521 CMR 6.00: SPACE ALLOWANCE AND REACH RANGES

6.1 WHEELCHAIR PASSAGE WIDTH

The minimum *clear* width for single wheelchair passage shall be 36 inches (36'' = 914 mm) except for a reduction to 32 inches (32'' = 813 mm) and that reduction shall not exceed a lineal distance of 24 inches (24'' = 610 mm). See Fig. 6a.





6.2 WIDTH FOR WHEELCHAIR PASSING

The minimum width for two wheelchairs to pass is 60 inches (60'' = 1524 mm) See Fig. 6b.

6.3 WHEELCHAIR TURNING SPACE

The space required for a wheelchair to make a 180-degree turn is a *clear space* of 60 inches (60'' = 1524mm) diameter (**See Fig. 6c**) or a T-shaped space. **See Fig. 6d**.



6.4 CLEAR FLOOR OR GROUND SPACE FOR WHEELCHAIRS shall comply with the following:

6.4.1 Size and Approach: The minimum *clear floor* or ground *space* required to accommodate a single, stationary wheelchair and occupant is 30 inches by 48 inches (30" x 48" = 762mm x 1219mm) (See Fig. 6e). The minimum *clear floor* or ground *space* for wheelchairs may be positioned for forward or parallel approach to an object (See Fig. 6f and 6g). *Clear floor* or ground *space* for wheelchairs may be part of the knee space required under objects.

6.00: continued



6.4.2 Relationship of Maneuvering Clearance to Wheelchair Spaces: One full unobstructed side of the *clear floor* or ground *space* for a wheelchair shall adjoin or overlap an accessible route or adjoin another wheelchair *clear floor space*. If a *clear floor space* is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearances shall be provided as shown in **Fig. 6h and 6j**.



6.4.3 Surfaces for Wheelchair Spaces: *Clear floor space* for wheelchairs shall comply with **521 CMR 29**, **Floor Surfaces**.

6.5 FORWARD REACH

If the *clear floor space* only allows forward approach to an object, the maximum high forward reach allowed shall be 48 inches (48'' = 1219mm) (**See Fig. 6k**). The minimum low forward reach is 15 inches (15'' = 381mm). If the high forward reach is over an obstruction, reach and clearances shall be as shown in **Fig. 6**.



When X is less than 20" (508 mm), then Y shall be 48" (1219 mm) max. When X is 20" to 25" (508 to 635 mm), then Y shall be 44" (1118 mm) max.

Maximum Forward Reach over an Obstruction Figure 61

6.6 **SIDE REACH**

If the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed shall be 54 inches (54'' = 1372mm) and the low side reach shall be no less than nine inches (9'' = 229 mm) above the floor (See Fig. 6m). If the side reach is over an obstruction, the reach and clearances shall be as shown in Fig. 6n.

