

**2** Examples of Kitchen Storage Types - Side Approach

**Subject** Calculation Methods for Kitchen Storage in Mobility Units

- References**
- 2019 California Building Code (CBC)
  - 2010 ADA Standards (ADAS)
  - Fair Housing Act Design Manual (FHADM)

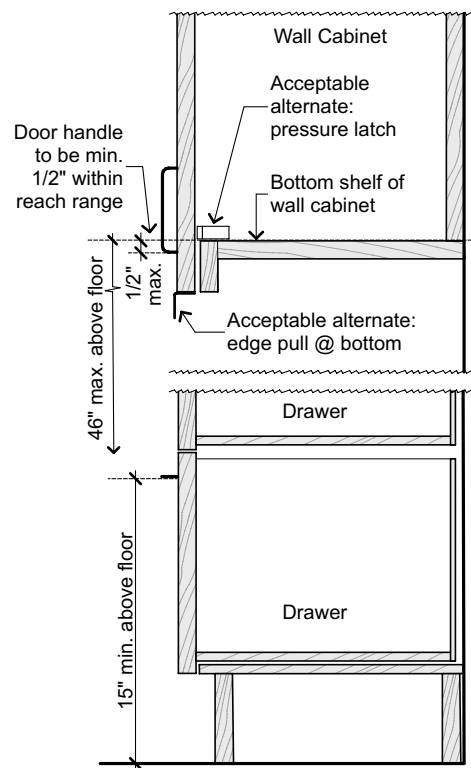
**Purpose** This bulletin provides guidance for calculating storage in Mobility Unit kitchens.

For more information visit the Mayor's Office on Disability (MOD) website: [sfgov.org/mod](http://sfgov.org/mod)

CBC Code Section	Summary
11B-225.2	At least one of each type of storage provided to be accessible.
11B-305	Clear floor space.
11B-308	Reach ranges.
11B-804.5	50% of shelf space to comply with 11B-811.

**Criteria for Kitchen Storage Calculations**

- Calculations and drawings must show 50% of shelving is accessible.
- When drawer hardware is within the required reach range, the storage is accessible.
- If the top of the front edge of a shelf is within the required reach range, the storage is accessible.
- One removable shelf in wall cabinets is to be included in non-accessible storage calculations except for cabinets that are under 24" in height and are located above a range or refrigerator.
- Mobility Units must have the same types of kitchen storage as comparable Adaptable Units.
  - Open shelves in Mobility Units are not comparable to shelves with a door in Adaptable Units.
  - If Adaptable Units have pantries then Mobility Units must also have pantries.
  - Drawer heights in Mobility Units are to be comparable to those in Adaptable Units.
- Items Excluded from Calculation:
  - Bread boards.
  - Refrigerators.
  - Oven storage drawers.
  - Filler strips.
  - Removable base cabinets.
  - Corner areas of wall and base cabinets.
- Projecting face of appliance, cannot overlap with clear floor space.



**Note:** If drawer pull is 15" AFF, drawer storage below 15" AFF may be counted.

**Example Calculations Format**

50% Storage Calcs. - Kitchen Type X								
Cab. Tag	Accessible Shelf and Drawer Count	Inaccessible Shelf and Drawer Count	Width	Depth	Area per Shelf or Drawer	Accessible Storage Area	Inaccessible Storage Area	Total Storage Area
C01	1	0	24"	8"	1.3 SF	1.3 SF	0.0 SF	1.3 SF
C02	1	1	24"	12"	2.0 SF	2.0 SF	2.0 SF	4.0 SF
C03	0	2	36"	12"	3.0 SF	0.0 SF	6.0 SF	6.0 SF
C04	0	2	24"	12"	2.0 SF	0.0 SF	4.0 SF	4.0 SF
C05	4	0	24"	24"	4.0 SF	16.0 SF	0 SF	16.0 SF
C06	2	1	24"	24"	4.0 SF	8.0 SF	4.0 SF	12.0 SF
C07	1	0	36"	24"	6.0 SF	6.0 SF	0 SF	6.0 SF
C08	3	2	24"	24"	4.0 SF	12.0 SF	8.0 SF	20.0 SF
C09	5	2	24"	24"	4.0 SF	20.0 SF	8.0 SF	28.0 SF
<b>Total:</b>						<b>65.3 SF</b>	<b>32.0 SF</b>	<b>97.3 SF</b>
<b>Percentage Accessible:</b>						<b>65.3 / 97.3 = 67.1%</b>		

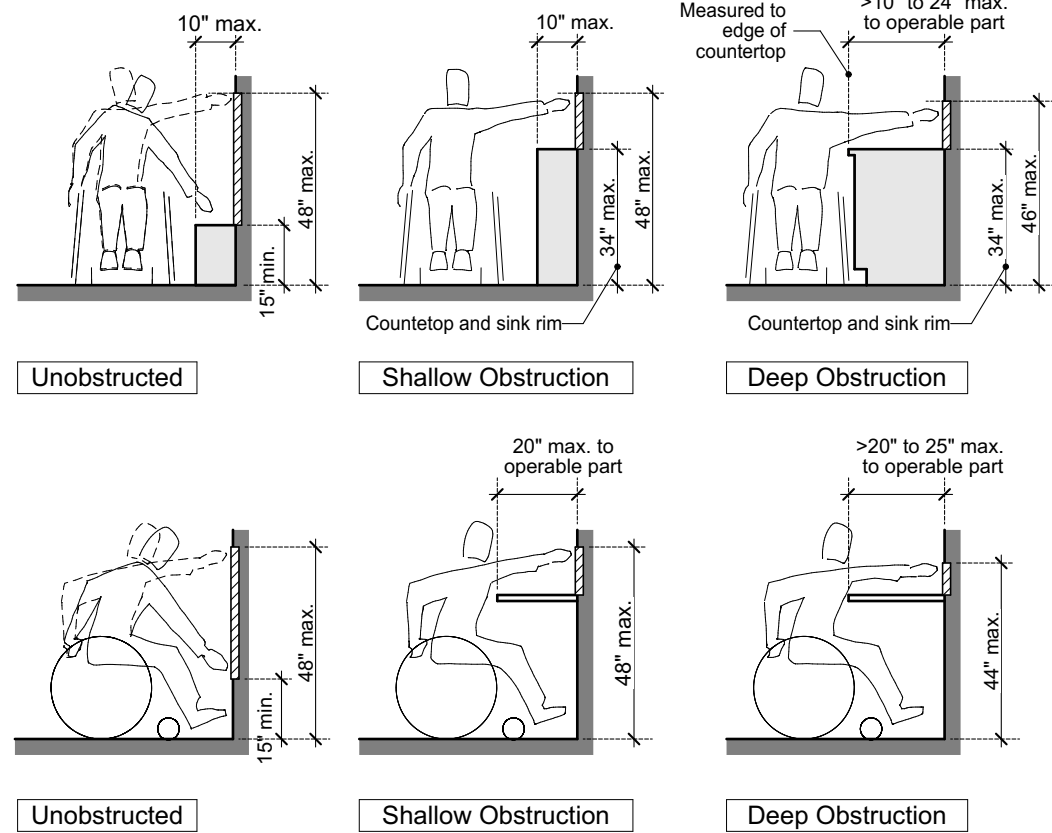
**Residential Dwelling Unit Terminology**

**Mobility Unit:** Residential dwelling unit per 11B-233.3.1.1 providing mobility features complying with Sections 11B-809.2 through 11B-809.4.

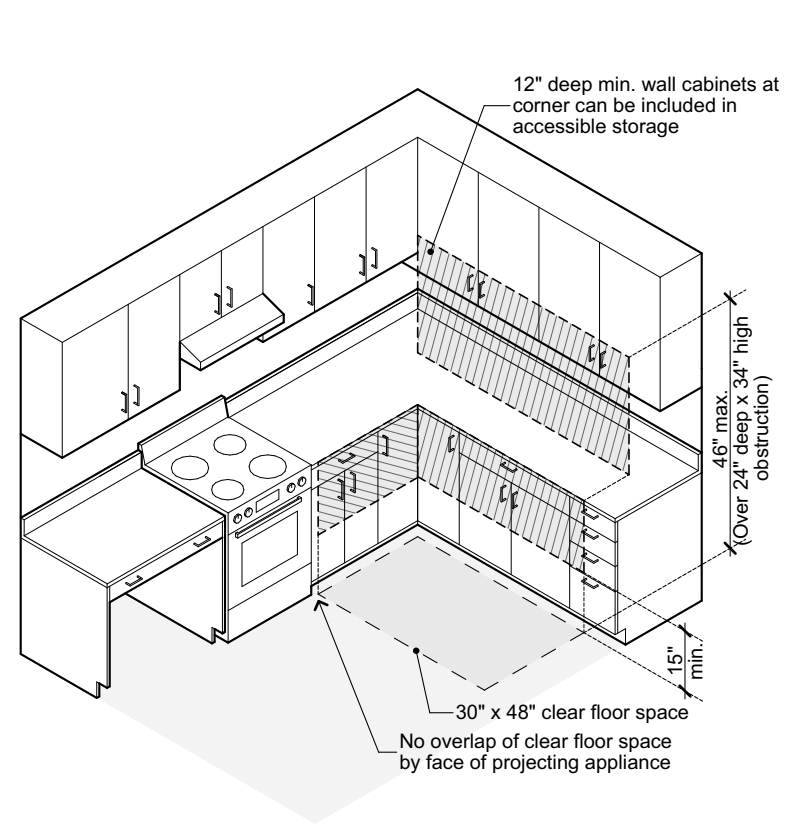
**Adaptable Unit:** Residential dwelling unit per 11B-233.3.1.2, providing adaptable accessibility features as required by Sections 11B-233.3.1.2.1 through 11B-233.3.1.2.6.

**Communication Unit:** Residential dwelling unit per 11B-233.3.1.3, providing communication features complying with Section 11B-809.5.

**1** Cabinet Handle Location

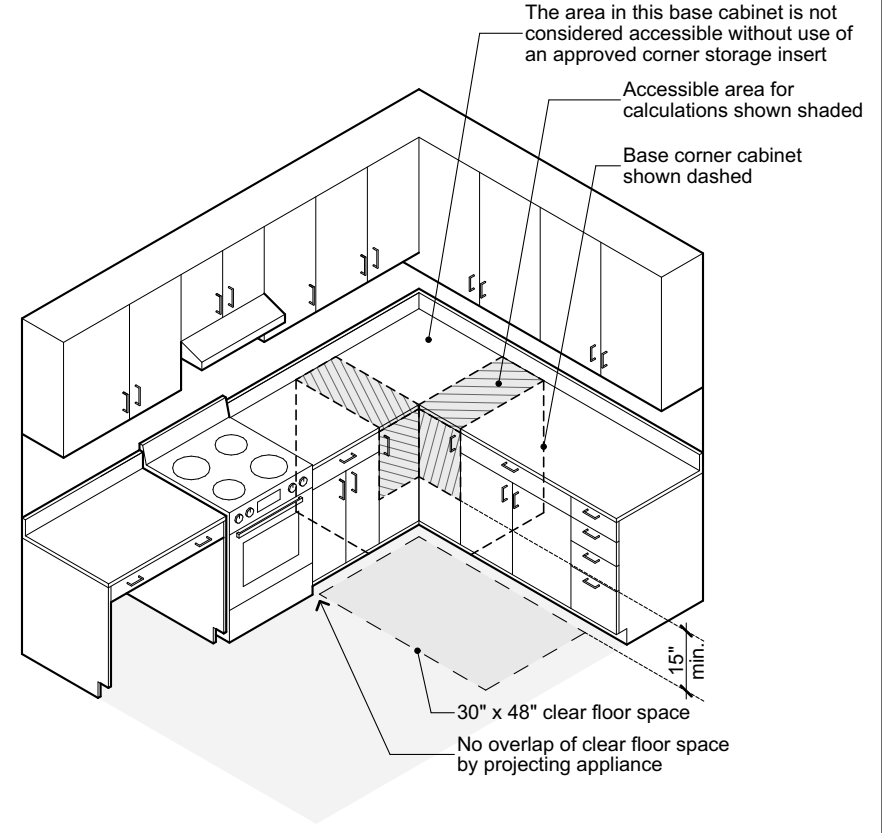


1 Reach Ranges  
02.2



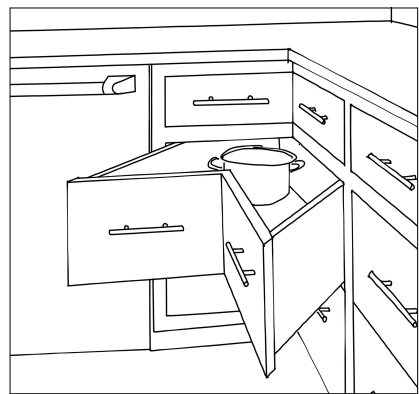
2 Corner Storage Reach  
02.2

KEY TO SHADING  
 = Accessible Storage from clear floor space position shown

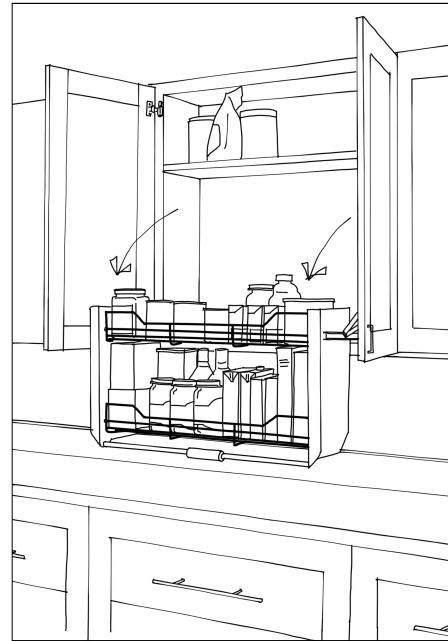


3 Corner Base Storage  
02.2

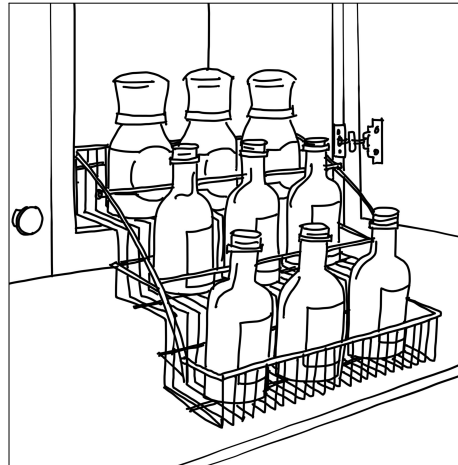
KEY TO SHADING  
 Corner storage considered accessible



Corner Storage Examples



Wall Cabinet Storage Examples

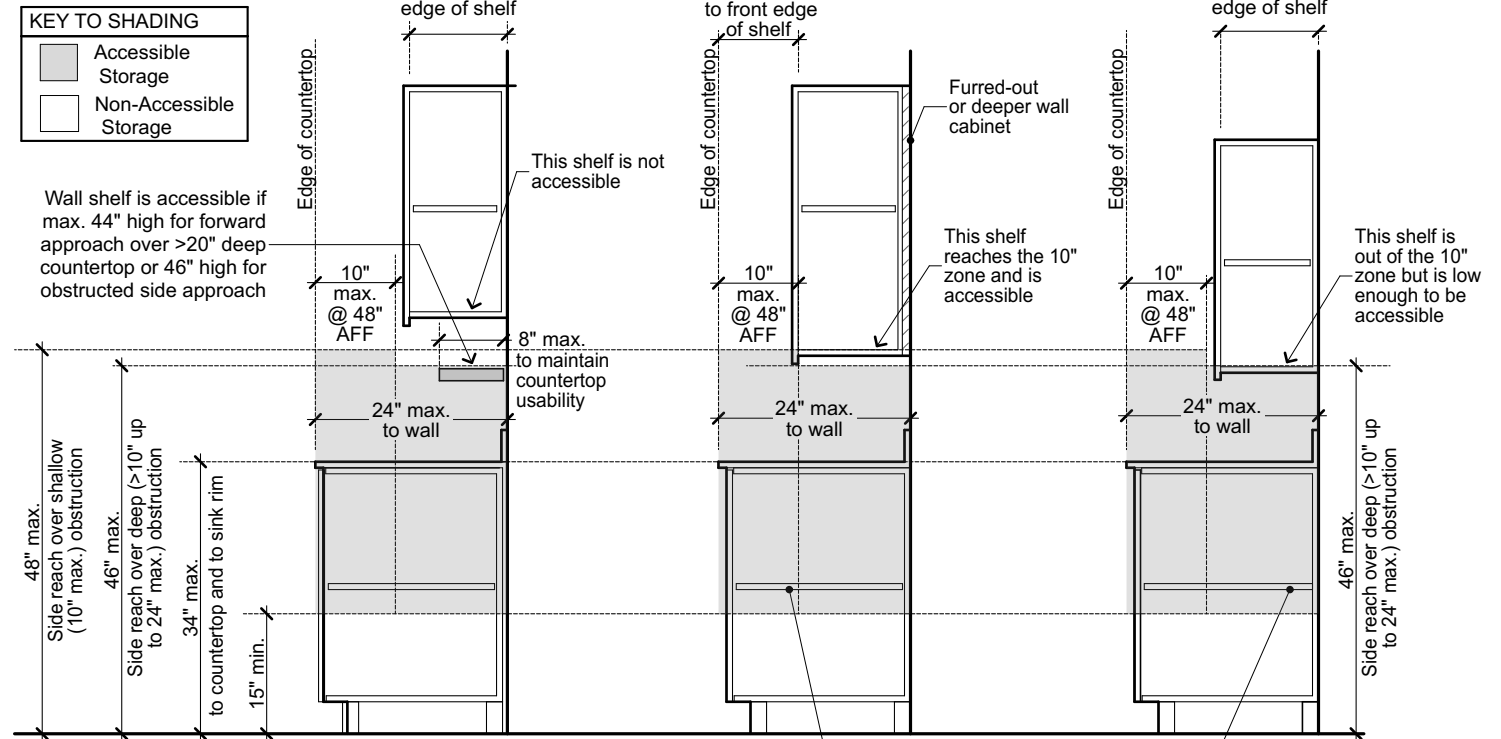


Products like these can make more wall cabinet storage accessible by bringing the contents down to a lower height and forward toward the user.

- Operating part / handle must be mounted within reach range.
- Confirm upper shelf lowers sufficiently to be included in accessible storage.
- Five pound operating force is measured when empty.
- Operation must not require grasping/twisting.

4 Non-Standard Storage Examples  
02.2

These images and other creative solutions for providing accessible storage are suggestions only - the project designer is responsible for demonstrating that any non-standard solution meets reach and other applicable code requirements.



- Note: These side reach diagrams apply only when there is a 48" length of countertop to accommodate the 30"x48" clear floor space with no protruding appliances.
- A Wall Shelf & Inaccessible Wall Cabinet
- B Furred-Out Wall Cabinet
- C Low Wall Cabinet

5 Side Reach Ranges for Cabinets  
02.2