

# Ready Mix Concrete vs Prestress Concrete - Quick Reference Guide

This quick reference guide will provide a snapshot in defining the similarities and differences between prestress concrete and ready-mix concrete. Please refer to the Standard Specifications for Highway Construction, Materials Sampling Guide, and the Materials Management Guidance webpage for a more complete picture.

Definitions:

- Precast concrete: concrete cast in reusable molds or forms, cured in a controlled environment, which is then transported to the construction site and lifted in place.
- Ready-mix concrete: manufactured according to a set recipe and delivered to the work site by truck mounted in-transit mixers.

## Ready Mix Material

### Typical Cast-in-Place Concrete

*Material Code, Name, and Description:*

**1002PCC, Portland Cement Concrete**

*Test Templates:*

**MSF002001, Small Quantities of Non Critical Material - Field**  
**PCF001001, Portland Cement MIA Cylinders - Field**  
**PCF002001, Mainline Pavement/Structure Maturity Report - Field**  
**PCF003001, Pavement Repair (Maturity Tests) - Field**  
**PCL004004, PCC Lab Performed Test (4x8) - Central Lab**  
**PCX002001, PCC Plant & Field Performed Test (Projs Let Before 2/5/2014)**  
**PCX002002, PCC Plant & Field Performed Test (Projs Let After 2/4/2014)**  
**PCX005001, Maturity Curve Development**  
**PCX006001, PCC Mix Design**

### Ready Mix Supplied Concrete - Contractor Poured/Formed

*Material Code, Name, and Description:*

**1002PCC, Portland Cement Concrete**

*Test Templates:*

**MSF002001, Small Quantities of Non Critical Material - Field**  
**PCF001001, Portland Cement MIA Cylinders - Field**  
**PCF002001, Mainline Pavement/Structure Maturity Report - Field**  
**PCF003001, Pavement Repair (Maturity Tests) - Field**  
**PCL004004, PCC Lab Performed Test (4x8) - Central Lab**  
**PCX002001, PCC Plant & Field Performed Test (Projs Let Before 2/5/2014)**  
**PCX002002, PCC Plant & Field Performed Test (Projs Let After 2/4/2014)**  
**PCX005001, Maturity Curve Development**  
**PCX006001, PCC Mix Design**

## Precast/Prestress Material

### Typical Precast/Prestress Concrete

*Material Code, Name, and Description:*

**Material: 705PSPCC, Precast/Prestressed Concrete**

*Test Templates:*

**PCL003001, PCC PreStressed Strength Test - Central Lab**  
**PCX002001, PCC Plant & Field Performed Test (Projs Let Before 2/5/2014)**  
**PCX002002, PCC Plant & Field Performed Test (Projs Let After 2/4/2014)**

### Ready Mix Supplied Concrete - Prestress Poured/Formed

*Material Code, Name, and Description:*

**Material: 705PSPCC, Precast/Prestressed Concrete**

*Test Templates:*

**PCL003001, PCC PreStressed Strength Test - Central Lab**  
**PCX002001, PCC Plant & Field Performed Test (Projs Let Before 2/5/2014)**  
**PCX002002, PCC Plant & Field Performed Test (Projs Let After 2/4/2014)**

### Ready Mix Supplied Concrete - Ready Mix Poured/Formed

*Material Code, Name, and Description:*

**Material: 705PSPCC, Precast/Prestressed Concrete**

*Test Templates:*

**PCL003001, PCC PreStressed Strength Test - Central Lab**  
**PCX002001, PCC Plant & Field Performed Test (Projs Let Before 2/5/2014)**  
**PCX002002, PCC Plant & Field Performed Test (Projs Let After 2/4/2014)**