

CASTAIC HIGH SCHOOL

TEST AND INSPECTION TASKS REQUIRED BY DSA TO BE PERFORMED BY TESTING LAB OF RECORD

CONCRETE:

1. Verify use of required design mix for each placement of concrete.
2. Test reinforcing steel - Both tests below must be performed for every 5 tons of reinforcing steel fabricated for the project. Samples of reinforcing steel are taken to Twining's lab for the below tests.
 - a. Tensile Test
 - b. Bend Test
3. Perform Slump, temperature, and air content tests.
4. Test concrete compression – Quantity of tests required results in the need for a on-site inspector for the entire duration of all structural concrete placements.
 - a. Minimum of (3) test cylinders are taken for every 50 cubic yards of concrete placed. Test cylinders are taken to lab and tested at periodic increments to ensure design strength is achieved.
5. Continuous batch plant inspection to ensure approved design mixes are followed at the plant.
6. Lab tests of post-installed anchors

MASONRY:

1. Test reinforcing steel similar to item 2 above in Concrete.
2. Test masonry units, mortar and grout
 - a. Compression Test (masonry units, mortar, and grout)
 - b. Absorption/Moisture Content
3. Verify proportions of site-prepared, premixed or pre-blended mortar and grout.
4. Test core-drilled samples of completed masonry walls.
5. Verify size, location and condition of all dowels, construction supporting masonry, etc.
6. Verify specified size, grade, and type of reinforcement.
7. Inspect placement of reinforcement, connectors, masonry units and construction of mortar joints.
8. Verify protection of masonry during cold weather.
9. Inspect type, size and location of anchors and all other items to be embedded in masonry including other details of anchorage of masonry to structural members, frames and other construction.
10. Inspect grout space prior to grouting and placement of grout.
11. Note: All-tilt-up panels are grouted at the foundations, so grout tests apply at both masonry walls and all tilt-up walls.

STEEL:

1. Continuous inspection of welding. Includes off-site fabrication and on-site installation.
2. Verify that all materials are appropriately marked and that mill certificates indicate material properties that comply with requirements.
3. Test unidentified materials.
4. Examine seam welds o structural tubes and pipes.
5. Verify stiffener locations, connection tube locations and all construction details fabricated in the shop.
6. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and welding procedures.
7. Verify weld filler material manufacturer's certificate of compliance.
8. Verify welding procedures, welder qualifications and equipment.
9. Inspect all welds.
10. Perform ultrasonic testing and magnetic particle testing for certain welds.

SUSPENDED CEILINGS:

1. Pull-test suspended ceiling wires.