

Procedure to Review Placement of Reinforcing Steel:

1. Make sure the Contractor has Reviewed the Shop Drawings;
2. Make sure that the contractor and rebar placer are using the latest set of reviewed Shop Drawings and IFC Drawings;
3. Check formwork and see that it has been cleaned (blown) out;
4. Check forms for locations of blockouts, openings and sleeves, if required;
5. Check forms for locations of Architectural, Mechanical and Electrical embeds;
6. Check that wall and slab thicknesses are as specified;
7. Contractor should confirm that overall dimensions are correct and have been checked. For critical equipment, the equipment supplier/installer should review locations of installed items, prior to placing concrete;
8. Check that chamfer strips are in place, if required;
9. Check for locations of control joints and water stops, if required;
10. Familiarise yourself with the various bar sizes;
11. Check for Rolling Mill marks on the rebar to verify the grade of steel;
12. Check lap and splice length. Check for type of splice and location;
13. Check that hooks have a proper hook length and that proper radii for bending are used;
14. Check for corner and base details, that reinforcing steel extends to the far side of the wall or slab;
15. Check that there are no areas of reinforcing congestion;
16. Check if bars need special treatment or fabrication;
17. Check if bars should be coated and that they have no loose rust or 'mud' on the surface that would interfere with bond;
18. For complicated projects that have bars for specific locations, confirm that the 'bar tag' corresponds to the reinforcing steel shop drawing.
19. Check that reinforcing steel is securely tied. You should be able to kick the reinforcing steel forcefully with your heel and not have it displaced;
20. Check that proper accessories to space rebar from wall forms or bottoms of slabs have been used;

21. Check reinforcing steel spacing with that specified. Bar spacing doesn't have to be 'exact'. They should be more or less uniformly spaced. The average spacing over a distance of 4' or 6' should be as specified;
22. Check that dowels extend far enough to develop reinforcing and that they are properly hooked and secured;
23. If dowels are being used, make sure that they are properly located at mid depth, that they are parallel and normal to the joint, and that they have been properly cut and not sheared. Shearing leaves a 'burr' on the end that may prevent movement. If a burr exists, it should be ground off;
24. Dowels shall be secured in place prior to casting concrete. 'Hand sticking' of dowels shall not be permitted.
25. Reinforcing steel shall not be welded unless the rebar is graded for welding;
26. Check concrete cover to reinforcing against formwork for slabs, walls, beams, etc.;
27. Check that embedded items, this includes plates and anchor rods, are properly anchored and secured;
28. Check concrete cover for embedded items;
29. Check that proper headed studs or anchors and embedment length of anchor rods have been provided;
30. Check that anchor rods have been located by means of a template. These should not be inserted into the concrete after the concrete has been placed;
31. Use a standard Site Visit Report to write up your observations;
32. Arrange for concrete testing in compliance with CSA A23;
33. Check that concrete slump is as specified;
34. Make sure that the concrete is properly vibrated to consolidate it into the forms and in intimate contact with any founding material; and
35. Check that concrete is placed to minimise segregation of aggregate;

Date: _____

Proj No: _____

Reinforcing Steel and Formwork Site Review Check List

Project Information

Project Name: _____

Area of Work: _____

Preamble

The person signing this document certifies that all the listed items have been reviewed and the work has been undertaken in accordance with the sealed construction documents, including specifications;

Check List items have been worded to promote an affirmative response; items not checked will be considered as a 'Yes' response; and

Items not reviewed should be '~~crossed off~~' with a line through the item.

Formwork

Check that wall and slab thicknesses are as specified; Yes No

Check that formwork is plumb and true; Yes No

Check formwork and see that it has been cleaned (blown) out; Yes No

Check that chamfer strips are in place, if required; Yes No

Check that formwork joints are taped, if required; Yes No

Last Revised: October 2, 2012 / DC

Check that form liner is properly installed, if required; Yes No

Check forms for locations of blockouts, openings, and sleeves for Building, Mechanical and Electrical embeds; and Yes No

Check for locations of control joints, and installation of water stops, if required. Yes No

Concrete Cover

Check concrete cover to reinforcing against formwork for slabs, walls, beams, etc.; and Yes No

Check concrete cover for embedded items. Yes No

Reinforcing Steel

Make sure that the contractor and rebar placer are using the latest set of reviewed Shop Drawings and IFC Drawings; Yes No

Check for Rolling Mill marks on the rebar to verify the grade of steel; Yes No

Check for corner and base details, that reinforcing steel extends to the far side of the wall or slab; Yes No

Check that there are no areas of reinforcing congestion; Yes No

Check if bars need special treatment or fabrication; Yes No

Check if bars should be coated and that they have no loose rust or 'mud' on the surface that would interfere with bond; Yes No

Check that hooks have a proper hook length and that proper radii for bending are used; Yes No

Check lap and splice length; Yes No

Check for type of splice, location, and stagger if required; Yes No

Check that reinforcing steel is securely tied. You should be able to kick the reinforcing steel forcefully with your heel and not have it displace; Yes No

Check that proper accessories to space rebar from wall forms or bottoms of slabs have been used; Yes No

Check that reinforcing steel has not been modified by other trades prior to casting concrete; Yes No

Check reinforcing bar size and spacing with that specified. Bar spacing doesn't have to be 'exact'. They should be more or less uniformly spaced. The average spacing over a distance of 4' or 6' should be as specified; Yes No

Check that dowels, for splicing, extend far enough to develop reinforcing and that they are properly hooked and secured. 'Hand sticking' of dowels shall not be permitted; Yes No

If dowels, for shear transfer, are being used, make sure that they are properly located, that they are parallel and normal to the joint, that they have been properly cut and not sheared, and that they are secured in place. Shearing leaves a 'burr' on the end that may prevent movement. If a burr exists, it should be ground off; Yes No

Check that embedded items, this includes plates and embedment length of anchor rods, etc. are properly anchored and secured Yes No

Check that anchor rods have been located by means of a template. These should not be inserted into the concrete after the concrete has been placed; and Yes No

Reinforcing steel shall not be welded unless the rebar is graded for welding. Yes No

Certification

Person: _____ Signature: _____ Date: _____

Reinforced Concrete Site Review Check List

Preamble

The person signing this document certifies that all the listed items have been reviewed and the work has been undertaken in accordance with the sealed construction documents, including specifications.

Check List items have been worded to promote an affirmative response; items not checked will be considered as a 'Yes' response.

Items not reviewed should be '~~crossed off~~' with a line through the item.

Formwork

Contractor should confirm that overall dimensions are correct and have been checked. For critical equipment, the equipment supplier/installer should review locations of installed items, prior to placing concrete; Yes No

Check that wall and slab thicknesses are as specified; Yes No

Check formwork and see that it has been cleaned (blown) out; Yes No

Check that chamfer strips are in place, if required; Yes No

Check forms for locations of Architectural, Mechanical and Electrical embeds; Yes No

Check forms for locations of blockouts, openings and sleeves, if required; and Yes No

Check that form liner is properly installed, if required; Yes No

Check that formwork joints are taped, if required; Yes No

Check for locations of control joints and water stops, if required; Yes No

This report was prepared by the Consultant for the express use by our client. The material in it reflects the Consultant's best judgment in light of the information available, to the Consultant, at the time of preparation. Any use of which a third party makes of this report, or any reliance or decisions to be made, based on it, are the responsibility of such third parties. The Consultant accepts no responsibility for damages suffered by any third party as a result of decisions made or actions based on this report.

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Reinforcing Steel

- Make sure that the contractor and rebar placer are using the latest set of reviewed Shop Drawings and IFC Drawings; Yes No
- Make sure the Contractor has Reviewed the Shop Drawings; Yes No
- Familiarise yourself with the various bar sizes; Yes No
- Check for Rolling Mill marks on the rebar to verify the grade of steel; Yes No
- Check for corner and base details, that reinforcing steel extends to the far side of the wall or slab; Yes No
- Check that there are no areas of reinforcing congestion; Yes No
- Check that hooks have a proper hook length and that proper radii for bending are used; Yes No
- Check if bars need special treatment or fabrication; Yes No
- Check if bars should be coated and that they have no loose rust or 'mud' on the surface that would interfere with bond; Yes No
- Check that there are no areas of reinforcing congestion; Yes No
- Check that hooks have a proper hook length and that proper radii for bending are used; Yes No
- Check lap and splice length. Check for type of splice and location; Yes No
- Check that reinforcing steel is securely tied. You should be able to kick the reinforcing steel forcefully with your heel and not have it displaced; Yes No
- Check that proper accessories to space rebar from wall forms or bottoms of slabs have been used; Yes No
- Check reinforcing steel spacing with that specified. Bar spacing doesn't have to be 'exact'. They should be more or less uniformly spaced. The average spacing over a distance of 4' or 6' should be as specified; Yes No
- Check that dowels extend far enough to develop reinforcing and that they are properly hooked and secured; Yes No
- If dowels are being used, make sure that they are properly located at mid depth, that they are parallel and normal to the joint, and that they have been properly cut and not sheared. Shearing leaves a 'burr' on the end that may prevent movement. If a burr exists, it should be ground off; Yes No
- Dowels shall be secured in place prior to casting concrete. 'Hand sticking' of dowels shall not be permitted. Yes No

Check that embedded items, this includes plates and embedment length of anchor rods, etc. are properly anchored and secured Yes No

Check that anchor rods have been located by means of a template. These should not be inserted into the concrete after the concrete has been placed; Yes No

Reinforcing steel shall not be welded unless the rebar is graded for welding; Yes No

Concrete Cover

Check concrete cover to reinforcing against formwork for slabs, walls, beams, etc.; Yes No

Check concrete cover for embedded items; Yes No

Closure

Area of Work: _____

Person: _____ Signature: _____ Date: _____