

The Principles of Universal Design

Powered door with sensors is convenient for all shoppers, especially if hands are full.

1 Equitable Use
The design is useful and marketable to people with diverse abilities.

The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

2 Flexibility in Use
The design accommodates a wide range of individual preferences and abilities.

Large-grip scissors accommodates use with either hand and allows alternation between the two in highly repetitive tasks.

Public emergency stations utilize recognized emergency colors and a simple design to quickly convey function to passers-by.

3 Simple and Intuitive Use
Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or education level.

A sequential-trip trigger on a nail gun requires the user to ① activate the safety before ② pulling the trigger, minimizing accidents that occur when a user accidentally hits an object or person while pulling the trigger.

5 Tolerance for Error
The design minimizes hazards and the adverse consequences of accidental or unintended actions.

Small bumps on a cell phone keypad tell the user where important keys are without requiring the user to look at the keys.

4 Perceptible Information
The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Door lever does not require grip strength to operate, and can even be operated by a closed fist or elbow.

6 Low Physical Effort
The design can be used efficiently and comfortably and with a minimum of fatigue.

Wide gates at subway stations accommodate wheelchair users as well as commuters with packages or luggage.

7 Size and Space for Approach and Use
Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.