

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.

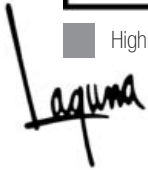
CLAY APPLICATION CHARTS

A guide to accurately select the materials best suited for your projects, based on lab testing and input from our technical staff and customers.

Western Cone 10 Clays	WC-368 S-60	WC-369 Rod's Mix	WC-370 Amador	WC-371 Big Pot	WC-372 Big Red	WC-373 Dark Brown	WC-376 LB Blend	WC-378 Maya Red	WC-379 B-Mix	WC-380 B-Mix w/sand	WC-381 Big White	WC-382 Half & Half	WC-383 LW	WC-384 Dave's Porcelain	WC-385 S Porcelain	WC-387 WS-10	WC-389 WSO	WC-409 CA-2	WC-412 Stony White	WC-415 English Porcelain	WC-427 HBCA	WC-428 Babu Porcelain	WC-431 LBW-70	WC-809 Soldate 30	WC-811 JSRH	WC-823 Rod's Bod	WC-835 Death Valley Red	WC-838 Kai Porcelain	WC-841 Danish White	WC-842 Danish-sand	WC-843 Soldate 60	WC-872 Los Altos	WC-879 Windsor Porcelain	WC-885 Granite	WC-893 B Mix w/grog	WC-894 Half & Half SC	S-2926 Southern Ice		
	Tableware																																						
Overware																																							
Wall Tile																																							
Floor Tile																																							
Sanitaryware																																							
Wind Chimes																																							
Jewelry																																							
Sculpture																																							
Raku Firing																																							
Crystal Firing																																							
Pit Firing																																							
Throwing Large																																							
Throwing Medium																																							
Throwing Small																																							
Handbuilding Large																																							
Handbuilding Medium																																							
Handbuilding Small																																							

Western Cone 5 Clays	WC-365 Hawaiian Red 2	WC-390 Red Sculpture	WC-391 B-3 Brown	WC-392 Buff Sculpture	WC-393 LB 6	WC-394 SB Red	WC-395 Porcelain Five	WC-397 WS-5	WC-398 WS-4	WC-399 MR-5	WC-400 Moroccan Sand	WC-401 B-Mix 5	WC-402 Half & Half 5	WC-436 B-Mix 5/Grog	WC-850 52 Buff/sand	WC-851 52 Buff	WC-861 Hagl Porcelain	WC-864 Weststone 2	WC-866 Electric Brown	WC-871 Calico	WC-877 Dover White	WC-881 Red Calico	
	Tableware																						
Overware																							
Wall Tile																							
Floor Tile																							
Sanitaryware																							
Wind Chimes																							
Jewelry																							
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Highly Recommended
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Western Cone 06 Clays	EM-207 Red	EM-210 White	EM-211 White No Taic	EM-212 White/sand	EM-214 Buff/sand	EM-215 Terra Cotta Sculp.	EM-217 Wed	EM-234 Red Sculpture	EM-330 Laguna 06 White	EM-334 Wards 06 Red	EM-335 06 #5 Pressing	EM-338 06 Red DE	EM-342 Whiteware	EM-343 R-2 Red	EM-344 R-2 Red w/grog	EM-345 Raku K-white	EM-348 06 #8 Pressing	EM-347 Whiteware w/grog	WC-548 Raku Throwing	WC-549 Raku Industrial
	Artware																			
Ovenware																				
Wall Tile																				
Wind Chimes																				
Jewelry																				
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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																
Ovenware																Ovenware	
Wall Tile																Wall Tile	
Floor Tile																Floor Tile	
Sanitaryware																Sanitaryware	
Wind Chimes																Wind Chimes	
Jewelry																Jewelry	
Sculpture																Sculpture	
Jiggering																Jiggering	
Raku Firing																Raku Firing	
Crystal Firing																Crystal Firing	
Pressing																Pressing	
Throwing Large																Throwing Large	
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Throwing Small																Throwing Small	
Handbuilding Large																Handbuilding Large	
Handbuilding Medium																Handbuilding Medium	
Handbuilding Small																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															
Overware																
Wall Tile																
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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									
Overware				Overware											
Wall Tile				Wall Tile											
Floor Tile				Floor Tile											
Sanitaryware				Sanitaryware											
Wind Chimes				Wind Chimes											
Jewelry				Jewelry											
Sculpture				Sculpture											
Jiggering				Jiggering											
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Crystal Firing				Crystal Firing											
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Throwing Large				Throwing Large											
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