

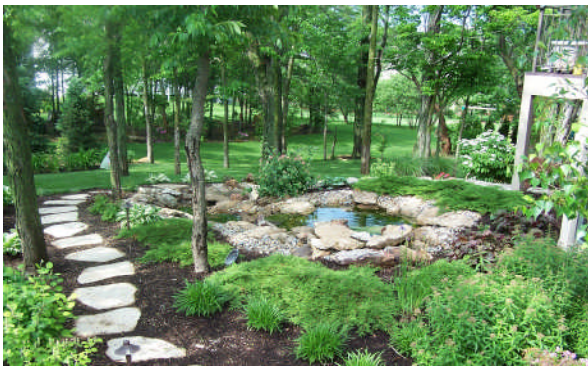
**25 YEARS OF  
CREATIVITY**

Vision

*Inspired by Nature...*

A shared passion for outdoor living is the greatest influence for our team at Doctor's. We combine that passion with our client's personal preferences to create unique landscape experiences. Each one is special, and is a testimony to the great attributes of Kansas City or Sunrise Beach living.

*...Created by Doctor's*



Let Doctor's fulfill all of your needs:

- Landscape Design & Installation
- Lawn and Landscape Management Programs
- Full Service Nursery & Garden Center
- Sprinkler Installation & Service
- Outdoor and Holiday Lighting
- Patios & Retaining Walls
- Ponds & Water Features
- Palm Trees

**DOCTOR'S LAWN &  
LANDSCAPE, INC.**

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Fax: 573-374-6898



**DOCTOR'S LAWN & LANDSCAPE, INC.**

**GUIDE TO  
BUILDING  
RETAINING  
WALLS**

**Quality**

*Care*

**COMMITMENT**

Experience

**Skilled**

**Creativity**

*Professionalism*

Value

**Distinctive**

**Service**

**Personal**

**SATISFACTION**

**OVERLAND PARK, KS  
(913) 681-8041**

**SUNRISE BEACH, MO  
(573) 374-1312**

# DOCTOR'S—YOUR FULL SERVICE LAWN AND LANDSCAPE CONTRACTOR

SUPPLIES NEEDED: SELECTED ROCK, GRAVEL BASE, SHOVEL, STRING, METAL STAKES, LEVEL, TAMP

## DESIGNING ROCK WALLS

A rock wall can increase the beauty of landscape as well as add usability to your outdoor living area. Uneven terrain can add visual interest and variety. Changes in grade may be used to delineate utility, recreational and gardening areas as well as provide proper drainage. The color and shape of the rock used should be incorporated to unify a design with the overall landscape.

The wall will be more stable if developed into a gentle curve. In informal landscaping, curved lines tend to be more pleasing to the eye.

Consider the following:

Soil type—does it wash or pack?

Will the soil grow healthy plants?

**Water Flow:** Drainage and rate of flow as well as concentration points of water runoff to protect the wall from erosion or undercutting are important points to consider. Allow gradual water flow by a planned drop in elevation. Never force water to run over the face of a retaining wall. Keep the lip (top layer of rock) of the wall at least 6 inches higher than the adjacent ground. The increased lip height should be in proportion to the amount of water flow in the drainage area. This height should form a gradual back slope extending at least 4 to 8 ft.

**Stone:** Type and quality of stone are important. Some stone is hard and resists weathering, while others are soft and will crumble. Use the largest, flattest rocks to form the wall's base. Lay this base at least to the depth of one rock below the soil surface. In some cases, it is desirable to begin the rock wall well below the soil surface.

If desired, small pockets in the wall will permit vegetation to establish a firm root system throughout the wall and provide added erosion control.

## BUILDING TIPS

A stone retaining wall will be made stable and last longer if a concrete footing is provided. A retaining wall can normally be laid safely up to 3-4 feet in height without concrete footings. If soil is the foundation, tamp it to a depth of 12-18 inches. This will generally provide a stable base for walls up to 4 ft.

The secret of building a solid retaining wall is in laying each stone firmly in place. The quantity of rock used will reflect the amount of soil placed between each stone. Using less rock is false economy. The top layer should be heavier capstone. For stability, it should extend back over the lip if existing soil.

Tamp clean topsoil firmly behind each layer of stone. Firm soil is important to the strength of the wall. Another method is to tamp and backfill with gravel or stone chips to help drainage behind the wall.

## BUILDING DIRECTIONS

1. Using a shovel, mark on the ground where the retaining wall will be built, both front and back.
2. Determine the desired height with string, long wooden or metal stakes and a string level.
3. Drive a stake into the ground where you marked the back of your retaining wall.
4. To indicate the height of the wall, stretch the string from the leveling point to one of the stakes.
5. Level the string on the stake, and tie it off.
6. Once the grade is established, tie the string to the next stake, and using the string level, place the string in the proper position. Continue using the level and string until the string on all the stakes is level.
7. After grading the terrace level, place the boulder in a trench along the string line. The boulders must be firmly seated in the ground. If the stones are quite heavy, you may wish to rent a front loader.
8. Backfill the area behind the boulders with gravel or a well-drained soil. Tamp soil well.
9. Place the next row of boulders on top of the first, angling them slightly to the back to give the wall more strength. Make sure that the second row of boulders sits over the joints of the first.
10. Continue placing layer on layer until you reach the desired height. Fill in between the layers with gravel or soil mix and finish the wall with good topsoil or potting mix so you can grow plants along the top.

