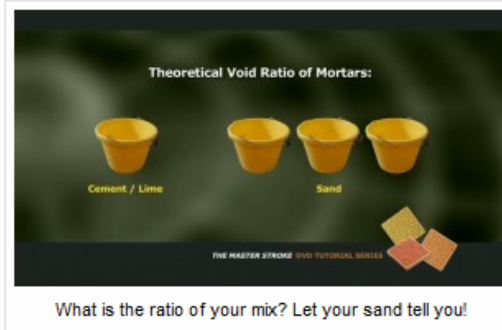


Lime Mortars DVD Review

Jeff | Sep 23, 2009 | Comments 1

This article is original content and has not appeared in The Last Straw.

St. Astier Natural Limes, a producer of hydraulic lime products from France, is offering a set of DVD videos called *The Master Stroke DVD Tutorial Series*. The Master Stroke is a 4-disc series beginning with lime mortars. Other discs cover plastering and rendering with lime, and building and pointing with lime. In this article we will review the first in the series, *Making Lime Mortars*.



The content of the DVD is laid out very clearly and is easy to follow. The quality of the video is very polished. The main purpose of the DVD is to show the construction worker how to create a consistent, high-quality mortar or render. Tips include how to properly keep your sand dry, how to measure each bucket of sand, etc. But there was one piece of information that really made this video important. Nearly half of the video is dedicated to the concept of the *sand void ratio* and how it affects your mix.

Have you ever wondered where the ratios we use for our mixes come from? This video explains how they are derived. Without going into too much detail, the ratio of sand to lime is determined by finding the void ratio of your sand. Once you know how much air is between the grains of sand you can find the volume of binder. If you use too much binder, the sand particles will be far apart, separated by water and lime. If you use too little lime you are not filling all the voids with lime and you will have pockets of air and water. The perfect ratio is one that fills all the voids and leaves little room for air or water. Once you know this ratio, based on your sand, you can then adjust the ratio to achieve your desired results. Don't think you can just figure this out on your own through this article. There is a proper way to do this, and each step is clearly defined in the video.

To know the proper ratio of sand to lime (or any other binder – clay, cement, gypsum, etc) is like an enlightenment for most of us. Have you ever wondered why the code says 4:1:3/4 (sand:cement:lime), or why your friends used 1:2:9 (cement:lime:sand)? Now you don't have to guess. Watch this video and learn how to properly measure the void ratio of your sand and the ratio of sand to binder. It will become apparent that the mix your friends are using on their project has little bearing on your mix.

Learning how to derive the ratio of sand to binder is obviously very valuable. The rest of the video walks you through the measuring and mixing process, showing how a professional would prepare his or her mortar. After being a sub-contractor and mixing thousands of batches of plaster, this video would have been great as a tool for estimating. In my mind it creates a baseline for high-quality that a builder can use to determine costs.



In summary, I would say buy this video! It can be purchased at the link above for \$39. From novice to professional, you will find value. Good luck.

This review is intended to be objective. No compensation of any form has been accepted in connection with this article.

About the author: Jeff Ruppert is a practicing engineer, owner of Odisea, a design and engineering firm located in Colorado, builder of bale homes and from time-to-time, a computer geek. He enjoys sharing information with others which is the main impetus for creating buildearth.org.