

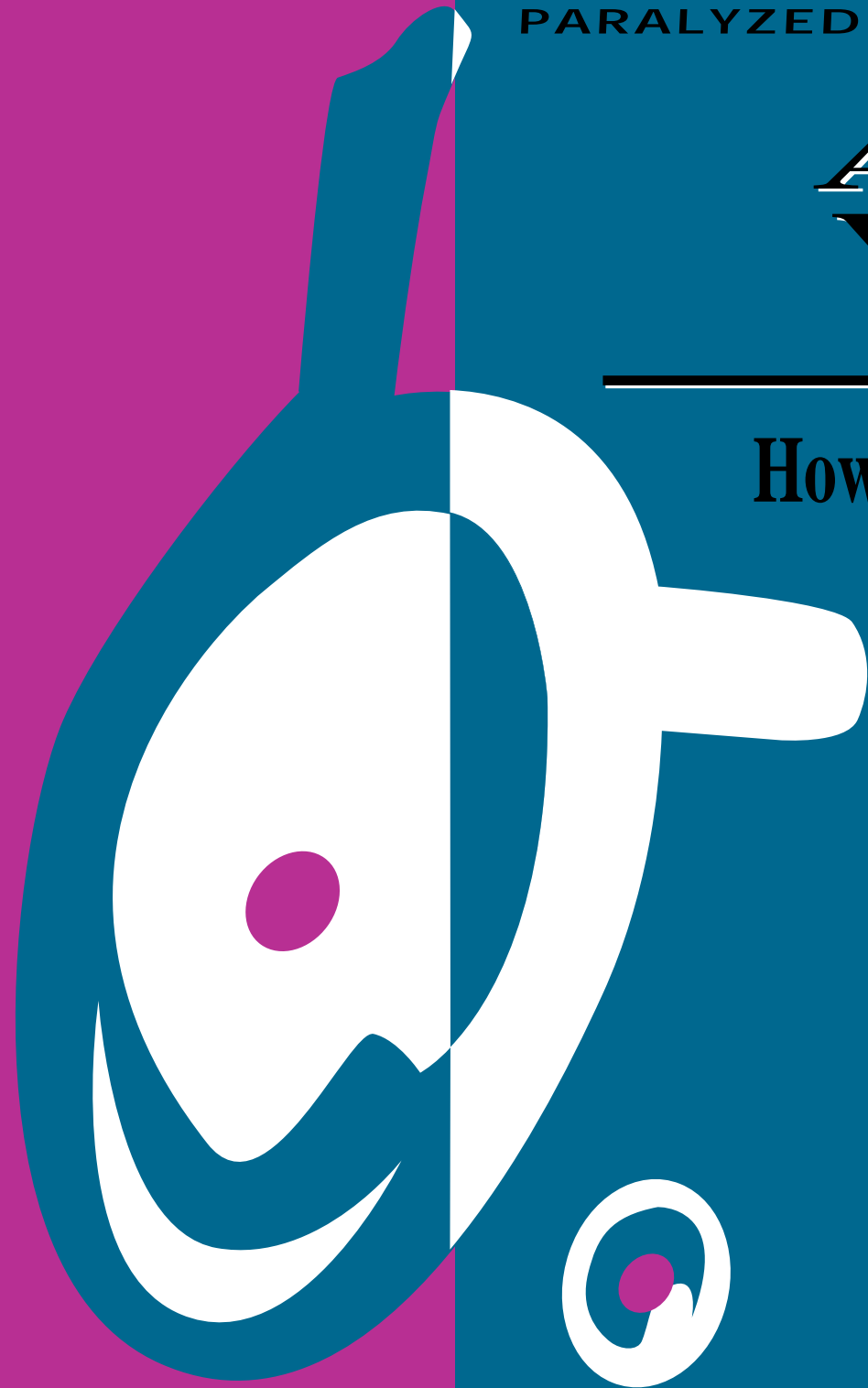
PARALYZED VETERANS OF AMERICA

# **A Guide to Wheelchair Selection**

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**How to Use the ANSI/RESNA  
Wheelchair Standards to  
Buy a Wheelchair**

*Peter Axelson, MSME  
Jean Minkel, MAPT  
Denise Chesney, MEBME*



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Washington, DC 20006

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\* *ANSI—American National Standards Institute; RESNA—an interdisciplinary association for the advancement of rehabilitation and assistive technology*

## A MESSAGE FROM PVA'S EXECUTIVE DIRECTOR



While serving in the Army in Vietnam, I sustained a combat-related spinal cord injury. After rehabilitation, I had few options for wheelchairs; the available chairs often were heavy and mobility limiting. Times have changed; wheelchair technology has exploded with a multitude of liberating choices that have greatly enhanced an individual's potential mobility and, therefore, opportunities for integration into society.

Today, the wheelchair-user population has many different segments, and manufacturers have developed a variety of products to meet specialized needs. However, with all these new products, consumers often have a difficult time making informed decisions about what's right for them. What may be considered an advantage for one person may be a disadvantage, or even dangerous, for the next person. Clearly, consumers need an easy-to-understand resource to guide them in making purchasing decisions.

In 1982, the ANSI/RESNA Wheelchair Standards Committee was formed to develop standard procedures for testing and comparing wheelchairs, and the Paralyzed Veterans of America (PVA) has been integrally involved with the Committee since its beginning. With support from PVA, Peter Axelson, the chairperson of the ANSI/RESNA Wheelchair Standards Committee, has guided the development of these standards since 1986. His work has been commendable.

However, wheelchair test procedures are technical and often difficult to understand. Thus, what happened next seemed natural, given the productive relationship between PVA and Mr. Axelson. On the basis of PVA's recommendation and support, Mr. Axelson began work on this book, *A Guide to Wheelchair Selection: How to Use the ANSI/RESNA Wheelchair Standards to Buy a Wheelchair*.

As you will see, the results are outstanding. Mr. Axelson and his coauthors have created a document that you will find informative and enjoyable. With the implementation of wheelchair standards, this book will be an invaluable reference for wheelchair users, therapists, wheelchair dealers, and anyone else who uses, prescribes, recommends, or sells wheelchairs. For the consumer, this is the ultimate guide for selecting a wheelchair.

Gordon H. Mansfield  
*Executive Director*  
*Paralyzed Veterans of America*

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# How to Use This Guide

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The purpose of this guide is to explain how you can use the ANSI/RESNA wheelchair standards to select your next wheelchair. Standards for wheelchairs are currently being adopted by federal agencies. The actual standards are very technical, and at first glance you may not understand how this information will help you select a wheelchair or scooter. This guide is meant to help you understand the purpose for and content of the ANSI/RESNA wheelchair standards.

The guide is divided into five sections:

## **Standardized Testing and Information Disclosure**

Provides background information on standardized testing of wheelchairs.  
Discusses how chairs are tested and how information is disclosed.

## **General Considerations**

Discusses general considerations related to choosing a powered or manual wheelchair.

## **Incorporating Personal Body Characteristics**

Relates your physical characteristics to the fit of a chair, either manual or powered.

## **Manual Wheelchairs**

Discusses manual wheelchair test procedures.

## **Powered Wheelchairs**

Discusses powered wheelchair test procedures. Focuses on three- and four-wheeled scooters as well as full-sized powered wheelchairs.

In the manual and powered wheelchair sections, the test procedures are grouped into three categories:

- Performance
- Safety
- Dimensions

For each test procedure, the guide includes:

- Reasons why you might need this information
- A brief description of the standardized test procedure
- How the results of the test will be disclosed in the manufacturer's technical product literature
- How to interpret the results of the test for your own situation

If you are an experienced rider, you may know which elements of performance, safety, and dimension are important to you. If not, or if you are a novice, we highly recommend that you involve other knowledgeable people in selecting your wheelchair. Many rehabilitation specialists have the expertise and training in using these standards and can help you select an appropriate wheelchair.

An excellent approach to the wheelchair selection process is to set priorities based on your mobility and seating needs. Setting priorities will help you identify the features that are most important to you and those on which you are willing to compromise. For example, if you live in a small apartment and need to fit your wheelchair into the trunk of your car, you will probably want to look specifically at the overall dimensions, foldability, and weight of the wheelchair. On the other hand, if you use a van and have an accessible apartment or home, you may not need a folding wheelchair. This guide will help you understand the test results that pertain to the factors most important to you. Armed with this information, you will be able to accurately compare products and make an informed purchasing decision.