

Wall Comparison



SEGMENTAL LANDSCAPE
Appearance: Available in a variety of colors and a choice of face textures and styles. Can create straight or curved walls, tiers, stairs, and corners.
Initial Cost & Installation: Low - if installed by do-it-yourselfer. Moderate - when installed by a professional. Segmental units fit tightly together without mortar or concrete on a gravel base.
Performance: Durable units made with high-strength concrete will not rot or decay and are environmentally safe.
Durability: Excellent. Very durable, dense units and dry stack construction allows for better drainage and resists freeze-thaw damage.



CAST-IN-PLACE
Appearance: Commercial looking. Surface can be colored, though is flat in appearance. Can be stuccoed, though typically left plain.
Initial Cost & Installation: Moderate-High. Requires forms and steel reinforcement. Best if professionally installed. Must wait 5-7 days to cure.
Performance: Must be set below frost line. Wall subject to cracking due to expansion and contraction. Likely to lean if not built on cantilevered footing. Difficult to repair and leaves unattractive patch.
Durability: Good. High quality concrete necessary to resist freeze-thaw damage. Hydrostatic pressure can build up behind wall if drainage is inadequate.



DRY LAID STONE
Appearance: Quarried stone in varying shapes, thickness, and lengths provide attractive, high-end wall. Some types of stone also available in "cut" dimensions. Suitable for straight or curved walls.
Initial Cost & Installation: Very High. Each stone must be selected and cut to fit if needed, so that little or no mortar is required to hold the wall together. Best if built by an experienced stone mason.
Performance: As a gravity structure, wall is wider at the base and tapers as it goes up. Quality workmanship is important to wall staying intact.
Durability: Excellent. Dense stones last indefinitely. Good drainage and freeze-thaw resistance.



P.A. FLAT STONE
Appearance: A thin, flat stone with a relative uniform thickness. Low profile of split face offers an elegant look. Suitable for straight or curved walls.
Initial Cost & Installation: High. Each stone must be sorted and selected by hand to fit tightly together. Best when installed by an experienced craftsman.
Performance: Typically used for walls under 2 1/2' high. For higher walls, best if used as a veneer.
Durability: Very Good. As a natural material, it is very durable, although typically not as dense as some indigenous stone. Good drainage and freeze-thaw resistance.



CONCRETE BLOCK
Appearance: Commercial looking and plain, though colored split-rib block can be attractive. Best when used for straight walls.
Initial Cost & Installation: High. Requires steel reinforcement and grout in cells. Best if installed by a mason.
Performance: Must be anchored into a concrete footing placed below frost line. Wall subject to cracking due to expansion and contraction.
Durability: Good. Hydrostatic pressure can build up behind wall if drainage is inadequate. Mortared joints may need re-pointing over time.



LANDSCAPE TIMBER
Appearance: Greenish cast due to pressure treatment for rot resistance. Weathers over time. Best when used for straight walls.
Initial Cost & Installation: Low-Moderate. Can be done by the do-it-yourselfer, but is best if installed by a professional.
Performance: Requires cribbing or "dead-men" tie-backs. No interlock other than spikes or steel rods, which give way over time.
Durability: Poor. Once timber is cut or nailed, water can penetrate and deteriorate wood. Is free-draining, but warps and splits over time.



MORTARED STONE
Appearance: Quarried stone in varied shapes and sizes provides attractive, high-end wall. Some types of stone also available in "cut" dimensions. Suitable for straight or curved walls.
Initial Cost & Installation: Very high. Each stone must be selected and mortared in place. Best if built by an experienced stone mason.
Performance: As a gravity structure, wall is wider at the base and tapers as it goes up. Quality workmanship is important to wall staying erect.
Durability: Very Good. Dense stones last indefinitely, though mortar may require re-pointing. Proper drainage required.



MORTARED CLAY BRICK
Appearance: Very attractive material that offers classic lines and a variety of patterns.
Initial Cost & Installation: Very High. Used as a veneer over cast-in-place concrete or block walls. Complexity of construction best left to masons.
Performance: Because it is a veneer system, it has similar properties to cast-in-place or concrete block walls.
Durability: Good. Again good construction and materials necessary to resist freeze-thaw damage. Proper drainage required to minimize hydrostatic pressure build up. Mortar may require re-pointing over time.



RAIL-TIE
Appearance: Heavy creosote saturation leaves blackish brown residue. Best when used for straight walls.
Initial Cost & Installation: Moderate. Not readily available, difficult to cut. Best if installed professionally.
Performance: Requires cribbing or "dead-men" tie-backs. No interlock other than spikes or steel rods, which give way over time.
Durability: Fair. Heavy saturation of arsenic and formaldehyde resists rot, though may be toxic. Is free-draining, but warps and splits over time.

A Word About Cost

In preparing our comparison section, we choose to describe costs without assigning actual amounts because there are many factors that affect costs. For projects that are professionally installed, the size of the job, the location, access to the site, and overhead recovery are just some of the factors that contractors use in determining price. In do-it-yourself projects, generally only the cost of the materials is accounted for - labor is often considered as "sweat equity". Therefore, project costs are less than if professionally installed, even when you select more expensive products.

