, SHALL BE LOCATED IN ACCORDANCE WITH 309.

704.2.4 CORD LENGTH. THE CORD FROM THE TELEPHONE TO THE HANDSET SHALL BE 29 INCHES (735 MM) LONG MINIMUM.

704.3 VOLUME CONTROL TELEPHONES. PUBLIC TELEPHONES REQUIRED TO HAVE VOLUME CONTROLS SHALL BE EQUIPPED WITH A RECEIVE VOLUME CONTROL THAT PROVIDES A GAIN ADJUSTABLE UP TO 20 DB MINIMUM. FOR INCREMENTAL VOLUME CONTROL, PROVIDE AT LEAST ONE INTERMEDIATE STEP OF 12 DB OF GAIN MINIMUM. AN AUTOMATIC RESET SHALL BE PROVIDED.

704.4 TTYS. TTYS REQUIRED AT A PUBLIC PAY TELEPHONE SHALL BE PERMANENTLY AFFIXED WITHIN, OR ADJACENT TO, THE TELEPHONE ENCLOSURE. WHERE AN ACOUSTIC COUPLER IS USED, THE TELEPHONE CORD SHALL BE SUFFICIENTLY LONG TO ALLOW CONNECTION OF THE TTY AND THE TELEPHONE RECEIVER.

704.4.1 HEIGHT. WHEN IN USE, THE TOUCH SURFACE OF TTY KEYPADS SHALL BE 34 INCHES (865 MM) MINIMUM ABOVE THE FINISH FLOOR.

EXCEPTION: WHERE SEATS ARE PROVIDED, TTYS SHALL NOT BE REQUIRED TO COMPLY WITH 704.4.1.

704.5 TTY SHELF. PUBLIC PAY TELEPHONES REQUIRED TO ACCOMMODATE PORTABLE TTYS SHALL BE EQUIPPED WITH A SHELF AND AN ELECTRICAL OUTLET WITHIN OR ADJACENT TO THE TELEPHONE ENCLOSURE. THE TELEPHONE HANDSET SHALL BE CAPABLE OF BEING PLACED FLUSH ON THE SURFACE OF THE SHELF. THE SHELF SHALL BE CAPABLE OF ACCOMMODATING A TTY AND SHALL HAVE 6 INCHES (150 MM) MINIMUM VERTICAL CLEARANCE ABOVE THE AREA WHERE THE TTY IS TO BE PLACED.

705 DETECTABLE WARNINGS

705.1 GENERAL. DETECTABLE WARNINGS SHALL CONSIST OF A SURFACE OF TRUNCATED DOMES AND SHALL COMPLY WITH 705.

705.1.1 DOME SIZE. TRUNCATED DOMES IN A DETECTABLE WARNING SURFACE SHALL HAVE A BASE DIAMETER OF 0.9 INCH (23 MM) MINIMUM AND 1.4 INCHES (36 MM) MAXIMUM, A TOP DIAMETER OF 50 PERCENT OF THE BASE DIAMETER MINIMUM TO 65 PERCENT OF THE BASE DIAMETER MAXIMUM, AND A HEIGHT OF 0.2 INCH (5.1 MM).

705.1.2 DOME SPACING. TRUNCATED DOMES IN A DETECTABLE WARNING SURFACE SHALL HAVE A CENTER-TO-CENTER SPACING OF 1.6 INCHES (41 MM) MINIMUM AND 2.4 INCHES (61 MM) MAXIMUM, AND A BASE-TO-BASE SPACING OF 0.65 INCH (17 MM) MINIMUM, MEASURED BETWEEN THE MOST ADJACENT DOMES ON A SQUARE GRID.

705.1.3 CONTRAST. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT WALKING SURFACES EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT.

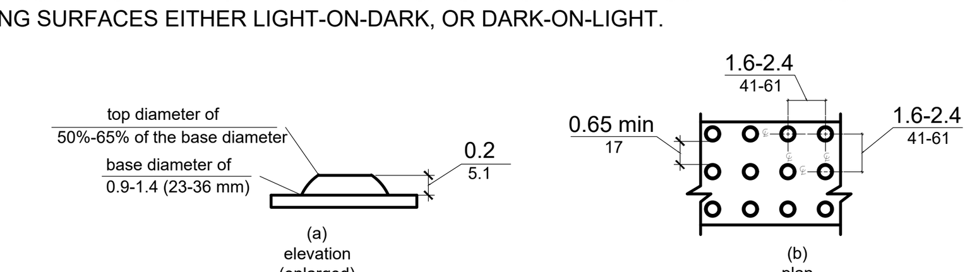

FIGURE 705.1 SIZE AND SPACING OF TRUNCATED DOMES

705.2 PLATFORM EDGES. DETECTABLE WARNING SURFACES AT PLATFORM BOARDING EDGES SHALL BE 24 INCHES (610 MM) WIDE AND SHALL EXTEND THE FULL LENGTH OF THE PUBLIC USE AREAS OF THE PLATFORM.

706 ASSISTIVE LISTENING SYSTEMS

706.1 GENERAL. ASSISTIVE LISTENING SYSTEMS REQUIRED IN ASSEMBLY AREAS SHALL COMPLY WITH 706.

706.2 RECEIVER JACKS. RECEIVERS REQUIRED FOR USE WITH AN ASSISTIVE LISTENING SYSTEM SHALL INCLUDE A 1/8 INCH (3.2 MM) STANDARD MONO JACK.

706.3 RECEIVER HEARING-AID COMPATIBILITY. RECEIVERS REQUIRED TO BE HEARING-AID COMPATIBLE SHALL INTERFACE WITH TELECOILS IN HEARING AIDS THROUGH THE PROVISION OF NECKLOOPS.

706.4 SOUND PRESSURE LEVEL. ASSISTIVE LISTENING SYSTEMS SHALL BE CAPABLE OF PROVIDING A SOUND PRESSURE LEVEL OF 110 DB MINIMUM AND 118 DB MAXIMUM WITH A DYNAMIC RANGE ON THE VOLUME CONTROL OF 50 DB.

706.5 SIGNAL-TO-NOISE RATIO. THE SIGNAL-TO-NOISE RATIO FOR INTERNALLY GENERATED NOISE IN ASSISTIVE LISTENING SYSTEMS SHALL BE 18 DB MINIMUM.

706.6 PEAK CLIPPING LEVEL. PEAK CLIPPING SHALL NOT EXCEED 18 DB OF CLIPPING RELATIVE TO THE PEAKS OF SPEECH.

707 AUTOMATIC TELLER MACHINES AND FARE MACHINES

707.1 GENERAL. AUTOMATIC TELLER MACHINES AND FARE MACHINES SHALL COMPLY WITH 707.

707.2 CLEAR FLOOR OR GROUND SPACE. A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 SHALL BE PROVIDED.

EXCEPTION: CLEAR FLOOR OR GROUND SPACE SHALL NOT BE REQUIRED AT DRIVE-UP ONLY AUTOMATIC TELLER MACHINES AND FARE MACHINES.

707.3 OPERABLE PARTS. OPERABLE PARTS SHALL COMPLY WITH 309. UNLESS A CLEAR OR CORRECT KEY IS PROVIDED, EACH OPERABLE PART SHALL BE ABLE TO BE DIFFERENTIATED BY SOUND OR TOUCH, WITHOUT ACTIVATION.

EXCEPTION: DRIVE-UP ONLY AUTOMATIC TELLER MACHINES AND FARE MACHINES SHALL NOT BE REQUIRED TO COMPLY WITH 309.2 AND 309.3.

707.4 PRIVACY. AUTOMATIC TELLER MACHINES SHALL PROVIDE THE OPPORTUNITY FOR THE SAME DEGREE OF PRIVACY OF INPUT AND OUTPUT AVAILABLE TO ALL INDIVIDUALS.

707.5 SPEECH OUTPUT. MACHINES SHALL BE SPEECH ENABLED. OPERATING INSTRUCTIONS AND ORIENTATION, VISIBLE TRANSACTION PROMPTS, USER INPUT VERIFICATION, ERROR MESSAGES, AND ALL DISPLAYED INFORMATION FOR FULL USE SHALL BE ACCESSIBLE TO AND INDEPENDENTLY USABLE BY INDIVIDUALS WITH VISION IMPAIRMENTS. SPEECH SHALL BE DELIVERED THROUGH A MECHANISM THAT IS READILY AVAILABLE TO ALL USERS, INCLUDING BUT NOT LIMITED TO, AN INDUSTRY STANDARD CONNECTOR OR A TELEPHONE HANDSET. SPEECH SHALL BE RECORDED OR DIGITIZED HUMAN, OR SYNTHESIZED.

EXCEPTIONS:
1. AUDIBLE TONES SHALL BE PERMITTED INSTEAD OF SPEECH FOR VISIBLE OUTPUT THAT IS NOT DISPLAYED FOR SECURITY PURPOSES, INCLUDING BUT NOT LIMITED TO, ASTERISKS REPRESENTING PERSONAL IDENTIFICATION NUMBERS.
2. ADVERTISEMENTS AND OTHER SIMILAR INFORMATION SHALL NOT BE REQUIRED TO BE AUDIBLE UNLESS THEY CONVEY INFORMATION THAT CAN BE USED IN THE TRANSACTION BEING CONDUCTED.
3. WHERE SPEECH SYNTHESIS CANNOT BE SUPPORTED, DYNAMIC ALPHABETIC OUTPUT SHALL NOT BE REQUIRED TO BE AUDIBLE.

707.5.1 USER CONTROL. SPEECH SHALL BE CAPABLE OF BEING REPEATED OR INTERRUPTED. VOLUME CONTROL SHALL BE PROVIDED FOR THE SPEECH FUNCTION.

EXCEPTION: SPEECH OUTPUT FOR ANY SINGLE FUNCTION SHALL BE PERMITTED TO BE AUTOMATICALLY INTERRUPTED WHEN A TRANSACTION IS SELECTED.

707.5.2 RECEIPTS. WHERE RECEIPTS ARE PROVIDED, SPEECH OUTPUT DEVICES SHALL PROVIDE AUDIBLE BALANCE INQUIRY INFORMATION, ERROR MESSAGES, AND ALL OTHER INFORMATION ON THE PRINTED RECEIPT NECESSARY TO COMPLETE OR VERIFY THE TRANSACTION.

EXCEPTIONS:
1. MACHINE LOCATION, DATE AND TIME OF TRANSACTION, CUSTOMER ACCOUNT NUMBER, AND THE MACHINE IDENTIFIER SHALL NOT BE REQUIRED TO BE AUDIBLE.
2. INFORMATION ON PRINTED RECEIPTS THAT DUPLICATES INFORMATION AVAILABLE ON-SCREEN SHALL NOT BE REQUIRED TO BE PRESENTED IN THE FORM OF AN AUDIBLE RECEIPT.
3. PRINTED COPIES OF BANK STATEMENTS AND CHECKS SHALL NOT BE REQUIRED TO BE AUDIBLE.

707.6 INPUT. INPUT DEVICES SHALL COMPLY WITH 707.6.

707.6.1 INPUT CONTROLS. AT LEAST ONE TACTILELY DISCERNIBLE INPUT CONTROL SHALL BE PROVIDED FOR EACH FUNCTION. WHERE PROVIDED, KEY SURFACES NOT ON ACTIVE AREAS OF DISPLAY SCREENS, SHALL BE RAISED ABOVE SURROUNDING SURFACES. WHERE MEMBRANE KEYS ARE THE ONLY METHOD OF INPUT, EACH SHALL BE TACTILELY DISCERNABLE FROM SURROUNDING SURFACES AND ADJACENT KEYS.

707.6.2 NUMERIC KEYS. NUMERIC KEYS SHALL BE ARRANGED IN A 12-KEY ASCENDING OR DESCENDING TELEPHONE KEYPAD LAYOUT. THE NUMBER FIVE KEY SHALL BE TACTILELY DISTINCT FROM THE OTHER KEYS.

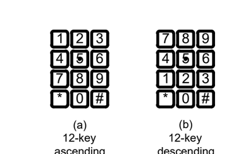

FIGURE 707.6.2 NUMERIC KEY LAYOUT

707.6.3 FUNCTION KEYS. FUNCTION KEYS SHALL COMPLY WITH 707.6.3.

707.6.3.1 CONTRAST. FUNCTION KEYS SHALL CONTRAST VISUALLY FROM BACKGROUND SURFACES. CHARACTERS AND SYMBOLS ON KEY SURFACES SHALL CONTRAST VISUALLY FROM KEY SURFACES. VISUAL CONTRAST SHALL BE EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.

EXCEPTION: TACTILE SYMBOLS REQUIRED BY 707.6.3.2 SHALL NOT BE REQUIRED TO COMPLY WITH 707.6.3.1.

707.6.3.2 TACTILE SYMBOLS. FUNCTION KEY SURFACES SHALL HAVE TACTILE SYMBOLS AS FOLLOWS: ENTER OR PROCEED KEY: RAISED CIRCLE; CLEAR OR CORRECT KEY: RAISED LEFT ARROW; CANCEL KEY: RAISED LETTER EX; ADD VALUE KEY: RAISED PLUS SIGN; DECREASE VALUE KEY: RAISED MINUS SIGN.

707.7 DISPLAY SCREEN. THE DISPLAY SCREEN SHALL COMPLY WITH 707.7.

EXCEPTION: DRIVE-UP ONLY AUTOMATIC TELLER MACHINES AND FARE MACHINES SHALL NOT BE REQUIRED TO COMPLY WITH 707.7.1.

707.7.1 VISIBILITY. THE DISPLAY SCREEN SHALL BE VISIBLE FROM A POINT LOCATED 40 INCHES (1015 MM) ABOVE THE CENTER OF THE CLEAR FLOOR SPACE IN FRONT OF THE MACHINE.

707.7.2 CHARACTERS. CHARACTERS DISPLAYED ON THE SCREEN SHALL BE IN A SANS SERIF FONT. CHARACTERS SHALL BE 3/16 INCH (4.8 MM) HIGH MINIMUM BASED ON THE UPPERCASE LETTER "I". CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.

707.8 BRAILLE INSTRUCTIONS. BRAILLE INSTRUCTIONS FOR INITIATING THE SPEECH MODE SHALL BE PROVIDED. BRAILLE SHALL COMPLY WITH 703.3.

708 TWO-WAY COMMUNICATION SYSTEMS

708.1 GENERAL. TWO-WAY COMMUNICATION SYSTEMS SHALL COMPLY WITH 708.

708.2 AUDIBLE AND VISUAL INDICATORS. THE SYSTEM SHALL PROVIDE BOTH AUDIBLE AND VISUAL SIGNALS.

708.3 HANDSETS. HANDSET CORDS, IF PROVIDED, SHALL BE 29 INCHES (735 MM) LONG MINIMUM.

708.4 RESIDENTIAL DWELLING UNIT COMMUNICATION SYSTEMS. COMMUNICATIONS SYSTEMS BETWEEN A RESIDENTIAL DWELLING UNIT AND A SITE, BUILDING, OR FLOOR ENTRANCE SHALL COMPLY WITH 708.4.

708.4.1 COMMON USE OR PUBLIC USE SYSTEM INTERFACE. THE COMMON USE OR PUBLIC USE SYSTEM INTERFACE SHALL INCLUDE THE CAPABILITY OF SUPPORTING VOICE AND TTY COMMUNICATION WITH THE RESIDENTIAL DWELLING UNIT INTERFACE.

708.4.2 RESIDENTIAL DWELLING UNIT INTERFACE. THE RESIDENTIAL DWELLING UNIT SYSTEM INTERFACE SHALL INCLUDE A TELEPHONE JACK CAPABLE OF SUPPORTING VOICE AND TTY COMMUNICATION WITH THE COMMON USE OR PUBLIC USE SYSTEM INTERFACE.

CHAPTER 8: SPECIAL ROOMS, SPACES AND ELEMENTS

801 GENERAL

801.1 SCOPE. THE PROVISIONS OF CHAPTER 8 SHALL APPLY WHERE REQUIRED BY CHAPTER 2 OR WHERE REFERENCED BY A REQUIREMENT IN THIS DOCUMENT.

802 WHEELCHAIR SPACES, COMPANION SEATS, AND DESIGNATED AISLE SEATS

802.1 WHEELCHAIR SPACES. WHEELCHAIR SPACES SHALL COMPLY WITH 802.1.

802.1.1 FLOOR OR GROUND SURFACE. THE FLOOR OR GROUND SURFACE OF WHEELCHAIR SPACES SHALL COMPLY WITH 302. CHANGES IN LEVEL ARE NOT PERMITTED.

EXCEPTION: SLOPES NOT STEEPER THAN 1:48 SHALL BE PERMITTED.

802.1.2 WIDTH. A SINGLE WHEELCHAIR SPACE SHALL BE 36 INCHES (915 MM) WIDE MINIMUM WHERE TWO ADJACENT WHEELCHAIR SPACES ARE PROVIDED, EACH WHEELCHAIR SPACE SHALL BE 33 INCHES (840 MM) WIDE MINIMUM.

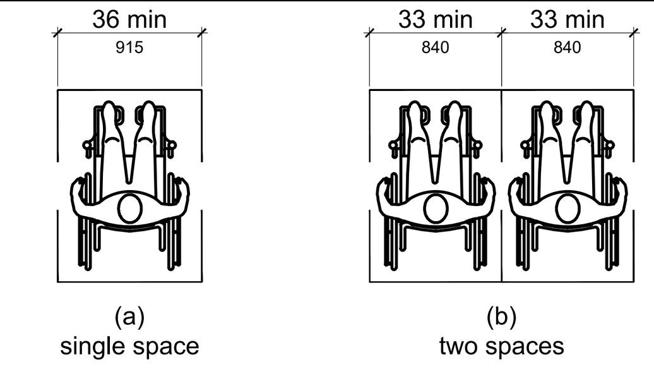

FIGURE 802.1.2 WIDTH OF WHEELCHAIR SPACES IN ASSEMBLY AREAS

802.1.3 DEPTH. WHERE A WHEELCHAIR SPACE CAN BE ENTERED FROM THE FRONT OR REAR, WHEELCHAIR SPACE SHALL BE 48 INCHES (1220 MM) DEEP MINIMUM. WHERE A WHEELCHAIR SPACE BE ENTERED ONLY FROM THE SIDE, THE WHEELCHAIR SPACE SHALL BE 60 INCHES (1525 MM) I MINIMUM.

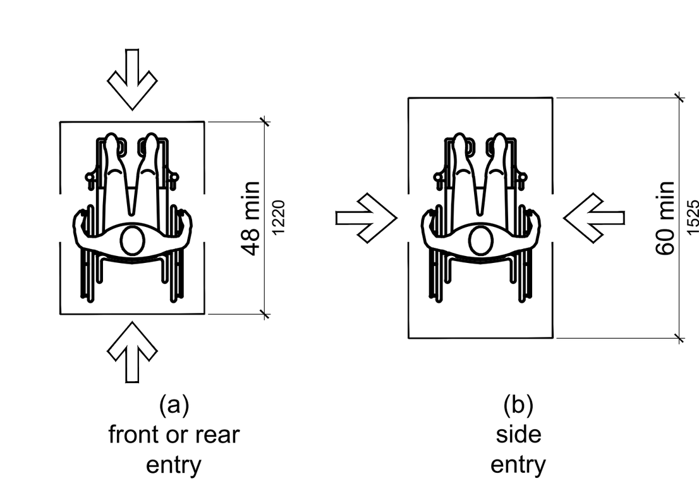

FIGURE 802.1.3 DEPTH OF WHEELCHAIR SPACES IN ASSEMBLY AREAS

802.1.4 APPROACH. WHEELCHAIR SPACES SHALL ADJOIN ACCESSIBLE ROUTES. ACCESSIBLE RO SHALL NOT OVERLAP WHEELCHAIR SPACES.

802.1.5 OVERLAP. WHEELCHAIR SPACES SHALL NOT OVERLAP CIRCULATION PATHS.

802.2 LINES OF SIGHT. LINES OF SIGHT TO THE SCREEN, PERFORMANCE AREA, OR PLAYING FIELD SPECTATORS IN WHEELCHAIR SPACES SHALL COMPLY WITH 802.2.

802.2.1 LINES OF SIGHT OVER SEATED SPECTATORS. WHERE SPECTATORS ARE EXPECTED TO RE SEATED DURING EVENTS, SPECTATORS IN WHEELCHAIR SPACES SHALL BE AFFORDED LINES OF S COMPLYING WITH 802.2.1.

802.2.1.1 LINES OF SIGHT OVER HEADS. WHERE SPECTATORS ARE PROVIDED LINES OF SIGHT OVEF HEADS OF SPECTATORS SEATED IN THE FIRST ROW IN FRONT OF THEIR SEATS, SPECTATORS SEATI WHEELCHAIR SPACES SHALL BE AFFORDED LINES OF SIGHT OVER THE HEADS OF SEATED SPECTA IN THE FIRST ROW IN FRONT OF WHEELCHAIR SPACES.

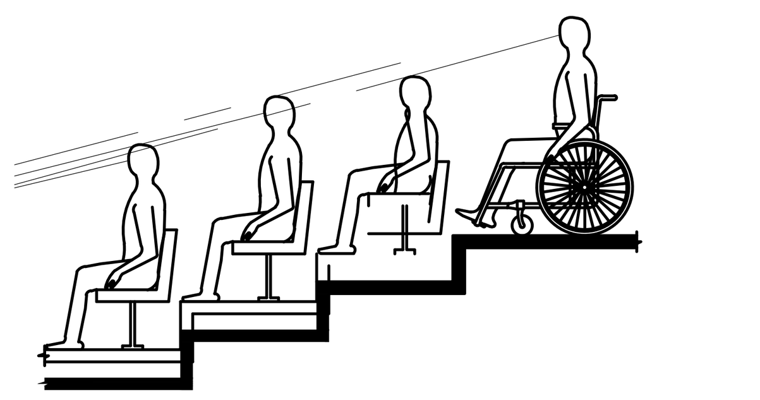

FIGURE 802.2.1.1 LINES OF SIGHT OVER THE HEADS OF SEATED SPECTATORS

802.2.1.2 LINES OF SIGHT BETWEEN HEADS. WHERE SPECTATORS ARE PROVIDED LINES OF SIGHT (THE SHOULDERS AND BETWEEN THE HEADS OF SPECTATORS SEATED IN THE FIRST ROW IN FRON THEIR SEATS, SPECTATORS SEATED IN WHEELCHAIR SPACES SHALL BE AFFORDED LINES OF SIGHT (THE SHOULDERS AND BETWEEN THE HEADS OF SEATED SPECTATORS IN THE FIRST ROW IN FRON WHEELCHAIR SPACES.

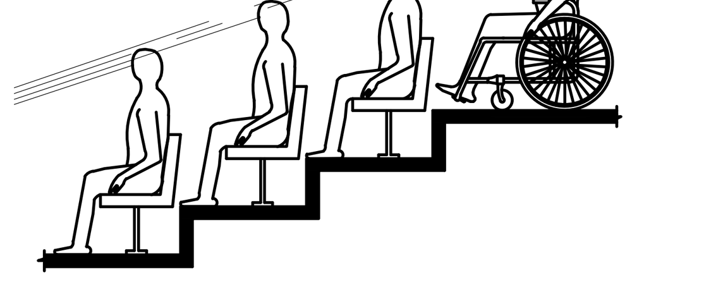

FIGURE 802.2.1.2 LINES OF SIGHT BETWEEN THE HEADS OF SPECTATORS

802.2.2 LINES OF SIGHT OVER STANDING SPECTATORS. WHERE SPECTATORS ARE EXPECTED TO S DURING EVENTS, SPECTATORS IN WHEELCHAIR SPACES SHALL BE AFFORDED LINES OF S COMPLYING WITH 802.2.2.

802.2.2.1 LINES OF SIGHT OVER HEADS. WHERE STANDING SPECTATORS ARE PROVIDED LINES OF S OVER THE HEADS OF SPECTATORS STANDING IN THE FIRST ROW IN FRONT OF THEIR SE SPECTATORS SEATED IN WHEELCHAIR SPACES SHALL BE AFFORDED LINES OF SIGHT OVER THE HI OF STANDING SPECTATORS IN THE FIRST ROW IN FRONT OF WHEELCHAIR SPACES.

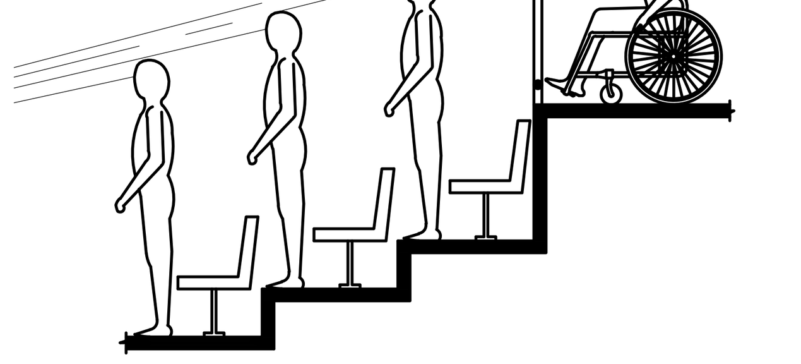

FIGURE 802.2.2.1 LINES OF SIGHT OVER THE HEADS OF STANDING SPECTATORS

802.2.2.2 LINES OF SIGHT BETWEEN HEADS. WHERE STANDING SPECTATORS ARE PROVIDED LINE SIGHT OVER THE SHOULDERS AND BETWEEN THE HEADS OF SPECTATORS STANDING IN THE FIRST IN FRONT OF THEIR SEATS, SPECTATORS SEATED IN WHEELCHAIR SPACES SHALL BE AFFORDED L OF SIGHT OVER THE SHOULDERS AND BETWEEN THE HEADS OF STANDING SPECTATORS IN THE F ROW IN FRONT OF WHEELCHAIR SPACES.

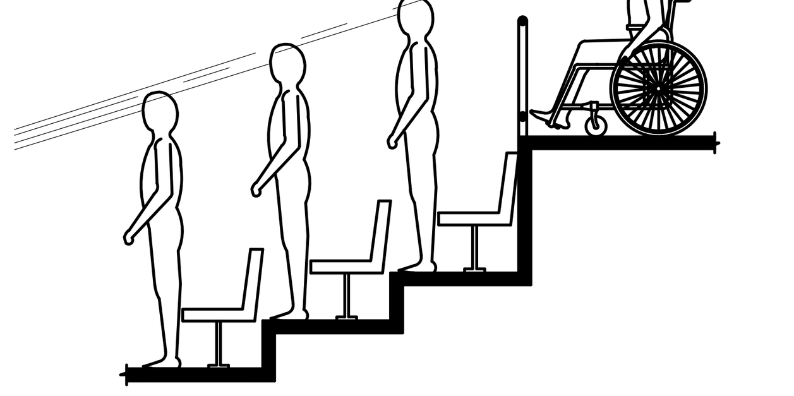

FIGURE 802.2.2.2 LINES OF SIGHT BETWEEN THE HEADS OF STANDING SPECTATORS

802.3 COMPANION SEATS. COMPANION SEATS SHALL COMPLY WITH 802.3.

802.3.1 ALIGNMENT. IN ROW SEATING, COMPANION SEATS SHALL BE LOCATED TO PROVIDE SHOUI ALIGNMENT WITH ADJACENT WHEELCHAIR SPACES. THE SHOULDER ALIGNMENT POINT OF WHEELCHAIR SPACE SHALL BE MEASURED 36 INCHES (915 MM) FROM THE FRONT OF THE WHEELC SPACE. THE FLOOR SURFACE OF THE COMPANION SEAT SHALL BE AT THE SAME ELEVATION AS FLOOR SURFACE OF THE WHEELCHAIR SPACE.

802.3.2 TYPE. COMPANION SEATS SHALL BE EQUIVALENT IN SIZE, QUALITY, COMFORT, AND AMENITIE THE SEATING IN THE IMMEDIATE AREA. COMPANION SEATS SHALL BE PERMITTED TO BE MOVABLE.

802.4 DESIGNATED AISLE SEATS. DESIGNATED AISLE SEATS SHALL COMPLY WITH 802.4.

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STATE OF TEXAS

JANUARY 11, 2022

MEN'S TOILET & LOCKER ROOM RENOVATION
FOR THE
ORANGE COUNTY DRAINAGE DISTRICT
8081 OLD HIGHWAY 90 ORANGE, TEXAS 77630

ISSUE DATES:

BIDS & CONSTRUCTION
JANUARY 11, 2022

PREPARED BY: CLS

TAS-5
SHEET NO.

PROJECT NO. 2021-11

TEXAS ACCESSIBILITY STANDARDS

802.4.1 ARMRESTS. WHERE ARMRESTS ARE PROVIDED ON THE SEATING IN THE IMMEDIATE AREA, FOLDING OR RETRACTABLE ARMRESTS SHALL BE PROVIDED ON THE AISLE SIDE OF THE SEAT.

802.4.2 IDENTIFICATION. EACH DESIGNATED AISLE SEAT SHALL BE IDENTIFIED BY A SIGN OR MARKER.

803 DRESSING, FITTING, AND LOCKER ROOMS
803.1 GENERAL. DRESSING, FITTING, AND LOCKER ROOMS SHALL COMPLY WITH 803.

803.2 TURNING SPACE. TURNING SPACE COMPLYING WITH 304 SHALL BE PROVIDED WITHIN THE ROOM.

803.3 DOOR SWING. DOORS SHALL NOT SWING INTO THE ROOM UNLESS A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305.3 IS PROVIDED BEYOND THE ARC OF THE DOOR SWING.

803.4 BENCHES. A BENCH COMPLYING WITH 903 SHALL BE PROVIDED WITHIN THE ROOM.

803.5 COAT HOOKS AND SHELVES. COAT HOOKS PROVIDED WITHIN THE ROOM SHALL BE LOCATED WITHIN ONE OF THE REACH RANGES SPECIFIED IN 308. SHELVES SHALL BE 40 INCHES (1015 MM) MINIMUM AND 48 INCHES (1220 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

804 KITCHENS AND KITCHENETTES
804.1 GENERAL. KITCHENS AND KITCHENETTES SHALL COMPLY WITH 804.

804.2 CLEARANCE. WHERE A PASS THROUGH KITCHEN IS PROVIDED, CLEARANCES SHALL COMPLY WITH 804.2.1. WHERE A U-SHAPED KITCHEN IS PROVIDED, CLEARANCES SHALL COMPLY WITH 804.2.2.

EXCEPTION: SPACES THAT DO NOT PROVIDE A COOKTOP OR CONVENTIONAL RANGE SHALL NOT BE REQUIRED TO COMPLY WITH 804.2.

804.2.1 PASS THROUGH KITCHEN. IN PASS THROUGH KITCHENS WHERE COUNTERS, APPLIANCES OR CABINETS ARE ON TWO OPPOSING SIDES, OR WHERE COUNTERS, APPLIANCES OR CABINETS ARE OPPOSITE A PARALLEL WALL, CLEARANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTER TOPS, APPLIANCES, OR WALLS WITHIN KITCHEN WORK AREAS SHALL BE 40 INCHES (1015 MM) MINIMUM. PASS THROUGH KITCHENS SHALL HAVE TWO ENTRIES.

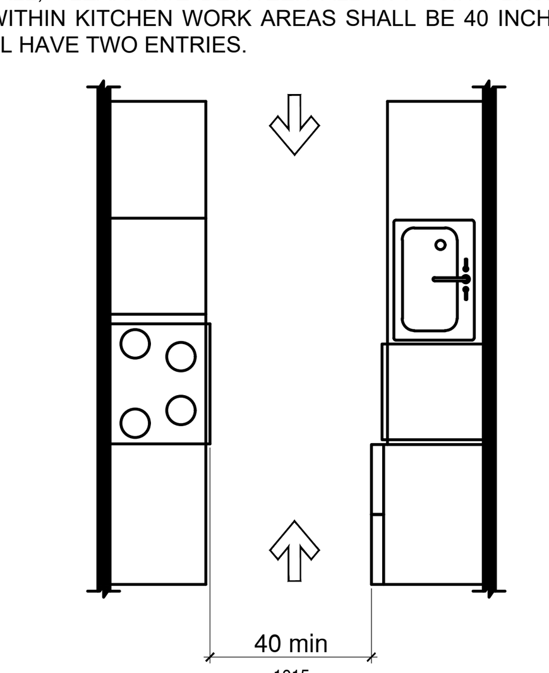

FIGURE 804.2.1 PASS THROUGH KITCHENS

804.2.2 U-SHAPED. IN U-SHAPED KITCHENS ENCLOSED ON THREE CONTIGUOUS SIDES, CLEARANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTER TOPS, APPLIANCES, OR WALLS WITHIN KITCHEN WORK AREAS SHALL BE 60 INCHES (1525 MM) MINIMUM.

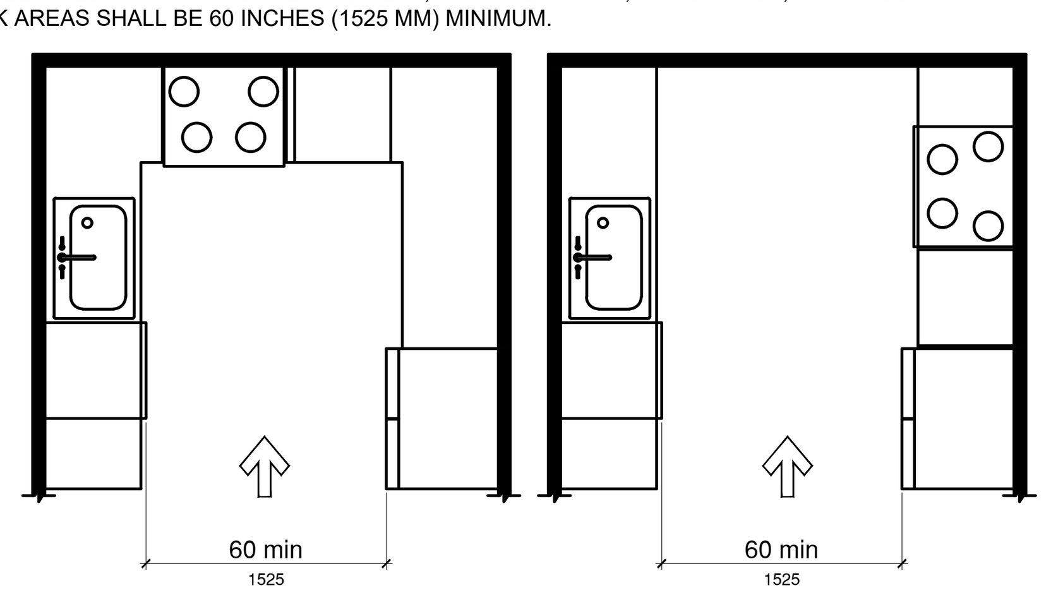

FIGURE 804.2.2 U-SHAPED KITCHENS

804.3 KITCHEN WORK SURFACE. IN RESIDENTIAL DWELLING UNITS REQUIRED TO COMPLY WITH 809, AT LEAST ONE 30 INCHES (760 MM) WIDE MINIMUM SECTION OF COUNTER SHALL PROVIDE A KITCHEN WORK SURFACE THAT COMPLIES WITH 804.3.

804.3.1 CLEAR FLOOR OR GROUND SPACE. A CLEAR FLOOR SPACE COMPLYING WITH 305 POSITIONED FOR A FORWARD APPROACH SHALL BE PROVIDED. THE CLEAR FLOOR OR GROUND SPACE SHALL BE CENTERED ON THE KITCHEN WORK SURFACE AND SHALL PROVIDE KNEE AND TOE CLEARANCE COMPLYING WITH 306.

EXCEPTION: CABINETRY SHALL BE PERMITTED UNDER THE KITCHEN WORK SURFACE PROVIDED THAT ALL OF THE FOLLOWING CONDITIONS ARE MET:
(A) THE CABINETRY CAN BE REMOVED WITHOUT REMOVAL OR REPLACEMENT OF THE KITCHEN WORK SURFACE;
(B) THE FINISH FLOOR EXTENDS UNDER THE CABINETRY; AND
(C) THE WALLS BEHIND AND SURROUNDING THE CABINETRY ARE FINISHED.

804.3.2 HEIGHT. THE KITCHEN WORK SURFACE SHALL BE 34 INCHES (865 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

EXCEPTION: A COUNTER THAT IS ADJUSTABLE TO PROVIDE A KITCHEN WORK SURFACE AT VARIABLE HEIGHTS, 29 INCHES (735 MM) MINIMUM AND 36 INCHES (915 MM) MAXIMUM SHALL BE PERMITTED.

804.3.3 EXPOSED SURFACES. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER THE WORK SURFACE COUNTERS.

804.4 SINKS. SINKS SHALL COMPLY WITH 606.

804.5 STORAGE. AT LEAST 50 PERCENT OF SHELF SPACE IN STORAGE FACILITIES SHALL COMPLY WITH 811.

804.6 APPLIANCES. WHERE PROVIDED, KITCHEN APPLIANCES SHALL COMPLY WITH 804.6.

804.6.1 CLEAR FLOOR OR GROUND SPACE. A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 SHALL BE PROVIDED AT EACH KITCHEN APPLIANCE. CLEAR FLOOR OR GROUND SPACES SHALL BE PERMITTED TO OVERLAP.

804.6.2 OPERABLE PARTS. ALL APPLIANCE CONTROLS SHALL COMPLY WITH 309.

EXCEPTIONS:
1. APPLIANCE DOORS AND DOOR LATCHING DEVICES SHALL NOT BE REQUIRED TO COMPLY WITH 309.4.
2. BOTTOM-HINGED APPLIANCE DOORS, WHEN IN THE OPEN POSITION, SHALL NOT BE REQUIRED TO COMPLY WITH 309.3.

804.6.3 DISHWASHER. CLEAR FLOOR OR GROUND SPACE SHALL BE POSITIONED ADJACENT TO THE DISHWASHER DOOR. THE DISHWASHER DOOR, IN THE OPEN POSITION, SHALL NOT OBSTRUCT THE CLEAR FLOOR OR GROUND SPACE FOR THE DISHWASHER OR THE SINK.

804.6.4 RANGE OR COOKTOP. WHERE A FORWARD APPROACH IS PROVIDED, THE CLEAR FLOOR OR GROUND SPACE SHALL PROVIDE KNEE AND TOE CLEARANCE COMPLYING WITH 306. WHERE KNEE AND TOE SPACE IS PROVIDED, THE UNDERSIDE OF THE RANGE OR COOKTOP SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PREVENT BURNS, ABRASIONS, OR ELECTRICAL SHOCK. THE LOCATION OF CONTROLS SHALL NOT REQUIRE REACHING ACROSS BURNERS.

804.6.5 OVEN. OVENS SHALL COMPLY WITH 804.6.5.

804.6.5.1 SIDE-HINGED DOOR OVENS. SIDE-HINGED DOOR OVENS SHALL HAVE THE WORK SURFACE REQUIRED BY 804.3 POSITIONED ADJACENT TO THE LATCH SIDE OF THE OVEN DOOR.

804.6.5.2 BOTTOM-HINGED DOOR OVENS. BOTTOM-HINGED DOOR OVENS SHALL HAVE THE WORK SURFACE REQUIRED BY 804.3 POSITIONED ADJACENT TO ONE SIDE OF THE DOOR.

804.6.5.3 CONTROLS. OVENS SHALL HAVE CONTROLS ON FRONT PANELS.

804.6.6 REFRIGERATOR/FREEZER. COMBINATION REFRIGERATORS AND FREEZERS SHALL HAVE AT LEAST 50 PERCENT OF THE FREEZER SPACE 54 INCHES (1370 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. THE CLEAR FLOOR OR GROUND SPACE SHALL BE POSITIONED FOR A PARALLEL APPROACH TO THE SPACE DEDICATED TO A REFRIGERATOR/FREEZER WITH THE CENTERLINE OF THE CLEAR FLOOR OR GROUND SPACE OFFSET 24 INCHES (610 MM) MAXIMUM FROM THE CENTERLINE OF THE DEDICATED SPACE.

805 MEDICAL CARE AND LONG-TERM CARE FACILITIES
805.1 GENERAL. MEDICAL CARE FACILITY AND LONG-TERM CARE FACILITY PATIENT OR RESIDENT SLEEPING ROOMS REQUIRED TO PROVIDE MOBILITY FEATURES SHALL COMPLY WITH 805.

805.2 TURNING SPACE. TURNING SPACE COMPLYING WITH 304 SHALL BE PROVIDED WITHIN THE ROOM.

805.3 CLEAR FLOOR OR GROUND SPACE. A CLEAR FLOOR SPACE COMPLYING WITH 305 SHALL BE PROVIDED ON EACH SIDE OF THE BED. THE CLEAR FLOOR SPACE SHALL BE POSITIONED FOR PARALLEL APPROACH TO THE SIDE OF THE BED.

805.4 TOILET AND BATHING ROOMS. TOILET AND BATHING ROOMS THAT ARE PROVIDED AS PART OF A PATIENT OR RESIDENT SLEEPING ROOM SHALL COMPLY WITH 603. WHERE PROVIDED, NO FEWER THAN ONE WATER CLOSET, ONE LAVATORY, AND ONE BATHTUB OR SHOWER SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF 603 THROUGH 610.

806 TRANSIENT LODGING GUEST ROOMS
806.1 GENERAL. TRANSIENT LODGING GUEST ROOMS SHALL COMPLY WITH 806. GUEST ROOMS REQUIRED TO PROVIDE MOBILITY FEATURES SHALL COMPLY WITH 806.2. GUEST ROOMS REQUIRED TO PROVIDE COMMUNICATION FEATURES SHALL COMPLY WITH 806.3.

806.2 GUEST ROOMS WITH MOBILITY FEATURES. GUEST ROOMS REQUIRED TO PROVIDE MOBILITY FEATURES SHALL COMPLY WITH 806.2.

ADVISORY 806.2 GUEST ROOMS. THE REQUIREMENTS IN SECTION 806.2 DO NOT INCLUDE REQUIREMENTS THAT ARE COMMON TO ALL ACCESSIBLE SPACES. FOR EXAMPLE, CLOSETS IN GUEST ROOMS MUST COMPLY WITH THE APPLICABLE PROVISIONS FOR STORAGE SPECIFIED IN SCOPING.

806.2.1 LIVING AND DINING AREAS. LIVING AND DINING AREAS SHALL BE ACCESSIBLE.

806.2.2 EXTERIOR SPACES. EXTERIOR SPACES, INCLUDING PATIOS, TERRACES AND BALCONIES, THAT SERVE THE GUEST ROOM SHALL BE ACCESSIBLE.

806.2.3 SLEEPING AREAS. AT LEAST ONE SLEEPING AREA SHALL PROVIDE A CLEAR FLOOR SPACE COMPLYING WITH 305 ON BOTH SIDES OF A BED. THE CLEAR FLOOR SPACE SHALL BE POSITIONED FOR PARALLEL APPROACH TO THE SIDE OF THE BED.

EXCEPTION: WHERE A SINGLE CLEAR FLOOR SPACE COMPLYING WITH 305 POSITIONED FOR PARALLEL APPROACH IS PROVIDED BETWEEN TWO BEDS, A CLEAR FLOOR OR GROUND SPACE SHALL NOT BE REQUIRED ON BOTH SIDES OF A BED.

806.2.4 TOILET AND BATHING FACILITIES. AT LEAST ONE BATHROOM THAT IS PROVIDED AS PART OF A GUEST ROOM SHALL COMPLY WITH 603. NO FEWER THAN ONE WATER CLOSET, ONE LAVATORY, AND ONE BATHTUB OR SHOWER SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF 603 THROUGH 610. IN ADDITION, REQUIRED ROLL-IN SHOWER COMPARTMENTS SHALL COMPLY WITH 608.2.2 OR 608.2.3. TOILET AND BATHING FIXTURES REQUIRED TO COMPLY WITH 603 THROUGH 610 SHALL BE PERMITTED TO BE LOCATED IN MORE THAN ONE TOILET OR BATHING AREA, PROVIDED THAT TRAVEL BETWEEN FIXTURES DOES NOT REQUIRE TRAVEL BETWEEN OTHER PARTS OF THE GUEST ROOM.

806.2.4.1 VANITY COUNTER TOP SPACE. IF VANITY COUNTER TOP SPACE IS PROVIDED IN NON-ACCESSIBLE GUEST TOILET OR BATHING ROOMS, COMPARABLE VANITY COUNTER TOP SPACE, IN TERMS OF SIZE AND PROXIMITY TO THE LAVATORY, SHALL ALSO BE PROVIDED IN ACCESSIBLE GUEST TOILET OR BATHING ROOMS.

806.2.5 KITCHENS AND KITCHENETTES. KITCHENS AND KITCHENETTES SHALL COMPLY WITH 804.

806.2.6 TURNING SPACE. TURNING SPACE COMPLYING WITH 304 SHALL BE PROVIDED WITHIN THE GUEST ROOM.

806.3 GUEST ROOMS WITH COMMUNICATION FEATURES. GUEST ROOMS REQUIRED TO PROVIDE COMMUNICATION FEATURES SHALL COMPLY WITH 806.3.

806.3.1 ALARMS. WHERE EMERGENCY WARNING SYSTEMS ARE PROVIDED, ALARMS COMPLYING WITH 702 SHALL BE PROVIDED.

806.3.2 NOTIFICATION DEVICES. VISIBLE NOTIFICATION DEVICES SHALL BE PROVIDED TO ALERT ROOM OCCUPANTS OF INCOMING TELEPHONE CALLS AND A DOOR KNOCK OR BELL. NOTIFICATION DEVICES SHALL NOT BE CONNECTED TO VISIBLE ALARM SIGNAL APPLIANCES. TELEPHONES SHALL HAVE VOLUME CONTROLS COMPATIBLE WITH THE TELEPHONE SYSTEM AND SHALL COMPLY WITH 704.3. TELEPHONES SHALL BE SERVED BY AN ELECTRICAL OUTLET COMPLYING WITH 309 LOCATED WITHIN 48 INCHES (1220 MM) OF THE TELEPHONE TO FACILITATE THE USE OF A TTY.

807 HOLDING CELLS AND HOUSING CELLS
807.1 GENERAL. HOLDING CELLS AND HOUSING CELLS SHALL COMPLY WITH 807.

807.2 CELLS WITH MOBILITY FEATURES. CELLS REQUIRED TO PROVIDE MOBILITY FEATURES SHALL COMPLY WITH 807.2.

807.2.1 TURNING SPACE. TURNING SPACE COMPLYING WITH 304 SHALL BE PROVIDED WITHIN THE CELL.

807.2.2 BENCHES. WHERE BENCHES ARE PROVIDED, AT LEAST ONE BENCH SHALL COMPLY WITH 903.

807.2.3 BEDS. WHERE BEDS ARE PROVIDED, CLEAR FLOOR SPACE COMPLYING WITH 305 SHALL BE PROVIDED ON AT LEAST ONE SIDE OF THE BED. THE CLEAR FLOOR SPACE SHALL BE POSITIONED FOR PARALLEL APPROACH TO THE SIDE OF THE BED.

807.2.4 TOILET AND BATHING FACILITIES. TOILET FACILITIES OR BATHING FACILITIES THAT ARE PROVIDED AS PART OF A CELL SHALL COMPLY WITH 603. WHERE PROVIDED, NO FEWER THAN ONE WATER CLOSET, ONE LAVATORY, AND ONE BATHTUB OR SHOWER SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF 603 THROUGH 610.

807.3 CELLS WITH COMMUNICATION FEATURES. CELLS REQUIRED TO PROVIDE COMMUNICATION FEATURES SHALL COMPLY WITH 807.3.

807.3.1 ALARMS. WHERE AUDIBLE EMERGENCY ALARM SYSTEMS ARE PROVIDED TO SERVE THE OCCUPANTS OF CELLS, VISIBLE ALARMS COMPLYING WITH 702 SHALL BE PROVIDED.

EXCEPTION: VISIBLE ALARMS SHALL NOT BE REQUIRED WHERE INMATES OR DETAINEES ARE NOT ALLOWED INDEPENDENT MEANS OF EGRESS.

807.3.2 TELEPHONES. TELEPHONES, WHERE PROVIDED WITHIN CELLS, SHALL HAVE VOLUME CONTROLS COMPLYING WITH 704.3.

808 COURTROOMS
808.1 GENERAL. COURTROOMS SHALL COMPLY WITH 808.

808.2 TURNING SPACE. WHERE PROVIDED, AREAS THAT ARE RAISED OR DEPRESSED AND ACCESSED BY RAMPS OR PLATFORM LIFTS WITH ENTRY RAMPS SHALL PROVIDE UNOBSTRUCTED TURNING SPACE COMPLYING WITH 304.

808.3 CLEAR FLOOR SPACE. EACH JURY BOX AND WITNESS STAND SHALL HAVE, WITHIN ITS DEFINED AREA, CLEAR FLOOR SPACE COMPLYING WITH 305.

EXCEPTION: IN ALTERATIONS, WHEELCHAIR SPACES ARE NOT REQUIRED TO BE LOCATED WITHIN THE DEFINED AREA OF RAISED JURY BOXES OR WITNESS STANDS AND SHALL BE PERMITTED TO BE LOCATED OUTSIDE THESE SPACES WHERE RAMP OR PLATFORM LIFT ACCESS POSES A HAZARD BY RESTRICTING OR PROJECTING INTO A MEANS OF EGRESS REQUIRED BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY.

808.4 JUDGES' BENCHES AND COURTROOM STATIONS. JUDGES' BENCHES, CLERKS' STATIONS, BAILIFFS' STATIONS, DEPUTY CLERKS' STATIONS, COURT REPORTERS' STATIONS AND LITIGANTS' AND COUNSEL STATIONS SHALL COMPLY WITH 902.

809 RESIDENTIAL DWELLING UNITS
809.1 GENERAL. RESIDENTIAL DWELLING UNITS SHALL COMPLY WITH 809. RESIDENTIAL DWELLING UNITS REQUIRED TO PROVIDE MOBILITY FEATURES SHALL COMPLY WITH 809.2 THROUGH 809.4. RESIDENTIAL DWELLING UNITS REQUIRED TO PROVIDE COMMUNICATION FEATURES SHALL COMPLY WITH 809.5.

809.2 ACCESSIBLE ROUTES. ACCESSIBLE ROUTES COMPLYING WITH CHAPTER 4 SHALL BE PROVIDED WITHIN RESIDENTIAL DWELLING UNITS IN ACCORDANCE WITH 809.2.

EXCEPTION: ACCESSIBLE ROUTES SHALL NOT BE REQUIRED TO OR WITHIN UNFINISHED ATTICS OR UNFINISHED BASEMENTS.

809.2.1 LOCATION. AT LEAST ONE ACCESSIBLE ROUTE SHALL CONNECT ALL SPACES AND ELEMENTS WHICH ARE A PART OF THE RESIDENTIAL DWELLING UNIT. WHERE ONLY ONE ACCESSIBLE ROUTE IS PROVIDED, IT SHALL NOT PASS THROUGH BATHROOMS, CLOSETS, OR SIMILAR SPACES.

809.2.2 TURNING SPACE. ALL ROOMS SERVED BY AN ACCESSIBLE ROUTE SHALL PROVIDE A TURNING SPACE COMPLYING WITH 304.

EXCEPTION: TURNING SPACE SHALL NOT BE REQUIRED IN EXTERIOR SPACES 30 INCHES (760 MM) MAXIMUM IN DEPTH OR WIDTH.

809.3 KITCHEN. WHERE A KITCHEN IS PROVIDED, IT SHALL COMPLY WITH 804.

809.4 TOILET FACILITIES AND BATHING FACILITIES. AT LEAST ONE BATHROOM SHALL COMPLY WITH 603. NO FEWER THAN ONE OF EACH TYPE OF FIXTURE PROVIDED SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF 603 THROUGH 610. TOILET AND BATHING FIXTURES REQUIRED TO COMPLY WITH 603 THROUGH 610 SHALL BE LOCATED IN THE SAME TOILET AND BATHING AREA, SUCH THAT TRAVEL BETWEEN FIXTURES DOES NOT REQUIRE TRAVEL BETWEEN OTHER PARTS OF THE RESIDENTIAL DWELLING UNIT.

809.5 RESIDENTIAL DWELLING UNITS WITH COMMUNICATION FEATURES. RESIDENTIAL DWELLING UNITS REQUIRED TO PROVIDE COMMUNICATION FEATURES SHALL COMPLY WITH 809.5.

809.5.1 BUILDING FIRE ALARM SYSTEM. WHERE A BUILDING FIRE ALARM SYSTEM IS PROVIDED, THE SYSTEM WIRING SHALL BE EXTENDED TO A POINT WITHIN THE RESIDENTIAL DWELLING UNIT IN THE VICINITY OF THE RESIDENTIAL DWELLING UNIT SMOKE DETECTION SYSTEM.

809.5.1.1 ALARM APPLIANCES. WHERE ALARM APPLIANCES ARE PROVIDED WITHIN A RESIDENTIAL DWELLING UNIT AS PART OF THE BUILDING FIRE ALARM SYSTEM, THEY SHALL COMPLY WITH 702.

809.5.1.2 ACTIVATION. ALL VISIBLE ALARM APPLIANCES PROVIDED WITHIN THE RESIDENTIAL DWELLING UNIT FOR BUILDING FIRE ALARM NOTIFICATION SHALL BE ACTIVATED UPON ACTIVATION OF THE BUILDING FIRE ALARM IN THE PORTION OF THE BUILDING CONTAINING THE RESIDENTIAL DWELLING UNIT.

809.5.3 INTERCONNECTION. THE SAME VISIBLE ALARM APPLIANCES SHALL BE PERMITTED TO PROVIDE NOTIFICATION OF RESIDENTIAL DWELLING UNIT SMOKE DETECTION AND BUILDING FIRE ALARM ACTIVATION.

809.5.4 PROHIBITED USE. VISIBLE ALARM APPLIANCES USED TO INDICATE RESIDENTIAL DWELLING UNIT SMOKE DETECTION OR BUILDING FIRE ALARM ACTIVATION SHALL NOT BE USED FOR ANY OTHER PURPOSE WITHIN THE RESIDENTIAL DWELLING UNIT.

809.5.5 RESIDENTIAL DWELLING UNIT PRIMARY ENTRANCE. COMMUNICATION FEATURES SHALL BE PROVIDED AT THE RESIDENTIAL DWELLING UNIT PRIMARY ENTRANCE COMPLYING WITH 809.5.5.

809.5.5.1 NOTIFICATION. A HARD-WIRED ELECTRIC DOORBELL SHALL BE PROVIDED. A BUTTON OR SWITCH SHALL BE PROVIDED OUTSIDE THE RESIDENTIAL DWELLING UNIT PRIMARY ENTRANCE. ACTIVATION OF THE BUTTON OR SWITCH SHALL INITIATE AN AUDIBLE TONE AND VISIBLE SIGNAL WITHIN THE RESIDENTIAL DWELLING UNIT. WHERE VISIBLE DOORBELL SIGNALS ARE LOCATED IN SLEEPING AREAS, THEY SHALL HAVE CONTROLS TO DEACTIVATE THE SIGNAL.

809.5.5.2 IDENTIFICATION. A MEANS FOR VISUALLY IDENTIFYING A VISITOR WITHOUT OPENING THE RESIDENTIAL DWELLING UNIT ENTRY DOOR SHALL BE PROVIDED AND SHALL ALLOW FOR A MINIMUM 180 DEGREE RANGE OF VIEW.

809.5.6 SITE, BUILDING, OR FLOOR ENTRANCE. WHERE A SYSTEM, INCLUDING A CLOSED-CIRCUIT SYSTEM, PERMITTING VOICE COMMUNICATION BETWEEN A VISITOR AND THE OCCUPANT OF THE RESIDENTIAL DWELLING UNIT IS PROVIDED, THE SYSTEM SHALL COMPLY WITH 708.4.

810 TRANSPORTATION FACILITIES
810.1 GENERAL. TRANSPORTATION FACILITIES SHALL COMPLY WITH 810.

810.2 BUS BOARDING AND ALIGHTING AREAS. BUS BOARDING AND ALIGHTING AREAS SHALL COMPLY WITH 810.2.

810.2.1 SURFACE. BUS STOP BOARDING AND ALIGHTING AREAS SHALL HAVE A FIRM, STABLE SURFACE.

810.2.2 DIMENSIONS. BUS STOP BOARDING AND ALIGHTING AREAS SHALL PROVIDE A CLEAR LENGTH OF 96 INCHES (2440 MM) MINIMUM, MEASURED PERPENDICULAR TO THE CURB OR VEHICLE ROADWAY EDGE, AND A CLEAR WIDTH OF 60 INCHES (1525 MM) MINIMUM, MEASURED PARALLEL TO THE VEHICLE ROADWAY.

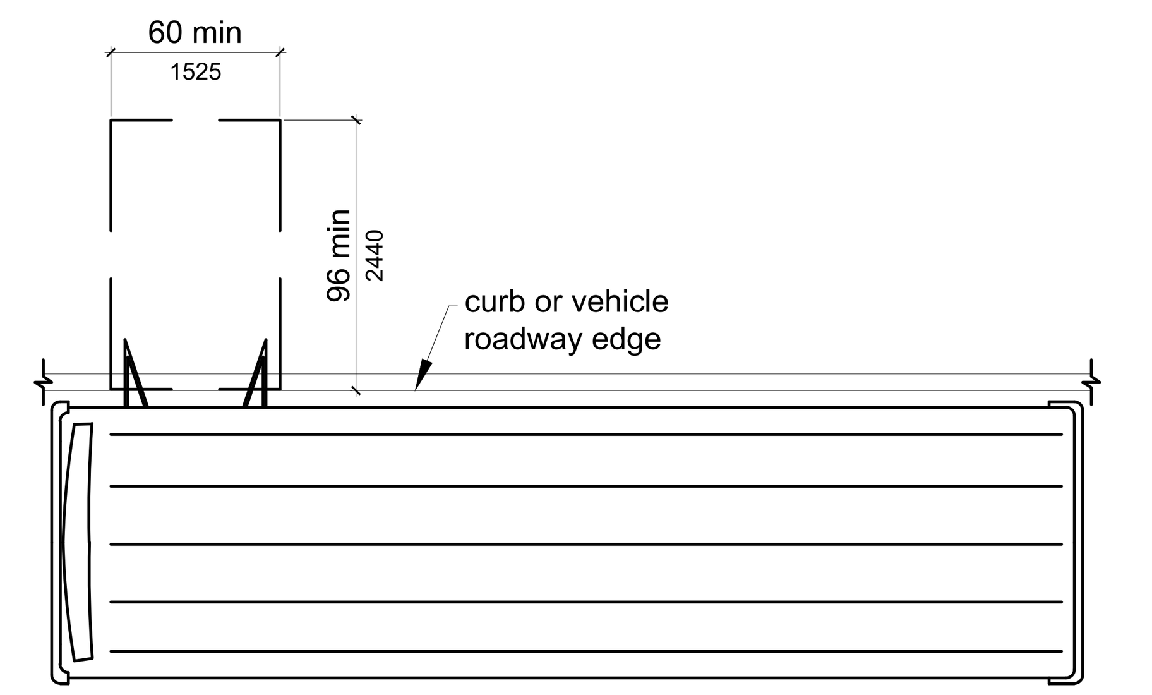

FIGURE 810.2.2 DIMENSIONS OF BUS BOARDING AND ALIGHTING AREAS

810.2.3 CONNECTION. BUS STOP BOARDING AND ALIGHTING AREAS SHALL BE CONNECTED TO STREETS, SIDEWALKS, OR PEDESTRIAN PATHS BY AN ACCESSIBLE ROUTE COMPLYING WITH 402.

810.2.4 SLOPE. PARALLEL TO THE ROADWAY, THE SLOPE OF THE BUS STOP BOARDING AND ALIGHTING AREA SHALL BE THE SAME AS THE ROADWAY, TO THE MAXIMUM EXTENT PRACTICABLE. PERPENDICULAR TO THE ROADWAY, THE SLOPE OF THE BUS STOP BOARDING AND ALIGHTING AREA SHALL NOT BE STEEPER THAN1:48.

810.3 BUS SHELTERS. BUS SHELTERS SHALL PROVIDE A MINIMUM CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 ENTIRELY WITHIN THE SHELTER. BUS SHELTERS SHALL BE CONNECTED BY AN ACCESSIBLE ROUTE COMPLYING WITH 402 TO A BOARDING AND ALIGHTING AREA COMPLYING WITH 810.2.

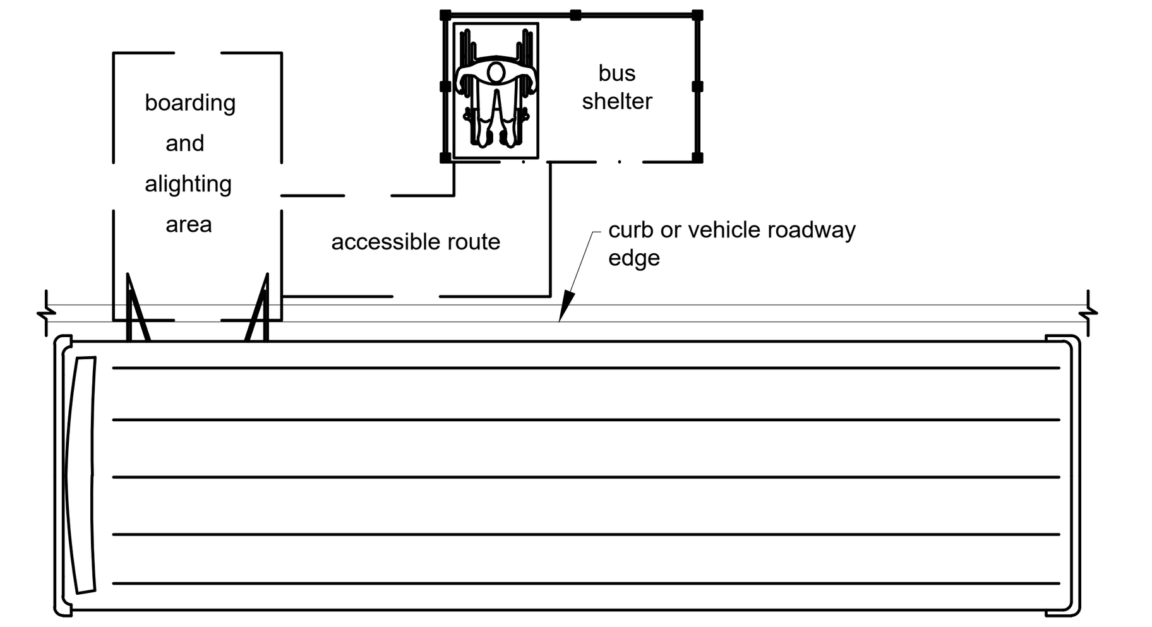

FIGURE 810.3 BUS SHELTERS

810.4 BUS SIGNS. BUS ROUTE IDENTIFICATION SIGNS SHALL COMPLY WITH 703.5.1 THROUGH 703.5.4, AND 703.5.7 AND 703.5.8. IN ADDITION, TO THE MAXIMUM EXTENT PRACTICABLE, BUS ROUTE IDENTIFICATION SIGNS SHALL COMPLY WITH 703.5.5.

EXCEPTION: BUS SCHEDULES, TIMETABLES AND MAPS THAT ARE POSTED AT THE BUS STOP OR BUS BAY SHALL NOT BE REQUIRED TO COMPLY.

810.5 RAIL PLATFORMS. RAIL PLATFORMS SHALL COMPLY WITH 810.5

810.5.1 SLOPE. RAIL PLATFORMS SHALL NOT EXCEED A SLOPE OF 1:48 IN ALL DIRECTIONS.

EXCEPTION: WHERE PLATFORMS SERVE VEHICLES OPERATING ON EXISTING TRACK OR TRACK LAID IN EXISTING ROADWAY, THE SLOPE OF THE PLATFORM PARALLEL TO THE TRACK SHALL BE PERMITTED TO BE EQUAL TO THE SLOPE (GRADE) OF THE ROADWAY OR EXISTING TRACK.

810.5.2 DETECTABLE WARNINGS. PLATFORM BOARDING EDGES NOT PROTECTED BY PLATFORM SCREENS OR GUARDS SHALL HAVE DETECTABLE WARNINGS COMPLYING WITH 705 ALONG THE FULL LENGTH OF THE PUBLIC USE AREA OF THE PLATFORM.

810.5.3 PLATFORM AND VEHICLE FLOOR COORDINATION. STATION PLATFORMS SHALL BE POSITIONED TO COORDINATE WITH VEHICLES IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF 36 CFR PART 1192. LOW-LEVEL PLATFORMS SHALL BE 8 INCHES (205 MM) MINIMUM ABOVE TOP OF RAIL.

EXCEPTION: WHERE VEHICLES ARE BOARDED FROM SIDEWALKS OR STREET-LEVEL, LOW-LEVEL PLATFORMS SHALL BE PERMITTED TO BE LESS THAN 8 INCHES (205 MM).

810.6 RAIL STATION SIGNS. RAIL STATION SIGNS SHALL COMPLY WITH 810.6.

EXCEPTION. SIGNS SHALL NOT BE REQUIRED TO COMPLY WITH 810.6.1 AND 810.6.2 WHERE AUDIBLE SIGNS ARE REMOTELY TRANSMITTED TO HAND-HELD RECEIVERS, OR ARE USER- OR PROXIMITY-ACTUATED.

810.6.1 ENTRANCES. WHERE SIGNS IDENTIFY A STATION OR ITS ENTRANCE, AT LEAST ONE SIGN AT EACH ENTRANCE SHALL COMPLY WITH 703.2 AND SHALL BE PLACED IN UNIFORM LOCATIONS TO THE MAXIMUM EXTENT PRACTICABLE. WHERE SIGNS IDENTIFY A STATION THAT HAS NO DEFINED ENTRANCE, AT LEAST ONE SIGN SHALL COMPLY WITH 703.2 AND SHALL BE PLACED IN A CENTRAL LOCATION.

810.6.2 ROUTES AND DESTINATIONS. LISTS OF STATIONS, ROUTES AND DESTINATIONS SERVED BY THE STATION WHICH ARE LOCATED ON BOARDING AREAS, PLATFORMS, OR MEZZANINES SHALL COMPLY WITH 703.5. AT LEAST ONE TACTILE SIGN IDENTIFYING THE SPECIFIC STATION AND COMPLYING WITH 703.2 SHALL BE PROVIDED ON EACH PLATFORM OR BOARDING AREA. SIGNS COVERED BY THIS REQUIREMENT SHALL, TO THE MAXIMUM EXTENT PRACTICABLE, BE PLACED IN UNIFORM LOCATIONS WITHIN THE SYSTEM.

EXCEPTION: WHERE SIGN SPACE IS LIMITED, CHARACTERS SHALL NOT BE REQUIRED TO EXCEED 3 INCHES (75 MM).

810.6.3 STATION NAMES. STATIONS COVERED BY THIS SECTION SHALL HAVE IDENTIFICATION SIGNS COMPLYING WITH 703.5. SIGNS SHALL BE CLEARLY VISIBLE AND WITHIN THE SIGHT LINES OF STANDING AND SITTING PASSENGERS FROM WITHIN THE VEHICLE ON BOTH SIDES WHEN NOT OBSTRUCTED BY ANOTHER VEHICLE.

810.7 PUBLIC ADDRESS SYSTEMS. WHERE PUBLIC ADDRESS SYSTEMS CONVEY AUDIBLE INFORMATION TO THE PUBLIC, THE SAME OR EQUIVALENT INFORMATION SHALL BE PROVIDED IN A VISUAL FORMAT.

810.8 CLOCKS. WHERE CLOCKS ARE PROVIDED FOR USE BY THE PUBLIC, THE CLOCK FACE SHALL BE UNCLUTTERED SO THAT ITS ELEMENTS ARE CLEARLY VISIBLE. HANDS, NUMERALS AND DIGITS SHALL CONTRAST WITH THE BACKGROUND EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. WHERE CLOCKS ARE INSTALLED OVERHEAD, NUMERALS AND DIGITS SHALL COMPLY WITH 703.5.

810.9 ESCALATORS. WHERE PROVIDED, ESCALATORS SHALL COMPLY WITH THE SECTIONS 6.1.3.5.6 AND 6.1.3.6.5 OF ASME A17.1 (INCORPORATED BY REFERENCE, SEE "REFERENCED STANDARDS" IN CHAPTER 1) AND SHALL HAVE A CLEAR WIDTH OF 32 INCHES (815 MM) MINIMUM.

EXCEPTION: EXISTING ESCALATORS IN KEY STATIONS SHALL NOT BE REQUIRED TO COMPLY WITH 810.9.

810.10 TRACK CROSSINGS. WHERE A CIRCULATION PATH SERVING BOARDING PLATFORMS CROSSES TRACKS, IT SHALL COMPLY WITH 402.

EXCEPTION: OPENINGS FOR WHEEL FLANGES SHALL BE PERMITTED TO BE 2 1/2 INCHES (64 MM) MAXIMUM.

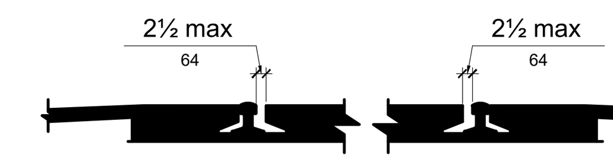

FIGURE 810.10 (EXCEPTION) TRACK CROSSINGS

811 STORAGE
811.1 GENERAL. STORAGE SHALL COMPLY WITH 811.

811.2 CLEAR FLOOR OR GROUND SPACE. A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 SHALL BE PROVIDED.

811.3 HEIGHT. STORAGE ELEMENTS SHALL COMPLY WITH AT LEAST ONE OF THE REACH RANGES SPECIFIED IN 308.

811.4 OPERABLE PARTS. OPERABLE PARTS SHALL COMPLY WITH 309.

CHAPTER 9: BUILT-IN ELEMENTS

901 GENERAL
901.1 SCOPE. THE PROVISIONS OF CHAPTER 9 SHALL APPLY WHERE REQUIRED BY CHAPTER 2 OR WHERE REFERENCED BY A REQUIREMENT IN THIS DOCUMENT.

902 DINING SURFACES AND WORK SURFACES
902.1 GENERAL. DINING SURFACES AND WORK SURFACES SHALL COMPLY WITH 902.2 AND 902.3.

EXCEPTION: DINING SURFACES AND WORK SURFACES FOR CHILDREN'S USE SHALL BE PERMITTED TO COMPLY WITH 902.4.

902.2 CLEAR FLOOR OR GROUND SPACE. A CLEAR FLOOR SPACE COMPLYING WITH 305 POSITIONED FOR A FORWARD APPROACH SHALL BE PROVIDED. KNEE AND TOE CLEARANCE COMPLYING WITH 306 SHALL BE PROVIDED.

902.3 HEIGHT. THE TOPS OF DINING SURFACES AND WORK SURFACES SHALL BE 28 INCHES (710 MM) MINIMUM AND 34 INCHES (865 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

902.4 DINING SURFACES AND WORK SURFACES FOR CHILDREN'S USE. ACCESSIBLE DINING SURFACES AND WORK SURFACES FOR CHILDREN'S USE SHALL COMPLY WITH 902.4.

EXCEPTION: DINING SURFACES AND WORK SURFACES THAT ARE USED PRIMARILY BY CHILDREN 5 YEARS AND YOUNGER SHALL NOT BE REQUIRED TO COMPLY WITH 902.4 WHERE A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 POSITIONED FOR A PARALLEL APPROACH IS PROVIDED.

902.4.1 CLEAR FLOOR OR GROUND SPACE. A CLEAR FLOOR SPACE COMPLYING WITH 305 POSITIONED FOR FORWARD APPROACH SHALL BE PROVIDED. KNEE AND TOE CLEARANCE COMPLYING WITH 306 SHALL BE PROVIDED, EXCEPT THAT KNEE CLEARANCE 24 INCHES (610 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND SHALL BE PERMITTED.

902.4.2 HEIGHT. THE TOPS OF TABLES AND COUNTERS SHALL BE 26 INCHES (660 MM) MINIMUM AND 30 INCHES (760 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

903 BENCHES
903.1 GENERAL. BENCHES SHALL COMPLY WITH 903.

903.2 CLEAR FLOOR OR GROUND SPACE. CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 SHALL BE PROVIDED AND SHALL BE POSITIONED AT THE END OF THE BENCH SEAT AND PARALLEL TO THE SHORT AXIS OF THE BENCH.

903.3 SIZE. BENCHES SHALL HAVE SEATS THAT ARE 42 INCHES (1065 MM) LONG MINIMUM AND 20 INCHES (510 MM) DEEP MINIMUM AND 24 INCHES (610 MM) DEEP MAXIMUM.

903.4 BACK SUPPORT. THE BENCH SHALL PROVIDE FOR BACK SUPPORT OR SHALL BE AFFIXED TO A WALL. BACK SUPPORT SHALL BE 42 INCHES (1065 MM) LONG MINIMUM AND SHALL EXTEND FROM A POINT 2 INCHES (51 MM) MAXIMUM ABOVE THE SEAT SURFACE TO A POINT 18 INCHES (455 MM) MINIMUM ABOVE THE SEAT SURFACE. BACK SUPPORT SHALL BE 2 1/2 INCHES (64 MM) MAXIMUM FROM THE REAR EDGE OF THE SEAT MEASURED HORIZONTALLY.

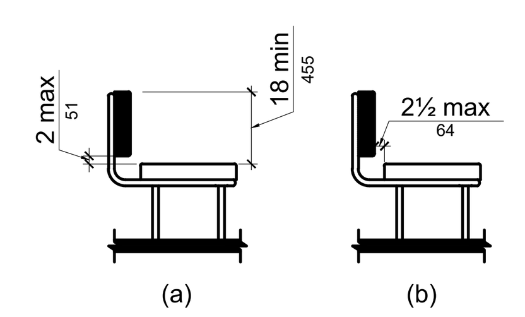

FIGURE 903.4 BENCH BACK SUPPORT

903.5 HEIGHT. THE TOP OF THE BENCH SEAT SURFACE SHALL BE 17 INCHES (430 MM) MINIMUM AND 19 INCHES (485 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

903.6 STRUCTURAL STRENGTH. ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHEN A VERTICAL OR HORIZONTAL FORCE OF 250 POUNDS (1112 N) IS APPLIED AT ANY POINT ON THE SEAT, FASTENER, MOUNTING DEVICE, OR SUPPORTING STRUCTURE.

903.7 WET LOCATIONS. WHERE INSTALLED IN WET LOCATIONS, THE SURFACE OF THE SEAT SHALL BE SLIP RESISTANT AND SHALL NOT ACCUMULATE WATER.

904 CHECK-OUT AISLES AND SALES AND SERVICE COUNTERS
904.1 GENERAL. CHECK-OUT AISLES AND SALES AND SERVICE COUNTERS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF 904.

904.2 APPROACH. ALL PORTIONS OF COUNTERS REQUIRED TO COMPLY WITH 904 SHALL BE LOCATED ADJACENT TO A WALKING SURFACE COMPLYING WITH 403.

904.3 CHECK-OUT AISLES. CHECK-OUT AISLES SHALL COMPLY WITH 904.3.

904.3.1 AISLE. AISLES SHALL COMPLY WITH 403.

904.3.2 COUNTER. THE COUNTER SURFACE HEIGHT SHALL BE 38 INCHES (965 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. THE TOP OF THE COUNTER EDGE PROTECTION SHALL BE 2 INCHES (51 MM) MAXIMUM ABOVE THE TOP OF THE COUNTER SURFACE ON THE AISLE SIDE OF THE CHECK-OUT COUNTER.

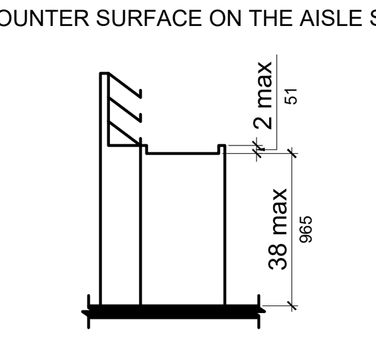

FIGURE 904.3.2 CHECK-OUT AISLE COUNTERS

904.3.3 CHECK WRITING SURFACES. WHERE PROVIDED, CHECK WRITING SURFACES SHALL COMPLY WITH 902.3.

904.4 SALES AND SERVICE COUNTERS. SALES COUNTERS AND SERVICE COUNTERS SHALL COMPLY WITH 904.4.1 OR 904.4.2. THE ACCESSIBLE PORTION OF THE COUNTER TOP SHALL EXTEND THE SAME DEPTH AS THE SALES OR SERVICE COUNTER TOP.

EXCEPTION: IN ALTERATIONS, WHEN THE PROVISION OF A COUNTER COMPLYING WITH 904.4 WOULD RESULT IN A REDUCTION OF THE NUMBER OF EXISTING COUNTERS AT WORK STATIONS OR A REDUCTION OF THE NUMBER OF EXISTING MAIL BOXES, THE COUNTER SHALL BE PERMITTED TO HAVE A PORTION WHICH IS 24 INCHES (610 MM) LONG MINIMUM COMPLYING WITH 904.4.1 PROVIDED THAT THE REQUIRED CLEAR FLOOR OR GROUND SPACE IS CENTERED ON THE ACCESSIBLE LENGTH OF THE COUNTER.

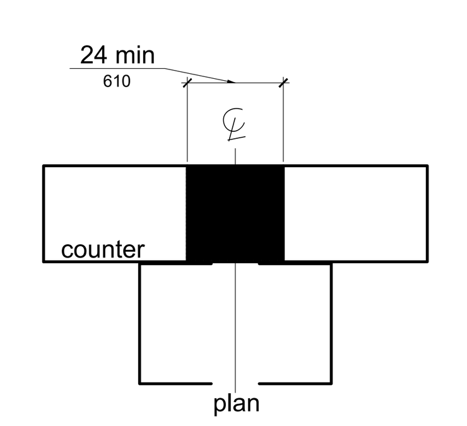

FIGURE 904.4 (EXCEPTION) ALTERATION OF SALES AND SERVICE COUNTERS

904.4.1 PARALLEL APPROACH. A PORTION OF THE COUNTER SURFACE THAT IS 36 INCHES (915 MM) LONG MINIMUM AND 36 INCHES (915 MM) HIGH MAXIMUM ABOVE THE FINISH FLOOR SHALL BE PROVIDED. A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 SHALL BE POSITIONED FOR A PARALLEL APPROACH ADJACENT TO THE 36 INCH (915 MM) MINIMUM LENGTH OF COUNTER.

EXCEPTION: WHERE THE PROVIDED COUNTER SURFACE IS LESS THAN 36 INCHES (915 MM) LONG, THE ENTIRE COUNTER SURFACE SHALL BE 36 INCHES (915 MM) HIGH MAXIMUM ABOVE THE FINISH FLOOR.

904.4.2 FORWARD APPROACH. A PORTION OF THE COUNTER SURFACE THAT IS 30 INCHES (760 MM) LONG MINIMUM AND 36 INCHES (915 MM) HIGH MAXIMUM SHALL BE PROVIDED. KNEE AND TOE SPACE COMPLYING WITH 306 SHALL BE PROVIDED UNDER THE COUNTER. A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 SHALL BE POSITIONED FOR A FORWARD APPROACH TO THE COUNTER.

904.5 FOOD SERVICE LINES. COUNTERS IN FOOD SERVICE LINES SHALL COMPLY WITH 904.5.

904.5.1 SELF-SERVICE SHELVES AND DISPENSING DEVICES. SELF-SERVICE SHELVES AND DISPENSING DEVICES FOR TABLEWARE, DISHWARE, CONDIMENTS, FOOD AND BEVERAGES SHALL COMPLY WITH 308.

904.5.2 TRAY SLIDES. THE TOPS OF TRAY SLIDES SHALL BE 28 INCHES (710 MM) MINIMUM AND 34 INCHES (865 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

904.6 SECURITY GLAZING. WHERE COUNTERS OR TELLER WINDOWS HAVE SECURITY GLAZING TO SEPARATE PERSONNEL FROM THE PUBLIC, A METHOD TO FACILITATE VOICE COMMUNICATION SHALL BE PROVIDED. TELEPHONE HANDSET DEVICES, IF PROVIDED, SHALL COMPLY WITH 704.3.

CHAPTER 10: RECREATION FACILITIES

1001 GENERAL
1001.1 SCOPE. THE PROVISIONS OF CHAPTER 10 SHALL APPLY WHERE REQUIRED BY CHAPTER 2 OR WHERE REFERENCED BY A REQUIREMENT IN THIS DOCUMENT.

1002 AMUSEMENT RIDES
1002.1 GENERAL. AMUSEMENT RIDES SHALL COMPLY WITH 1002.

1002.2 ACCESSIBLE ROUTES. ACCESSIBLE ROUTES SERVING AMUSEMENT RIDES SHALL COMPLY WITH CHAPTER 4.

EXCEPTIONS:
1. IN LOAD OR UNLOAD AREAS AND ON AMUSEMENT RIDES, WHERE COMPLIANCE WITH 405.2 IS NOT STRUCTURALLY OR OPERATIONALLY FEASIBLE, RAMP SLOPE SHALL BE PERMITTED TO BE 1:8 MAXIMUM.
2. IN LOAD OR UNLOAD AREAS AND ON AMUSEMENT RIDES, HANDRAILS PROVIDED ALONG WALKING SURFACES COMPLYING WITH 403 AND REQUIRED ON RAMPS COMPLYING WITH 405 SHALL NOT BE REQUIRED TO COMPLY WITH 505 WHERE COMPLIANCE IS NOT STRUCTURALLY OR OPERATIONALLY FEASIBLE.

1002.3 LOAD AND UNLOAD AREAS. A TURNING SPACE COMPLYING WITH 304.2 AND 304.3 SHALL BE PROVIDED IN LOAD AND UNLOAD AREAS.

1002.4 WHEELCHAIR SPACES IN AMUSEMENT RIDES. WHEELCHAIR SPACES IN AMUSEMENT RIDES SHALL COMPLY WITH 1002.4.

1002.4.1 FLOOR OR GROUND SURFACE. THE FLOOR OR GROUND SURFACE OF WHEELCHAIR SPACES SHALL BE STABLE AND FIRM.

1002.4.2 SLOPE. THE FLOOR OR GROUND SURFACE OF WHEELCHAIR SPACES SHALL HAVE A SLOPE NOT STEEPER THAN 1:48 WHEN IN THE LOAD AND UNLOAD POSITION.

1002.4.3 GAPS. FLOORS OF AMUSEMENT RIDES WITH WHEELCHAIR SPACES AND FLOORS OF LOAD AND UNLOAD AREAS SHALL BE COORDINATED SO THAT, WHEN AMUSEMENT RIDES ARE AT REST IN THE LOAD AND UNLOAD POSITION, THE VERTICAL DIFFERENCE BETWEEN THE FLOORS SHALL BE WITHIN PLUS OR MINUS 5/8 INCHES (16 MM) AND THE HORIZONTAL GAP SHALL BE 3 INCHES (75 MM) MAXIMUM UNDER NORMAL PASSENGER LOAD CONDITIONS.

EXCEPTION: WHERE COMPLIANCE IS NOT OPERATIONALLY OR STRUCTURALLY FEASIBLE, RAMPS, BRIDGE PLATES, OR SIMILAR DEVICES COMPLYING WITH THE APPLICABLE REQUIREMENTS OF 36 CFR 1192.83(C) SHALL BE PROVIDED.

1002.4.4 CLEARANCES. CLEARANCES FOR WHEELCHAIR SPACES SHALL COMPLY WITH 1002.4.4.

EXCEPTIONS:
1. WHERE PROVIDED, SECUREMENT DEVICES SHALL BE PERMITTED TO OVERLAP REQUIRED CLEARANCES.
2. WHEELCHAIR SPACES SHALL BE PERMITTED TO BE MECHANICALLY OR MANUALLY REPOSITIONED.
3. WHEELCHAIR SPACES SHALL NOT BE REQUIRED TO COMPLY WITH 307.4.

1002.4.4.1 WIDTH AND LENGTH. WHEELCHAIR SPACES SHALL PROVIDE A CLEAR WIDTH OF 30 INCHES (760 MM) MINIMUM AND A CLEAR LENGTH OF 48 INCHES (1220 MM) MINIMUM MEASURED TO 9 INCHES (230 MM) MINIMUM ABOVE THE FLOOR SURFACE.

1002.4.4.2 SIDE ENTRY. WHERE WHEELCHAIR SPACES ARE ENTERED ONLY FROM THE SIDE, AMUSEMENT RIDES SHALL BE DESIGNED TO PERMIT SUFFICIENT MANEUVERING CLEARANCE FOR INDIVIDUALS USING A WHEELCHAIR OR MOBILITY AID TO ENTER AND EXIT THE RIDE.

1002.4.4.3 PERMITTED PROTRUSIONS IN WHEELCHAIR SPACES. OBJECTS ARE PERMITTED TO PROTRUDE A DISTANCE OF 6 INCHES (150 MM) MAXIMUM ALONG THE FRONT OF THE WHEELCHAIR SPACE, WHERE LOCATED 9 INCHES (230 MM) MINIMUM AND 27 INCHES (685 MM) MAXIMUM ABOVE THE FLOOR OR GROUND SURFACE OF THE WHEELCHAIR SPACE. OBJECTS ARE PERMITTED TO PROTRUDE A DISTANCE OF 25 INCHES (635 MM) MAXIMUM ALONG THE FRONT OF THE WHEELCHAIR SPACE, WHERE LOCATED MORE THAN 27 INCHES (685 MM) ABOVE THE FLOOR OR GROUND SURFACE OF THE WHEELCHAIR SPACE.

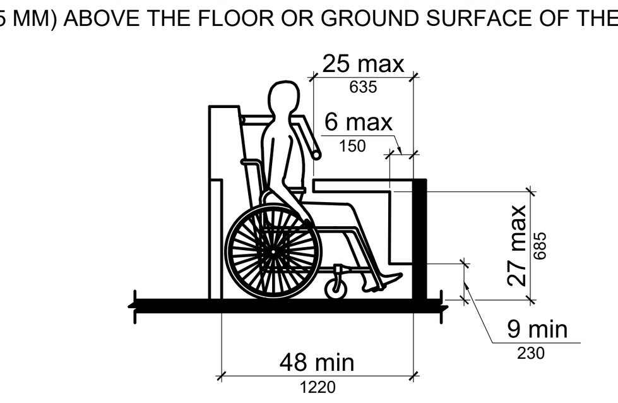

FIGURE 1002.4.4.3 PROTRUSIONS IN WHEELCHAIR SPACES IN AMUSEMENT RIDES

1002.4.5 RIDE ENTRY. OPENINGS PROVIDING ENTRY TO WHEELCHAIR SPACES ON AMUSEMENT RIDES SHALL BE 32 INCHES (815 MM) MINIMUM CLEAR.

1002.4.6 APPROACH. ONE SIDE OF THE WHEELCHAIR SPACE SHALL ADJOIN AN ACCESSIBLE ROUTE WHEN IN THE LOAD AND UNLOAD POSITION.

1002.4.7 COMPANION SEATS. WHERE THE INTERIOR WIDTH OF THE AMUSEMENT RIDE IS GREATER THAN 53 INCHES (1345 MM), SEATING IS PROVIDED FOR MORE THAN ONE RIDER, AND THE WHEELCHAIR IS NOT REQUIRED TO BE CENTERED WITHIN THE AMUSEMENT RIDE, A COMPANION SEAT SHALL BE PROVIDED FOR EACH WHEELCHAIR SPACE.

1002.4.7.1 SHOULDER-TO-SHOULDER SEATING. WHERE AN AMUSEMENT RIDE PROVIDES SHOULDER-TO-SHOULDER SEATING, COMPANION SEATS SHALL BE SHOULDER-TO-SHOULDER WITH THE ADJACENT WHEELCHAIR SPACE.

EXCEPTION: WHERE SHOULDER-TO-SHOULDER COMPANION SEATING IS NOT OPERATIONALLY OR STRUCTURALLY FEASIBLE, COMPLIANCE WITH THIS REQUIREMENT SHALL BE REQUIRED TO THE MAXIMUM EXTENT PRACTICABLE.

1002.5 AMUSEMENT RIDE SEATS DESIGNED FOR TRANSFER. AMUSEMENT RIDE SEATS DESIGNED FOR TRANSFER SHALL COMPLY WITH 1002.5 WHEN POSITIONED FOR LOADING AND UNLOADING.

1002.5.1 CLEAR FLOOR OR GROUND SPACE. A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 SHALL BE PROVIDED IN THE LOAD AND UNLOAD AREA ADJACENT TO THE AMUSEMENT RIDE SEATS DESIGNED FOR TRANSFER.

1002.5.2 TRANSFER HEIGHT. THE HEIGHT OF AMUSEMENT RIDE SEATS DESIGNED FOR TRANSFER SHALL BE 14 INCHES (355 MM) MINIMUM AND 24 INCHES (610 MM) MAXIMUM MEASURED FROM THE SURFACE OF THE LOAD AND UNLOAD AREA.

1002.5.3 TRANSFER ENTRY. WHERE OPENINGS ARE PROVIDED FOR TRANSFER TO AMUSEMENT RIDE SEATS, THE OPENINGS SHALL PROVIDE CLEARANCE FOR TRANSFER FROM A WHEELCHAIR OR MOBILITY AID TO THE AMUSEMENT RIDE SEAT.

1002.5.4 WHEELCHAIR STORAGE SPACE. WHEELCHAIR STORAGE SPACES COMPLYING WITH 305 SHALL BE PROVIDED IN OR ADJACENT TO UNLOAD AREAS FOR EACH REQUIRED AMUSEMENT RIDE SEAT DESIGNED FOR TRANSFER AND SHALL NOT OVERLAP ANY REQUIRED MEANS OF EGRESS OR ACCESSIBLE ROUTE.

1002.6 TRANSFER DEVICES FOR USE WITH AMUSEMENT RIDES. TRANSFER DEVICES FOR USE WITH AMUSEMENT RIDES SHALL COMPLY WITH 1002.6 WHEN POSITIONED FOR LOADING AND UNLOADING.

1002.6.1 CLEAR FLOOR OR GROUND SPACE. A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 SHALL BE PROVIDED IN THE LOAD AND UNLOAD AREA ADJACENT TO THE TRANSFER DEVICE.

1002.6.2 TRANSFER HEIGHT. THE HEIGHT OF TRANSFER DEVICE SEATS SHALL BE 14 INCHES (355 MM) MINIMUM AND 24 INCHES (610 MM) MAXIMUM MEASURED FROM THE LOAD AND UNLOAD SURFACE.

1002.6.3 WHEELCHAIR STORAGE SPACE. WHEELCHAIR STORAGE SPACES COMPLYING WITH 305 SHALL BE PROVIDED IN OR ADJACENT TO UNLOAD AREAS FOR EACH REQUIRED TRANSFER DEVICE AND SHALL NOT OVERLAP ANY REQUIRED MEANS OF EGRESS OR ACCESSIBLE ROUTE.

1003 RECREATIONAL BOATING FACILITIES
1003.1 GENERAL. RECREATIONAL BOATING FACILITIES SHALL COMPLY WITH 1003.

1003.2 ACCESSIBLE ROUTES. ACCESSIBLE ROUTES SERVING RECREATIONAL BOATING FACILITIES, INCLUDING GANGWAYS AND FLOATING PIERS, SHALL COMPLY WITH CHAPTER 4 EXCEPT AS MODIFIED BY THE EXCEPTIONS IN 1003.2.

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JANUARY 11, 2022

MEN'S TOILET & LOCKER ROOM RENOVATION
FOR THE
ORANGE COUNTY DRAINAGE DISTRICT
8081 OLD HIGHWAY 90 ORANGE, TEXAS 77630

ISSUE DATES:
BIDS & CONSTRUCTION
JANUARY 11, 2022

PREPARED BY: CLS

TAS-6
SHEET NO.

PROJECT NO. 2021-11
TEXAS ACCESSIBILITY STANDARDS

1003.2.1 BOAT SLIPS. ACCESSIBLE ROUTES SERVING BOAT SLIPS SHALL BE PERMITTED TO USE THE EXCEPTIONS IN 1003.2.1.

EXCEPTIONS:
1. WHERE AN EXISTING GANGWAY OR SERIES OF GANGWAYS IS REPLACED OR ALTERED, AN INCREASE IN THE LENGTH OF THE GANGWAY SHALL NOT BE REQUIRED TO COMPLY WITH 1003.2 UNLESS REQUIRED BY 202.4.
2. GANGWAYS SHALL NOT BE REQUIRED TO COMPLY WITH THE MAXIMUM RISE SPECIFIED IN 405.6.
3. WHERE THE TOTAL LENGTH OF A GANGWAY OR SERIES OF GANGWAYS SERVING AS PART OF A REQUIRED ACCESSIBLE ROUTE IS 80 FEET (24 M) MINIMUM, GANGWAYS SHALL NOT BE REQUIRED TO COMPLY WITH 405.2.
4. WHERE FACILITIES CONTAIN FEWER THAN 25 BOAT SLIPS AND THE TOTAL LENGTH OF THE GANGWAY OR SERIES OF GANGWAYS SERVING AS PART OF A REQUIRED ACCESSIBLE ROUTE IS 30 FEET (9145 MM) MINIMUM, GANGWAYS SHALL NOT BE REQUIRED TO COMPLY WITH 405.2.
5. WHERE GANGWAYS CONNECT TO TRANSITION PLATES, LANDINGS SPECIFIED BY 405.7 SHALL NOT BE REQUIRED.
6. WHERE GANGWAYS AND TRANSITION PLATES CONNECT AND ARE REQUIRED TO HAVE HANDRAILS, HANDRAIL EXTENSIONS SHALL NOT BE REQUIRED. WHERE HANDRAIL EXTENSIONS ARE PROVIDED ON GANGWAYS OR TRANSITION PLATES, THE HANDRAIL EXTENSIONS SHALL NOT BE REQUIRED TO BE PARALLEL WITH THE GROUND OR FLOOR SURFACE.
7. THE CROSS SLOPE SPECIFIED IN 403.3 AND 405.3 FOR GANGWAYS, TRANSITION PLATES, AND FLOATING PIERS THAT ARE PART OF ACCESSIBLE ROUTES SHALL BE MEASURED IN THE STATIC POSITION.
8. CHANGES IN LEVEL COMPLYING WITH 303.3 AND 303.4 SHALL BE PERMITTED ON THE SURFACES OF GANGWAYS AND BOAT LAUNCH RAMPS.

1003.2.2 BOARDING PIERS AT BOAT LAUNCH RAMPS. ACCESSIBLE ROUTES SERVING BOARDING PIERS AT BOAT LAUNCH RAMPS SHALL BE PERMITTED TO USE THE EXCEPTIONS IN 1003.2.2.

EXCEPTIONS:
1. ACCESSIBLE ROUTES SERVING FLOATING BOARDING PIERS SHALL BE PERMITTED TO USE EXCEPTIONS 1, 2, 5, 6, 7 AND 8 IN 1003.2.1.
2. WHERE THE TOTAL LENGTH OF THE GANGWAY OR SERIES OF GANGWAYS SERVING AS PART OF A REQUIRED ACCESSIBLE ROUTE IS 30 FEET (9145 MM) MINIMUM, GANGWAYS SHALL NOT BE REQUIRED TO COMPLY WITH 405.2.
3. WHERE THE ACCESSIBLE ROUTE SERVING A FLOATING BOARDING PIER OR SKID PIER IS LOCATED WITHIN A BOAT LAUNCH RAMP, THE PORTION OF THE ACCESSIBLE ROUTE LOCATED WITHIN THE BOAT LAUNCH RAMP SHALL NOT BE REQUIRED TO COMPLY WITH 405.

1003.3 CLEARANCES. CLEARANCES AT BOAT SLIPS AND ON BOARDING PIERS AT BOAT LAUNCH RAMPS SHALL COMPLY WITH 1003.3.

1003.3.1 BOAT SLIP CLEARANCE. BOAT SLIPS SHALL PROVIDE CLEAR PIER SPACE 60 INCHES (1525 MM) WIDE MINIMUM AND AT LEAST AS LONG AS THE BOAT SLIPS. EACH 10 FEET (3050 MM) MAXIMUM OF LINEAR PIER EDGE SERVING BOAT SLIPS SHALL CONTAIN AT LEAST ONE CONTINUOUS CLEAR OPENING 60 INCHES (1525 MM) WIDE MINIMUM.

EXCEPTIONS:
1. CLEAR PIER SPACE SHALL BE PERMITTED TO BE 36 INCHES (915 MM) WIDE MINIMUM FOR A LENGTH OF 24 INCHES (610 MM) MAXIMUM, PROVIDED THAT MULTIPLE 36 INCH (915 MM) WIDE SEGMENTS ARE SEPARATED BY SEGMENTS THAT ARE 60 INCHES (1525 MM) WIDE MINIMUM AND 60 INCHES (1525 MM) LONG MINIMUM.
2. EDGE PROTECTION SHALL BE PERMITTED AT THE CONTINUOUS CLEAR OPENINGS, PROVIDED THAT IT IS 4 INCHES (100 MM) HIGH MAXIMUM AND 2 INCHES (51 MM) WIDE MAXIMUM.
3. IN EXISTING PIERS, CLEAR PIER SPACE SHALL BE PERMITTED TO BE LOCATED PERPENDICULAR TO THE BOAT SLIP AND SHALL EXTEND THE WIDTH OF THE BOAT SLIP, WHERE THE FACILITY HAS AT LEAST ONE BOAT SLIP COMPLYING WITH 1003.3, AND FURTHER COMPLIANCE WITH 1003.3 WOULD RESULT IN A REDUCTION IN THE NUMBER OF BOAT SLIPS AVAILABLE OR RESULT IN A REDUCTION OF THE WIDTHS OF EXISTING SLIPS.

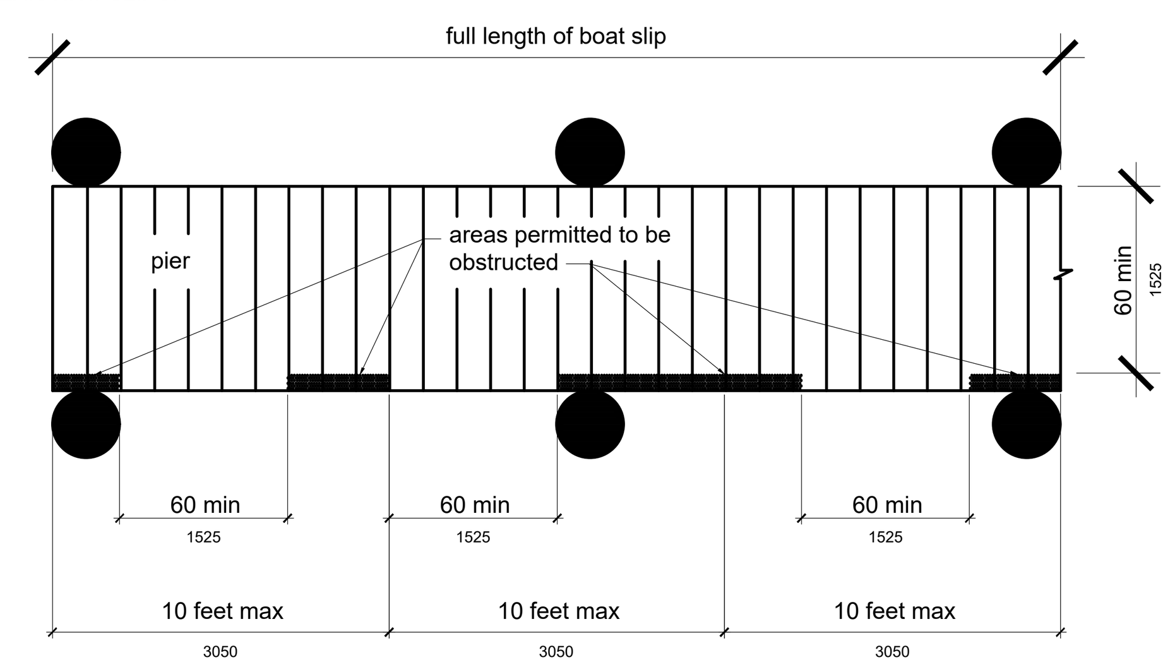

FIGURE 1003.3.1 BOAT SLIP CLEARANCE

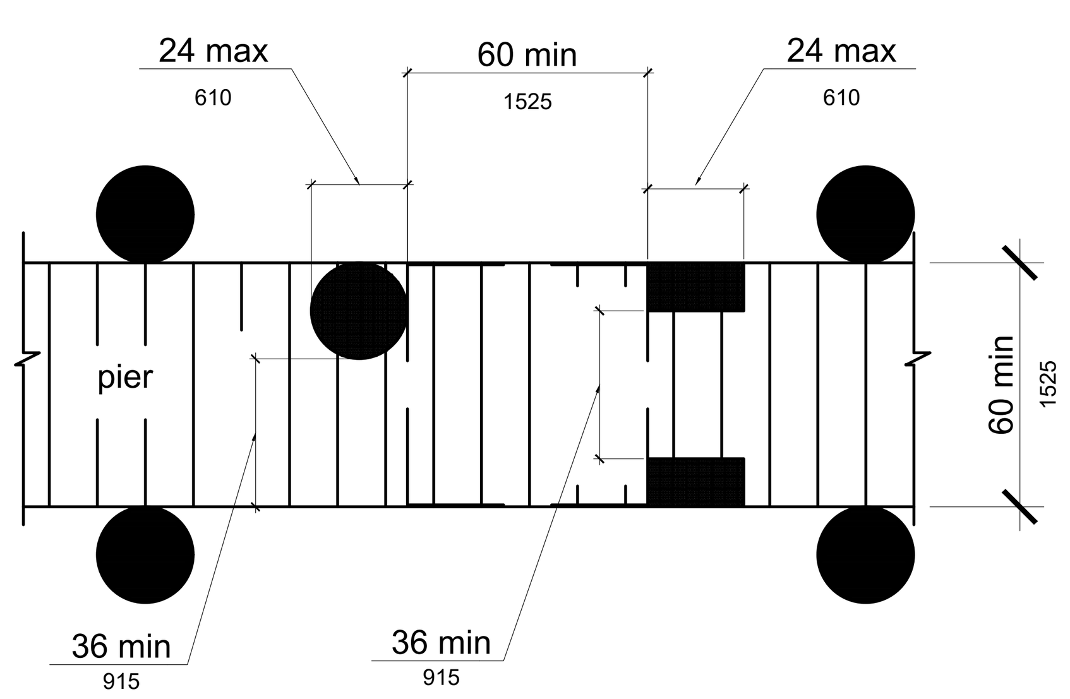

FIGURE 1003.3.1 (EXCEPTION 1) CLEAR PIER SPACE REDUCTION AT BOAT SLIPS

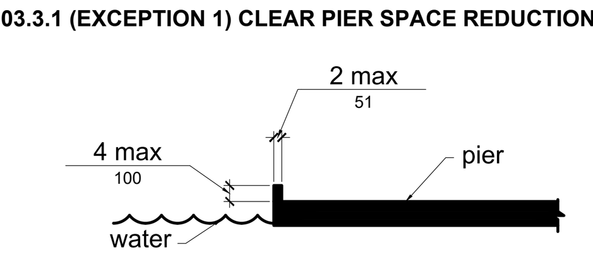

FIGURE 1003.3.1 (EXCEPTION 2) EDGE PROTECTION AT BOAT SLIPS

1003.3.2 BOARDING PIER CLEARANCES. BOARDING PIERS AT BOAT LAUNCH RAMPS SHALL PROVIDE CLEAR PIER SPACE 60 INCHES (1525 MM) WIDE MINIMUM AND SHALL EXTEND THE FULL LENGTH OF THE BOARDING PIER. EVERY 10 FEET (3050 MM) MAXIMUM OF LINEAR PIER EDGE SHALL CONTAIN AT LEAST ONE CONTINUOUS CLEAR OPENING 60 INCHES (1525 MM) WIDE MINIMUM.

EXCEPTIONS:
1. THE CLEAR PIER SPACE SHALL BE PERMITTED TO BE 36 INCHES (915 MM) WIDE MINIMUM FOR A LENGTH OF 24 INCHES (610 MM) MAXIMUM PROVIDED THAT MULTIPLE 36 INCH (915 MM) WIDE SEGMENTS ARE SEPARATED BY SEGMENTS THAT ARE 60 INCHES (1525 MM) WIDE MINIMUM AND 60 INCHES (1525 MM) LONG MINIMUM.
2. EDGE PROTECTION SHALL BE PERMITTED AT THE CONTINUOUS CLEAR OPENINGS PROVIDED THAT IT IS 4 INCHES (100 MM) HIGH MAXIMUM AND 2 INCHES (51 MM) WIDE MAXIMUM.

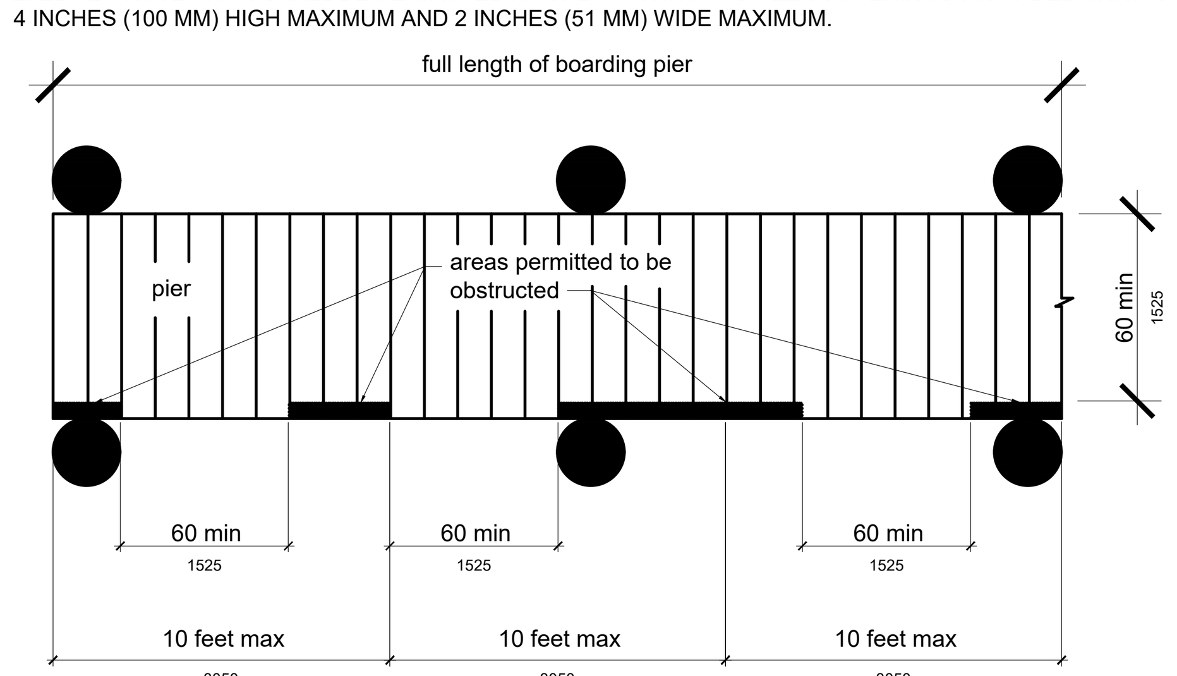

FIGURE 1003.3.2 BOARDING PIER CLEARANCE

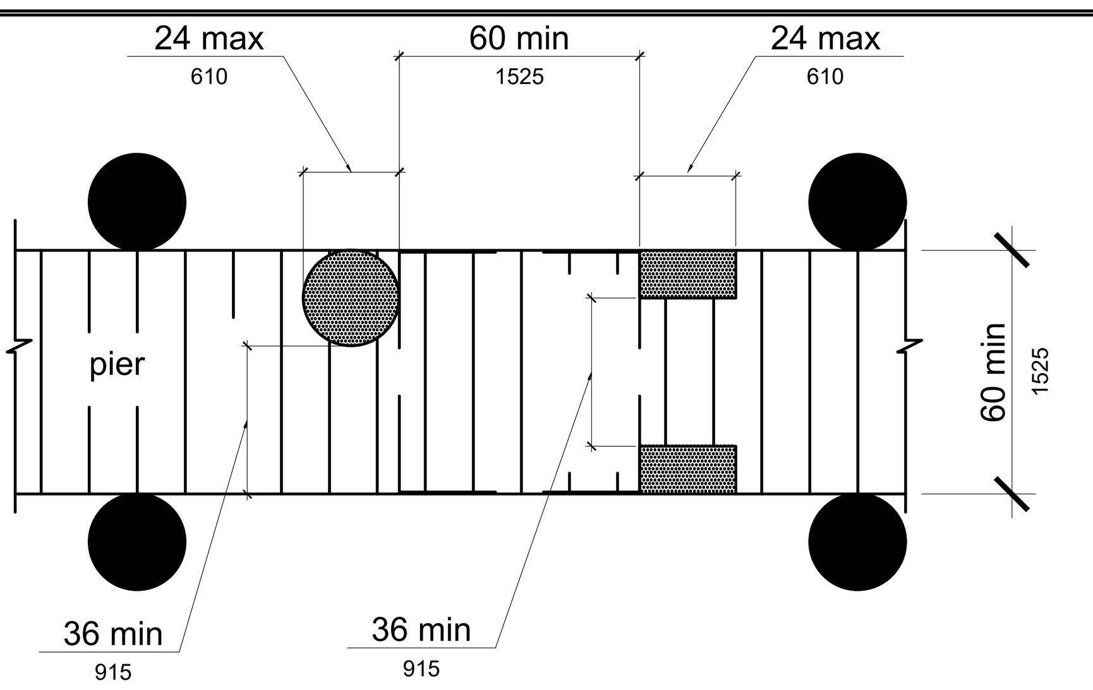

FIGURE 1003.3.2 (EXCEPTION 1) CLEAR PIER SPACE REDUCTION AT BOARDING PIERS

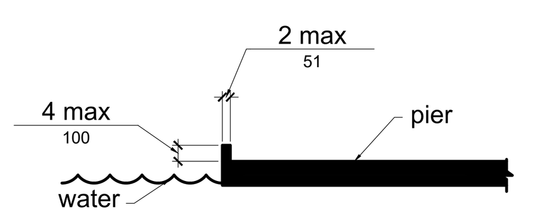

FIGURE 1003.3.2 (EXCEPTION 2) EDGE PROTECTION AT BOARDING PIERS

1004 EXERCISE MACHINES AND EQUIPMENT

1004.1 CLEAR FLOOR SPACE. EXERCISE MACHINES AND EQUIPMENT SHALL HAVE A CLEAR FLOOR SPACE COMPLYING WITH 305 POSITIONED FOR TRANSFER OR FOR USE BY AN INDIVIDUAL SEATED IN A WHEELCHAIR. CLEAR FLOOR OR GROUND SPACES REQUIRED AT EXERCISE MACHINES AND EQUIPMENT SHALL BE PERMITTED TO OVERLAP.

1005 FISHING PIERS AND PLATFORMS

1005.1 ACCESSIBLE ROUTES. ACCESSIBLE ROUTES SERVING FISHING PIERS AND PLATFORMS, INCLUDING GANGWAYS AND FLOATING PIERS, SHALL COMPLY WITH CHAPTER 4.

EXCEPTIONS:
1. ACCESSIBLE ROUTES SERVING FLOATING FISHING PIERS AND PLATFORMS SHALL BE PERMITTED TO USE EXCEPTIONS 1, 2, 5, 6, 7 AND 8 IN 1003.2.1.
2. WHERE THE TOTAL LENGTH OF THE GANGWAY OR SERIES OF GANGWAYS SERVING AS PART OF A REQUIRED ACCESSIBLE ROUTE IS 30 FEET (9145 MM) MINIMUM, GANGWAYS SHALL NOT BE REQUIRED TO COMPLY WITH 405.2.

1005.2 RAILINGS. WHERE PROVIDED, RAILINGS, GUARDS, OR HANDRAILS SHALL COMPLY WITH 1005.2.

1005.2.1 HEIGHT. AT LEAST 25 PERCENT OF THE RAILINGS, GUARDS, OR HANDRAILS SHALL BE 34 INCHES (865 MM) MAXIMUM ABOVE THE GROUND OR DECK SURFACE.

EXCEPTION: WHERE A GUARD COMPLYING WITH SECTIONS 1003.2.12.1 AND 1003.2.12.2 OF THE INTERNATIONAL BUILDING CODE (2000 EDITION) OR SECTIONS 1012.2 AND 1012.3 OF THE INTERNATIONAL BUILDING CODE (2003 EDITION) (INCORPORATED BY REFERENCE, SEE "REFERENCED STANDARDS" IN CHAPTER 1) IS PROVIDED, THE GUARD SHALL NOT BE REQUIRED TO COMPLY WITH 1005.2.1.

1005.2.1.1 DISPERSION. RAILINGS, GUARDS, OR HANDRAILS REQUIRED TO COMPLY WITH 1005.2.1 SHALL BE DISPERSED THROUGHOUT THE FISHING PIER OR PLATFORM.

1005.3 EDGE PROTECTION. WHERE RAILINGS, GUARDS, OR HANDRAILS COMPLYING WITH 1005.2 ARE PROVIDED, EDGE PROTECTION COMPLYING WITH 1005.3.1 OR 1005.3.2 SHALL BE PROVIDED.

1005.3.1 CURB OR BARRIER. CURBS OR BARRIERS SHALL EXTEND 2 INCHES (51 MM) MINIMUM ABOVE THE SURFACE OF THE FISHING PIER OR PLATFORM.

1005.3.2 EXTENDED GROUND OR DECK SURFACE. THE GROUND OR DECK SURFACE SHALL EXTEND 12 INCHES (305 MM) MINIMUM BEYOND THE INSIDE FACE OF THE RAILING. TOE CLEARANCE SHALL BE PROVIDED AND SHALL BE 30 INCHES (760 MM) WIDE MINIMUM AND 9 INCHES (230 MM) MINIMUM ABOVE THE GROUND OR DECK SURFACE BEYOND THE RAILING.

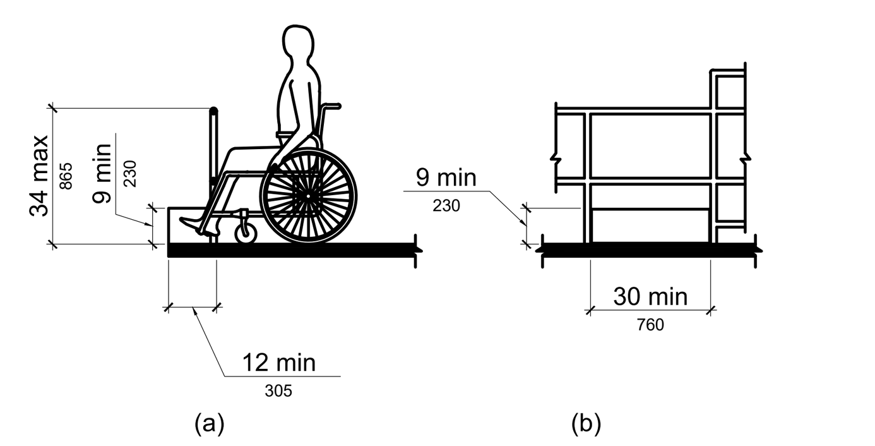

FIGURE 1005.3.2 EXTENDED GROUND OR DECK SURFACE AT FISHING PIERS AND PLATFORMS

1005.4 CLEAR FLOOR OR GROUND SPACE. AT EACH LOCATION WHERE THERE ARE RAILINGS, GUARDS, OR HANDRAILS COMPLYING WITH 1005.2.1, A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 SHALL BE PROVIDED. WHERE THERE ARE NO RAILINGS, GUARDS, OR HANDRAILS, AT LEAST ONE CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 SHALL BE PROVIDED ON THE FISHING PIER OR PLATFORM.

1005.5 TURNING SPACE. AT LEAST ONE TURNING SPACE COMPLYING WITH 304.3 SHALL BE PROVIDED ON FISHING PIERS AND PLATFORMS.

1006 GOLF FACILITIES

1006.1 GENERAL. GOLF FACILITIES SHALL COMPLY WITH 1006.

1006.2 ACCESSIBLE ROUTES. ACCESSIBLE ROUTES SERVING TEEING GROUNDS, PRACTICE TEEING GROUNDS, PUTTING GREENS, PRACTICE PUTTING GREENS, TEEING STATIONS AT DRIVING RANGES, COURSE WEATHER SHELTERS, GOLF CAR RENTAL AREAS, BAG DROP AREAS, AND COURSE TOILET ROOMS SHALL COMPLY WITH CHAPTER 4 AND SHALL BE 48 INCHES (1220 MM) WIDE MINIMUM. WHERE HANDRAILS ARE PROVIDED, ACCESSIBLE ROUTES SHALL BE 60 INCHES (1525 MM) WIDE MINIMUM.

EXCEPTION: HANDRAILS SHALL NOT BE REQUIRED ON GOLF COURSES. WHERE HANDRAILS ARE PROVIDED ON GOLF COURSES, THE HANDRAILS SHALL NOT BE REQUIRED TO COMPLY WITH 505.

1006.3 GOLF CAR PASSAGES. GOLF CAR PASSAGES SHALL COMPLY WITH 1006.3.

1006.3.1 CLEAR WIDTH. THE CLEAR WIDTH OF GOLF CAR PASSAGES SHALL BE 48 INCHES (1220 MM) MINIMUM.

1006.3.2 BARRIERS. WHERE CURBS OR OTHER CONSTRUCTED BARRIERS PREVENT GOLF CARS FROM ENTERING A FAIRWAY, OPENINGS 60 INCHES (1525 MM) WIDE MINIMUM SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 75 YARDS (69 M).

1006.4 WEATHER SHELTERS. A CLEAR FLOOR OR GROUND SPACE 60 INCHES (1525 MM) MINIMUM BY 96 INCHES (2440 MM) MINIMUM SHALL BE PROVIDED WITHIN WEATHER SHELTERS.

1007 MINIATURE GOLF FACILITIES

1007.1 GENERAL. MINIATURE GOLF FACILITIES SHALL COMPLY WITH 1007.

1007.2 ACCESSIBLE ROUTES. ACCESSIBLE ROUTES SERVING HOLES ON MINIATURE GOLF COURSES SHALL COMPLY WITH CHAPTER 4. ACCESSIBLE ROUTES LOCATED ON PLAYING SURFACES OF MINIATURE GOLF HOLES SHALL BE PERMITTED TO USE THE EXCEPTIONS IN 1007.2.

EXCEPTIONS:
1. PLAYING SURFACES SHALL NOT BE REQUIRED TO COMPLY WITH 302.2.
2. WHERE ACCESSIBLE ROUTES INTERSECT PLAYING SURFACES OF HOLES, A 1 INCH (25 MM) MAXIMUM CURB SHALL BE PERMITTED FOR A WIDTH OF 32 INCHES (815 MM) MINIMUM.
3. A SLOPE NOT STEEPER THAN 1:4 FOR A 4 INCH (100 MM) MAXIMUM RISE SHALL BE PERMITTED.
4. RAMP LANDING SLOPES SPECIFIED BY 405.7.1 SHALL BE PERMITTED TO BE 1:20 MAXIMUM.
5. RAMP LANDING LENGTH SPECIFIED BY 405.7.3 SHALL BE PERMITTED TO BE 48 INCHES (1220 MM) LONG MINIMUM.
6. RAMP LANDING SIZE SPECIFIED BY 405.7.4 SHALL BE PERMITTED TO BE 48 INCHES (1220 MM) MINIMUM BY 60 INCHES (1525 MM) MINIMUM.
7. HANDRAILS SHALL NOT BE REQUIRED ON HOLES. WHERE HANDRAILS ARE PROVIDED ON HOLES, THE HANDRAILS SHALL NOT BE REQUIRED TO COMPLY WITH 505.

1007.3 MINIATURE GOLF HOLES. MINIATURE GOLF HOLES SHALL COMPLY WITH 1007.3.

1007.3.1 START OF PLAY. A CLEAR FLOOR OR GROUND SPACE 48 INCHES (1220 MM) MINIMUM BY 60 INCHES (1525 MM) MINIMUM WITH SLOPES NOT STEEPER THAN 1:48 SHALL BE PROVIDED AT THE START OF PLAY.

1007.3.2 GOLF CLUB REACH RANGE AREA. ALL AREAS WITHIN HOLES WHERE GOLF BALLS REST SHALL BE WITHIN 36 INCHES (915 MM) MAXIMUM OF A CLEAR FLOOR OR GROUND SPACE 36 INCHES (915 MM) WIDE MINIMUM AND 48 INCHES (1220 MM) LONG MINIMUM HAVING A RUNNING SLOPE NOT STEEPER THAN 1:20. THE CLEAR FLOOR OR GROUND SPACE SHALL BE SERVED BY AN ACCESSIBLE ROUTE.

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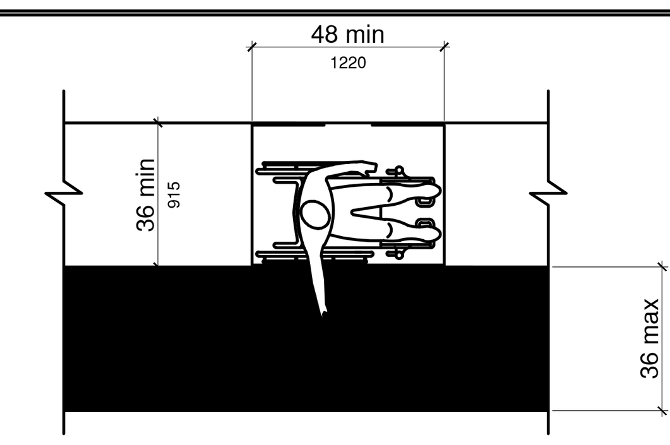

Note: Running Slope of Clear Floor or Ground Space Not Steeper Than 1:20

FIGURE 1007.3.2 GOLF CLUB REACH RANGE AREA

1008 Play Areas

1008.1 GENERAL. PLAY AREAS SHALL COMPLY WITH 1008.

1008.2 ACCESSIBLE ROUTES. ACCESSIBLE ROUTES SERVING PLAY AREAS SHALL COMPLY WITH CHAPTER 4 AND 1008.2 AND SHALL BE PERMITTED TO USE THE EXCEPTIONS IN 1008.2.1 THROUGH 1008.2.3. WHERE ACCESSIBLE ROUTES SERVE GROUND LEVEL PLAY COMPONENTS, THE VERTICAL CLEARANCE SHALL BE 80 INCHES HIGH (2030 MM) MINIMUM.

-**1008.2.1 GROUND LEVEL AND ELEVATED PLAY COMPONENTS.** ACCESSIBLE ROUTES SERVING GROUND LEVEL PLAY COMPONENTS AND ELEVATED PLAY COMPONENTS SHALL BE PERMITTED TO USE THE EXCEPTIONS IN 1008.2.1.

EXCEPTIONS:
1. TRANSFER SYSTEMS COMPLYING WITH 1008.3 SHALL BE PERMITTED TO CONNECT ELEVATED PLAY COMPONENTS EXCEPT WHERE 20 OR MORE ELEVATED PLAY COMPONENTS ARE PROVIDED NO MORE THAN 25 PERCENT OF THE ELEVATED PLAY COMPONENTS SHALL BE PERMITTED TO BE CONNECTED BY TRANSFER SYSTEMS.
2. WHERE TRANSFER SYSTEMS ARE PROVIDED, AN ELEVATED PLAY COMPONENT SHALL BE PERMITTED TO CONNECT TO ANOTHER ELEVATED PLAY COMPONENT AS PART OF AN ACCESSIBLE ROUTE.

1008.2.2 SOFT CONTAINED PLAY STRUCTURES. ACCESSIBLE ROUTES SERVING SOFT CONTAINED PLAY STRUCTURES SHALL BE PERMITTED TO USE THE EXCEPTION IN 1008.2.2.

EXCEPTION: TRANSFER SYSTEMS COMPLYING WITH 1008.3 SHALL BE PERMITTED TO BE USED AS PART OF AN ACCESSIBLE ROUTE.

1008.2.3 WATER PLAY COMPONENTS. ACCESSIBLE ROUTES SERVING WATER PLAY COMPONENTS SHALL BE PERMITTED TO USE THE EXCEPTIONS IN 1008.2.3.

EXCEPTIONS:
1. WHERE THE SURFACE OF THE ACCESSIBLE ROUTE, CLEAR FLOOR OR GROUND SPACES, OR TURNING SPACES SERVING WATER PLAY COMPONENTS IS SUBMERGED, COMPLIANCE WITH 302, 403.3, 405.2, 405.3, AND 1008.2.6 SHALL NOT BE REQUIRED.
2. TRANSFER SYSTEMS COMPLYING WITH 1008.3 SHALL BE PERMITTED TO CONNECT ELEVATED PLAY COMPONENTS IN WATER.

1008.2.4 CLEAR WIDTH. ACCESSIBLE ROUTES CONNECTING PLAY COMPONENTS SHALL PROVIDE A CLEAR WIDTH COMPLYING WITH 1008.2.4.

1008.2.4.1 GROUND LEVEL. AT GROUND LEVEL, THE CLEAR WIDTH OF ACCESSIBLE ROUTES SHALL BE 60 INCHES (1525 MM) MINIMUM.

EXCEPTIONS:
1. IN PLAY AREAS LESS THAN 1000 SQUARE FEET (93 M²), THE CLEAR WIDTH OF ACCESSIBLE ROUTES SHALL BE PERMITTED TO BE 44 INCHES (1120 MM) MINIMUM, IF AT LEAST ONE TURNING SPACE COMPLYING WITH 304.3 IS PROVIDED WHERE THE RESTRICTED ACCESSIBLE ROUTE EXCEEDS 30 FEET (9145 MM) IN LENGTH.
2. THE CLEAR WIDTH OF ACCESSIBLE ROUTES SHALL BE PERMITTED TO BE 36 INCHES (915 MM) MINIMUM FOR A DISTANCE OF 60 INCHES (1525 MM) MAXIMUM PROVIDED THAT MULTIPLE REDUCED WIDTH SEGMENTS ARE SEPARATED BY SEGMENTS THAT ARE 60 INCHES (1525 MM) WIDE MINIMUM AND 60 INCHES (1525 MM) LONG MINIMUM.

1008.2.4.2 ELEVATED. THE CLEAR WIDTH OF ACCESSIBLE ROUTES CONNECTING ELEVATED PLAY COMPONENTS SHALL BE 36 INCHES (915 MM) MINIMUM.

EXCEPTIONS:
1. THE CLEAR WIDTH OF ACCESSIBLE ROUTES CONNECTING ELEVATED PLAY COMPONENTS SHALL BE PERMITTED TO BE REDUCED TO 32 INCHES (815 MM) MINIMUM FOR A DISTANCE OF 24 INCHES (610 MM) MAXIMUM PROVIDED THAT REDUCED WIDTH SEGMENTS ARE SEPARATED BY SEGMENTS THAT ARE 48 INCHES (1220 MM) LONG MINIMUM AND 36 INCHES (915 MM) WIDE MINIMUM.
2. THE CLEAR WIDTH OF TRANSFER SYSTEMS CONNECTING ELEVATED PLAY COMPONENTS SHALL BE PERMITTED TO BE 24 INCHES (610 MM) MINIMUM.

1008.2.5 RAMPS. WITHIN PLAY AREAS, RAMPS CONNECTING GROUND LEVEL PLAY COMPONENTS AND RAMPS CONNECTING ELEVATED PLAY COMPONENTS SHALL COMPLY WITH 1008.2.5.

1008.2.5.1 GROUND LEVEL. RAMP RUNS CONNECTING GROUND LEVEL PLAY COMPONENTS SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 1:16.

1008.2.5.2 ELEVATED. THE RISE FOR ANY RAMP RUN CONNECTING ELEVATED PLAY COMPONENTS SHALL BE 12 INCHES (305 MM) MAXIMUM.

1008.2.5.3 HANDRAILS. WHERE REQUIRED ON RAMPS SERVING PLAY COMPONENTS, THE HANDRAILS SHALL COMPLY WITH 505 EXCEPT AS MODIFIED BY 1008.2.5.3.

EXCEPTIONS:
1. HANDRAILS SHALL NOT BE REQUIRED ON RAMPS LOCATED WITHIN GROUND LEVEL USE ZONES.
2. HANDRAIL EXTENSIONS SHALL NOT BE REQUIRED.

1008.2.5.3.1 HANDRAIL GRIPPING SURFACES. HANDRAIL GRIPPING SURFACES WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF 0.95 INCH (24 MM) MINIMUM AND 1.55 INCHES (39 MM) MAXIMUM. WHERE THE SHAPE OF THE GRIPPING SURFACE IS NON-CIRCULAR, THE HANDRAIL SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE.

1008.2.5.3.2 HANDRAIL HEIGHT. THE TOP OF HANDRAIL GRIPPING SURFACES SHALL BE 20 INCHES (510 MM) MINIMUM AND 28 INCHES (710 MM) MAXIMUM ABOVE THE RAMP SURFACE.

1008.2.6 GROUND SURFACES. GROUND SURFACES ON ACCESSIBLE ROUTES, CLEAR FLOOR OR GROUND SPACES, AND TURNING SPACES SHALL COMPLY WITH 1008.2.6.

1008.2.6.1 ACCESSIBILITY. GROUND SURFACES SHALL COMPLY WITH ASTM F 1951 (INCORPORATED BY REFERENCE, SEE "REFERENCED STANDARDS" IN CHAPTER 1). GROUND SURFACES SHALL BE INSPECTED AND MAINTAINED REGULARLY AND FREQUENTLY TO ENSURE CONTINUED COMPLIANCE WITH ASTM F 1951.

1008.2.6.2 USE ZONES. GROUND SURFACES LOCATED WITHIN USE ZONES SHALL COMPLY WITH ASTM F 1292 (1999 EDITION OR 2004 EDITION) (INCORPORATED BY REFERENCE, SEE "REFERENCED STANDARDS" IN CHAPTER 1).

1008.3 TRANSFER SYSTEMS. WHERE TRANSFER SYSTEMS ARE PROVIDED TO CONNECT TO ELEVATED PLAY COMPONENTS, TRANSFER SYSTEMS SHALL COMPLY WITH 1008.3.

1008.3.1 TRANSFER PLATFORMS. TRANSFER PLATFORMS SHALL BE PROVIDED WHERE TRANSFER IS INTENDED FROM WHEELCHAIRS OR OTHER MOBILITY AIDS. TRANSFER PLATFORMS SHALL COMPLY WITH 1008.3.1.

1008.3.1.1 SIZE. TRANSFER PLATFORMS SHALL HAVE LEVEL SURFACES 14 INCHES (355 MM) DEEP MINIMUM AND 24 INCHES (610 MM) WIDE MINIMUM.

1008.3.1.2 HEIGHT. THE HEIGHT OF TRANSFER PLATFORMS SHALL BE 11 INCHES (280 MM) MINIMUM AND 18 INCHES (455 MM) MAXIMUM MEASURED TO THE TOP OF THE SURFACE FROM THE GROUND OR FLOOR SURFACE.

1008.3.1.3 TRANSFER SPACE. A TRANSFER SPACE COMPLYING WITH 305.2 AND 305.3 SHALL BE PROVIDED ADJACENT TO THE TRANSFER PLATFORM. THE 48 INCH (1220 MM) LONG MINIMUM DIMENSION OF THE TRANSFER SPACE SHALL BE CENTERED ON AND PARALLEL TO THE 24 INCH (610 MM) LONG MINIMUM SIDE OF THE TRANSFER PLATFORM. THE SIDE OF THE TRANSFER PLATFORM SERVING THE TRANSFER SPACE SHALL BE UNOBSTRUCTED.

1008.3.1.4 TRANSFER SUPPORTS. AT LEAST ONE MEANS OF SUPPORT FOR TRANSFERRING SHALL BE PROVIDED.

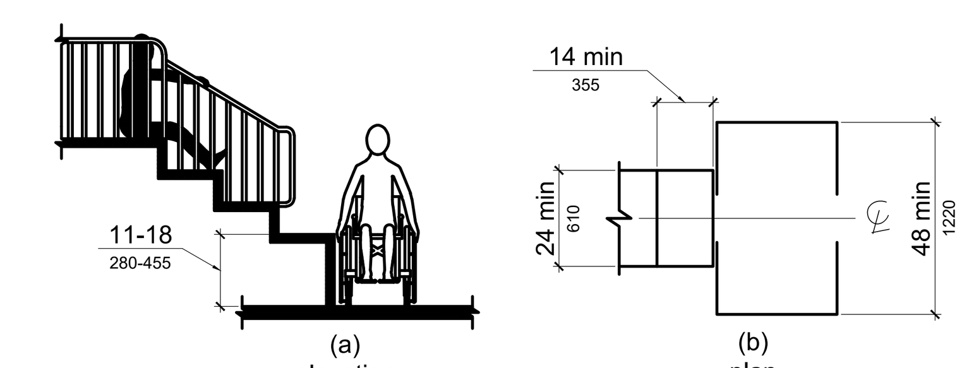

FIGURE 1008.3.1 TRANSFER PLATFORMS

1008.3.2 TRANSFER STEPS. TRANSFER STEPS SHALL BE PROVIDED WHERE MOVEMENT IS INTENDED FROM TRANSFER PLATFORMS TO LEVELS WITH ELEVATED PLAY COMPONENTS REQUIRED TO BE ON ACCESSIBLE ROUTES. TRANSFER STEPS SHALL COMPLY WITH 1008.3.2.

1008.3.2.1 SIZE. TRANSFER STEPS SHALL HAVE LEVEL SURFACES 14 INCHES (355 MM) DEEP MINIMUM AND 24 INCHES (610 MM) WIDE MINIMUM.

1008.3.2.2 HEIGHT. EACH TRANSFER STEP SHALL BE 8 INCHES (205 MM) HIGH MAXIMUM.

1008.3.2.3 TRANSFER SUPPORTS. AT LEAST ONE MEANS OF SUPPORT FOR TRANSFERRING SHALL BE PROVIDED.

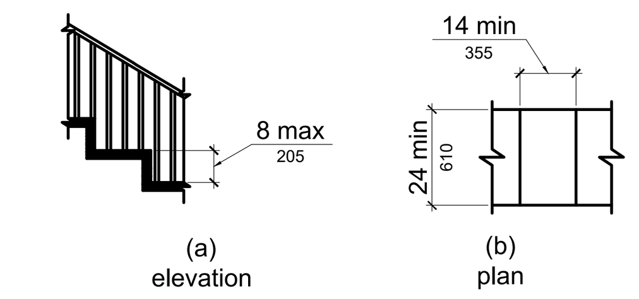

FIGURE 1008.3.2 TRANSFER STEPS

1008.4 PLAY COMPONENTS. GROUND LEVEL PLAY COMPONENTS ON ACCESSIBLE ROUTES AND ELEVATED PLAY COMPONENTS CONNECTED BY RAMPS SHALL COMPLY WITH 1008.4.

1008.4.1 TURNING SPACE. AT LEAST ONE TURNING SPACE COMPLYING WITH 304 SHALL BE PROVIDED ON THE SAME LEVEL AS PLAY COMPONENTS. WHERE SWINGS ARE PROVIDED, THE TURNING SPACE SHALL BE LOCATED IMMEDIATELY ADJACENT TO THE SWING.

1008.4.2 CLEAR FLOOR OR GROUND SPACE. CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305.2 AND 305.3 SHALL BE PROVIDED AT PLAY COMPONENTS.

CHILDREN'S REACH RANGES			
FORWARD OR SIDE REACH	AGES 3 AND 4	AGES 5 THROUGH 8	AGES 9 THROUGH 12
HIGH (MAXIMUM)	36 IN (915 MM)	40 IN (1015 MM)	44 IN (1120 MM)
LOW (MINIMUM)	20 IN (510 MM)	18 IN (455 MM)	16 IN (405 MM)

1008.4.3 PLAY TABLES. WHERE PLAY TABLES ARE PROVIDED, KNEE CLEARANCE 24 INCHES (610 MM) HIGH MINIMUM, 17 INCHES DEEP (430 MM) MINIMUM, AND 30 INCHES (760 MM) WIDE MINIMUM SHALL BE PROVIDED. THE TOPS OF RIMS, CURBS, OR OTHER OBSTRUCTIONS SHALL BE 31 INCHES (785 MM) HIGH MAXIMUM.

EXCEPTION: PLAY TABLES DESIGNED AND CONSTRUCTED PRIMARILY FOR CHILDREN 5 YEARS AND YOUNGER SHALL NOT BE REQUIRED TO PROVIDE KNEE CLEARANCE WHERE THE CLEAR FLOOR OR GROUND SPACE REQUIRED BY 1008.4.2 IS ARRANGED FOR A PARALLEL APPROACH.

1008.4.4 ENTRY POINTS AND SEATS. WHERE PLAY COMPONENTS REQUIRE TRANSFER TO ENTRY POINTS OR SEATS, THE ENTRY POINTS OR SEATS SHALL BE 11 INCHES (280 MM) MINIMUM AND 24 INCHES (610 MM) MAXIMUM FROM THE CLEAR FLOOR OR GROUND SPACE.

EXCEPTION: ENTRY POINTS OF SLIDES SHALL NOT BE REQUIRED TO COMPLY WITH 1008.4.4.

1008.4.5 TRANSFER SUPPORTS. WHERE PLAY COMPONENTS REQUIRE TRANSFER TO ENTRY POINTS OR SEATS, AT LEAST ONE MEANS OF SUPPORT FOR TRANSFERRING SHALL BE PROVIDED.

1009 SWIMMING POOLS, WADING POOLS, AND SPAS

1009.1 GENERAL. WHERE PROVIDED, POOL LIFTS, SLOPED ENTRIES, TRANSFER WALLS, TRANSFER SYSTEMS, AND POOL STAIRS SHALL COMPLY WITH 1009.

1009.2 POOL LIFTS. POOL LIFTS SHALL COMPLY WITH 1009.2.

1009.2.1 POOL LIFT LOCATION. POOL LIFTS SHALL BE LOCATED WHERE THE WATER LEVEL DOES NOT EXCEED 48 INCHES (1220 MM).

EXCEPTIONS:
1. WHERE THE ENTIRE POOL DEPTH IS GREATER THAN 48 INCHES (1220 MM), COMPLIANCE WITH 1009.2.1 SHALL NOT BE REQUIRED.
2. WHERE MULTIPLE POOL LIFT LOCATIONS ARE PROVIDED, NO MORE THAN ONE POOL LIFT SHALL BE REQUIRED TO BE LOCATED IN AN AREA WHERE THE WATER LEVEL IS 48 INCHES (1220 MM) MAXIMUM.

1009.2.2 SEAT LOCATION. IN THE RAISED POSITION, THE CENTERLINE OF THE SEAT SHALL BE LOCATED OVER THE DECK AND 16 INCHES (405 MM) MINIMUM FROM THE EDGE OF THE POOL. THE DECK SURFACE BETWEEN THE CENTERLINE OF THE SEAT AND THE POOL EDGE SHALL HAVE A SLOPE NOT STEEPER THAN 1:48.

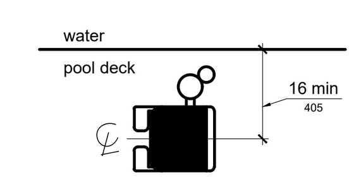

FIGURE 1009.2.2 POOL LIFT SEAT LOCATION

1009.2.3 CLEAR DECK SPACE. ON THE SIDE OF THE SEAT OPPOSITE THE WATER, A CLEAR DECK SPACE SHALL BE PROVIDED PARALLEL WITH THE SEAT. THE SPACE SHALL BE 36 INCHES (915 MM) WIDE MINIMUM AND SHALL EXTEND FORWARD 48 INCHES (1220 MM) MINIMUM FROM A LINE LOCATED 12 INCHES (305 MM) BEHIND THE REAR EDGE OF THE SEAT. THE CLEAR DECK SPACE SHALL HAVE A SLOPE NOT STEEPER THAN 1:48.

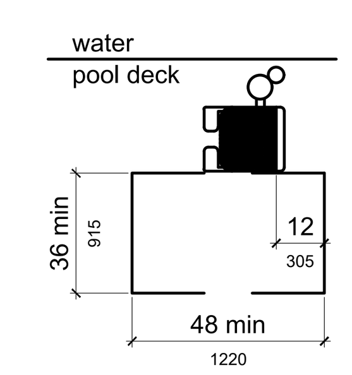

FIGURE 1009.2.3 CLEAR DECK SPACE AT POOL LIFTS

1009.2.4 SEAT HEIGHT. THE HEIGHT OF THE LIFT SEAT SHALL BE DESIGNED TO ALLOW A STOP AT 16 INCHES (405 MM) MINIMUM TO 19 INCHES (485 MM) MAXIMUM MEASURED FROM THE DECK TO THE TOP OF THE SEAT SURFACE WHEN IN THE RAISED (LOAD) POSITION.

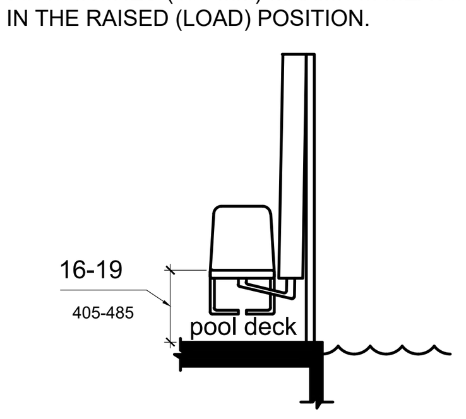

FIGURE 1009.2.4 POOL LIFT SEAT HEIGHT

1009.2.5 SEAT WIDTH. THE SEAT SHALL BE 16 INCHES (405 MM) WIDE MINIMUM.

1009.2.6 FOOTRESTS AND ARMRESTS. FOOTRESTS SHALL BE PROVIDED AND SHALL MOVE WITH THE SEAT. IF PROVIDED, THE ARMREST POSITIONED OPPOSITE THE WATER SHALL BE REMOVABLE OR SHALL FOLD CLEAR OF THE SEAT WHEN THE SEAT IS IN THE RAISED (LOAD) POSITION.

EXCEPTION: FOOTRESTS SHALL NOT BE REQUIRED ON POOL LIFTS PROVIDED IN SPAS.

1009.2.7 OPERATION. THE LIFT SHALL BE CAPABLE OF UNASSISTED OPERATION FROM BOTH THE DECK AND WATER LEVELS. CONTROLS AND OPERATING MECHANISMS SHALL BE UNOBSTRUCTED WHEN THE LIFT IS IN USE AND SHALL COMPLY WITH 309.4.

1009.2.8 SUBMERGED DEPTH. THE LIFT SHALL BE DESIGNED SO THAT THE SEAT WILL SUBMERGE TO A WATER DEPTH OF 18 INCHES (455 MM) MINIMUM BELOW THE STATIONARY WATER LEVEL.

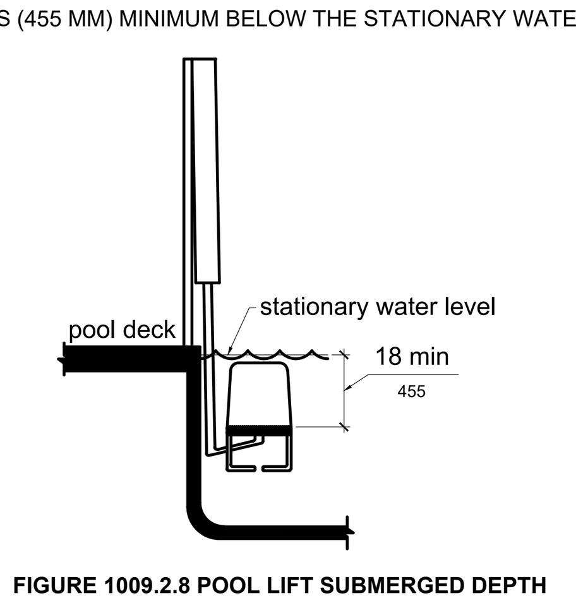

FIGURE 1009.2.8 POOL LIFT SUBMERGED DEPTH

1009.2.9 LIFTING CAPACITY. SINGLE PERSON POOL LIFTS SHALL HAVE A WEIGHT CAPACITY OF 300 POUNDS. (136 KG) MINIMUM AND BE CAPABLE OF SUSTAINING A STATIC LOAD OF AT LEAST ONE AND A HALF TIMES THE RATED LOAD.

1009.3 SLOPED ENTRIES. SLOPED ENTRIES SHALL COMPLY WITH 1009.3.

1009.3.1 SLOPED ENTRIES. SLOPED ENTRIES SHALL COMPLY WITH CHAPTER 4 EXCEPT AS MODIFIED IN 1109.3.1 THROUGH 1109.3.3.

EXCEPTION: WHERE SLOPED ENTRIES ARE PROVIDED, THE SURFACES SHALL NOT BE REQUIRED TO BE SLIP RESISTANT.

1009.3.2 SUBMERGED DEPTH. SLOPED ENTRIES SHALL EXTEND TO A DEPTH OF 24 INCHES (610 MM) MINIMUM AND 30 INCHES (760 MM) MAXIMUM BELOW THE STATIONARY WATER LEVEL. WHERE LANDINGS ARE REQUIRED BY 405.7, AT LEAST ONE LANDING SHALL BE LOCATED 24 INCHES (610 MM) MINIMUM AND 30 INCHES (760 MM) MAXIMUM BELOW THE STATIONARY WATER LEVEL.

EXCEPTION: IN WADING POOLS, THE SLOPED ENTRY AND LANDINGS, IF PROVIDED, SHALL EXTEND TO THE DEEPEST PART OF THE WADING POOL.

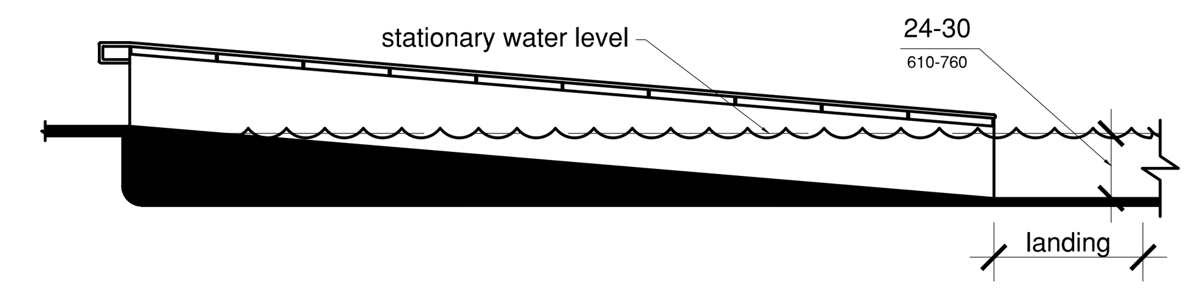

FIGURE 1009.3.2 SLOPED ENTRY SUBMERGED DEPTH

1009.3.3 HANDRAILS. AT LEAST TWO HANDRAILS COMPLYING WITH 505 SHALL BE PROVIDED ON THE SLOPED ENTRY. THE CLEAR WIDTH BETWEEN REQUIRED HANDRAILS SHALL BE 33 INCHES (840 MM) MINIMUM AND 38 INCHES (965 MM) MAXIMUM.

EXCEPTIONS:
1. HANDRAIL EXTENSIONS SPECIFIED BY 505.10.1 SHALL NOT BE REQUIRED AT THE BOTTOM LANDING SERVING A SLOPED ENTRY.
2. WHERE A SLOPED ENTRY IS PROVIDED FOR WAVE ACTION POOLS, LEISURE RIVERS, SAND BOTTOM POOLS, AND OTHER POOLS WHERE USER ACCESS IS LIMITED TO ONE AREA, THE HANDRAILS SHALL NOT BE REQUIRED TO COMPLY WITH THE CLEAR WIDTH REQUIREMENTS OF 1009.3.3.
3. SLOPED ENTRIES IN WADING POOLS SHALL NOT BE REQUIRED TO PROVIDE HANDRAILS COMPLYING WITH 1009.3.3. IF PROVIDED, HANDRAILS ON SLOPED ENTRIES IN WADING POOLS SHALL NOT BE REQUIRED TO COMPLY WITH 505.

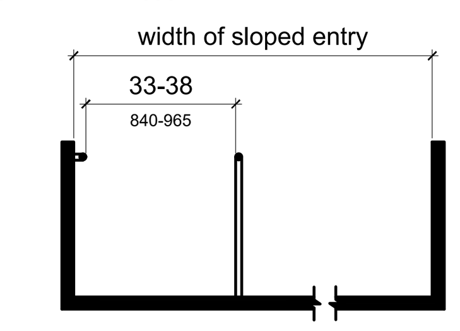

FIGURE 1009.3.3 HANDRAILS FOR SLOPED ENTRY

1009.4 TRANSFER WALLS. TRANSFER WALLS SHALL COMPLY WITH 1009.4.

1009.4.1 CLEAR DECK SPACE. A CLEAR DECK SPACE OF 60 INCHES (1525 MM) MINIMUM BY 60 INCHES (1525 MM) MINIMUM WITH A SLOPE NOT STEEPER THAN 1:48 SHALL BE PROVIDED AT THE BASE OF THE TRANSFER WALL. WHERE ONE GRAB BAR IS PROVIDED, THE CLEAR DECK SPACE SHALL BE CENTERED ON THE GRAB BAR. WHERE TWO GRAB BARS ARE PROVIDED, THE CLEAR DECK SPACE SHALL BE CENTERED ON THE CLEARANCE BETWEEN THE GRAB BARS.

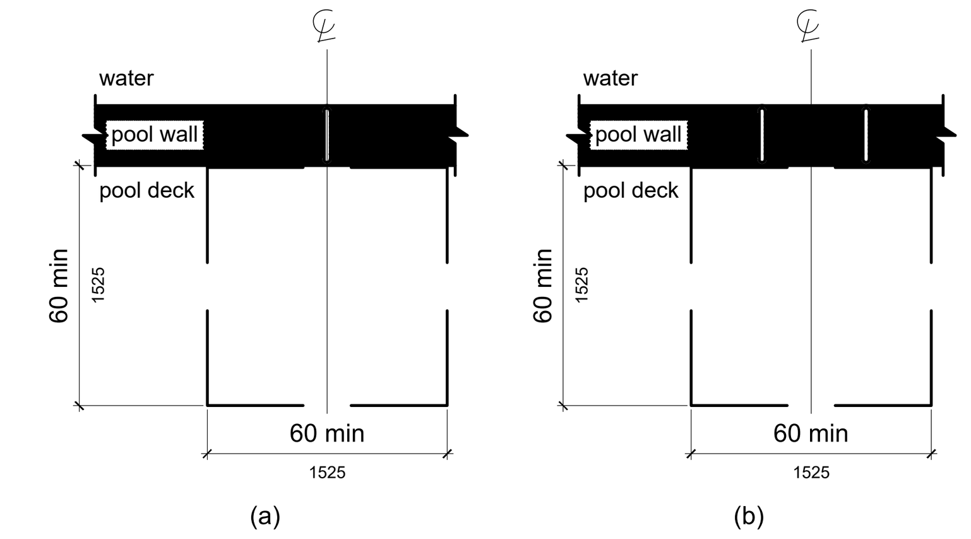

FIGURE 1009.4.1 CLEAR DECK SPACE AT TRANSFER WALLS

1009.4.2 HEIGHT. THE HEIGHT OF THE TRANSFER WALL SHALL BE 16 INCHES (405 MM) MINIMUM AND 19 INCHES (485 MM) MAXIMUM MEASURED FROM THE DECK.

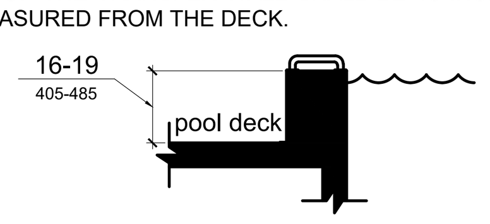

FIGURE 1009.4.2 TRANSFER WALL HEIGHT

1009.4.3 WALL DEPTH AND LENGTH. THE DEPTH OF THE TRANSFER WALL SHALL BE 12 INCHES (305 MM) MINIMUM AND 16 INCHES (405 MM) MAXIMUM. THE LENGTH OF THE TRANSFER WALL SHALL BE 60 INCHES (1525 MM) MINIMUM AND SHALL BE CENTERED ON THE CLEAR DECK SPACE.

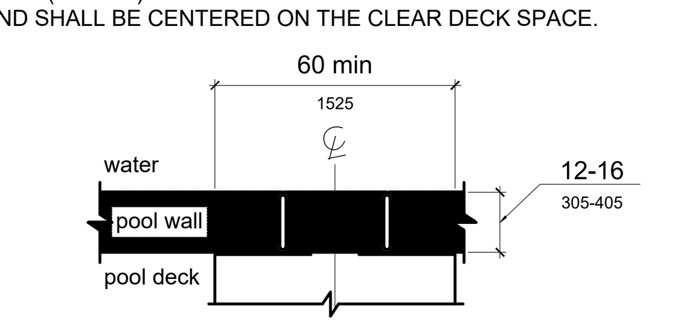

FIGURE 1009.4.3 DEPTH AND LENGTH OF TRANSFER WALLS

1009.4.4 SURFACE. SURFACES OF TRANSFER WALLS SHALL NOT BE SHARP AND SHALL HAVE ROUNDED EDGES.

1009.4.5 GRAB BARS. AT LEAST ONE GRAB BAR COMPLYING WITH 609 SHALL BE PROVIDED ON THE TRANSFER WALL. GRAB BARS SHALL BE PERPENDICULAR TO THE POOL WALL AND SHALL EXTEND THE FULL DEPTH OF THE TRANSFER WALL. THE TOP OF THE GRIPPING SURFACE SHALL BE 4 INCHES (100 MM) MINIMUM AND 6 INCHES (150 MM) MAXIMUM ABOVE TRANSFER WALLS. WHERE ONE GRAB BAR IS PROVIDED, CLEARANCE SHALL BE 24 INCHES (610 MM) MINIMUM ON BOTH SIDES OF THE GRAB BAR. WHERE TWO GRAB BARS ARE PROVIDED, CLEARANCE BETWEEN GRAB BARS SHALL BE 24 INCHES (610 MM) MINIMUM.

EXCEPTION: GRAB BARS ON TRANSFER WALLS SHALL NOT BE REQUIRED TO COMPLY WITH 609.4.

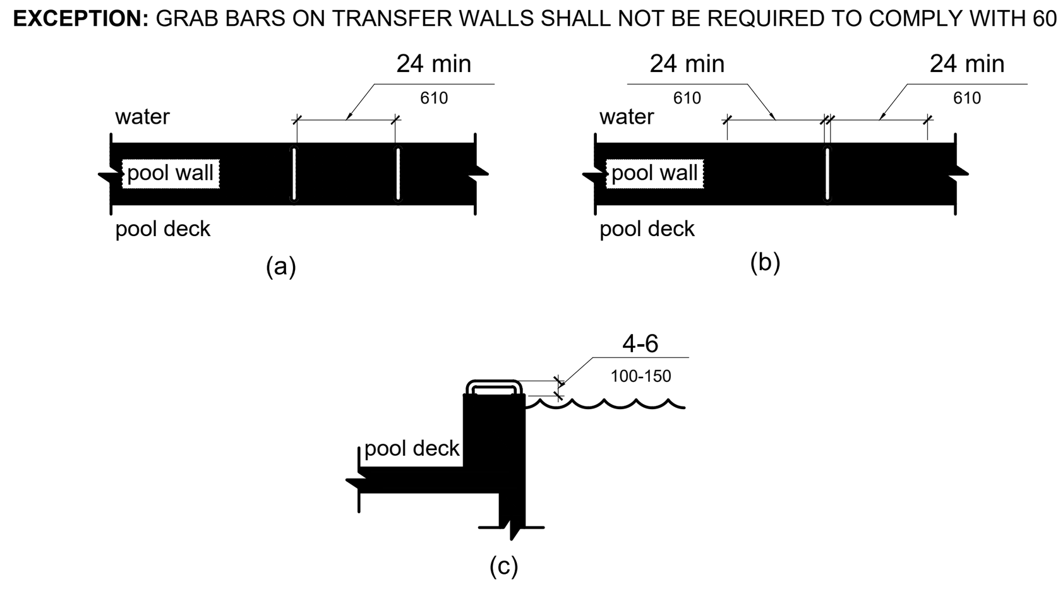

FIGURE 1009.4.5 GRAB BARS FOR TRANSFER WALLS

1009.5 TRANSFER SYSTEMS. TRANSFER SYSTEMS SHALL COMPLY WITH 1009.5.

1009.5.1 TRANSFER PLATFORM. A TRANSFER PLATFORM SHALL BE PROVIDED AT THE HEAD OF EACH TRANSFER SYSTEM. TRANSFER PLATFORMS SHALL PROVIDE 19 INCHES (485 MM) MINIMUM CLEAR DEPTH AND 24 INCHES (610 MM) MINIMUM CLEAR WIDTH.

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CADE L. SPELL
25311
STATE OF TEXAS

JANUARY 11, 2022

MEN'S TOILET & LOCKER ROOM RENOVATION
FOR THE
ORANGE COUNTY DRAINAGE DISTRICT
8081 OLD HIGHWAY 90 ORANGE, TEXAS 77630

ISSUE DATES:
BIDS & CONSTRUCTION
JANUARY 11, 2022

PREPARED BY: CLS

TAS-7
SHEET NO.

PROJECT NO. 2021-11

TEXAS ACCESSIBILITY STANDARDS

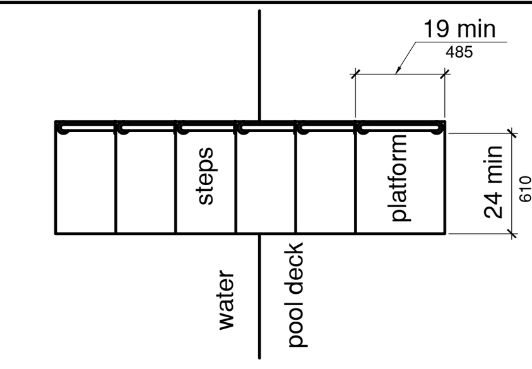


FIGURE 1009.5.1 SIZE OF TRANSFER PLATFORM

1009.5.2 TRANSFER SPACE. A TRANSFER SPACE OF 60 INCHES (1525 MM) MINIMUM BY 60 INCHES (1525 MM) MINIMUM WITH A SLOPE NOT STEEPER THAN 1:48 SHALL BE PROVIDED AT THE BASE OF THE TRANSFER PLATFORM SURFACE AND SHALL BE CENTERED ALONG A 24 INCH (610 MM) MINIMUM SIDE OF THE TRANSFER PLATFORM. THE SIDE OF THE TRANSFER PLATFORM SERVING THE TRANSFER SPACE SHALL BE UNOBSTRUCTED.

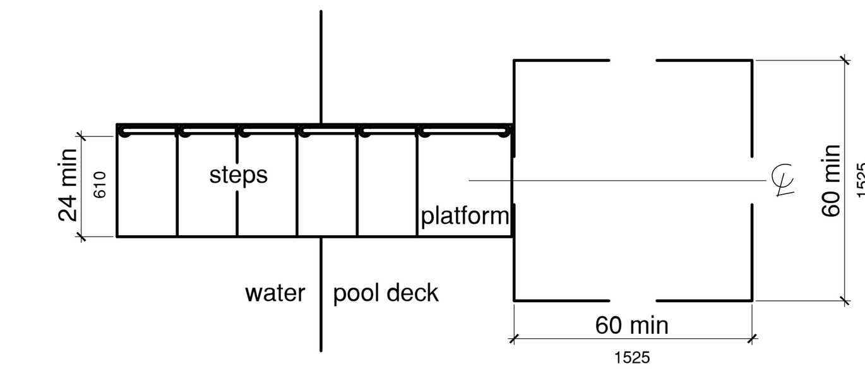


FIGURE 1009.5.2 CLEAR DECK SPACE AT TRANSFER PLATFORM

1009.5.3 HEIGHT. THE HEIGHT OF THE TRANSFER PLATFORM SHALL COMPLY WITH 1009.4.2.

1009.5.4 TRANSFER STEPS. TRANSFER STEP HEIGHT SHALL BE 8 INCHES (205 MM) MAXIMUM. THE SURFACE OF THE BOTTOM TREAD SHALL EXTEND TO A WATER DEPTH OF 18 INCHES (455 MM) MINIMUM BELOW THE STATIONARY WATER LEVEL.

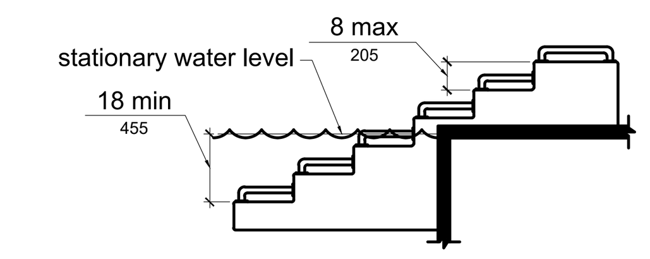


FIGURE 1009.5.4 TRANSFER STEPS

1009.5.5 SURFACE. THE SURFACE OF THE TRANSFER SYSTEM SHALL NOT BE SHARP AND SHALL HAVE ROUNDED EDGES.

1009.5.6 SIZE. EACH TRANSFER STEP SHALL HAVE A TREAD CLEAR DEPTH OF 14 INCHES (355 MM) MINIMUM AND 17 INCHES (430 MM) MAXIMUM AND SHALL HAVE A TREAD CLEAR WIDTH OF 24 INCHES (610 MM) MINIMUM.

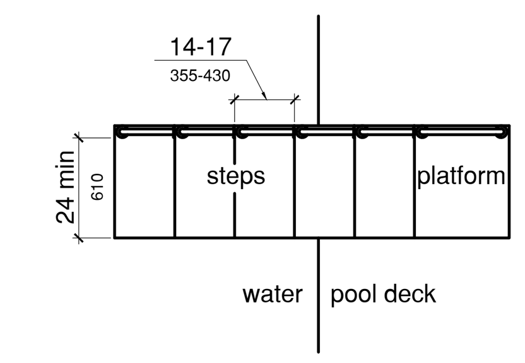
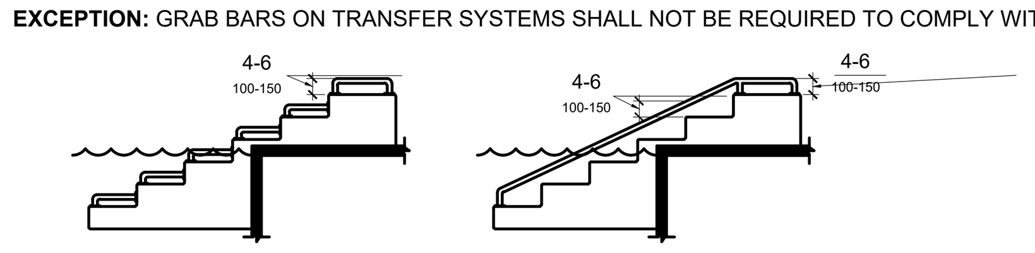


FIGURE 1009.5.6 SIZE OF TRANSFER STEPS

1009.5.7 GRAB BARS. AT LEAST ONE GRAB BAR ON EACH TRANSFER STEP AND THE TRANSFER PLATFORM OR A CONTINUOUS GRAB BAR SERVING EACH TRANSFER STEP AND THE TRANSFER PLATFORM SHALL BE PROVIDED. WHERE A GRAB BAR IS PROVIDED ON EACH STEP, THE TOPS OF GRIPPING SURFACES SHALL BE 4 INCHES (100 MM) MINIMUM AND 6 INCHES (150 MM) MAXIMUM ABOVE EACH STEP AND TRANSFER PLATFORM. WHERE A CONTINUOUS GRAB BAR IS PROVIDED, THE TOP OF THE GRIPPING SURFACE SHALL BE 4 INCHES (100 MM) MINIMUM AND 6 INCHES (150 MM) MAXIMUM ABOVE THE STEP NOSING AND TRANSFER PLATFORM. GRAB BARS SHALL COMPLY WITH 609 AND BE LOCATED ON AT LEAST ONE SIDE OF THE TRANSFER SYSTEM. THE GRAB BAR LOCATED AT THE TRANSFER PLATFORM SHALL NOT OBSTRUCT TRANSFER.

EXCEPTION: GRAB BARS ON TRANSFER SYSTEMS SHALL NOT BE REQUIRED TO COMPLY WITH 609.4.



(a) individual grab bars (b) continuous grab bars

FIGURE 1009.5.7 GRAB BARS

1009.6 POOL STAIRS. POOL STAIRS SHALL COMPLY WITH 1009.6.

1009.6.1 POOL STAIRS. POOL STAIRS SHALL COMPLY WITH 504.

EXCEPTION: POOL STEP RISER HEIGHTS SHALL NOT BE REQUIRED TO BE 4 INCHES (100 MM) HIGH MINIMUM AND 7 INCHES (180 MM) HIGH MAXIMUM PROVIDED THAT RISER HEIGHTS ARE UNIFORM.

1009.6.2 HANDRAILS. THE WIDTH BETWEEN HANDRAILS SHALL BE 20 INCHES (510 MM) MINIMUM AND 24 INCHES (610 MM) MAXIMUM. HANDRAIL EXTENSIONS REQUIRED BY 505.10.3 SHALL NOT BE REQUIRED ON POOL STAIRS.

1010 SHOOTING FACILITIES WITH FIRING POSITIONS

1010.1 TURNING SPACE. A CIRCULAR TURNING SPACE 60 INCHES (1525 MM) DIAMETER MINIMUM WITH SLOPES NOT STEEPER THAN 1:48 SHALL BE PROVIDED AT SHOOTING FACILITIES WITH FIRING POSITIONS.

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JANUARY 11, 2022

MEN'S TOILET & LOCKER ROOM RENOVATION FOR THE ORANGE COUNTY DRAINAGE DISTRICT

8081 OLD HIGHWAY 90 ORANGE, TEXAS 77630

ISSUE DATES:

BIDS & CONSTRUCTION
JANUARY 11, 2022

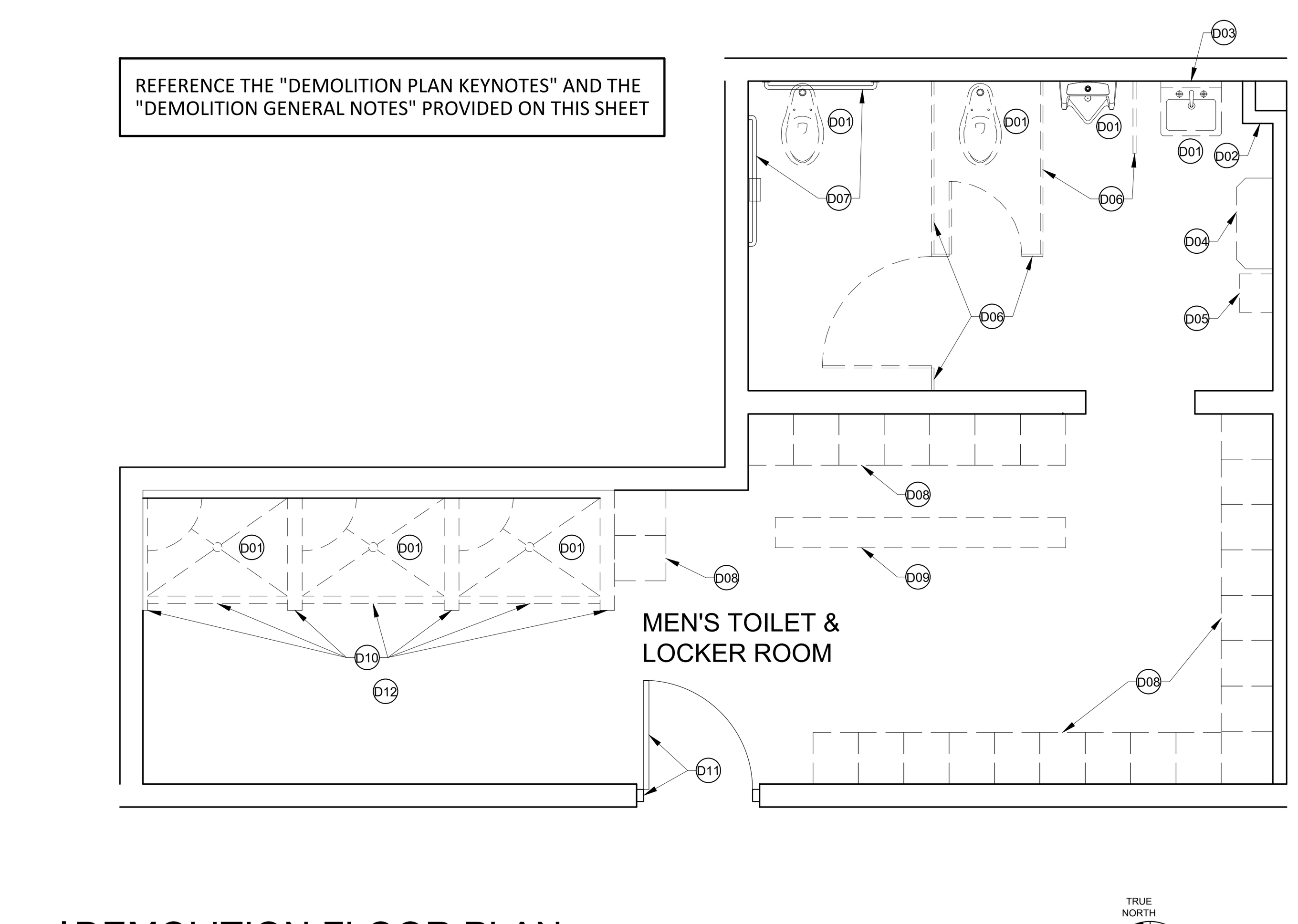
PREPARED BY: CLS

TAS-8
SHEET NO.

PROJECT NO. 2021-11

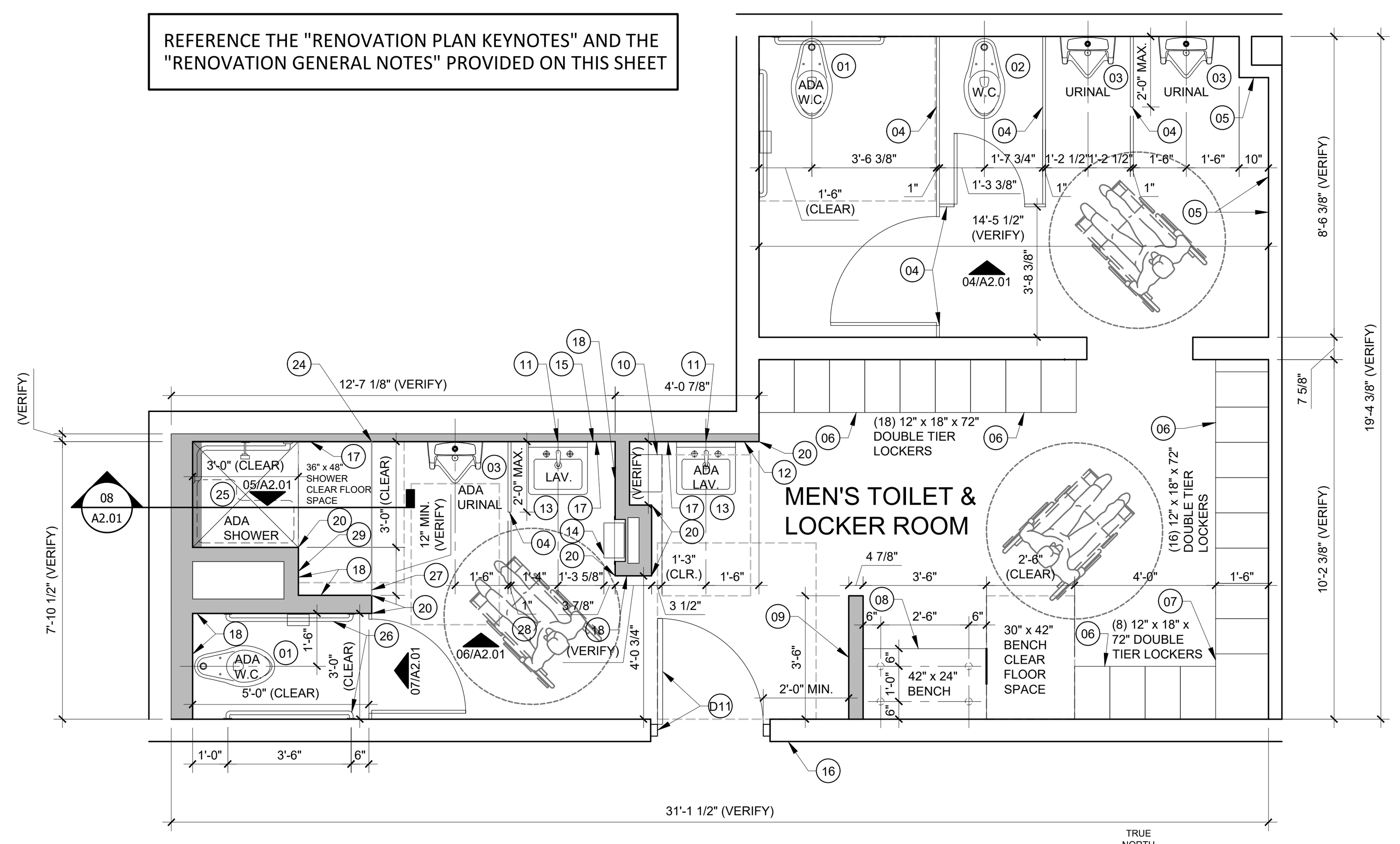
TEXAS ACCESSIBILITY STANDARDS

REFERENCE THE "DEMOLITION PLAN KEYNOTES" AND THE "DEMOLITION GENERAL NOTES" PROVIDED ON THIS SHEET



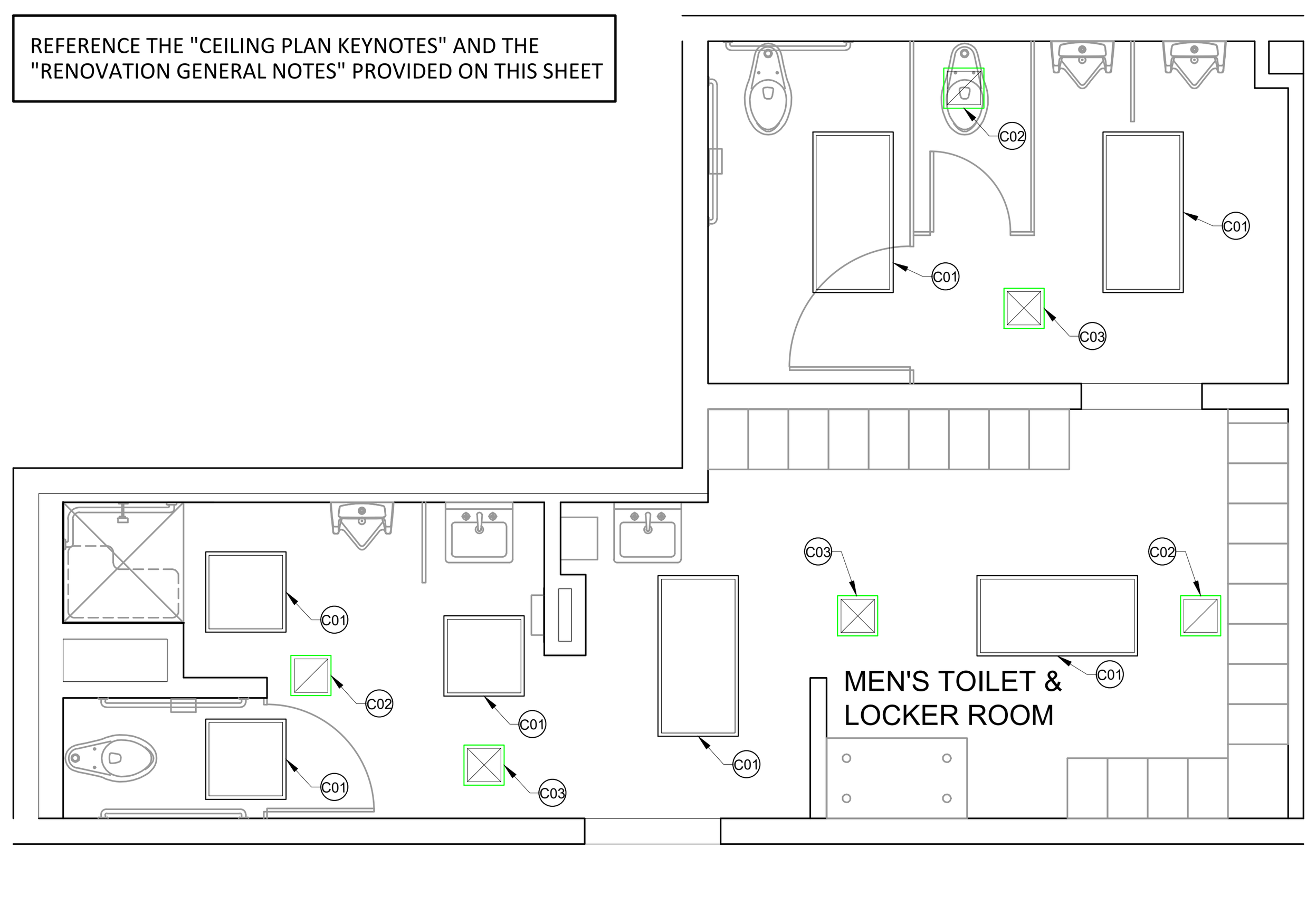
01 | DEMOLITION FLOOR PLAN
SCALE: 1/4" = 1'-0"

REFERENCE THE "RENOVATION PLAN KEYNOTES" AND THE "RENOVATION GENERAL NOTES" PROVIDED ON THIS SHEET



02 | RENOVATION FLOOR PLAN
SCALE: 1/4" = 1'-0"

REFERENCE THE "CEILING PLAN KEYNOTES" AND THE "RENOVATION GENERAL NOTES" PROVIDED ON THIS SHEET



03 | REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

DEMOLITION PLAN KEYNOTES

- D01 COMPLETELY REMOVE EXISTING PLUMBING FIXTURE SHOWN DASHED. REFERENCE M.E.P. DRAWINGS.
- D02 CAREFULLY REMOVE AND SALVAGE EXISTING SOAP DISPENSER FOR REUSE. REFERENCE RENOVATION FLOOR PLAN.
- D03 REMOVE EXISTING MIRROR.
- D04 REMOVE GLASS SHELF AND BRACKETS.
- D05 CAREFULLY REMOVE EXISTING PAPER TOWEL DISPENSER AND SAVE FOR REINSTALLATION. REFERENCE RENOVATION FLOOR PLAN.
- D06 COMPLETELY REMOVE EXISTING TOILET PARTITIONS SHOWN DASHED. PATCH FLOOR AND WALLS TO MATCH EXISTING CONSTRUCTION AS REQUIRED.
- D07 EXISTING GAB BARS TO REMAIN.
- D08 COMPLETELY REMOVE EXISTING METAL LOCKERS SHOWN DASHED. PATCH FLOOR AND WALLS WHERE REQUIRED TO MACH EXISTING CONSTRUCTION.
- D09 COMPLETELY REMOVE EXISTING FLOOR-MOUNTED BENCH. PATCH FLOOR AS REQUIRED TO MACH EXISTING CONSTRUCTION.
- D10 COMPLETELY REMOVE EXISTING SHOWERS AND PARTITIONS SHOWN DASHED. PATCH FLOOR AND WALLS AS REQUIRED TO MATCH EXISTING CONSTRUCTION. FLOOR PATCH SURFACE SHALL BE LEVEL WITH EXISTING ADJACENT FLOOR OUTSIDE OF EXISTING SHOWER AREA.
- D11 EXISTING DOOR AND FRAME TO REMAIN.
- D12 REMOVE EXISTING FLOOR DRAIN. REFERENCE M.E.P. DRAWINGS.

RENOVATION PLAN KEYNOTES

- 01 INSTALL NEW ADA WATER CLOSET WITH AUTOMATIC FLUSH VALVE AS SCHEDULED ON M.E.P. DRAWINGS. TOP OF SEAT SHALL BE 17" MIN. TO 19" MAX. A.F.F. PATCH WALL AND/OR FLOOR AS REQUIRED.
- 02 INSTALL NEW WATER CLOSET WITH AUTOMATIC FLUSH VALVE AS SCHEDULED ON M.E.P. DRAWINGS. PATCH WALL AND/OR FLOOR AS REQUIRED.
- 03 INSTALL NEW STALL-TYPE URINAL WITH AUTOMATIC FLUSH VALVE AS SCHEDULED ON M.E.P. DRAWINGS. PATCH WALL AND/OR FLOOR AS REQUIRED.
- 04 INSTALL NEW TOILET PARTITIONS AS SPECIFIED. PATCH WALLS AND/OR FLOOR AS REQUIRED. PROVIDE IN-WALL BLOCKING IN STUD WALLS IN THE LOCATIONS RECOMMENDED BY MANUFACTURER.
- 05 PATCH WALLS AS REQUIRED WHERE SOAP DISPENSER, GLASS SHELF, AND PAPER TOWEL DISPENSER WERE REMOVED.
- 06 INSTALL NEW DOUBLE TIER 12"x18"x72" HDPE LOCKERS WITH SLOPED TOP AS SPECIFIED. COLOR TO BE SELECTED BY OWNER. PROVIDE BLOCKING WHERE REQUIRED BY MANUFACTURER.
- 07 INSTALL HDPE FILLER PANEL (MATCHING LOCKERS) AT ENDS OF LOCKER RUN AS REQUIRED. PROVIDE BLOCKING AS REQUIRED.
- 08 INSTALL NEW 42" L x 24" W x 17.25" H ACCESSIBLE FLOOR-MOUNTED HDPE LOCKER ROOM BENCH AS SPECIFIED. COLOR TO BE SELECTED BY OWNER. INSTALL BENCH WITH 4 BLACK ALUMINUM PEDESTALS. TOP OF BENCH @ 17.25" A.F.F.
- 09 INSTALL NEW 3 5/8" 20 GAUGE METAL STUD FRAMED WALL WITH 5/8" THICK TYPE "X" MOISTURE-RESISTANT GYPSUM BOARD (BOTH SIDES) AS SPECIFIED. TOP OF WALL TERMINATES AT CEILING. TAPE, FLOAT, SAND, TEXTURE, PRIME, AND PAINT AS SPECIFIED.
- 10 INSTALL EXISTING RENOWN TOUCHLESS PAPER TOWEL DISPENSER. VERIFY DISPENSER WIDTH, DEPTH, AND REQUIRED MOUNTING CLEARANCES BEFORE CONSTRUCTING DISPENSER MOUNTING WALL. FRONT OF DISPENSER SHALL NOT PROJECT MORE THAN 4" FROM FACE OF WALL. ENSURE WIDTH OF WALL RECESS (WHERE DISPENSER WILL BE MOUNTED) PROVIDES THE MINIMUM CLEARANCES REQUIRED FOR PROPER OPERATION AND MAINTENANCE OF DISPENSER. INSTALL IN-WALL BLOCKING AS REQUIRED.
- 11 INSTALL NEW MIRROR AS SPECIFIED CENTERED ON LAVATORY WITH BOTTOM EDGE OF REFLECTING SURFACE @ 40" A.F.F. INSTALL IN-WALL BLOCKING AS REQUIRED.
- 12 INSTALL EXISTING SALVAGED GOJO WALL-MOUNT SOAP DISPENSER. REFERENCE DEMOLITION FLOOR PLAN. INSTALL IN-WALL BLOCKING AS REQUIRED.
- 13 INSTALL NEW ACCESSIBLE WALL-HUNG LAVATORY AS SCHEDULED ON M.E.P. DRAWINGS. TOP OF LAVATORY (RIM) TO BE 34" MAX. A.F.F. WATER SUPPLY AND DRAIN PIPES UNDER LAVATORY SHALL BE INSULATED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORY.
- 14 INSTALL NEW XLERATOR (XL-SB-1.1N-H-120) HAND DRYER AND RECESS KIT (40502) WITH BRUSHED STAINLESS STEEL FINISH AS NOTED ON M.E.P. DRAWINGS. BOTTOM OF HAND DRYER @ 37" A.F.F. BOTTOM OF ROUGH WALL OPENING FOR RECESS KIT SHALL BE 10" BELOW BOTTOM OF HAND DRYER (@ 27" A.F.F.).
- 15 INSTALL NEW GOJO WALL-MOUNT SOAP DISPENSER TO MATCH EXISTING SALVAGED DISPENSER. INSTALL IN-WALL BLOCKING AS REQUIRED.
- 16 INSTALL NEW ADA-COMPLIANT ROOM IDENTIFICATION SIGNAGE AS SPECIFIED. COLOR AND STYLE TO BE SELECTED BY OWNER.
- 17 INSTALL CERAMIC WALL TILE AS SPECIFIED OVER 5/8" THICK CEMENT BACKER BOARD OVER 1 1/2" 20 GAUGE FURRING HAT CHANNELS @ 12" O.C. ATTACHED TO EXISTING CMU WALL. REFERENCE INTERIOR ELEVATION FOR WALL TILE PATTERN. TILE COLORS TO BE SELECTED BY OWNER.
- 18 INSTALL CERAMIC WALL TILE AS SPECIFIED OVER 5/8" THICK CEMENT BACKER BOARD OVER 20 GAUGE METAL STUDS @ 16" O.C. REFERENCE INTERIOR ELEVATION FOR WALL TILE PATTERN. TILE COLORS TO BE SELECTED BY OWNER.
- 19 CLEAN AND PAINT EXISTING DOOR AND FRAME.
- 20 INSTALL SCHLUTER QUADEC EDGE PROTECTION PROFILE WITH BRUSHED NICKEL ANODIZED FINISH AT ALL VERTICAL OUTSIDE CORNERS OF TILED WALLS.
- 21 INSTALL SCHLUTER JOLLY EDGE PROTECTION PROFILE WITH BRUSHED NICKEL ANODIZED FINISH TO CAP TOP OF TILE AT ALL HORIZONTAL LOCATIONS WHERE TILED WALL TRANSITIONS TO PAINTED GYPSUM BOARD WALL ABOVE.
- 22 INSTALL SCHLUTER DILEX-AHKA COVE-SHAPED PROFILE WITH BRUSHED NICKEL ANODIZED FINISH ALONG BOTTOM OF TILED WALLS WHERE WALL MEETS THE EXISTING FLOOR.
- 23 INSTALL SCHLUTER DILEX-AHK COVE-SHAPED PROFILE WITH BRUSHED NICKEL ANODIZED FINISH ALONG BOTTOM OF TILED WALLS AT SHOWER WHERE WALL MEETS NEW FLOOR TILE.
- 24 COVE-SHAPED WALL-TO-FLOOR TRANSITION PIECES SHALL HAVE MATCHING PROFILES AND ALIGN WHERE SCHLUTER DILEX-AHK (AT TILED FLOOR AREAS) MEET DILEX-AHKA (AT EXISTING FLOOR AREAS). TOP OF TILED FLOOR AREAS SHALL BE LEVEL WITH TOP OF EPOXY PAINTED FLOOR FINISH SURFACE OF EXISTING FLOOR AREAS WHERE THE TWO MEET.
- 25 INSTALL NEW SHOWER SYSTEMS KIT AS SCHEDULED ON M.E.EP. DRAWINGS. INSTALL NEW SHOWER SEAT, GRAB BARS, ROD, AND SHOWER CURTAIN AS SPECIFIED. INSTALL SCHLUTER-KERDI LINE DRAIN, WATERPROOF MEMBRANE, BAND, AND SHOWER COMPONENTS AS SPECIFIED AND DETAILED. REFERENCE 08/A2.01 & 09/A2.01.
- 26 INSTALL TWO 42" LONG GRAB BARS ON SIDE WALLS OF AMBULATORY ACCESSIBLE TOILET COMPARTMENT, LOCATED 12" FROM REAR WALL AND EXTENDING 54" FROM REAR WALL. PROVIDE 54" L x 12" H MIN. IN-WALL BLOCKING (CENTERED ON GRAB BAR) AT STUD WALLS. TOP OF GRAB BAR GRIPPING SURFACE SHALL BE INSTALLED 33" MIN. TO 36" MAX. A.F.F.
- 27 STOP TILE FLOOR EVEN WITH END OF WING WALL. TOP OF TILED FLOOR SURFACE SHALL BE LEVEL WITH TOP OF EPOXY PAINTED FLOOR FINISH SURFACE WHERE THE TWO MEET.
- 28 INSTALL NEW FLOOR DRAIN AS SCHEDULED AND SPECIFIED ON M.E.P. DRAWINGS. SAW CUT AND REMOVE EXISTING CONCRETE AROUND NEW DRAIN LOCATION AS REQUIRED. INSTALL NEW CONCRETE WITH POSITIVE SLOPE TOWARD DRAIN. SLOPED CONCRETE SURFACE SURROUNDING DRAIN SHALL NOT EXCEED 1:48 IN ANY DIRECTION.
- 29 INSTALL TOWEL HOOK AS SPECIFIED 40" MIN. TO 48" MAX. A.F.F. CONFIRM INSTALLATION LOCATION WITH OWNER PRIOR TO INSTALLATION OF IN-WALL BLOCKING. PROVIDE 16" L x 6" H MIN. IN-WALL BLOCKING (CENTERED ON TOWEL HOOK) AT STUD WALL.

CEILING PLAN KEYNOTES

- C01 NEW RECESSED LED LIGHT FIXTURE AS SCHEDULED ON M.E.P. DRAWINGS. PATCH CEILING AROUND LIGHT FIXTURE AS REQUIRED TO MATCH EXISTING CONSTRUCTION. TAPE, FLOAT, SAND, TEXTURE, PRIME, AND PAINT CEILING AS SPECIFIED.
- C02 NEW CEILING EXHAUST FAN AS SCHEDULED ON M.E.P. DRAWINGS. PATCH CEILING AROUND EXHAUST FAN AS REQUIRED TO MATCH EXISTING CONSTRUCTION. TAPE, FLOAT, SAND, TEXTURE, PRIME, AND PAINT CEILING AS SPECIFIED.
- C03 NEW SUPPLY AIR GRILLE AS SCHEDULED ON M.E.P. DRAWINGS. PATCH CEILING AROUND SUPPLY AIR GRILLE AS REQUIRED TO MATCH EXISTING CONSTRUCTION. TAPE, FLOAT, SAND, TEXTURE, PRIME, AND PAINT CEILING AS SPECIFIED. REMOVE GLASS SHELF AND BRACKETS.

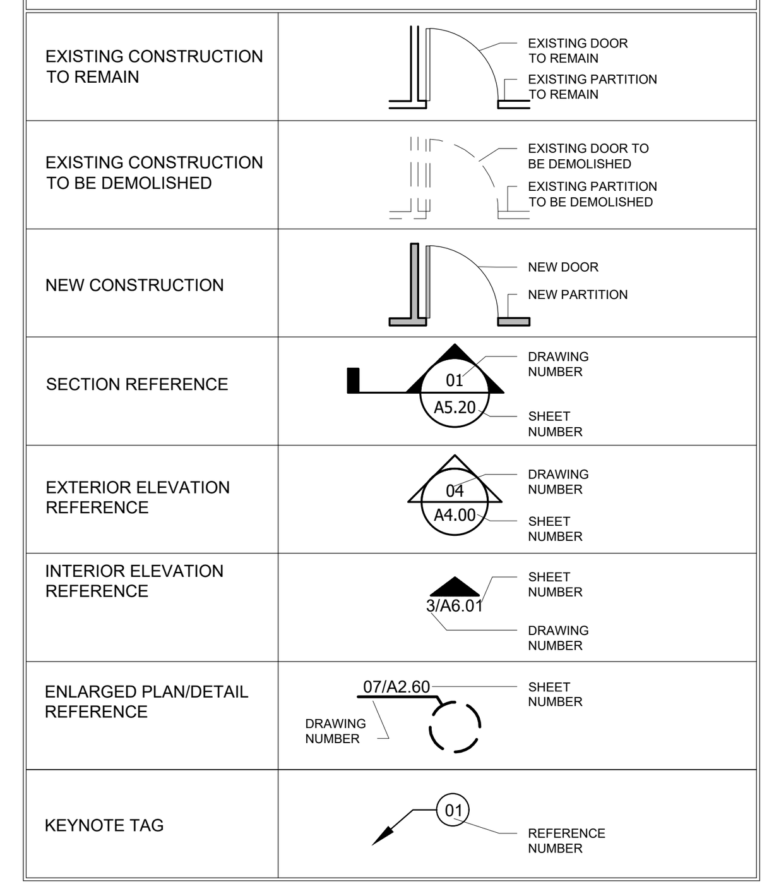
DEMOLITION GENERAL NOTES

1. ALL EXISTING CMU WALLS ARE TO REMAIN.
2. EXISTING FLOOR DRAINS REQUIRED TO REMAIN IN SERVICE SHALL BE PROTECTED DURING DEMOLITION AND CONSTRUCTION AS REQUIRED.
3. REFERENCE M.E.P. DRAWINGS FOR THE LOCATION OF EXISTING FLOOR DRAIN REQUIRED TO BE REMOVED.
4. ALL EXISTING FIRE ALARM DEVICES SHALL BE PROTECTED FROM DAMAGE DURING DEMOLITION AND CONSTRUCTION ACTIVITIES. REFERENCE M.E.P. DRAWINGS FOR THE LOCATIONS OF FIRE ALARM DEVICES TO BE REMOVED AND REINSTALLED BACK ONCE RENOVATION OF EXISTING WALLS AND CEILING IS COMPLETE.
5. REMOVE ALL EXISTING LIGHT FIXTURES. REFERENCE M.E.P. DRAWINGS.
6. REMOVE EXISTING EXHAUST FANS AND VENTS. REFERENCE M.E.P. DRAWINGS.
7. REMOVE ALL EXISTING RUBBER WALL BASE.
8. REFERENCE M.E.P. DRAWINGS FOR ALL MECHANICAL, ELECTRICAL, AND PLUMBING ITEMS TO BE REMOVED.
9. REMOVE EXISTING FLOOR COATING AS REQUIRED TO MAKE READY FOR INSTALLATION OF NEW SLIP-RESISTANT EPOXY FLOOR COATING. FOLLOW EPOXY FLOOR COATING MANUFACTURER'S SURFACE PREPARATION REQUIREMENTS.

BID ALTERNATE #1:

INSTALL PREFABRICATED SHOWER UNIT AS SCHEDULED ON MEP DRAWINGS IN LIEU OF TILED SHOWER, LINE DRAIN SYSTEM, AND TILED FLOOR. REF. "SH-1R ADA (ALTERNATE #1) ON SHEET P.2 PLUMBING FIXTURE SCHEDULE. FOLLOW SHOWER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ADJUST FRAMING DIMENSIONS AS NECESSARY TO PROVIDE REQUIRED SHOWER ROUGH OPENING. PROVIDE SLAB RECESS AS REQUIRED TO ENSURE FLOOR-TO-SHOWER FLOOR TRANSITION, INCLUDING THRESHOLD, COMPLIES WITH SECTION 303 OF THE 2012 TEXAS ACCESSIBILITY STANDARDS (REF. SHEET TAS-1). TILED FLOOR AREA OUTSIDE OF SHOWER, AS DETAILED ON 08/A2.01, IS NOT REQUIRED.

SYMBOLS LEGEND

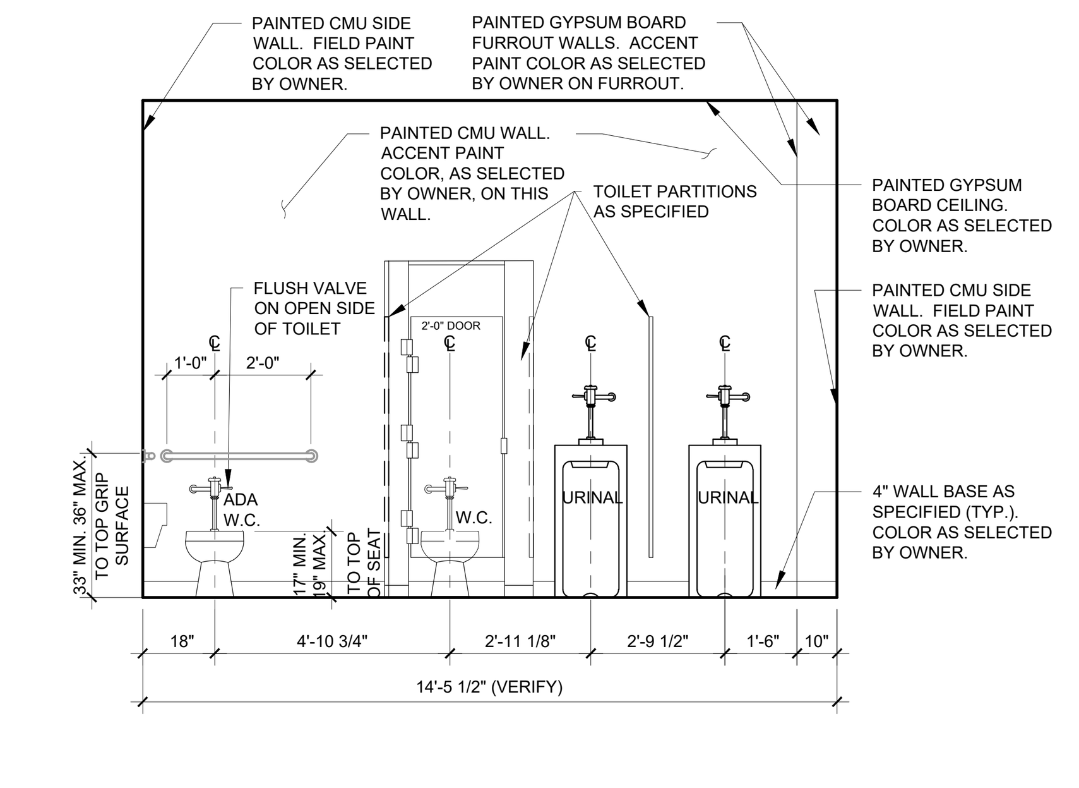


PROJECT GENERAL NOTES

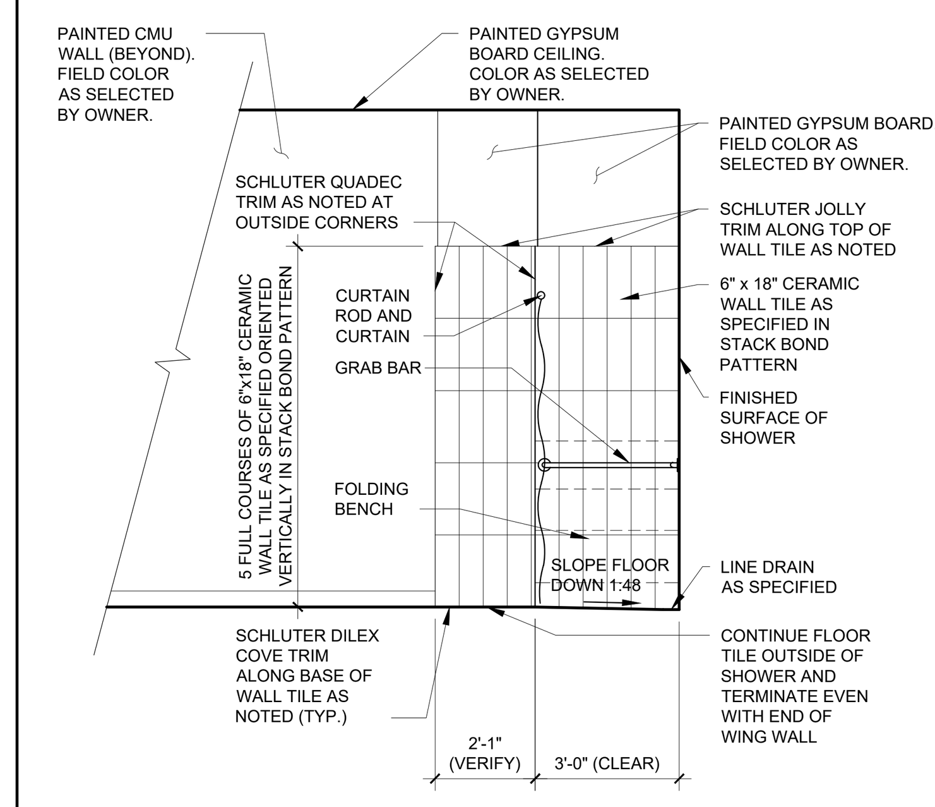
1. THE DEMOLITION PLAN IS PROVIDED TO ASSIST THE CONTRACTOR IN BETTER UNDERSTANDING THE PROJECT'S SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY EXISTING CONDITIONS AND TO COORDINATE ALL DEMOLITION WORK WITH THE PROPOSED PLANS AND INFORMATION SHOWN IN THE CONTRACT DOCUMENTS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT SHOULD THE CONTRACTOR SUSPECT THAT THE EXISTING CONDITIONS ARE NOT COMPATIBLE WITH THE INTENT OF THE CONTRACT DOCUMENTS.
2. ALL DEMOLISHED MATERIALS SHALL BE DISPOSED OF IN A MANNER THAT IS APPROVED BY LOCAL ORDINANCES AND CODES. ALL DISPOSAL FEES SHALL BE PAID BY THE CONTRACTOR.
3. ALL EXISTING CONSTRUCTION AND MATERIALS INTENDED TO REMAIN SHALL BE PROTECTED. ANY DAMAGE TO EXISTING CONSTRUCTION OR MATERIALS INTENDED TO REMAIN, RESULTING FROM DEMOLITION OR CONSTRUCTION ACTIVITIES, SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AND RETURNED TO THE OWNER IN ITS ORIGINAL, UNDAMAGED CONDITION.
4. THE DESIGNATED WORK AREA (MEN'S TOILET AND LOCKER ROOM) IS PART OF AN ACTIVE MAINTENANCE SHOP BUILDING. THIS BUILDING WILL BE OPERATIONAL DURING CONSTRUCTION AND THE SITE AND OTHER BUILDINGS WILL CONTINUE TO BE USED BY THE ORANGE COUNTY DRAINAGE DISTRICT WHILE CONSTRUCTION ACTIVITIES ARE BEING CARRIED OUT FOR THIS BUILDING. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER ANY CONSTRUCTION ACTIVITIES THAT WILL AFFECT THE DAY-TO-DAY OPERATIONS OF, ACCESS TO, OR USABILITY OF THE BUILDING, THE SITE, AND PARKING AREAS. THE CONTRACTOR SHALL INFORM THE OWNER OF THE AREAS THAT WILL BE AFFECTED BY CONSTRUCTION ACTIVITIES AND THE ANTICIPATED DURATION FOR EACH CONSTRUCTION ACTIVITY PRIOR TO ITS COMMENCEMENT.
5. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO KEEP THE CONSTRUCTION AREAS AND PREMISES CLEAN AND CLEAR OF ALL TRASH, DEBRIS, AND RUBBISH CAUSED BY CONSTRUCTION ACTIVITIES.
6. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AREAS OF THE SITE THAT CAN BE USED FOR LAY-DOWN OR ONSITE STORAGE, JOB TRAILER, DUMPSTER LOCATION, ETC.
7. DIMENSIONS ARE SHOWN FROM FACE OF STUD TO FACE OF STUD UNLESS OTHERWISE NOTED.
8. GENERAL CONTRACTOR SHALL PROVIDE IN-WALL BLOCKING/BACKING AS NEEDED TO PROPERLY ATTACH ALL WALL-MOUNTED COMPONENTS INCLUDING, BUT NOT LIMITED TO, GRAB BARS, TOILET ACCESSORIES, PLUMBING FIXTURES, LOCKERS, DISPENSERS, MIRRORS, ETC.
9. REFER TO THE ELECTRICAL DRAWINGS FOR LOCATIONS OF ALL ELECTRICAL OUTLETS AND LIGHT FIXTURES.
10. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY ROUGH-IN DIMENSIONS AND MECHANICAL, PLUMBING, AND POWER REQUIREMENTS FOR ALL EQUIPMENT AND DEVICES TO BE INSTALLED AS PART OF THIS CONTRACT.
11. ALL NEW PROJECT SIGNAGE SHALL COMPLY WITH THE 2012 TEXAS ACCESSIBILITY STANDARDS.

RENOVATION GENERAL NOTES

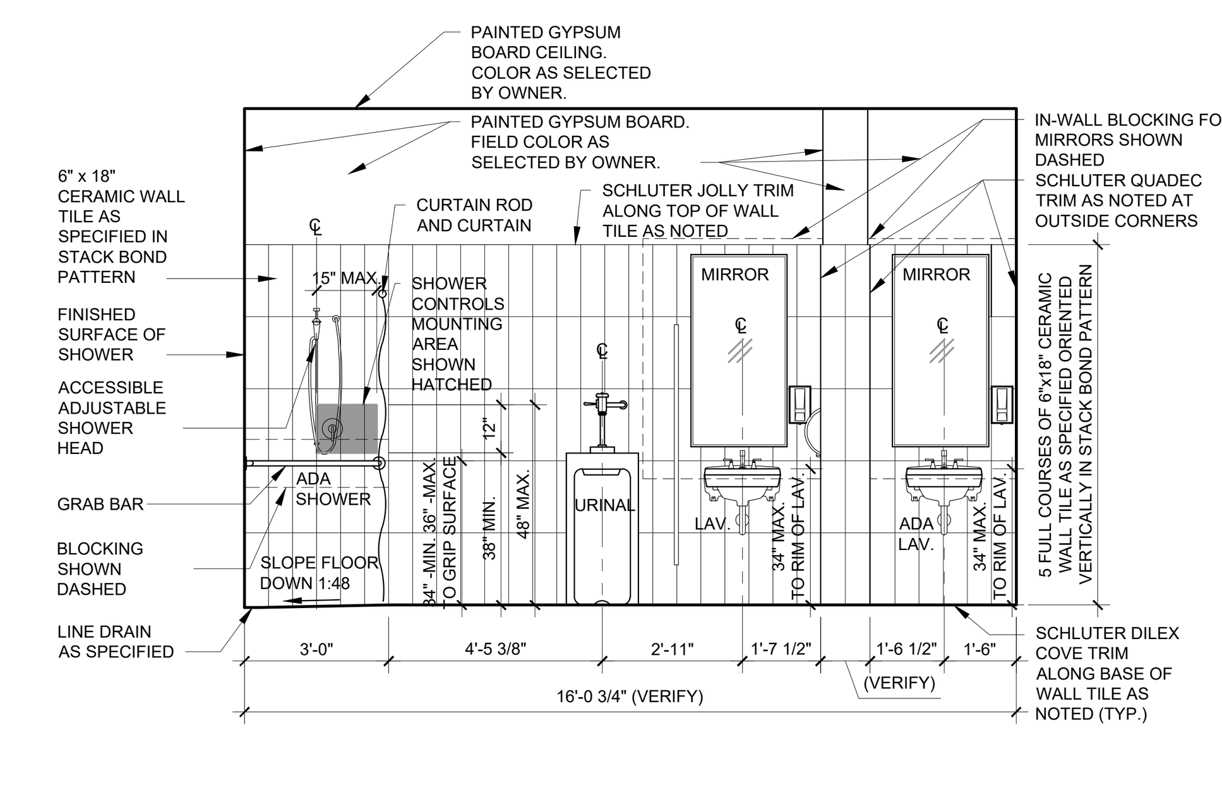
1. ALL FLOOR PLAN DIMENSIONS ARE PROVIDED TO THE FINISHED WALL SURFACE OR CENTER OF FIXTURE UNLESS OTHERWISE NOTED.
2. INSTALL NEW PLUMBING (WATER, DRAIN, & VENT) LINES AS REQUIRED TO SERVE ALL NEW PLUMBING FIXTURES. SAW CUT AND PATCH EXISTING WALLS, FLOOR, AND/OR CEILING TO MATCH EXISTING CONSTRUCTION AS REQUIRED. REFERENCE M.E.P. DRAWINGS.
3. CLEAN AND PAINT ALL CEILING SURFACES AND WALL SURFACES NOT RECEIVING TILE, AS SPECIFIED. ADHERE TO PAINT MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SURFACE PREPARATION REQUIREMENTS. PAINT COLORS TO BE SELECTED BY OWNER.
4. REFERENCE M.E.P. DRAWINGS FOR NEW LIGHT FIXTURES TO BE INSTALLED. PATCH CEILINGS WHERE EXISTING LIGHT FIXTURES WERE REMOVED.
5. INSTALL NEW SLIP-RESISTANT EPOXY FLOOR COATING THROUGHOUT TOILET AND LOCKER ROOM AS SPECIFIED AND IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. REFER TO EPOXY FLOOR COATING MANUFACTURER'S "PRODUCT INFORMATION" AND "APPLICATION BULLETIN" FOR REQUIRED SURFACE PREPARATION, TINTING, APPLICATION CONDITIONS, AND APPLICATION EQUIPMENT. INSTALL MANUFACTURER'S RECOMMENDED ADDITIVE FOR SLIP-RESISTANCE AS SPECIFIED.
6. WATER BASED EPOXY FLOOR COATING SURFACE PREPARATIONS:
   - SURFACE MUST BE CLEAN, DRY, AND IN SOUND CONDITION. REMOVE ALL OIL, DUST, GREASE, DIRT, LOOSE RUST, AND OTHER FOREIGN MATERIAL TO ENSURE ADEQUATE ADHESION.
   - **DO NOT USE HYDROCARBON SOLVENTS FOR CLEANING.**
   - **CONCRETE AND MASONRY**
     FOR SURFACE PREPARATION, REFER TO SSPC-SP13/NACE 6, OR ICRI NO. 310.2R, CSP 1-3. SURFACES SHOULD BE THOROUGHLY CLEAN AND DRY. CONCRETE AND MORTAR MUST BE CURED AT LEAST 28 DAYS @ 75°F (24°C). REMOVE ALL LOOSE MORTAR AND FOREIGN MATERIAL. SURFACE MUST BE FREE OF LAITANCE, CONCRETE DUST, DIRT, FORM RELEASE AGENTS, MOISTURE CURING MEMBRANES, LOOSE CEMENT AND HARDENERS. FILL BUG HOLES, AIR POCKETS AND OTHER VOIDS WITH STEEL-SEAM FT910. PRIMER REQUIRED.
   - **FOLLOW THE STANDARD METHODS LISTED BELOW WHEN APPLICABLE:**
     ASTM D4258 STANDARD PRACTICE FOR CLEANING CONCRETE.
     ASTM D4259 STANDARD PRACTICE FOR ABRADING CONCRETE.
     ASTM D4260 STANDARD PRACTICE FOR ETCHING CONCRETE.
     ASTM F1869 STANDARD TEST METHOD FOR MEASURING MOISTURE VAPOR
     EMISSION RATE OF CONCRETE.
     SSPC-SP 13/NACE 6 SURFACE PREPARATION OF CONCRETE.
     ICRI NO. 310.2R CONCRETE SURFACE PREPARATION.
   - **PREVIOUSLY PAINTED SURFACES**
     IF IN SOUND CONDITION, CLEAN THE SURFACE OF ALL FOREIGN MATERIAL. SMOOTH, HARD OR GLOSSY COATINGS AND SURFACES SHOULD BE DULLED BY ABRADING THE SURFACE. APPLY A TEST AREA, ALLOWING PAINT TO DRY ONE WEEK BEFORE TESTING ADHESION. IF ADHESION IS POOR, OR IF THIS PRODUCT ATTACKS THE PREVIOUS FINISH, REMOVAL OF THE PREVIOUS COATING MAY BE NECESSARY. IF PAINT IS PEELING OR BADLY WEATHERED, CLEAN SURFACE TO SOUND SUBSTRATE AND TREAT AS A NEW SURFACE AS ABOVE.
7. INSTALL NEW 4" VINYL WALL BASE AS SPECIFIED THROUGHOUT ON ALL NON-TILED WALLS.
8. ALL FLOOR, CEILING, AND WALL PATCHES / REPAIRS MADE WHERE FIXTURES, M.E.P. ITEMS, PARTITIONS, BENCHES, LOCKERS, OR TOILET ROOM ACCESSORIES HAVE BEEN REMOVED SHALL MATCH AND BE INDISCERNIBLE FROM THE SURROUNDING EXISTING CONSTRUCTION ONCE THE RENOVATION WORK IS COMPLETE. SLOPPY OR OBVIOUS PATCHES / REPAIRS, AS DETERMINED BY THE OWNER, WILL NOT BE ACCEPTED.



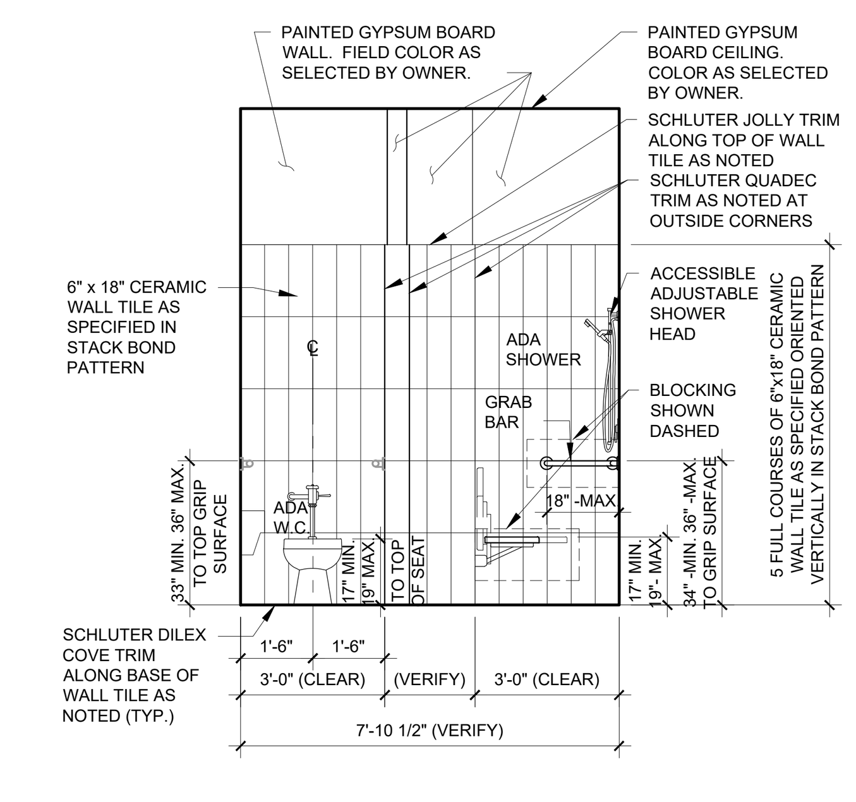
04 | INTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



05 | INTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



06 | INTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



07 | INTERIOR ELEVATION
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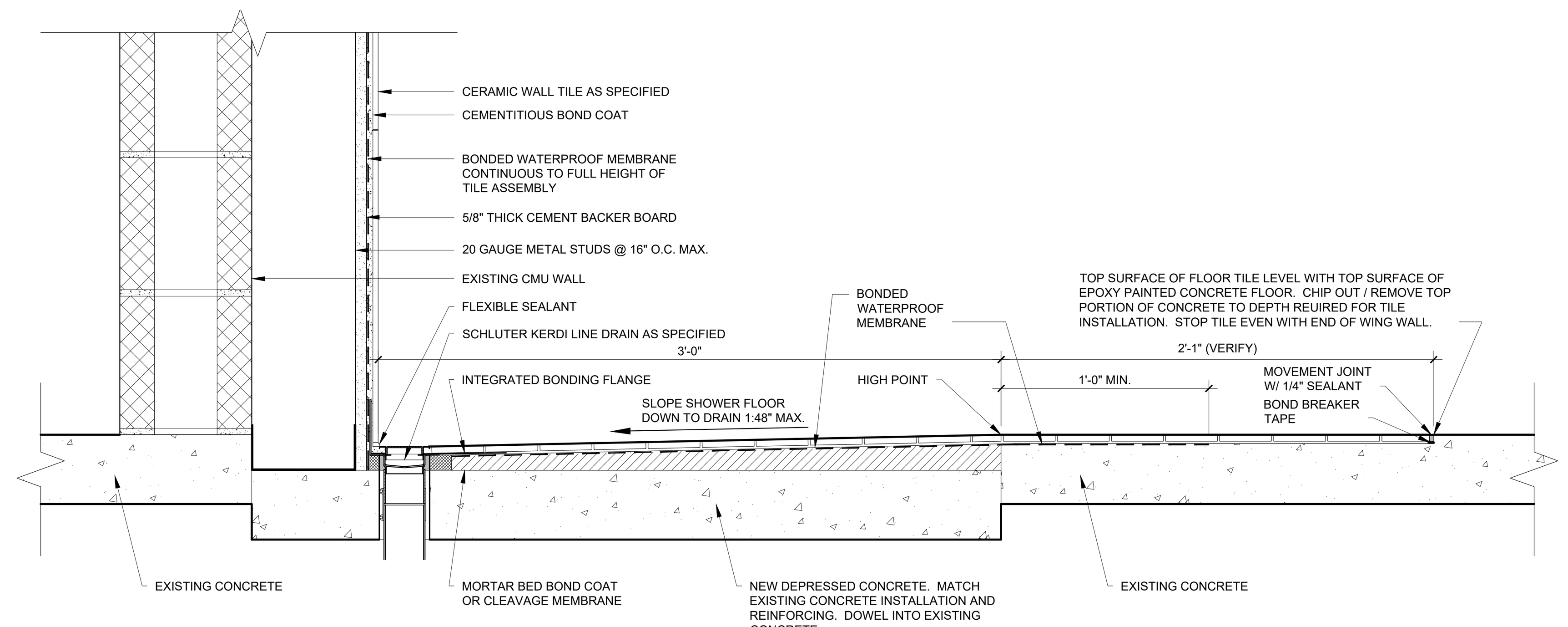
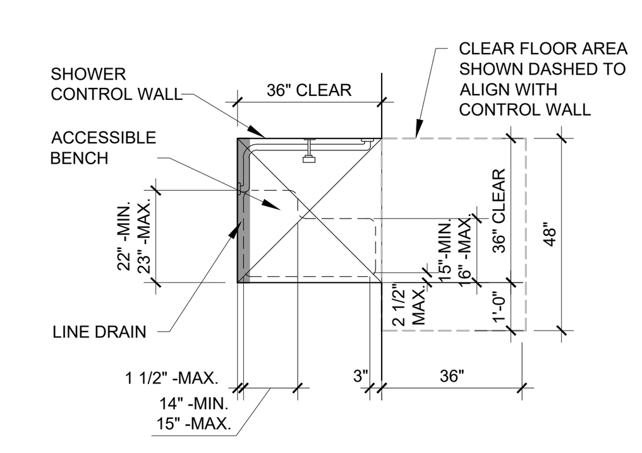


08 | SHOWER FLOOR SECTION
SCALE: 1/4" = 1'-0"



09 | SHOWER PLAN DETAIL
SCALE: 1/4" = 1'-0"

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TBPE FIRM # F-10227
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REGISTERED ARCHITECT
CADE L. SPELL
25311
STATE OF TEXAS

JANUARY 11, 2022

MEN'S TOILET & LOCKER ROOM RENOVATION FOR THE ORANGE COUNTY DRAINAGE DISTRICT

8081 OLD HIGHWAY 90 ORANGE, TEXAS 77630

ISSUE DATES:

BIDS & CONSTRUCTION
JANUARY 11, 2022

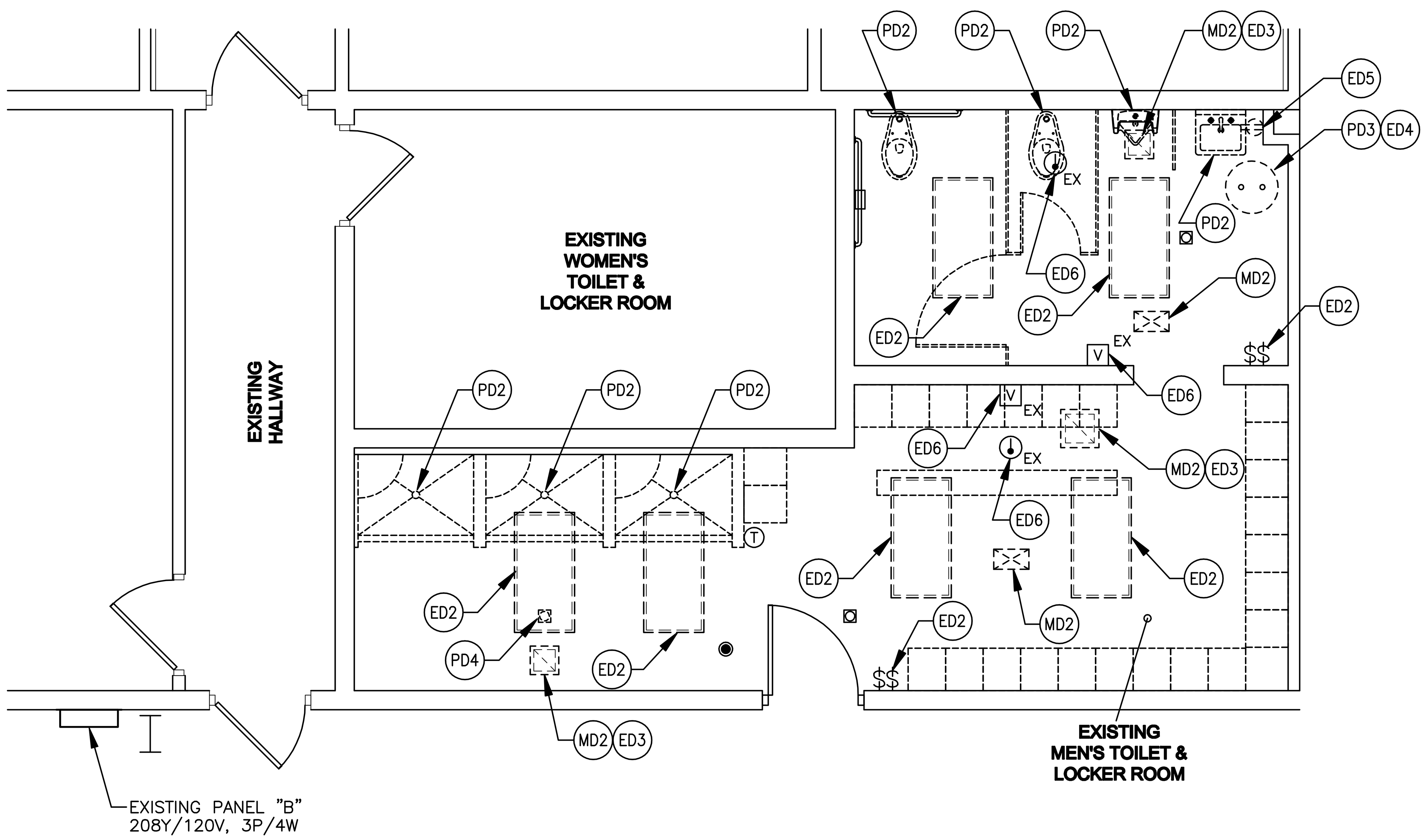
PREPARED BY: CLS

A2.01
SHEET NO.

PROJECT NO. 2021-11

PLANS, INTERIOR ELEVATIONS, NOTES, & DETAIL

1 SITE LOCATION
SCALE: NOT TO SCALE



2 MEP DEMOLITION FLOOR PLAN
SCALE: 1/4" = 1'-0"

MECHANICAL DEMOLITION NOTES

(MD1) REFERENCE ARCHITECTURAL SHEETS FOR DEMOLITION AND RENOVATION OF EXISTING WALLS, CEILINGS AND FLOORS. THE FINAL MECHANICAL SYSTEM AFTER NEW WORK AND DEMOLITION SHALL MEET ALL LOCAL, STATE MECHANICAL CODES AND INTERNATIONAL MECHANICAL CODE.

(MD2) REMOVE EXISTING SUPPLY AIR DIFFUSERS, EXHAUST FAN/GRILLE AND RELATED DUCTS, WALL CAP AND/OR SUPPORTS. PATCH/CAP EXISTING MAIN DUCT, CEILINGS AND WALLS TO MATCH EXISTING CONSTRUCTION. REMOVE AND REINSTALL EXISTING THERMOSTAT. REFER TO MECHANICAL FLOOR PLAN FOR NEW REQUIREMENTS. COORDINATE WITH GENERAL CONTRACTOR FOR PATCHING EXISTING CEILINGS AND WALLS.

ELECTRICAL DEMOLITION NOTES

(ED1) REFERENCE ARCHITECTURAL SHEETS FOR DEMOLITION AND RENOVATION OF EXISTING WALLS, CEILINGS AND FLOORS. THE FINAL ELECTRICAL SYSTEM AFTER NEW WORK AND DEMOLITION SHALL MEET ALL LOCAL, STATE ELECTRICAL CODES AND NFPA 70.

(ED2) REMOVE EXISTING LIGHT FIXTURES AND RELATED JUNCTION/PULL BOXES, REPLACE EXISTING LIGHT SWITCHES WITH NEW. DISCONNECT AND RECONNECT EXISTING CIRCUIT, CONDUIT AND CONDUCTORS, AND MODIFY/INSTALL NEW CONDUIT AND CONDUCTORS AS REQUIRED.

(ED3) DISCONNECT EXISTING CIRCUIT, CONDUIT AND CONDUCTORS OF EXISTING EXHAUST FANS TO BE REMOVED BY MECHANICAL CONTRACTOR, AND RECONNECT TO NEW EXHAUST FAN. MODIFY AND/OR INSTALL NEW CONDUIT AND CONDUCTORS AS REQUIRED.

(ED4) REMOVE EXISTING CIRCUIT, CONDUIT AND CONDUCTORS OF EXISTING ELECTRIC WATER HEATER TO BE REMOVED BY PLUMBING CONTRACTOR. REMOVE EXISTING 30A/2P CIRCUIT BRESKER THAT SERVED EXISTING ELECTRIC WATER HEATER AND INSTALL NEW (2)-20A/1P CIRCUIT BREAKERS IN EXISTING PANEL "B" POLE #6 AND #8.

(ED5) REMOVE EXISTING GFCI DUPLEX RECEPTACLE AND RELATED WALL BOX, CONDUIT AND CONDUCTORS. SPLICE OR MODIFY EXISTING CIRCUIT TO MAINTAIN CIRCUITRY AS REQUIRED.

(ED6) REMOVE AND REINSTALL BACK EXISTING FIRE ALARM DEVICES DUE TO RENOVATION OF EXISTING WALLS AND CEILINGS.

(ED7) REFER TO ELECTRICAL FLOOR PLAN FOR NEW LOCATION OF LIGHT FIXTURES, FIRE ALARM DEVICES, EXHAUST FANS AND REQUIREMENTS. COORDINATE WITH GENERAL CONTRACTOR FOR PATCHING WALLS AND CEILING TO MATCH EXISTING CONSTRUCTION.

PLUMBING DEMOLITION NOTES

(PD1) REFERENCE ARCHITECTURAL SHEETS FOR DEMOLITION AND RENOVATION OF EXISTING WALLS, CEILINGS AND FLOORS. THE FINAL PLUMBING SYSTEM AFTER NEW WORK AND DEMOLITION SHALL MEET ALL LOCAL, STATE PLUMBING CODES AND INTERNATIONAL PLUMBING CODES.

(PD2) REMOVE EXISTING WATER CLOSET, URINAL, LAVATORY, SHOWER AND RELATED CLEANOUTS, DRAINS, COLD/HOT WATER, SANITARY SEWER AND VENT PIPING ON DEMOLISHED AND/OR RENOVATED FLOORS, WALLS AND CEILING AS REQUIRED. CAP, MODIFY AND/OR REROUTE EXISTING UNDER FLOOR PLUMBING PIPING. SAW CUT AND BACKFILL EXISTING FLOOR AS REQUIRED. REFER TO PLUMBING DRAWINGS FOR NEW REQUIREMENTS. COORDINATE WITH GENERAL CONTRACTOR FOR PATCHING CEILINGS, WALLS AND FLOORS TO MATCH EXISTING CONSTRUCTION.

(PD3) REMOVE EXISTING ELECTRIC WATER HEATER LOCATED ABOVE CEILING. DISCONNECT AND RECONNECT EXISTING COLD, HOT WATER AND DRAIN PIPING TO NEW ELECTRIC WATER HEATER TO BE INSTALLED IN THE SAME EXISTING LOCATION. MODIFY AND/OR REROUTE EXISTING COLD, HOT WATER AND DRAIN PIPING AS REQUIRED.

(PD4) REMOVE EXISTING FLOOR DRAIN. MODIFY AND/OR REROUTE EXISTING SANITARY AND VENT PIPING, AND CONNECT TO NEW FLOOR DRAIN AS SHOWN ON SHEET 1/P.1.

MEPTech Engineering, Inc.
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STATE OF TEXAS
L. L. LASERNA
89546
LICENSED PROFESSIONAL ENGINEER
1/11/22

MEN'S TOILET & LOCKER ROOM RENOVATION FOR THE ORANGE COUNTY DRAINAGE DISTRICT

8081 OLD HIGHWAY 90 ORANGE, TEXAS 77630

ISSUE DATES:

BIDS & CONSTRUCTION
JANUARY 11, 2022

PREPARED BY: LLL

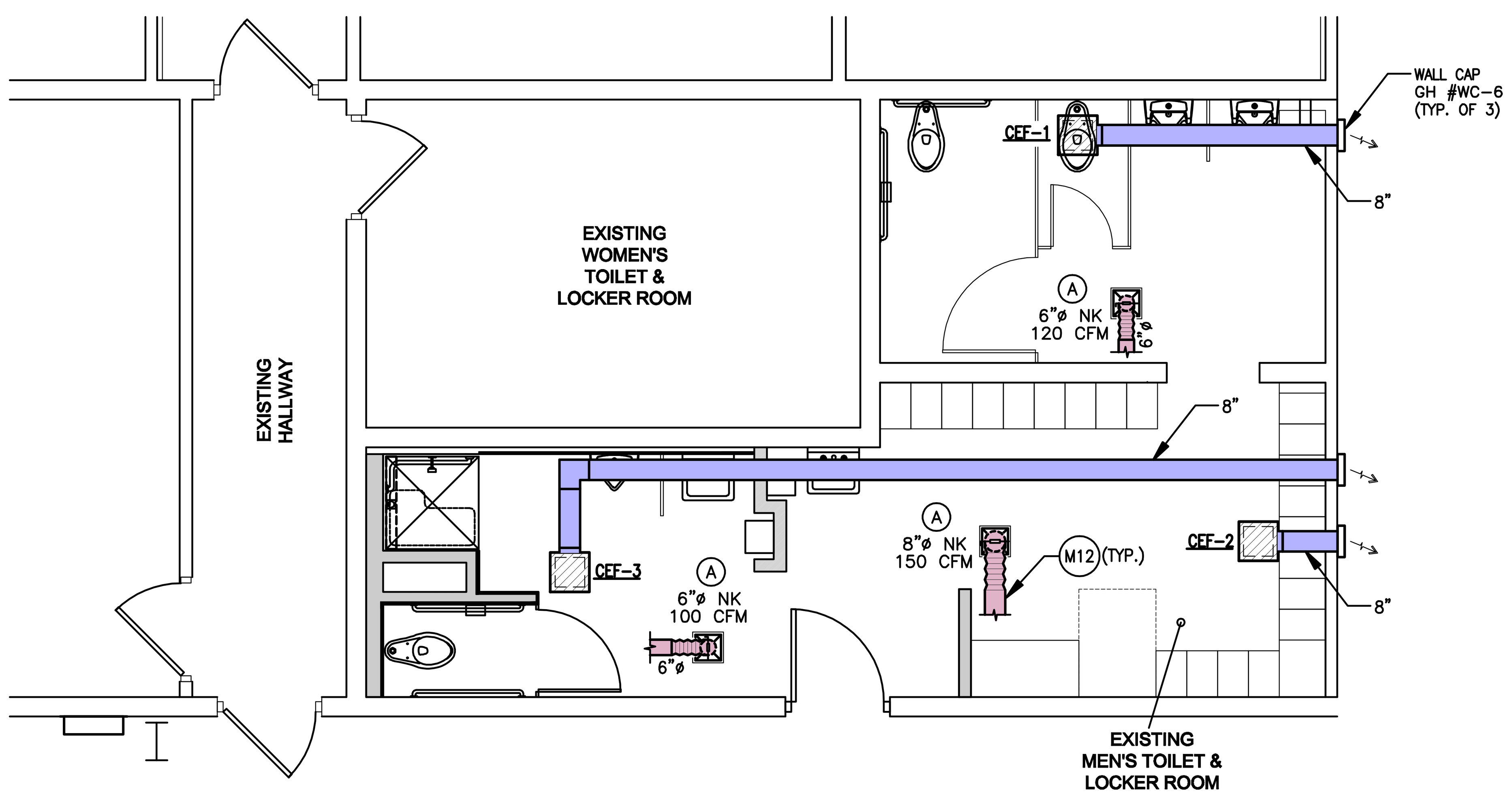
MEP.1
SHEET NO.

PROJECT NO. 2021-11

MEP DEMO FLR. PLAN, NOTES & SITE LOCATION

MECHANICAL SPECIFICATIONS

1. CONTRACTOR QUALIFICATIONS
   a. Be a specialist in this field and provide trained, experienced and skilled personnel to construct a practical working system.
   b. Coordinate with other divisions of work to provide a complete and functioning system.
   c. All materials and equipment shall be new and of best grade and quality, provided by reputable manufacturers.
   d. The mechanical drawings are diagrammatic in nature, but should be followed as closely as possible.
   e. Any changes required due to poor workmanship or coordination shall be made without additional expense to the owner.
   f. Install all equipment, materials and required supports in a neat, workman–like manner in accordance with the manufacturers printed instructions.
   g. The design is based on the equipment scheduled. The contractor shall bear all costs of variations in electrical, mechanical, structural requirementds if the contractor chooses to utilize any other approved equipment manufacturer.
2. CORRECTIONS AND MAINTENANCE DURING THE WARRANTY PERIOD
   a. The guarantee and warranty period is for 12 months after substantial completion of the project.
   b. Corrections to failures or defects during this period shall be at no cost to the owner.
   c. Response time shall be no longer than the day after notification.
3. SHOP DRAWINGS AND SUBMITTALS
   a. Provide submittals of all equipment and materials utilized for this project for review by owner/architect/engineer.
4. CONDENSATE DRAIN PIPING SYSTEMS
   a. Type L copper tubing with drainage pattern fittings, soldered joints and a water seal trap.
   b. Insulate same as specified for refrigerant suction piping.
   c. Provide condensate drain piping from each cooling coil drain connection sized equal to the unit drain connection and auxiliary drain.
5. DUCTWORK SYSTEMS
   a. Coordinate the duct installation with Architectural and Structural elements of the project.
   b. Construct and install systems in accordance with SMACNA and other referenced standards.
   c. Provide turning vanes in all square elbows.
   d. Seal all joints and seams with fireproof, non–hardening, non–migrating mastic. Leakage in excess of 5% of total airflow is not acceptacle. All mastics and adhesives utilized shall meet flame spread of 25 and developped smoke of 50 per ASTM E–84, NFPA 255 and U.L. 723.
   e. Provide all unit duct connections with flexible duct connectors.
   f. Provide the following duct systems:
      1.) Open structure/Outside air/Exhaust air duct – Galvanized sheet metal with 2" thick, 3/4 lb. external insulation or per local code.
      2.) All supply and return air ductwork shall be fiberglass ductwork shall have 1 1/2" thick aluminum cased certainteed #475R4 "TOUGHGARD" or approved with as thermosetting acrylic polymer coating with immobilized EPA approved anti–microbial agent fiberglass ductwork. Foil tape to be U.L. 181/181A listed. All flexible ductwork to supply air diffusers to be insulated with minimum R–6 external insulation. All starting collars, spin–ins for flexible ductwork shall be sealed with mastic, both under and on top of the collar with no metal surfaces of the starting collar exposed. Insulation on the flexible ductwork to be sealed to the main trunk and shall not be crushed at the main trunk to be U.L. 181/181A listed.
   g. Seal airtight all ductwork penetrating non–rated wall assemblies.
6. MECHANICAL SYSTEMS TESTING AND BALANCING
   a. Provide a trained, experienced technician to test, adjust and balance the air distribution and exhaust systems.
      1.) Adjust the outside and return air to the design conditions.
      2.) Adjust fan rpm required to obtain design air quantities.
      3.) Measure and adjust all duct systems and air outlets to design air quantities.
7. DELIVERY, STORAGE AND HANDLING
   a. Protect all equipment and materials to be installed from weather and damage.
8. CODES, PERMITS AND FEES
   a. Installation of mechanical systems in their entirety shall comply with the 2018 International Building Code and Mechanical Code, and comply with the most recent versions of all applicable laws, rules, regulations and ordinances of all governing codes and authorities. Obtain all required permits and pay all fees required by these authorities.
   b. Modifications required by above Authorities shall be made without additional expense to the owner.



1 MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"

EXHAUST FAN SCHEDULE

MARK	CFM	STATIC PRESSURE "H_2O"	DRIVE	FAN RPM	MOTOR		ELECTRICAL SUPPLY			REMARKS
					AMPS	WATTS	VOLT	ø	Hz	
CEF–1	180	0.125	DIRECT	1400	1.30	113	115	1	60	GREENNECK SP–A190
CEF–2	225	0.125	DIRECT	900	0.43	48.2	115	1	60	GREENNECK SP–A200
CEF–3	150	0.25	DIRECT	1400	1.30	113	115	1	60	GREENNECK SP–A190

NOTES:
1. PROVIDE BACKDROP DAMPER FOR EACH FAN.
2. PROVIDE SAFETY DISCONNECT SWITCH FOR EACH FAN.
3. PROVIDE ALUMINUM GRILLE IN WHITE ENAMEL FINISH.
4. CEF–1, 2 & 3 CONTROLLED BY LIGHT SWITCH.

AIR DISTRIBUTION DEVICE SCHEDULE

MARK	FUNCTION	MAKE AND MODEL NO.	FACE SIZE (INCH)	OPENING SIZE (INCH)	MOUNTING STYLE BORDER	MATERIAL OF CONSTRUCTION	REMARKS
(A)	SUPPLY AIR DIFFUSER	TITUS TMS–AA	12x12	10x10	SURFACE	ALUMINUM	NOTES: 1, 2, 3, 4

NOTES:
1. REFER TO MECHANICAL FLOOR PLAN FOR NECK SIZES.
2. 4–WAY THROW UNLESS OTHERWISE NOTED.
3. WITH ALUMINUM CONTROL OPPOSED BLADE DAMPER #AG–75–AA.
4. STANDARD FINISH #26 WHITE.

MECHANICAL SYMBOLS

1 / M.1	REFERENCE TO DETAIL AND SHEET NUMBER
	EQUIPMENT FURNISHED BY DIVISION 15
	EQUIPMENT FURNISHED BY OTHER DIVISIONS
(T)	THERMOSTAT, 48" AFF
AFF	ABOVE FINISHED FLOOR
(A) 8"ø NK 150 CFM	SUPPLY AIR DEVICE/DUCT WITH TYPE AND CFM
(B) 8"ø NK 150 CFM	RETURN AIR DEVICE/DUCT WITH TYPE AND CFM
	EXHAUST AIR DEVICE/DUCT
12/10	DUCTWORK WITH DIMENSION (WIDTHxDEPTH)
	MANUAL VOLUME CONTROL DAMPER

MECHANICAL NOTES

(M1) THE EXACT MOUNTING HEIGHTS AND/OR LOCATIONS OF ALL HVAC EQUIPMENT SHALL BE FIELD VERIFIED AND COORDINATED WITH ALL OTHER MECHANICAL, ELECTRICAL, ARCHITECTURAL AND STRUCTURAL SYSTEMS.

(M2) THE FINAL LOCATION OF AIR DEVICES MUST BE COORDINATED WITH THE LOCATION OF LIGHT FIXTURES, CEILING FANS, ARCHITECTURAL AND STRUCTURAL SYSTEMS.

(M3) ALL ACCESS DOORS REQUIRED IN GENERAL CONSTRUCTION ARE TO BE PROVIDED AND INSTALLED BY THE GENERAL CONTRACTOR. IT IS THE RESPONSIBILITY OF THE HVAC CONTRACTOR TO IDENTIFY SIZE, TYPE AND LOCATION OF SUCH DOORS FOR PROPER ACCESS TO ALL CONCEALED HVAC EQUIPMENT, VALVES AND OTHER RELATED EQUIPMENT. THE HVAC CONTRACTOR SHALL IDENTIFY THESE REQUIREMENTS ON A COORDINATED SHOP DRAWING PRIOR TO SYSTEM FABRICATION AND INSTALLATION.

(M4) THE EXACT SIZES AND LOCATIONS OF ALL WALL AND/OR ROOF OPENINGS REQUIRED MUST BE COORDINATED AND APPROVED BY GENERAL CONTRACTOR AND/OR ARCHITECT. STRUCTURAL FRAMES AROUND ALL OPENINGS SHALL BE FURNISHED AND INSTALLED AS REQUIRED.

(M5) PROVIDE SLEEVES AND FLASHING REQUIRED FOR PIPING AND DUCTWORK PENETRATIONS. PROVIDE ESCUTCHEON PLATES FOR ALL PIPING PENETRATING FINISHED WALLS AND CEILINGS.

(M6) VERIFY ALL EQUIPMENT VOLTAGES WITH THE ELECTRICAL CONTRACTOR PRIOR TO ORDERING ALL HVAC EQUIPMENT. ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL POWER AND CONTROL CONDUIT FOR HVAC EQUIPMENT AS REQUIRED. HVAC CONTROLS CONTRACTOR WILL INSTALL CONTROL VOLTAGE WIRING IF REQUIRED. HVAC CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS WITH ALL TRADES.

(M7) ONLY THE MANUFACTURERS LISTED ON CONTRACT DRAWINGS OR SPECIFICATIONS ARE APPROVED FOR BIDDING UNLESS INSTRUCTED OTHERWISE BY OWNER. ALL OTHER MANUFACTURERS WILL BE CONSIDERED AS SUBSTITUTIONS AND MUST HAVE PRIOR APPROVAL IN WRITING SUBMITTED TO THE ENGINEER AS SOON AS POSSIBLE BEFORE THE BID DATE.

(M8) FOR ALL CEILING SUPPLY AIR DIFFUSERS, PROVIDE A 2" THICK R–8 FOIL FACED INSULATION BLANKET COMPLETELY COVERING TOP OF DIFFUSERS. ALL INSULATION MATERIALS USED THROUGHOUT THE AIR DISTRIBUTION SYSTEMS SHALL BE FACTORY STAMPED WITH RELATED R VALUE.

(M9) MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCE AROUND HVAC EQUIPMENT. ALL DUCT SIZES NOTED ARE INSIDE CLEAR DIMENSIONS.

(M10) ALL INTERIOR SUPPORTS, CLAMPS AND RELATED ITEMS SHALL BE SHOP PRIMED UNLESS GALVANIZED CONSTRUCTION. ALL EXTERIOR SUPPORTS, CLAMPS AND RELATED ITEMS SHALL BE OF GALVANIZED CONSTRUCTION. COAT ANY FIELD WELDS, CUTS OR DAMAGED WITH GALVANIZED COATING WITH TWO COATS ZINC RICH CHROMATE PAINT.

(M11) FLEXIBLE DUCT DIAMETER SHALL MATCH THE NECK SIZE OF THE DIFFUSER TO WHICH IT CONNECTS, UNLESS NOTED OTHERWISE. THE TOTAL LENGTH OF FLEXIBLE DUCT RUN SHALL NOT EXCEED 6 FT.. EXTEND HARD DUCT WITHIN 6 FT. OF THE AIR DEVICE FOR COMPLIANCE. FLEXIBLE DUCTWORK IS NOT PERMITTED FOR USE IN ANY PARTS OF THE RETURN OR EXHAUST AIR SYSTEMS. FLEXIBLE DUCTWORK MUST BE INSTALLED WITH SUPERIOR WORKMANSHIP MAINTAINING FULL CROSS SECTIONAL AREA THROUGHOUT. SUPPORT FROM STRUCTURE AT 24" INTERVALS WITH THREADED RODS AND UNISTRUTS TO ENSURE FULL CROSS SECTIONAL AREA FOR MAXIMUM AIR FLOW.

(M12) CONNECT NEW DUCT TO EXISTING 14x10 DUCT LOCATED ABOVE GYPSUM BOARD CEILING.

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1/11/22

MEN'S TOILET & LOCKER ROOM RENOVATION
FOR THE
ORANGE COUNTY DRAINAGE DISTRICT
8081 OLD HIGHWAY 90 ORANGE, TEXAS 77630

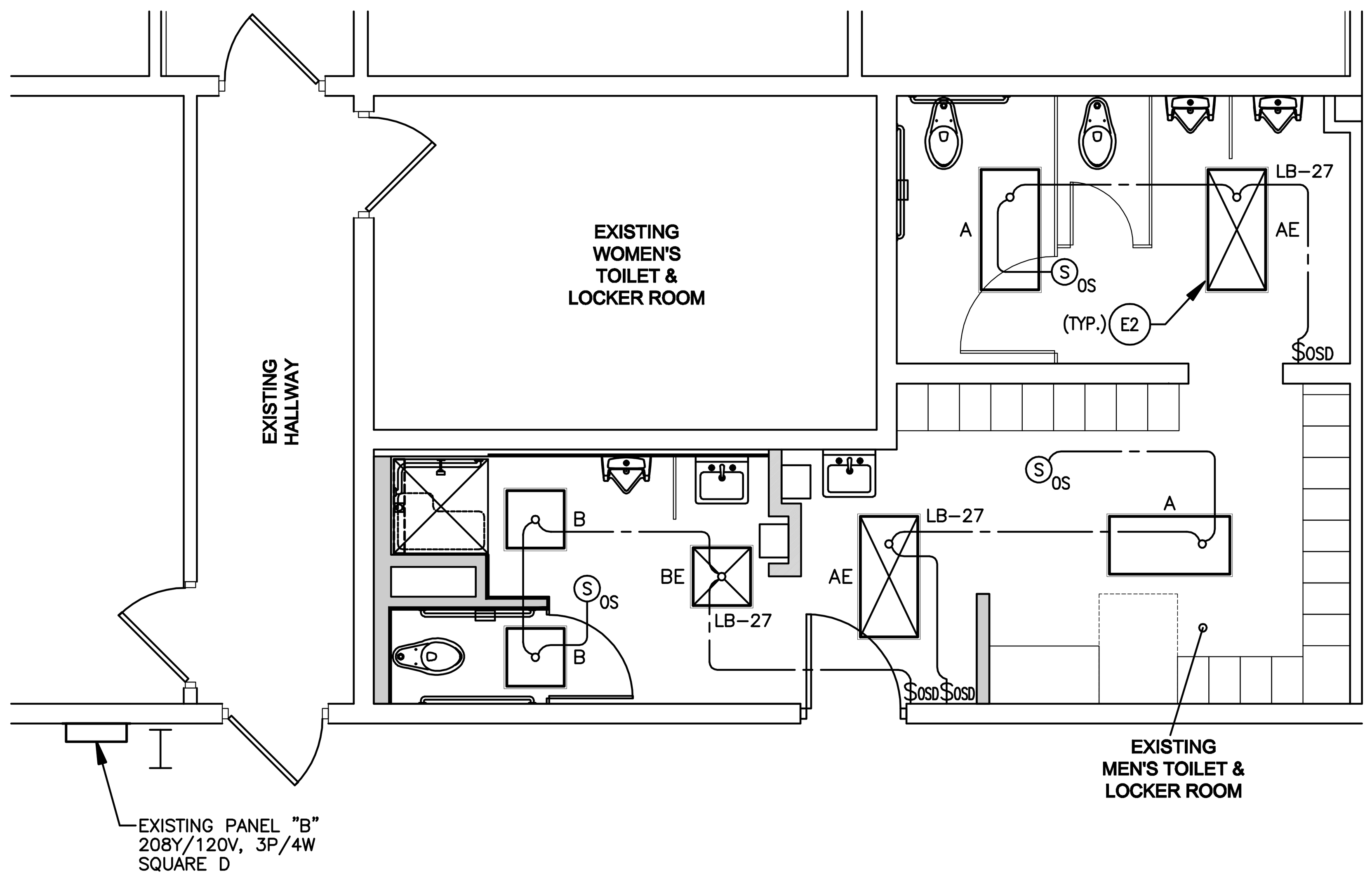
ISSUE DATES:
BIDS & CONSTRUCTION
JANUARY 11, 2022

PREPARED BY: LL

M.1
SHEET NO.

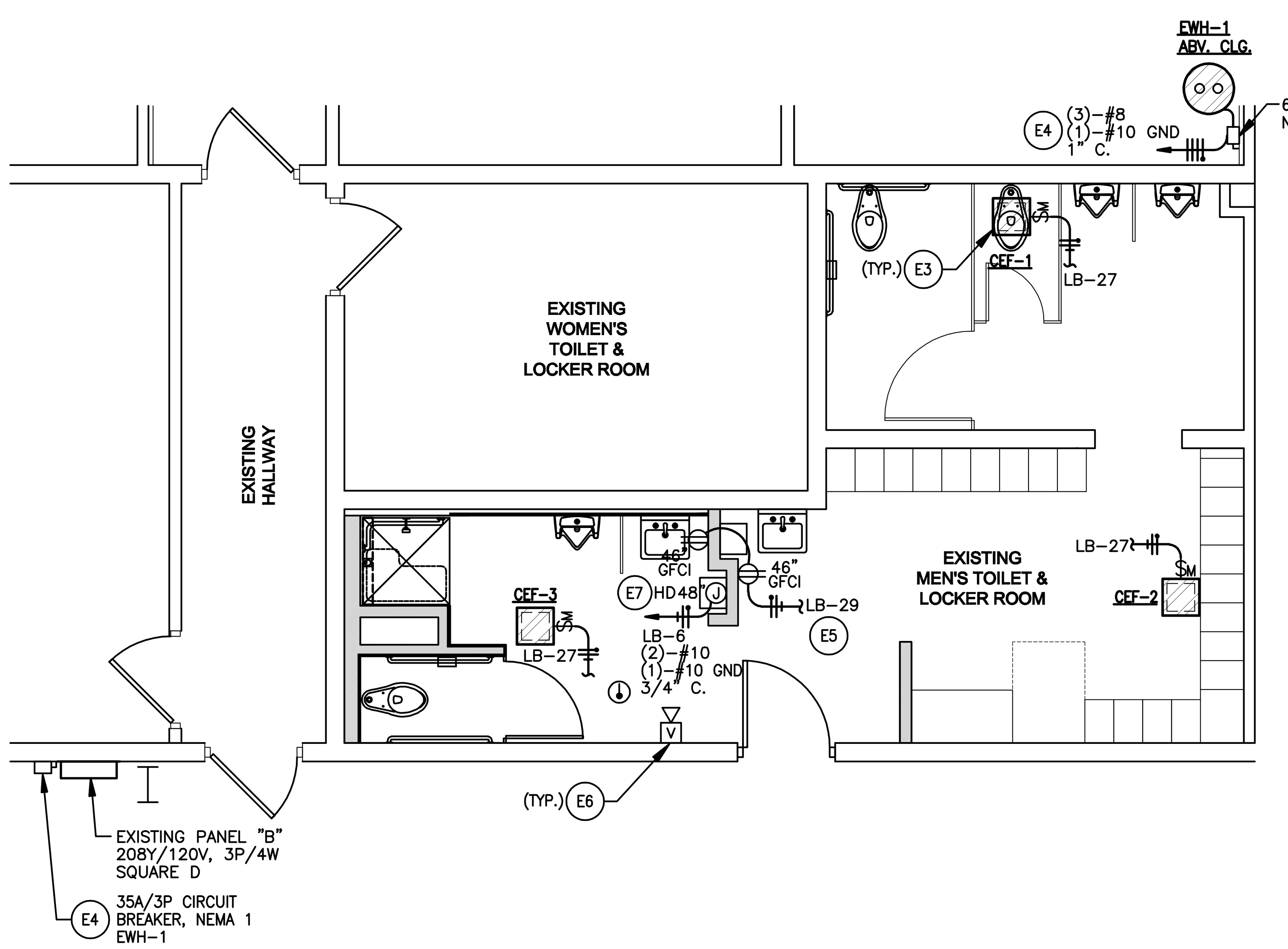
PROJECT NO. 2021-11

MECH. FLR. PLAN, SCHED., SYMBOLS, NOTES & SPECS.



1 LIGHTING FLOOR PLAN

SCALE: 1/4" = 1'-0"



2 POWER & COMMUNICATIONS FLOOR PLAN

SCALE: 1/4" = 1'-0"

LIGHT FIXTURE SCHEDULE

MARK	MANUFACTURER	MODEL NO.	LAMPS	VOLTAGE	REMARKS
A	FAIL-SAFE COOPER	GRW-24-4-FA-LD4-72-40-A12125-120-ED1D1-PAF	(1)-56W LED/840 (INCLUDED)	120	2' x 4' RECESSED FLANGED LED TROFFER WITH DIE FORMED OF COLD ROLLED STEEL, EXTRUDED ALUMINUM DOOR FRAME, PAINTED AFTER FABRICATION, BAKED WHITE ENAMEL FINISH, SPRING LOADED STEEL LATCHES, INTEGRAL LED DRIVER AND WET LOCATION.
AE	FAIL-SAFE COOPER	GRW-24-4-FA-LD4-72-40-A12125-120-ED1D1-PAF-EL14W	(1)-56W LED/840 (INCLUDED)	120	SAME AS FIXTURE TYPE "A" EXCEPT WITH EMERGENCY BATTERY PACK INSTALLED.
B	FAIL-SAFE COOPER	GRW-24-2-FA-LD4-44-40-A12125-120-ED1D1-PAF-EL14W	(1)-40.1W LED/840 (INCLUDED)	120	2' x 2' RECESSED FLANGED LED TROFFER WITH DIE FORMED OF COLD ROLLED STEEL, EXTRUDED ALUMINUM DOOR FRAME, PAINTED AFTER FABRICATION, BAKED WHITE ENAMEL FINISH, SPRING LOADED STEEL LATCHES, INTEGRAL LED DRIVER AND WET LOCATION.
BE	FAIL-SAFE COOPER	GRW-24-2-FA-LD4-44-40-A12125-120-ED1D1-PAF-EL14W	(1)-40.1W LED/840 (INCLUDED)	120	SAME AS FIXTURE TYPE "B" EXCEPT WITH EMERGENCY BATTERY PACK INSTALLED.

ELECTRICAL SPECIFICATIONS

1. GENERAL REQUIREMENTS AND CONTRACTOR QUALIFICATIONS
   - A. The Contractor for this work shall be a specialist in this field, having the organization to provide trained, experienced and skilled personnel required to construct a practical and working system.
   - B. Study all matters and conditions of the Project and coordinate with the other Divisions of work to provide a complete and functioning system in accordance with the Contract Documents.
   - C. Use only the specified materials, equipment and procedures in fabricating the systems.
   - D. Notify the Engineer of any and all conflicts in ample time to avoid unwarranted changes in any work.
   - E. Obtain all applicable permits and pay all fees charged by above authorities.
   - F. Existing conditions
     1. Prior to submitting a proposal, visit the job site to become familiar with existing conditions and equipment for the work to be accomplished.
     2. Verify exact location of existing electrical system.
   - G. Provide "AS BUILT" shop drawings at completion of project.
   - H. The Electrical Systems in their entirety shall be installed in accordance with the NFPA 70, 2017 National Electrical Code, International Energy Code and all other governing Codes and Authorities. Modifications required by the above said outhorities shall be made without additional charge to the owner.
   - I. With submission of bid, Contractor shall give written notice to the Architect or Engineer of any materials or apparatus believed inadequate or unsuitable, in violation of laws, ordinances, rules and any necessary items or work omitted. In the absence of such written notice, it is mutually agreed the Contractor has included the cost of all required items in his proposal, and that he will be responsible for the approved satisfactory functioning of the entire system without extra compensation.

2. LIGHTING AND POWER CIRCUITS AND SWITCHLEGS
   - A. Provide a luminaire for each luminaire symbol shown on the drawings and install all luminaires complete with lamps.
   - B. Install luminaires complete with all materials, devices, parts, cables, hardware, hangers, supports, frames and equipment required for a complete, safe and fully operational installation.
   - C. Furnish and install all conduit and conductors necessary for complete circuiting of general power and lighting and for light switching.

3. SHOP DRAWINGS AND PRODUCT DATA
   - A. Submit manufacturer's printed product literature for all compoments of the electrical systems prior to purchase and installation.

4. BRANCH CIRCUITS FOR POWER AND LIGHTING
   - A. Conduit systems shall be U.L. labeled EMT with U.L. labeled compression or die cast type fittings.
     1. Minimum 3/4" for homeruns. 1/2" for switchlegs.
   - B. Branch circuit Conductors to be soft drawing annealed copper having a conductivity of not less than 99% of pure copper.
     1. Type "THHN" (interior), or "THHW" (exterior) solid conductor.
   - C. All feeders, service conductors & branch circuit wiring shall be copper only.
   - D. Use flexible conduit for light fixture wiring where length is within limits as prescribed by NEC and Local Codes.
   - E. Conduit interconnection of lighting fixtures shall be from joist level. Do not extend runs horizontally from fixture to fixture.
   - F. Except where wiring and conduit is routed exposed in electrical/mechanical rooms all wiring shall be concealed within floors, walls or partitions.
   - G. Color coding of wire larger than No. 6 AWG and other types of wire accomplished by means of self-adhesive, wrap around type markers of solid colors.
     1. Mark each wire at panelboards, junction boxes, pull boxes, and outlets.
     2. Color Code.

        208/120V

        A. black
        B. red
        C. blue
        N. white
        G. green
        SL. pink
   - H. Motor circuit conductors shall be continuous throughout their entire length.
   - I. Splices and joints in branch circuit wiring shall be made only in accessible junction boxes and shall be made with compression type solderless connectors. Connectors of the nonmetallic screw type are not approved.
   - J. Minimum wire size shall be no less than #12 AWG unless otherwise noted on plans.
   - K. Minimum wire size 20 amp branch circuit shall be AWG listed size per distance shown below. Distance shall be measured from the panelboard circuit breaker to the furthest outlet.

        120V

        A. #12 Less than 100 feet
        B. #10 Between 100-150 feet
        C. #8 Between 150-250 feet

5. WIRING DEVICES
   - A. Furnish and install all wiring devices for convenience outlets, telephone outlets, push buttons, conductor splices, and switches as shown on the drawings unless otherwise noted.
   - B. Unless shown otherwise, convenience outlets shall be Hubbell #CR5362GR/WH.
   - C. Unless shown otherwise, light switches shall be Hubbell #CS1221GR/WH/CS1222GR/WH/CS1223GR/WH/CS1224GR/WH.
     Dimmer - 120V LED Incandescent: Greengate WBSD-DEC-W (White)
     Dimmer - 0-10V LED/Fluorescent: Greengate WBSD-010M-C1-W (White)
   - D. Where shown on drawings, duplex receptacles designated with ground fault circuit interruption shall be HUBBELL #GFR53521 and weatherproof cover shall be HUBBELL CWP26H.
   - E. The following are the ADA Accessibility Guidelines for switches, receptacles, telephones and outlets. Unless shown otherwise on the drawings, mounting heights to be as follows:
     1. Wall switches - 4'-0"
     2. Wall switches at countertops 3'-8" to center of device or shown on drawings.
     3. Wall receptacles, telephone and data outlets - 1'-6" to center of device or shown on drawings.
     4. Wall receptacles, telephone and date outlets at countertops 3'-8" to center of device or shown on drawings.
   - F. Provide white wall/face plates for all interior areas. Confirm color with Architect or GC.
   - G. Occupancy Sensors:
     1.) Wall mounted: Greengate-Cooper Model ONW-D-1001-DMV-N/OSW-D-010 120V and white color.
     2.) Ceiling mounted: Greengate-Cooper Model OAC-DT-2000-R/DT2000 120V and white color.

6. LIGHT FIXTURES AND LIGHTING CONTROLS.
   - A. Furnish and install all lighting fixtures in accordance with the fixture designation, light fixture schedule or indicated on drawings.

7. TELEPHONE, VIDEO AND DATA CONDUIT SYSTEM REQUIREMENT
   - A. Where shown on drawings, at each telephone, video and data outlet location, furnish and install recessed wall or floor boxes with 3/4" empty conduit and pull string extending to 6" above ceiling. Provide white plastic cover plate over wall box if not in used.

8. CUTTING AND PATCHING
   - A. The contract shall do all cutting and patching of the existing contruction work which may be required for the proper installation of the electrical work. All patching shall be of the same materials, workmanship and finish as, and shall accurately match all surrounding work.

9. FIRE ALARM, SMOKE DETECTION
   - A. Installation of new fire alarm devices shall comply with the current applicable provisions of NFPA 70, NFPA 71, NFPA 72/72E, NFPA 101, local and state building codes, and all requirements of the local authority having jurisdiction.
   - B. Furnish and install new fire alarm devices with all necessary equipment, wiring, conduits, boxes, etc. required to ensure a fully operational system.
   - C. It shall be the responsibility of the Electrical Contractor to provide all conduit systems, standard electrical boxes, and operating power for the fire alarm system as outlined on the project drawings or as required by the Fire Alarm System Contractor. Verify all requirements prior to installation of conduit and wall boxes.

10. PANELBOARDS, CBs, DISCONNECT SAFETY SWITCHES & MOTOR STARTERS
   - A. Furnish and install at locations as shown on the drawings and shall be of the type approved by owner, indicated or specified.

11. GROUNDING OF ELECTRICAL SYSTEMS
   - A. Grounding of the electrical systems shall conform to the requirements of the latest National Electrical Code and other governing local codes.

ELECTRICAL NOTES

(E1) COORDINATE EXACT LOCATION OF ALL NEW LIGHT FIXTURES WITH ACTUAL CEILING SYSTEMS AND STRUCTURES. REFERENCE ARCHITECTURAL REFLECTED CEILING PLAN, WALLS, ROOF/CEILING STRUCTURES, SECTIONS & ELEVATIONS.

(E2) CONNECT NEW LIGHT FIXTURE TYPE "A", "AE", "B" AND "BE" TO EXISTING CIRCUIT B-27. MODIFY EXISTING CONDUIT AND CONDUCTORS OR INSTALL NEW AS REQUIRED TO MEET 2017 NEC AND LOCAL CODES.

(E3) CONNECT NEW EXHAUST FAN "CEF-1", "CEF-2" AND "CEF-3 TO CIRCUIT B-27 AND SWITCHED WITH LIGHTS.

(E4) CONNECT NEW ELECTRIC WATER HEATER "EWH-1" TO EXISTING PANEL "B". FURNISH AND INSTALL 35A/3P CIRCUIT BREAKER WITH NEMA 1 ENCLOSURE AND CONNECT TO EXISTING PANEL "B" BUS BARS WITH LUG CONNECTORS.

(E5) CONNECT NEW GFCI DUPLEX RECEPTACLES TO EXISTING PANEL "B" CIRCUIT B-29. MODIFY AND/OR INSTALL NEW CONDUIT AND CONDUCTORS AS REQUIRED.

(E6) INSTALL WALL AND/OR BACK BOX WITH 3/4" EMPTY CONDUIT WITH PULL STRING UP WALL TO 6" ABOVE ACCESSIBLE CEILING WITH BUSHING FOR FIRE ALARM DEVICES. CONNECT NEW FIRE ALARM DEVICES TO EXISTING FIRE ALARM CIRCUITS. FIELD CONFIRM THE LOCATION OF EXISTING FIRE ALARM CONTROL PANEL. INSTALLATION OF NEW FIRE ALARM DEVICES MUST MEET NFPA 72, NFPA 101 AND LOCAL FIRE CODES.

(E7) INSTALL FLUSH MOUNTED JUNCTION BOX AT 48" AFF FOR XLERATOR HAND DRYER MODEL XL-SB, NO TOUCH, 120V, 12.5A, 1500W, 60Hz,. BRUSHED STAINLESS STEEL FINISH. INSTALL HAND DRYER AT ADA HEIGHT. CONFIRM EXACT HEIGHT WITH ARCHITECT PRIOR TO MAKE INSTALLATION. CONNECT HAND DRYER TO EXISTING PANEL "B" CIRCUIT B-6.

(E8) ROUGH-IN AND MAKE FINAL CONNECTIONS TO EQUIPMENT SPECIFIED IN OTHER DIVISIONS, OR FURNISHED BY OWNER. FIELD CONFIRM WITH EQUIPMENT SUPPLIER AND/OR INSTALLER EXACT REQUIREMENTS PRIOR BIDDING AND INSTALLATION.

(E9) ALL LOCATIONS OF ELECTRICAL AND TECHNOLOGY DEVICES MUST BE CONFIRMED WITH ARCHITECTURAL SECTIONS, ELEVATIONS, MILLWORKS AND CASEWORK PRIOR TO MAKE FINAL INSTALLATIONS. ALL CHANGES DUE TO CONFLICT OF LOCATIONS AND/OR LACK OF ARCHITECTURAL SHEETS COORDINATION SHALL BE MADE WITHOUT ADDITIONAL EXPENSE TO THE OWNER.

(E10) ALL CONDUIT PENETRATIONS AT FIRE RATED WALLS MUST BE PROVIDED WITH SCHEDULE 40 GALVANIZED CONDUIT SLEEVE SECURED TO PARTITION WITH GROUT AND CAULK ANNULAR SPACE BETWEEN CONDUIT AND SLEEVE WITH FIRE RETARDANT SEALANT. WHERE CONDUIT IS EXPOSED AT FINISHED WALLS, PROVIDE FLUSH MOUNTED SLEEVE AND STAINLESS STEEL ESCUTCHEON PLATES. AT NON-FIRE RATED INTERIOR WALLS, CAULK ANNULAR SPACE BETWEEN CONDUIT AND SLEEVE WITH 1 LB. DENSITY FIBERGLASS AND SEAL ENDS WITH DOW CORNING 732 RTV OR EQUAL.

(E11) ALL EXHAUST FANS (120V/1ø) ARE SPECIFIED WITH FACTORY INSTALLED DISCONNECT SAFETY SWITCH. MOTOR STARTERS ARE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. THERMOSTATS, FAN INTERLOCKS AND HVAC CONTROLS ARE ALL PROVIDED AND INSTALLED UNDER DIVISION 15. CONFIRM WITH DIVISION 15 AND MECHANICAL SCHEDULES.

ELECTRICAL SYMBOLS

1 / E.1	REFERENCE TO DETAIL AND SHEET NUMBER
	EXISTING SURFACE MOUNTED PANEL
	LED LIGHT FIXTURE
	LED EMERGENCY LIGHT FIXTURE
	NEUTRAL CONDUCTOR
	PHASE CONDUCTOR
	GROUND CONDUCTOR
	SWITCH LEG AND/OR BRANCH CIRCUIT
	BRANCH CIRCUIT
	HOME RUN TO PANELBOARD
$	SWITCH, 48" AFF
$3	THREE-WAY SWITCH, 48" AFF
$M	MOTOR RATED SWITCH
$OSD	OCCUPANCY SENSOR DIMMER SWITCH, 48" AFF
	MOTOR
	DISCONNECT SAFETY SWITCH
	DUPLEX RECEPTACLE, 12" AFF
GFCI	GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE
J	JUNCTION BOX
V EX	EXISTING FIRE ALARM VISUAL/STROBE DEVICE, 80" AFF
V	FIRE ALARM AUDIO/VISUAL DEVICE, 80" AFF
EX	EXISTING CEILING MOUNTED HEAT DETECTOR
	CEILING MOUNTED HEAT DETECTOR

ABBREVIATIONS

A	AMPERES
AIC	AMPS INTERRUPTING CURRENT
AFF	ABOVE FINISHED FLOOR
C	CONDUIT
CU	COPPER
CB	CIRCUIT BREAKER
FD	FUSED DISCONNECT SAFETY SWITCH
GFCI	GROUND FAULT CIRCUIT INTERRUPTERS
GND	GROUND CONDUCTOR
KVA	KILOVOLT-AMPS
MLO	MAIN LUGS ONLY
MCB	MAIN CIRCUIT BREAKER
NEC	NATIONAL ELECTRICAL CODE
NFD	NON-FUSED DISCONNECT SAFETY SWITCH
V	VOLTS
WP	WEATHERPROOF

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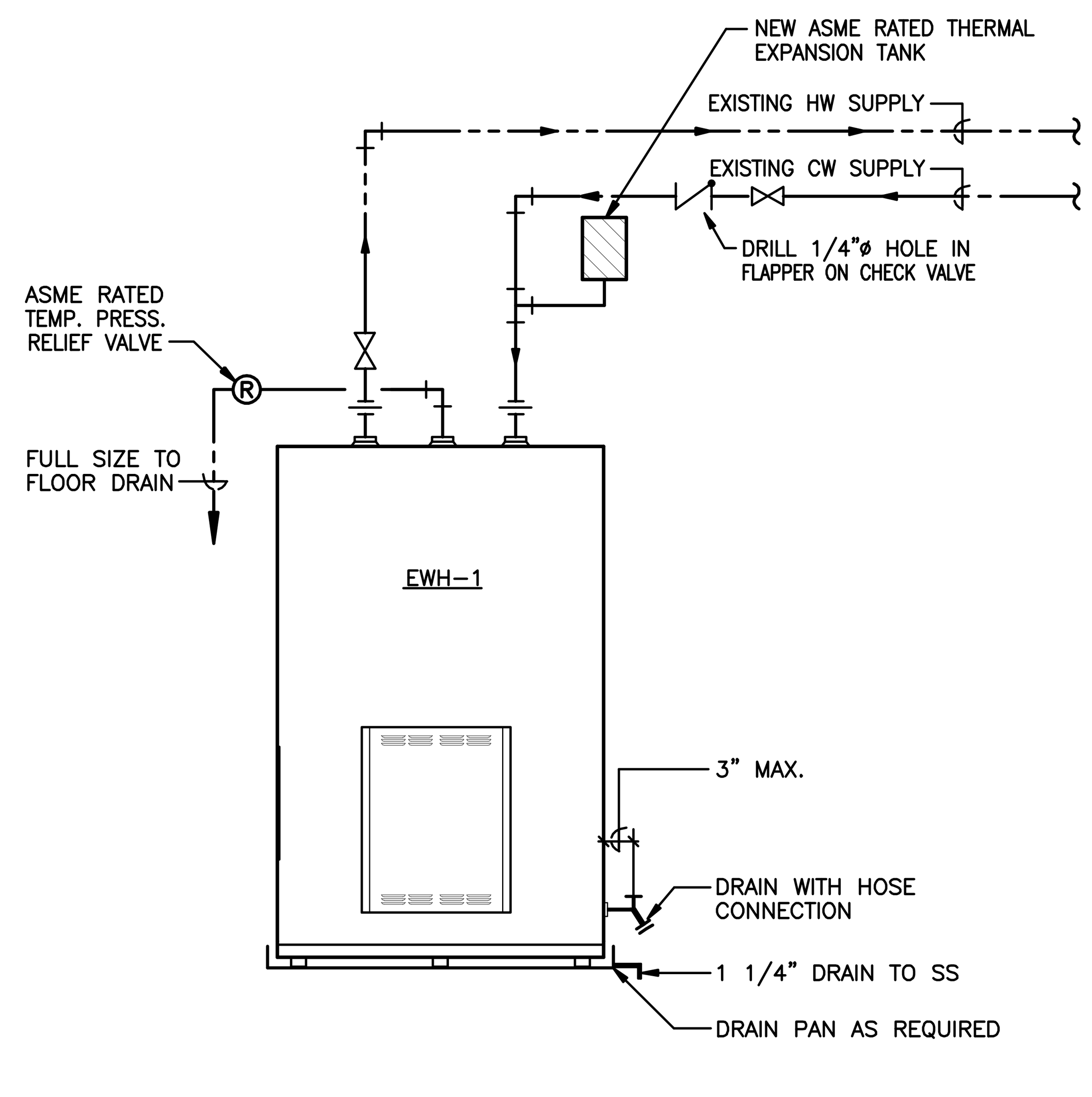
PREPARED BY: LL

E.1

SHEET NO.

PROJECT NO. 2021-11

LTG., P&C FLR. PLANS, SCHED., SYM.,NOTES & SPECS.

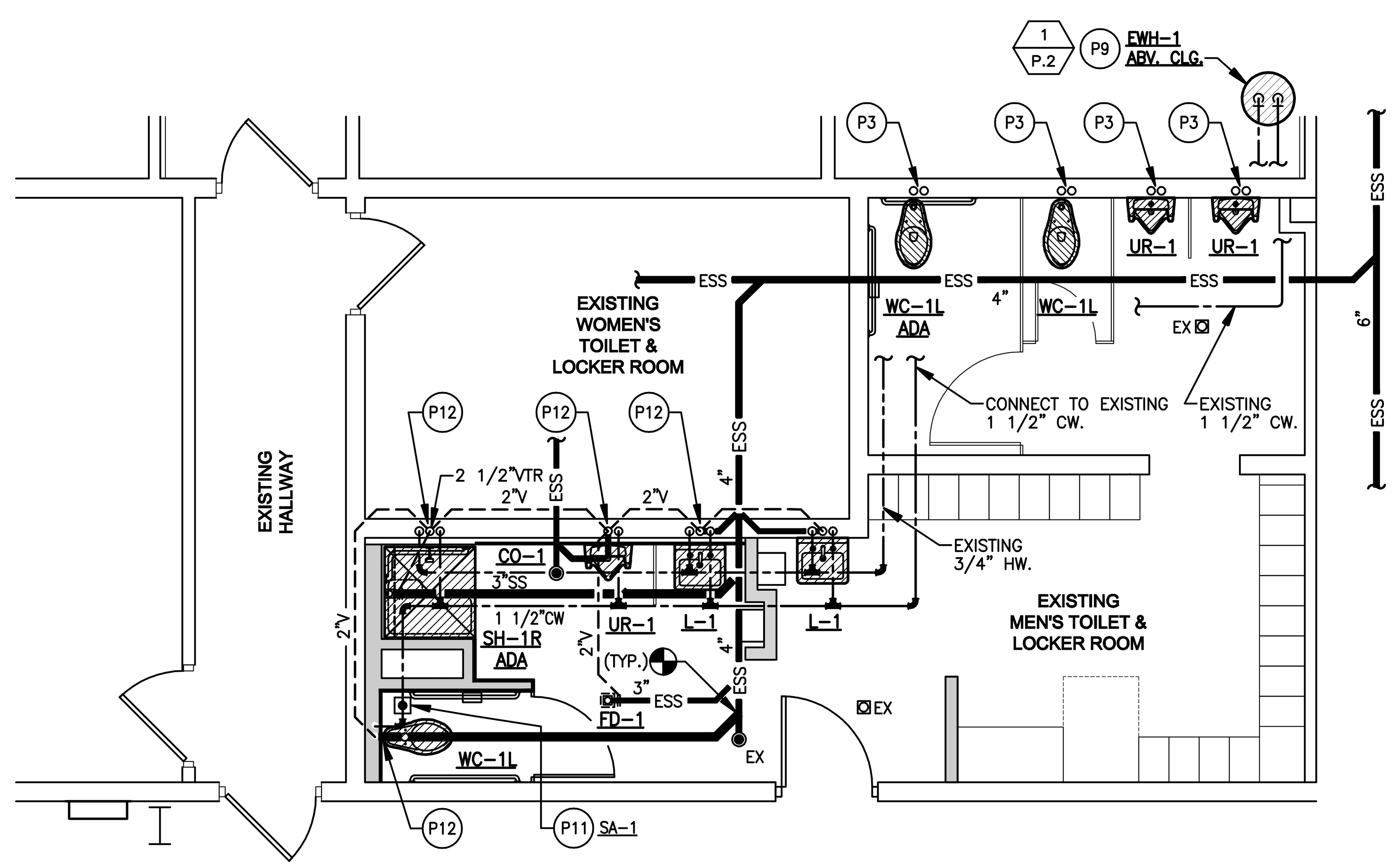


2 ELECTRIC WATER HEATER (EWH-1)

SCALE: NOT TO SCALE

PLUMBING SYMBOLS

Symbol	Description
1 / P.1	REFERENCE TO DETAIL AND SHEET NUMBER
	POINT OF CONNECTION NEW TO EXISTING
	EQUIPMENT FURNISHED BY DIVISION 15
	EQUIPMENT FURNISHED BY OTHER DIVISIONS
AFF	ABOVE FINISHED FLOOR
UF	UNDER FLOOR
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER: 120°F
	PIPE RISER DOWN
	PIPE RISER UP
	SANITARY SEWER LINE
ESS	EXISTING 4" SANITARY SEWER LINE
	VENT LINE
EX	EXISTING CLEANOUT
CO	CLEANOUT IN FINISHED FLOOR
EX	EXISTING FLOOR DRAIN
FD	FLOOR DRAIN
VTR	VENT THRU ROOF
HB	RECESSED HOSE BIBB
	GATE VALVE
	BALL VALVE
	UNION
R	RELIEF VALVE
	SHOCK ARRESTOR
	P-TRAP
CD	CONDENSATE DRAIN PIPING



1 PLUMBING FLOOR PLAN - SAN. SEWER, VENT, COLD & HOT

SCALE: 1/4" = 1'-0"

PLUMBING NOTES

(P1) CONFIRM AND COORDINATE EXACT LOCATION OF ALL FLOOR DRAINS WITH ARCHITECTURAL AND STRUCTURAL ELEMENTS, AND HVAC EQUIPMENT AND ELECTRICAL SYSTEMS. REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS PRIOR TO MAKE FINAL INSTALLATION.

(P2) ALL EXTERIOR BRACKETS, CLAMPS AND HANGERS SHALL BE GALVANIZED. COAT ALL ENDS AND WELDS WITH "ZRC" COLD GALVANIZING COMPOUND. PROVIDE SHIELDING AT ALL DISSIMILAR METAL CONTACT. ALL MISCELLANEOUS INTERIOR BRACKETS SHALL BE SHOP PRIMED UNLESS GALVANIZED OR STAINLESS STEEL.

(P3) CONNECT EXISTING COLD WATER, HOT WATER, SANITARY SEWER LINE AND VENT PIPING TO NEW WATER CLOSET AND URINAL. EXTEND OR MODIFY EXISTING PIPING AS REQUIRED. SAW CUT EXISTING WALL OR FLOOR AND PATCH TO MATCH EXISTING CONSTRUCTION.

(P4) INSTALL ASME THERMAL EXPANSION TANK EQUAL TO WATTS MODEL PET-12-M1 AT COLD WATER CONNECTION TO ELECTRIC WATER HEATER.

(P5) REFER TO SHEET P.2 PLUMBING FIXTURE BRANCH CONNECTION SCHEDULE FOR LINE SIZES NOT SHOWN ON FLOOR PLANS.

(P6) INSTALL 12" AIR CHAMBER FOR DOMESTIC HOT AND COLD WATER PIPING AT SINGLE PLUMBING FIXTURE.

(P7) PROVIDE TYPE "K" COPPER UNDER SLAB WITH CORROSION PROTECTION AS SPECIFIED OR SCHEDULED.

(P8) ALL PLUMBING FIXTURES INDICATED ON FLOOR PLANS OR SCHEDULED FOR ADA MUST COMPLY WITH ADA HEIGHTS AND REQUIREMENTS. CONFIRM WITH ARCHITECTURAL DRAWINGS. INSULATE P-TRAP, TAILPIECE AND WATER SUPPLIES OF ALL ADA COMPLIANT PLUMBING FIXTURES WITH HANDI-LAV INSULATION OR EQUAL.

(P9) INSTALL NEW ELECTRIC WATER HEATER "EWH-1" AT EXISTING LOCATION AND CONNECT EXISTING COLD WATER, HOT WATER AND DRAIN PIPING, AND EXTEND OR MODIFY PIPING AS REQUIRED

(P10) PROVIDE HYDROTROL SHOCK ARRESTOR EQUAL TO MIFAB OR ZURN Z1700, MODEL #300 IN COLD WATER LINE, 33-60 PU. INSTALL STAINLESS STEEL 12" x 12" ACCESS FOR SERVICING.

(P11) PLUMBING PIPING INSTALLATION MUST BE WITHIN 3 FEET OF ALL ELECTRICAL PANELS AND HVAC EQUIPMENT OR PER CODES.

(P12) CONNECT COLD WATER, HOT WATER, SANITARY SEWER LINE AND VENT PIPING TO NEW WATER CLOSET, SHOWER, URINAL AND LAVATORY AS SHOWN. SAW CUT AND PATCH EXISTING WALLS, FLOOR AND/OR CEILING TO MATCH EXISTING CONSTRUCTION AS REQUIRED.

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PLUMBING FLR. PLAN, SYM., NOTES & DETAILS

PLUMBING SPECIFICATIONS

1. SCOPE OF THE WORK INCLUDED IN THIS SECTION:

   A. The complete installation of the domestic cold and hot water piping and the drain, waste and vent piping all from the point noted on the drawings to all fixtures, saw cutting/trenching and backfilling for piping in this section, and fixtures, incidentals, and equipment described in this section.

   B. The furnishing of all labor, materials, equipment, tools, cranes, hoists, scaffolding, support, etc. necessary or incidental to the accomplishment of the work described herein and/or shown on the accompanying drawings.

   C. Furnishing detailed information, including dimensional drawings and specifications on all equipment, fixtures piping etc. to be furnished and/or installed.

   D. All work and installation of plumbing systems in their entirety shall comply with the 2018 International Plumbing Code, International Energy Conservation Code, Southern Standard Mechanical Code, most recent versions of all applicable laws, rules, regulations and ordinances of all governing national or local codes and authorities. However, give precedence to the plans and specifications whenever they require higher standards than those required by the rules and regulations above. The 2018 International Plumbing Code will govern in case of any direct conflict between this code and the plans and specifications. Any changes necessary in the work indicated on the plans or in the specifications that must be made in order for the work to conform to this plumbing code shall be made at no additional cost to the Owner.

   E. Includes extensive cooperation with mechanical contractor, electrical contractor, and others where plumbing work serves units furnished under separate trades and contract.

   F. Contractor shall obtain required permits and pay all fees.

   G. Demolition damage to existing materials/equipment will be repaired at no additional cost to owner. Re-support any remaining piping or devices that were supported by walls or structures being removed.

2. DRAWINGS:

   The approximate locations of all equipment, piping etc. are indicated on the plumbing drawings. These drawings do not intend to give the complete and accurate and precise details in regard to locations, etc. Exact locations are to be determined by reference to the general building plans and by actual measurements at the building, and will in all cases, be subject to approval of the Engineer.

3. COMPLETE FUNCTIONING OF THE WORK:

   All labor, materials, apparatus and appliances that may be fairly implied as essential to the complete functioning of the plumbing systems described herein and shown on the drawings shall be furnished and installed whether specifically mentioned in these specifications, or shown in the drawings or not. In case of doubt as to the work intended by the drawings or specifications, or in event of need for amplification or clarification thereof, the contractor shall call upon the Engineer for supplementary instructions or drawings.

4. EXAMINATION OF THE SITE:

   Examine the actual site and compare with the drawings and specifications. Ascertain and check locations of any existing obstructions that may affect the work. Failure to determine conditions will not be considered cause for granting additional compensation.

5. SUBMITTAL DATA AND SHOP DRAWINGS:

   A. Within twenty (20) days after a contract is awarded for this work, the contractor shall submit to the Architect for approval, detailed shop drawings, control wiring diagrams, equipment drawings, engineering information, detailed specifications and description, and other pertinent data on all items of equipment and material the contractor intends to install.

   B. Three (3) complete sets of drawings and/or data noted in A. above shall be submitted to the Engineer for approval and if corrections are required, re-submit showing connections, and continue to re-submit until approval by the Architect is obtained. After satisfactory review by the Architect, one approved copy will be returned to the Contractor.

6. COLD/HOT WATER, SANITARY DRAIN, WASTE AND VENT PIPING:

   A. Furnish and install all cold/hot, sanitary drain, waste, vent piping, supports, hangers, sleeves and insulations noted or required to tie-in new pipings to existing.

7. ESCUTCHEONS:

   A. Location: On all exposed lines in finished areas where passing through walls, floors, or ceilings.

   B. Material: Chrome plated Brass or as noted on plans.

   C. Sized to fit snugly around pipe and tight against wall, floor or ceiling where installed. Verify with Architect if you have any questions.

8. CLEANING AND TESTING:

   A. After completing this installation, the Contractor shall thoroughly clean all components or his work that are sight exposed elsewhere within inside or out-side the building. This cleaning shall be done in preparation of final painting. Any equipment having factory painted finish shall be touched up using paint of the same type and color.

   B. All items of equipment and fixtures shall be tested and proven free of all mechanical defects.

   C. The Contractor shall also make such other tests as may be required to demonstrate that all equipment/pipings performance comply with the specification requirements and in accordance with codes.

9. PLUMBING FIXTURES:

   A. The work in this section shall include the furnishing and installing of all plumbing fixtures, unless noted otherwise, and/or the connection to or roughing in of plumbing services for fixtures furnished under other sections herein or furnished by the Owner, all as noted in fixture schedule in this section.

   B. Note that each and every fixture requiring water service shall be furnished with individual stop valves.

   C. Locate all fixtures accurately for spacing and height. Engineer to check and verify center to center location of all fixtures after roughing-in and before placing on concrete slab. Refer to plans or elsewhere herein for wall-mounted fixture rim height above floor. If the rim mounting height is not noted for any wall-mounted fixture, obtain the desired height before roughing in for fixture.

ELECTRIC WATER HEATER

MARK	RECOVERY		INPUT KW	FLC AMPS	MOCP	VOLTAGE /PHASE	DIMENSIONS	THERMOSTAT	WATER CONNECTIONS SIZE (NPT)		MANUFACTURER MODEL NO.	LOCATION	REMARKS
	TANK GALLONS	GPH @ 100° RISE							CW	HW			
EWH-1	30	50	9	25	35	208/3/60	19"øx x49-1/4"H	IMMERSION	3/4"	3/4"	RHEEM E30A-9-G	ABOVE CLG.	W/ (1)

NOTES:

1) ELECTRIC WATER HEATER WITH:
   A.) 150 PSIG ASME T & P RELIEF VALVE.
   B.) 98% MAXIMUM RECOVERY EFFICIENCY.
   C.) LIFEGUARD HEATING ELEMENTS, SYSTEM SENTINEL LED DIAGNOSTIC SYSTEM AND AUTOMATIC TEMP. CONTROL.
   D.) FULL PORT, FULL FLOW BRASS DRAIN VALVE.
   E.) LONG LIFE ASME TANK, MINIMAL HEAT LOSS DESIGN AND 2 1/2" RIGID POLYRETHANE FOAM INSULATION.
   F.) ANODE RODS.
   G.) INTEGRAL 120 VOLT CONTROL CIRCUIT AND FUSING.
   H.) WITH "WATTS" THERMAL EXPANSION TANK (PET-12-M1).

PLUMBING FIXTURE BRANCH CONNECTION SCHEDULE

FIXTURE	MARK	HOT WATER	COLD WATER	WASTE/DRAIN	VENT
WATER CLOSET-FLUSH VALVE	WC-1L, WC-1L ADA	----	1"	4"	2"
URINAL	UR-1	----	3/4"	2"	2"
LAVATORY	L-1	1/2"	1/2"	1 1/2"	1 1/2"
SHOWER	SH-1R ADA	1/2"	1/2"	3"	2"
ELECTRIC WATER HEATER	EWH-1	1"	1"	----	----
FLOOR DRAIN	FD-1	----	----	3"	2" (UF)
CLEANOUT	CO-1	----	----	3"	2"

NOTE:

PIPE SIZES SHOWN ARE MINIMUM.

PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER	MODEL NO.	REMARKS
WC-1L ADA	AMERICAN STANDARD	3461.660 3461.001.020	VITREOUS WHITE CHINA FLOOR MOUNT MADERA 16-1/2"H ELONGATED FLUSHOMETER FLUSH VALVE TOILET, 1.6 GPF LOW CONSUMPTION, TOP SPUD, FLOOR OUTLET AND EVERCLEAN. ADA COMPLIANT. LEFT HANDED FLUSH LEVER OR WIDE SIDE OF STALL.
	AMERICAN STANDARD	6065.161 5905.100	SELECTRONIC FLUSH VALVE WITH FACTORY-INSTALLED CR-P2 LITHIUM BATTERY, SENSOR "HANDS FREE" OPERATION AND MANUAL OVERRIDE BUTTON. EVERCLEAN SEAT EXTRA HEAVY DUTY OPEN FRONT LESS COVER.
WC-1L	AMERICAN STANDARD	3451.660 3451.001.020	VITREOUS WHITE CHINA FLOOR MOUNT MADERA 15"H ELONGATED FLUSHOMETER/SELECTRONIC FLUSH VALVE TOILET, 1.6 GPF LOW CONSUMPTION, TOP SPUD, FLOOR OUTLET AND EVERCLEAN. STANDARD HEIGHT. LEFT HANDED FLUSH LEVER OR WIDE SIDE OF STALL.
	AMERICAN STANDARD	6065.161 5905.100	SELECTRONIC FLUSH VALVE WITH FACTORY-INSTALLED CR-P2 LITHIUM BATTERY, SENSOR "HANDS FREE" OPERATION AND MANUAL OVERRIDE BUTTON. EVERCLEAN SEAT EXTRA HEAVY DUTY OPEN FRONT LESS COVER.
UR-1	AMERICAN STANDARD McGuire	6400.001.020 1233	STALLBROOK 1.0 GPF VITREOUS WHITE CHINA, SLOPING FRONT STALL URINAL WITH TOP SPUD, INTEGRAL FLUSH SPREADER, WASHOUT FLUSH ACTION, 3/4" INLET SPUD, STRAINER AND SELECTRONIC FLUSH VALVE. ADA COMPLIANT. MOUNT AT ADA HEIGHT.
	AMERICAN STANDARD	6063.101	SELECTRONIC FLUSH VALVE WITH FACTORY-INSTALLED CR-P2 LITHIUM BATTERY, SENSOR "HANDS FREE" OPERATION AND MANUAL OVERRIDE BUTTON.
L-1	AMERICAN STANDARD	0356.421.020	LUCERNE WHITE VITREOUS WALL-HUNG LAVATORY WITH SINGLE CENTER FAUCET HOLE. ADA COMPLIANT. WALL HANGER INCLUDED/CONCEALED ARMS SUPPORT.
	AMERICAN STANDARD	6053.102	ELECTRONIC PROXIMITY LAVATORY FAUCET, 1.5 GPM PRESSURE COMPENSATING, VANDAL-RESISTANT AERATOR AND SENSOR "HANDS FREE" OPERATION AND PWRX LONG-LIFE BATTERY POWERED.
	AMERICAN STANDARD	605XTMV1070	POINT OF USE THERMOSTATIC MIXING VALVE.
	McGUIRE	155WCECO	ADA COMPLIANT OFFSET CHROME PLATED CAST BRASS TAILPIECE WITH OPEN GRID STRAINER.
	McGUIRE	2165CC	1/2"x3/8" ANGLE HOT AND COLD WATER SUPPLY STOPS.
	McGUIRE	8872CBECO	1 1/4" 17 GA. CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT AND OUTLET TO WALL WITH ESCUTCHEON.
	TRUEBRO	102EZ	ONE P-TRAP COVER TWO ANGLE VALVE AND SUPPLY COVER.
	TRUEBRO	105EZ	ONE OFFSET TAILPIECE WHELLCHAIR STRAINER COVER ONLY.
SH-1R ADA	AMERICAN STANDARD	1662.211.002	1.5 GPF FLOWWISE COMMERCIAL SHOWER SYSTEMS KIT WITH SS SHOWER VALVE, COLONY, COLONY SOFT VALVE ONLY TRIM, 1.5 GPM 3-F HAND SHOWER, IN-LINE VACUUM BREAKER, METAL HOSE, WALL SUPPLY AND 36" SLIDE BAR. ADA COMPLIANT. CONFIRM EXACT REQUIREMENTS OF GRAB BARS, SEAT, DOOR/CURTAIN ROD WITH ARCHITECTURAL DRAWINGS AND SPECIFICATIONS PRIOR TO SUBMIT BIDDING.
	SCHUTER KERDI LINE DRAIN SYSTEM		REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS EXACT REQUIREMENTS OF THE SCHUTER KERDI LINE DRAIN SYSTEM.
SH-1R ADA (ALTERNATE #1)	FREEDOM SHOWERS	APFQ3637BF3PR	40-1/4W"x38-1/2Dx77-5/8"H OD FREEDOM ADA TRANSFER SHOWER, RIGHT VALVE WALL, 3-PIECE FOR REMODELING (36" x 36" ID), ICE GRAY COLOR, DOUBLE RECEIVER FLANGE, 5/8" BARRIER FREE THRESHOLD, CENTER DRAIN LOCATION, SELF-SUPPORTING AND PRE-LEVELLED SHOWER BASE ELIMINATES MUD SETTING, FULL WALL REINFORCEMENT, SMOOTH WALLS, MOLDED LEG LEDGE, EASY-TO-CLEAN APPLIED ACRYLIC FINISH, TEXTURED SLIP-RESISTANT FLOOR, FOLDING SHOWER SEAT, GRAB BARS-INSIDE CORNER AND STRAIGHT, SHOWER ROD, WIEGHTED CURTAIN, PRESSURE BALANCE MIXING VALVE AND HANDPHELD SHOWER AND SLIDE BAR, RECESSED SOAP DISH, CAULKLESS DRAIN AND COLLAPSIBLE WATER RETAINER. ADA COMPLIANT.
FD-1	SIOUX CHIEF	842LNR-V/842PT TG-33IP	PVC BODY AND CAST IRON FLASHING COLLAR WITH ROUND NICKEL BRONZE ADJUSTABLE STRAINER HEAD, GASKET SEAL OUTLET AND PRO-SET/ROLL/TRAP SILL WATERLESS TRAP PRIMER.
CO-1	SIOUX CHIEF	852-4-LB-R	HARD FINISHED FLOOR. PVC BODY, ROUND ADJUSTABLE NICKEL BRONZE SCORIATED TOP, PVC CLOSURE PLUG.
SA-1	ZURN	Z1700-100/200	ZURN TYPE "B" PDI 3/4" MIPS SHOCKSTOP 12-32 FIXTURE UNITS. PROVIDE SS 12"x12" ACCESS FOR SERVICING.

NOTES:

1.) PROVIDE OTHER NECESSARY ACCESSORIES THAT ARE NOT MENTION IN THIS SCHEDULE AS REQUIRED. CONFIRM AND COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS. SUBMIT SUBMITTAL PRIOR TO PURCHASE.

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1/11/22

MEN'S TOILET & LOCKER ROOM RENOVATION FOR THE ORANGE COUNTY DRAINAGE DISTRICT

8081 OLD HIGHWAY 90 ORANGE, TEXAS 77630

ISSUE DATES:

BIDS & CONSTRUCTION
JANUARY 11, 2022

PREPARED BY: LL

P.2
SHEET NO.

PROJECT NO. 2021-11

PLUMBING SCHEDULES & SPECS.