



# SECTION - 20

## HISTORIC MILLWORK

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## PART 1 - GENERAL

### 1 IN GENERAL

#### 1.1 GRADES

- 1.1.1 **ECONOMY** is not offered in this **SECTION**.
- 1.1.2 **CUSTOM** is not offered in this **SECTION**.
- 1.1.3 **PREMIUM** is a superior quality of workmanship and materials, with a corresponding increase in cost.
  - 1.1.3.1 **SECTION 20 IS AN EXTENSION OF AND INCLUDES ALL PREMIUM GRADE REQUIREMENTS OF SECTIONS 3 - 19, AS APPLICABLE.**
- 1.1.4 **IF PROVISIONS FOR THE GRADE SPECIFIED ARE IN CONFLICT WITH, OR MODIFIED BY THE CONTRACT DOCUMENTS, THE MODIFICATIONS SHALL GOVERN.**

#### 1.2 SPECIAL CONSIDERATIONS

- 1.2.1 **ALL HISTORIC MILLWORK RESTORATION** including stripping, repairs, reconstruction, materials, new fabrication, installation, and finishing shall be of a **SINGLE SOURCE RESPONSIBILITY**.
  - 1.2.1.1 If **SINGLE SOURCE RESPONSIBILITY** is **NOT REQUIRED**, then the **FOLLOWING SHALL BE INCLUDED IN THE PAINTING SECTION OF THE SPECIFICATIONS**:
    - 1.2.1.1.1 **TABLE 20-1, STRIPPING REQUIREMENTS**, Items 6.2.10 - 6.2.18
    - 1.2.1.1.2 **TABLE 20-1, FINISHING REQUIREMENTS**, Items 6.2.24 - 6.2.26
- 1.2.2 The overall rationale and intent of this **SECTION** is to assist in compliance with the US Secretary of the Interior's "**STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES** (The Standards) with **GUIDELINES FOR PRESERVING, REHABILITATION, RESTORING, AND RECONSTRUCTING HISTORIC BUILDINGS** (The Guidelines)" which spells out the following:
  - 1.2.2.1 The **HISTORIC CHARACTER** of a property will be retained and preserved.
    - 1.2.2.1.1 The removal of distinctive materials or alterations of features, spaces and spatial relationships that characterize a property will be avoided.
  - 1.2.2.2 **EACH PROPERTY** will be recognized as a physical record of its time, place, and use.
    - 1.2.2.2.1 Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
  - 1.2.2.3 **CHANGES TO PROPERTY** that have acquired historic significance in their own right will be retained and preserved.
  - 1.2.2.4 **DISTINCTIVE MATERIALS**, features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property will be preserved.
  - 1.2.2.5 **DETERIORATED HISTORIC FEATURES** will be repaired rather than replaced.
    - 1.2.2.5.1 Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials.
    - 1.2.2.5.2 Replacement of missing features will be substantiated by documentary and physical evidence.
  - 1.2.2.6 **CHEMICAL** or **PHYSICAL TREATMENTS**, if appropriate, will be undertaken using the gentlest means possible.
    - 1.2.2.6.1 Treatments that cause damage to historic properties will not be used.
  - 1.2.2.7 **NEW ADDITIONS**, exterior alterations, or related new construction will not destroy historic materials and spatial relationships that characterize the property.

1.2.2.7.1 The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale, and proportion, and massing to protect the historic integrity of the property and its environment.

1.2.2.8 **NEW ADDITIONS** and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

1.2.3 For technical information on dealing with historic wood products, contact the **NATIONAL PARK SERVICE, TECHNICAL PRESERVATION SERVICES FOR HISTORIC BUILDINGS**. Their Internet address is: [www2.cr.nps.gov/tps/index.htm](http://www2.cr.nps.gov/tps/index.htm).

### 1.3 **RECOMMENDATIONS**

#### 1.3.1 **FOR JOB-SITE FINISHING, INCLUDE IN THE PAINTING SECTION OF THE SPECIFICATIONS:**

1.3.1.1 **"BEFORE FINISHING**, all exposed portions of millwork shall have handling marks or effects of exposure to moisture removed with a thorough, final sanding over all surfaces of the exposed portions, using at least 150 grit or finer sandpaper, and shall be cleaned before applying sealer or finish."

1.3.1.2 **"CONCEALED SURFACES** of all architectural millwork that may be exposed to moisture such as those adjacent to exterior concrete walls, etc. shall be backprimed."

### 1.4 **SURFACE DEFINITIONS**

#### 1.4.1 **EXPOSED SURFACES**

1.4.1.1 All visible surfaces of standing/running trim and door/window frames.

1.4.1.2 Excluding top horizontal surfaces 72" or more above finish grade, deck or walk unless visible from above.

1.4.1.3 Excluding bottom horizontal surfaces 48" or less above finish grade or walk.

1.4.1.4 All visible surfaces of window and sash members.

1.4.1.5 All visible surfaces of screen, screen door, blind, and shutter members.

1.4.1.6 All visible surfaces of stringers, skirtboards, treads, risers, and balustrades.

1.4.1.7 All visible surfaces of architectural wall surfacing.

1.4.1.8 Both visible faces of wood doors.

1.4.1.9 At casework:

1.4.1.9.1 All surfaces visible when doors and drawers are closed, including knee spaces.

1.4.1.9.2 Underside of cabinets bottoms over 48" above finished floor, including bottoms behind light valances.

1.4.1.9.3 Cabinet tops under 72" above finished floor or, if 72" and over and visible from an upper building level or floor.

1.4.1.9.4 Visible front edges of web frames, ends, divisions, tops, shelves, and hanging stile.

1.4.1.9.5 Sloping tops of cabinets that are visible.

1.4.1.9.6 Visible portions of bottoms, tops, and ends in front of sliding doors.

1.4.1.9.7 Visible surfaces in open cabinets or behind glass.

1.4.1.9.8 Interior faces of hinged doors.

1.4.1.9.9 Cabinet and millwork surfaces behind sliding presentation panels.

#### 1.4.2 **SEMI-EXPOSED SURFACES**

1.4.2.1 Top horizontal surfaces 72" or more above finish grade, deck or walk, unless visible from above.

1.4.2.2 Bottom horizontal surfaces 48" or less above finish grade or walk.

- 1.4.2.3 Both visible edges of wood doors.
- 1.4.2.4 At casework:
  - 1.4.2.4.1 Shelves.
  - 1.4.2.4.2 Divisions.
  - 1.4.2.4.3 Interior face of ends (sides), backs, and bottoms (even on a bank of drawers). Also included are the interior surfaces of cabinet top members when the top member is 36" or more above the finished floor.
  - 1.4.2.4.4 Drawer sides, sub-fronts, backs, and bottoms.
  - 1.4.2.4.5 The underside of cabinet bottoms between 24" and 48" above the finished floor.
  - 1.4.2.4.5 In open cabinets or behind glass for all rooms designated as storage, janitor, closet, or utility.

### 1.4.3 CONCEALED SURFACES

- 1.4.3.1 All non visible surfaces attached to and/or covered by another.
- 1.4.3.2 All non-visible blocking, spacers, etc. used for attachment.
- 1.4.3.3 Top and bottom edges of wood doors.
- 1.4.3.4 At casework:
  - 1.4.3.4.1 Toe space unless otherwise specified.
  - 1.4.3.4.2 Sleepers.
  - 1.4.3.4.3 Web frames, stretchers, and solid sub-tops.
  - 1.4.3.4.4 Security panels.
  - 1.4.3.4.5 The underside of cabinet bottoms less than 24" above the finished floor.
  - 1.4.3.4.6 The flat tops of cabinet 72" or more above the finished floor, except if visible from an upper building level.
  - 1.4.3.4.7 The three non-visible edges of adjustable shelves.
  - 1.4.3.4.8 The underside of countertops, knee spaces, and drawer aprons.
  - 1.4.3.4.9 The faces of cabinet ends of adjoining units that butt together.

## 2 SCOPE

- 2.1 The restoration, fabrication, installation, and finishing of all existing and/or new historic architectural millwork.
- 2.2 **TYPICAL INCLUSIONS**
  - 2.2.1 Shall comply with those listed within **SECTIONS 6 - 19**, as applicable.
- 2.3 **TYPICAL EXCLUSIONS**
  - 2.3.1 Shall comply with those listed within **SECTIONS 6 - 19**, as applicable.

## 3 DEFAULT STIPULATION

- 3.1 **IF NOT OTHERWISE SPECIFIED OR INDICATED, ALL WORK** shall be **PREMIUM GRADE** of softwood and/or hardwood intended for opaque and/or transparent finish as described in **SECTIONS 3 and 4**. **IT IS THE RESPONSIBILITY OF THE MILLWORK FABRICATOR TO OBSERVE THE PROJECT BEFORE BID AND MATCH ALL MATERIALS FOR SPECIES, GRAIN AND OVERALL APPEARANCE.**

**CONTINUED. . . . .**

The following portions of the *Manual of Millwork* are excluded intentionally to protect our sale of the standards (grade rules) to fabricators and installers of architectural millwork products; which intern supports our providing it free of cost to architects, designers, and specification writers.

**PART 2 - PRODUCT** (Grade Rules)

**PART 3 - EXECUTION** (Installation Rules)