

CLAY KNOWLEDGE

CHOOSING POTTERY CLAY



Kaolin Used in porcelain & difficult to work clays Near - white



Stoneware Clays Mid Fire 1160-1240 °C High Fire 1200-1280 °C

Earthernware
Easy to work
Fired at 950-1100 °C

Ball Clay
Good for adding
plasticity to other
clays-grey



Fire Clay
Often added to
stoneware
Adds insulation &
strength

WORKING WITH CLAY



PINCH - Use your fingers to pinch and poke a single lump of clay into any shape.

SLAB - Roll the clay into flat sheets (like a pie crust) to cut apart and assemble.



COIL - Roll out long snakes of clay and weist them into coils and shapes.

WHEEL - Spin clay on potter's sheel to form pots and vases.

6 STAGES OF CLAY

1 SLIP: Clay suspended in water. It can be poured into moulds, used as a bonding agent between clay pieces, or applied for decorative purposes

2 GREENWARE: Workable clay. It's firm enough to hold its shape but flexible enough to be shaped or molded without breaking.

3 LEATHER HARD: Partially dried clay that retains a bit of flexibility. It may crack but won't fully break when bent. It feels cool to the touch and is ideal for carving or refining surface details.

4 BONE DRY: Clay that has completely dried and is ready for firing in the kiln. It has no flexibility and is extremely fragile.

5 BISQUEWARE: Clay that has undergone its first firing. It appears lighter in color and has slightly shrunk. The piece is now hard and durable, though still porous and not yet waterproof.

6 GLAZEWARE: Clay that has been fired a second time with a coat of glaze. The glaze melts to form a smooth, glass-like surface, giving the piece a glossy finish and making it waterproof.

HOW TO FIND LOCAL CLAY

Approximately 80% of the Earth's land surface contains clay, so there's a good chance that local earthenware clay can be found near where you live.

Where to look for clay:

- Riverbanks
- Naturally exposed earth (such as canyons or gullies)
- Stream beds
- Road cuts
- Construction sites

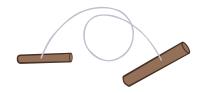
Always get written permission from the landowner before digging clay. This is especially important on construction sites, where safety and legal considerations apply.

Follow safe practices:

- Avoid unstable or dangerous terrain
- Stay clear of active construction zones and machinery

Important: Never collect clay from National or State Parks or Monuments. Disturbing these protected natural areas is often illegal and can result in serious consequences.

CLAY TOOLS



WIRE CLAY CUTTER is used to slice through blocks of clay or remove pieces from the wheel. It has a thin wire with handles on each end, allowing clean, even cuts without distorting the clay.

BOXWOOD OR OXBONE TOOLS shape, detail and refine clay. Their smooth surface helps prevent deep gouges or other issues, making them ideal for sculpting, trimming, and smoothing without damaging the clay.





LOOP, RIBBON & WIRE TOOL are often used on greenware (workable clay) for refining and detailing.

NEEDLES are among the most versatile tools in pottery. They can be used for various tasks, such as scoring slabs and coils when handbuilding.





BRUSHES are used to apply water and slip to specific areas of clay, as well as to paint and design with slips, underglazes, and glazes.



RIBS: Used for shaping, smoothing and finishing clay vessels.