



## ADDENDUM 04 TO CONTRACT DOCUMENTS

**Date:** 10/05/18

**To:** Bidders

**From:** Becker Morgan Group, Inc.

**Copies:** State of Delaware, Office of Management and Budget  
Division of Facilities Management

**Project:** **Delaware veterans Home Addition & Renovations**  
Milford, Delaware

**Project Number:** BMG Project No. 2005017.06  
State Contract No. 2-14-54V02  
VA FAI Contract No. 10-002

**Subject:** **ADDENDUM NO. 04**

**NOTICE:** Attention is called to the following item(s), effective as of the date above, which shall be added to, deleted from, or changed in the contract documents dated 9/17/18 – Issue for Bid, and any previously issued addenda, thereby incorporating these items into the contract.

### **RFI's**

*(Italicized questions still pending)*

*(Shaded questions answered in previous Addenda)*

<b>Delmarva Veteran Builders RFI 1</b>	
Item	Description
1	<p>Q: At pre-bid meeting, consideration was proposed for consolidation of Sub Contractor list under DE Code Title 29, section 6962 (d)(10) as follows – please advise if any update.</p> <ol style="list-style-type: none"> <li>1. Sitework</li> <li>2. Concrete</li> <li>3. Masonry</li> <li>4. Structural Steel</li> <li>5. CFMF</li> <li>6. Roofing</li> <li>7. Flooring</li> <li>8. Foodservice</li> <li>9. HVAC</li> <li>10. Plumbing</li> <li>11. Electrical</li> <li>12. Fire Protection</li> </ol> <p>A: See revised Sub Contractor List per Spec Section 004100 Bid Form-2017, Addendum No. 1, dated 9/21/18.</p>
2	Q: At pre-bid meeting, consideration was proposed for delaying bid-due time later in day – please

**Addendum 04**

Delaware Veterans Home Addition &amp; Renovations

BMG Project No. 2005017.06

State Contract No. 2-14-54V02

**10/05/18**

Milford, Delaware

VA FAI Contract No. 10-002

Page 2 of 7

	advise if any update. A: Bids are due at 11:30am on Tuesday, October, 9, 2018	
	<b>Delmarva Veteran Builders RFI 2</b>	
Item	Description	
1	Q: Is it assumed the only required affidavit for Drug Testing at bid will be from the General Contractor or will each subcontractor be required to submit affidavit as well? A: Only General Contractor affidavit for Drug Testing is required to be submitted with bid.	
	<b>Delmarva Veteran Builders RFI 3</b>	
Item	Description	
	Q: Provide specification for resinous flooring and base. A: Resinous Flooring noted on Drawing A105 to be Vinyl Sheet Flooring, spec section 096516, see revised drawing A105, Addendum 01, dated 9/21/18.	
	<b>Guardian Environmental Services RFI 1</b>	
Item	Description	
1	Q: On door schedule, it calls out for doors 1172D/1 and 1172D/2 to be HM. On the door hardware schedule, it calls out for these doors and frames to be aluminum. I see no other aluminum doors listed anywhere and there is a spec for aluminum doors and frames. Are these aluminum or HM? Please advise. A: Doors 1172D/1 and 1172D/2 to be HM doors.	
	<b>Richard Y. Johnson RFI 1</b>	
Item	Description	
1	Q: Drawing A105-Finish Floor Plan: In the finish schedule and legend it lists "resinous flooring", however, the specifications do not include a section for this material. Please advise. A: Resinous Flooring to be Vinyl Sheet Flooring, spec section 096516, see revised drawing A105, Addendum 01, dated 9/21/18.	
	<b>Conventional Builders RFI 1</b>	
Item	Description	
1	Q: Drawing A105 Finish Schedule reference specifications HPC 099600, can specifications be issued? A: See Spec Section 099600 – High-Performance Coatings, Addendum No. 2, dated 9/26/18.	
2	Q: Drawing A401 calls for acrylic wall panels, can specification be issued? A: See Spec Section 060660 – Plastic Fabrications, Addendum No. 2, dated 9/26/18.	
3	Q: Drawing A401 detail 2, calls for a SS-1 Top Cap, what material is SS-1? A: SS-1 is spec'd in Spec Section 123661.16, please refer to that section for material.	
4	Q: Drawing A401 detail 2, shows decorative columns, can a specification be issued? How do these columns attach? Details are needed. A: See Addendum No. 4 attachments for specification and details for "Decorative Columns".	
5	Q: Drawing A401 detail 2, shows box trim at radius walls; can details be issued showing material and attachments? A: Base for Detail 2/A401 to be RB-2; see revised Spec Section 096513 – Resilient Base and Accessories, date 9/26/18.	
6	Q: Specification 068200 composite trim, it appears all soffit and trim on exterior of building are metal. Where are composite trim used? A: Spec 068200 Composite Trim is for the faux wood truss located in the Private Dining.	
7	Q: Drawing A402 detail 11, is showing crown molding. Will this be part of the case work? A: Yes, crown molding is part of the case work.	
8	Q: Drawing A303 shows 6x6 posts, can details be issued on bottom attachment? Also will the 6x6 be treated or PVC? Will the 4x4 at top of 6x6 be treated as well?	

**Addendum 04**

Delaware Veterans Home Addition &amp; Renovations

BMG Project No. 2005017.06

State Contract No. 2-14-54V02

**10/05/18**

Milford, Delaware

VA FAI Contract No. 10-002

Page 3 of 7

	A: The attachment for the 6x6 PT posts are shown on 1/S101, Simpson Strong Tie ABU66's. The 6X6 pots and the 4x at top of 6x6 to be treated wood.	
9	Q: Drawing A402 shows wood trusses at 33' inside dimension of room is 33', what supports the truss? A: See Spec Section 068200 Composite Trim for the product data of the faux wood truss.	
10	Q: Will exterior wall require spray foam and blue skin? A: For weather resistive barrier, basis of design is Tyvek Commercial Wrap per spec section 072500-2.1. For continuous insulation, 1" rigid insulation, per spec section 072100-2.1	
11	Q: Drawing A101 at new site wall, can a foundation drawing be issued? A: The foundation wall (Site Wall) detail is 6/S501. Site wall is documented on architectural and civil plans for layout.	
12	Q: Will the site wall be in the base bid? A: Yes, site wall is in the base bid.	
13	Q: Drawing A201 detail 8, can a specification be issued for aluminum fence? A: See Spec Section 323119 - Decorative Metal Fences and Gates	
<b>Delmarva Veteran Builders RFI 4</b>		
Item	Description	
1	Q: Confirm finish floor material for new walk-in cooler/freezer and provide spec as needed. A: See spec section 114000-3.6 – Item #4	
<b>Richard Y. Johnson RFI 2</b>		
Item	Description	
1	Q: Section 1,2,3 on A303 and Sections 1,2 on A304 and Detail 7 on A504 indicated FRT plywood sheathing. However, Section 1,2 on A302 indicate plywood sheathing. Should these areas be FRT plywood as well? A: Yes, Section 1 and 2 on A302 to be FRT plywood sheathing.	
2	Q: On Elevation drawings A201, a wood trellis is called out. There is a specification 066030 Exterior PVC Pergolas provided. Should the "wood trellis" be "exterior PVC"? A: No, Wood Trellis to be PT wood, painted. Delete spec section 066030 Exterior PVC Pergolas.	
3	Q: Is there a Specification for the square "Decorative Columns" as indicated on A401 and A402? A: See Addendum No. 4 attachments for specifications and details for "Decorative Columns".	
<b>Guardian Environmental Services RFI 2</b>		
Item	Description	
1	Q: It appears there are some discrepancies on the door schedule compared to the elevations. Door Type A is shown on the elevation to have no glazing, however several Type A doors within the door schedule are scheduled to have glazing. Also, they are commented as existing to remain. If they are existing to remain, do these doors require glazing and hardware, or are they already glazed? Doors 1151B/1 and 1151C/1 are schedule to have tempered glass and insulated glass on fire rated doors, where other doors with fire ratings are scheduled to receive fire glass. Please advise the correct type of door and glazing for these doors. A: If door is noted "EXISTING TO REMAIN", these doors do not require new glazing or new hardware; Door is to remain as is. Doors 1151B/1 and 1151C/1 to have no glazing. They will be Door Type 'A'.	
<b>Richard Y. Johnson RFI 3</b>		
Item	Description	
1	Q: Detail 4/A401 indicates "Acrylic Wall Panels" and Section 7/A402 indicates "Acrylic Wall Panels" with "Single Point Supports". Are there specifications/model numbers for these	

**Addendum 04**

Delaware Veterans Home Addition &amp; Renovations

BMG Project No. 2005017.06

State Contract No. 2-14-54V02

**10/05/18**

Milford, Delaware

VA FAI Contract No. 10-002

Page 4 of 7

	materials? A: See Spec Section 060660 – Plastic Fabrications, Addendum No. 2, dated 9/26/18.	
	<b>Modern Controls RFI 1</b>	
Item	Description	
1	Q: Are the new mechanical systems to be tied into the existing building automation system? If yes – what is the current building automation system in place? A: The existing system is a Honeywell Niagara BACnet platform. The controls work associated with this work shall integrate with this existing platform.	
	<b>Guardian Environmental Services RFI 3</b>	
Item	Description	
1	Q: On Drawing M-400, Detail 9, roof curb detail, it notes that mechanical contractor shall hire existing roof warranty contractor to cut and patch all roof penetrations. Who is the existing roof warranty contractor? A: Mechanical Contractor does not need to hire the existing roofing contractor to cut and patch all roof penetrations. However, they do need to hire an approved installer of the existing roof manufacturer Firestone Building Products Company since the existing roof is still under warranty.	
	<b>Conventional Builders RFI 2</b>	
Item	Description	
1	Q: Drawing AD101, in the kitchen, it calls to remove floor. Is this finished floor or all concrete in the kitchen? Please advise. A: Demo note that states to remove floor is stating to remove finish floor in its entirety.	
2	Q: Main Dining Room wall are wall paper around 9', there are no notes showing demo. Will the wall paper be removed? A: Remove wall paper in Main Dining Room in its entirety.	
3	Q: Drawing AD101 calls to remove exterior wall. Is this wall metal stud or masonry? A: Exterior wall that is being removed is a metal stud wall with an exterior finish of stone veneer.	
	<b>Conventional Builders RFI 3 (Bowmar Millwork Corporation)</b>	
Item	Description	
1	Q: Ref.: 064116,1.4,B,5 // Ref.: 064116,1.6,A,1 // Ref.: 064116,1.6,B // Ref.: 064116,2.1,A,1 – Would a letter stating compliance with the AWI quality standards be acceptable in lieu of membership? A: Yes, a letter stating compliance with the AWI quality standards is acceptable	
2	Q: Ref.: 8/A402 – What is the species of the raised panel? The upper part of the cabinet has a glass door, is white going to be acceptable for the semi exposed interior? A: Species of the raised panel to be Birch. No, white will not be acceptable for the exposed interior of the casework. The exposed interior to match the same color as painted wood cabinetry which is TBD.	
3	Q: Ref.: 9/A402 – What is the species for the wood trim and Raised Panel? Stain or Paint Grade? A: Species of the wood trim and raised panel to be Birch – Paint Grade.	
4	Q: Ref.: 11/A402 – What is the species for the Raised Panel? Stain or Paint Grade? A: Species of the raised panel to be Birch – Paint Grade.	
	<b>Guardian Environmental Services RFI 4</b>	
Item	Description	
1	Q: What's the existing BAS that we are integrating too? Is it Niagara? If so, is it open? A: The existing system is a Honeywell Niagara BACnet platform. The controls work associated	

**Addendum 04**

Delaware Veterans Home Addition &amp; Renovations

BMG Project No. 2005017.06

State Contract No. 2-14-54V02

**10/05/18**

Milford, Delaware

VA FAI Contract No. 10-002

Page 5 of 7

	with this work shall integrate with this existing platform.	
	<b>Delmarva Veteran Builders RFI 5 (Bowmar Millwork Corporation)</b>	
Item	Description	
1	Q: Ref.: 064116,1.4,B,5 // Ref.: 064116,1.6,A,1 // Ref.: 064116,1.6,B // Ref.: 064116,2.1,A,1 – Would a letter stating compliance with the AWI quality standards be acceptable in lieu of membership? A: Yes, a letter stating compliance with the AWI quality standards is acceptable	
2	Q: Ref.: 8/A402 – What is the species of the raised panel? The upper part of the cabinet has a glass door, is white going to be acceptable for the semi exposed interior? A: Species of the raised panel to be Birch. No, white will not be acceptable for the exposed interior of the casework. The exposed interior to match the same color as painted wood cabinetry which is TBD.	
3	Q: Ref.: 9/A402 – What is the species for the wood trim and Raised Panel? Stain or Paint Grade? A: Species of the wood trim and raised panel to be Birch – Paint Grade.	
4	Q: Ref.: 11/A402 – What is the species for the Raised Panel? Stain or Paint Grade? A: Species of the raised panel to be Birch – Paint Grade.	
	<b>Commonwealth RFI 1 (Bowmar Millwork Corporation)</b>	
Item	Description	
1	Q: Ref.: 064116,1.4,B,5 // Ref.: 064116,1.6,A,1 // Ref.: 064116,1.6,B // Ref.: 064116,2.1,A,1 – Would a letter stating compliance with the AWI quality standards be acceptable in lieu of membership? A: Yes, a letter stating compliance with the AWI quality standards is acceptable	
2	Q: Ref.: 8/A402 – What is the species of the raised panel? The upper part of the cabinet has a glass door, is white going to be acceptable for the semi exposed interior? A: Species of the raised panel to be Birch. No, white will not be acceptable for the exposed interior of the casework. The exposed interior to match the same color as painted wood cabinetry which is TBD.	
3	Q: Ref.: 9/A402 – What is the species for the wood trim and Raised Panel? Stain or Paint Grade? A: Species of the wood trim and raised panel to be Birch – Paint Grade.	
4	Q: Ref.: 11/A402 – What is the species for the Raised Panel? Stain or Paint Grade? A: Species of the raised panel to be Birch – Paint Grade.	
	<b>Richard Y. Johnson RFI 4</b>	
Item	Description	
1	Q: Detail 4/A304 indicates the fencing to be 3' 4" tall between brick piers. Fencing suppliers are telling us that 3' 6" is a standard height and 3' 4" would be a custom size. Is 3' 6" acceptable for this condition? A: A 3' 0" fence height is acceptable to make it a standard size in lieu of 3' 4".	
	<b>Commonwealth RFI 2</b>	
Item	Description	
1	Q: Per Addendum # 2 response to RFI Conv Builders RFI 1.9-Reviewing Basis of Design for Faux Wood Trusses Fypon product information it is clear the faux trusses require a substructure of some sort for installation and support. Nothing is shown or described on the plans for the substructure, connections of substructure members or attachment to the building structure. Please provide further details for installation specific to supporting substructure components and attachment to the building structure as the manufacturer's installation requirements are silent and do not address the particular installation requirements for this project.	

**Addendum 04**

Delaware Veterans Home Addition &amp; Renovations

BMG Project No. 2005017.06

State Contract No. 2-14-54V02

**10/05/18**

Milford, Delaware

VA FAI Contract No. 10-002

Page 6 of 7

	A: Install per manufacturers instructions; the items that contractor will need to take into account that fypon does not include in the truss design/manufacturing are 2x6 blocking mounted and secured to the ceiling, all thread rods for vertical members, and additional 2x blocking at intersection of vertical members and horizontal member.	
2	Q: Under Alternate 4 what happens to the existing sloping ceiling in the main dining area? A: The existing sloping ceiling tile, under alternate 4, is to be removed in its entirety.	
3	Q: Please indicate if the gyp wallboard ceiling on the underside of the sloping truss in the Main Dining Area is existing or new [ref detail 3/A301]. A: The gyp wallboard ceiling on the underside of the existing sloping truss in the Main Dining Area will be a new ceiling, under alternate 4 only.	
4	Q: Please detail vertical support requirements and attachment details to the existing structure for ceiling clouds to be installed in Alternate 4. A: Ceiling clouds to be supported by hanger wire, per manufacturer details, to the existing trusses.	
5	Q: The phasing requirements for the project have not been detailed. Please establish a phasing plan showing temporary partitions and any ICRA and ILSM requirements during construction or set aside an allowance for bidders to include in their bid for such measures. A: Temporary partitions are not required for phasing of the project; the entire dining area and kitchen area will be shut down to the residents. All other isolation requirements of the work area should be per spec section 015000-3.3-E.	
6	Q: Please confirm location of temporary fencing if required and if wind screen privacy fabric is required. A: Temporary fencing and wind screen privacy fabric is required due to the use of the site by Owner and Residents. Temporary Fencing to follow the Line of Disturbance (L.O.D.) on drawing C201.	
7	Q: Please confirm Section 015000.I Electronic Communication Service applies to the project. A: Yes, due to the complexity of the project, will need to have immediate access for sharing information.	
8	Q: Confirm 1 original copy of the bid form is required to be submitted with the bid. A: 1 original and 2 copies of the bid forms are required.	
9	Q: Request AISC standards under section 051200 1.8 A, B and C be waived from the project with understanding all quality standards dictated by the AISC are met. A: We will waive items A, B, and C under section 051200, 1.8 with the agreement of understanding that all quality standards shall be held in accordance with AISC.	
<b>Richard Y. Johnson RFI 5</b>		
Item	Description	
1	Q: Eldorado Stone does not offer the Warm Springs color in the specified stone, can a new color be provided? A: StoneCraft – Heritage, Warm Springs	
<b>Richard Y. Johnson RFI 6</b>		
Item	Description	
1	Q: Exposed duct in the dining room alternate. We don't see any spec for exposed duct in a public area. It must be painted so do they want the rectangle lined or not lined and do they want single or double wall spiral for the round duct, or spiral for all of it? A: Exposed duct work is to have rigid insulation with canvas jacket. Canvas jacket to be painted black. Reference spec section 230713-3.02D	

**Addendum 04**

Delaware Veterans Home Addition &amp; Renovations

BMG Project No. 2005017.06

State Contract No. 2-14-54V02

**10/05/18**

Milford, Delaware

VA FAI Contract No. 10-002

Page 7 of 7

**PROJECT MANUAL CHANGES:**

Item	Description
1	Spec Section 000110 – Table of Contents: Division 06 – Wood, Plastic, and Composites, Add “062023 Interior Finish Carpentry 6”. Division 11 – Equipment, Delete “111319 Stationary Loading Dock Equipment 8” in its entirety.
2	Spec Section 062023 – Interior Finish Carpentry: Add Spec Section 062023 – Interior Finish Carpentry, dated 10/5/18, Addendum No. 4
3	Spec Section 103100 – Manufactured Gas Fireplaces: Delete Section 103100 – Manufactured Gas Fireplaces in its entirety, Substitute with Section 103100 – Manufactured Gas Fireplaces, dated 10/5/18, Addendum No. 4 per change in the outdoor gas fireplace, section 2.3.
4	Spec Section 111319 – Stationary Loading Dock Equipment: Delete Spec Section 111319 – Stationary Loading Dock Equipment in its entirety per the deletion of Alternate 3 in Addendum 1.

**DRAWING CHANGES:**

Item	Description
1	Drawing A402 – Interior Elevations, Enlarged Plans, Sections, and Millwork Details: Delete Drawing A402 in its entirety, Substitute revised Drawing A402, dated 10/5/18.
2	Drawing A501 – Plan Details: Delete Drawing A501 in its entirety, Substitute revised Drawing A501, dated 10/5/18

**CHANGES TO ADDENDA**

Item	Description
	NONE

**LIST OF ATTACHMENTS**

Item	Description	
1	062023 – Interior Finish Carpentry	10/5/18
2	103100 – Manufactured Gas Fireplaces	10/5/18
3	A402	10/5/18
4	A501	10/5/18

**END OF ADDENDUM 04**

cc: All attendees

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## SECTION 062023 - INTERIOR FINISH CARPENTRY

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:

- 1. Interior trim.

- B. Related Requirements:

- 1. Section 061000 "Rough Carpentry" for furring, blocking, and other carpentry work not exposed to view.
  - 2. Section 061053 "Miscellaneous Rough Carpentry" for furring, blocking, and other carpentry work not exposed to view.
  - 3. Section 064300 "Wood Stairs and Railings."
  - 4. Section 099123 "Interior Painting" for priming and backpriming of interior finish carpentry.

#### 1.3 DEFINITIONS

- A. MDF: Medium-density fiberboard.
- B. MDO: Plywood with a medium-density overlay on the face.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials, dimensions, profiles, textures, and colors and include construction and application details.
  - 1. Include data for wood-preservative treatment from chemical-treatment manufacturer and certification by treating plant that treated materials comply with requirements. Indicate type of preservative used and net amount of preservative retained. Include chemical-treatment manufacturer's written instructions for finishing treated material.
  - 2. Include data for fire-retardant treatment from chemical-treatment manufacturer and certification by treating plant that treated materials comply with requirements.
  - 3. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced before shipment to Project site to levels specified.



- B. Samples for Initial Selection: For each type of product involving selection of colors, profiles, or textures.
- C. Samples for Verification:
  - 1. For each species and cut of lumber and panel products with nonfactory-applied finish, with half of exposed surface finished, 50 sq. in. (300 sq. cm) for lumber and 8 by 10 inches (200 by 250 mm) for panels.
  - 2. For each finish system and color of lumber and panel products with factory-applied finish, 50 sq. in. (300 sq. cm) for lumber and 8 by 10 inches (200 by 250 mm) for panels.
  - 3. For interior wood columns, include quarter-section Samples of cap, base, plinth, and 6-inch- (150-mm-) long quarter-section Sample of shaft. Samples need not be same diameter as required columns.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Stack lumber, plywood, and other panels flat with spacers between each bundle to provide air circulation. Protect materials from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.
- B. Deliver interior finish carpentry materials only when environmental conditions comply with requirements specified for installation areas. If interior finish carpentry materials must be stored in other than installation areas, store only where environmental conditions comply with requirements specified for installation areas.

#### 1.6 FIELD CONDITIONS

- A. Environmental Limitations: Do not deliver or install interior finish carpentry materials until building is enclosed and weatherproof, wet work in space is completed and nominally dry, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.
- B. Do not install finish carpentry materials that are wet, moisture damaged, or mold damaged.
  - 1. Indications that materials are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
  - 2. Indications that materials are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

#### 1.7 WARRANTY

- A. Manufacturer's Warranty for Columns: Manufacturer agrees to repair or replace columns that fail in materials or workmanship within specified warranty period.
  - 1. Warranty Period for Columns: Five years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MATERIALS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, comply with the applicable rules of any rules-writing agency certified by the American Lumber Standard Committee's Board of Review. Grade lumber by an agency certified by the American Lumber Standard Committee's Board of Review to inspect and grade lumber under the rules indicated.
  - 1. Factory mark each piece of lumber with grade stamp of grading agency.
  - 2. For exposed lumber, mark grade stamp on end or back of each piece.
- B. Softwood Plywood: DOC PS 1.
- C. Hardboard: ANSI A135.4.
- D. MDF: ANSI A208.2, Grade 130.

### 2.2 INTERIOR TRIM

- A. Lumber Trim for Opaque Finish (Painted Finish):
  - 1. Species and Grade: Eastern white pine, D Select; NeLMA or NLGA.
  - 2. Maximum Moisture Content: 10 percent.
  - 3. Finger Jointing: Not allowed.
  - 4. Face Surface: Surfaced (smooth).
  - 5. Optional Material: Primed MDF of same actual dimensions as lumber indicated may be used in lieu of lumber.
- B. Moldings for Opaque Finish (Painted Finish): Made to patterns included in MMPA's "WM/Series Wood Moulding Patterns."
  - 1. Softwood Moldings: MMPA WM 4, P grade.
    - a. Species: Eastern white, Idaho white, lodgepole, ponderosa, radiata, or sugar pine.
    - b. Maximum Moisture Content: 15 percent with at least 85 percent of shipment at 12 percent or less.
  - 2. Optional Material: Primed MDF.
  - 3. Finger Jointing: Not allowed.
  - 4. Base and Capital: Fabricate with standard wood trim pieces to the dimensions detailed on drawings.
  - 5. Column Shaft: Enclose metal framing with full width lumber, mitered at corners.

## 2.3 MISCELLANEOUS MATERIALS

- A. Fasteners for Interior Finish Carpentry: Nails, screws, and other anchoring devices of type, size, material, and finish required for application indicated to provide secure attachment, concealed where possible.
- B. Low-Emitting Materials: Adhesives shall comply with the testing and product requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."
- C. Glue: Aliphatic-resin, polyurethane, or resorcinol wood glue recommended by manufacturer for general carpentry use.

## 2.4 FABRICATION

- A. Ease edges of lumber less than 1 inch (25 mm) in nominal thickness to 1/16-inch (1.5-mm) radius and edges of lumber 1 inch (25 mm) or more in nominal thickness to 1/8-inch (3-mm) radius.

# PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Examine finish carpentry materials before installation. Reject materials that are wet, moisture damaged, and mold damaged.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

## 3.2 PREPARATION

- A. Clean substrates of projections and substances detrimental to application.
- B. Before installing interior finish carpentry, condition materials to average prevailing humidity in installation areas for a minimum of 24 hours unless longer conditioning is recommended by manufacturer.

## 3.3 INSTALLATION, GENERAL

- A. Do not use materials that are unsound; warped; improperly treated or finished; inadequately seasoned; too small to fabricate with proper jointing arrangements; or with defective surfaces, sizes, or patterns.

- B. Install interior finish carpentry level, plumb, true, and aligned with adjacent materials. Use concealed shims where necessary for alignment.
1. Scribe and cut interior finish carpentry to fit adjoining work. Refinish and seal cuts as recommended by manufacturer.
  2. Where face fastening is unavoidable, countersink fasteners, fill surface flush, and sand unless otherwise indicated.
  3. Install to tolerance of **1/8 inch in 96 inches (3 mm in 2438 mm)** for level and plumb. Install adjoining interior finish carpentry with **1/32-inch (0.8-mm)** maximum offset for flush installation and **1/16-inch (1.5-mm)** maximum offset for reveal installation.
  4. Install stairs with no more than **3/16-inch (4.7-mm)** variation between adjacent treads and risers and with no more than **3/8-inch (9.5-mm)** variation between largest and smallest treads and risers within each flight.
  5. Coordinate interior finish carpentry with materials and systems in or adjacent to it. Provide cutouts for mechanical and electrical items that penetrate interior finish carpentry.

### 3.4 STANDING AND RUNNING TRIM INSTALLATION

- A. Install with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Do not use pieces less than **24 inches (610 mm)** long, except where necessary. Stagger joints in adjacent and related standing and running trim. [**Cope**] [**Miter**] at returns, miter at outside corners, and cope at inside corners to produce tight-fitting joints with full-surface contact throughout length of joint. Use scarf joints for end-to-end joints. Plane backs of casings to provide uniform thickness across joints where necessary for alignment.
1. Match color and grain pattern of trim for transparent finish (stain or clear finish) across joints.
  2. Install trim after gypsum-board joint finishing operations are completed.
  3. Install without splitting; drill pilot holes before fastening where necessary to prevent splitting. Fasten to prevent movement or warping. Countersink fastener heads on exposed carpentry work and fill holes.

### 3.5 ADJUSTING

- A. Replace interior finish carpentry that is damaged or does not comply with requirements. Interior finish carpentry may be repaired or refinished if work complies with requirements and shows no evidence of repair or refinishing. Adjust joinery for uniform appearance.

### 3.6 CLEANING

- A. Clean interior finish carpentry on exposed and semiexposed surfaces. Restore damaged or soiled areas and touch up factory-applied finishes if any.

### 3.7      PROTECTION

- A.    Protect installed products from damage from weather and other causes during construction.
- B.    Remove and replace finish carpentry materials that are wet, moisture damaged, and mold damaged.
  - 1.    Indications that materials are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
  - 2.    Indications that materials are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION 062023

## SECTION 103100 - MANUFACTURED GAS FIREPLACES

### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Gas fireplaces and accessories including the following:
  - 1. Manufactured indoor gas fireplaces.
  - 2. Manufactured outdoor gas fireplaces.
  - 3. Indoor gas log sets.
  - 4. Outdoor gas log sets.
  - 5. Gas fireplace surrounds.
  - 6. Gas fireplace accessories.

#### 1.2 RELATED SECTIONS

- A. Section 06 10 00 - Rough Carpentry.
- B. Section 22 14 13 - Facility Storm Drainage Piping.
- C. Section 26 05 00 - Common Work Results for Electrical.

#### 1.3 REFERENCES

- A. ANSI Z21.44 - Gas-Fired Gravity and Fan Type Direct Vent Wall Furnaces.
- B. ANSI Z21.88 - Vented Gas Fireplace Heaters.
- C. Z21.50b - Vented Gas Fireplaces.
- D. ANSI Z223.1 - National Fuel Gas Code.
- E. CSA 2.22b - Vented Gas Fireplaces.
- F. CSA 2.33 - Vented Gas Fireplace Heaters.
- G. CAN/ULC S610 - Factory-Built Fireplaces.
- H. UL 127 - Standard for Factory-Built Fireplaces.
- I. UL 907 - Standard for Fireplace Accessories
- J. UL 1482 - Standard for Safety for Solid-Fuel Type Room Heaters.

#### 1.4 SUBMITTALS

- A. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
- B. Shop Drawings: Provide drawing of required clearances, rough-in of enclosure and utilities.

- C. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and finishes.
- D. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square representing actual product.

## 1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum 5 year experience manufacturing similar products.
- B. Installer Qualifications: Minimum 2 year experience installing similar products.
- C. Multiple Installation Mock-Up: Provide a mock-up for evaluation of site and framing preparation techniques and installation workmanship.
  - 1. Provide representative fireplace in area designated by Architect.
  - 2. Do not proceed with remaining units until workmanship, installation and operation are approved by Architect.
  - 3. Remake mock-up unit as required to produce acceptable work.

## 1.6 PRE-INSTALLATION MEETINGS

- A. Convene minimum two weeks prior to starting work of this section.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
- B. Handling: Handle materials to avoid damage.

## 1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

## 1.9 SEQUENCING

- A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

## 1.10 WARRANTY

- A. Warranty: Provide manufacturer's standard warranty against defects in materials and workmanship.

# PART 2 PRODUCTS

## 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

- a) **Heatilator (Basis-of-Design).**
- b) Heat & Glo.
- c) Majestic.
- d) Empire Comfort Systems, Inc.

## 2.2 MANUFACTURED INDOOR GAS FIREPLACES

- A. Compliance - General:
  - 1. Comply with applicable building codes.
  - 2. Comply with ANSI Z21.88/CSA 2.33 or Z21.50b/CSA 2.22b.
- B. Novus Series:
  - 1. Direct Vent: 100% of combustion exhaust and fumes are removed.
  - 2. Controls: WSK200.
  - 3. Fronts-Doors: Stainless Steel.
  - 4. Refractory: Traditional.
  - 5. Model NBV4842 as manufactured by Heatilator.
    - a. Unit Front Width: 47 inches (1194 mm).
    - b. Framing Front Width: 48 inches (1219 mm).
    - c. Unit Back Width: 20-5/8 inches (524 mm).
    - d. Framing Back Width: 48 inches (1219 mm).
    - e. Unit Height: 34-1/2 inches (876 mm).
    - f. Framing Height: 34-7/8 inches (886 mm).
    - g. Unit Depth: 19-1/8 inches (486 mm).
    - h. Framing Depth: 19-5/8 inches (498 mm).
    - i. Glass Size: 42 inches (1067 mm) x 22-5/8 inches (575 mm).
    - j. BTU/Hour Input: 30,000 (8.8 kW).
    - k. Efficiency: Steady State - 77%, AFUE - 56%, Canada EnerGuide - 58%.

## 2.3 MANUFACTURED OUTDOOR GAS FIREPLACES

- A. Outdoor Lifestyles Villa Gas Fireplace:
  - 1. Front-Door: Stainless Steel Operable Doors
  - 2. Refractory: Traditional Refractory.
  - 3. Model VILLA Gas-42 as manufactured by Heat & Glo.
    - a. Unit Front Width: 47 inches (1194 mm).
    - b. Framing Front Width: 48 inches (1219 mm).
    - c. Unit Back Width: 29-3/4 inches (756 mm).
    - d. Framing Back Width: 48 inches (1219 mm).
    - e. Unit Height: 39-1/2 inches (1003 mm).
    - f. Framing Height: 39-3/4 inches (1010 mm).
    - g. Unit Depth: 21-3/8 inches (543 mm).
    - h. Framing Depth: 21-1/2 inches (546 mm).
    - i. Glass Size: 42 inches (1067 mm) x 20-7/8 inches (530 mm).
    - j. BTU/Hour Input: 42,000 (12.3 kW).

## 2.4 GAS FIREPLACE ACCESSORIES

- A. Controls:
  - 1. Remote Controls.



- B. Termination Caps: Gas.
  - 1. Terracotta Termination.
- C. Circulating Fans: Manufacturer's standard circulating fan compatible with specified fireplace.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

### 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

### 3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions, ANSI Z21.44 and the requirements of authorities having jurisdiction.
- B. Use manufacturer's guidelines for minimum clearances to combustibles, walls, and finishes.
- C. Anchor all components firmly in position for long life under hard use.

### 3.4 FIELD QUALITY CONTROL

- A. Upon completion of installation, visually inspect all exposed surfaces. Touch up scratches and abrasions with touch-up paint recommended by the manufacturer, make imperfections invisible to the unaided eye from a distance of 5 feet (1.5m).
- B. Test for proper operation, control and safety devices.
- C. Complete Installer's Warranty Validation Card.

### 3.5 PROTECTION

- A. Protect installed products until completion of project.

END OF SECTION 103100