



The Stone Trust

To Preserve and Advance the Art and Craft of Dry Stone Walling

707 Kipling Rd. Dummerston, VT 05301

www.thestonetrust.org

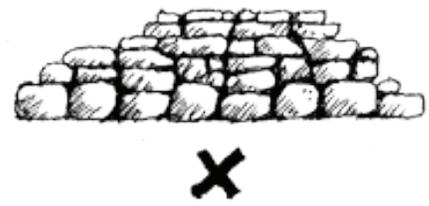
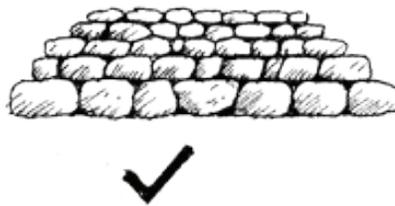
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The Basic Rules Of Dry Stone Walling

If you are going to build a wall, this is the page to read. Dry stone walls can seem complex at first with all the different parts and terms. Fortunately the basic techniques needed to build a strong wall can be condensed down to just five rules. If you follow these rules, your wall will be strong and look good.

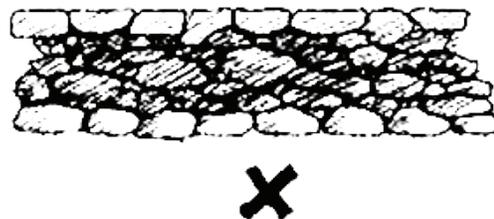
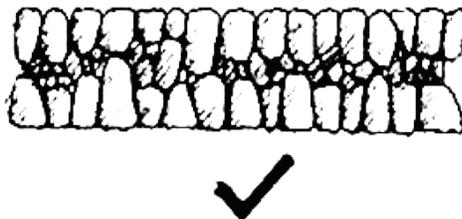
1. Cross the Joints:

This means that each stone should be crossing a joint below so that it is setting on two stones below it. What should not be done is to stack stones so that there are vertical joints running from one course to the next. Such joints are called Running Joints or Stack Bonds. Walls with running joints are very weak and look poor. The images to the left are looking at the face of a wall. Correctly built is on the left, the right is built wrong.



2. Set the Length of the Stone into the Wall:

This means that the end of each stone is the part visible in the final wall. In other words the length of each stone is perpendicular to the direction of the wall. When stones are placed with the wall, so the sides are visible, it creates a much weaker wall and is called trace walling or face walling. Think of how firewood is stacked, with each piece perpendicular to the overall direction of the stack, so all you see are the ends of the pieces. A stone wall should be built the same way. Throughstones (long stones the ends of which show in both sides of the wall) are an extension of this rule, and should be placed ever 3 or 4 feet to tie the wall faces together. Trace walling is one of the most common errors made, and is one primary reasons walls fall down. The images below are shown looking down on a course in a wall. Correctly built is on the left, the right is built wrong.





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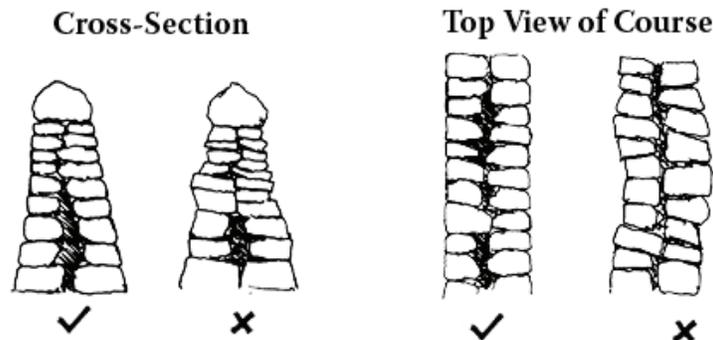
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3. Heart the Wall Tightly:

The wall should be built as solid as possible. Gaps in the interior of the wall, between the face stones, should be tightly filled with small stones. The tighter the hearting, the stronger the wall. However fewer larger hearting stones are much stronger than many small little bits. Anything that can be easily shoved is too small to use for hearting (and absolutely no concrete or soil!). Hearting stones are much better if they are flat or angular. Rounded stones can act like ball bearings. Hearting stones should be placed individually, not randomly thrown in. Hearting takes place as the wall is being built, make sure each course is completely hearted before beginning the next course. Not properly hearting a wall allows stones to move independently of one another, resulting in a structurally weak wall that will not last.

4. Build With the Plane of the Wall:

This means to align the stones so that there is an even plane to the faces of the wall. String lines are especially useful to keeping an even plane to the wall. The outer most 'bump' of each stone is what should be in-line. By doing this the wall will look smooth and even when you stand back. This applies both in cross section and in each course as the images below show.



5. Keep Stones Level:

Walls should be built so that the stones and courses are level. This is more apparent when using flat stones but applies to nearly all walls. Stones should be level both into the core of the wall and along the face. Stones that are not level will tend to slide causing internal stress in the wall and will eventually cause failure as the wall shifts over time. While there are a few local styles and techniques that don't follow this rule (ex: herringbone wall), it should be followed when building typical walls, and especially when you are learning to build. This rule is especially important when building on sloping ground.