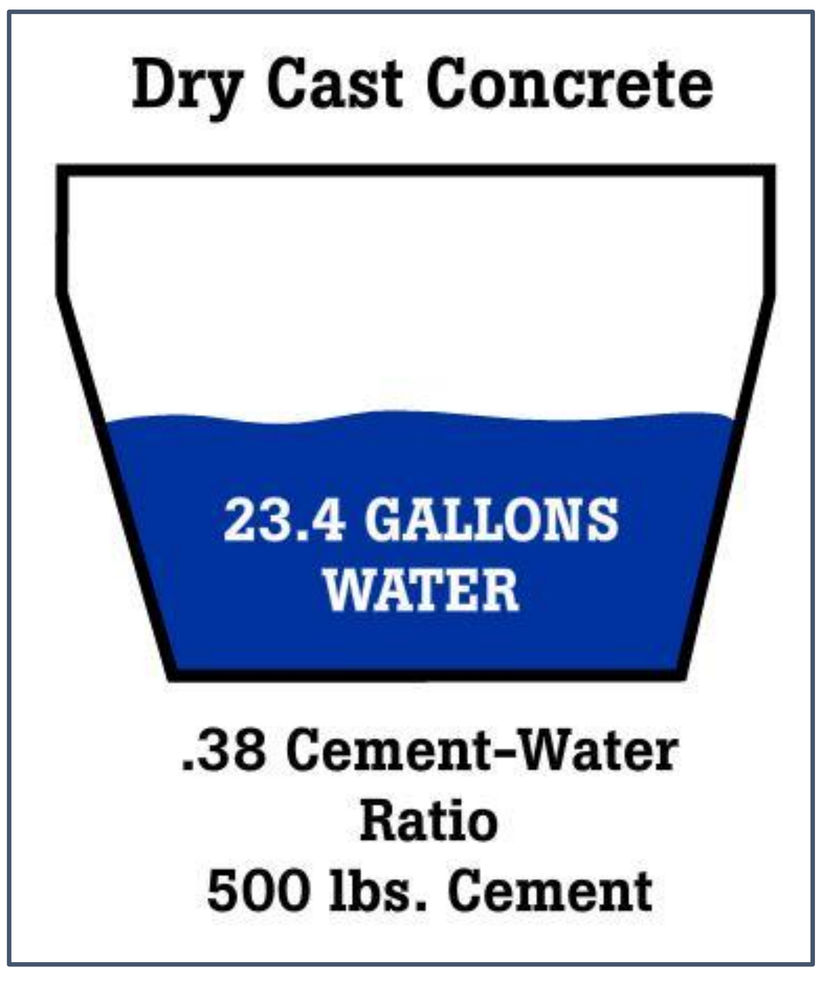
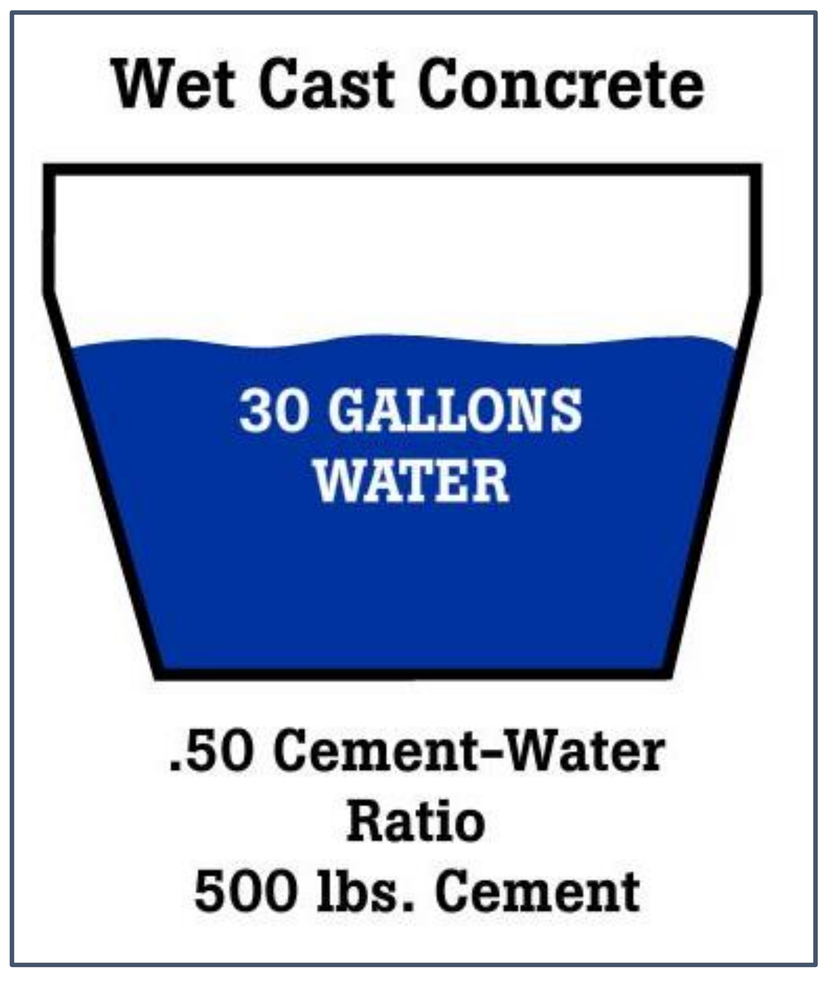
Dry Cast & Wet Cast

What's the big deal anyways?



Example Mix Properties



Dry Cast Concrete Design

- Most Reinforced Concrete Pipe (RCP) & many Precast Box Culvert (BC) are produced using dry cast techniques due to high rates of production & shortened cure times.
- Dry cast mixes have zero slump – a standard slump test, although not required, would leave a dry mix standing as-is once mold is removed.

Wet Cast Concrete Design

- A significant amount of Box Culverts and precast concrete products are produced using wet cast processes, including some Reinforced Concrete Pipe (RCP).
- Wet mixes have a standard design slump that can be measured in accordance with ASTM C143.

Dry Cast Production

- High quantity of pours per day using a single form because zero slump allows forms to be stripped immediately.
- Compressive design strength achieved within days, often overnight.
- Forms tend to be more rigid in order to transfer intensive vibration forces needed for stiffer mix.

Wet Cast Production

- Forms remain in place until sufficient strength achieved.
- Typically requires less intense formwork.
- Workability of mix can allow for greater variability in designed pours (i.e. custom shapes, mass concrete, etc.).

ACPA