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PART 1. GENERAL

1.01 REFERENCES

- A. The following is a list of standards which may be referenced in this section:
1. CAN/CSA-S16 Limit States Design of Steel Structures.
 2. ASTM A36 Standard Specification for Carbon Structural Steel.
 3. ASTM A48 Standard Specification for Gray Iron Castings.
 4. ASTM A53 Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc Coated, Welded and Seamless.
 5. A108 Standard Specification for Steel Bars, Carbon and Alloy, Cold-Finished.
 6. ASTM A123/A, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 7. ASTM A153 Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
 8. ASTM A193 Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature or High Pressure Service and other Special Purpose Applications.
 9. ASTM A194 Standard Specification for Carbon and Alloy Steel Nuts for Bolts for High-Pressure or High-Temperature Service, or Both.
 10. ASTM A307 Standard Specification for Carbon Steel Bolts and Studs, 60000 psi Tensile Strength.
 11. ASTM A325 Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.
 12. ASTM A563 Standard Specification for Carbon and Alloy Steel Nuts.
 13. ASTM A780 Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings.
 14. A786 Standard Specification for Hot-Rolled Carbon, Low-Alloy, High-Strength Low-Alloy, and Alloy Steel Floor Plates.
 15. A793 Standard Specification for Rolled Floor Plate, Stainless Steel.
 16. ASTM B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
 17. B308 Standard Specification for Aluminum-Alloy 6061-T6 Standard Structural Profiles.
 18. ASTM F436 Standard Specification for Hardened Steel Washers.
 19. ASTM F468 Standard Specification for Nonferrous Bolts, Hex Cap Screws, and Studs for General Use.
 20. National Building Code of Canada (NBCC) 2010

1.02 DEFINITIONS

- A. Exterior Area: Location not protected from the weather by a building or other enclosed structure.
- B. Interior Dry Area: Location inside building or structure where floor is not subject to

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liquid spills or washdown, nor where wall or roof slab is common to a water-holding or earth-retaining structure.

- C. Interior Wet Area: Location inside building or structure where floor is sloped to floor drains or gutters and is subject to liquid spills or washdown, or where wall, floor, or roof slab is common to a water-holding or earth-retaining structure.

1.03 REFERENCE SECTIONS

- A. Section 13122, Framed Fabric Structures

1.04 SUBMITTALS

- A. Action Submittals

1. Shop Drawings:

- a. Metal fabrications, including welding and fastener information.
- b. Specific instructions for concrete anchor installation, including drilled hole size, preparation, placement, procedures, and instructions for safe handling of anchoring systems.
- c. Specific instructions for aeration floor diffuser grate installation, including preparation, placement, and procedures.
- d. Shop drawings and calculations to bear the seal of a professional engineer licensed in the Province of Manitoba stating that anchor bolts have been designed to support and resist structural loads as per NBCC 2010.
- e. Anchor bolt calculations to indicate minimum embedment depth and minimum concrete edge distance requirements to resist anticipated tensile and shear loads.
- f. Shop drawings showing dimensions for custom made stainless steel sump and catch basin baskets.

- B. Informational Submittals:

1. Concrete Drilled Anchors:

- a. Manufacturer's product description and installation procedures.
- b. Current test data or ICC Evaluation Report.
- c. Adhesive Anchor Installer Certification.

2. Passivation method for stainless steel members.

3. Hot-Dip Galvanizing: Certificate of compliance signed by galvanizer, with description of material processed and ASTM standard used for coating.

1.05 QUALITY ASSURANCE

- A. Qualifications:

1. Adhesive Anchor Installers: Trained and certified by manufacturer.
2. Galvanized Coating Applicator: Company specializing in hot-dip galvanizing after fabrication and following procedures of Quality Assurance Manual of the American Galvanizers Association.

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1.06 DELIVERY, STORAGE, AND HANDLING

- A. Insofar as practical, factory assemble items specified herein. Assemblies that due to necessity have to be shipped unassembled shall be packaged and tagged in manner that will protect materials from damage and will facilitate identification and field assembly.
- B. Package stainless steel items in a manner to provide protection from carbon impregnation.
- C. Protect painted coatings and hot-dip galvanized finishes from damage due to metal banding and rough handling. Use padded slings and straps.
- D. Store fabricated items in dry area, not in direct contact with ground.

PART 2. PART 2 PRODUCTS

2.01 GENERAL

- A. For hot-dip galvanized steel that is exposed to view and does not receive paint, limit the combined phosphorus and silicon content to 0.04 percent. For steels that require a minimum of 0.15 percent silicon (such as plates over 1.5 inches thick for A36 steel), limit the maximum silicon content to 0.21 percent and the phosphorous content to 0.03 percent.
- B. Unless otherwise indicated, meet the following requirements:

Item	ASTM Reference
Steel Shapes and Plates, except W-Shapes	A36/A36M
Steel W-Shapes	A992
Steel Pipe	A501 or A53/ A53M, Type E or S, Grade B
Structural Steel Tubing	A500, Grade B
Stainless Steel:	
Bars and Angles	A276, AISI Type 316 (316L for welded connections)
Shapes	A276, AISI Type 304 (304L for welded connections)
Steel Plate, Sheet, and Strip	A240/A240M, AISI Type 316 (316L for welded connections)
Bolts, Threaded Rods, Anchor Bolts, and Anchor, Studs	F593, AISI Type 316, Condition CW
Nuts	F594, AISI Type 3 16, Condition CW
Steel Bolts and Nuts:	
Carbon Steel	A307 bolts, with A563 nuts
High-Strength	A325, Type 1 bolts, with A563 nuts
Anchor Bolts and Rods	F1554, Grade 55, with weldability supplement S1
Eyebolts	A489
Threaded Rods	A36/A36M
Flat Washers (Unhardened)	F844
Flat and Beveled Washers (Hardened)	F436

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Item	ASTM Reference
Thrust Ties for Pipe:	
Threaded Rods	A 193/A193M, Grade B7
Nuts	A 194/A194M, Grade 2H
Plate	A283/A283M, Grade D
Welded Anchor Studs	A108, Grades C-1010 through C- 1020
Aluminum Plates and Structural Shapes	B209 and B308/B308M, Alloy 6061-T6
Aluminum Bolts and Nuts	F468, Alloy 2024-T4
Cast Iron	A48, Class 35

- C. Bolts, Washers, and Nuts: Use stainless steel, hot-dip galvanized steel , zinc-plated steel, and aluminum material types as indicated in Fastener Schedule at end of this section.

2.02 ANCHOR BOLTS AND ANCHOR BOLT SLEEVES

A. Cast-In-Place Anchor Bolts:

1. Headed type, unless otherwise shown on Drawings.
2. Material type and protective coating as shown in Fastener Schedule at end of this section.
3. Anchor bolt design for Mixing and Receiving Building by building Manufacturer. Anchor bolts to be designed to resist dead, live, wind and snow loads per NBCC 2010.

B. Anchor Bolt Sleeves:

1. Plastic:
 - a. Single unit construction with corrugated sleeve.
 - b. Top of sleeve shall be self-threading to provide adjustment of threaded anchor bolt projection.
 - c. Material: High density polyethylene.
2. Fabricated Steel: ASTM A36/A36M.

2.03 CONCRETE DRILLED ANCHORS

A. General:

1. AISI Type 316 stainless, hot-dip galvanized, or zinc-plated steel, as shown in Fastener Schedule at end of this section.
2. Current evaluation and acceptance reports by ICC or other similar code organization.

B. Wedge Anchors:

1. Manufacturers and Products:
 - a. ITW Construction Products Ramset/Red Head, TruboIt Wedge Anchor.
 - b. Hilti, Inc., Kwik-Bolt-3 (KB-3) Anchor.
 - c. Powers Rawl, Power-Stud Anchor.
 - d. Simpson Strong-Tie Co., Inc., Wedge-All Anchor.

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- e. Wej-It Corp., ANKRtite Wedge Anchor.
 - f. U.S. Anchor, Kingpin Wedge Anchor.
- C. Expansion Anchors:
- 1. Self-drilling anchors, snap-off or flush type, zinc-plated.
 - 2. Nondrilling Anchors: Flush type for use with zinc-plated or stainless steel bolt, or stud type with projecting threaded stud.
 - 3. Manufacturers and Products:
 - a. ITW Construction Products Ramset/Red Head, Multi-Set II Drop-In and Self Drill Anchor.
 - b. Hilti, Inc ., Hilti HDI Drop-In Anchor.
 - c. Powers Rawl, Steel Drop-In Anchor.
 - d. Simpson Strong-Tie Co., Inc., Drop-In Anchor.
- D. Adhesive Anchors:
- 1. Threaded Rod:
 - a. ASTM F593 stainless steel threaded rod, diameter as shown on Drawings.
 - b. Length as required, to provide minimum depth of embedment.
 - c. Clean and free of grease, oil, or other deleterious material.
 - d. For hollow-unit masonry, provide galvanized or stainless steel wire cloth screen tube to fit threaded rod.
 - 2. Adhesive:
 - a. Two-component designed to be used in adverse freeze/thaw environments, with gray color after mixing.
 - b. Cure Temperature, Pot Life, and Workability: Compatible for intended use and environmental conditions.
 - c. Nonsag, with selected viscosity base on installation temperature and overhead application where applicable.
 - 3. Packaging and Storage:
 - a. Disposable, self-contained cartridge system capable of dispensing both components in the proper mixing ratio and fitting into a manually or pneumatically operated caulking gun.
 - b. Store adhesive cartridges on pallets or shelving in covered storage area, in accordance with manufacturer's written instructions.
 - c. Cartridge Markings: Include manufacturer's name, product name, material type, batch or serial number, and adhesive expiration date.
 - d. Dispose of cartridges if shelf life has expired.
 - 4. Manufacturers and Products:
 - a. ITW Construction Products Ramset/Red Head, Epcon Ceramic 6 Epoxy or A7 Adhesive Anchor System. (Use only Epcon A7 Adhesive System for hollow masonry.)
 - b. Hilti, Inc., HIT Doweling Anchor System, HIT HY 150 (HIT HY 20 for hollow masonry).

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- c. Powers Rawl, Power Fast Epoxy Injection Gel Cartridge System.
- d. Simpson Strong-Tie Co., Inc., Epoxy-Tie Adhesive ET or Acrylic-Tie Adhesive. (Use only Acrylic-Tie Adhesive for temperatures below 4°C.)
- e. Covert Operations, Inc., CIA-Gel 7000 Epoxy Anchors.
- f. U.S. Anchor, Ultrabond I.
- g. Unitex, Pro-Poxy 300 and Pro-Poxy 300 Fast Epoxy Adhesive Anchors.

E. Adhesive Threaded Inserts:

- 1. Stainless steel, internally threaded insert.
- 2. Manufacturer and Product: Hilti, Inc, HI S-R Insert with HIT HY 150 adhesive.

2.04 PIPE SLEEVES

- A. ASTM A53/A53M, Schedule 40 steel pipe sleeves. Hot-dip galvanize in accordance with ASTM A123/A123M.

2.05 FLOOR PLATE

A. Material:

- 1. Galvanized Steel: Carbon steel, ASTM A786/A786M, commercial grade, hot-dip galvanized after fabrication in accordance with ASTM A123/A123M.
- 2. Stainless Steel: ASTM A793, AISI Type 304.

B. Minimum Thickness:

- 1. Steel: min 1/2 inch, unless shown otherwise on Drawings.

C. Floor plate to be designed to resist 100 kN point load.

D. Provide 6mm thick stainless steel embedded angles with welded 10mm dia, 100mm long nelson studs at 200 centers into concrete for plate to bear on to.

E. Surface shall be raised-lug pattern or diamond tread, unless shown otherwise on Drawings and flush with surrounding concrete.

F. Plate to have a 25mm hole midway along one edge so that a manhole lifting tool can be inserted to lift and remove plate.

G. Slip- Resistant Surface:

- 1. Provide where indicated on Drawings.
- 2. Manufacturers and Products:
 - a. IKG/Borden, MEBAC 2.
 - b. W.S. Molnar Co., SLIPNOT Grade 2-Medium.

2.06 AERATION FLOOR DIFFUSER GRATE

A. Material:

- 1. Stainless Steel: AISI Type 316L.

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B. Dimensions:

1. As shown on drawings.
2. Dimensions must conform to specified requirements.
3. All holes and slots must be fully open and slot interior must have straight or tapered sides with a slightly larger slot width on the bottom of the grate.

C. Dimensions and Tolerances:

1. Testing methods shall conform to ASTM A370.
2. Minimum Dimension tolerance of 1/32 inch per inch in any dimension.
3. Minimum flange thickness of 0.180 inch.
4. Minimum overall thickness of 0.680 inch.
5. Minimum crown of 0.120 inch.
6. Burrs, edges, slag, and casting fins must be removed. All edges shall be true and smooth.

D. Anchoring System: Bolt hole pattern as shown on drawings or as recommended by Manufacturer and approved by the Contract Administrator.

E. Manufacturers:

1. Northwest Castings, Seattle, WA.
2. Jay R. Smith Manufacturing Co.
3. Or approved equal in accordance with B6.

2.07 SUMP AND CATCH BASIN BASKETS

A. Material:

1. Stainless Steel: AISI Type 316L

B. Dimensions:

1. As shown in drawings.
2. 6 mm holes punched through base and walls of basket.
3. 20 mm stainless steel handle able to rotate freely.

2.08 CLEANOUT FRAME AND COVERS

A. Materials:

1. Galvanized steel skirt with steel rim.
2. Steel cover with H-20 load rating.
3. Stainless steel bolts (3/8").
4. Neoprene or Nitrile gasket, or approved equal in accordance with B6.

B. Dimensions:

1. Depth: Equal to slab thickness where installed.
2. Diameter: minimum 400 mm interior diameter

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C. Manufacturers and Products:

1. Atlantic Screen and Manufacturing Inc 107MW18x12
2. Environmental Bio-Systems Inc 107MW18x12
3. Canadian Pipe and Pump Supply 107MW18x12
4. Drillers Service Inc. 560LMHC18
5. Pemco 107MW18x12
6. Or Approved Equal in accordance with B6.

2.09 ACCESSORIES

A. Antiseizing Lubricant for Stainless Steel Threaded Connections:

1. Resists washout.
2. Manufacturers and Products:
 - a. Bostik, Neverseez.
 - b. Saf-T-Eze Div., STL Corp., Anti-Seize.

2.10 FABRICATION

A. General:

1. Finish exposed surfaces smooth, sharp, and to well-defined lines.
2. Furnish necessary rabbets, lugs, and brackets so Work can be assembled in neat, substantial manner.
3. Conceal fastenings where practical; where exposed, flush countersink.
4. Drill metalwork and countersink holes as required for attaching hardware or other materials.
5. Grind cut edges smooth and straight. Round sharp edges to small uniform radius. Grind burrs, jagged edges, and surface defects smooth.
6. Fit and assemble in largest practical sections for delivery to Site.

B. Materials:

1. Use steel shapes, unless otherwise noted.
2. Steel to be hot-dip galvanized: Limit silicon content to less than 0.04 percent or to between 0.15 and 0.25 percent.
3. Fabricate aluminum in accordance with AA Specifications for Aluminum Structures - Allowable Stress Design.

C. Welding:

1. Weld connections and grind exposed welds smooth. When required to be watertight, make welds continuous.
2. Welded fabrications shall be free from twisting or distortion caused by improper welding techniques.
3. Steel: Meet fabrication requirements of AWS D1.1, Section 5.
4. Aluminum: Meet requirements of AWS D1.2.
5. Stainless Steel: Meet requirements of AWS D1.6.
6. Complete welding before applying finish.

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D. Painting:

1. Shop prime with rust-inhibitive primer as specified in Section 09900, Painting, unless otherwise indicated.
2. Coat surfaces of galvanized steel and aluminum fabricated items to be in direct contact with concrete, grout, or dissimilar metals, as specified in Section 09900, Painting, unless indicated otherwise.
3. Do not apply protective coating to galvanized steel anchor bolts or galvanized steel welded anchor studs, unless indicated otherwise.

E. Galvanizing:

1. Fabricate steel to be galvanized in accordance with ASTM A143, ASTM A384, and ASTM A385. Avoid fabrication techniques that could cause distortion or embrittlement of the steel.
2. Provide venting and drain holes for tubular members and fabricated assemblies in accordance with ASTM A385.
3. Remove welding slag, splatter, burrs, grease, oil, paint, lacquer, and other deleterious material prior to delivery for galvanizing.
4. Remove by blast cleaning or other methods surface contaminants and coatings not removable by normal chemical cleaning process in the galvanizing operation.
5. Hot-dip galvanize steel members, fabrications, and assemblies after fabrication in accordance with CSA G164M. Where fabrications are too large to be hot dipped, employ zinc metallizing.
6. Hot-dip galvanize bolts, nuts, washers, and hardware components in accordance with ASTM A153/A153M. Oversize holes to allow for zinc alloy growth. Hot-dip galvanized steel bolts shall not be less than 19mm in diameter. Shop assemble bolts and nuts.
7. Galvanized steel sheets in accordance with ASTM A653.
8. Galvanize components of bolted assemblies separately before assembly.
9. Galvanizing of tapped holes is not required.

F. Fitting: Where movement of fabrications is required or shown, cut, fit, and align items for smooth operation. Make comers square and opposite sides parallel.

G. Accessories: Furnish as required for a complete installation. Fasten by welding or with stainless steel bolts or screws.

2.11 SOURCE QUALITY CONTROL

A. Visually inspect all fabrication welds and correct any deficiencies.

1. Steel: AWS D1.1, Section 6 and Table 6.1, Visual Inspection Acceptance Criteria.
2. Aluminum: AWS D1.2.
3. Stainless Steel: AWS D1.6.

B. Aeration Diffuser Grate Tolerances: Inspect all fabrications and certify specified tolerances.

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PART 3. EXECUTION

3.01 INSTALLATION OF METAL FABRICATIONS

A. General:

1. Install metal fabrications plumb or level, accurately fitted, free from distortion or defects.
2. Install rigid, substantial, and neat in appearance.
3. Install manufactured products in accordance with manufacturer's recommendations.
4. Obtain Engineer approval prior to field cutting steel members or making adjustments not scheduled.
5. For aluminum and stainless steel items, and exterior locations, use stainless steel anchors.
6. Tolerances: CAN/CSA S16.

B. Aluminum:

1. Do not remove mill markings from concealed surfaces.
2. Remove inked or painted identification marks on exposed surfaces not otherwise coated after installed material has been inspected and approved.
3. Fabrication, mechanical connections, and welded construction shall be in accordance with the AA Aluminum Design Manual.

C. Pipe Sleeves:

1. Provide where pipes pass through concrete.
2. Holes drilled with a rotary drill may be provided in lieu of sleeves in existing walls.
3. Provide a center flange for water stoppage on sleeves in exterior or water-bearing walls.
4. Provide a rubber caulking sealant or a modular mechanical unit to form a watertight seal in the annular space between pipes and sleeves.

3.02 CAST-IN-PLACE ANCHOR BOLTS

- A. Accurately locate and hold anchor bolts in place with templates at the time concrete is placed.
- B. Use anchor bolt sleeves for location adjustment and provide two nuts and one washer per bolt of same material as bolt.
- C. Minimum Bolt Size: 1/2-inch diameter by 12 inches long, unless otherwise shown.

3.03 CONCRETE DRILLED ANCHORS

- A. Begin installation only after concrete or masonry to receive anchors has attained design strength.
- B. Install in accordance with manufacturer's instructions.

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- C. Provide minimum embedment, edge distance, and spacing as follows, unless indicated otherwise by anchor manufacturer's instructions or shown otherwise on Drawings:

Anchor Type	Min. Embedment (bolt diameters)	Min. Edge Distance (bolt diameters)	Mill. Spacing (bolt diameters)
Wedge	9	6	12
Expansion	4	6	12
Adhesive	9	9	13.5

- D. Use only drill type and bit type and diameter recommended by anchor manufacturer. Clean hole of debris and dust with brush and compressed air.
- E. When embedded steel or rebar is encountered in the drill path, slant drill to clear obstruction. If drill must be slanted more than 10 degrees to clear obstruction, notify Contract Administrator for direction on how to proceed.
- F. Adhesive Anchors:
1. Do not install adhesive anchors when temperature of concrete is below 4°C (-4°C for Simpson Strong-Tie Acrylic-Tie Adhesive) or above 38°C.
 2. Remove any standing water from hole with oil free compressed air. Inside surface of hole shall be dry where required by manufacturer's instructions.
 3. For hollow-unit masonry, install screen tube in accordance with manufacturer's instructions.
 4. Do not disturb anchor during recommended curing time.
 5. Do not exceed maximum torque as specified in manufacturer's instructions.

3.04 AERATION FLOOR DIFFUSER GRATE

- A. Block-outs shall be created and anchor bolts shall be installed by use of exact templates or other means necessary to create true alignment to ensure proper grate placement as specified. Diffuser grates shall mate perfectly with connecting risers. No internal obstructions will be permitted.
- B. Grates shall be properly anchored and must be able to be removed freely without obstruction.
- C. Install diffuser grates plumb and level, accurately fitted, free from distortion or defects. Crown of grate must not be greater than 1/8 inch above the adjoining level concrete surface.
- D. Connecting pipe shall be plugged and protected during entire installation process to prevent material from entering finished piping.
- E. Obtain Contract Administrator's approval prior to making installation adjustments not scheduled.

3.05 CLEANOUT FRAME AND COVERS

- A. Install cleanout frames plumb and level, accurately fitted, free from distortion or defects. Cleanout must be centered horizontally on process piping. Top of cover must be flush

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with the adjoining level concrete surface.

- B. Covers must be able to be removed freely without obstruction.
- C. Covers shall be bolted in place during entire installation process to prevent material from entering finished piping.
- D. Obtain Contract Administrator's approval prior to making installation adjustments not scheduled.

3.06 ELECTROLYTIC PROTECTION

A. Aluminum and Galvanized Steel:

1. Coat surfaces of galvanized steel and aluminum fabricated items to be in direct contact with concrete, grout, masonry, or dissimilar metals, as specified in Section 09900, Painting, unless indicated otherwise.
2. Do not apply protective coating to galvanized steel anchor bolts or galvanized steel welded anchor studs, unless indicated otherwise.
3. Allow coating to dry before installation of the material.
4. Protect coated surfaces during installation.
5. Should coating become marred, prepare and touch up in accordance with paint manufacturer's written instructions.

B. Stainless Steel:

1. During handling and installation, take necessary precautions to prevent carbon impregnation of stainless steel members.
2. After installation, visually inspect stainless steel surfaces for evidence of iron rust, oil, paint, and other forms of contamination.
3. Remove contamination in accordance with requirements of ASTM A380 and ASTM A967.
4. Brushes used to remove foreign substances shall utilize only stainless steel or nonmetallic bristles.
5. After treatment, visually inspect surfaces for compliance.

3.07 PAINTING AND REPAIR OF GALVANIZED STEEL

A. Painted Galvanized Surfaces: Prepare as specified in Section 09900, Painting.

B. Repair of Damaged Hot-Dip Galvanized Coating:

1. Conform to ASTM A780.
2. For minor repairs at abraded areas, use sprayed zinc conforming to ASTM A780.
3. For flame cut or welded areas, use zinc-based solder, or zinc sticks, conforming to ASTM A780.
4. Use magnetic gauge to determine that thickness is equal to or greater than the base galvanized coating.

3.08 FIELD QUALITY CONTROL

A. Contractor shall facilitate all testing to be performed by the City's independent testing

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agency. See Specification Section 01040, Coordination.

3.09 FASTENER SCHEDULE

A. Unless indicated otherwise on the Drawings, provide fasteners as follows:

Service Use and Location	Product	Remarks
1. Anchor Bolts Cast Into Concrete for Structural Steel, Metal Fabrications and Castings		
All Areas	Stain less steel headed anchor bolts.	
2. Anchor Bolts Cast Into Concrete for Equipment Bases		
All Areas	Stainless steel headed anchor bolts, un less otherwise specified with equipment	
3. Drilled Anchors for Metal Components to Cast-in-Place Concrete (e.g., Electrical Panels, and Equipment)		
Interior Dry Areas	Zinc-plated or stainless steel wedge or expansion anchors	
All Other Areas	Adhesive stainless steel anchors	
4. Connections for Structural Steel Framing		
Exterior and Interior Wet and Dry Areas	High-strength steel bolted connections	Use hot-dipped galvanized high-strength bolted connections for galvanized steel framing members
5. Connections of Aluminum Components		
Submerged, Exterior and Interior Wet and Dry Areas	Stainless steel bolted connections, unless otherwise specified with equipment	
6. All Others		
Exterior and Interior Wet Dry Areas	Stainless steel and fasteners	

B. Antiseizing Lubricant: Use on all stainless steel threads.

C. Do not use adhesive anchors to support fire-resistive construction or where ambient temperature will exceed 49°C.

END OF SECTION