## SECTION 12 36 16 - METAL COUNTERTOPS

#### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section includes stainless-steel countertops, shelves, and sinks.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Include plans, sections, details, and attachments to other work. Detail fabrication and installation, including field joints.

#### 1.3 INFORMATIONAL SUBMITTALS

## 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver metal countertops only after casework has been completed in installation areas.
- B. Keep finished surfaces covered with polyethylene film or other protective covering during handling and installation.

## 1.5 FIELD CONDITIONS

A. Field Measurements: Verify actual dimensions of construction to receive metal countertops by field measurements before fabrication.

# PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. Stainless-Steel Sheet: ASTM A 240/A 240M, Type 304.
- B. Sealant for Countertops: Manufacturer's standard sealant of characteristics indicated below that complies with applicable requirements in Section 07 92 00 "Joint Sealants."
  - Mildew-Resistant Joint Sealant: Mildew resistant, single component, nonsag, acid curing, silicone.
  - 2. Joint Sealant: Single component, nonsag, neutral curing, silicone; Class 25.
  - 3. Color: As selected by Architect from manufacturer's full range.

PERKINS+WILL C140135461 (MMC) /152168.00 (P+W) June 14, 2013 February 07, 2014

4. Sealant shall have a VOC content of 250 g/L or less.

## 2.2 STAINLESS-STEEL COUNTERTOPS, SHELVES AND SINKS

- A. Countertops: Fabricate from 0.062-inch- (1.59-mm-) thick, stainless-steel sheet. Provide smooth, clean exposed tops and edges in uniform plane, free of defects. Provide front and end overhang of 1 inch (25 mm) over the base cabinets.
  - 1. Joints: Fabricate countertops without field-made joints.
  - 2. Weld shop-made joints.
  - 3. Sound deaden the undersurface with heavy-build mastic coating.
  - 4. Extend the top down to provide a 1-inch- (25-mm-) thick edge with a 1/2-inch (12.7-mm) return flange.
  - 5. Form the backsplash coved to and integral with top surface, with a 1/2-inch-(12.7-mm) thick top edge and 1/2-inch (12.7-mm) return flange.
  - 6. Provide raised (marine) edge around perimeter of tops containing sinks; pitch tops containing sinks two ways to provide drainage without channeling or grooving.
  - 7. Where stainless-steel sinks occur in stainless-steel tops, factory weld into one integral unit.
- B. Wall-Mounted Shelves: Fabricate from stainless-steel sheet, not less than 0.050-inch (1.27-mm) nominal thickness. Weld shop-made joints. Fold down the front edge a minimum of 3/4 inch (19 mm); fold up the back edge a minimum of 3 inches (75 mm). Provide integral stiffening brackets, formed by folding up ends a minimum of 3/4 inch (19 mm) and by welding to upturned back edge.
  - 1. Stainless-Steel Sinks: Fabricate from stainless-steel sheet, not less than 0.050-inch (1.27-mm) nominal thickness. Fabricate with corners rounded and coved to at least 5/8-inch (16-mm) radius. Slope the sink bottoms to outlet without channeling or grooving. Provide continuous butt-welded joints.
  - 2. NOTE: Coordinate with Division 22 for Plumbing Fixtures, non-integral sinks, sinks and plumbing fittings.
  - 3. Provide sizes indicated or manufacturer's closest standard size of equal or greater volume, as approved by Architect.
  - 4. Provide double-wall construction for sink partitions with top edge rounded to at least 1/2-inch (13-mm) diameter.
  - 5. Factory punch holes for fittings.
  - 6. Provide sinks with stainless-steel strainers and tailpieces.
  - 7. Provide sinks with integral rims except where located in stainless-steel countertops.
  - 8. Apply 1/8-inch- (3-mm-) thick coating of heat-resistant, sound-deadening mastic to under-sink surfaces.

# 2.3 STAINLESS-STEEL FINISH

A. Grind and polish surfaces to produce uniform, directional satin finish matching No. 4 finish, with no evidence of welds and free of cross scratches. Run grain with long dimension of each piece. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces clean.

# February 07, 2014

#### PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of metal countertops.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

## 3.2 INSTALLATION

- A. Install metal countertops level, plumb, and true; shim as required, using concealed shims.
- B. Field Jointing: Where possible, make field jointing in the same manner as shop jointing; use fasteners recommended by manufacturer. Prepare edges to be joined in shop so Project-site processing of top and edge surfaces is not required. Locate field joints where shown on Shop Drawings.
- C. Secure tops to cabinets with Z- or L-type fasteners or equivalent; use two or more fasteners at each front, end, and back.
- D. Abut top and edge surfaces in one true plane, with internal supports placed to prevent deflection.
- E. Seal junctures of tops, splashes, and walls with mildew-resistant silicone sealant or another permanently elastic sealing compound recommended by countertop material manufacturer.
- F. Wall-Mounted Shelves: Fasten to masonry, partition framing, blocking, or reinforcements in partitions. Fasten each shelf through upturned back edge at not less than 24 inches (600 mm) o.c.

### 3.3 CLEANING AND PROTECTION

- A. Repair or remove and replace defective work as directed on completion of installation.
- B. Clean finished surfaces, touch up as required, and remove or refinish damaged or soiled areas to match original factory finish, as approved by Architect.
- C. Protection: Provide 6-mil (0.15-mm) plastic or other suitable water-resistant covering over the countertop surfaces. Tape to underside of countertop at a minimum of 48 inches (1220 mm) o.c. Remove protection at Substantial Completion.

**END OF SECTION**