

WHAT'S IN A NAME?

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□ ENGINEERS, testing laboratories, professors and, in general, all construction people pride themselves on the accuracy of their technology and their ability to refer to materials, systems, tests and other items by their proper terminology.

Invariably, one's understanding of a subject, theory or material is directly reflected on how well and properly he uses the terminology for that concept. If you ask a doctor to check your tonsils and he examines your stomach,



SPREADING mortar on masonry unit.

you wonder does he understand what he is doing and does he understand the terminology.

Accordingly, it behooves us to make sure that the terms we have used are proper and reflect the concepts and accurately label the items we are discussing. One area that should be clarified is in reference to what we term "test specimens." In masonry, we test mortar, grout, the masonry unit and the assembly of these masonry units with mortar and grout. Therefore, each of these should be referred to by the proper term.

Field specimens for mortar are made by placing fresh mortar the thickness of the joint on the masonry unit and allowing it to remain there for one minute. This permits the excess water to be absorbed by the masonry unit and approach the actual field conditions.

The mortar is placed in a cylindrical mold two inches in diameter and four inches high in three layers and each layer tamped.

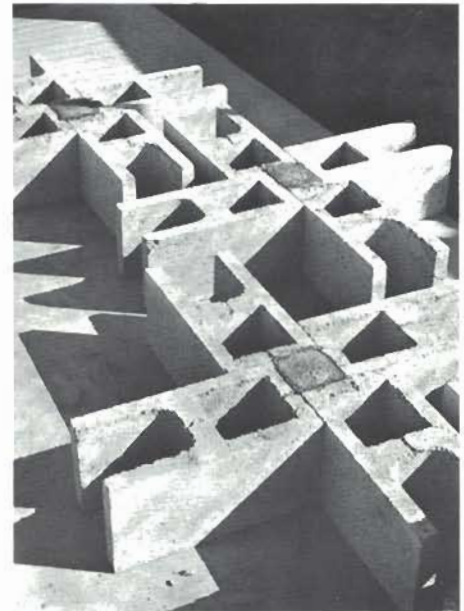
Mortar specimens may also be made as a laboratory specimen of a



MORTAR specimen and cardboard mold.



POURING grout into molds made of masonry units.



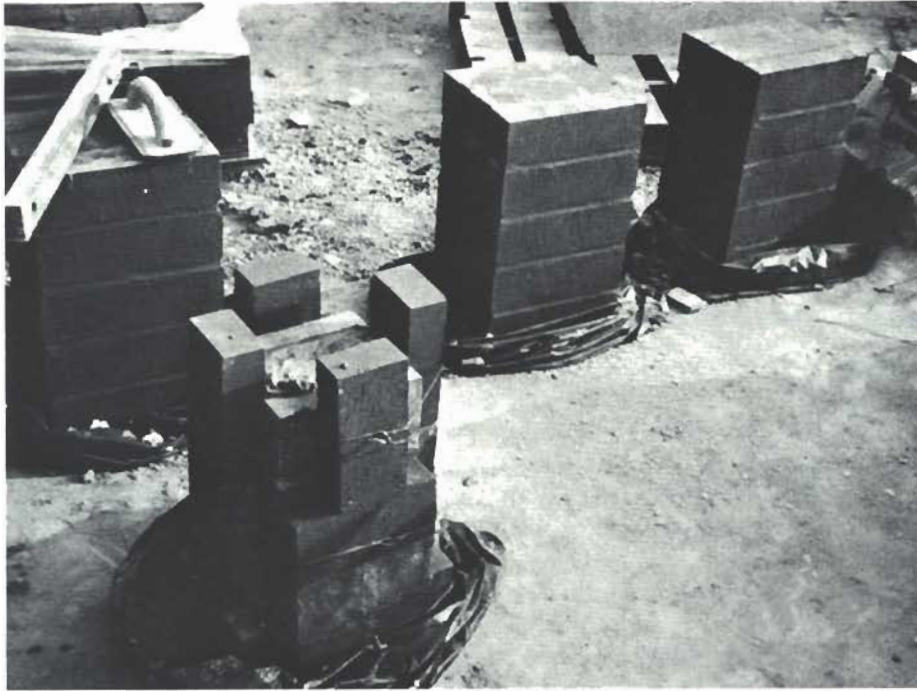
THREE grout specimens.

two inch cube. These are referred to as the mortar specimen, or the test specimen for mortar.

A grout specimen is obtained by making a mold of masonry units and pouring grout into the mold. Or grout may be poured into a concrete block cell and after it has hardened, the block is broken away and the grout cut into a 4" square and 7-5/8" high specimen. Or, grout may be cast into a block and after it has hardened, a core drilled out of it 4" in diameter and 7-5/8" high. Any one of these is the grout test specimen.

When the masonry unit is tested, we refer to it as testing the brick or testing the block and obtaining the

Photos by J. E. Amrhein



BRICK prisms built in stack bond and grouted.

compressive strength of the masonry unit.

When the materials are assembled, masonry units, mortar and grout, this assembly is tested and by definition represents the strength of the masonry wall. This assembly is referred to as the masonry prism.

The masonry prism is the representative sample of the wall. If there is no grout in the wall, then the masonry prism is made up of masonry units and mortar.

Summary: To summarize the terminology presented here, the items, mortar and grout and masonry unit are to be referred to as *specimens* while the assembly of the masonry unit, mortar and grout, is called a *prism*.

Proper use of the term "*specimen*" and proper use of the term "*prism*" will clarify what is meant and engi-

neers, architects, researchers and testing laboratories can all understand each other when they are referring to the strength of a grout *specimen* or strength of a masonry *prism*. □



CONCRETE block prism, grouted open end units.