**SCHEDULE OF SPECIAL INSPECTIONS**

Reference UFGS 01 45 35 for all requirements not noted as part of this schedule.

**INSPECTION DEFINITIONS:**

**PERFORM**: Perform these tasks for each weld, fastener or bolted connection, and required verification.

**OBSERVE:** Observe these items randomly during the course of each work day to insure that applicable requirements are being met. Operations need not be delayed pending these inspections at contractor’s risk.

**DOCUMENT**: Document, with a report, that the work has been performed in accordance with the contract documents. This is in addition to any other reports required in the Special Inspections guide specification.

**CONTINUOUS:** Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks.

**PERIODIC:** Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.

The Seismic Design Category for this project is: [ ]  A, [ ]  B, [ ]  C, [ ]  D, [ ]  E, [ ]  F (check appropriate box)

**DESIGNER NOTES (delete this box after reviewing):**

1. This schedule contains minimum requirements. Do not delete applicable inspection tasks unless notes in blue indicate it is acceptable to do so.
2. Blue text = designers notes. The designer must review and edit all blue text in this schedule prior to inserting this schedule into the special inspections spec (UFGS 01 45 35).
3. Check section boxes with ANY inspection tasks applicable to your project. You may choose to delete unchecked sections or leave them in the schedule unchecked.
4. Individual rows/tasks that are not applicable to the project may be left in the section, as the inspector can determine whether they occur/apply (e.g. metal trusses in the light gauge framing section for example).
5. Design discipline sections are color coded for easier reference by designers. This schedule does NOT need to be printed in color.
6. When finished editing, delete this note box and save this schedule as a PDF and insert into the project specifications (special inspections section).
7. **STRUCTURAL STEEL – WELDING**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| STEEL INSPECTION PRIOR TO WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.4-1 and Table C-N5.4-1 |
| TASK | INSPECTION TYPE[[1]](#footnote-2) | DESCRIPTION |
| 1. Verify that the welding procedures specification (WPS) is available
 | **PERFORM** |  |
| 1. Verify manufacturer certifications for welding consumables are available
 | **PERFORM** |  |
| 1. Verify material identification
 | **PERFORM** | Type and grade. |
| 1. Verify use of qualified welders
 | **PERFORM** | Welding by welders, welding operators, and tack welders who are qualified in conformance with requirements. |
| 1. Welder Identification System
 | OBSERVE | * Fabricator or erector, as applicable, shall maintain a system by which a welder who has welded a joint or member can be identified.
* Die stamping of members subjected to fatigue shall be prohibited unless approved by the engineer of record.
 |
| 1. Fit-up of groove welds (including joint geometry)
 | OBSERVE | * Joint preparation
* Dimensions (alignment, root opening, root face, bevel)
* Cleanliness (condition of steel surfaces)
* Tacking (tack weld quality and location)
* Backing type and fit (if applicable)
 |
| 1. Fit-up of CJP groove welds of HSS T-, Y-, and K-connections without backing (including joint geometry
 | **PERFORM** | * Joint preparations
* Dimensions (alignment, root opening, root face, bevel)
* Cleanliness (condition of steel surfaces)
* Tacking (tack weld quality and location)
 |
| 1. Configuration and finish of access holes
 | OBSERVE |  |
| 1. Fit-up of fillet welds
 | OBSERVE | * Dimensions (alignment, gaps at root)
* Cleanliness (condition of steel surfaces)
* Tacking (tack weld quality and location)
 |
| STEEL INSPECTION DURING WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.4-2 and Table C-N5.4-2 |
| TASK | INSPECTION TYPE  | DESCRIPTION |
| 1. Control and handling of welding consumables
 | OBSERVE | * Packaging
* Electrode atmospheric exposure control
 |
| 1. No welding over cracked tack welds
 | OBSERVE |  |
| 1. Environmental conditions
 | OBSERVE | * Wind speed within limits
* Precipitation and temperature
 |
| STEEL INSPECTION DURING WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.4-2 and Table C-N5.4-2 |
| TASK | INSPECTION TYPE | DESCRIPTION |
| 1. Welding Procedures Specification followed
 | OBSERVE | * Settings on welding equipment
* Travel speed
* Selected welding materials
* Shielding gas type/flow rate
* Preheat applied
* Interpass temperature maintained (min./max.)
* Proper position (F, V, H, OH)
* Intermix of filler metals avoided
 |
| 1. Welding techniques
 | OBSERVE | * Interpass and final cleaning
* Each pass within profile limitations
* Each pass meets quality requirements
 |
| STEEL INSPECTION AFTER WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.4-3 and Table C-N5.4-3 |
| TASK | INSPECTION TYPE[[2]](#footnote-3) | DESCRIPTION |
| 1. Welds cleaned
 | OBSERVE |  |
| 1. Verify size, length, and location of all welds
 | **PERFORM** | * Size, length, and location of all welds conform to the requirements of the construction drawings.
 |
| 1. Verify welds meet visual acceptance criteria
 | **PERFORM AND****DOCUMENT** | * Crack prohibition
* Weld/base-metal fusion
* Crater cross section
* Weld profiles
* Weld size
* Undercut
* Porosity
 |
| 1. Check for arc strikes
 | **PERFORM** |  |
| 1. Visually inspect *k*-area
 | **PERFORM** | When welding of doubler plates, continuity plates or stiffeners has been performed in the k-area, visually inspect the web k-area for cracks within 3 in. (75 mm) of the weld (AISC 360 – Table N5.4-3) |
| 1. Verify backing removed, weld tabs removed and finished, and fillet welds added where required
 | **PERFORM** |  |
| 1. Repair activities
 | **PERFORM AND DOCUMENT** |  |
| 1. Acceptance or rejection of welded joint or member
 | **PERFORM AND DOCUMENT** |  |
| 1. No prohibited welds have been added without the approval of the engineer of record
 | OBSERVE |  |

**END SECTION**

1. **STRUCTURAL STEEL – BOLTING**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| STEEL INSPECTION TASKS PRIOR TO BOLTING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.6-1 and Table C-N5.6-1 |
| TASK | INSPECTION TYPE[[3]](#footnote-4) | DESCRIPTION |
| 1. Verify manufacture’s certifications available for fastener materials
 | **PERFORM** |  |
| 1. Fasteners marked in accordance with ASTM requirements
 | OBSERVE |  |
| 1. Proper fasteners selected for joint detail (grade, type, bolt length if threads are to be excluded from shear plane)
 | OBSERVE |  |
| 1. Proper bolting procedure selected for joint detail
 | OBSERVE |  |
| 1. Connecting elements, including appropriate faying surface condition and hole preparation, if specified, meet applicable requirements
 | OBSERVE |  |
| 1. Pre-installation verification testing for each fastener assembly performed by installation personnel, carefully observing and documenting the installation methods.
 | OBSERVE | Check if the fastener assemblies and the installation methods are capable of achieving 105%, or more, of the minimum required bolt pretension. |
| 1. Proper storage provided for bolts, nuts, washers, and other fastener components
 | OBSERVE |  |
| STEEL INSPECTION TASKS DURING BOLTING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.6-2 and Table C-N5.6-2 |
| TASK | INSPECTION TYPE  | DESCRIPTION |
| 1. Fastener assemblies of suitable condition, placed in all holes and washers (if required) are positioned as required
 | OBSERVE |  |
| 1. Joint brought to the snug-tight condition prior to pretensioning operation
 | OBSERVE |  |
| 1. Fastener component not turned by the wrench prevented from rotating
 | OBSERVE |  |
| 1. Bolts are pretensioned in accordance with RCSC *Specification*, progressing systematically from the most rigid point toward the free edges
 | OBSERVE |  |
| STEEL INSPECTION TASKS AFTER BOLTING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.6.3 and Table C-N5.6-3 |
| TASK | INSPECTION TYPE  | DESCRIPTION |
| 1. Acceptance or rejection of all bolted connections
 | **DOCUMENT** |  |

**END SECTION**

1. **STRUCTURAL STEEL - NONDESTRUCTIVE TESTING**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| NONDESTRUCTIVE TESTING OF WELDED JOINTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Section N5.5 |
| TASK | INSPECTION TYPE[[4]](#footnote-5) | DESCRIPTION |
| 1. Verify use of qualified nondestructive testing personnel
 | **PERFORM** | Visual weld inspection and nondestructive testing (NDT) shall be conducted by personnel qualified in accordance with AWS D1.8 Clause 7.2 |
| 1. CJP groove welds
 | OBSERVE | **[NOTE: DOR must delete this row if Section D (SEISMIC PROVISIONS SECTION) is checked]**Dye penetrant testing (DT) and ultrasonic testing (UT) shall be performed on 20% of CJP groove welds for materials greater than 5/16” (8 mm) thick. Testing rate must be increased to 100% if greater than 5% of welds tested have unacceptable defects. |
| 1. Welded joints subject to fatigue
 | OBSERVE | Dye penetrant testing (DT) and Ultrasonic testing (UT) shall be performed on 100% of welded joints identified on contract drawings as being subject to fatigue. Table A-3.1 in AISC 360-22 provides Fatigue Design Parameters for welded joints that must be checked. |

**END SECTION**

1. **STRUCTURAL STEEL – AISC 341 REQUIREMENTS (SEISMIC PROVISIONS)**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| NONDESTRUCTIVE TESTING OF WELDED JOINTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 341-22: Section J7.2 |
| TASK | INSPECTION TYPE[[5]](#footnote-6) | DESCRIPTION |
| **[NOTE: DOR may uncheck this section for projects NOT designed in accordance with AISC 341 (Seismic Provisions) or for projects designed according to AISC 341, but using an R value equal to 3]** |
| 1. CJP groove welds
 | OBSERVE | Ultrasonic testing (UT) shall be performed on 100% of complete-joint-penetration (CJP) groove welds in materials 5/16 in. (8 mm) thick or greater. UT in materials less than 5/16 in. (8 mm) thick is not required. Welds shall be inspected by UT in compliancewith AWS D1.8/D1.8M.Magnetic particle testing (MT) shall be performed on 25% of all beam-to-column CJP groove welds. Welds shall be inspected by MT in compliance with AWS D1.8/ D1.8M.For ordinary moment frames in structures in risk categories I or II, UT and MT of CJP groove welds shall be required only for demand critical welds. |
| 1. Beam cope and access hole.
 | OBSERVE | At welded splices and connections, thermally cut surfaces of beam copes and access holes shall be tested using magnetic particle testing (MT) or dye penetrant testing (DT), when the flange thickness exceeds 1 1/2 in. for rolled shapes, or when the web thickness exceeds 1 1/2 in. for built-up shapes. |
| 1. *k*-area NDT (AISC 341 Table J7.1 and AWS D1.8 Clause 7.4)
 | **PERFORM AND DOCUMENT** | Where welding of doubler plates, continuity plates or stiffeners has been performed in the *k*-area, the web shall be tested for cracks using magnetic particle testing (MT). The MT inspection area shall include the *k*-area base metal within 3 in. of the weld. The MT shall be performed no sooner than 48 hours following completion of the welding. |
| 1. Placement of reinforcing or contouring fillet welds (Table J7.1)
 | **PERFORM AND DOCUMENT** |  |
| 1. Weld tab removal sites
 | OBSERVE | At the end of welds where weld tabs have been removed, magnetic particle testing shall be performed on the same beam-to-column joints receiving UT. |

**END SECTION**

1. **STRUCTURAL STEEL - COMPOSITE CONSTRUCTION**[[6]](#footnote-7)

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

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| --- |
| COMPOSITE CONSTRUCTION PRIOR TO PLACING CONCRETE – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.4-2, AISC 341-22: Table J10.1 |
| TASK | INSPECTION TYPE | DESCRIPTION |
| 1. Placement and installation of steel headed stud anchors
 | **PERFORM** |  |
| 1. Material identification of reinforcing steel (Type/Grade)
 | OBSERVE |  |
| 1. Determination of carbon equivalent for reinforcing steel other than ASTM A706
 | OBSERVE |  |
| 1. Proper reinforcing steel size, spacing, clearances, support, and orientation
 | OBSERVE |  |
| 1. Reinforcing steel has not been rebent in the field
 | OBSERVE |  |
| 1. Required reinforcing steel clearances have been provided
 | OBSERVE |  |
| 1. Reinforcing steel has been tied and supported as required
 | OBSERVE |  |
| 1. Composite member has required size
 | OBSERVE |  |

**END SECTION**

1. **STRUCTURAL STEEL - OTHER INSPECTIONS**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| OTHER STEEL INSPECTIONS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22 Section N5.8, AISC 341-22: Tables J9.1 & J11.1 |
| TASK | INSPECTION TYPE [[7]](#footnote-8)  | DESCRIPTION |
| 1. Verify anchor rods and other embedments supporting structural steel
 | **PERFORM** | Verify the diameter, grade, type, and length of the anchor rod or embedded item, and the extent or depth of embedment prior to placement of concrete. |
| 1. Fabricated steel or erected steel frame
 | OBSERVE | Verify compliance with the details shown on the construction documents, such as braces, stiffeners, member locations and proper application of joint details at each connection. |
| 1. Check reduced beam sections (RBS) where/if they occur
 | **PERFORM AND DOCUMENT** | * Contour and finish
* Dimensional tolerances
 |
| 1. Check protected zones
 | **PERFORM AND DOCUMENT** | No holes or unapproved attachments made by fabricator or erector  |
| 1. Check H-piles where/if they occur
 | **PERFORM AND DOCUMENT** | No holes or unapproved attachments made by the responsible contractor  |

**END SECTION**

1. **STRUCTURAL COLD-FORMED METAL DECK PLACEMENT**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

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| --- |
| METAL DECK INSPECTION PRIOR TO DECK PLACEMENT – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.1 |
| TASK | INSPECTION TYPE [[8]](#footnote-9) | DESCRIPTION  |
| 1. Verify compliance of materials (deck and all deck accessories) with construction documents, including profiles, material properties, and base metal thickness
 | **PERFORM** |  |
| 1. Acceptance or rejection of deck and deck accessories
 | **DOCUMENT** |  |
| METAL DECK INSPECTION AFTER DECK PLACEMENT – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.2 |
| TASK | INSPECTION TYPE | DESCRIPTION |
| 1. Verify compliance of deck and all deck accessory installation with construction documents
 | **PERFORM** |  |
| 1. Verify deck materials are represented by the mill certifications that comply with the construction documents
 | **PERFORM** |  |
| 1. Acceptance or rejection of installation of deck and deck accessories
 | **DOCUMENT** |  |
| METAL DECK INSPECTION PRIOR TO WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.3 |
| TASK | INSPECTION TYPE | DESCRIPTION |
| 1. Verify welding procedure specification (WPS) is available
 | **PERFORM** |  |
| 1. Verify manufacturer’s certifications for welding consumables are available
 | **PERFORM** |  |
| 1. Material identification (type/grade)
 | OBSERVE |  |
| 1. Check welding equipment
 | **PERFORM** |  |

**END SECTION**

1. **STRUCTURAL COLD-FORMED METAL DECK – WELDING**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| METAL DECK INSPECTION DURING WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.4 |
| TASK | INSPECTION TYPE [[9]](#footnote-10)  | DESCRIPTION |
| 1. Use of qualified welders
 | OBSERVE |  |
| 1. Control and handling of welding consumables
 | OBSERVE |  |
| 1. Environmental conditions (wind speed, moisture, temperature)
 | OBSERVE |  |
| 1. WPS followed
 | OBSERVE |  |
| METAL DECK INSPECTION AFTER WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.5 |
| TASK | INSPECTION TYPE | DESCRIPTION |
| 1. Verify size and location of welds, including support, sidelap, and perimeter welds.
 | **PERFORM** |  |
| 1. Verify welds meet visual acceptance criteria
 | **PERFORM** |  |
| 1. Verify repair activities
 | **PERFORM** |  |
| 1. Acceptance or rejection of welds
 | **DOCUMENT** |  |

**END SECTION**

1. **STRUCTURAL COLD-FORMED METAL DECK – FASTENING**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
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| METAL DECK INSPECTION BEFORE MECHANICAL FASTENING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.6 |
| TASK | INSPECTION TYPE | DESCRIPTION |
| 1. Manufacturer installation instructions available for mechanical fasteners
 | OBSERVE |  |
| 1. Proper tools available for fastener installation
 | OBSERVE |  |
| 1. Proper storage for mechanical fasteners
 | OBSERVE | * Fasteners are located away from moisture and in a protected location, such as off the ground and away from excessive handling.
* Uncoated fasteners are stored in airtight containers to reduce corrosion and rust.
 |
| METAL DECK INSPECTION DURING MECHANICAL FASTENING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.7 |
| TASK | INSPECTION TYPE | DESCRIPTION |
| 1. Fasteners are positioned as required
 | OBSERVE |  |
| 1. Fasteners are installed in accordance with manufacturer's instructions
 | OBSERVE |  |
| METAL DECK INSPECTION AFTER MECHANICAL FASTENING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.8 |
| TASK | INSPECTION TYPE[[10]](#footnote-11) | DESCRIPTION |
| 1. Check spacing, type, and installation of support fasteners
 | **PERFORM** |  |
| 1. Check spacing, type, and installation of side-lap fasteners
 | **PERFORM** |  |
| 1. Check spacing, type, and installation of perimeter fasteners
 | **PERFORM** |  |
| 1. Verify repair activities
 | **PERFORM** |  |
| 1. Acceptance or rejection of mechanical fasteners
 | **DOCUMENT** |  |

**END SECTION**

1. **STRUCTURAL COLD-FORMED STEEL FRAMING AND/OR COLD-FORMED TRUSSES**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| COLD-FORMED STEEL CONSTRUCTION AND CONNECTIONS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.5, 1705.12.2, 1705.12.3, 1705.13.3, 1705.13.9, UFC 4 023 03  |
| TASK | INSPECTION TYPE[[11]](#footnote-12) | DESCRIPTION |
| 1. Verify compliance of trusses spanning 60-feet or greater where/if applicable
 | **PERFORM** | Verify that temporary and permanent truss restraint/bracing is installed in accordance with approved truss submittal package. |
| 1. Welded connections (seismic and/or wind resisting system)
 | OBSERVE | Visually inspect all welds that are part of the main wind or seismic force resisting system, including shear walls, braces, collectors (drag struts), and hold-downs.**[NOTE: DOR must identify critical wind and/or seismic force resisting welds in the contract drawings so that the special inspector can confirm compliance.]** |
| 1. Connections (seismic and/or wind resisting system)
 | OBSERVE | Visually inspect all screw attachment, bolting, anchoring and other fastening of components within the main wind or seismic force resisting system, including roof deck, roof framing, exterior wall covering, wall to roof/floor connections, braces, collectors (drag struts) and hold-downs.**[NOTE: DOR must identify critical wind and/or seismic force resisting connection/fastener components in the contract drawings so that the special inspector can confirm compliance.]** |
| 1. Cold-formed steel (progressive collapse resisting system where/if applicable)
 | OBSERVE | Verify proper welding operations, screw attachment, bolting, anchoring and other fastening of components within the progressive collapse resisting system, including horizontal tie force elements, vertical tie force elements and bridging elements (UFC 4 023 03).**[NOTE: DOR must identify critical progressive collapse resisting connection/fastener components in the contract drawings so that the special inspector can confirm compliance.]** |

**END SECTION**

1. **STRUCTURAL OPEN-WEB STEEL JOISTS**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
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| OPEN-WEB STEEL JOISTS AND JOIST GIRDERS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC TABLE 1705.2.4, 2024 IBC 2207.1, SJI 100 OR 200 |
|  | INSPECTION TYPE 1  | DESCRIPTION |
| 1. Installation of open-web steel joists and joist girders
 | OBSERVE | * End connections – welded or bolted for compliance with SJI 100 or 200
* Bridging – horizontal and diagonal for compliance with SJI 100 or 200
 |

**END SECTION**

1. **STRUCTURAL CONCRETE CONSTRUCTION**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

| CONCRETE CONSTRUCTION, INCLUDING COMPOSITE DECK – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC TABLE 1705.3 (ACI 318-19 REFERENCES NOTED IN IBC TABLE) |
| --- |
| TASK | INSPECTION TYPE [[12]](#footnote-13) | DESCRIPTION |
| 1. Inspect reinforcement, including prestressing tendons, and verify placement.
 | PERIODIC | Verify prior to placing concrete that reinforcement is of specified type, grade and size; that it is free of oil, dirt and unacceptable rust; that it is located and spaced properly; that specified cover has been provided; that hooks, bends, ties, stirrups and supplemental reinforcement are placed correctly; that specified lap lengths, stagger and offsets are provided; and that all mechanical connections are installed per the manufacturer’s instructions and/or evaluation report. |
| 1. Inspect reinforcing bar welding
 | PERIODIC | * Verify weldability of reinforcing bars other than ASTM A 706
* Inspect single-pass fillet welds, maximum 5/16” in accordance with AWS D1.4
 |
| CONTINUOUS | * Inspect welding of reinforcement for special moment frame, boundary elements of special shear walls, and coupling beams.
* Inspect welded reinforcement splices.
* Inspect welding of primary tension reinforcement in corbels.
 |
| PERIODIC | * Inspect all other welds in accordance with AWS D1.4
 |
| 1. Inspect cast-in-place anchors, post-installed drilled anchors, and adhesive anchors other than those in item 4 below
 | PERIODIC | * Verify prior to placing concrete that cast in place anchors and post installed drilled anchors have proper embedment, spacing and edge distance.
* Inspection requirements for adhesive anchors are different from those for other post-installed anchors and require assessment and qualification under the provisions of ACI 355.4 which may require proof loading.
 |
| 1. Inspect post-installed adhesive anchors in horizontal or upward inclined orientations and subject to sustained tension loading.
 | CONTINUOUS AND DOCUMENT | * Inspect as required per approved ICC-ES report
* Verify that installer is certified for installation of horizontal and overhead installation applications
* Verify proof loading as required by the contract documents (IBC Table 1705.3, 4)
 |
| 1. Verify use of required mix design
 | PERIODIC | Verify that all mixes used comply with the approved construction documents(IBC Table 1705.3, 5) |
| 1. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete
 | CONTINUOUS | At the time fresh concrete is sampled to fabricate specimens for strength test, verify these tests are performed by qualified technicians.  |
| 1. Inspect concrete and/or shotcrete placement for proper application techniques
 | CONTINUOUS | Verify proper application techniques are used during concrete conveyance and that depositing avoids segregation or contamination. Verify that concrete is properly consolidated. |
| 1. Verify maintenance of specified curing temperature and technique
 | PERIODIC | Inspect curing and cold weather, or hot weather protection procedures. |
| 1. Inspect prestressed concrete
 | CONTINUOUS | Verify application of prestressing forces and grouting of bonded prestressing tendons. |
| 1. Inspect erection of precast concrete members
 | PERIODIC | * Verify dimensional tolerances for precast members and interfacing members.
* Verify details of lifting devices, embedments, and related reinforcement required to resist temporary loads from handling, storage, transportation, and erection, if designed by the licensed design professional.
 |
| 1. Inspect precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability element (MDE or HDE) in structures assigned to Seismic Design Category C, D, E, or F
 | **CONTINUOUS** | Inspect such connections and reinforcement in the field for:* Installation of the embedded parts
* Completion of the continuity of reinforcement across joints.
* Completion of connections in the field
 |
| 1. Inspect installation tolerances of precast concrete diaphragm connections for compliance with ACI 550.5
 | PERIODIC |  |
| 1. Verify in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.
 | PERIODIC | See ACI 318 26.11.2 |
| 1. Inspect formwork for shape, location and dimensions of the concrete member being formed.
 | PERIODIC | Formwork fabrication and installation shall result in final structure that conforms to shapes, lines, and dimensions of the members as required by the construction documents. |

**END SECTION**

1. **STRUCTURAL - MASONRY CONSTRUCTION (ALL RISK CATEGORIES)**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

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| --- |
| MASONRY CONSTRUCTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH AT START OF CONSTRUCTION 2024 IBC 1705.4 (TMS 402/602-22 TABLE 3 & 4)  |
| TASK | INSPECTION TYPE [[13]](#footnote-14) | DESCRIPTION |
| 1. Verify compliance with approved submittals prior to start
 | PERIODIC |  |
| 1. Verify proportions of site-mixed mortar.
 | PERIODIC |  |
| 1. Verify grade, type and size of reinforcement, connectors, and anchor bolts
 | PERIODIC |  |
| 1. Verify sample panel construction
 | PERIODIC**CONTINUOUS** | **[NOTE: DOR must either delete ‘PERIODIC’ for Risk Category IV/V, or delete ‘CONTINUOUS’ for Risk Categories I/II/ III]** |
| MASONRY CONSTRUCTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH PRIOR TO GROUTING IBC 1705.4 (TMS 402/602-22 TABLE 4)  |
| TASK | INSPECTION TYPE | DESCRIPTION |
| 1. Verify grout space
 | PERIODIC**CONTINUOUS** | **[NOTE: DOR must either delete ‘PERIODIC’ for Risk Category IV/V, or delete ‘CONTINUOUS’ for Risk Categories I/II/ III]**  |
| 1. Verify placement of reinforcement, connectors, and anchor bolts
 | PERIODIC**CONTINUOUS** | **[NOTE: DOR must either delete ‘PERIODIC’ for Risk Category IV/V, or delete ‘CONTINUOUS’ for Risk Categories I/II/ III]**  |
| 1. Verify proportions of site-prepared grout
 | PERIODIC |  |
| MASONRY CONSTRUCTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH DURING CONSTRUCTION IBC 1705.4 (ACI 530-16 TABLE 4)  |
| TASK | INSPECTION TYPE | DESCRIPTION |
| 1. Verify compliance of materials and procedures with the approved submittals
 | PERIODIC |  |
| 1. Verify placement of masonry units and mortar joint construction
 | PERIODIC |  |
| 1. Verify size and location of structural elements
 | PERIODIC |  |
| 1. Verify type, size and placement of reinforcement, connectors, anchor bolts, and anchorages, including details of anchorage of masonry to structural members, frames, or other construction
 | PERIODIC**CONTINUOUS** | **[NOTE: DOR must either delete ‘PERIODIC’ for Risk Category IV/V, or delete ‘CONTINUOUS’ for Risk Categories I/II/III]** |
| 1. Verify type, size and location of veneer ties and movement joints
 | PERIODIC | Periodic inspection of veneers is required when the height of the veneer exceeds 60 ft (18.3 m) above grade plane. See Commentary in Appendix A. |
| MASONRY CONSTRUCTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH DURING CONSTRUCTION IBC 1705.4 (ACI 530-16 TABLE 4)  |
| TASK | INSPECTION TYPE | DESCRIPTION |
| 1. Verify installation of adhered veneer
 | PERIODIC | Periodic inspection of veneers is required when the height of the veneer exceeds 60 ft (18.3 m) above grade plane |
| 1. Verify welding of reinforcement
 | **CONTINUOUS** |  |
| 1. Verify preparation, construction, and protection of masonry during cold weather (temperature below 40oF (4.4oc) or hot weather (temp above 90oF (32.2oC))
 | PERIODIC |  |
| 1. Verify placement of grout
 | **CONTINUOUS** |  |
| 1. Observe preparation of grout specimens, mortar specimens, and/or prisms
 | PERIODIC**CONTINUOUS** | **[NOTE: DOR must either delete ‘PERIODIC’ for Risk Category IV/V, or delete ‘CONTINUOUS’ for Risk Categories I/II/III]** |

**END SECTION**

1. **STRUCTURAL – WOOD CONSTRUCTION – SPECIALTY ITEMS**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| WOOD CONSTRUCTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.5  |
| TASK | INSPECTION TYPE[[14]](#footnote-15)  | DESCRIPTION |
| 1. High-load diaphragms where applicable
 | PERIODIC | Verify thickness and grade of sheathing, size of framing members at panel edges, nail diameters and length, and the number of fastener lines and that fastener spacing is per approved contract documents. |
| 1. Metal-plate connected wood trusses spanning 60 feet or greater
 | PERIODIC | Verify that the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing are installed in accordance with the approved truss submittal package |
| Mass timber elements in Type IV-A, IV-B, and IV-C construction. Refer to 2024 IBC 602.4 for details about Type IV construction  |
| 1. Inspect anchorage and connections of mass timber construction to timber deep foundation systems
 | PERIODIC |  |
| 1. Inspect erection of mass timber construction
 | PERIODIC |  |
| 1. Inspect connections where installation methods are required to meet design loads
 |
| 1. Threaded fasteners
 | PERIODIC | * Verify use of proper installation equipment
* Verify use of pre-drilled holes where required
* Inspect screws, including diameter, length, head type, spacing, installation angle and depth
 |
| 1. Adhesive anchors connections installed in horizontal or upwardly inclined orientation to resist sustained tension loads.
 | CONTINUOUS |  |
| 1. Adhesive anchors not defined in preceding cell
 | PERIODIC |  |
| 1. Bolted connections
 | PERIODIC |  |
| 1. Concealed connections
 | PERIODIC |  |

**END SECTION**

1. **STRUCTURAL WOOD CONSTRUCTION - SEISMIC & WIND**

**THIS SECTION IS APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| WOOD CONSTRUCTION SEISMIC AND WIND – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.12 & 1705.13.2 |
| TASK | INSPECTION TYPE[[15]](#footnote-16) | DESCRIPTION |
| **[NOTE: DOR may uncheck this section where the lateral resistance is provided by structural sheathing, the sheathing nailing/fasteners (shear walls, shear panels and diaphragms) are consistently greater than 4” on center, or if the design wind speed (ASD) is less than 140 mph (62.6 meters/sec) AND the seismic design category is A or B]** |
| 1. Nailing, bolting, anchoring and other fastening of elements of the main wind/seismic force-resisting system
 | PERIODIC  | Includes connectors for: shear wall sheathing, roof/floor sheathing, drag struts/collectors (double top plates), braces, hold downs, roof connections to exterior walls. |
| 1. Field gluing operations of elements of the main wind/seismic force-resisting system
 | **CONTINUOUS** |  |

**END SECTION**

1. **STRUCTURAL ISOLATION AND ENERGY DISSIPATION SYSTEMS**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| ISOLATION AND ENERGY DISSIPATION SYSTEMS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.13.8, 1705.14.4 |
| **[NOTE: This section is not applicable to Seismic Design Category A. Uncheck this section if this category applies]** |
| TASK | INSPECTION TYPE[[16]](#footnote-17) | DESCRIPTION |
| 1. Verify fabrication and installation of isolator units and energy dissipation devices
 | PERFORM | Verify that fabrication and installation of isolator units and energy dissipation devices conform to manufacturer’s recommendations and approved construction documents |
| 1. Test of seismic isolation systems in seismically isolated structures
 | PERFORM | Seismic isolation systems in seismically isolated structures shall be tested in accordance with ASCE 7, Section 17.8 |

**END SECTION**

1. **GEOTECHNICAL - SOILS INSPECTION**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| SOILS INSPECTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.6 and TABLE 1705.6 |
| TASK | INSPECTION TYPE[[17]](#footnote-18) | DESCRIPTION |
| 1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.
 | PERIODIC |  |
| 1. Verify excavations are extended to proper depth and have reached proper material
 | PERIODIC |  |
| 1. Perform classification and testing of compacted fill materials
 | PERIODIC |  |
| 1. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly
 | PERIODIC |  |
| 1. During fill placement, verify use of proper materials and procedures in accordance with the provisions of the approved geotechnical report. Verify densities and lift thicknesses during placement and compaction of compacted fill
 | **CONTINUOUS** |  |

**END SECTION**

1. **GEOTECHNICAL - DRIVEN DEEP FOUNDATION ELEMENTS**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| DRIVEN DEEP FOUNDATION ELEMENTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.7 and TABLE 1705.7 |
| TASK | INSPECTION TYPE | DESCRIPTION |
| 1. Verify element materials, sizes and lengths comply with requirements
 | **CONTINUOUS** |  |
| 1. Inspect driving operations and maintain complete and accurate records for each element
 | **CONTINUOUS** |  |
| 1. Verify placement locations and plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element
 | **CONTINUOUS** |  |
| 1. Determine capacities of test elements and conduct additional load tests if required.
 | **CONTINUOUS** |  |
| 1. For steel, concrete, concrete-filled, perform additional special inspections in accordance with the steel and concrete sections in this schedule
 |  |  |
| 1. For specialty elements, perform additional inspections as determined by the licensed design professional in responsible charge
 |  | In accordance with Statement of Special Inspections |

**END SECTION**

1. **GEOTECHNICAL - HELICAL PILE FOUNDATIONS**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| HELICAL PILE FOUNDATIONS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.9  |
| TASK | INSPECTION TYPE | DESCRIPTION |
| 1. Record installation equipment used, pile dimensions, tip elevations, final depth, final installation torque and other pertinent installation data as required. The approved geotechnical report and the contract documents prepared by the licensed design professional in responsible charge shall be used to determine compliance
 | **CONTINUOUS** |  |
| 1. Determine capacities of test elements and conduct additional load tests if required.
 | **CONTINUOUS** |  |

**END SECTION**

1. **GEOTECHNICAL – CAST-IN-PLACE CONCRETE DEEP FOUNDATION ELEMENTS**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| CAST-IN-PLACE CONCRETE DEEP FOUNDATION ELEMENTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.8  |
| TASK | INSPECTION TYPE [[18]](#footnote-19)  | DESCRIPTION |
| 1. Inspect drilling operations and maintain complete and accurate records for each element
 | **CONTINUOUS** |  |
| 1. Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end-bearing strata capacity. Record concrete or grout volumes
 | **CONTINUOUS** |  |
| 1. For concrete elements, perform tests and additional special inspections in accordance with Concrete section of this schedule
 | **CONTINUOUS** |  |
| 1. Determine capacities of test elements and conduct additional load tests if required.
 | **CONTINUOUS** |  |

**END SECTION**

1. **FIRE PROTECTION - SPRAYED FIRE-RESISTANT MATERIALS**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| SPRAYED FIRE RESISTANT MATERIALS (SFRM) – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.15 |
| TASK | INSPECTION TYPE [[19]](#footnote-20) | DESCRIPTION |
| 1. Check substrate condition
 | PERIODIC | Prior to application, confirm that surfaces have been prepared according to the approved fire-resistant design and manufacturer’s instructions. See 2024 IBC 1705.15.2 and 1705.15.3 for more details. |
| 1. Verify material thickness
 | PERIODIC | Verify SFRM thickness according to 2024 IBC 1705.15.4  |
| 1. Verify material density
 | PERIODIC | Verify SFRM density according to 2024 IBC 1705.15.5 |
| 1. Verify bond strength
 | PERIODIC | Verify bond strength of cured SFRM according to 2024 IBC 1705.15.6 |
| 1. Inspect the condition of finished application
 | PERIODIC |  |

**END SECTION**

1. **FIRE PROTECTION - INTUMESCENT FIRE-RESISTIVE MATERIALS**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| INTUMESCENT FIRE-RESISTIVE MATERIALS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH2024 IBC 1705.16 |
| TASK | INSPECTION TYPE | DESCRIPTION |
| 1. Inspect according to AWCI 12-B and the contract documents
 | PERIODIC | Inspections shall be performed in accordance with AWCI 12-B, Standard Practice for the Testing and Inspection of Field Applied Thin Film Intumescent Fire-Resistive Materials.Inspections shall be performed during construction. Additional visual inspection shall be performed after rough installation and where applicable, prior to the concealment of electrical, automatic sprinkler, mechanical and plumbing systems. |

**END SECTION**

1. **FIRE PROTECTION – FIRE-RESISTANT PENETRATIONS AND JOINTS**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| FIRE-RESISTANT PENETRATIONS AND JOINTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.18  |
| TASK | INSPECTION TYPE | DESCRIPTION |
| 1. Inspect of penetration firestop systems conducted in accordance with ASTM E2174.
 | PERIODIC | **[NOTE: This section applies to Risk Category III, IV, & V structures, or in fire areas containing Group R occupancies with an occupant load greater than 250. DOR may choose to uncheck this section where project is assigned to Risk Category I or II. Confirm Risk Category with licensed design professional in responsible charge]** |
| 1. Inspecti of fire-resistant joint systems conducted in accordance with ASTM E2393
 | PERIODIC |

**END SECTION**

1. **FIRE PROTECTION – SMOKE CONTROL**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| SMOKE CONTROL – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.19  |
| TASK | INSPECTION TYPE[[20]](#footnote-21)  | DESCRIPTION |
| 1. Verify device locations and perform leakage testing
 | PERIODIC | Perform during erection of ductwork and prior to concealment |
| 1. Perform pressure difference testing, flow measurements and detection and control verification
 | PERIODIC | Perform prior to occupancy and after sufficient completion |

**END SECTION**

1. **SEALANT – SEALING OF MASS TIMBER**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| SEALING OF MASS TIMBER – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.20  |
| TASK | INSPECTION TYPE | DESCRIPTION |
| 1. Inspect sealants or adhesives
 | PERIODIC | Inspect sealants or adhesives where sealant and adhesive are required by 2024 IBC 703.7 |

**END SECTION**

1. **ARCHITECTURAL - EXTERIOR INSULATION AND FINISH SYSTEMS**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

|  |
| --- |
| EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.17  |
| TASK | INSPECTION TYPE[[21]](#footnote-22)  | DESCRIPTION |
| 1. Water-resistive barrier coating applied over a sheathing substrate.
 | PERIODIC | Verify that water-resistive barrier coating complies with ASTM E2570.**[NOTE: Not required for EIFS applications installed over:**1. **a water-resistive barrier with a means of draining moisture to the exterior.**
2. **masonry or concrete walls**

**Uncheck this section in those cases]** |

**END SECTION**

1. **ARCHITECTURAL – ARCHITECTURAL COMPONENTS**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

| ARCHITECTURAL COMPONENTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.13.5, 1705.13.7 and TABLE 1705.13.7 |
| --- |
| TASK | INSPECTION TYPE | DESCRIPTION |
| **[NOTE: This section is not applicable to Seismic Design Categories A, B, & C. Uncheck this section if one of those categories applies. Confirm Seismic Design Category with the licensed design professional in responsible charge.]** |
| 1. Erection and fastening of exterior cladding and interior and exterior veneer.
 | PERIODIC | Verify appropriate materials, fasteners and attachment at commencement of work and at completion. **[NOTE: Inspection not required if height is less than 30 feet or weight is less than 5psf]**  |
| 1. Interior and exterior non-load-bearing walls
 | PERIODIC | Verify appropriate materials, fasteners and attachment at commencement of work and at completion. **[NOTE: Inspection not required if interior non-load-bearing walls weigh less than 15psf]** |
| 1. Access floors
 | PERIODIC | Verify that anchorage complies with approved construction documents.  |
| 1. Storage racks
 | PERIODIC | Steel storage racks and steel cantilevered storage racks that are 8 feet in height or greater shall be inspected for: * Materials used, to verify compliance with one or more of the material test reports in accordance with the approved construction documents
* Fabricated storage rack elements
* Storage rack anchorage installation
* Completion of storage rack system

Inspection of post-installed anchors shall comply with approved ICC-ES report.**[NOTE: Not required for racks less than 8 feet in height]** |

**END SECTION**

1. **PLUMBING/MECHANICAL/ELECTRICAL - DESIGNATED SEISMIC SYSTEMS**

**ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** [ ]

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| PLUMBING, MECHANICAL AND ELECTRICAL – DESIGNATED SEISMIC SYSTEMS2024 IBC 1705.13.6 |
| TASK | INSPECTION TYPE[[22]](#footnote-23)  | DESCRIPTION |
| **[NOTE: This section is not applicable to Seismic Design Categories A or B. Uncheck this section if one of those categories applies. Confirm Seismic Design Category with licensed design professional in responsible charge.]** |
| 1. Check anchorage of electrical equipment for emergency and standby power systems
 | PERIODIC | * Check for general conformance
 |
| 1. Check anchorage of all other electrical equipment in Seismic Design Categories E and F only (See first page of this schedule for Seismic Design Category)
 | PERIODIC | * Check for general conformance
 |
| 1. Check installation and anchorage of piping designed to carry hazardous materials and their associated mechanical units.
 | PERIODIC | * Check for general conformance
 |
| 1. Check installation and anchorage of vibration isolation systems where the construction documents require a nominal clearance of ¼” or less between support framing and restraint.
 | PERIODIC | * Check for general conformance
 |
| 1. Verify clearance between fire sprinkler piping and surrounding mechanical and electrical equipment, including ductwork, piping and their structural supports.
 | PERIODIC | * Check for minimum clearances noted in ASCE 7 13.2.3 or a nominal clearance of not less than 3 in.
 |

**END SECTION**

**APPPENDIX A**

**Commentary on M12**

Table 4 of TMS 602-22 does not have any Level 3 inspection requirements (for Risk Category IV structures). The leadership of the standard committee was contacted. They indicated that there are no requirements because veneers are covered under Part 4: Prescriptive Design Methods, and for prescriptive design there is never any Level 3 inspection requirement according to Table 3.1 of TMS 402-22. Although veneer is covered in Part 4, Chapter 13 of TMS 402-22, in Section 13.2.3, there is Engineered Design of Anchored Masonry Veneer and in Section 13.3.3, there is Engineered Design of Adhered Masonry Veneer. Engineered Design is covered in Part 3 of the standard, and for Part 3, Engineered Design, there are Level 3 inspection requirements in Table 3.1 of TMS 402-22. Upon further discussion, the leadership of the standard committee suggested to keep inspection Periodic for all Risk Category structures.

1. **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.

 **OBSERVE**: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor’s risk. [↑](#footnote-ref-2)
2. **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.

 **OBSERVE**: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor’s risk.

 **DOCUMENT**: Document in a report that the work has been performed as required. This is in addition to all other required reports. [↑](#footnote-ref-3)
3. **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.

 **OBSERVE**: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor’s risk.

 **DOCUMENT**: Document in a report that the work has been performed as required. This is in addition to all other required reports. [↑](#footnote-ref-4)
4. **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.

 **OBSERVE**: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor’s risk. [↑](#footnote-ref-5)
5. **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.

 **OBSERVE**: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor’s risk.

 **DOCUMENT**: Document in a report that the work has been performed as required. This is in addition to all other required reports [↑](#footnote-ref-6)
6. See Concrete Construction Section for all concrete related inspection of composite steel construction. [↑](#footnote-ref-7)
7. **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.

 **OBSERVE**: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor’s risk.

 **DOCUMENT**: Document in a report that the work has been performed as required. This is in addition to all other required reports. [↑](#footnote-ref-8)
8. **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.

 **OBSERVE**: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor’s risk.

 **DOCUMENT**: Document in a report that the work has been performed as required. This is in addition to all other required reports. [↑](#footnote-ref-9)
9. **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.

 **OBSERVE**: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor’s risk.

 **DOCUMENT**: Document in a report that the work has been performed as required. This is in addition to all other required reports. [↑](#footnote-ref-10)
10. **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.

 **OBSERVE**: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor’s risk.

 **DOCUMENT**: Document in a report that the work has been performed as required. This is in addition to all other required reports. [↑](#footnote-ref-11)
11. **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.

**OBSERVE**: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor’s risk. [↑](#footnote-ref-12)
12. **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.

 **DOCUMENT**: Document in a report that the work has been performed as required. This is in addition to all other required reports.

 **CONTINUOUS:** Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks. [↑](#footnote-ref-13)
13. **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.

 **CONTINUOUS:** Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks. [↑](#footnote-ref-14)
14. **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.

 **CONTINUOUS:** Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks. [↑](#footnote-ref-15)
15. **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.

 **CONTINUOUS:** Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks. [↑](#footnote-ref-16)
16. **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification. [↑](#footnote-ref-17)
17. **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.

 **CONTINUOUS:** Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks. [↑](#footnote-ref-18)
18. **CONTINUOUS:** Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks. [↑](#footnote-ref-19)
19. **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed. [↑](#footnote-ref-20)
20. **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed. [↑](#footnote-ref-21)
21. **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed. [↑](#footnote-ref-22)
22. **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed. [↑](#footnote-ref-23)