semi-ambulatory person. There will be little leeway for swaying or missteps (see Fig. A1).

A4.2.3 Wheelchair Turning Space. *These guidelines specify* a minimum space of 60 in (1525 mm) diameter *or a 60 in by 60 in (1525 mm by 1525 mm) T-shaped space* for a pivoting 180-degree turn of a wheelchair. This space is usually satisfactory for turning around, but many people will not be able to turn without repeated tries and bumping into surrounding objects. The space shown in Fig. A2 will allow most wheelchair users to complete U-turns without difficulty.

A4.2.4 Clear Floor or Ground Space for Wheelchairs. The wheelchair and user shown in Fig. A3 represent typical dimensions for a large adult male. The space requirements in this *guideline* are based upon maneuvering clearances that will accommodate most wheelchairs. Fig. A3 provides a uniform reference for design not covered by this *guideline*.

A4.2.5 & A4.2.6 Reach. *Reach ranges for persons seated in wheelchairs may be further clarified by Fig. A3(a). These drawings approximate in the plan view the information shown in Fig. 4, 5, and 6.*

A4.3 Accessible Route.

A4.3.1 General.

(1) Travel Distances. Many people with mobility impairments can move at only very slow speeds; for many, traveling 200 ft (61 m) could take about 2 minutes. This assumes a rate of about 1.5 ft/s (455 mm/s) on level ground. It also assumes that the traveler would move continuously. However, on trips over 100 ft (30 m), disabled people are apt to rest frequently, which substantially increases their trip times. Resting periods of 2 minutes for every 100 ft (30 m) can be used to estimate travel times for people with severely limited stamina. In inclement weather, slow progress and resting can greatly increase a disabled person's exposure to the elements.

(2) Sites. Level, indirect routes or those with running slopes lower than 1:20 can sometimes provide more convenience than direct routes with maximum allowable slopes or with ramps.

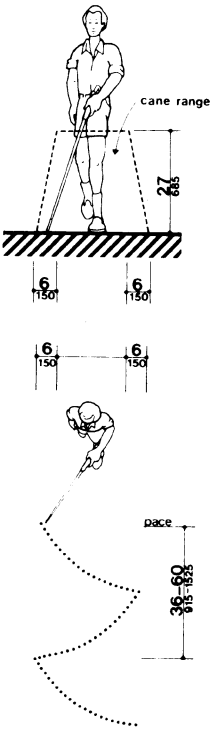

Fig. A4
Cane Technique

A4.3.10 Egress. Because people with disabilities may visit, be employed or be a resident in any building, emergency management plans with specific provisions to ensure their safe evacuation also play an essential role in fire safety and life safety.

A4.3.11.3 Stairway Width. *A 48 inch (1220 mm) wide exit stairway is needed to allow assisted evacuation (e.g., carrying a person in a wheelchair) without encroaching on the exit path for ambulatory persons.*