An Introduction to Cold Storage Concrete Slab Construction

Intro Conarmor LLC

Intro FX DESTREE

Training objectives

1. **Cast-in-Place Concrete in Thermally Controlled Environments**

- How slab systems interface with site, personnel, and operations
- Understanding sub-base, ground insulation, and underfloor systems
- Thermal properties of materials used in controlled environments
- Typical layered section used in freezer slab concrete construction

2. Concrete Dry Shrinkage & Thermal Shrinkage

- Physics is behind slab shrinkage in cold environments
- Tools for straightforward determination with examples

3. Specifying and Detailing Slab Systems for Freezers & Coolers

- Ideal designs vs. real-world construction
- Common issues and owner outcomes
- Freezer slab detailing

4. Essential Components of Effective Freezer Slab Systems

- Concrete mixes essentials and slab reinforcement
- Slab jointing design: construction joints, armor joints
- Armor joint in freezers: selection criteria
- Joint fillers

5. Slab System Construction Routes

- Conventional slab systems with dense jointing
- Semi-engineered, extended joint systems
- Advanced, super seamless slab systems

Questions