Bringing Universal Design to the Outdoor Landscape

By Jack Carman, FASLA, RLA

Integrating universal design (UD) within a person's home and community buildings is an idea that is growing in acceptance today. However, the application of UD to the outdoor environment has been slower to gain a foothold in the public's perception of accessible environments—despite the fact that, thanks to the media and trends toward going "green," public awareness of environments that encourage a relationship with nature is increasing. The fact is, interaction with the natural world has been shown to promote improved health, foster an increase in physical strength and mental alertness, and encourage socialization. Outdoor environments offer improvement in quality of life for everyone. Therefore, it is essential that UD features are incorporated into the outdoor environment so that people of all abilities can benefit from access to the natural world.

We are all connected with nature. None of us can divorce ourselves from the basic fact that we rely on nature everyday. Many people start their day by checking the weather forecast to determine what they will wear and how the road conditions will be. Research has shown that a view of nature helps us to recover more quickly from illness, that natural absorption of vitamin D from sunlight helps strengthen bone tissue, that blood pressure levels lower when we experience scenes of nature, and that stress levels are reduced simply by viewing nature. On a more intuitive level, we know that we generally feel better after we have taken a walk in the park, have experienced the vibrant colors of a sunset or picked wildflowers for a special someone. We can all recall the many ways in which we have interacted with nature throughout the seasons. Maintaining that connection is essential to who and what we are as inhabitants of this planet. It is a basic necessity of a balanced lifestyle.

Certain design considerations are key in the creation of outdoor settings. Access to shade, available seating, appropriate walking surfaces and minimally sloped paths are just a few of the elements that allow a person to move about in the outdoor landscape. Of primary importance is the ability to move easily from one place to another. We all want to be able to decide in which direction we want to go and how we would like to get there,

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A wide ramp leading to this shaded outdoor area allows for an easy transition between indoors and outside.

and to have the opportunity to do this effortlessly and independently.

Unimpeded access to the outdoor environment is the first consideration when applying UD to the outdoor setting. Many homes and/or buildings have steps that prohibit a person from moving independently between indoors and outdoors, so eliminating the steps to a front door and/or porch is a good place to begin. A ramp that is minimally sloped (two to three percent) up to the door makes it easy for a person to move freely in and out of the house or building. Other UD considerations include, but are not limited to, a landing in front of the door, a ledge to hold packages, easy-to-use handrails, sufficient area lighting and a wide, level walkway. Appropriate landscaping that allows a person to clearly see their way to the door or out into the yard can also make them feel secure and comfortable.

Whether it is a child eager to play in a sand box or an adult looking forward to working in the garden, people want to be able to go outside and enjoy their yard. A porch or deck is an important

feature, as it allows a person to transition from indoors to the yard. A porch also offers shelter in case of inclement weather, giving the person time to move indoors if it starts to rain or if the heat of the sun becomes too intense. Also, the elder eye takes as long as 15 minutes to adjust to the brightness of the outdoor sun, and an overhang can give an older individual the opportunity to pause and adapt to sunlight. Minimally sloped walks from the deck to yard can make all the difference in allowing a person to move independently and carry objects easily. Raised planters help people of all ages and abilities to garden by providing convenient opportunities to get their hands in the soil and can be set at a variety of heights to accommodate different

that grow over the walks and leaves from plants on pavement can make for hazardous conditions as well. It is important to provide not only a safe physical environment, but also one that is psychologically safe. An individual's perception that their neighborhood is safe to walk around is fundamental to their willingness to participate fully in the outdoor environment.

When outdoor environments are implemented correctly with UD features, everyone moves through the space in the same way. There are no differences due to age or ability. An appropriately designed entrance to a building that allows all people to enter the building in the same way has a minimally sloped entrance walk, a landing for transitioning from outdoors to indoors, and room to move. There

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needs. Stable, comfortable and attractive outdoor furniture encourages people to pause, sit and enjoy nature. The seat of a chair should be 18 to 19 inches high and have sturdy arms to provide support when getting in or out of the chair. Furniture should be movable but stable, allowing for a variety of inviting areas to be configured for socializing in the outdoor setting during different seasons or times of the day.

Moving from one's yard into the surrounding neighborhood should also be a simple transition. Sidewalks that are a minimum of five feet in width and have smooth level walking surfaces will provide easy access. Sidewalks that are uneven and too narrow are difficult to use and should be replaced. Street trees that provide ample areas of shade are important so that heat from the sun does not become excessive. Glare can also be reduced by coloring or tinting the concrete pavement surface. Maintaining plantings adjacent to the sidewalk is also important so that the walkway doesn't become overgrown and unsafe. Low hanging branches from street trees, shrubs

should be places to sit comfortably, rest and socialize. Aesthetics, access and design are all interwoven, so that everyone feels welcome and not singled out as "special." The UD features of the outdoor environment should be made to be a part of the overall landscape and allow a person to feel at ease and in charge of their outdoor environment.

This is a brief overview of a few of the challenges a person may face when trying to move about in the outdoor environment. Eliminating obstacles will allow a person to remain independent throughout their lives and stay connected to nature and the world around them. People should have every opportunity to connect with nature, whether visiting the neighborhood park with family or simply going to the neighborhood store to buy a newspaper and cup of coffee. Applying the principles of UD to the world outside of the home and/or community building is essential to maintaining quality of life and enjoyment of life for everyone, and should be incorporated into any universally designed environment.]

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Raised planters of varying heights allow people of all ages and abilities to garden comfortably.