## **Development Services**

#### From Concept to Construction







	ndered	- 1 . 1 . 1
Appeal ID: 25044		Project Address: 3883 SW Moody Ave
Hearing Date: 8/11/2	1	Appellant Name: Jeancarlo Saenz
Case No.: B-003		Appellant Phone: 9727269400 x 106
Appeal Type: Buildin	9	Plans Examiner/Inspector: Maureen McCafferty
Project Type: commercial		Stories: 8 Occupancy: R-2, M, S-2, A-3 Construction Type: Type I-A & Type III-A
Building/Business N	lame: Block 40	Fire Sprinklers: Yes - Thorughout
Appeal Involves: Ere	ection of a new structure	LUR or Permit Application No.: 18-209390-CO
Plan Submitted Opt	on: pdf [File 1] [File 2] [File 3]	Proposed use: Mix-use building
Code Section  Requires	2014 OSSC, Section 1101.2, 11.01.2.1, and Chapter 35  Section 1101.2 Design	
APPEAL INFORM	NATION SHEET	
Requires	Buildings and facilities shall be designed and constructed to be accessible in accordance with thi	
	code and ICC A117 .1.	
	1101.2.1 Alternate Methods	
	The application of Section 104.11 to this chapter shall be limited to the extent that alternate	
	methods of construction, designs or technologies shall provide substantially equivalent or greater accessibility. Where approved by the building official, the provisions of the Fair Housing Act	
	Amendments of 1988 may be considered as an alternate method to the criteria outlined in ICC	
	A117.1 as it relates to covered multi-family dwellings.	
	Chapter 35 – Reference standards	
	2009 ICC A117.1	
	Accessible outlets on inside corners of kitchens.	
Alternate Requested		visions of the 2017 ICC A117.1, which is the referenced standa
Alternate Requested	The proposed design will use prov	
Alternate Requested	The proposed design will use proving 2021 IBC and probably will be t	
Code Modification o Alternate Requested Proposed Design	The proposed design will use proving 2021 IBC and probably will be to the proposed to replace Section 1	visions of the 2017 ICC A117.1, which is the referenced standard the referenced standard on the next version of the current OSS0 1004.9 Operable Parts from the 2009 ICC A117.1 with Section 17 ICC A117.1. Specifically, exceptions #2 and #3, which outlin

The proposed kitchen layouts won't meet electrical code and accessibility at the same time since more than 2 outlets will be required on all inside corners per section 210 of the NEC. Per this section, in kitchens, one receptacle is required over each section of counter-top with a maximum spacing of 4 feet. If an appliance or sink is located along a countertop, the counter on each side is considered a separate section, and a receptacle must be installed on each side.

Because the inside corner is flanked by two appliances, it is considered a counter-top and outlets need to be located at the spacing required. On inside corners, the length of the surface is longer than usual, which generates the requirement for more than 2 outlets to comply with the electrical code. This is the case for some of the kitchens in this project and the reason for the request of an alternate design.

The proposed kitchen layouts do provide an accessible reach to one outlet at a minimum, as outlined in exception #2 (see attached diagram). This solves the conflict generated by the NEC.

This design only affects Type B units, all requirements for Type A units still meet the provisions of 2009 ICC A117.1. Also, the design approach provided by the 2017 ICC A117.1 for electrical outlets in kitchens is also consistent with what is required by the Fair Housing Act, which is listed on section 1101.2.1 as alternate method of design.

#### APPEAL DECISION

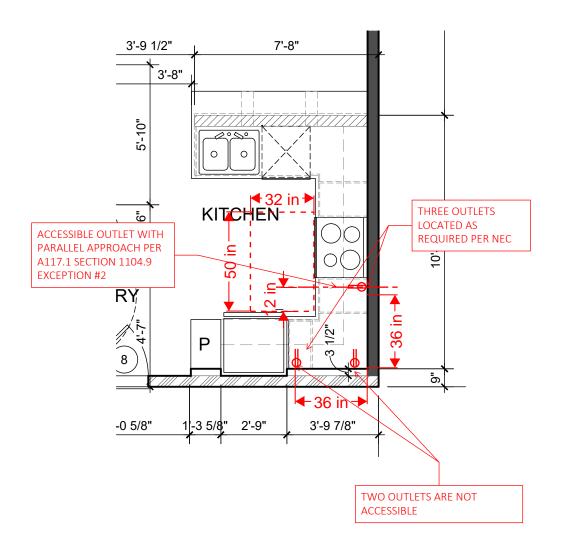
Use of 2017 ICC A117.1 to address accessible electrical outlets on inside corners of kitchen counters: Granted as proposed with accessibility to be verified at time of plan review.

The Administrative Appeal Board finds that the information submitted by the appellant demonstrates that the approved modifications or alternate methods are consistent with the intent of the code; do not lessen health, safety, accessibility, life, fire safety or structural requirements; and that special conditions unique to this project make strict application of those code sections impractical.

Pursuant to City Code Chapter 24.10, you may appeal this decision to the Building Code Board of Appeal within 90 calendar days of the date this decision is published. For information on the appeals process, go to www.portlandoregon.gov/bds/appealsinfo, call (503) 823-7300 or come in to the Development Services Center.

https://www.portlandoregon.gov/bds/appeals/index.cfm?action=entry&appe... 8/12/2021

# BLOCK 40 - KITCHEN OUTLET APPEAL DIAGRAM FOR TYPE B UNITS



TYPICAL KITCHEN PLAN WITH INSIDE CORNER - 1/4" SCALE

The lift must be a platform (wheelchair) lift in accordance with ASME A18.1, not a chair lift (e.g., flipdown seat). Platform lifts may be incline lifts or vertical lifts. The current ASME A18.1 standard limits the maximum rise for vertical platform lifts to 14 feet (4270 mm). See ASME A18.1 for limitations of use.

The exception allows for platform lifts within a Type B dwelling unit to use the 36-inch by 48-inch (760 mm by 1220 mm) car size rather than the larger 36-inch by 52-inch (760 mm by 1320 mm) car size required for private residence elevators in Accessible or Type A units. This is consistent with Section 410.5.1.2 for existing buildings and is applicable for both new and existing Type B units.

**1104.9 Operable parts.** Lighting controls, electrical switches and receptacle outlets, environmental controls, electrical panelboards, and user controls for security or intercom systems shall comply with Sections 309.3 and 1104.1.1.

#### **Exceptions:**

- 1. Receptacle outlets serving a dedicated use.
- 2. In a kitchen where two or more receptacle outlets are provided above a length of countertop that is uninterrupted by a sink or appliance, only one receptacle outlet shall be required to comply with this section.
- 3. In a kitchen where a clear floor space for a parallel approach cannot be located at a countertop in a corner between appliances, receptacle outlets over the countertop shall not be required to comply with this section provided that the countertop area does not exceed 9 square feet (0.835 m²) maximum.
- 4. Floor receptacle outlets.
- 5. HVAC diffusers.
- 6. Controls mounted on ceiling fans.
- 7. Controls or switches mounted on appliances.
- 8. Plumbing fixture controls.
- 9. Reset buttons and shut-offs serving appliances, piping and plumbing fixtures.
- 10. Where redundant controls other than light switches are provided for a single element, one control in each space shall not be required to comply with this section.
- 11. Within kitchens and bathrooms, lighting controls, electrical switches and receptacle outlets are permitted to be located over cabinets with countertops 36 inches (915 mm) maximum in height and 25<sup>1</sup>/<sub>2</sub> inches (650 mm) maximum in depth.

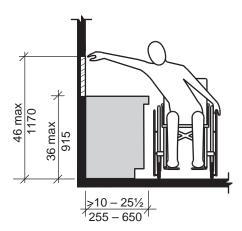


FIGURE 1104.9
REACH OVER A KITCHEN OR BATHROOM CABINET

❖ The general requirements for operable parts are listed in Section 309. By a more specific reference to Sections 1104.1.1 (not 309.2) and 309.3 (not 309.4), operable parts in Type B units require a 30-inch by 48-inch (760 mm by 1220 mm) clear floor space adjacent to the part and that part is to be within reach ranges. Section 309.4, which is not included by the reference, is the section that would normally require that operation of the part does not require any tight pinching, grasping or twisting of the wrist to operate or more than 5 pounds of force (22 N). While it would be a good design practice to still consider the provisions of Section 309.4, it is not a requirement for the items listed in Section 1104.9.

The exceptions in this section are mostly consistent with the exceptions in Section 309.1. However, this section does not reference Section 309.1, so the exceptions are repeated here. Section 1104.9, Exceptions 7 and 8 for plumbing and appliance controls is unique to Type B units. Section 309.1, Exception 8 for electric panel boards in not repeated here because the main section includes electric panel boards but does not reference Section 309.4. (See Commentary Figure C309.1.) Section 309.1, Exception 10 deals with emergency equipment that is not found within a dwelling unit. Section 1104.9 Exception 10 dealing with outlets over counters is unique to Type B units

The intent is for the person in the space to be able to operate the equipment in the room in a normal manner. It is not the intent that these provisions be applicable to items such as shut-offs for plumbing fixtures or protection switches for electrical equipment, such as the reset switch on a garbage disposal. These reset buttons or shutoff controls are addressed by Exception 9, which is intended to cover any of the elements in the base paragraph and allow electrical switches and various shut-offs to be exempt from the requirements of Section 309. Inclusion of this exception clarifies that these controls are not typically considered as being regulated by the standard. These

types of switches or controls are not intended for everyday usage but are for protecting appliances or allowing them to be disconnected to be serviced. Two examples that may be found within a dwelling unit are the electrical reset switch on the bottom of a garbage disposal unit and the water shut-off valves on water supply lines beneath a sink, lavatory or water closet.

Examples of lighting controls are wall light switches or pull cords. If light switches are offered with 3-way or 4-way operation, all switches must be accessible (Exception 10 excludes "light switches" from the redundant control exception). Other types of switches could include wall activation switches for garbage disposals, bathroom ventilation fans or cooking hoods. Exception 10 allows for redundant controls to be located in an inaccessible location. For example, where multiple controls can operate a single element, one of those controls does not need to be accessible. Exception 5 exempts any electrical switches mounted on appliances, such as the cooking hoods. Bathroom ventilation fan shall be accessible as part of the environmental controls.

Receptacles are typically the standard duplex wall outlets located around a room or over a counter. There are several exceptions for electrical receptacles. Receptacles that serve a dedicated purpose (Exception 1), such as the receptacle for a washer/ dryer, refrigerator or stove, need not be reachable. These items are typically plugged in all the time and located behind the stationary appliance. The model electrical code requires electrical receptacles spaced at a maximum of 12 feet (3660 mm) apart in most rooms. In spaces with very tall windows or along balcony guards, there may not be wall space for the required electrical receptacles. Large rooms may need receptacles located toward the center of the room. When floor receptacles are used, they do not need to be reachable (Exception 4). Exceptions 2 and 3 are used for receptacles over kitchen counters. In kitchens, according to the model electrical code, one receptacle is required over each section of countertop with a maximum spacing of 4 feet (1220 mm). If an appliance or sink is located along a countertop, the counter on each side is considered a separate section, and a receptacle must be installed on each side. Exception 2 allows for one receptacle per counter section to not be reachable if the remainder of the outlets over that piece of countertop are reachable. Exception 3 is intended to address where the outlets are positioned in the corner of kitchen and are not reachable due to the configuration of appliances and cabinets. To use this exception, the counter area cannot exceed 9 square feet and the corner area is between appliances (see Commentary Figure C1104.9). An alternative is to locate a receptacle on the side or front surface of the lower cabinet. This is commonly done on kitchen island counters; however, this could reduce drawer space when used on typical floor cabinets.

In a kitchen in a Type B unit, the counters can be located at any height, typically 36 inches (915 mm). However, with the obstructed side reach range requirements in Section 308.3.2, which is referenced from Section 309.3, receptacles generally cannot be located over the standard 36-inch-high (915 mm) counter and be accessible, since the height of the obstruction is to be limited to 34 inches (865 mm) or less. In addition, the standard generally limits the depth of the obstruction to a maximum of 24 inches. Because the Type B units were intended to meet the requirements of the Fair Housing Act and the FHA design requirements that were intended to allow conventional cabinets, Exception 10 was added to specifically allow the reach to be over a 36-inch-high (915 mm) counter. Exception 10 also will allow the reach depth to be over a 24-inch-deep (610 mm) base cabinet that has the typical 1<sup>1</sup>/<sub>2</sub>-inch countertop extending over the base cabinet. Without Exception 10, it would not be possible to use conventional cabinets and still provide access to the outlets, controls and switches that are located over the cabinets. This same problem is typically not as big of an issue in bathrooms because bathroom counter heights are typically installed between 29 and 34 inches (735 mm and 865 mm) high, and the controls or switches may be located on a side wall near the front of the cabinet.

Environmental controls can include ceiling fans or heating and air conditioning thermostats. A common error for locating the thermostat for the designer is to specify the electrical box at 48 inches (1220 mm) high, not noting that the actual control is on the top of the thermostat box, thus placing the control out of the reach range. Exception 5 does exempt the heating and air conditioning diffusers from being accessible. They need to be on or near the floor and near the ceiling to circulate the air in the room effectively. Exception 6 exempts controls mounted on ceiling fans. Typically the on-off and speed for ceiling fans are controlled from a wall switch, but there may be a switch on the fan itself for reversing the direction of the blades.

For Type B units (unlike Accessible and Type A units), Exception 7 exempts all appliance-mounted controls. Appliance controls vary greatly and may include a key pad for temperature and type of cooking (e.g., bake/broil) on ovens, knobs for burner settings on stove tops, door handles to access the interior of the appliance, water/ice dispensers on refrigerators, latches for self-cleaning ovens, soap containers in dishwashers and clothes washers, lint trays in dryers, etc.

In Type B units, plumbing fixture controls are exempted in accordance with Exception 8. Plumbing fixture controls include faucets in showers, tubs and sinks, and flush valves on toilets, which do have accessibility requirements in Accessible and Type A units.

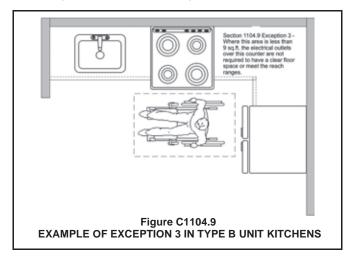
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Accessible windows and window hardware are covered in Accessible and Type A units; however, they are not required in Type B units.

Although electrical panelboards (circuit breaker boxes) are listed in this section, their inclusion does not mean that they are required to be placed within the unit but that they are accessible wherever they are installed within the units and are available for operation or use by the occupants. The location and additional access requirements for panelboards are found in the National Fire Protection Association's National Electrical Code (NFPA 70). If the panelboards are located within the unit, they should allow for the occupants to have access to and reach them (see Commentary Figure C309.1). It is also important that users understand that including panelboards in this section makes the Type B units more restrictive than the FHA. Fair Housing excludes panelboards and circuit breakers completely from the occupant control requirements, while the A117.1 standard regulates the clear floor space and height to access the panelboard.

Security or intercom systems may include activation keypads or access to a phone or speaker. Refer to Sections 1106.5, 1106.6 and 1106.7 for additional specifics for communication features that are part of security or intercom systems.

Operable parts on the primary entrance door to the units are regulated under Section 1104.5.1 through a reference to Sections 404.2.6 and 404.3.5. Door hardware on other doors within the unit is not regulated (see Section 1104.5.2).



**1104.10 Laundry equipment.** Washing machines and clothes dryers shall comply with Section 1104.10.

The standard does not require laundry equipment within the unit; however, where they are provided within units, washers and dryers must meet the minimal level of accessibility in Section 1104.10.1. These provisions are less than those in a common laundry room (see Section 611).

When designing the laundry area, several items must be considered. Section 1104.10.1 requires a parallel clear floor space in front of each top-loading appliance and a forward or parallel approach in front of each front-loading machine. Since appliance controls have no requirements (Section 1104.9 Exception 7), Type B units can use stackable washers and dryers [see Commentary Figure C1104.10(d)].

Though not specifically referenced, the requirements of Section 611.2 regarding the location of the clear floor space could be followed for guidance. This would center the clear floor space on a top-loading appliance and allow up to a 24-inch offset for either a forward or parallel approach to a front-loading machine [see Commentary Figure C1104.10(c)]. The A117.1 standard does not state this requirement because clearances at laundry equipment are not required by the Fair Housing Act (FHA). This means that the A117.1 standard's requirements in Section 1104.10.1 exceed the requirements of the FHA simply by requiring the clear floor space. It is for that same reason that the standard no longer requires the clear floor space be centered on the laundry equipment in a Type B unit.

The orientation of the clear floor space at a front-loading appliance is another important distinction for the Type B unit. While the general laundry provisions of Section 611 and, therefore, those of the Accessible and Type A units (Sections 1102.10 and 1103.10) will only accept a parallel approach, Type B units will accept either a parallel or forward approach. The option for a forward approach to top-loading washers and dryers was not added to the standard in order that the requirements in Section 611 and those of the Accessible and Type A units could match the requirements of Section 611.2 in the federal 2010 ADA Standards for Accessible Design.

When laundry equipment is located in a room, turning spaces and maneuvering clearances are not required as they are for an Accessible unit and Type A unit. A service/laundry sink does not need be accessible; however, it would be better design to provide a parallel or side approach to that sink for potential use [see Commentary Figure C1104.10(a)].

When laundry equipment is located in a closet, the clear floor space can be located 10 inches (255 mm) back from the face of the units (Section 308.3.1), which allows for the wall thickness, but may necessitate either sliding closet doors or no doors so the doors will not block the clear floor space [see Commentary Figure C1104.10(b)]. This standard does not address whether removal of the doors could be considered an adaptable feature.

Countertop is shown at the typical

# SIDE REACH OVER AN OBSTRUCTION

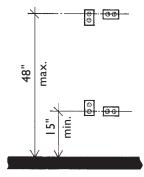
To reach controls and outlets mounted over base cabinets which lack knee space, a person using a wheelchair must be able to approach the cabinet from a position parallel to the cabinet and execute a side reach. This parallel position is made up of a 30-inch x 48-inch clear floor space adjoining a 36-inch wide minimum accessible route. When executing a side reach over a cabinet, the upper limit of the range is reduced to 46 inches.

Cabinet depth is limited to 24 inches. HUD permits use of a standard 24-inch deep cabinet with an additional extension of 1 to 1-1/2 inches for countertops for a maximum depth of 25-1/2 inches. If a built-in shelf, cabinet, or other obstruction must be deeper than 25-1/2 inches, then any switches, outlets, and controls that must be in accessible locations are not permitted to be installed over such deep surfaces.

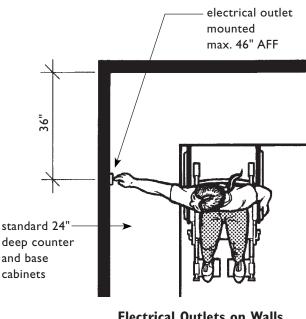
### kitchen height of 36". The drawing in the Guidelines (taken from ANSI Figure 6(c)), on which this drawing is based, gives this dimension as 34". The 34" dimension shown in the Guidelines is in no way intended to dictate counter heights in covered dwelling units. user in a position parallel to cabinet for a side reach to max. control or outlet 46" max. max. 36" cabinet with Maximum Side Reach (From a Parallel Approach) no kneespace Over an Obstruction

#### **Mounting Locations for Outlets**

For accessible controls and outlets, all operable parts must be within the ranges specified above. When electrical outlets are installed horizontally or vertically, duplex outlets must have both receptacles within the reach range. Measurements are made as illustrated below.



**Mounting Height for Outlets** 



Electrical Outlets on Walls
Over Cabinets Must Be a Minimum
of 36" from a Corner