

**SECTION 02 41 19**  
**SELECTIVE STRUCTURE DEMOLITION**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Demolishing designated construction.
  - 2. Cutting and alterations for completion of the Work.
  - 3. Removing designated items for reuse and Owner's retention.
  - 4. Protecting items designated to remain.
  - 5. Removing demolished materials.

**1.2 QUALITY ASSURANCE**

- A. Conform to applicable code for demolition work, dust control, products requiring electrical disconnection and re-connection.
- B. Conform to applicable code for procedures when hazardous or contaminated materials are discovered.
- C. Obtain required permits from authorities having jurisdiction.

**1.3 SCHEDULING**

- A. Section 01 30 00 - Administrative Requirements: Requirements for scheduling.
- B. Schedule Work to coincide with new construction.
- C. Cooperate with Owner in scheduling noisy operations and waste removal that may impact Owners operation in adjoining spaces.

**1.4 PROJECT CONDITIONS**

- A. Conduct demolition to minimize interference with adjacent [and occupied] building areas.
- B. Cease operations immediately if structure appears to be in danger and notify Architect. Do not resume operations until directed.

**PART 2 PRODUCTS**

NOT USED

### **PART 3 EXECUTION**

#### **3.1 PREPARATION**

- A. Do not close or obstruct building egress path.

#### **3.2 SALVAGE REQUIREMENTS**

- A. Coordinate with Owner to identify building components and equipment required to be removed and delivered to Owner.
- B. Tag components and equipment Owner designates for salvage.
- C. Protect designated salvage items from demolition operations until items can be removed.
- D. Carefully remove building components and equipment indicated to be salvaged.
- E. Disassemble as required to permit removal from building.
- F. Package small and loose parts to avoid loss.
- G. Deliver salvaged items to Owner. Obtain signed receipt from Owner.

#### **3.3 DEMOLITION**

- A. Conduct demolition to minimize interference with adjacent and occupied building areas.
- B. Maintain protected egress from and access to adjacent existing buildings at all times.
- C. Cease operations immediately when structure appears to be in danger and notify Architect.
- D. Demolish in orderly and careful manner. Protect existing improvements, and supporting structural members.
- E. Carefully remove building components indicated to be reused.
  - 1. Disassemble components as required to permit removal.
  - 2. Package small and loose parts to avoid loss.
  - 3. Mark components and packaged parts to permit reinstallation.
  - 4. Store components, protected from construction operations, until reinstalled.
- F. Remove demolished materials from site except where specifically noted otherwise. Do not burn or bury materials on site.

- G. Remove materials as Work progresses. Upon completion of Work, leave areas in clean condition.
- H. Remove temporary Work.

**END OF SECTION**

**SECTION 05 50 00**  
**METAL FABRICATIONS**

**PART 1 GENERAL**

1.1 SUMMARY

- A. Section includes shop fabricated metal items.
  - 1. Structural supports for miscellaneous attachments.

1.2 REFERENCES

- A. ASTM International:
  - 1. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.
- B. American Welding Society:
  - 1. AWS A2.4 - Standard Symbols for Welding, Brazing, and Nondestructive Examination.
  - 2. AWS D1.1 - Structural Welding Code - Steel.
  - 3. GC-03 - Anti-Corrosive Paints.
- C. SSPC: The Society for Protective Coatings:
  - 1. SSPC - Steel Structures Painting Manual.

1.3 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Submittal requirements.
- B. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable. Indicate welded connections using standard AWS A2.0 welding symbols. Indicate net weld lengths.
- C. Samples: Submit illustrating factory finishes.
- D. Welders Certificates: Certify welders employed on the Work, verifying AWS qualification within previous 12 months.

1.4 QUALITY ASSURANCE

- A. Finish joints in accordance with NOMMA Guideline 1.

1.5 QUALIFICATIONS

- A. Design under direct supervision of Professional Engineer experienced in design of this Work and licensed at Project location.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.
- B. Accept metal fabrications on site in labeled shipments. Inspect for damage.
- C. Protect metal fabrications from damage by exposure to weather.

1.7 FIELD MEASUREMENTS

- A. Verify field measurements are as indicated on shop drawings.

**PART 2 PRODUCTS**

2.1 MATERIALS - STEEL

- A. Steel Plate: ASTM A36/A36M.

2.2 STRUCTURAL SUPPORTS

- A. Other Structural Supports: Steel sections, shape and size as indicated on Drawings; prime paint, two coats.

2.3 FABRICATION

- A. Fit and shop assemble items in largest practical sections, for delivery to site.
- B. Fabricate items with joints tightly fitted and secured.
- C. Continuously seal joined members by continuous welds.
- D. Exposed Mechanical Fastenings: Flush countersunk screws or bolts; unobtrusively located; consistent with design of component, except where specifically noted otherwise.
- E. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.

2.4 FACTORY APPLIED FINISHES - STEEL

- A. Prepare surfaces to be primed in accordance with SSPC SP 2.
- B. Do not prime surfaces in direct contact with concrete or where field welding is required.

- C. Prime paint items with two coats.

## 2.5 FABRICATION TOLERANCES

- A. Squareness: 1/8 inch maximum difference in diagonal measurements.
- B. Maximum Offset Between Faces: 1/16 inch.
- C. Maximum Misalignment of Adjacent Members: 1/16 inch.
- D. Maximum Bow: 1/8 inch in 48 inches.
- E. Maximum Deviation From Plane: 1/16 inch in 48 inches.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.
- B. Verify field conditions are acceptable and are ready to receive Work.

### 3.2 PREPARATION

- A. Clean and strip primed steel items to bare metal where site welding is required.
- B. Supply steel items required to be cast into concrete or embedded in masonry with setting templates to appropriate sections.

### 3.3 INSTALLATION

- A. Install items plumb and level, accurately fitted, free from distortion or defects.
- B. Make provisions for erection stresses. Install temporary bracing to maintain alignment, until permanent bracing and attachments are installed.
- C. Field weld components indicated on shop drawings.
- D. Perform field welding in accordance with AWS D1.1.
- E. Obtain approval of Architect/Engineer prior to site cutting or making adjustments not scheduled.
- F. After erection, touch up welds, abrasions, and damaged finishes with prime paint or galvanizing repair paint to match shop finishes.

3.4 ERECTION TOLERANCES

- A. Section 01 40 00 - Quality Requirements: Tolerances.
- B. Maximum Variation From Plumb: 1/4 inch per story or for every 12 ft in height whichever is greater, non-cumulative.
- C. Maximum Offset From Alignment: 1/4 inch.
- D. Maximum Out-of-Position: 1/4 inch.

3.5 FIELD QUALITY CONTROL

- A. Welding: Inspect welds in accordance with AWS D1.1.

**END OF SECTION**

**SECTION 06 61 16**  
**SOLID SURFACE FABRICATIONS**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. This Section includes the following horizontal and trim solid surface product types:
  - 1. Windowsills

**1.2 DEFINITION**

- A. Solid surface is defined as nonporous, homogeneous material maintaining the same composition throughout the part with a composition of acrylic polymer, aluminum trihydrate filler and pigment.

**1.3 SUBMITTALS**

- A. Product data:
  - 1. For each type of product indicated.
- B. Shop drawings:
  - 1. Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices and other components.
    - a. Show full-size details, edge details, thermoforming requirements, attachments, etc.
    - b. Show locations and sizes of furring, blocking, including concealed blocking and reinforcement specified in other Sections.
    - c. Show locations and sizes of cutouts and holes for plumbing fixtures, faucets, soap dispensers, waste receptacle and other items installed in solid surface.
- C. Samples:
  - 1. For each type of product indicated.
    - a. Submit minimum 6-inch by 6-inch sample in specified gloss.
    - b. Cut sample and seam together for representation of inconspicuous seam.
    - c. Indicate full range of color and pattern variation.
  - 2. Approved samples will be retained as a standard for work.
- D. Product data:
  - 1. Indicate product description, fabrication information and compliance with specified performance requirements.

- E. Product certificates:
  - 1. For each type of product, signed by product manufacturer.
- F. Fabricator/installer qualifications:
  - 1. Provide copy of certification number.
- G. Manufacturer certificates:
  - 1. Signed by manufacturers certifying that they comply with requirements.
- H. NSF/ANSI standards:
  - 1. Refer to [www.nsf.org](http://www.nsf.org) for the latest compliance to NSF/ANSI Standard 51 for food zone — all food types.
- I. Maintenance data:
  - 1. Submit manufacturer's care and maintenance data, including repair and cleaning instructions.
    - a. Maintenance kit for finishes shall be submitted.
  - 2. Include in project closeout documents.

#### 1.4 QUALITY ASSURANCE

- A. A. Qualifications:
  - 1. Shop that employs skilled workers who custom fabricate products similar to those required for this project and whose products have a record of successful in-service performance.
- B. Fabricator/installer qualifications:

Work of this section shall be by a certified fabricator/installer, certified in writing by the manufacturer.
- C. Applicable standards:
  - 1. Standards of the following, as referenced herein:
    - a. American National Standards Institute (ANSI)
    - b. American Society for Testing and Materials (ASTM)
    - c. National Electrical Manufacturers Association (NEMA)
    - d. NSF International
  - 2. Fire test response characteristics:
    - a. Provide with the following Class A (Class I) surface burning characteristics as determined by testing identical products per UL 723 (ASTM E84) or another testing and inspecting agency acceptable to authorities having jurisdiction:
      - 1) Flame Spread Index: 25 or less.
      - 2) Smoke Developed Index: 450 or less.
- D. Drawings shall:
  - 1. Be produced in 1/2-inch scale for all fabricated items.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver no components to project site until areas are ready for installation.
- B. Store components indoors prior to installation.
- C. Handle materials to prevent damage to finished surfaces.
  - 1. Provide protective coverings to prevent physical damage or staining following installation for duration of project.

1.6 WARRANTY

- A. Provide manufacturer's warranty against defects in materials.
  - 1. Warranty shall provide material and labor to repair or replace defective materials.
  - 2. Damage caused by physical or chemical abuse or damage from excessive heat will not be warranted.
- B. Manufacturer's warranty period:
  - 1. Ten years from date of substantial completion.

1.7 MAINTENANCE

- A. Provide maintenance requirements as specified by the manufacturer.

**PART 2 PRODUCTS**

2.1 MANUFACTURERS

- A. Approved Manufacturers:
  - 1. Corian as manufactured by Du Pont Company, Corian Products, Wilmington, Delaware 19898.
  - 2. Avonite as manufactured by Avonite, Inc., Belen, New Mexico.
  - 3. Nuvel as manufactured by General Electric Company and distributed by Formica Corporation, Cincinnati, Ohio.
  - 4. Gibraltar as manufactured by Ralph Wilson Plastics Co., 600 South General Bruce Drive, PO Box 6110, Temple, Texas 76503.
- B. Basis-of-Design Product: The design is based on the products named in the Material Schedule. Subject to compliance with requirements, provide either the named products or comparable products by one of the manufactures specified. Comparable products are subject to review and approval through the submittal process specified.

## 2.2 MATERIALS

- A. Solid polymer components
  - 1. Cast, nonporous, filled polymer, not coated, laminated or of composite construction with through body colors meeting ANSI Z124.3 or ANSI Z124.6, having minimum physical and performance properties specified.
  - 2. Superficial damage to a depth of 0.010 inch (.25 mm) shall be repairable by sanding and/or polishing.
- B. Thickness:
  - 1. 1/2 inch

## 2.3 ACCESSORIES

- A. Joint adhesive:
  - 1. Manufacturer's standard one- or two-part adhesive kit to create inconspicuous, nonporous joints.
- B. Sealant:
  - 1. Manufacturer's standard mildew-resistant, FDA-compliant, NSF 51-compliant (food zone — any type), UL-listed silicone sealant in colors matching components.

## 2.4 FACTORY FABRICATION

- A. Shop assembly
  - 1. Fabricate components to greatest extent practical to sizes and shapes indicated, in accordance with approved shop drawings and manufacturer's printed instructions and technical bulletins.
  - 2. Form joints between components using manufacturer's standard joint adhesive without conspicuous joints.
    - a. Reinforce with strip of solid polymer material, 2" wide.
  - 3. Provide factory cutouts for plumbing fittings and bath accessories as indicated on the drawings.
  - 4. Rout and finish component edges with clean, sharp returns.
    - a. Rout cutouts, radii and contours to template.
    - b. Smooth edges.
    - c. Repair or reject defective and inaccurate work.

## 2.5 FINISHES

- A. Color: Selected from the manufacturer's standard color chart.
- B. Finish:
  - 1. Provide surfaces with a uniform finish.
    - a. Semigloss; gloss range of 20–50.

### **PART 3 EXECUTION**

#### **3.1 EXAMINATION**

- A. Examine substrates and conditions, with fabricator present for compliance with requirements for installation tolerances and other conditions affecting performance of work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

#### **3.2 INSTALLATION**

- A. Install components plumb, level and rigid, scribed to adjacent finishes, in accordance with approved shop drawings and product data.
  - 1. Provide product in the largest pieces available.
  - 2. Form field joints using manufacturer's recommended adhesive, with joints inconspicuous in finished work.
    - a. Exposed joints/seams shall not be allowed.
  - 3. Reinforce field joints with solid surface strips extending a minimum of 1 inch on either side of the seam with the strip being the same thickness as the top.
  - 4. Cut and finish component edges with clean, sharp returns.
  - 5. Rout radii and contours to template.
  - 6. Carefully dress joints smooth, remove surface scratches and clean entire surface.

#### **3.3 REPAIR**

- A. Repair or replace damaged work which cannot be repaired to architect's satisfaction.

#### **3.4 CLEANING AND PROTECTION**

- A. Keep components clean during installation.
- B. Remove adhesives, sealants and other stains.

#### **3.5 SCHEDULE**

- A. Windowsills:
  - 1. Surfaces of material adhesively joined with inconspicuous seams.

**END OF SECTION**