



Concrete Strength Testing Checklist

Pre-Testing Preparation

Ensuring proper setup and equipment readiness before commencing testing.

Date of Preparation Check

Time of Preparation Check

Ambient Temperature (°C)

Humidity (%)

Testing Standard Used

- ☐ ASTM C39
- ☐ ASTM C469
- ☐ EN 12390-3
- ☐ Other (Specify)

Project Name

Write something...

Concrete Mix Design No.

Write something...

Equipment Ready?

☐ Yes

☐ No

Sample Extraction & Handling

Documenting and correctly handling concrete samples from the pour.

Pour Identification Number/Tag

Enter a number...

Location of Sample Extraction (e.g., Slab #, Column C-3)

Write something...

Number of Cylinders Extracted

Enter a number...

Sample Extraction Method (e.g., Scoop, Trowel)

- ☐ Scoop
- ☐ Trowel
- ☐ Other (Specify)

Notes on Sample Extraction Conditions (e.g., moisture, temperature, slump)

Write something...

Date of Sample Extraction

Enter date...

Time of Sample Extraction

Name/Initials of Person Extracting Samples

Write something...

Cylinder Preparation & Storage

Ensuring proper mold selection, filling, and curing conditions for cylinders.

Number of Cylinders Cast

Enter a number...

Mold Type Used (e.g., Standard, Slim)

- ☐ Standard
- ☐ Slim
- ☐ Other (Specify)

Specifics regarding other mold type (if applicable)

Write something...

Concrete Slump (inches)

Enter a number...

Compaction Factor

Enter a number...

Date of Casting

Enter date...

Notes on Cylinder Preparation (e.g., visual defects, air pockets)

Write something...

Curing Conditions

- ☐ Water Curing
- ☐ Controlled Temperature
- ☐ Ambient Conditions

Curing Temperature (°C)

Enter a number...

Testing Equipment Calibration & Verification

Confirming the accuracy and functionality of compression testing equipment.

Last Calibration Date for Compression Machine

Enter date...

Compression Machine Capacity (kN/lbs)

Enter a number...

Machine Load Increment (kN/lbs)

Enter a number...

Calibration Weight Serial Number(s)

Enter a number...

Calibration Standard Used

- ☐ Certified Weight Set
- ☐ Pressure Standard
- ☐ Other (Specify in LONG_TEXT)

If 'Other' selected above, specify calibration standard:

Write something...

Load Cell Verification Passed?

- ☐ Yes
- ☐ No

If Load Cell Verification Failed, describe the issue and corrective action taken:

Write something...

Verification Load Applied (kN/lbs)

Enter a number...

Testing Procedure Execution

Following the standardized testing procedure meticulously.

Cylinder Load at Failure (lbs or kN)

Enter a number...

Maximum Load Achieved (lbs or kN)**Cylinder Diameter (inches or mm)****Cylinder Height (inches or mm)****Strain at Failure (microstrain)****Loading Rate**

- ☐ 0.25 in/min
- ☐ 0.5 in/min
- ☐ 1.0 in/min
- ☐ Other - Specify
- ☐ Specified by Standard

Observations during Testing (e.g., cracking patterns, failure mode)

Direction of Test (if applicable)

- ☐ Parallel to Reinforcement
- ☐ Perpendicular to Reinforcement
- ☐ Not Applicable

Data Recording & Analysis

Accurate recording of results and initial data analysis.

Cylinder Diameter (inches)

Cylinder Height (inches)

Maximum Test Load (lbs)

Breaking Load (lbs)

Calculated Compressive Strength (psi)

Average Compressive Strength (psi) - for multiple tests

Enter a number...

Test Method Used (e.g., ASTM C496, ASTM C39)

- ☐ ASTM C39
- ☐ ASTM C496
- ☐ Other (Specify in Long Text)

Notes / Observations (e.g., failure pattern, unusual conditions)

Write something...

Documentation & Reporting

Properly documenting the test and generating a clear, concise report.

Test Number/ID

Enter a number...

Date of Test

Enter date...

Time of Test

Project Name

Write something...

Concrete Mix Design

Write something...

Observations during testing (e.g., cracking, appearance)

Write something...

28-Day Strength (psi/MPa)

Enter a number...

Compliance with Specification?

☐ Yes

☐ No

☐ N/A

Attach Test Certificates/Photos

 Upload File

Tester Signature

Quality Control & Non-Conformance

Identifying and addressing any deviations from established protocols.

Number of Discarded Cylinders (if any)

Enter a number...

Reason for Cylinder Discard (if applicable)

Write something...

Observed Anomalies (e.g., cracking, air pockets)

- ☐ None
- ☐ Cracking
- ☐ Air Pockets
- ☐ Surface Defects
- ☐ Other (specify in Long Text)

Description of Observed Anomalies (if selected above)

Write something...

Test Result within Specification Limits?

- ☐ Yes
- ☐ No
- ☐ N/A

Explanation of Non-Conformance (if result outside limits)

Write something...

Corrective Actions Taken

- ☐ Re-test Sample
- ☐ Adjust Mix Design
- ☐ Investigate Curing Practices
- ☐ Other (specify in Long Text)

Details of Corrective Actions (if selected above)

Write something...

Date of Corrective Action

Enter date...

Signature of Person Verifying Non-Conformance