



Subject	Reach Ranges to Operable Parts
References	<ul style="list-style-type: none"> • 2019 California Building Code (CBC) • 2010 ADA Standards (ADAS) • Fair Housing Act Design Manual (FHADM)
Purpose	This bulletin provides guidance for the accessible mounting locations of electrical outlets, switches, and controls.

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

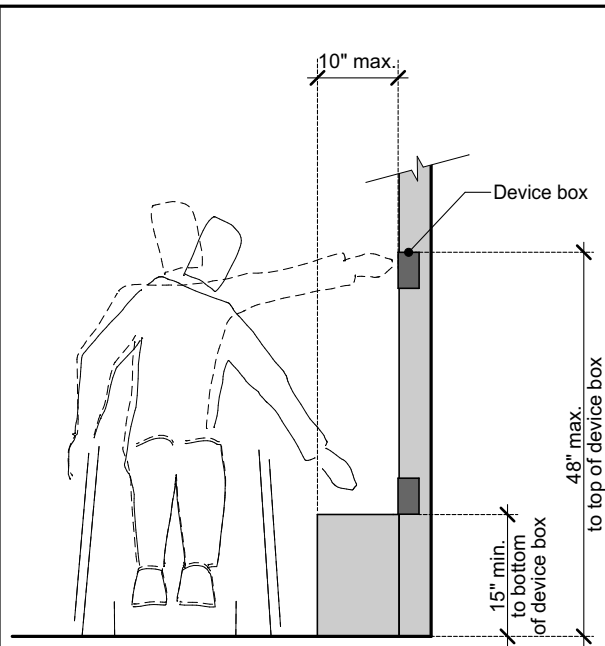
CBC Code Section	Summary
1136A	Receptacles, controls, and switch heights in Adaptable Units.
1138A.3	Reach ranges in Adaptable Units.
1138A.4	Controls and operating mechanisms.
11B-205	Operable parts.
11B-305	Clear floor space.
11B-306	Knee and toe clearance.
11B-308.1	Measurement of reach ranges for switches and outlets.
11B-308.2	Forward Reach, unobstructed and obstructed.
11B-308.3	Side Reach, unobstructed and obstructed over 34" max high counter.
11B-804.3	Kitchen work surface.
11B-804.6	Appliances.
ADAS Section	Summary
ADAS 205	Operable Parts.
FHADM Section	Summary
Requirement five, page 5.8	Mounting locations for outlets.

Criteria for Outlets and Controls at Kitchen Counters

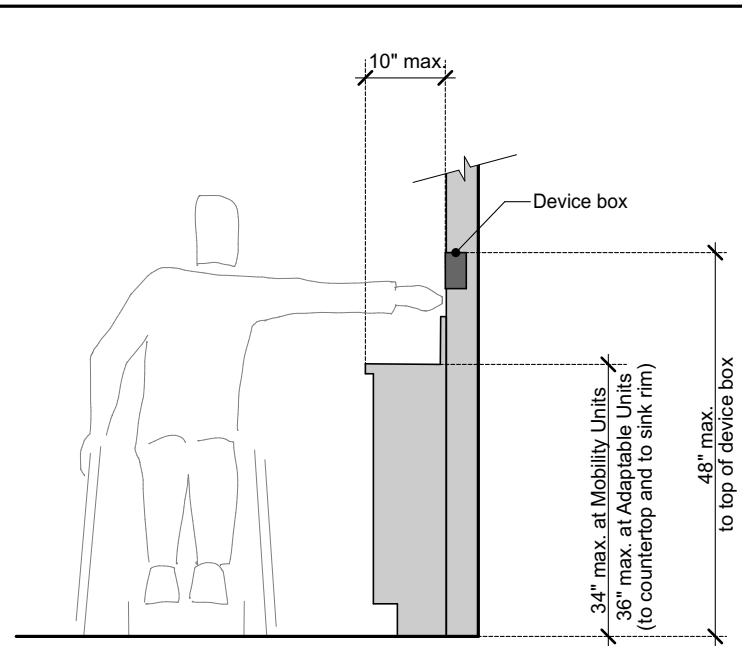
1. Adaptable Units: Inaccessible outlets and controls are acceptable provided that comparable accessible ones are provided within the same area.
2. All switches shall be located within accessible reach ranges.
3. Architectural drawings shall show locations of all operable parts, including minimum and maximum heights and distances from obstructions.
4. Position wall devices over countertops horizontally for easier reach (recommended).

Residential Dwelling Unit Terminology

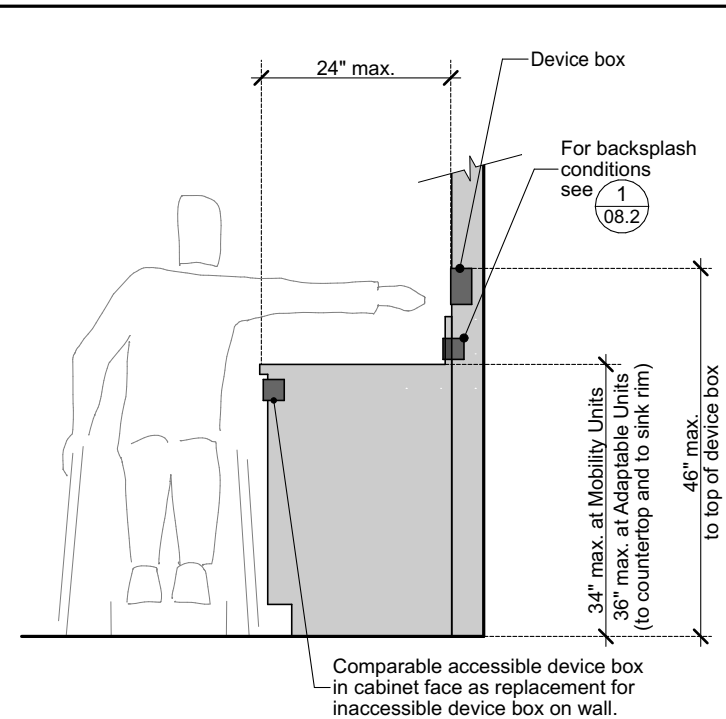
- Mobility Unit:** Residential dwelling unit per 11B-233.3.1.1 providing mobility features complying with Sections 11B-809.2 through 11B-809.4.
- Adaptable Unit:** Residential dwelling unit per 11B-233.3.1.2, providing adaptable accessibility features as required by Sections 11B-233.3.1.2.1 through 11B-233.3.1.2.6.
- Communication Unit:** Residential dwelling unit per 11B-233.3.1.3, providing communication features complying with Section 11B-809.5.



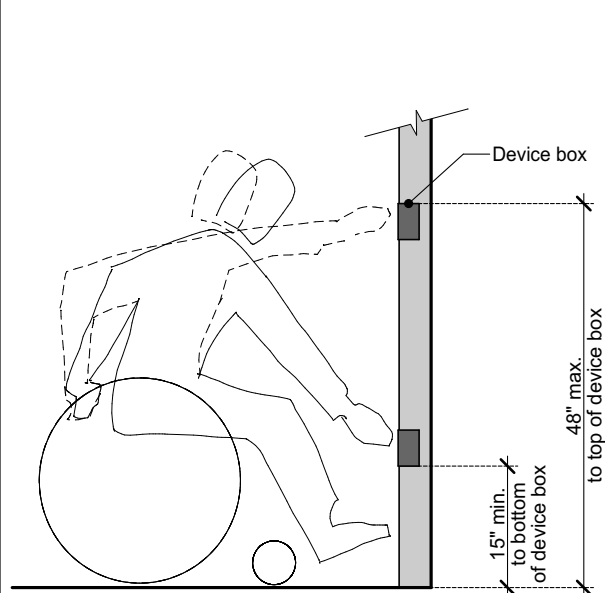
A Unobstructed Side Reach



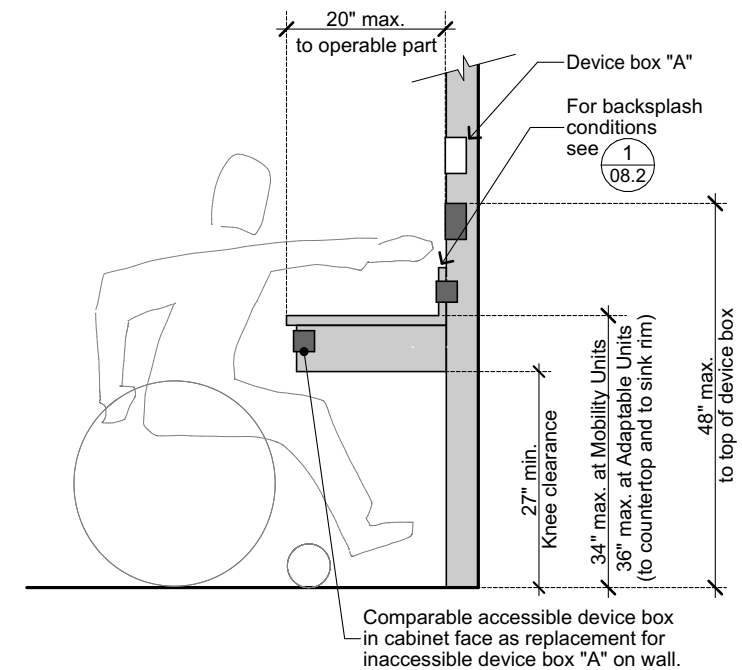
B Shallow Obstructed Side Reach



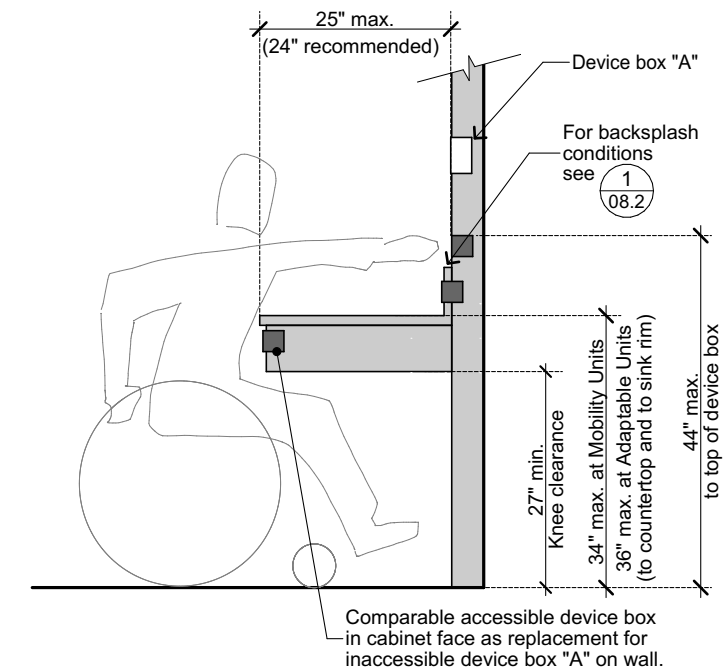
C Deep Obstructed Side Reach



D Unobstructed Forward Reach

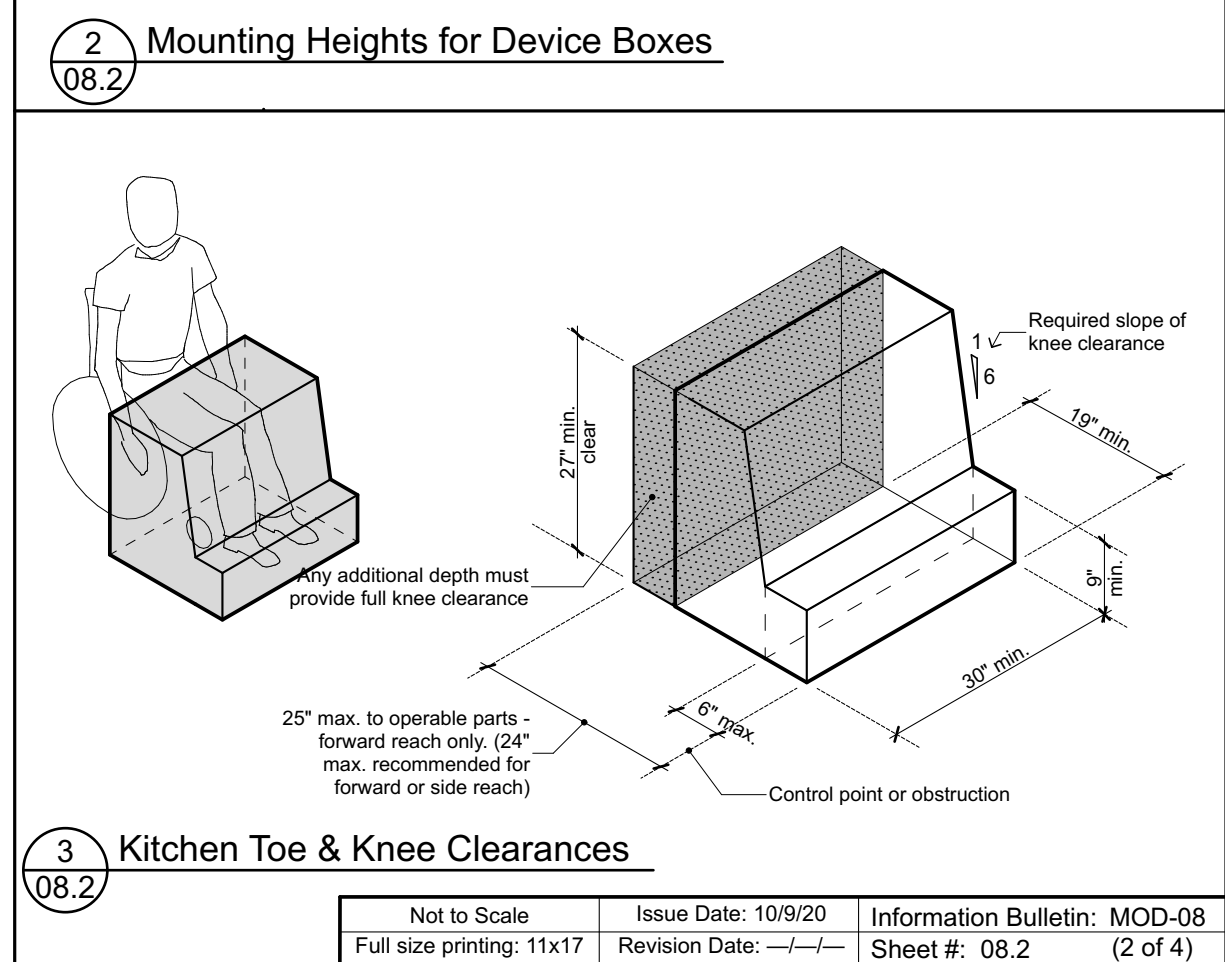
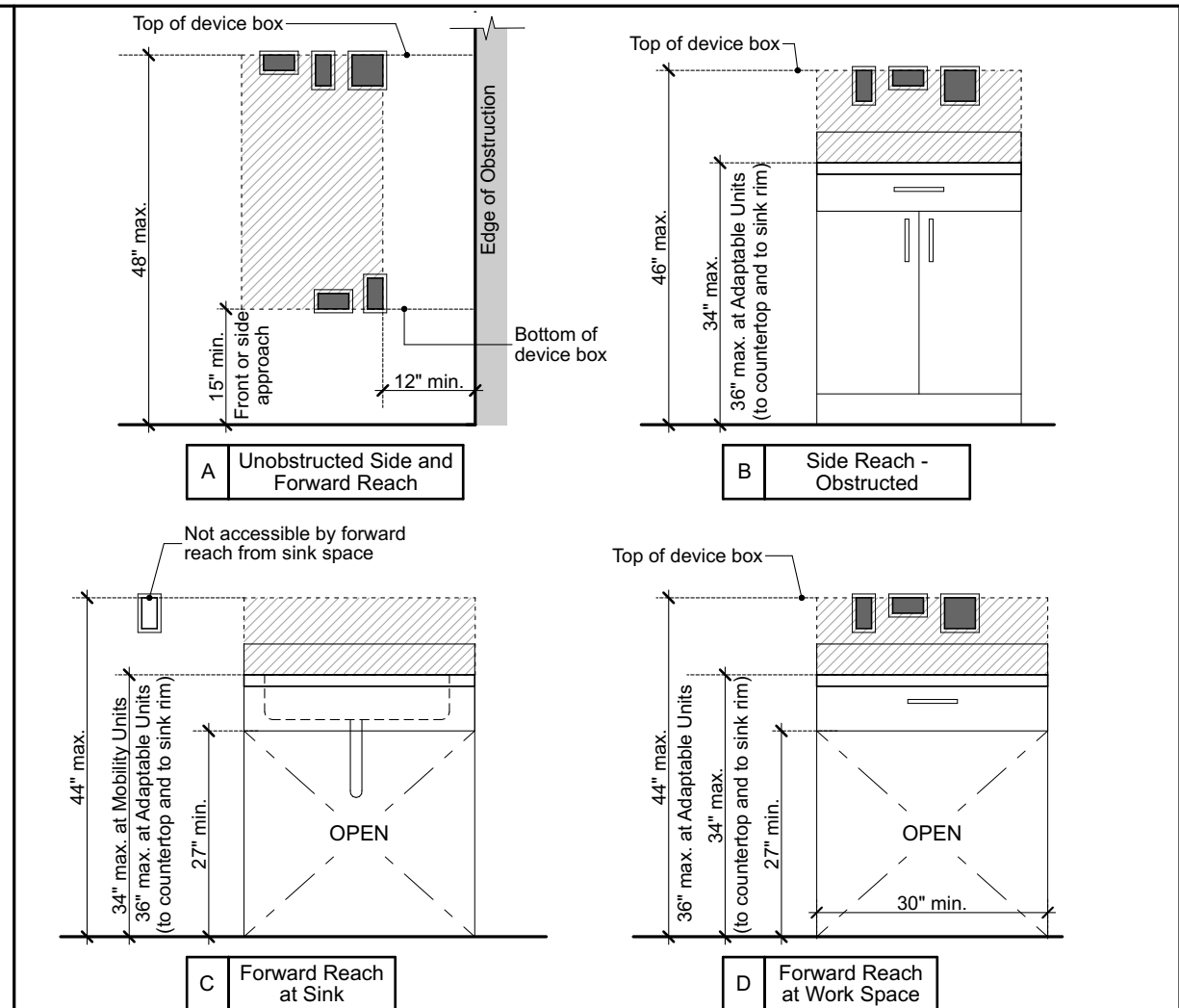
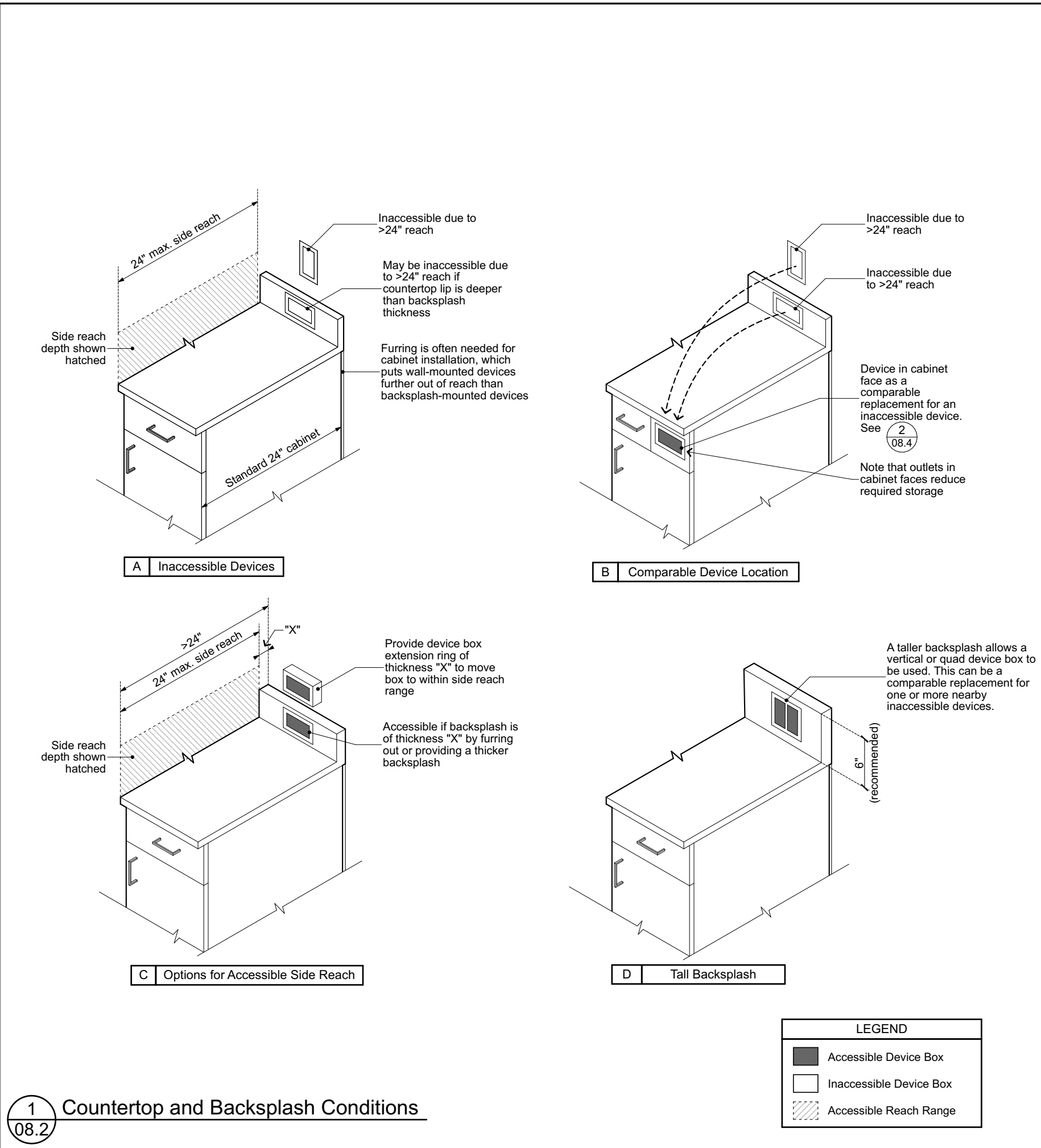


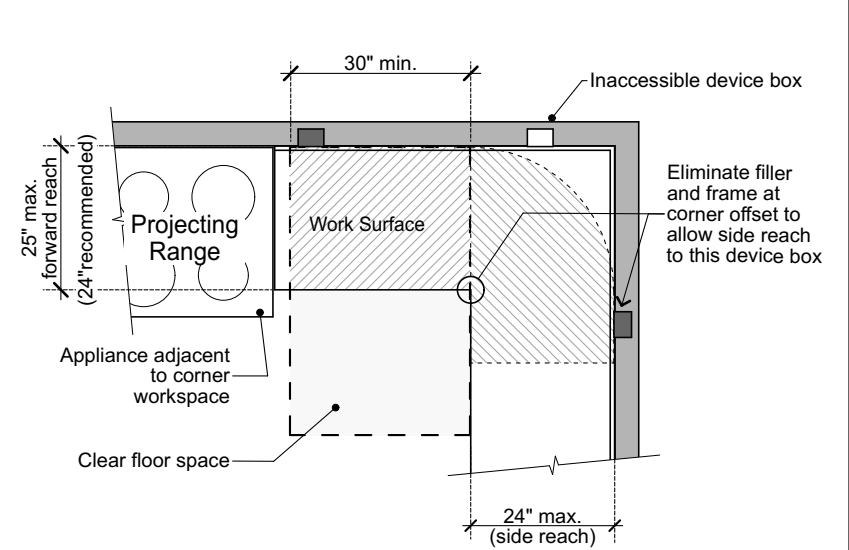
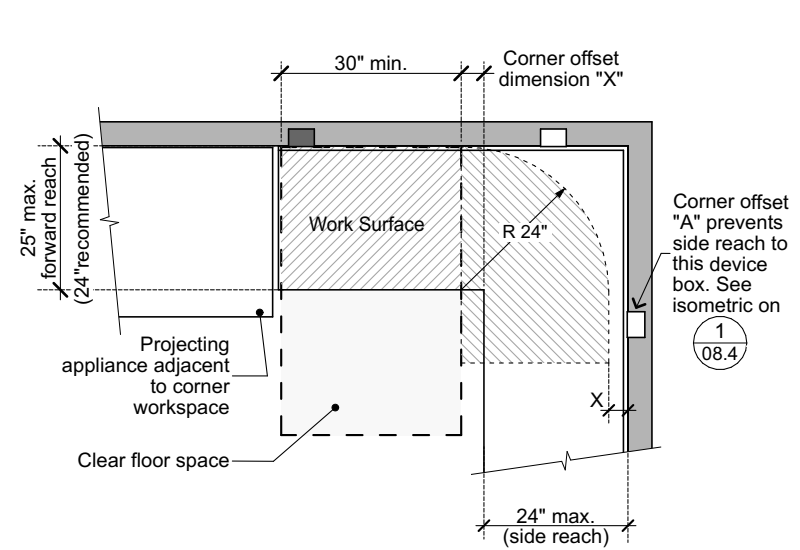
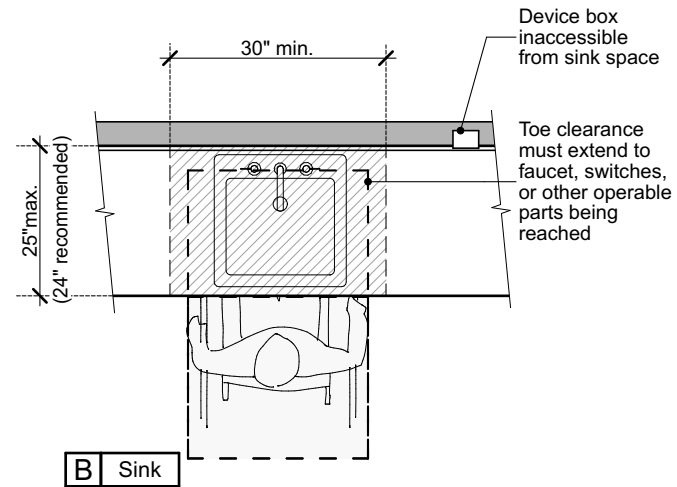
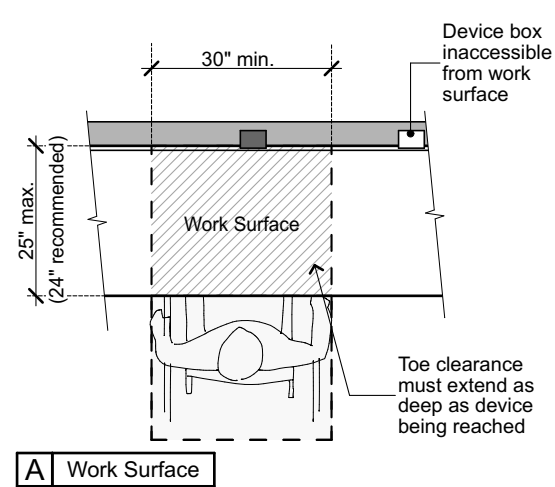
E Shallow Obstructed Forward Reach



F Deep Obstructed Forward Reach

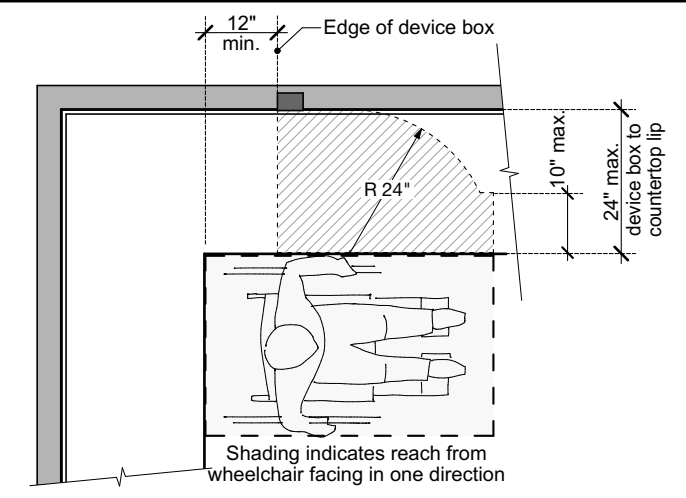
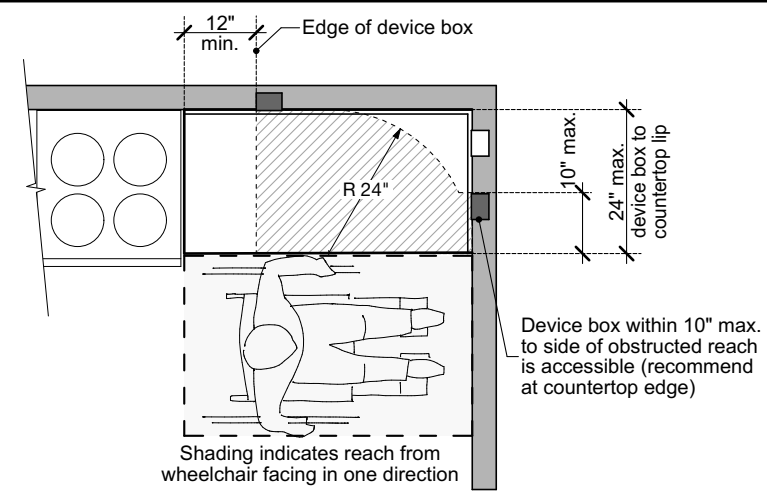
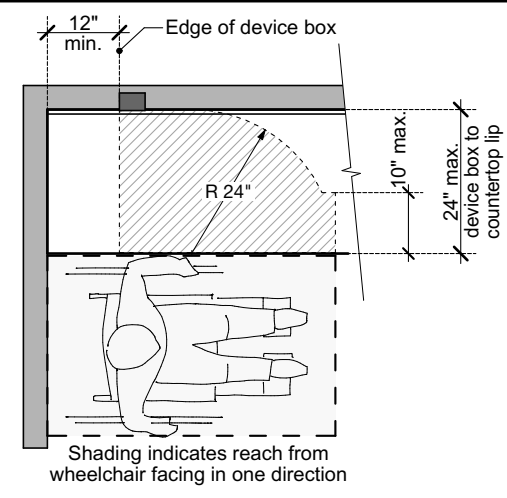
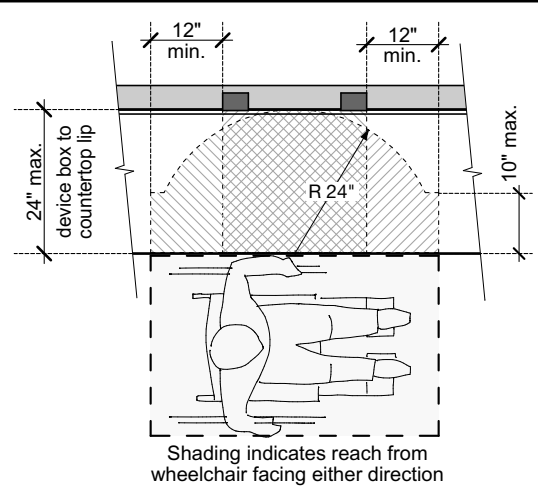
LEGEND	
	Accessible Device Box
	Inaccessible Device Box



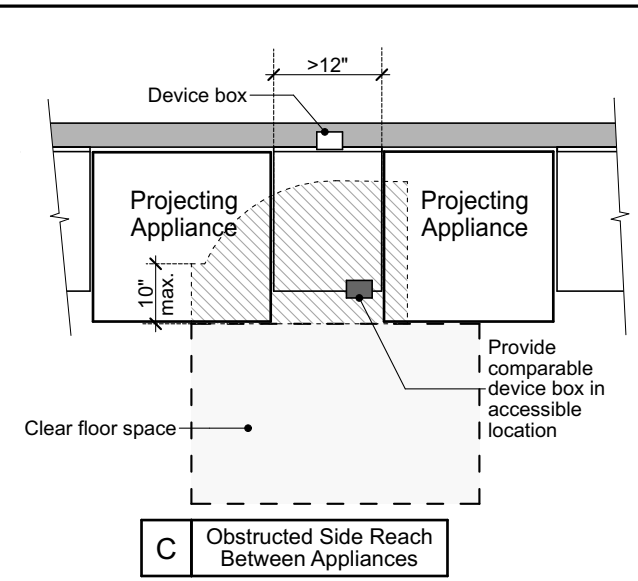
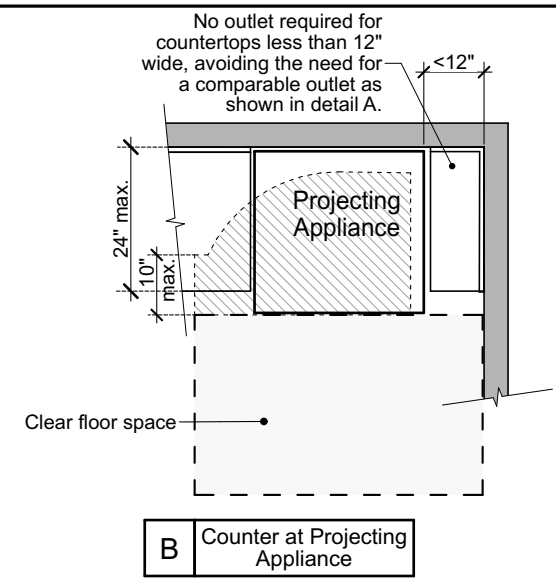
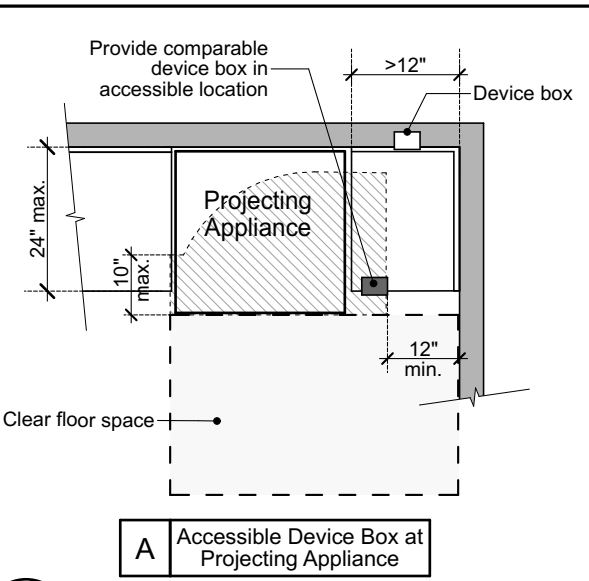


1 Forward Reach Over Work Surface & Sink
08.3

2 Corner Reach Over Work Surface
08.3

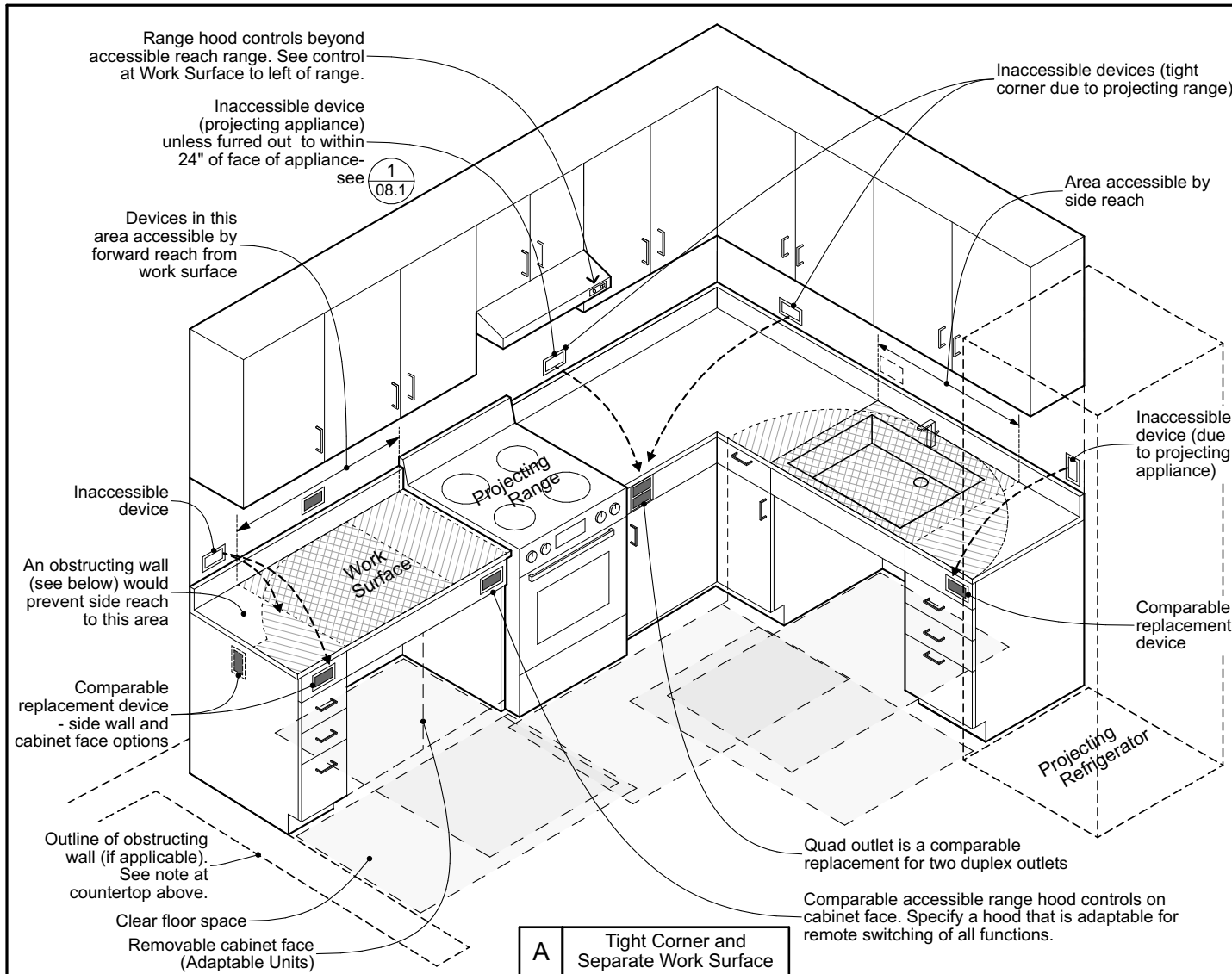


3 Side Reach Over Counters
08.3

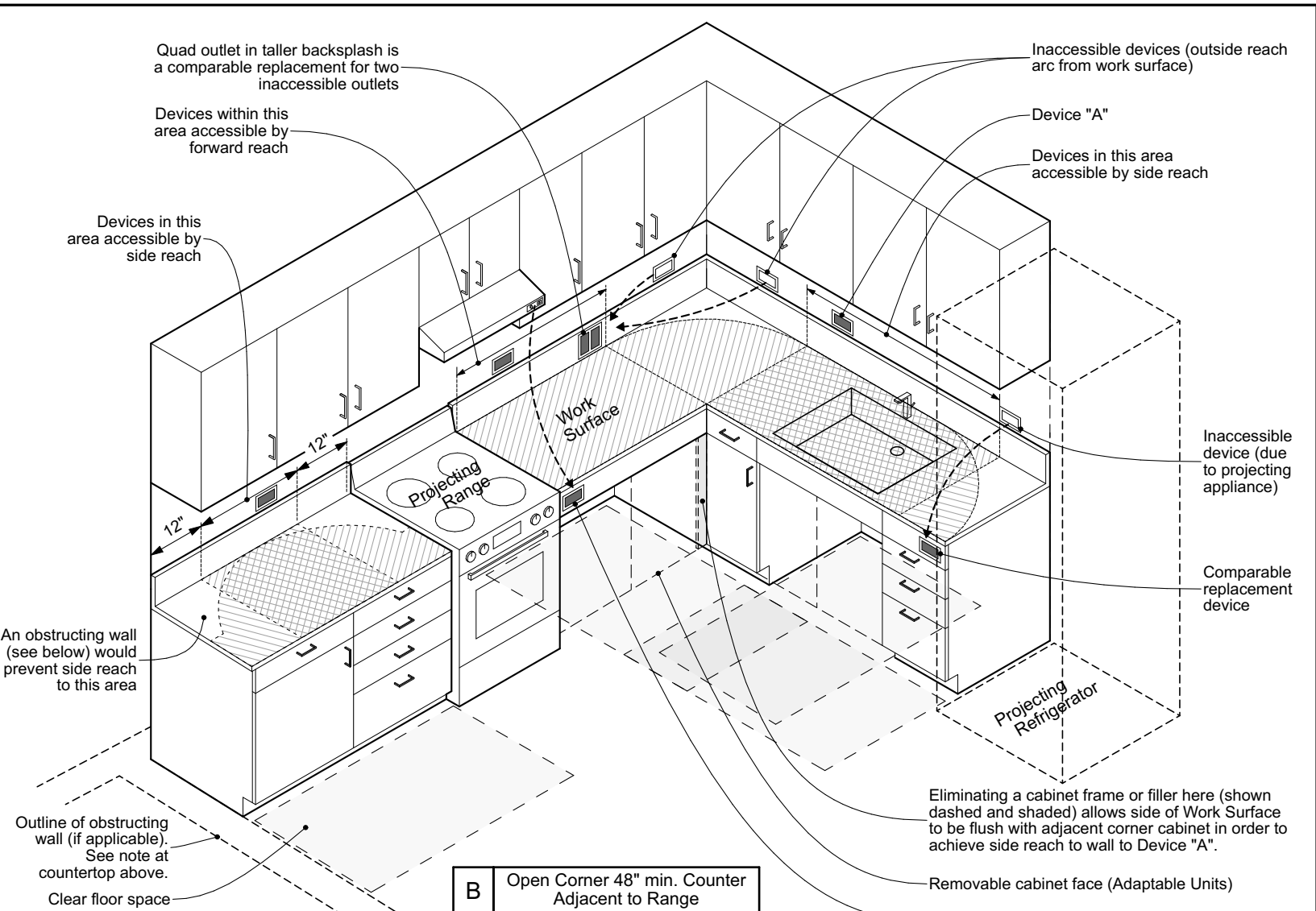


LEGEND	
	Accessible Device Box
	Inaccessible Device Box
	Accessible Reach Range
	30" x 48" Clear Floor Space

4 Counter at Projecting Appliance
08.3

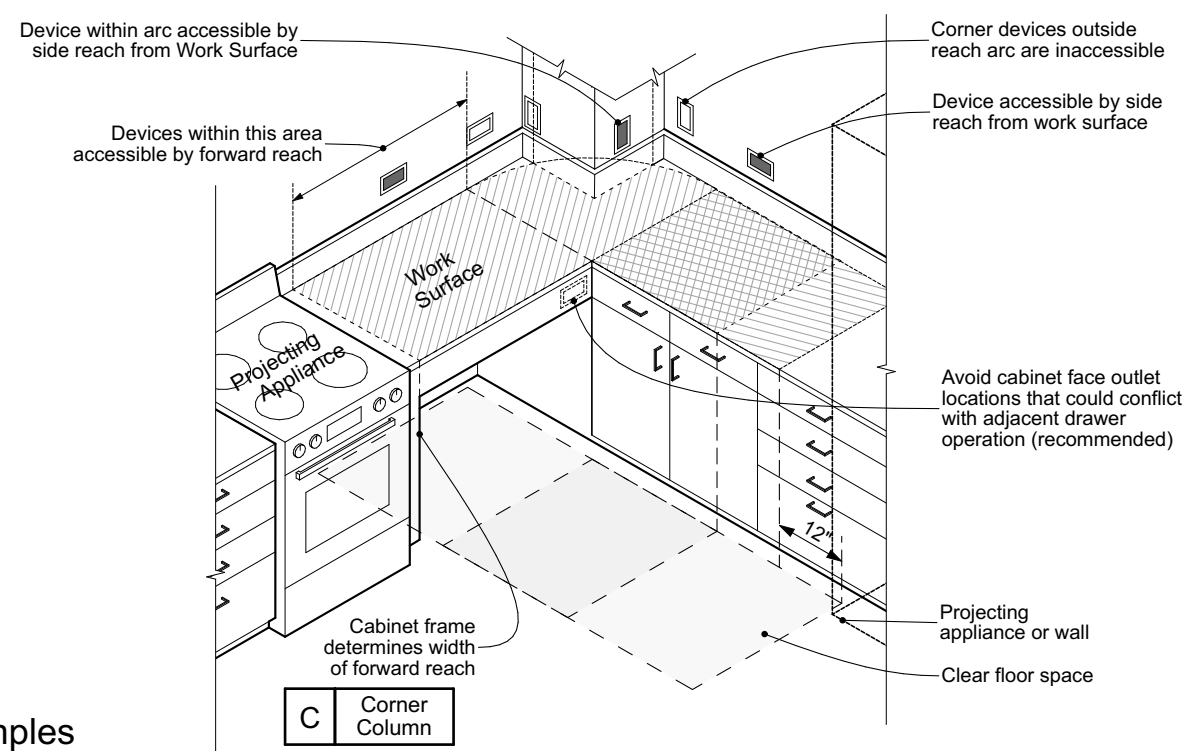


A Tight Corner and Separate Work Surface

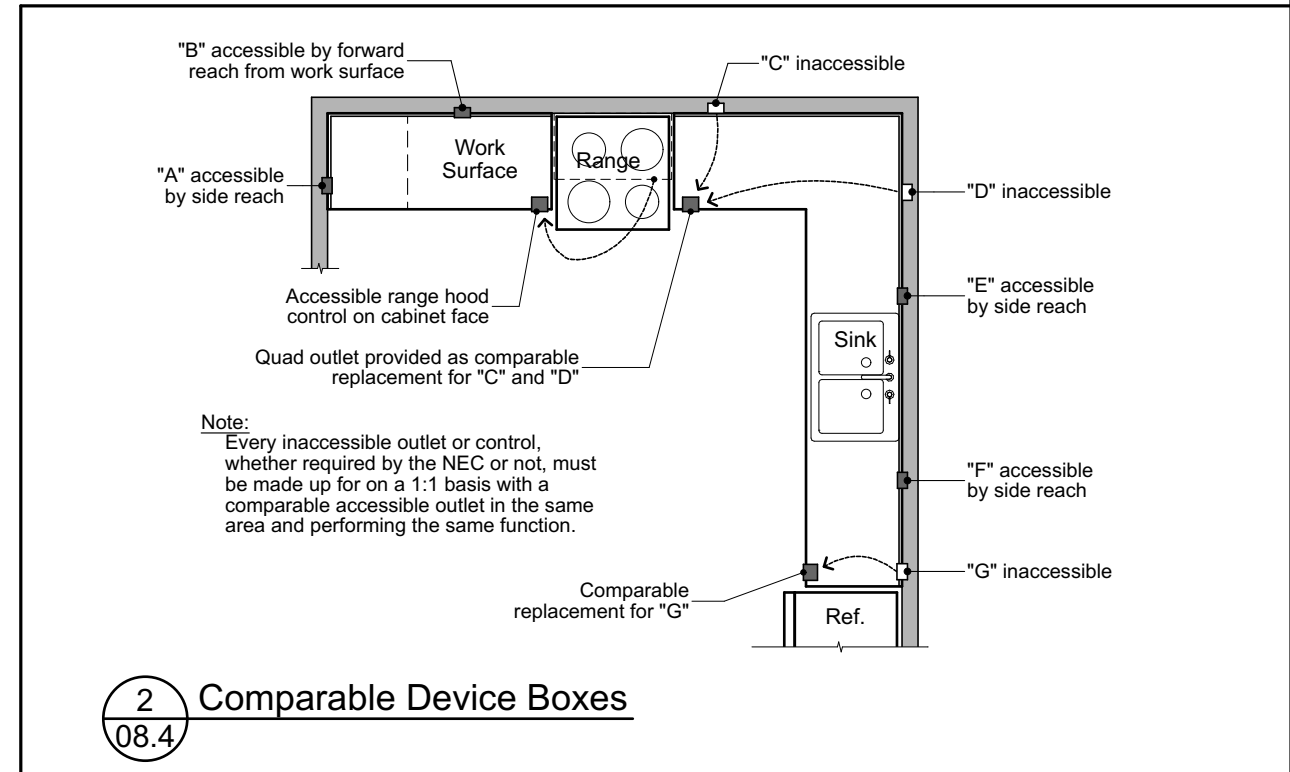


B Open Corner 48" min. Counter Adjacent to Range

LEGEND	
	Accessible Device Box
	Inaccessible Device Box
	Accessible Reach Range
	30" x 48" Clear Floor Space



C Corner Column



2 Comparable Device Boxes
08.4