

A GUIDE TO CLAY SELECTION

When choosing a clay for a functional ceramic project, there are numerous factors to consider: color, plasticity, porosity, vitrification, firing temperature and glaze fit, just to name a few. Information on the characteristics of each of Laguna's clays can be found in the following pages and will assist you in making the best possible product choices for your needs. The Clay Application Charts beginning on the next page are based on lab testing, input from our technical staff and feedback from our customers.

HIGH FIRE STONEWARE CLAYS

CHARACTERISTICS:

Cone 10 Earth-colored Stoneware Clays produce durable ware and most will react favorably to the manipulation of air, gas and smoke in reduction firing. These clays have good plasticity and will perform well in both wheel throwing and hand building methods.

White Stoneware Clays also have good plasticity and contain sand to increase their strength and workability, making them slightly open when fired. These clays have become very popular because of the clean canvas they provide for a myriad of glaze colors. Some iron speckling can occur but for the most part, glaze colors are not affected.

Cone 5 or 6 Stoneware Clays are similar to Cone 10 clays in their workability and represent potential savings in lower firing costs. The lower firing temperature and oxidation atmosphere allow for the use of a large palette of ceramic stains and cause less warping of the ware.

TRADITIONAL APPLICATIONS:

Tableware may be made with stoneware clays with smooth to slightly coarse fired surface textures and low water absorption. Recommended clays include Cone 10: WC-370, WC-841, WC-379, WC-382, #900, #590, #510; Cone 5: WC-877, WC-400, WC-401, WC-402, #65, #50, #55.

Ovenware may be made from most stoneware clays provided the ware is well designed and the user is aware of potential thermal shock and how to avoid it. Cone 5 stonewares tend to be less susceptible to thermal shock but all ovenware made of stoneware should be heated and cooled gradually. Recommended clays include Cone 10: WC-389, WC-376, #750, #910; Cone 5: WC-851, WC-877, #70, #60, #30.

Wall Tile clay selection is completely dependent on one's individual design considerations. Recommended clays include Cone 10: WC-389, WC-376, #950, #310; Cone 5: WC-397, WC-394, #66, #45, #30.

Floor Tile, on the other hand, should be made from a strong, durable clay to withstand wear and abuse. Commercial producers employ special production techniques to increase the durability and provide lower shrinkage. Recommended clays for floor tile include Cone 10: WC-371, WC-372, WC-381, WC-885, #901; Cone 5: WC-397, WC-365, #30, #60, #45.

Sculpture Clays contain significant amounts of sand and grog in various mesh sizes and are formulated for a low rate of shrinkage. These clays are designed to accommodate large handbuilt, wheel thrown or sculpted projects. Recommended clays include WC-381, WC-371, WC-372, #901, #950 which are listed as Cone 10 but may be fired to Cone 5 or lower for sculpture work; WC-390, WC-392, #30, #45, #66, #75 are Cone 5 sculpture bodies, again often fired lower for sculpture.

Please Note:

Clays designated above as "WC" and "EM" are manufactured in our California facility and available F.O.B. Los Angeles, CA and Byesville, OH. "#" clays are manufactured in our Ohio facility and are available F.O.B. Ohio.

PORCELAINS

CHARACTERISTICS:

Porcelains are most commonly known for their whiteness and for having some degree of translucency. They are pure and vitreous which gives them their inherent glaze fit quality and unparalleled hardness and durability. Laguna offers a variety of prepared moist porcelain clays in firing temperatures ranging from Cone 10 to Cone 3.

Dave's Porcelain (WC-384) and #570 are outstanding Cone 10 throwing bodies and are also excellent for slab projects when a hard clay is desired. Cone 10 Windsor Porcelain (WC-879) is made with a highly plastic, imported kaolin, and translucent when construction is thin. A good Cone 5 clay is #15.

TRADITIONAL APPLICATIONS:

Sanitaryware is usually made from porcelain or porcelain-like clays. Hardness and durability as well as flawless glaze fit are key factors in their function.

Wind chimes create a nice sound when made of thin porcelain. If other less vitreous clays are used, consider glazing them to heighten their tone.

Tableware, Tile, and Sculpture functions are greatly enhanced when made with porcelain. The smooth, white, hard qualities provide an ideal surface for glaze colors to achieve depth and clarity. Porcelain is waterproof and very durable, making its use for dinnerware especially popular.

LOW FIRE CLAYS

CHARACTERISTICS:

Low fire clay tends to be either reddish or white in color and because of its porosity, glazing is required to create a waterproof surface. When fired, these clays are non-vitreous and have low shrinkage. Low fire dinnerware does not take extremely hot temperatures well, and repeated exposure to such temperatures can result in cracking and crazing. Laguna's low fire, high talc clays are used commercially, by hobbyists and in educational programs.

TRADITIONAL APPLICATIONS:

Low Fire Clays provide a good medium for small throwing, handbuilding and modeling projects. Recommended clays include: EM-207, EM-210, EM-330, EM-338, #10, #20. The following basic low fire clays contain sand to facilitate their use on somewhat larger forms: EM-212, EM-214, #10-G, #20-G.

Sculpture Clays are designed for larger projects where varying thickness becomes a factor. Recommended clays: EM-215, EM-234. Cone 06 sculpture bodies include #10-G, #26.

Other low fire clays have specific uses which are usually described in their title, i.e. 06 #5 Pressing.

Note: Forming methods, drying techniques and firing schedules will all effect your results with any clay. Always test an unfamiliar clay before ordering it in quantity.

Eastern Cone 10 Clays	WC-379	B Mix	WC-618	#510	WC-620	#580	WC-621	#590	WC-625	#700	WC-626	#750	WC-627	#850	WC-628	#900	WC-629	#910	WC-630	#950	WC-631	#550	WC-632	#560	WC-633	#570	WC-637	#1050	WC-643	#901	Eastern Cone 8 Clays	WC-615	#310		
	Tableware																																		
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Ovenware																																			
Wall Tile																																			
Floor Tile																																			
Sanitaryware																																			
Wind Chimes																																			
Jewelry																																			
Sculpture																																			
Jiggering																																			
Raku Firing																																			
Crystal Firing																																			
Pressing																																			
Throwing Large																																			
Throwing Medium																																			
Throwing Small																																			
Handbuilding Large																																			
Handbuilding Medium																																			
Handbuilding Small																																			

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Eastern Cone 6 Clays	WC-401 B Mix 5	WC-600 #005	WC-601 #30	WC-602 #40	WC-603 #45	WC-606 #50	WC-607 #55	WC-608 #60	WC-609 #65	WC-610 #66	WC-611 #70	WC-612 #75	WC-613 #80	WC-614 #90	WC-616 #15	WC-617 #16
	Tableware															
Ovenware																
Wall Tile																
Floor Tile																
Sanitaryware																
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Jewelry																
Sculpture																
Jiggering																
Crystal Firing																
Pressing																
Modeling																
Throwing Large																
Throwing Medium																
Throwing Small																
Handbuilding Large																
Handbuilding Medium																
Handbuilding Small																

Eastern Cone 4-2 Clays	EM-110 #100	EM-111 #125	EM-112 #150	Eastern Cone 06 Clays	EM-100 #10	EM-101 #10-G	EM-102 #10-NW	EM-103 #10-T	EM-104 #10-VW	EM-105 #12	EM-106 #20	EM-107 #20-G	EM-109 #26	EM-635 #200	EM-636 #250
	Tableware					Tableware									
Ovenware				Ovenware											
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Sanitaryware				Sanitaryware											
Wind Chimes				Wind Chimes											
Jewelry				Jewelry											
Sculpture				Sculpture											
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Modeling				Modeling											
Pressing				Pressing											
Throwing Large				Throwing Large											
Throwing Medium				Throwing Medium											
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