

Hobcaw Education Center (NERR) – Hobcaw Discovery Center Renovations

Project # H27-6017-A

# ARCHITECTURE FIRM

LS3P ASSOCIATES LTD. 701-A Lady Street Columbia, SC 29201

Architect: David Anderson

# PLUMBING ENGINEER

RMF Engineering 474 Wando Park Blvd., Suite 100 Mount Pleasant, SC 29464

Engineer: Craig Buck

# MECHANICAL ENGINEER

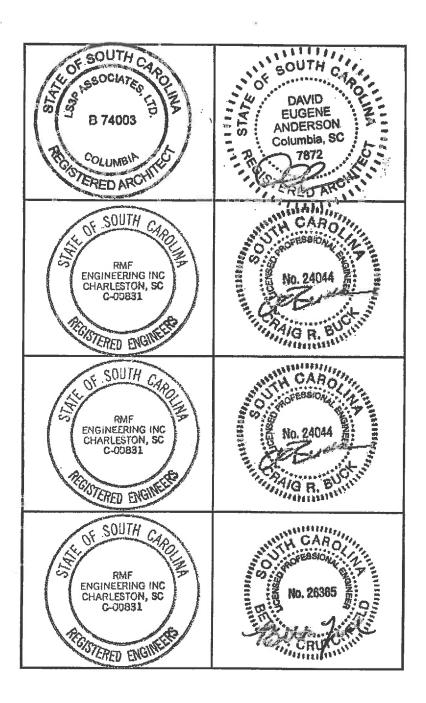
RMF Engineering 474 Wando Park Blvd., Suite 100 Mount Pleasant, SC 29464

Engineer: Craig Buck

#### ELECTRICAL ENGINEER

RMF Engineering 474 Wando Park Blvd., Suite 100 Mount Pleasant, SC 29464

Engineer: Beth Crutchfield



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APPROVED BY:

# **Invitation for Minor Construction Quotes**

SCBO NOTES 2, 4 and 5 APPLY TO THIS INVITATION FOR QUOTES
PROJECT NAME:  Hobcaw Education Center (NERR) - Hobcaw Discovery Center Renovations
PROJECT NUMBER: H27-6017-A PROJECT LOCATION: Georgetown, South Carolina
BID SECURITY REQUIRED? Yes No
PERFORMANCE BOND REQUIRED? Yes No 🗸
PAYMENT BOND REQUIRED? Yes No CONSTRUCTION COST RANGE: Less than \$50,000
DESCRIPTION OF PROJECT: Project includes renovations to the existing Discovery Center building and Baruch Foundation Administrative
offices. Scope of work in the Discovery Center includes, but is not limited to, installation of acoustical wall and
ceiling panels, track lighting at 3 locations and louvered blinds at the interior side of 2 exterior doors. Scope of
work in the Baruch Foundation administrative offices includes replacement of existing carpeting, and painting of walls and trim throughout. Small and minority business participation is encouraged.
of waits and till unbughout. Small and innormy business participation is encouraged.
A/E NAME: LS3P Associates LTD A/E CONTACT: David Anderson
ADDRESS: 701-A Lady Street PHONE: 803-765-2418 Fax: 803-765-2419
CITY: Columbia STATE: sc ZIP: 29201 E-MAIL: davidanderson@ls3p.com
PLANS ON FILE AT: AGC: ————————————————————————————————————
DODGE:
OTHER: Vendor is responsible for all downloads from USC's web site.
PLANS MAY BE OBTAINED FROM: http://purchasing.sc.edu (See Facilities/Construction Solicitation & Awards)
PLAN DEPOSIT AMOUNT: NONE IS DEPOSIT REFUNDABLE? Yes No
PRE-QUOTE CONFERENCE? Yes No MANDATORY ATTENDANCE? Yes No
DATE: 5/9/2012 TIME: 2:00 PM PLACE: Kimbel Lodge, 147 Pondpine Road, Georgetown, SC
Hairmanita of Goods Co. 1
GENCY: University of South Carolina  FAME AND TITLE OF AGENCY COORDINATOR: Kay Keisler, Procurement Specialist
ADDRESS: 743 Greene Street PHONE: 803-777-5812 Fax: 803-777-8739
THORE: Fax:
E 11 / 10010
FQ CLOSING DATE: 5/16/2012 TIME: 2:00 PM LOCATION: Kimbel Lodge, 147 Pondpine Road, Geor
HAND-DELIVERY: USC Baruch Marine Lab, 2306 Crabhall Road, USC Baruch Marine Lab, 2306 Crabhall Road
Hobcaw Barony, Georgetown, SC 29440 Hobcaw Barony, Georgetown, SC 29440
TTN: Wendy Allen ATTN: Wendy Allen
S PROJECT WITHIN A CENCY CONSTRUCTION CERTIFICATION CATALOG (
S PROJECT WITHIN AGENCY CONSTRUCTION CERTIFICATION? (Agency MUST check one) YES NO

(State Engineer)

(Date)

# **Quote Form**

	Quote	s shall be submitted only on SE-331
QUOTE SUBMITTEI	D BY:	
		(Offeror's Name)
QUOTE SUBMITTED	то:	University of South Carolina
		(Agency Name)
FOR PROJECT:	H27-6017-A (Number)	Hobcaw Education Ctr (NERR)-Hobcaw Discovery Ctr Reno (Name)
the above-named Project, the AGENCY in the form incomposition of the prices conditions stated.  2. Pursuant to Section 11-amount and form required  Bid Bond with 1	the undersigned OFFE cluded in the Solicitation and within the time 32-3030(1) of the SC (by the Solicitation Document of Attorney (OFFERO)	Minor Construction Quotes, and in compliance with the Instructions to Bidders for ROR proposes and agrees, if this Quote is accepted, to enter into a Contract with the in Documents, and to perform all Work as specified or indicated in the Solicitation frames indicated in the Solicitation and in accordance with the other terms and Code of Laws, as amended, OFFEROR has submitted Bid Security as follows in the aments:  [In Electronic Bid Bond
said Addenda into its Quote	e:	onowing Addenda to the Solicitation documents and has incorporated the effects of
offeror agrees that for each calendar day the Contract Time for Substant 6. Offeror herewith su	acceptance for a period in writing upon request if from the compensati actual construction to ial Completion, as provi- brits its offer to provi- and to pay all royaltic	all bid alternates, if any, may not be revoked or withdrawn after the opening of bids, of30 Days following the Quote Date, or for such longer period of time that of the AGENCY.  On to be paid, the AGENCY shall retain as Liquidated Damages the amount of the required to achieve Substantial Completion exceeds the specified or adjusted ided in the Contract Documents.  de all labor, materials, equipment, tools of trades and labor, accessories, appliances, as, fee, permits, licenses and applicable taxes necessary to complete the following
6.1 BASE BID		
6.2 ALTERNATE NO	0.1	to be ADDED/DEDUCTED from BASE BID.  (circle one)  to be ADDED/DEDUCTED from BASE BID.
		(circle one)
FEIN/SSN:		This Quote is hereby submitted on behalf of the Offeror named above.
SC Contractor's License Number:		BY:
Address:		(Signature of Offeror's Representative)
	· · · · · · · · · · · · · · · · · · ·	(Print or Type Name of Offeror's Rpresentative)
Telephone/Fax		
E-mail		ITS:

# USC SUPPLEMENTAL GENERAL CONDITIONS FOR CONSTRUCTION PROJECTS

- 1. Contractor's employees shall take all reasonable means not to interrupt the flow of student traffic in building corridors, lobbies and stairs. All necessary and reasonable safety precautions shall be taken to prevent injury to building occupants while transporting materials and equipment through the building to the work area. Providing safe, accessible, plywood pedestrian ways around construction may be required if a suitable alternative route is not available.
- 2. Fraternization between Contractor's employees and USC students, faculty or staff is strictly prohibited zero tolerance!
- 3. USC will not tolerate rude, abusive or degrading behavior on the job site. Heckling and cat-calling directed toward students, faculty or staff or any other person on USC property is strictly prohibited. Any contractor whose employees violate this requirement will be assessed a fine of up to \$500 per violation.
- 4. Contractor's employees must adhere to the University's policy of maintaining a drug-free and smoke-free/tobacco free workplace.
- 5. Contractor must sign a Contractor Key Receipt/Return form before any keys are issued. Keys must be returned immediately upon the completion of the work. The Contractor will bear the cost of any re-keying necessary due to the loss of or failure to return keys.
- 6. A welding permit must be issued by the University Fire Marshall before any welding can begin inside a building. Project Manager will coordinate.
- 7. Contractor must notify the University immediately upon the discovery of suspect material such as those potentially containing asbestos or other such hazardous materials. These materials **must not** be disturbed until approved by the USC Project Manager.
- 8. At the beginning of the project, the USC Project Manager will establish the Contractor's lay-down area. This area will also be used for the Contractors work vehicles. No personal vehicles will be allowed in this area, or in any areas surrounding the construction site that are not regular or authorized parking lots. Personal vehicles must 'be parked in the perimeter parking lots. Parking permits can be obtained at the USC Parking Office located in the Pendleton Street parking garage. The lay down area will be clearly identified to the contractor by the PM, with a sketch or drawing provided to Parking. In turn, the contractor will mark off this area with a sign containing the project name, PM name, Contractor name and contact number, and end date. Where this area is subject to foot traffic, protective barriers will be provided as specified by the PM. The area will be maintained in a neat and orderly fashion.
- 9. Contractor will be responsible for providing its own temporary toilet facilities, unless prior arrangements are made with the USC Project Manager.

- 10. Use of USC communications facilities (telephones, computers, etc.) by the Contractor is prohibited, unless prior arrangements are made with the USC Project Manager.
- 11. For all projects over \$100,000, including IDC's, an SE-395, Contractor Performance Evaluation, will be completed by the USC Project Manager and reviewed with the GC at the beginning of the project and a copy given to the GC. At the end of the project the form will be completed and a Construction Performance rating will be established.
- 12. Contractor is responsible for removal of all debris from the site, and is required to provide the necessary dumpsters which will be emptied at least <u>one (1)</u> times per week. Construction waste must not be placed in University dumpsters. The construction site must be thoroughly cleaned with all trash picked up and properly disposed of on a daily basis and the site must be left in a safe and sanitary condition each day. The University will inspect job sites regularly and will fine any contractor found to be in violation of this requirement an amount up to \$1,000.00 daily per violation.
- 13. Contractor must provide all O&M manuals, as-built drawings, and training of USC personnel on new equipment, controls, etc. prior to Substantial Completion. Final payment will not be made until this is completed.
- 14. Tree protection fencing is required to protect existing trees and other landscape features to be preserved within a construction area. The limits of this fence will be evaluated for each situation with the consultant, USC Arborist and USC Project Manager. The tree protection fence shall be 6' high chain link fence unless otherwise approved by USC Project Manager. No entry or materials storage will be allowed inside the tree protection zone. A 3" layer of mulch shall be placed over the tree protection area to maintain moisture in the root zone if USC Arborist determines that construction may decrease amount of moisture needed to sustain health of tree(s).
- 15. Contractor shall water trees and other landscape material as directed by USC Arborist until site is returned to Owner.
- Where it is necessary to cross walks, tree root zones (i.e., under canopy) or lawns the following measures shall be taken: For single loads up to 9,000 lbs., a 3/4" minimum plywood base shall be placed over areas impacted. For single loads over 9,000 lbs., two layers of 3/4" plywood is required.
- 17. For projects requiring heavy loads to cross walks, tree root zones or lawns on a regular basis (as determined by USC Project Manager), a construction entry road consisting of 10' X 16' oak logging mats placed on 12" coarse, chipped, hardwood base. Mulch and logging mats shall be supplemented throughout the project to keep matting structurally functional.
- 18. Any damage to existing landscaping (including lawn areas) will be remediated at Contractor's expense before final payment is made.

# Contractor Vehicle Requirements on Campus

- 1. All motorized vehicles on the University campus are expected to travel and park on roadways and/or in parking stalls.
- 2. All motorized vehicle traffic on USC walkways must first be authorized by USC Grounds Department and USC Project Manager. Violators may be subject to fines and penalties.
- 3. All motorized vehicles that leak or drip liquids are prohibited from traveling or parking on walks or landscaped areas.
- 4. Contractors, vendors, and delivery personnel are required to obtain prior parking authorization before parking in a designated space. Violators may be subject to fines and/or penalties. See Item 10 below.
- 5. Drivers of equipment or motor vehicles that damage university hardscape or landscape will be held personally responsible for damages and restoration expense.
- 6. Vehicle drivers who park on landscape or drives must be able to produce written evidence of need or emergency requiring parking on same.
- 7. All vehicles parked on landscape, hardscape, or in the process of service delivery, must display adequate safety devices, i.e. flashing lights, cones, signage, etc.
- 8. All drivers of equipment and vehicles will be respectful of University landscape, equipment, structures, fixtures and signage.
- 9. All incidents of property damage will be reported to Parking Services or the Work Management Center.
- 10. Parking on campus is restricted to spaces designated by Parking Services at the beginning of the project. Once the project manager and contractor agree on how many spaces are needed, the project manager will obtain a placard for each vehicle. This placard must be hung from the mirror of the vehicle, otherwise a ticket will be issued and these tickets cannot be Afixed@. Parking spaces are restricted to work vehicles only; no personal vehicles.

Project Name:

Hobcaw Education Center (NERR) - Hobcaw Discovery Center Renovations

Project Number:

H27-6017-A

University of South Carolina

# CONTRACTOR'S ONE YEAR GUARANTEE

STATE OF
COUNTY OF
as General Contractor on the above-named project, do hereby guarantee that all work executed under the requirements of the Contract Documents shall be free from defects due to faulty materials and /or workmanship for a period of one (1) year from date of acceptance of the work by the Owner and/or Architect/Engineer; and hereby agree to remedy defects due to faulty materials and/or workmanship, and pay for any damage resulting wherefrom, at no cost to the Owner, provided; however, that the following are excluded from this guarantee;
Defects or failures resulting from abuse by Owner.
Damage caused by fire, tornado, hail, hurricane, acts of God, wars, riots, or civil commotion.
[Name of Contracting Firm]
*By
Title
*Must be executed by an office of the Contracting Firm.
SWORN TO before me this day of, 2 (seal)
State
My commission expires

General Decision Number: SC120027 01/06/2012 SC27

Superseded General Decision Number: SC20100054

State: South Carolina

Construction Type: Building

Counties: Georgetown, Jasper and Williamsburg Counties in

South Carolina.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Modification Number

Publication Date

0

01/06/2012

ELEC0508-009 06/01/2011

Rates

Fringes

ELECTRICIAN (Jasper) .....\$ 22.62

8.02

ELEC0776-001 09/01/2011

REMAINING COUNTIES

Rates

Fringes

ELECTRICIAN....\$ 23.77

Work more than 40 ft. above the ground on or from swinging scaffolds, boson chairs, or raw structural steel: \$1.00 per hour additional.

ELEV0032-003 01/01/2011

**JASPER** 

Rates Fringes

ELEVATOR MECHANIC......\$ 35.23 21.785+a+b

#### PAID HOLIDAYS:

- a. New Year's Day, Memorial Day, Independence Day, Labor Day, Vetern's Day, Thanksgiving Day, the Friday after Thanksgiving, and Christmas Day.
- b. Employer contributes 8% of regular hourly rate to vacation pay credit for employee who has worked in business more than 5 years; 6% for less than 5 years' service.

ELEV0135-002 01/01/2011

REMAINING COUNTIES

Rates

Fringes

ELEVATOR MECHANIC.....\$ 34.60

21.785

#### PAID HOLIDAYS:

- a. New Year's Day, Memorial Day, Independence Day, Labor Day, Vetern's Day, Thanksgiving Day, the Friday after Thanksgiving, and Christmas Day.
- b. Employer contributes 8% of regular hourly rate to vacation pay credit for employee who has worked in business more than 5 years; 6% for less than 5 years' service.

SUSC2011-016 08/31/2011

	Rates	Fring <b>e</b> s			
CARPENTER, Includes Form Work	.\$ 16.00	0.00			
LABORER: Common or General	.\$ 10.42	0.99			
LABORER: Pipelayer	.\$ 12.50	1.23			
OPERATOR: Backhoe/Excavator/Trackhoe	.\$ 16.95	1.83			
PAINTER: Brush, Roller and Spray	.\$ 13.50	0.00			
PIPEFITTER	\$ 19.75	3.96			
PLUMBER	.\$ 17.20	2.65			
SHEET METAL WORKER (Installation of HVAC Duct					
Only)	.\$ 19.15	1.15			
TRUCK DRIVER		1.27			

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

# Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union

classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rate.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

#### WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

# TECHNICAL SPECIFICATIONS

#### SECTION 011000 - SUMMARY

#### PART 1 - GENERAL

# 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract apply to this Section.

#### 1.2 SUMMARY

# A. Section includes:

- 1. Project information.
- 2. Work covered by Contract Documents.
- Access to site.
- 4. Work restrictions.
- 5. Specification and drawing conventions.

#### 1.3 PROJECT INFORMATION

- A. Project Identification: Discovery Center Renovations
  - 1. Project Location: Hobcaw Barony, 22 Hobcaw Road, Georgetown, SC 29440
  - 2. Owner: Belle W. Baruch Foundation / University of South Carolina.
  - 3. Owner's Representative: Tom Opal, University of South Carolina. (803) 777-7076
- B. Architect Identification: The Contract Documents were prepared for Project by LS3P ASSOCIATES LTD., 701-A Lady Street, Columbia, SC 29201.

# 1.4 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of the Project is defined by the Contract Documents and consists, generally, of the following:
  - 1. Project includes renovations to the existing Discovery Center building and Baruch Foundation Administrative offices. Scope of work in the Discovery Center includes, but is not limited to, installation of acoustical wall and ceiling panels, track lighting at three locations, and louvered blinds at the interior side of two exterior doors. Scope of work in the Baruch Foundation administrative offices includes replacement of existing carpeting, and painting of walls and trim throughout.
- B. Type of Contract
  - 1. Project will be constructed under a single prime contract.
- C. The Work shall be conducted in a single phase, with the date of Substantial Completion to be by or before June 18, 2012 and Final Completion by or before June 25, 2012. Notice to Proceed and/or Purchase Order to commence work is planned to be issued by May 21, 2012.

# 1.5 ACCESS TO SITE

- A. General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.
- B. Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
  - 1. Limits: Confine construction operations to area of work.

- C. Parking: Park in designated areas only.
- D. Firearms: No firearms, concealed or otherwise, are permitted on site. Post notice at entrance to site.

# 1.6 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
  - 1. Comply with limitations on use of public streets and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work to normal business working hours of 8 a.m. to 5 p.m., Monday through Friday, except as otherwise indicated or coordinated with the Owner.
  - 1. Noise: Comply with local ordinances for hours of construction operations that may result in excessive noise.
- C. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet of entrances, operable windows, or outdoor air intakes.

# 1.7 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the CSI/CSC's "MasterFormat 2004" numbering system.
- B. The Specifications are directed to the Contractor. Requirements expressed as directions are to be performed by Contractor or by sub-contractors under his direction. Occasionally, for clarity, requirements for Work to be performed by Contractor, indirectly by the Contractor, or by Others will be so stated.
- C. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular context. These conventions are as follows:
  - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
  - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- D. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- E. Drawing Coordination: Requirements for materials and products identified on the Drawings are described in detail in the Specifications. One or more of the following are used on the Drawings to identify materials and products:
  - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
  - 2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

**END OF SECTION 011000** 

#### SECTION 012500 - SUBSTITUTION PROCEDURES

# PART 1 - GENERAL

# 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract apply to this Section.

# 1.2 SUMMARY

A. Section includes administrative and procedural requirements for substitutions.

#### 1.3 DEFINITIONS

A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

#### 1.4 SUBMITTALS

- A. Substitution Requests: Submit one copy of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
    - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
    - b. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
    - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section, indicating all differences from specification. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
    - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
    - e. Evidence that proposed product provides specified warranty.
    - f. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
    - g. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

- 2. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within 5 days of receipt of a request for substitution.
  - a. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

# 1.5 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

# PART 2 - PRODUCTS

# 2.1 SUBSTITUTIONS

- A. Substitutions for Cause or Convenience: Submit requests for substitution immediately on discovery of need for change, but not later than 5 days prior to time required for preparation and review of related submittals.
  - 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
    - a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume.
    - b. Substitution request is fully documented and properly submitted
    - c. Requested substitution is consistent with the Contract Documents and will produce indicated results and is compatible and has been coordinated with other portions of the Work.
    - d. Requested substitution provides specified warranty.

PART 3 - EXECUTION (Not Used)

END OF SECTION 012500

#### SECTION 096800 - CARPETING

#### PART 1 - GENERAL

#### 1.1 SUMMARY

A. This Section includes carpeting.

#### 1.2 SUBMITTALS

- A. Product Data: For each type of product indicated. Include manufacturer's written data on physical characteristics, durability, and fade resistance. Include installation recommendations for each type of substrate required.
- B. Shop Drawings: Show the following:
  - 1. Locations where cutouts are required in carpet.
  - 2. Carpet type, color, and dye lot.
  - 3. Seam locations, types, and methods.
  - 4. Type of installation.
  - 5. Pattern type, repeat size, location, direction, and starting point.
  - 6. Type, color, and location of edge, transition, and other accessory strips.
  - 7. Transition details to other flooring materials.
- C. Samples for Initial Selection: For each of the following products and for each color and texture required. Label each Sample with manufacturer's name, material description, color, pattern, and designation indicated on Drawings and in schedules.
  - 1. Carpet: 12-inch- square Sample.
  - 2. Exposed Edge Stripping and Accessory: 12-inch-long Samples.
- D. Product Schedule: Use same room and product designations indicated on Drawings and in schedules.
- E. Maintenance Data: For carpet to include in maintenance manuals specified in Division 1. Include the following:
  - 1. Methods for maintaining carpet, including cleaning and stain-removal products and procedures and manufacturer's recommended maintenance schedule.
  - 2. Precautions for cleaning materials and methods that could be detrimental to carpet.

#### 1.3 OUALITY ASSURANCE

A. Installer Qualifications: An experienced installer who is certified by the Floor Covering Installation Board or who can demonstrate compliance with its certification program requirements.

#### 1.4 DELIVERY, STORAGE, AND HANDLING

A. General: Comply with CRI 104, Section 5, "Storage and Handling."

# 1.5 PROJECT CONDITIONS

- A. General: Comply with CRI 104, Section 6.1, "Site Conditions; Temperature and Humidity."
- B. Environmental Limitations: Do not install carpet until wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

# 1.6 WARRANTY

- A. General Warranty: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Special Carpet Warranty: Written warranty, signed by carpet manufacturer agreeing to replace carpet that does not comply with requirements or that fails within specified warranty period. Warranty does not

include deterioration or failure of carpet due to unusual traffic, failure of substrate, vandalism, or abuse. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, and delamination.

1. Warranty Period: 10 years from date of Substantial Completion.

#### 1.7 EXTRA MATERIALS

- A. Furnish extra materials described below, before installation begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - Carpet: Full-width rolls equal to 5 percent of amount installed for each type indicated, but not less than 10 sq. yd.

#### PART 2 - PRODUCTS

#### 2.1 CARPET

- A. Products: Subject to compliance with requirements, provide products by one of the following or an Architect approved equal:
  - 1. Mannington Commercial.
  - 2. Shaw Contract.
  - Patcraft.
- B. Physical Characteristics:
  - 1. Fiber Content: Nylon.
  - 2. Fiber Type: DuPont Antrom Legacy.
  - 3. Face Construction: Level-loop pile to match existing.
  - 4. Total Weight: 71.20 oz./sq. yd.
  - 5. Width: 12 feet.
  - 6. Color and pattern: To match existing.
- C. Performance Characteristics: As follows:
  - 1. Class A.
  - 2. Colorfastness to Light: Not less than 4 after 40 AFU (AATCC fading units) per AATCC-16.
  - 3. Antimicrobial Activity: Not less than 2-mm halo of inhibition for gram-positive bacteria; not less than 1-mm halo of inhibition for gram-negative bacteria; no fungal growth; per AATCC-174.

# 2.2 INSTALLATION ACCESSORIES

- A. Adhesives: Water-resistant, mildew-resistant, nonstaining type to suit products and subfloor conditions indicated, that complies with flammability requirements for installed carpet and that is recommended by carpet manufacturer.
- B. Seaming Cement: Hot-melt adhesive tape or similar product recommended by carpet manufacturer for taping seams and butting cut edges at backing to form secure seams and to prevent pile loss at seams.
- C. Metal Edge Strips: Extruded aluminum with mill finish of width shown, of height required to protect exposed edge of carpet, and of maximum lengths to minimize running joints.

# PART 3 - EXECUTION

#### 3.1 EXAMINATION

A. Examine substrates, areas, and conditions for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet performance. Verify that substrates and conditions are satisfactory for carpet installation and comply with requirements specified.

# 3.2 PREPARATION

- A. General: Comply with CRI 104, Section 6.2, "Site Conditions; Floor Preparation," and carpet manufacturer's written installation instructions for preparing substrates indicated to receive carpet installation.
- B. Vacuum clean substrates to be covered immediately before installing carpet. After cleaning, examine substrates for moisture or dust. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.3 INSTALLATION

- A. Direct-Glue-Down Installation: Comply with CRI 104, Section 8, "Direct Glue-Down Installation."
- B. Comply with carpet manufacturer's written recommendations for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile. At doorways, center seams under the door in closed position.
- C. Cut and fit carpet to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet manufacturer.
- D. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on finish flooring as marked on subfloor. Use nonpermanent, nonstaining marking device.
- E. Install pattern parallel to walls and borders.

# 3.4 CLEANING AND PROTECTION

- A. Perform the following operations immediately after installing carpet:
  - 1. Remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet manufacturer.
  - 2. Remove yarns that protrude from carpet surface.
  - 3. Vacuum carpet using commercial machine with face-beater element.
- B. Protect installed carpet to comply with CRI 104, Section 15, "Protection of Indoor Installations,"
- C. Protect carpet against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet manufacturer.

**END OF SECTION 096800** 

CARPETING

#### SECTION 098400 - ACOUSTICAL WALL PANELS

#### PART 1 - GENERAL

# 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract apply to this Section.

#### 1.2 SUMMARY

A. This Section includes the following: Back-mounted acoustical wall panels.

# 1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show fabrication and installation details for acoustical wall panels, including plans, elevations, sections, details, and attachments to other Work.
- C. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors, textures, and patterns available for facing materials for each type of acoustical wall panel indicated. Include samples of installation devices and accessories.
- D. Samples for Verification: 4 by 6-inch units of each type of acoustical wall panel indicated. Include samples of installation devices and accessories.
- E. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- F. Maintenance Data: For acoustical wall panels and facings.

# 1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A firm experienced in manufacturing acoustical wall panels similar to those indicated for this Project and with a record of successful in-service performance.
- B. Source Limitations for Acoustical Wall Panels: Obtain acoustical wall panels from one source with resources to provide products of consistent quality in appearance and physical properties.
- C. Fire-Test-Response Characteristics: Provide acoustical wall panels with the following surfaceburning characteristics per ASTM E 84.
  - 1. Flame Spread: 25 or less.
  - 2. Smoke Developed: 450 or less.

# 1.5 DELIVERY, STORAGE, AND HANDLING

A. Protect acoustical wall panels from excessive moisture when shipping, storing, and handling. Deliver in unopened bundles and store in a dry place with adequate air circulation. Do not deliver material to building until wet-work, such as concrete and plaster, has been completed and cured to a condition of equilibrium. Protect panel edges from crushing and impact.

# 1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not install acoustical wall panels until construction in spaces is complete and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- B. Air-Quality Limitations: Protect acoustical wall panels from exposure to airborne odors, such as tobacco smoke, and install panels under conditions free from odor contamination of ambient air.

#### 1.7 WARRANTY

A. Warranty Period: One year from date of Substantial Completion.

#### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

A. Products: Subject to compliance with requirements, provide one of the products indicated for each designation in the Acoustical Wall Panel Schedule at the end of Part 3.

# 2.2 ACOUSTICAL WALL PANELS, GENERAL

- A. Fabricate panels to sizes and configurations indicated; attach facing materials to cores to produce installed panels with visible surfaces fully covered and free from waves in fabric weave, wrinkles, sags, blisters, seams, adhesive, or other foreign matter.
  - 1. Fabricate back-mounted panels in factory to sizes required to fit wall surfaces, based on field measurements of completed substrates indicated to receive acoustical wall panels.
  - 2. Where square corners are indicated, tailor corners.
- B. Dimensional Tolerances of Finished Units: Plus or minus 1/16 inch for the following:
  - Thickness.
  - 2. Edge straightness.
  - 3. Overall length and width.
  - 4. Squareness from corner to corner.
- C. Sound-Absorption Performance: Provide acoustical wall panels with minimum noise reduction coefficients indicated, as determined by testing per ASTM C 423 for mounting type specified under individual product requirements.
- D. Back-Mounting Accessories: Manufacturer's standard or recommended accessories for securely mounting panels, of type and size indicated, to substrates provided; and complying with the following requirements:
  - 1. Mechanically Mounted Edge-Reinforced Panels: Metal impaling clips designed to support weight of panels, mechanically attached to wall substrate according to panel manufacturer's standard pattern and bonded with adhesive to back of panel for additional support of panels.

#### PART 3 - EXECUTION

# 3.1 EXAMINATION

A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting acoustical wall panel performance. Proceed with installation only after unsatisfactory conditions have been corrected.

# 3.2 INSTALLATION

- A. Install acoustical wall panels in locations indicated with vertical surfaces and edges plumb, top edges level and in alignment with other panels, and scribed to fit adjoining work accurately at borders and at penetrations. Comply with manufacturer's written instructions for installation of panels using type of mounting accessories indicated or, if not indicated, as recommended by manufacturer.
- B. Construction Tolerances: As follows:
  - 1. Variation from Plumb and Level: Plus or minus 1/16 inch.
  - 2. Variation of Joints from Hairline: Not more than 1/16 inch.

#### 3.3 CLEANING

- A. Clip loose threads; remove pills and extraneous materials.
- B. Clean panels with fabric facing, on completion of installation, to remove dust and other foreign materials according to manufacturer's written instructions.
- C. Remove surplus materials, rubbish, and debris resulting from acoustical wall panel installation, on completion of the Work, and leave areas of installation in a neat and clean condition.

#### 3.4 PROTECTION

- A. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and installer that ensure acoustical wall panels are without damage or deterioration at time of Substantial Completion.
- B. Replace panels that cannot be cleaned and repaired.

# 3.5 ACOUSTICAL PRODUCT SCHEDULE

- A. Back-Mounted, Edge-Reinforced Acoustical Wall Panels: Manufacturer's standard panel construction consisting of facing material laminated to front face, edges, and back border of dimensionally stable, rigid glass fiber board core; with edges chemically hardened to reinforce panel perimeter against distortion and damage; and complying with the following requirements:
  - 1. Products: Provide one of the following:
    - a. WP1000 Panel, SounDesign<sup>SM</sup>

(803) 802-5596 (basis of design)

- b. Type AP Panel, Decoustics, Ltd.
- c. Conwed Respond, or Wall Technology A100 Series
- 2. Facing Material: Manufacturer's standard polyester or polyolefin fabric from same dye lot; color and pattern as selected from manufacturer's full range or fabric that facilitates application of printed images and graphics.
- 3. Nominal Core Density: 6lb/cu. ft...
  - a. Refer to Finish Schedule for Manufacturers, colors and patterns.
- 4. Nominal Overall Panel Thickness and Noise Reduction Coefficient: 1 inch and not less than 0.80 NRC (2 inch and not less than .95 NRC), type A mounting per ASTM E 795.
- 5. Panel Thickness: 2"
- 6. Panel Width: as indicated.
- 7. Panel Height: as indicated.
- 8. Edge Detail: Square.
- 9. Corner Detail: Square

**END OF SECTION 098400** 

#### SECTION 099000 - PAINTING

# PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes surface preparation and field painting of the following:
  - Exposed interior items and surfaces.
  - 2. Surface preparation, priming, and finish coats specified in this Section are in addition to shop priming and surface treatment specified in other Sections.
- B. Paint exposed surfaces, except where the paint schedules indicate that a surface or material is not to be painted or is to remain natural. If the paint schedules do not specifically mention an item or a surface, paint the item or surface the same as similar adjacent materials or surfaces whether or not schedules indicate colors. If the schedules do not indicate color or finish, the Architect will select from standard colors and finishes available.
- C. Do not paint prefinished items, concealed surfaces, finished metal surfaces, operating parts, and labels.

# 1.2 DEFINITIONS

- A. General: Standard coating terms defined in ASTM D 16 apply to this Section.
  - Eggshell refers to low-sheen finish with a gloss range between 5 and 20 when measured at a 60-degree meter.
  - Semigloss refers to medium-sheen finish with a gloss range between 30 and 65 when measured at a 60degree meter.

#### 1.3 SUBMITTALS

- A. Product Data: For each paint system specified. Include block fillers and primers.
  - Material List: Provide an inclusive list of required coating materials. Indicate each material and crossreference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
  - 2. Manufacturer's Information: Provide manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each coating material proposed for use.
  - 3. Certification by the manufacturer that products supplied comply with local regulations controlling use of volatile organic compounds (VOCs).
- B. Samples: Of each color and material to be applied, with texture to simulate actual conditions, on representative Samples of the actual substrate.
  - Provide stepped Samples, defining each separate coat, including block fillers and primers. Use representative colors when preparing Samples for review. Resubmit until required sheen, color, and texture are achieved.
  - 2. Provide a list of materials and applications for each coat of each sample. Label each sample for location and application.
  - 3. Submit Samples on the following substrates for the Architect's review of color and texture only:
    - a. Painted Wood: Provide two 12-inch- square samples of each color and material on hardboard.
- C. Paint Color Schedule: Prior to requesting inspection for Substantial Completion, submit schedule indicating all paint manufacturers, product numbers and colors for all painted surfaces.

#### 1.4 QUALITY ASSURANCE

- A. Applicator Qualifications: Engage an experienced applicator who has completed painting system applications similar in material and extent to that indicated for this Project with a record of successful inservice performance.
- B. Source Limitations: Obtain block fillers, primers, and undercoat materials for each coating system from the same manufacturer as the finish coats.

- C. Benchmark Samples (Mockups): Provide a full-coat benchmark finish samples of each type of coating and substrate required on the Project. Comply with procedures specified in PDCA P5. Duplicate finish of approved prepared samples.
  - 1. The Architect will select one room or surface to represent surfaces and conditions for each type of coating and substrate to be painted.
    - a. Wall Surfaces: Provide samples on at least 100 sq. ft. of wall surface.
    - b. Doors: Provide full size samples for interior doors.
  - 2. Final approval of colors will be from job-applied samples.

# 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the Project Site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label, and the following information:
  - 1. Product name or title of material.
  - 2. Product description (generic classification or binder type).
  - 3. Manufacturer's stock number and date of manufacture.
  - 4. Contents by volume, for pigment and vehicle constituents.
  - 5. Thinning instructions.
  - 6. Application instructions.
  - 7. Color name and number.
  - 8. VOC content.
- B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F. Maintain containers used in storage in a clean condition, free of foreign materials and residue.
  - 1. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing, and application.

# 1.6 PROJECT CONDITIONS

A. Apply water-based paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 50 and 90 deg F.

# PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Products: Subject to compliance with requirements, provide products by one of the following manufacturers:
  - 1. Duron Paints.
  - 2. Imperial Chemical Industries (ICI).
  - 3. Benjamin Moore & Co. (Moore).
  - 4. PPG Industries, Inc. (PPG).
  - 5. Sherwin-Williams Co. (S-W).

# 2.2 PAINT MATERIALS, GENERAL

- A. Material Compatibility: Provide primers, undercoats, and finish-coat materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
- B. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified. Paint-material containers not displaying manufacturer's product identification will not be acceptable.
- C. Colors: Provide color selections made by the Architect.

#### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with the Applicator present, under which painting will be performed for compliance with paint application requirements.
  - 1. Do not begin to apply paint until unsatisfactory conditions have been corrected and surfaces receiving paint are thoroughly dry.
  - 2. Start of painting will be construed as the Applicator's acceptance of surfaces and conditions within a particular area.
- B. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
  - Notify the Architect about anticipated problems using the materials specified over substrates primed by others.

#### 3.2 PREPARATION

- A. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of the size or weight of the item, provide surface-applied protection before surface preparation and painting.
  - After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.
- B. Cleaning: Before applying paint or other surface treatments, clean the substrates of substances that could impair the bond of the various coatings. Remove oil and grease before cleaning.
  - 1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.
- C. Surface Preparation: Clean and prepare surfaces to be painted according to the Painting and Decorating Contractors of America (PDCA) Specification Manual and manufacturer's written instructions for each particular substrate condition and as specified.
  - 1. Wood: Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper, as required. Sand surfaces exposed to view smooth and dust off.
    - a. Scrape and clean small, dry, seasoned knots, and apply a thin coat of white shellac or other recommended knot sealer before applying primer. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood filler. Sand smooth when dried.
- D. Materials Preparation: Mix and prepare paint materials according to manufacturer's written instructions.
  - Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
  - 2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
  - 3. Use only thinners approved by paint manufacturer and only within recommended limits.

#### 3.3 APPLICATION

- A. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.
  - 1. Paint colors, surface treatments, and finishes are indicated in the schedules.
  - 2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
  - 3. Provide finish coats that are compatible with primers used.
  - 4. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, convector covers, grilles, and similar components are in place. Extend coatings in these areas, as required, to maintain the system integrity and provide desired protection.

- 5. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Before the final installation of equipment, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
- B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
  - The number of coats and the film thickness required are the same regardless of application method. Do
    not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. If
    sanding is required to produce a smooth, even surface according to manufacturer's written instructions,
    sand between applications.
  - 2. Omit primer on metal surfaces that have been shop primed and touchup painted.
  - 3. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
  - 4. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and where application of another coat of paint does not cause the undercoat to lift or lose adhesion.
- C. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.
  - 1. Brushes: Use brushes best suited for the type of material applied. Use brush of appropriate size for the surface or item being painted.
  - 2. Rollers: Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.
  - 3. Spray Equipment: Use airless spray equipment with orifice size as recommended by the manufacturer for the material and texture required.
- D. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate. Provide the total dry film thickness of the entire system as recommended by the manufacturer.
- E. Prime Coats: Before applying finish coats, apply a prime coat of material, as recommended by the manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn through or other defects due to insufficient sealing.
- F. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
- G. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.

#### 3.4 CLEANING

- A. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from the site.
  - 1. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping. Be careful not to scratch or damage adjacent finished surfaces.

# 3.5 PROTECTION

- A. Protect work of other trades, whether being painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Architect.
- B. Provide "Wet Paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others to protect their work after completing painting operations.
  - 1. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces. Comply with procedures specified in PDCA P1.

# 3.6 INTERIOR PAINT SCHEDULE

- A. Dressed Lumber Substrates: Including architectural woodwork, trim and wood bases.
  - 1. Institutional Low-Odor/VOC Latex System: MPI INT 6.3V.
    - a. Prime Coat: Interior latex-based wood primer, #39.
    - b. Intermediate Coat: Institutional low-odor/VOC interior latex (semigloss), #147.
    - c. Topcoat: Institutional low-odor/VOC interior latex (semigloss), #147.
- B. Wood Panel Substrates: Including painted plywood and medium-density fiberboard.
  - 1. Latex System: MPI INT 6.4R.
    - a. Prime Coat: Interior latex-based wood primer, #39.
    - b. Intermediate Coat: Interior latex matching topcoat, #54.
    - c. Topcoat: Interior latex (semigloss), #54.]

**END OF SECTION 099000** 

# SECTION 122113 - HORIZONTAL LOUVER BLINDS

# PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract apply to this Section.

# 1.2 SUMMARY

- A. This Section includes the following types of venetian blinds and accessories:
  - 1. Horizontal louver blinds with aluminum slats.

#### 1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include styles, material descriptions, construction details, dimensions of individual components and profiles, features, finishes, and operating instructions.
- B. Shop Drawings: Show location and extent of horizontal louver blinds. Include elevations, sections, details, and dimensions not shown in Product Data. Show installation details, mountings, attachments to other Work, operational clearances, and relationship to adjoining work.
- C. Samples for Initial Selection: For each colored component of each type of horizontal louver blind indicated.1. Include similar Samples of accessories involving color selection.
- D. Samples for Verification: For the following products, prepared on Samples from the same material to be used for the Work.
  - 1. Louver Slat: Not less than 12 inches long.
- E. Window Treatment Schedule: Include horizontal louver blinds in schedule using same room designations indicated on Drawings.
- F. Maintenance Data: For horizontal louver blinds to include in maintenance manuals. Include the following:
  - 1. Methods for maintaining horizontal louver blinds and finishes.
  - Precautions about cleaning materials and methods that could be detrimental to finishes and performance.
  - 3. Operating hardware.

# 1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain horizontal louver blinds through one source from a single manufacturer.
- B. Fire-Test-Response Characteristics: Provide horizontal louver blinds with the fire-test-response characteristics indicated, as determined by testing identical products per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:
  - 1. Flame-Resistance Ratings: Passes NFPA 701.
- C. Corded Window Covering Product Standard: Provide horizontal louver blinds complying with WCMA A 100.1.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver blinds in factory packages, marked with manufacturer and product name, fire-test-response characteristics, and location of installation using same room designations indicated on Drawings and in a window treatment schedule.

#### 1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not install horizontal louver blinds until construction and wet and dirty finish work in spaces, including painting, is complete and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- B. Field Measurements: Where horizontal louver blinds are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for operable glazed units' operation hardware throughout the entire operating range. Notify Architect of discrepancies. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

# 1.7 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Horizontal Louver Blinds: Before installation begins, provide two extra blinds for each typical size,

#### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Horizontal Louver Blinds, Aluminum Slats:
    - a. Faber.
    - b. Hunter Douglas Window Fashions.
    - c. Kirsch.
    - d. Levolor Contract; a Newell Company; Levolor.
    - e. Springs Window Fashions Division, Inc.; Bali.

# 2.2 HORIZONTAL LOUVER BLINDS, ALUMINUM LOUVER SLATS

- A. Louver Slats: Aluminum, alloy and temper recommended by producer for type of use and finish indicated; with crowned profile.
  - 1. Nominal Slat Width: 1 inch.
  - 2. Nominal Slat Thickness: Not less than 0.008 inch.
  - 3. Slat Finish: Ionized Coating: Antistatic, dust-repellent, baked polyester finish.
- B. Headrail: Formed steel or extruded aluminum; long edges returned or rolled; fully enclosing operating mechanisms on three sides and ends; capacity for one blind per headrail, unless otherwise indicated in a window treatment schedule.
  - 1. Finish Color Characteristics: Match color, texture, pattern, and gloss of louver slats.
- C. Bottom Rail: Formed-steel or extruded-aluminum tube, sealed with plastic or metal capped ends top contoured to match crowned shape of louver slat and bottom contoured for minimizing light gaps; with enclosed and protected ladders and tapes to prevent their contact with sill.
- D. Maximum Light Blocking Blinds: Designed for eliminating all visible light gaps if slats are tilted closed; with tight tape spacing indicated and slats with minimal-sized rout holes for ladders hidden and placed near back edge for maximum slat overlap; with headrail and bottom rail extended and formed for light-tight joints between rail and adjacent slats or construction.
- E. Tilt Control: Consisting of enclosed worm gear mechanism, slip clutch or detachable wand preventing overrotation, and linkage rod, for the following operation:
  - 1. Tilt Operation: Manual with clear plastic wand.
  - 2. Length of Tilt Control: Length required to make operation convenient from floor level.

- Tilt: One-direction, positive stop or lock out limited at an angle of 70 degrees up from zero-degree horizontal.
- F. Tilt-Control and Cord-Lock Position: Right side and left side of headrail, respectively, unless otherwise indicated.
- G. Ladders: Evenly spaced to prevent long-term louver sag.
  - 1. For Blinds with Nominal Slat Width 1 Inch or Less: Braided string.
- H. Mounting: Extension brackets mounting permitting easy removal and replacement without damaging blind or adjacent surfaces and finishes; with spacers and shims required for blind placement and alignment indicated.
  - Provide intermediate support brackets if end support spacing exceeds spacing recommended by manufacturer for weight and size of blind.
- I. Hold-Down Brackets and Hooks or Pins: Manufacturer's standard.
- J. Color: White.

#### 2.3 HORIZONTAL LOUVER BLINDS FABRICATION

- A. Product Standard and Description: Comply with AWCMA Document 1029, unless otherwise indicated, for each horizontal louver blind designed to be self-leveling and consisting of louver slats, rails, ladders, tapes, lifting and tilting mechanisms, cord, cord lock, tilt control, and installation hardware.
- B. Concealed Components: Non-corrodible or corrosion-resistant-coated materials.
  - 1. Lifting and Tilting Mechanisms: With permanently lubricated moving parts.
- C. Unit Sizes: Obtain units fabricated in sizes to fill window and other openings as follows, measured at 74 deg F:
  - Blind Units Installed between (Inside) Jambs: Width equal to 1/4 inch per side or 1/2 inch total, plus or minus 1/8 inch, less than jamb-to-jamb dimension of opening in which each blind is installed. Length equal to 1/4 inch, plus or minus 1/8 inch, less than head-to-sill dimension of opening in which each blind is installed.
  - 2. Blind Units Installed Outside Jambs: Width and length as required, with terminations between blinds of end-to-end installations at centerlines of mullion or other defined vertical separations between openings.
- D. Installation Brackets: Designed for easy removal and reinstallation of blind, for supporting headrailand operating hardware, and for hardware position and blind mounting method indicated.
- E. Installation Fasteners: Not fewer than two fasteners per bracket, fabricated from metal noncorrosive to blind hardware and adjoining construction; type designed for securing to supporting substrate; and supporting blinds and accessories under conditions of normal use.
- F. Color-Coated Finish:
  - 1. Metal: For components exposed to view, apply manufacturer's standard baked finish complying with manufacturer's written instructions for surface preparation including pretreatment, application, baking, and minimum dry film thickness.
- G. Component Color: Provide rails, cords, ladders, and exposed-to-view metal and plastic matching or coordinating with slat color, unless otherwise indicated.

#### **PART 3 - EXECUTION**

# 3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, operational clearances, and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

# 3.2 HORIZONTAL LOUVER BLIND INSTALLATION

- A. Install blinds level and plumb and aligned with adjacent units according to manufacturer's written instructions, and located so exterior louver edges in any position are not closer than 1 inch to interior face of glass. Install intermediate support as required to prevent deflection in headrail. Allow clearances between adjacent blinds and for operating glazed opening's operation hardware, if any.
- B. Head Mounted: Install headrail on face of opening head.
- C. Provide horizontal louver blinds where indicated.

#### 3.3 ADJUSTING

A. Adjust horizontal louver blinds to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.

# 3.4 CLEANING AND PROTECTION

- A. Clean blind surfaces after installation, according to manufacturer's written instructions.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, to ensure that horizontal louver blinds are without damage or deterioration at time of Substantial Completion.
- C. Replace damaged blinds that cannot be repaired, in a manner approved by Architect, before time of Substantial Completion.

**END OF SECTION 122113**