

## Q.C./Q.A. plan

## **CF Urea Warehouse**

Sergeant Bluff, Iowa

February 3 - 2014

### Section 1

**Primary and Secondary structural** 

Components

Section 2

Wall sheeting

Section 3

Roofing

Section 4

Building trim/ openings

#### Section 1

#### Primary and secondary steel

- 1) Inspect all materials for damage, deficiencies and defects prior to installation.
- 2) Inspect all anchor points for proper alignment, projection and dimensional measurements to ensure proper fit up.
- 3) Review Manufacturer prints and details thoroughly with all employees involved with erection activities.
- 4) Ensure that materials are properly staged for access and to protect materials from damage from employees and other trades.
- 5) During erection ensure that components are installed within ASTM and building manufacturer's specifications. Ensure building columns and beams are plumb and aligned to produce a structurally sound and ascetically pleasing building.
- 6) Ensure that all bolts are installed in the proper locations and are tensioned to snug tight. Ongoing inspections of this must happen daily.
- 7) Schedule Q.C. Manager for inspection of primary, secondary details and bolting prior to any sheathing installation.
- 8) Q.C. manager will inspect and produce a punch list of any discrepancies noted. This report will be submitted to the. Sub

contractor and in turn will be submitted to GC for review. All discrepancies must be remediated before sheathing starts. The punch list must be verified by the foreman as complete and returned in writing.

## Section 2 Wall sheathing

Prior to any wall sheeting application the foreman will have a pre-task meeting to review all safety issues as well as details for installation.

- 1) Ensure that all structure lines, building lines are true and plumb.
- 2) Ensure that all girts, spandrel beams etc. have been adequately braced to ensure deflection has been eliminated.
- 3) Ensure that base trim, opening trims and opening steel has been installed per the manufactures details.
- 4) Ensure that trim has been applied to shed water infiltration.
- 5) Ensure closures if applicable have been installed per the manufacturer's details.
- 6) Ensure that sheets are pre-drilled accurately to ensure that fasteners are straight and will align properly with secondary structural components.
- 7) Verify that the proper amounts of screws will be installed (per the manufacturer recommendations.)
- 8) Install panels true and plumb, lap panels per the manufacturer's details. Install sealants where shown on

- details. Foreman to verify daily, details are being followed and installation is of high quality workmanship.
- 9) Ensure cuts around doors, windows, louvers and other penetrations are tight and clean. Install sealants where needed and ensure weather tightness.
- 10) Inspect finished product "is free of dents dings and scratches, remediate as necessary".
- 11) Inspect work with GC as work is completed have section signed off as complete as work progresses.
- 12) Q.C. manager will inspect work as needed to ensure all details have been adhered to. A punch list will be generated of all discrepancies. Sub contractor and GC management will be copied.
- 13) Any remediation will be performed and a completion list will be generated by the site foreman and submitted to Sub contractor and GC for their review.

# Section 3 Roofing

Prior to any Roof sheeting application the foreman will have a pre-task meeting to review all safety issues as well as details for installation. All hands must review the safety plan as well as the details prior to working on the roof.

1) Verify that all purlins, flange braces, roof opening supports have been installed per the details.

- 2) Layout roof modulation to ensure that roof will remain straight and on module.
- 3) Install roof panels straight and true; ensure that panels have proper overhangs for trim installation.
- 4) Ensure roof panels stay aligned from side to side to allow ridge cap to work properly.
- 5) Ensure all sealants at ridge, side laps, gables and low eaves are installed per the manufacturer's instructions.
- 6) Once roof is complete, the site foreman and Q.C. manager will inspect the roof for any deficiencies. A report will be generated and all deficiencies will be remediated. Pictures will be taken of the roof surface and documented. Issues noted will be addressed, documented and copied to the GC.

### Trim out/ penetrations

- 1) All trim details will be observed and adhered to. An employee meeting will be held prior to the building gutters, gable trim and downspouts being installed.
- 2) Daily inspections of work will be performed by the site foreman.
- 3) Ensure that all fasteners are installed; verify that sealants are applied properly and per the building manufacturer's details.
- 4) Inspect final work to ensure there will be no water infiltration.

- 5) Verify that downspouts and gutters are free of debris for proper water shedding.
- 6) Ensure that corners and penetration trim is installed true and straight. Ensure that trim has been matched and intersections are tight and will not allow water infiltration.
- 7) The end product will be inspected by the site foreman and the Q.C manager to ensure details have been followed and the appearance is of good quality. Any deficiencies will be noted and a punch list will be generated. The punch list will be submitted to the Sub contractor and GC. Once the remediation is complete the foreman and GC will reinspect.