



Structural Steel Alignment Checklist

General Information

Basic project details and referencing documents for alignment verification.

Project Name

Drawing Revision Number

Inspection Date

Inspector's Name

Contractor

Weather Conditions

- ☐ Clear
- ☐ Rain
- ☐ Cloudy
- ☐ Windy
- ☐ Snow

Reference Documents (e.g., Shop Drawings, Field Drawings)

Write something...

Foundation/Base Plate Alignment

Verification of alignment between steel columns/beams and their supporting foundations/base plates.

Foundation Elevation Verification (mm)

Enter a number...

Base Plate Levelness (mm)

Enter a number...

Column-to-Base Plate Offset (X-Axis) (mm)

Enter a number...

Column-to-Base Plate Offset (Y-Axis) (mm)

Enter a number...

Base Plate Anchor Bolt Location Verification

- ☐ Correct Location
- ☐ Minor Adjustment Required
- ☐ Significant Adjustment Required

Observations/Comments on Base Plate Alignment

Write something...

Photo Documentation of Base Plate Alignment

 Upload File

Base Plate Surface Condition

- ☐ Clean & Smooth
- ☐ Minor Imperfections
- ☐ Significant Imperfections

Column Alignment

Checks related to column verticality, straightness, and alignment with grid lines.

Column Verticality (degrees from plumb)

Enter a number...

Column Straightness (out-of-straightness, inches)

Enter a number...

Column Position Relative to Grid Line (Left/Right/On)

- ☐ Left
- ☐ Right
- ☐ On

Column Offset from Design Location (inches)

Enter a number...

Column Alignment with Level Line (Above/Below/On)

- ☐ Above
- ☐ Below
- ☐ On

Column Slope (inches per foot)

Enter a number...


Notes on Column Alignment Deviations

Write something...

Column Alignment Photo (before adjustment)

 Upload File

Column Alignment Photo (after adjustment)

 Upload File

Beam Alignment

Verification of beam levelness, straightness, and alignment with grid lines.

Beam Elevation Deviation (Max)

Enter a number...

Beam Levelness Deviation (along length)

Enter a number...

Beam Alignment with Grid Lines

- ☐ Within Tolerance
- ☐ Outside Tolerance
- ☐ NA (Not Applicable)

Details of any Alignment Issues Found

Write something...

Beam Straightness Visual Inspection

- ☐ Straight
- ☐ Slightly Bowed
- ☐ Significant Bow

Measured Beam Length

Enter a number...

Design Beam Length

Enter a number...

Beam Wobble/Movement during measurement

- ☐ None
- ☐ Slight
- ☐ Significant

Connection Alignment

Alignment checks specifically focusing on bolted and welded connections between structural members.

Bolt Hole Offset (Max)

Enter a number...

Weld Length (Actual vs. Required)

Enter a number...

Bolt Hole Alignment - Satisfactory?

- ☐ Yes
- ☐ No
- ☐ N/A


Weld Quality - Visual Inspection

- ☐ Acceptable
- ☐ Repair Required
- ☐ Reject

Detailed Notes on Connection Alignment Issues

Write something...

Connection Alignment Photos

 Upload File

Connection Type

- ☐ Bolted
- ☐ Welded
- ☐ Other

Bracing Alignment

Checks for proper alignment and plumbness of bracing members (diagonal and horizontal).

Diagonal Brace Verticality (Degrees)

Enter a number...

Horizontal Brace Levelness (Degrees)

Enter a number...

Brace Connection Type

- ☐ Bolted
- ☐ Welded
- ☐ Shop Welded
- ☐ Field Welded


Connection Inspection Status

- ☐ Visual Inspection Complete
- ☐ Weld Inspection Complete
- ☐ Bolted Connection Tightened
- ☐ No Issues Found

Remarks/Observations Regarding Brace Alignment

Write something...

Photographic Evidence of Brace Alignment

 Upload File

Brace Location (Grid Coordinates)

 [Set My Current Location](#)



Roof Truss/Frame Alignment

Alignment verification for roof trusses and frames, including slope, levelness, and member alignment.

Truss/Frame Slope (Degrees)

Enter a number...

Deviation from Design Slope (Degrees)

Enter a number...

Maximum Allowable Deviation (Degrees)

Enter a number...

Levelness of Top Chord (Within Tolerance?)

- ☐ Yes
- ☐ No
- ☐ N/A

Chord Alignment Checks Completed?

- ☐ Gridline 1
- ☐ Gridline 2
- ☐ Gridline 3
- ☐ All Gridlines


Notes/Observations Regarding Alignment

Write something...

Connection Bolt Tension Verified?

- ☐ Yes
- ☐ No
- ☐ N/A

Supporting Photos/Documentation

 Upload File

Girder & Main Beam Alignment

Alignment checks for large girders and main beams, ensuring proper levelness and position.

Girder/Beam Elevation Check (at North end)

Enter a number...

Girder/Beam Elevation Check (at South end)

Enter a number...

Girder/Beam Levelness Variance (max allowed)

Enter a number...

Girder/Beam Alignment Method Used

- ☐ Laser Level
- ☐ Transit Level
- ☐ String Line
- ☐ Other


Detailed description of any corrections made (if applicable)

Write something...

Girder/Beam Position Relative to Grid Line

- ☐ Within Tolerance
- ☐ Outside Tolerance - Correction Required

Alignment Photos (pre and post correction)

 Upload File

Specific Location of Girder/Beam being checked (e.g., Grid Coordinates)

 [Set My Current Location](#)




As-Built Verification & Documentation

Ensuring alignment records reflect actual conditions and are appropriately documented.

Summary of Alignment Verification Activities

Write something...

Alignment Survey Data (PDF/CAD)

 Upload File

Total Number of Alignment Checks Performed

Enter a number...

Were any alignment discrepancies found?

☐ Yes

☐ No

Detailed Description of Discrepancies (if any)

Write something...

Corrective Actions Taken for Discrepancies

Write something...

Date of As-Built Verification

Enter date...

Time of As-Built Verification

Inspector Signature