



U.S. Department  
of Veterans Affairs

# VA Barrier Free Design Standard

A Supplement to the Architectural Barriers Act  
Accessibility Standards (ABAAS)



**PG-18-13**

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Office of Construction & Facilities Management  
Facilities Standards Service

## VA Barrier Free Design Standard

The Architectural Barriers Act (ABA) insures that buildings financed with federal funds are so designed and constructed as to be accessible to everyone. This law requires all construction, renovation, or leasing with federal funds to meet the Architectural Barriers Act Accessibility Standard (ABAAS). ABAAS was made effective May 9, 2006 for new construction and alterations, June 30, 2006 for lease-construction facilities, and February 7, 2007 for all other leased facilities. ABAAS replaces the Uniform Federal Accessibility Standards (UFAS), which was VA’s previous standard for accessibility.

This supplement to ABAAS tailors some of the requirements to better meet the barrier free needs of the Department of Veterans Affairs (VA) in its facilities.

Previous requirements have been simplified and abbreviated so that these six pages replace the former 26-page VA Barrier Free Design Handbook (H-08-13).

The following comparison tables are to assist contracted Architect/Engineer firms and VA staff in designing accessible facilities for the VA. Paragraph numbers correspond to ABAAS paragraph numbers. Planners and designers are to be guided by ABAAS, the exception being where the more stringent VA requirement is noted in the tables.

**VA GUIDELINES ARE THE SAME AS ABAAS FOR MOST REQUIREMENTS.  
WHERE VA REQUIREMENTS DIFFER, SEE BELOW.**

### Minimum Requirements

REQUIREMENT	VA	ABAAS	NOTES
Sites - parking spaces accessible	1% greater than ABAAS		1
Spinal Cord Injury/Disorder (SCI/D) Facilities	0.2 accessible spaces per Inpatient bed; 0.5 per Long-Term Care bed; 5.6 per Outpatient Exam Room. Dedicated for SCI/D patients		7
Hospital Outpatient Facilities	10% of total spaces	10% of total spaces	29
Rehabilitation and Outpatient Physical Therapy Facilities	20% of total spaces	20% of total spaces	
Buildings- accessible seating, assembly areas	1% greater than ABAAS		2



**Accessible Route**

REQUIREMENT	VA	ABAAS	NOTES
Width, min. Patient Care Areas	1830 mm (6'-0")	915 mm (3'-0")	3
Width, min. Administrative Areas	1525 mm (5'-0")	915 mm (3'-0")	3
Slope, maximum (including parking spaces)	1:50 (2%)	1:48 (2.1%)	4
Minimum gradient of walk requiring rest areas every 60 000 mm (200')	1:50 (2%)	1:33 (3%)	5
Turning Radius	1675 mm (5'-6")	1525 mm (5'-0")	31
Turning Radius, Bariatric	1830 mm (6'-0")	1525 mm (5'-0")	31
T-Shaped Turning Space	1675 mm (5'-6") x (5'-6")	1525 mm (5'-0") x (5'-0")	32
T-Shaped Turning Space, Bariatric	1830 mm (6'-0") x (6'-0")	1525 mm (5'-0") x (5'-0")	32

**Floor Surfaces**

REQUIREMENT	VA	ABAAS	NOTES
Changes in level	Not permitted on SCI floors	No requirement	6
Carpet cushion or padding	Not permitted	Permitted	

**Parking and Passenger Loading Zones**

REQUIREMENT	VA	ABAAS	NOTES
Access aisle requirement for accessible parking spaces	1525 mm (5'-0") each side	1525mm (5'-0") 1 per 2 spaces.	8
Passenger loading area "communication system" for assistance at SCI units	Yes	No requirement	9

**Curb Ramps**

REQUIREMENT	VA	ABAAS	NOTES
Width, minimum	1220 mm (4'-0")	915 mm (3'-0")	10

**Ramps**

REQUIREMENT	VA	ABAAS	NOTES
Maximum slope	1:20	1:12	11
Maximum length, within range of 1:33 -1:26	12 000 mm (40')	60 000 mm (200')	12
Maximum length, within range of 1:25 -1:20	10 500 mm (35')	60 000 mm (200')	12
Minimum clear width	1220 mm (4'-0")	915 mm (3'-0")	13
Minimum size level landing, where doors swing into landing	1830 mm x 1830 mm (6'-0" x 6'-0")	1525 mm x 1525 mm (5'-0" x 5'-0")	14



**Stairs**

REQUIREMENT	VA	ABAAS	NOTES
Handrail height	865 mm (34")	760 mm-865 mm (30"-34")	15

**Elevators (Passenger)**

REQUIREMENT	VA	ABAAS	NOTES
Minimum width of elevator doors	1220 mm (4'-0")	915 mm (3'-0")	16
Minimum car size	2440 mm x 1880 mm (8'-0" x 6'-2") platform size	1730mm x 1300mm (68" x 51") car inside dimensions	17
Double set of handrails	Yes	No requirement	18

**Windows**

REQUIREMENT	VA	ABAAS	NOTES
Sill height in patient bedrooms	610 mm (24") maximum	No requirement	19

**Doors and Doorways**

REQUIREMENT	VA	ABAAS	NOTES
Patient Care Delivery Areas with patient bed, stretcher or gurney access, minimum width	1220 mm (4'-0")	1120 mm (3' - 8")	20

**Water Closets- Inpatient Nursing Units**

REQUIREMENT	VA	ABAAS	NOTES
Grab bar configuration	Double swing-up bars for all patient toilets/shower rooms on Nursing Units	Side & back bars for all accessible water closets.	

**Toilet Stalls**

REQUIREMENT	VA	ABAAS	NOTES
Minimum accessible stall size	1650 mm x 1830 mm (5'-6" x 6'-0")	1525 mm x 1420 mm (5'-0" x 4'-8")	22
Minimum size wheelchair "front-transfer" stall	1065 mm x 1830 mm (3'-6" x 6'-0")	915 mm x 1675 mm (3'-0" x 5'-6")	25
Grab bars	Required in all stalls	Required in accessible stalls	



**Shower Stalls (Patient)**

REQUIREMENT	VA	ABAAS	NOTES
Minimum stall dimensions	1220 mm x 1220 mm (4'-0" x 4'-0")	915 mm x 915 mm (3'-0" x 3'-0") or 760 mm x 1525 mm (2'-6" x 5'-0")	23
Grab bars	Horizontal plus vertical bars	Horizontal bars only	30

**Toilet Rooms**

REQUIREMENT	VA	ABAAS	NOTES
Inpatient Bedroom Toilet Rooms, Minimum width of toilet room entrance doors	1220 mm (48")	865 mm (34")	24

**Cafeterias**

REQUIREMENT	VA	ABAAS	NOTES
Knee clearance, for minimum 5% tables	685 mm (2'-3") and 735 mm (2'-5") for at least 5%	685 mm (2'- 3")	26
Cutlery and supply height	1015 mm-1220 mm (40" - 48")	1370 mm (54") max.	27

**Health Care Facilities**

REQUIREMENT	VA	ABAAS	NOTES
Medical/Surgical Nursing Units, percent of patient bedrooms accessible	100%	10%	28
Medical/Surgical Nursing Units, percent of toilet rooms accessible	100%	10%	28

ABAAS may indicate slightly different metric equivalents than the ones which VA has shown.

*Information gathered from data provided by the Department of Health and Human Services; the National Center for Health Statistics; and the Department of Veterans Affairs, Office of Planning and Management Analysis (see SURVEY OF DISABLED VETERANS, OPMA-M 043-90-1).*

1. The percent of disabled at VA hospitals is much higher than the percent of disabled in the general population. Two percent may be adequate for the general population. The percentage of disabled drivers/passengers is much higher in the veteran population. ABAAS Table 208.2 shows varying accessible parking space requirements. 1 out of every 6 accessible parking spaces shall be a van accessible parking space. Other VA Hospital service lines may have different requirements.
2. A higher percentage of sick and disabled make up the VA population than make up the general population. ABAAS Table 221.2.1.1 shows varying wheelchair space requirements in assembly areas.



3. It takes a minimum of 1500 mm (5'-0") for two wheelchairs to pass. Wheelchairs have increased in size in recent years, so 1800 mm (6'-0") is recommended for Patient Care Delivery Areas where wheelchair usage is commonplace.
4. The disabled population used by ABAAS to determine an acceptable slope for using public accommodations is stronger and younger than are veterans at VA facilities.
5. Previous studies used a younger, more fit, population to determine the minimum slope and distance for a disabled person's travel capability.
6. Current standards are based on an active, independent population.
7. Refer to Section 4 Parking Geometrics in the Parking Design Manual.
8. Disabled veterans come to VA facilities either driving or as a passenger. Both sides of the parking space must be accessible to allow disembarking from either side of the vehicle.
9. This feature, not mentioned in other standards, allow Spinal Cord Injury/Disorder veterans to contact Nursing Service, Pharmacy, or Security for their appropriate needs without the extra burden of unloading their wheelchair and leaving their car.
10. Sick veterans in wheelchairs are often weak, disoriented, and unskilled in wheelchair operation. Studies show the additional 300 mm (1'-0") provides a much-needed margin of safety.
11. Tests show only those with good upper body strength can manage a ramp slope of 1:12. Slopes greater than 1:16 create safety hazards for any wheeled vehicle.
12. Long uninterrupted ramps are prone to cause accidents. Weak, unskilled wheelchair users need more frequent stops in order to operate wheelchairs safely.
13. The 300 mm (1'-0") added width is necessary to ensure all VA wheelchair users can get up and down the ramp, safely.
14. Older, frail, disoriented, or disabled veterans need a larger level platform to maneuver a wheelchair.
15. Life Safety Code (NFPA 101) requires 850 mm (34") to 950 mm (38").
16. Hospital elevator doors need to be 1200 mm (4'-0") wide in order to better facilitate the movement of gurneys, beds, and multiple wheelchairs.
17. See Transport Systems Design Manual. The larger cab size is required for movement of gurneys and multiple wheelchairs. This dimension is for side (off-centered) doors. Elevator cabs with centered doors require a minimum 51" x 80" clear dimension.
18. Handrails protect the elevator cab walls and provide stability for patients: the lower rail for wheelchairs, the higher rail for gurney riders and standers.
19. Window sills must be low enough that seated (wheelchair) and bedridden patients can see the outdoors.

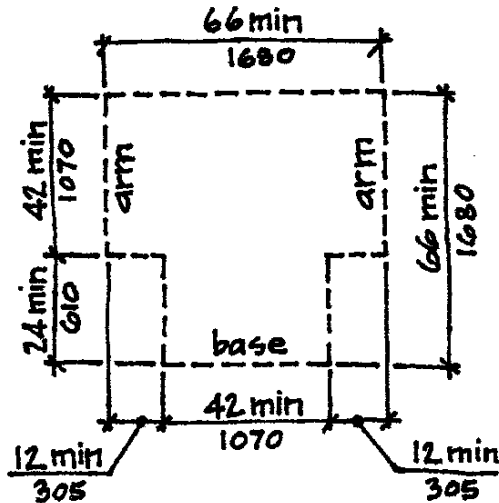


20. A 1200 mm (4'-0") door to patient and patient care delivery area bedrooms is required because beds with accessories, stretchers, and gurneys are frequently moved from one room to another and wheelchairs are larger. This includes Small House Model, Spinal Cord Injury/Disorder, Mental Health, Domiciliary, Diagnostic and Treatment Areas such as Imaging Services, Surgery, or Rehabilitation Therapy functions, Bariatric Exam Rooms, and Outpatient Procedure Rooms. In Medical/Surgical Nursing Units and Intensive Care Nursing Units, provide a 6'-0" wide opening with a 4'-0" and a 2'-0" door leaf for Bariatric Rooms. All Toilet Rooms within Patient Rooms shall also comply with the 4'-0" minimum width requirement. Where patient beds, stretcher, and gurneys do not access a patient care delivery room, then a minimum of 42" is required for the door width. See each individual Design Guide for specific door requirements.
21. An 800 mm (2'-8") opening is not adequate for some wheelchairs and most gurneys.
22. Disabled patients in wheelchairs many times are not skilled in maneuvering wheelchairs, may be weaker, and space is often needed for someone to assist.
23. The 900 mm x 900 mm (3'-0" x 3'-0") shower has a folding seat which requires the patient to transfer from the wheelchair. The 750 mm x 1500 mm (2'-6" x 5'-0") shower just barely accommodates a wheelchair. There is little room for the patient to maneuver or for attendants to assist.
24. VA uses a standard 1200 mm (4'-0") door to ensure a 1150 mm (46") clear opening to patient and patient care delivery area Bedroom Toilet Rooms because wheelchairs and gurneys are larger now. This includes Long Term Care, CLC, Small House, Medical/ Surgical Nursing Units, Intensive Care, Spinal Cord Injury/Disorder, Mental Health, and Domiciliary/Supportive Housing.
25. The additional width allows correct door width and makes the stall usable by wheelchair users.
26. Many disabled veterans use electric wheelchairs with a control stick that will not fit under a table with only 675 mm (2'-3") clearance.
27. Frail, disabled patients have a more limited reach than independent, more physically sound, wheelchair users.
28. The VA Under Secretary for Health has advised that 100% accessibility makes nursing simpler, puts less strain on staff, gives patients more independence, and requires less patient supervision by a limited staff. For renovation projects or projects at existing facilities where space is at a premium, consideration can be given to having less than 100% of the rooms accessible while meeting ABAAS requirements at a minimum. This includes all ABAAS Accessibility requirements including mounting heights required by the ABAAS Guidelines.
29. Hospital Outpatient Facilities are those located in hospitals, and which provide regular and continuing medical treatment. Rehabilitation and Outpatient Physical Therapy Facilities cover patients with mobility impairments.
30. See VA Standard Details 13.1, 13.2, and 13.3.
31. Wheelchairs have increased in size in recent years, thus the need for a 5'-6" minimum turning radius requirement.



32. In lieu of meeting the Turning Radius requirements, the following T-Shaped Turning Space requirements are also acceptable per below:

a. Non-Bariatric: The turning space shall be a T-shaped space within a 66 inch (1680 mm) square minimum with arms and base 42 inches (1070 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 ABAAS Guidelines only at the end of either the base or one arm. See diagram below (not to scale).



b. Bariatric: The turning space shall be a T-shaped space within a 72 inch (1830 mm) square minimum with arms and base 48 inches (1220 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 ABAAS Guidelines only at the end of either the base or one arm. See diagram below (not to scale).

