





PRODUCT DATASHEET

DESCRIPTION: Rapid Set[®] HTF SHOTCRETE is a fast-setting, fiber-reinforced shotcrete formulation based on advanced CSA cement technology. HTF SHOTCRETE produces shotcrete mixtures with unparalleled performance and ease of use without the need for an accelerator. Finished HTF SHOTCRETE exhibits exceptional durability for mining and tunneling environments.

APPLICATIONS: HTF SHOTCRETE is ideal for tunnel interiors, mine ribs, highwalls, and other vertical and overhead shotcrete applications where fast strength gain and long-term durability are desired. HTF SHOTCRETE sets fast without an accelerator. HTF SHOTCRETE can be applied anywhere conventional dry processed shotcrete is used.

ADVANTAGES:

- CONVENIENT: Single-component, pre-blended formula
- FAST: Sets quickly to minimize dropout and gain strength with no accelerator, reducing cycle times
- SAFE: Hydraulic cement based formula contains 0 g/L of VOCs
- EFFICIENCY: Reduced rebound saves material and minimizes clean-up

• HIGH SULFATE RESISTANCE

• **GREEN:** Rapid Set cement is manufactured using recycled materials, smaller carbon footprint than conventional shotcrete

ENVIRONMENTAL ADVANTAGES: Use HTF SHOTCRETE to reduce your carbon footprint and lower your environmental impact. Production of Rapid Set cement emits far less CO_2 than portland cement. Contact your CTS representative for EPD, LEED values and other sustainability information.

FIELD TESTING: Conduct field test panels at the jobsite using the prepared bonding surface and the HTF SHOTCRETE to determine actual field performance and suitability for intended use.

SURFACE PREPARATION: Concrete bonding surfaces should be clean, sound, and free from any materials that may inhibit bond such as oil, asphalt, curing compounds, acids, dirt and loose debris. Surface should be prepared in accordance with ICRI Guidelines for surface preparation and project specifications.

Before placement of HTF SHOTCRETE, the repair surface should be thoroughly saturated with water just before placement.

PACKAGING: HTF SHOTCRETE is packaged in 3000-lb woven polypropylene bulk bags.

SHELF LIFE: HTF SHOTCRETE has a shelf life of 12 months when stored properly in a dry location, protected from moisture, out of direct sunlight, and in an undamaged package.

USER RESPONSIBILITY: Before using Rapid Set products, read current technical data sheet, bulletins, product label and material safety data sheet at www.CTScement.com. It

OVERVIEW

Highlights:

High Early Strength: Long term performance

For fast and durable shotcrete applications

MasterFormat® 2016

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Manufacturer:

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HTF SHOTCRETE Fast-Setting, Fiber-Reinforced Dry Process Shotcrete

is the user's responsibility to review instructions and warnings for any Rapid Set product in current technical data sheet, bulletins, product label and material safety data sheet prior to use.

WARNING: DO NOT BREATHE DUST. AVOID CONTACT WITH SKIN AND EYES. Use material in well-ventilated areas only. Exposure to cement dust may irritate eyes, nose, throat, and the upper respiratory system/lungs. Silica exposure by inhalation may result in the development of lung injuries and pulmonary diseases, including silicosis and lung cancer. Seek medical treatment if you experience difficulty breathing while using this product. The use of a NIOSH/MSHA-approved respirator (P-, N- or R-95) is recommended to minimize inhalation of cement dust. Eat and drink only in dust-free areas to avoid ingesting cement dust. Skin contact with dry material or wet mixtures may result in bodily injury ranging from moderate irritation and thickening/cracking of skin to severe skin damage from chemical burns. If irritation or burning occurs, seek medical treatment. Protect eyes with goggles or safety glasses with side shields. Cover skin with protective clothing. Use chemical resistant gloves and waterproof boots. In case of skin contact with cement dust, immediately wash off dust with soap and water to avoid skin damage. In case of skin contact with wet cement, wash exposed skin areas with cold running water as soon as possible. In case of eve contact with cement dust, flush immediately and repeatedly with clean water, and consult a physician. If wet cement splashes into eyes, rinse eyes with clean water for at least 15 minutes and go to the hospital for further treatment.

Please refer to the SDS and www.CTScement.com for additional safety information regarding this material.

LIMITED WARRANTY: CTS Cement Manufacturing Corp. (CTS) warrants its materials to be of good quality and, at its option, will replace or refund the purchase price of any material proven to be defective within one (1) year from date of purchase. The above remedies shall be the limit of CTS' responsibility. Except for the foregoing, all warranties expressed or implied, including merchantability and fitness for a particular purpose, are excluded. CTS shall not be liable for any consequential, incidental, or special damages arising directly or indirectly from the use of the materials.

▲ WARNING

CANCER and REPRODUCTIVE HARM - www.P65Warnings.ca.gov

TYPICAL PHYSICAL DATA

Yield	Approximately 0.8 cu. yd. per 3000-lb bulk bag
Set time	30 minutes
Working time	15 minutes

Compressive Strength, ASTM C1604, C39	
1 hour*	1000 psi (6.89 MPa)
3 hours	3000 psi (20.7 mPa)
24 hours	4500 psi (31.0 mpa)

28 days 8000 psi (55.2 MPa)

*After final set All data produced at 72°F (22°C)

