

GENERAL NOTES - STRUCTURAL TESTS & SPECIAL INSPECTIONS (IBC 2018)

1704 SPECIAL INSPECTIONS
 THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.

1704.2.3 STATEMENT OF SPECIAL INSPECTIONS
 THE PROVISIONS AS OUTLINED ON THESE DESIGN DOCUMENTS DEFINE THE STRUCTURAL SPECIAL INSPECTIONS APPLICABLE TO THE PROJECT. THE STATEMENT OF SPECIAL INSPECTIONS AS REQUIRED BY THE LOCAL JURISDICTION FOR PERMIT APPLICATIONS IS TO BE PREPARED USING THE INFORMATION PRESENTED HERE.

1704.2.4 REPORT REQUIREMENTS
 SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED AT A POINT IN TIME AGREED UPON BY THE PERMIT APPLICANT AND THE BUILDING OFFICIAL PRIOR TO THE START OF WORK.

MATERIAL/ACTIVITY	SERVICE	EXTENT
VERIFY FABRICATION/QUALITY CONTROL PROCEDURES	IN PLANT REVIEW	PERIODIC

1704.4 CONTRACTOR RESPONSIBILITY
 EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A WIND AND/OR A SEISMIC-FORCE-RESISTING SYSTEM, DESIGNATED WIND AND/OR SEISMIC SYSTEM, OR COMPONENT LISTED IN THE QUALITY ASSURANCE PLAN SHALL SUBMIT A WRITTEN CONTRACTOR'S STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND TO THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE QUALITY ASSURANCE PLAN.

MATERIAL/ACTIVITY	SERVICE	EXTENT
(WORK UNUSUAL IN NATURE, INCLUDING BUT NOT LIMITED TO ALTERNATIVE MATERIALS AND SYSTEMS, UNUSUAL DESIGN APPLICATIONS, MATERIALS AND SYSTEMS WITH SPECIAL MANUFACTURER'S REQUIREMENTS)	SUBMITTAL REVIEW, SHOP AND/OR FIELD INSPECTION	

MATERIAL/ACTIVITY	SERVICE	EXTENT
FABRICATOR AND ERECTOR DOCUMENTS (VERIFY REPORTS AND CERTIFICATES AS LISTED IN AISC 360, CHAPTER N, PARAGRAPH 3.2 FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS)	SUBMITTAL REVIEW	EACH SUBMITTAL

1705.2 STEEL CONSTRUCTION
 MATERIAL VERIFICATION OF STRUCTURAL STEEL: SHOP AND FIELD INSPECTION PERIODIC
 EMBEDMENTS (VERIFY DIAMETER, GRADE, TYPE, LENGTH, EMBEDMENT - SEE 1705.3 FOR ANCHORS): FIELD INSPECTION PERIODIC
 VERIFY MEMBER LOCATIONS, BRACES, STIFFENERS, AND APPLICATION OF JOINT DETAILS AT EACH CONNECTION COMPLY WITH CONSTRUCTION DOCUMENTS: FIELD INSPECTION PERIODIC
 STRUCTURAL STEEL WELDING:

A. INSPECTION TASKS PRIOR TO WELDING (OBSERVE, OR PERFORM FOR EACH WELDED JOINT OR MEMBER, THE QA TASKS LISTED IN AISC 360, TABLE N5.4.1)	SHOP AND FIELD INSPECTION	OBSERVE OR PERFORM AS NOTED
B. INSPECTION TASKS DURING WELDING (OBSERVE, OR PERFORM FOR EACH WELDED JOINT OR MEMBER, THE QA TASKS LISTED IN AISC 360, TABLE N5.4.2)	SHOP AND FIELD INSPECTION	OBSERVE
C. INSPECTION TASKS AFTER WELDING (OBSERVE, OR PERFORM FOR EACH WELDED JOINT OR MEMBER, THE QA TASKS LISTED IN AISC 360, TABLE N5.4.3)	SHOP AND FIELD INSPECTION	OBSERVE OR PERFORM AS NOTED

D. NONDESTRUCTIVE TESTING (NDT) OF WELDED JOINTS:		
1) COMPLETE PENETRATION GROOVE WELDS 5/16" OR GREATER IN RISK CATEGORY III OR IV	SHOP OR FIELD ULTRASONIC TESTING - 100%	PERIODIC
2) COMPLETE PENETRATION GROOVE WELDS 5/16" OR GREATER IN RISK CATEGORY II	SHOP OR FIELD ULTRASONIC TESTING - 10% OF WELDS MINIMUM	PERIODIC
3) WELDED JOINTS SUBJECT TO FATIGUE WHEN REQUIRED BY AISC 360, APPENDIX 3, TABLE A-3.1	SHOP OR FIELD RADIOGRAPHIC OR ULTRASONIC TESTING	PERIODIC
4) FABRICATOR'S NDT REPORTS WHEN FABRICATOR PERFORMS NDT	VERIFY REPORTS	EACH SUBMITTAL

STRUCTURAL STEEL BOLTING: SHOP AND FIELD INSPECTION
 A. INSPECTION TASKS PRIOR TO BOLTING (OBSERVE, OR PERFORM TASKS FOR EACH BOLTED CONNECTION, IN ACCORDANCE WITH QA TASKS LISTED IN AISC 360, TABLE N5.6.1)
 B. INSPECTION TASKS DURING BOLTING (OBSERVE, THE QA TASKS LISTED IN AISC 360, TABLE N5.6.2)

1) PRE-TENSIONED AND SLIP-CRITICAL JOINTS		
a) TURN-OF-NUT WITH MATCHING MARKINGS		PERIODIC
b) DIRECT TENSION INDICATOR		PERIODIC
c) TWIST-OFF TYPE TENSION CONTROL BOLT		PERIODIC
d) TURN-OF-NUT WITHOUT MATCHING MARKINGS		CONTINUOUS
e) CALIBRATED WRENCH		CONTINUOUS
2) SNUG-TIGHT JOINTS		PERIODIC

C. INSPECTION TASKS AFTER BOLTING (PERFORM TASKS FOR EACH BOLTED CONNECTION, IN ACCORDANCE WITH QA TASKS LISTED IN AISC 360, TABLE N5.6.3)
 INSPECTION OF STEEL ELEMENTS OF COMPOSITE CONSTRUCTION PRIOR TO CONCRETE PLACEMENT IN ACCORDANCE WITH QA TASKS LISTED IN AISC 360, TABLE N6.1

MATERIAL/ACTIVITY	SERVICE	EXTENT
MATERIAL VERIFICATION OF COLD-FORMED STEEL DECK:		
A. IDENTIFICATION MARKINGS	FIELD INSPECTION	PERIODIC
B. MANUFACTURER'S CERTIFIED TEST REPORTS	SUBMITTAL REVIEW	EACH SUBMITTAL
CONNECTION OF COLD-FORMED STEEL DECK TO SUPPORTING STRUCTURE:		
A. WELDING	SHOP AND FIELD INSPECTION	PERIODIC
B. OTHER FASTENERS (IN ACCORDANCE WITH AISC 360, SECTION N6)		
1) VERIFY FASTENERS ARE IN CONFORMANCE WITH APPROVED SUBMITTAL		PERIODIC
2) VERIFY FASTENER INSTALLATION IS IN CONFORMANCE WITH APPROVED SUBMITTAL AND MANUFACTURER'S RECOMMENDATIONS		PERIODIC
REINFORCING STEEL:	SHOP AND FIELD INSPECTION	
A. VERIFICATION OF WELDABILITY OF STEEL OTHER THAN ASTM A706		PERIODIC
B. SHEAR REINFORCEMENT		CONTINUOUS
C. OTHER REINFORCING STEEL		PERIODIC

MATERIAL/ACTIVITY	SERVICE	EXTENT
INSPECTION OF REINFORCEMENT AND VERIFICATION OF PLACEMENT	SHOP AND FIELD INSPECTION	PERIODIC
REINFORCING BAR WELDING:		
A. VERIFICATION OF WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706	SHOP AND FIELD INSPECTION	PERIODIC
B. INSPECTION OF SINGLE-PASS FILLET WELDS, MAXIMUM 5/16" AND	SHOP AND FIELD INSPECTION	PERIODIC
C. INSPECTION OF ALL OTHER WELDS	SHOP AND FIELD INSPECTION	CONTINUOUS
INSPECTION OF ANCHORS CAST IN CONCRETE	SHOP AND FIELD INSPECTION	PERIODIC
INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS:		
A. ADHESIVE ANCHORS INSTALLED IN HORIZONTAL OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS	SHOP AND FIELD INSPECTION	CONTINUOUS
B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN "A"	SHOP AND FIELD INSPECTION	PERIODIC
VERIFICATION OF USE OF REQUIRED DESIGN MIX	SHOP AND FIELD INSPECTION	PERIODIC
PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	SHOP AND FIELD INSPECTION	CONTINUOUS
INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	SHOP AND FIELD INSPECTION	CONTINUOUS
VERIFICATION OF MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	SHOP AND FIELD INSPECTION	PERIODIC
INSPECTION OF FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	SHOP AND FIELD INSPECTION	PERIODIC

MATERIAL/ACTIVITY	SERVICE	EXTENT
(A) LEVEL 1, 2, AND 3 QUALITY ASSURANCE:		
1) VERIFY COMPLIANCE WITH APPROVED SUBMITTALS	FIELD INSPECTION	PERIODIC
(B) LEVEL 2 QUALITY ASSURANCE:		
1) VERIFICATION OF Fm AND f _{rac} PRIOR TO CONSTRUCTION	TESTING BY UNIT STRENGTH METHOD OR PRISM TEST METHOD	PERIODIC
(C) LEVEL 3 QUALITY ASSURANCE:		
1) VERIFICATION OF Fm AND f _{rac} PRIOR TO CONSTRUCTION AND FOR EVERY 5,000 SF DURING CONSTRUCTION	TESTING BY UNIT STRENGTH METHOD OR PRISM TEST METHOD	PERIODIC
2) VERIFICATION OF PROPORTIONS OF MATERIALS IN PREMIXED OR PREBLENDED MORTAR, PRE-STRESSING GROUT, AND GROUT OTHER THAN SELF-CONSOLIDATING GROUT, AS DELIVERED TO THE PROJECT SITE	FIELD INSPECTION	CONTINUOUS
(D) LEVELS 2 AND 3 QUALITY ASSURANCE:		
1) VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) OF SELF-CONSOLIDATING GROUT AS DELIVERED TO THE PROJECT	FIELD TESTING	CONTINUOUS
2) VERIFY PROPORTIONS OF SITE-MIXED MORTAR, GROUT AND PRE-STRESSING GROUT FOR BONDED TENDONS	FIELD INSPECTION	PERIODIC
3) VERIFY GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND PRE-STRESSING TENDONS AND ANCHORAGES	FIELD INSPECTION	PERIODIC
4) VERIFY CONSTRUCTION OF MORTAR JOINTS, AND PLACEMENT OF MASONRY UNITS	FIELD INSPECTION	PERIODIC
5) VERIFY PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRE-STRESSING TENDONS AND ANCHORAGES	FIELD INSPECTION	LEVEL 2 - PERIODIC LEVEL 3 - CONTINUOUS
6) VERIFY GROUT SPACE PRIOR TO GROUTING	FIELD INSPECTION	LEVEL 2 - PERIODIC LEVEL 3 - CONTINUOUS
7) VERIFY PLACEMENT OF GROUT AND PRE-STRESSING GROUT FOR BONDED TENDONS	FIELD INSPECTION	CONTINUOUS
8) VERIFY SIZE AND LOCATION OF STRUCTURAL MASONRY ELEMENTS	FIELD INSPECTION	PERIODIC
9) VERIFY TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION.	FIELD INSPECTION	LEVEL 2 - PERIODIC LEVEL 3 - CONTINUOUS
10) VERIFY WELDING OF REINFORCEMENT (SEE 1705.2.2)	FIELD INSPECTION	CONTINUOUS
11) VERIFY PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°F)	FIELD INSPECTION	PERIODIC
12) VERIFY APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	FIELD INSPECTION	CONTINUOUS
13) VERIFY PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF N-BED MORTAR JOINTS (FIRST 5000 SF OF AAC MASONRY)	FIELD INSPECTION	CONTINUOUS
14) VERIFY PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS (AFTER THE FIRST 500 SF OF AAC MASONRY)	FIELD INSPECTION	LEVEL 2 - PERIODIC LEVEL 3 - CONTINUOUS
15) VERIFY PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY (FIRST 5000 SF OF AAC MASONRY)	FIELD INSPECTION	LEVEL 2 - PERIODIC LEVEL 3 - CONTINUOUS
16) VERIFY PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY (AFTER THE FIRST 500 SF OF AAC MASONRY)	FIELD INSPECTION	LEVEL 2 - PERIODIC LEVEL 3 - CONTINUOUS
17) OBSERVE SEPARATION OF PRISMS, GROUT, AND MORTAR SPECIMENS	FIELD TESTING	LEVEL 2 - PERIODIC LEVEL 3 - CONTINUOUS
18) VERIFY SAMPLE PANEL CONSTRUCTION	FIELD INSPECTION	LEVEL 2 - PERIODIC LEVEL 3 - CONTINUOUS

MATERIAL/ACTIVITY	SERVICE	EXTENT
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	FIELD INSPECTION	PERIODIC
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	FIELD INSPECTION	PERIODIC
PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS	FIELD INSPECTION	PERIODIC
VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL	FIELD INSPECTION	CONTINUOUS
PRIOR TO PLACEMENT OF CONTROLLED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	FIELD INSPECTION	PERIODIC

MATERIAL/ACTIVITY	SERVICE	EXTENT
ROOF CLADDING	SHOP AND FIELD INSPECTION	PERIODIC
WALL CLADDING	SHOP AND FIELD INSPECTION	PERIODIC

MATERIAL/ACTIVITY	SERVICE	EXTENT
INSPECTION OF STRUCTURAL STEEL IN ACCORDANCE WITH AISC 341	SHOP AND FIELD INSPECTION	IN ACCORDANCE W/ AISC 341

MATERIAL/ACTIVITY	SERVICE	EXTENT
INSPECTION AND VERIFY THAT THE COMPONENT LABEL, ANCHORAGE OR FASTENING INFORMATION ON THE CERTIFICATE OF COMPLIANCE IN ACCORDANCE WITH SECTION 1705.2.2	FIELD INSPECTION	PERIODIC

MATERIAL/ACTIVITY	SERVICE	EXTENT
INSPECTION DURING THE ERECTION AND FASTENING OF EXTERIOR CLADDING AND INTERIOR AND EXTERIOR VENEER	FIELD INSPECTION	PERIODIC
INSPECTION DURING THE ERECTION AND FASTENING OF PERIODIC AND EXTERIOR NON-LOAD BEARING WALLS	FIELD INSPECTION	PERIODIC
INSPECTION DURING ANCHORAGE OF ACCESS FLOORS	FIELD INSPECTION	PERIODIC

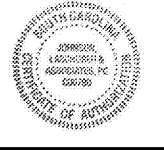
MATERIAL/ACTIVITY	SERVICE	EXTENT
INSPECTION DURING THE ANCHORAGE OF ELECTRICAL EQUIPMENT FOR EMERGENCY OR STANDBY POWER SYSTEMS	FIELD INSPECTION	PERIODIC
INSPECTION DURING ANCHORAGE OF OTHER ELECTRICAL EQUIPMENT	FIELD INSPECTION	PERIODIC
INSPECTION DURING THE INSTALLATION OF HVAC DUCTWORK, PIPING SYSTEMS AND THEIR STRUCTURAL SUPPORTS, WHERE AUTOMATIC FIRE SPRINKLER SYSTEMS ARE INSTALLED	FIELD INSPECTION	PERIODIC

MATERIAL/ACTIVITY	SERVICE	EXTENT
TEST IN ACCORDANCE WITH THE QUALITY ASSURANCE REQUIREMENTS OF AISC 341	SHOP AND FIELD TESTING	PER AISC 341

MATERIAL/ACTIVITY	SERVICE	EXTENT
INSPECT PENETRATION FIRESTOP	FIELD TESTING	PER ASTM E2174 PER ASTM E2993
INSPECT FIRE-RESISTANT JOINT SYSTEMS	FIELD TESTING	PER ASTM E2993



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 PROJECT NAME
**NORTH AUGUSTA
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 PROJECT LOCATION:
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