

(Get free) Kiln Building with Space Age Materials

Kiln Building with Space Age Materials

Frank A. Colson

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Frank A. Colson : Kiln Building with Space Age Materials before purchasing it in order to gauge whether or not it would be worth my time, and all praised Kiln Building with Space Age Materials:

0 of 0 people found the following review helpful. Five Stars By Peter From 1976 but good info 2 of 2 people found the following review helpful. neat book By CBI am ready to start a (controlled) fire! This book is super old school and a little out dated but I love it! Easy to follow instructions. 4 of 4 people found the following review helpful. a budget saver for potters By Nazani 127 pages, well illustrated. This book will be a godsend to artists on a budget, as a lot of the materials can be salvaged or purchased at local hardware stores.. The 'space-age materials' include things like ceramic-fiber liquid cement and ceramic-fiber blankets. Chapters include: downdraft Roman-arch kiln suspension drum kiln portable Raku kiln production kiln with 2 car bed setc.

Since the development of new materials, a number of products have emerged which drastically change the basic approach toward construction and firing techniques. No longer is it necessary to think in terms of heavy, bulky kilns which require huge amounts of fuel input to create the proper heat conditions for bringing clay to maturity and glazes to flow. New approaches are needed to accompany the way these new materials are used and how they can serve the needs of the craftsman. The information in this book is aimed at showing the individual artist-craftsman how to use new materials in the construction of pottery kilns. What are the new materials and how do they work to make a better kiln for the potter? Among the most available and diversified of the materials are the alumina-silica ceramic fibers.

Weighing one-fortieth the equivalent volume of firebrick, these materials have a normal heat exposure range of 2,300 F. Another family of ceramic fibers is based on zirconium oxide. Its melting point is extremely high. An even more sophisticated ceramic fiber is the boron-nitrate-based material, which is extracted from kernite and borax. Other ceramic fibers produced for their extremely fine insulating qualities are those made from quartz and nickel. When kilns are made entirely out of ceramic fibers - without any use of bricks - the pattern of reflection and retention of heat is different; therefore, it is necessary to understand and allow for these differences when firing. This concept is discussed in chapters 4-7, each of which deals with a different type of ceramic-fiber kiln. Each kiln has been proven in operation many times over. Chapter 8 describes the different forms of ceramic fibers and binders - such as cerent, liquid rigidizer, blanket, board, casting mixes - and how to use them to repair and operate conventional kilns. In addition, several kiln systems using vacuum-formed shapes are discussed as a preview of kilns of the future.