

# EnviroTrol Curing

AMCON Block and Precast, Inc. incorporates a modern energy efficient environmentally controlled curing system which creates an atmosphere most conducive for the curing of concrete masonry units. Known as EnviroTrol Curing, this system meets the unique curing requirements of architectural CMU's.

AMCON's CO<sub>2</sub> EnviroTrol system incorporates numerous cycles of high temperature, steam and carbon dioxide (CO<sub>2</sub>) to aggressively accelerate the hydration process. Coupled with a high temperature drying cycle, this 24 hour hydration and drying process results in units that require no additional drying time to meet the physical requirements of ASTM C-90 Type-1, Moisture Controlled Units.

The incorporation of CO<sub>2</sub> into the curing process assists in the carbonation of the units. (Carbonation and hydration are the chemical reactions that create the strength in concrete.) Carbonation can also cause the units to shrink. Fully carbonating CMU's in a controlled setting before they are placed in a wall will minimize or eliminate shrinkage cracks.

The CO<sub>2</sub> EnviroTrol system controls the temperature, humidity, and carbon dioxide until the hydration and carbonation processes are functionally complete. The results are architectural units that are dry, color consistent, resistant to carbonation shrinkage and have a greatly reduced efflorescence potential when compared to conventionally cured CMU's

AMCON's CO<sub>2</sub> EnviroTrol System is also equipped with a state of the art computerized batching system, resulting in CMU's that are consistent in color, texture and strength.

## **SPECIFICATION**

### **PERFORMANCE:**

Masonry units shall conform to: ASTM C-90, Type-1 Moisture Controlled Criteria.

### **WEIGHT:**

Manufactured with normal weight aggregate meeting ASTM C-33.

**CURING:** CMU's shall be cured utilizing the CO<sub>2</sub> EnviroTrol System with the incorporation of CO<sub>2</sub> and steam in the curing process, AND a minimum 7 hour drying cycle that maintains a uniform minimum temperature of 190 degrees Fahrenheit. CMU's shall meet ASTM C90 Type-1 Moisture Controlled Criteria when removed from the kiln.

**TECHNICAL**