

[1] Ahhh, Concrete.

Ahhh....

What's not to like about concrete? What's not to *love* about this child of the ancient world, a child who speaks such a modern tongue? What's not to enjoy about a structural material which you are allowed to *touch*...?

Perhaps that's overdoing it. Concrete can also be a salty dog, a wretched mess, a crude brute. A building site for concrete construction is always wet... and dirty. It's slow. It's *retarded*. And here in the US of A, that's almost a mortal sin.

History

Cement and Concrete

- Cement

- Aggregates and Water

- Admixtures

- ... Reinforcing

Making and Placing Concrete

- Proportioning Concrete Mixes

- Handling and Placing Concrete

- Curing Concrete

Formwork

Reinforcing

- The Concept of Reinforcing

Steel Bars for Concrete Reinforcing  
Fabrication and Erection of Reinforcing Bars  
Reinforcing a Simple Concrete Beam  
Reinforcing a Continuous Concrete Beam  
Reinforcing a Structural Concrete Slab  
Two-Way Slab Action  
Reinforcing Concrete Columns

Prestressing

    Pretensioning

    Posttensioning

ACI 301

\* \*

SiteCast Concrete Framing Systems

Why does this chapter use the term “sitecast” concrete?

Casting a concrete slab on grade

    pouring and finishing a slab on grade

Casting a concrete wall

    insulating concrete forms

Casting a concrete column

One-way floor and Roof Framing Systems

    one-way solid slab system

    one-way concrete joist system (ribbed slab)

    Wide-module Concrete joist system

Two-way floor and roof framing systems

    Two-way flat slab and flat plate systems

    two way waffle-slab system

    Concrete stairs

Sitecast posttensioned framing systems

Selecting a system

Innovations in Sitecast concrete construction

Architectural Concrete

Longer Spans in Sitecast Concrete

Designing Economical Sitecast Concrete Buildings

Sitecast Concrete and Building Codes

Uniqueness of Sitecast Concrete