



## WINTER WORK GUIDE

As a general rule, for 3000 p.s.i. concrete at 4" slump, deposited in forms, except in the most exposed locations, the following proportions of "Anti-Hydro<sup>®</sup>" should be used to protect concrete at reduced temperatures. Sand and coarse aggregate should be free of frost and ice.

### MINIMUM EXPECTED AIR TEMPERATURES

- 40° to 32° F - 1 gallon "Anti-Hydro<sup>®</sup>" per cubic yard
- 32° to 23° F - 1½ gallons "Anti-Hydro<sup>®</sup>" per cubic yard
- 23° to 20° F - 2 gallons "Anti-Hydro<sup>®</sup>" per cubic yard
- 20° to 18° F - 2½ gallons "Anti-Hydro<sup>®</sup>" per cubic yard
- 18° to 15° F - 3 gallons "Anti-Hydro<sup>®</sup>" per cubic yard

"Anti-Hydro<sup>®</sup>" is sold in quarts, 1, 5, 30 and 55 gallon containers.

#### CAUTION:

DO NOT USE "Anti-Hydro" IN PRE-STRESSED AND/OR POST-TENSIONED APPLICATIONS (CONTAINS CaCL<sub>2</sub> SOLUTIONS).

For more details please contact our Technical Department at  
PH: (800) 777-1773



**ANTI-HYDRO<sup>®</sup> INTERNATIONAL, INC.**  
**1-800-777-1773**  
**[www.anti-hydro.com](http://www.anti-hydro.com)**

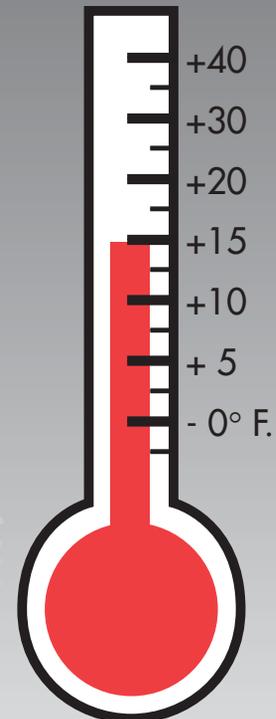
# CONTINUE

# CONSTRUCTION

# IN COLD



# WEATHER





# "Anti-Hydro®"

## For Protecting Mortar & Concrete at temperatures - Down to 15°F

"ANTI-HYDRO" is a liquid admixture, which has been the standard for waterproofing, hardening and cold weather concrete and masonry work for over 100 years.

"ANTI-HYDRO" lowers the water requirements and reacts with portland cement to give increased heat of hydration, high early strength and higher ultimate strength. It produces concrete that is hard, waterproof, durable and capable of withstanding freezing temperatures.

"ANTI-HYDRO" includes inhibitors...its use in millions of yards of concrete has not adversely affected metal forms or reinforced rods.

### RECOMMENDED COLD WEATHER CONCRETE PRACTICES

Concrete may be safely placed in cold weather if necessary preparations are made, proper mixes are designed and correct placing, finishing and curing techniques are followed. The thickness and exposure of concrete being placed should be considered in determining cold weather concreting procedures.

1. Concrete mixes should be designed with adequate portland cement content. Avoid the use of retarders. The hydration of portland cement produces heat. "Anti-Hydro" reacts with portland cement to give more complete hydration, producing additional heat in less time, thus developing high early strength. Concrete which has obtained a compressive strength of 500 p.s.i. will not be seriously affected by a few cycles of freeze and thaw. Tests indicate that concrete containing "Anti-Hydro" can attain such strength in 24 hours, even at temperatures below freezing.
2. Heated water and aggregates may be used; maximum temperatures as follows: mixing water 150°F.; aggregates 200°F.; concrete 80°F. the recommended temp. of concrete being placed should be 55°F minimum.
3. Concrete floors should never be placed on frozen bases. Forms should be entirely free of ice. Thawing may cause subsequent movement and failure.
4. Protect concrete during early curing stages against sudden changes in temperature. Thermal shock may cause cracking of concrete. Do not place concrete toppings on base slabs where there is more than 30°F temperature differential between the topping mix and the base. Failure of bond may occur.
5. Do not allow gases from heating devices to be directed on fresh concrete. Carbonation results in soft weak surfaces.
6. On windy days erect wind barriers to prevent rapid heat loss from concrete slabs. Leave wall forms on longer to retain heat of hydration.

## "ANTI-HYDRO®" Saves Money on Every Winter Job!

"ANTI-HYDRO" allows concrete and masonry work to continue even in subfreezing weather.

Because it internally cures and produces higher strength at all ages, the need for high early cement is eliminated and forms may be stripped at earlier ages. Initial setting times are reduced, resulting in substantial saving of finishing costs overtime.