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The following is exerted from my book, *Clay: A Studio Handbook*

Loading a Bisque-Firing

When loading a bisque fire, the wares can touch each other with no clearance at all and may rest inside and/or on top of each other. Bone-dry greenware is very fragile, so use common sense and avoid situations where stacking causes asymmetrical or focused stress. You can stack quite a few vessels foot-to-rim, foot-to-foot and/or rim-to-rim, and smaller vessels can be placed inside larger ones as long as the inner piece is not wedging inside the rim or walls of the outer one.

Don't stack large, flat bowls or plates directly on top of one another, as the base of each insulates the center of the one beneath from changes in temperature and air circulation. This can slow the escape of water vapor, and/or build up expansion/contraction tension, resulting in localized cracking or shattering. A good solution is to separate the bowls or plates with small flat wads, which can be used again and again in subsequent bisque firings. Set three wads equally spaced at the outer edge of the bottom of one piece so that the foot of the next piece rests on and is elevated slightly upon these shims, leaving a space for heat and air to circulate. You can stack at least three or four pieces this way, but make sure that the shims are in the same location through the stack.

For the same reasons, don't fire large flat forms directly on the kiln shelf, as the shelf will insulate the center underside during heating and cooling, which can result in serious cracking. Flat tiles, plates up to 14" in diameter, and many flat slab pieces are far better fired on edge, allowing heat and atmosphere to circulate freely around them.

Any large flat pieces that must sit flat on the shelf should be elevated on a network of small balls or parallel coils of wadding, pressing the piece gently down upon the wadding so that it is evenly supported with an air space beneath that is open to the outside. A large bowl or platter may be placed on a star-burst pattern of small coils of any claybody, with the points of the coils extending out just beyond the outer edge of the foot. Large slab pieces may be fired on parallel rows of small coils of clay, spaced about 2" apart. Don't use a grid pattern, because you create closed spaces that defeat the purpose. In a bisque firing these coils or wads can be made from any claybody, because the kiln will be heated gradually.

Some people recommend bisque-firing large flat-bottom pieces on a bed of sand or grog, but that is not a good idea and can be destructive. It often worsens the problem by further insulating the underside from changes in temperature, causing uneven expansion on heating and contraction on cooling, likely resulting in severe cracking or shattering. Far better to fire any such piece on wadding or coils of clay. This is especially true in a bisque-firing, where firing shrinkage is not an issue, while escape of moisture and thermal expansion and contraction are serious concerns.