29 MAR 2018

SECTION 00 91 11

ADDENDUM NO. 1

DATE: March 29, 2018

RE: Abe and Annie Seibel Residence Hall

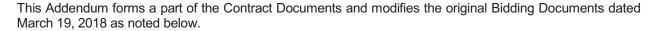
Galveston, TX

EYP Project No. 1016076.01

FROM: EYP/

1111 Louisiana, 26th Floor Houston, TX 77002

TO: Invited Bidders



This Addendum consists of 1 page plus attachments.

REVISED SPECIFICATIONS:

1.01 The following Specifications Sections are revised and reissued herewith:

00 01 00 Table of Contents, 5 pages 00 11 13 Bid Solicitation, 23 pages 08 51 13 Aluminum Windows, 6 pages

08 80 00 Glazing, 6 pages

10 11 01 Visual Display Boards, 3 pages

REVISED DRAWINGS:

1.02 The following 24" by 36" Drawings are revised and reissued herewith:

CS100

AS101

A100, A101, A102, A103

A200, A201, A220

A300, A301, A302, A310, A311

A600

C2.0, C3.0, C4.0, C5.1, C6.0

L101, L201

S101, S102, S103

S310, S312

S410

E0.00

E0.10

E2.01

E3.01

P2.01

END OF ADDENDUM NO. 1

ADD 01

EYP, Inc.

DOCUMENT 00 01 10

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SECTION 00 11 13 BID SOLICITATION

INVITATION

1.01 TO: Invited Bidders

1.02 FROM: The Owner (hereinafter referred to as Owner):

Galveston College

4015 Avenue Q

Galveston, TX 77750

1.03 PROJECT

A. TITLE:

Abe & Annie Seibel Hall 2222 29th Street, Galveston TX EYP Project No. 1016076.01

B. ARCHITECT: (hereinafter referred to as Architect).

EYP Architecture & Engineering 1111 Louisiana, 26th Floor Houston, Texas 77002 (713) 665-5665

1.04 BIDDER QUALIFICATION

- A. The following Contractors are pre-qualified as Prime Bidders:
 - 1. Vaughn Construction, 10355 Westpark Drive, Houston TX 77042. Phone: 713-243-8300.
 - 2. Tellepsen Builders, 777 Benmar Drive, Suite 400, Houston TX 77060. Phone: 281-447-8100.
 - 3. JE Dunn Construction, 10350 Richmond Ave, Suite 900, Houston TX 77042. Phone 713-521-4664.

1.05 BIDDER QUALIFICATION

- A. Bids will be accepted only from invited Bidders.
- B. Bidders are requested to inform Architect within 5 days of date of invitation whether or not they wish to bid.

1.06 BIDDING CONDITIONS

- A. TYPE OF BID: Stipulated sum.
- B. LOCATION OF BID RECEIVER: Galveston College Purchasing Office, 4015 Avenue Q, Galveston, TX 77550.
- C. BID TIME AND DATE: 2:00 PM, April 23, 2018.
 - 1. Bids received after this time and date will not be considered and will be returned unopened.
- D. BID SUBMISSION: Submit bid package in sealed envelope, labeled "BID FOR Abe & Annie Seibel Hall" on outside of envelope.
- E. BID OPENING: Public and read aloud.
- F. BID COPIES: Original plus three.
- G. BID SECURITY: Bid Bond for 5 percent of greatest amount of Bid. Make Bid Security payable to the Owner.
- H. ADDENDA: Interpretations and supplemental instructions will be in the form of written addenda. Acknowledge receipt of addenda on Bid Form.

- I. BONDS: Performance and Payment Bonds in the amount of 100 percent of Contract amount shall be required.
- J. CONTRACT TIME: Complete Work on or before June 2019.
- K. Refer to other bidding requirements described in Document 00 21 13 Instructions to Bidders and Document 00 31 00 Available Project Information .
- L. Submit your offer on the Bid Form provided, Document 00 41 00 Bid Form. Bidders may supplement this form as appropriate.
- M. Your offer will be required to be submitted under a condition of irrevocability for a period of 30 days after submission.
- N. Owner reserves the right to reject any or all bids. Owner does not bind himself to accept the lowest bid or any proposal for this Work or any part thereof. Owner shall have the right to ask for new bids for the whole of the Work or any part thereof.

1.07 DOCUMENTS

- A. DOCUMENTS: Each bidder may obtain digital blackline sets and CD-ROM disks of the Bidding Documents directly from the designated printer for the price of printing and handling.
 - 1. Designated Printer:
 - a. Thomas Reprographics: www.thomasprintworks.com.
 - b. 4235 Richmond Ave.
 - c. Houston, TX 77027
 - d. (713) 621-0022

1.08 PRE-BID CONFERENCE

- A. TIME AND DATE: 2:00 PM, April 10, 2018.
- B. LOCATION: Galveston College Purchasing Office, 4015 Avenue Q, R-253, Galveston, TX 77550.
- C. MEETING MINUTES: Summarized minutes of this conference will be circulated to attendees. These minutes will not form part of the Contract Documents.
 - 1. Information relevant to the Bid Documents will be recorded in an Addendum, issued to Bid Document recipients.

1.09 QUESTIONS

- A. Direct ALL questions concerning the Bid to Brent Oldbury at the Architect's office. Questions and requests for clarification will be distributed to the appropriate consultant for their response.
- B. Only questions and requests for clarifications submitted by PRIME bidders will be addressed. All questions and requests for clarification shall be submitted in written form. Verbal questions and requests for clarification will not be accepted unless exceptional circumstances exist. Such verbal questions and requests shall be followed by written confirmation.
 - Clarifications will be considered when such request includes the name of the inquiring Prime Bidder; stated reference number to the drawing and/or specification section; and the proposed clarification.
- C. Questions and requests for clarification may be faxed or e-mailed to the Architect's office at 713/665-6213 or boldbury@eypae.com. Include complete Project Name and Project Number on all correspondence.
- D. Questions and requests for clarification, which are not otherwise answered or noted in the Bidding Documents, will be clarified or answered by Addendum. Verbal responses will not be given under any circumstances.

EYP, Inc. 00 11 13 - 2 ADD 01

1.10 REQUEST FOR PROPOSAL AND OWNER REQUIRED DOCUMENTS

A. A copy of the Request for Proposal, Additional Bid Requirements and required forms are included with this document.

END OF BID SOLICITATION



Request for Proposal

Project # 1016076.01 Construction of the Galveston College **Abe & Annie Seibel Hall Opening Date: April 23, 2018** (Proposals must be received no later than 2:00 PM)

Please submit one (1) original and three (3) copies to:

Veronica Atterberry Galveston College Purchasing Office 4015 Avenue Q Galveston, Texas 77550 For questions call: 409-944-1213

Email: vatterbe@gc.edu

Vendor guarantees products and services to meet or exceed specifications and industry standards. If unable to quote, please advise at once. Vendors are invited, but not required to attend the opening. Galveston College reserves the right to accept or reject any part of all proposals.

Name of Firm:	
Street Address:	
City/State/Zip:	
Signature:	
Typed Name:	
Title:	
Date:	

Galveston College	Project Title	Construction of the Abe & Annie Seibel Hall
Purchasing Office	RFP #/Project #	Project # 1016076.01
Request for Proposal	Issue Date	March 26, 2018
	Pre-bid Meeting	April 10, 2018 @ 2:00 PM, R-253
	Closing Date & Time	April 23, 2018 @ 2:00 PM

RFP package, identified as Construction of the Annie & Abe Seibel Hall, was prepared by EYP Architecture & Engineering, 1111 Louisiana, 26th Floor, Houston, Texas 77002

It is the Bidders responsibility to ensure that the entire RFP package has been reviewed prior to the Bidders submittal of a proposal. RFP package may be obtained at no cost from Thomas Printworks at 713-621-0022 or vault@thomasprintworks.com, referencing the above project number.

To receive a copy of the RFP or if there are any questions about the content of the RFP, contact Brent Oldbury, Project Architect, at 713-852-3608 or boldbury@eypae.com

I. General and Background Information

A. General Information

- 1. Galveston College is requesting Proposal from qualified vendors for the Construction of the Abe & Annie Seibel Hall. This building will be used for student housing. Authorized vendors who can provide this solution are invited to submit proposals for consideration. Your bid should meet all requirements as delineated in the attached schedule of conditions.
- 2. There is no expressed or implied obligation for Galveston College to reimburse responding firms for any expenses incurred in preparing proposals in response to this request.
- 3. To be considered, one (1) original and three (3) copies, of the proposal must be received by Ms. Atterberry at Galveston College Purchasing Office, 4015 Avenue Q, Galveston, Texas 77550, by 2:00 PM, April 23, 2018. Galveston College reserves the right to reject any or all proposals submitted.
- 4. Bids submitted after the above time will be returned to the Bidder unopened.
- 5. Bids will be opened publicly and read aloud at 2:00 PM at the office of Galveston College Purchasing Office, 4015 Avenue Q, Galveston, Texas, 77550, on the 23 day of April 2018

Pre-bid meeting to be held on April 10, 2018 at 2:00 PM in R-253, at Galveston College

B. Galveston College Background Information

1. Galveston College ("GC" or "the College") is an accredited public two-year community college located in Galveston, Texas. The College has historically served between 2,200 and 2,600 credit students per semester and nearly 10,000 noncredit students per year.

II. Services Required

The Construction of the Abe & Annie Seibel Hall, which will be for student housing.

Please see plan documents provided by the Architects.

III. General Instructions

- 1. The College reserves the right to accept or reject any or all responses and/or parts thereof, and to award based on the best overall response submitted to the District with consideration given to competence and capability to perform in accordance with standard business practices and requirements of the RFP
- 2. Respondents must submit the signature page of this RFP their proposal response, and all additional documents requiring information. It is requested that Respondent provide one (1) original and three (3) copies, of all documents in a sealed envelope and response shall be manually signed in ink by a person having the authority to bind the firm in a contract. Please mark original response as such.
- 3. Time/date stamp clock in the College Business Office shall be the official time of receipt. Responses received in the Business Office after submission deadline shall be returned unopened and will be considered void and unacceptable. Respondents are responsible for making certain Responses are delivered to the Business Office. Mailing of a Response does not ensure that the Response will be delivered on time or delivered at all. It is suggested that some sort of delivery service that provides a receipt is used if the Respondent does not personally hand deliver response. Delivery at any other campus location or any other department is unacceptable.
- 4. Any alteration made prior to opening date and time must be initialed by the signer of the response, guaranteeing authenticity.
- 5. A response may not be withdrawn or canceled by the Respondent prior to the ninety-first (91st) day following the date designated for the receipt of response and only prior to award.
- 6. Responses will be received and publicly acknowledged at the location, date, and time stated above. Respondents, their representatives and interested persons may be present. The responses shall be received and acknowledged only so as to avoid disclosure of the contents to competing Respondents and kept secret during negotiation. However, all responses shall be open for public inspection after the contract is awarded. Trade secrets and any material that is considered to be confidential information contained in the response and identified by Respondent as such will be treated as confidential by the District to the extent allowable in the Open Records Act.
- 7. All proposals, responses, inquiries, or correspondence relating to or in reference to this RFP, and all electronic media, reports, charts, and other documentation submitted by prospers shall become the property of the College when received.
- 8. No oral, telegraphic, telephonic or facsimile responses will be considered.
- 9. The College is by statute exempt from the State Sales Tax and Federal Excise Tax.
- 10. Any interpretations, corrections and/or changes to this Invitation to Bid and Specifications or extensions to the opening/receipt date will be made by addenda to the RFP by the Colleges Purchasing Department. Sole authority to authorize Addenda shall be vested in the College Purchasing Coordinator. Addenda will be forwarded to all who are known to have received a copy of the RFP. Respondents shall acknowledge receipt of all addenda.
- 11. Minimum Standards for Responsible Prospective Respondents: A prospective Respondent must meet the following minimum requirements:
 - i. have adequate financial resources, or the ability to obtain such resources as required;

- ii. be able to provide competent and qualified personnel in a timely manner;
- iii. be able to comply with the required or proposed delivery/completion schedule;
- iv. have a satisfactory record of performance;
- v. have a satisfactory record of integrity and ethics;
- vi. provide a complete and thorough response / submittal; and,
- vii. be otherwise qualified and eligible to receive an award.
- 12. The College may request representation and other information sufficient to determine Respondent's ability to meet these minimum standards listed above.

IV. Responding to the RFP

- A. Your response should be brief and to the point. It should not include materials that do not relate directly to this RFP.
- B. The following information will be used in the evaluation and rating of the awarded proposal, along with other criteria stated in this RFP. Please provide the following:

 (See Form C)
 - 1. Firm name, background, and history
 - 2. Provide a list of all the firm's clients (particularly, Texas clients), and note those clients that are comparable to Galveston College indicating the length of service with each account. The College may contact and/or visit any of these accounts. (*Form B*)
 - 3. Bonds and Insurance requirement:
 - i. The successful Vendor will be required to furnish a certificate of insurance prior to entering the work location with the following minimum coverage's:
 - Worker's Compensation on all employees as required by law.
 - Public Liability \$2,000,000
 - Property Damage \$ 2,000,000
 - ii. A Payment Bond is required if the Contract Price is in excess of \$25,000. The Payment Bond is for the Contract Sum and is payable to the Owner solely for the protection and use of payment bond beneficiaries who have a direct contractual relationship with the Contractor or a Subcontractor.
 - iii. A Performance Bond is required if the contract price is in excess of \$100,000. The Performance Bond is to be for the Contract Sum to guarantee the faithful performance of the Work.
 - iv. Bond Requirements: Each bond will be the responsibility of the Contractor and shall be executed by a corporate surety or sureties authorized to do business in the State of Texas and acceptable to the Owner, and in compliance with the relevant provisions of the Texas Insurance Code.
 - v. Liquidated damages: In the event of a delay to the completion date as per the contract schedule for which Contractor is solely responsible, Contractor shall pay Liquidated Damages to Galveston College at a rate of \$5000.00 per day.
 - Such Liquidated damages shall be deemed to be a genuine pre-estimate of the foreseeable damages incurred by Galveston College due to delay and shall be Galveston College's sole recourse for late performance by Contractor under the Contract.

For the purpose of calculating such Liquidated Damages, a grace period of ten (10) days shall be observed, and the Contract Schedule shall be extended by any additional time or delays outside the sole control of the Contractor or delay not caused by the Contractor, including but not limited to suspension by Galveston College or Contractor, in accordance with the Contract, weather downtime, delay due to Force Majeure, and any time spent or lost on additional work or standby.

- 4. Cost of Services: please use pricing sheets provided.
- 5. Vendor shall provide their Quality of Assurance Process.
- 6. Galveston College reserves the right to further negotiate with the selected vendor/contractor.
- 7. Complete contact information for any questions the committee may have about your proposal including an e-mail address.
- 8. All forms are required and must be included in the bid packet at time of submittal. Forms should be signed as required.
 - i. If any form is incomplete, the proposal will not be accepted.
 - ii. Other required Forms:
 - Vendor Statement
 - Felony Conviction Notice
 - Conflict of Interest Questionnaire
 - House bill 89 Verification Form
- C. The Respondent selected for an award will be the Respondent whose proposal, as presented in the response to this RFP, is the most advantageous to Galveston College. The College is not bound to accept the lowest priced proposal if that proposal is not in the best interest of the College as determined by the College. Taking into consideration the relative importance of the factors set forth in the Invitation to Bid in accordance with Government Code 2254.004.
- D. Responses shall be evaluated on the following criteria: ratings will be based on a scale of 1-10 with 1 being least met, 5 average and 10 most met.
 - 1. Price
 - 2. The reputation of the vendor and the vendor's product
 - 3. The quality of the vendor's goods and services.
 - 4. The extent to which the product meets the needs of the College.
 - 5. The vendor's past relationship with the College
 - 6. The impact on the ability of the district to comply with laws and rules relating to historically underutilized businesses.
 - 7. Total long term cost to the College to acquire the vendor's goods or services
 - 8. For a contract for goods and services, other than goods and services related to telecommunications and information services, building construction and maintenance, or instructional materials, whether the vendor or the vendor's ultimate parent company or majority owners:
 - i. Has its principal place of business in this state; or
 - ii. Employs at least 500 persons in this state
 - 9. Any other relevant factor specifically listed in the request for bids or proposals
- E. Additional Criteria:

- 1. Demonstrated technical and management competence with the Construction of Higher Education Housing as proposed.
- 2. Demonstrated experience with Construction of housing projects, particularly those of higher education.
- 3. Knowledge of current construction codes and safety codes.
- 4. Capability and capacity to perform the services for the project, including Respondents financial resources to perform the work in the time projected.
- 5. The Respondents ability to meet the proposed time of project. Also demonstrated ability to meet schedules on past projects.
- 6. The Qualifications and experience of the team members proposed to manage the project.
- 7. The quality of reference from past customers.
- 8. Include any explanatory information that you feel would be helpful to the college in understanding and evaluating your pricing information.

V. <u>Vendors Profile</u>

A. **General Vendor Information.** Please provide the following information:

- 1. Total number of clients
- 2. Total number of community college clients
- 3. Number of full-time personnel
- 4. Location of headquarters and field offices
- 5. Location of office that would serve this account.

VI. Qualifications

A. Vendor must provide evidence of the following:

- 1. Experience with public community colleges, particularly Texas Community Colleges.
- 2. Financial stability of the company, its record of legal liability claims, and proven commitment to and involvement in the educational community;
- 3. List of references from colleges with comparable profiles and needs;
- 4. have adequate financial resources, or the ability to obtain such resources as required;
- 5. be able to provide competent and qualified personnel in a timely manner;
- 6. be able to comply with the required or proposed delivery/completion schedule;
- 7. have a satisfactory record of performance;
- 8. have a satisfactory record of integrity and ethics;
- 9. provide a complete and thorough response / submittal; and,
- 10. be otherwise qualified and eligible to receive an award.



STANDARD TERMS AND CONDITIONS (Sealed Bids and Proposals)

I. QUANTITIES AND DISCOUNTS LISTED IN THE SPECIFICATIONS:

- 1. The quantities listed on the attached specifications are approximations only. It is possible we might exceed the quantities listed, or not purchase the entire amount specified. The individual departments will decide when and what quantity is required during the fiscal year, and the College will only be responsible for payment for the items which have been purchased and delivered.
- 2. A percentage discount off manufacturer's list price is requested for those items not mentioned in the schedule of items. The vendor may also quote a last column price, cost plus for these items. The amount is to be reported on the "Vendor Information Report" located on the last page.

II. OBLIGATIONS BY THE COMPANY:

- 1. Your completed and signed Vendor statement indicates your compliance to the conditions and specifications. This officer must have the power and authority to obligate the company for all proposals and conditions stated.
- 2. Specifications which refer to brand names are given for reference. Bidders may quote on approved equivalent articles, provided that brand name catalog number(s) and any deviations are noted and complete descriptive literature is furnished.
- 3. Substitutions will not be allowed after a quotation has been submitted for review, and will not be delivered instead of the item quoted, unless the item is of a higher quality than the item specified.
- 4. The Vendor shall not substitute items named in the proposal without the express written consent of the College. Failure of the delivered item(s) to perform as specified, or failure to meet the stated delivery schedule shall release the College from all obligations to the contracting party with regard to the item(s) in question.
- 5. Any specifications a vendor may not agree with must be submitted in writing to the Purchasing Office 7 days in advance of the opening.
- 6. Vendor shall be in compliance with all relevant requirements of the Americans with Disabilities Act (ADA) as applicable to their operations. By submission of a quote response, the vendor acknowledges intention to conform with the ADA requirements. Non-compliance constitutes good cause for the College to suspend a contract with any successful vendor.
- 7. It is understood and agreed that the delivery date and/or date of installation after receipt of a purchase order will not vary from a supplier's quote. In its acceptance of any quotation offer, the College is relying on the promised delivery date and/or installation as material and basic to its acceptance, unless otherwise indicated. In the event of Seller's failure to delivery as and when promised, the College reserves the right to cancel its accepting order, any part thereof, and Seller

- agrees that the College may return all or part of any shipment so made, and may charge Seller with any loss or expense as a result of such failure to deliver as promised.
- 8. In quoting, give complete information in spaces provided; otherwise your offer may not be given consideration. All bid/proposal offers must be signed to be considered.

III. OBLIGATIONS BY THE COLLEGE

- 1. The College reserves the right to separate and accept, or eliminate any item(s) listed under this proposal that it deems necessary to accommodate budgetary and/or operational requirements.
- 2. The College also reserves the right to reject any or all bids submitted, or parts thereof, to waive any formalities or irregularities and to make whatever award is in the best interest of the College.
- 3. In determining to whom to award a contract, the district may consider:
- 4. The purchase price;
- 5. The reputation of the vendor and of the vendor's goods or services;
- 6. The quality of the vendor's goods or services;
- 7. The extent to which the goods or services meet the district's needs;
- 8. The vendor's past relationship with the district;
- 9. The impact on the ability of the district to comply with laws and rules relating to historically underutilized businesses;
- 10. The total long-term cost to the district to acquire the vendor's goods or services;
- 11. Qualifications References, successful implementations with similar schools;
- 12. Long-term vision for the future (Long-term viability);
- 13. Company Viability Financial stability of the vendor; legal liability (has the company ever been sued by a client?);
- 14. Campus Demonstrations Successful demonstration of specific scenarios;
- 15. Any other relevant factor that a private business entity would consider in selecting a vendor; and,
- 16. Any other relevant factor specifically listed in the request for bids or proposals.
- 17. Reference Texas Education Code, SEC 44.031 (b).
- 18. The College shall not be responsible for any goods delivered or services performed without its purchase order, signed by an authorized representative of the Purchasing Office.

IV. DELIVERY OF THE SEALED BID/PROPOSAL:

- 1. Fax transmittal will not be accepted under any circumstances. Sealed bids/proposals must be mailed, hand delivered, or delivered by courier before the stated time.
- 2. All bids/proposals received after the stated time will not be opened, read, or recorded, and will be returned unopened.

V. STATE LAW REQUIREMENTS

- 1. This agreement will be governed and construed according to the laws of the State of Texas. This is performable in Galveston County.
- All equipment and services furnished under this contract shall comply with applicable laws, ordinances and regulations. The Vendors shall give all notices and comply with the laws, ordinances, rules and regulations, and without such notice to the authorized College's representative, the Vendor shall bear all costs arising therefrom.
- 3. On May 30, 1995, Governor George Bush signed Senate Bill 1. It became effective on the day he signed it. The following is a requirement included in this law. It is mandatory that the College must include this in all specifications. Each vendor must respond to this section of the law.

Section 44.034 TEC. Notification of Criminal History of Contractor.

- (a) A person or business entity that enters into a contract with a school district must give advance notice to the district if the person or an owner or operator of the business entity has been convicted of a felony. The notice must include a general description of the conduct resulting in the conviction of a felony.
- (b) A school district may terminate a contract with a person or business entity if the district determines that the person or business entity failed to give notice as required by Subsection (a) or misrepresented the conduct resulting in the conviction. The district must compensate the person or business entity for services performed before the termination of the contract.
- (c) This section does not apply to a publicly held corporation.

CONFLICT OF INTEREST

The College District shall not enter into a purchasing contract with businesses in which a board member, member or the faculty, student, or an immediate family member of a board member, member of the faculty, or a student has an interest that, in the opinion of the president, could be viewed as a conflict of interest.

Section 176.006 Disclosure Requirements for Vendors and Other Persons; Questionnaire,

During the 2005 legislative session, House Bill 914, passed, and became effective on January 1, 2006. The bill enacts Local Government Code 176. It requires a vendor that wishes to conduct business or be considered for business with a local government entity to file a "conflict of interest questionnaire." Failure to abide by these new statutory requirements can result in possible criminal penalties. It is mandatory that the College must include this in all specifications. Each financial institution must respond to this section of the law.

House Bill 1295 (If Awarded Contract)

The Texas Legislature adopted House Bill 1295, which was added to Section 2252.908 of the Government Code. The law states that a governmental entity agency or state agency may not enter into certain contracts with a business entity unless the business submits a disclosure of interested parties (Form 1295). This disclosure requirement applies to a contract entered into on or after January 1, 2016.

If awarded a contract, the vendor may be required to complete and submit this form. GC will be unable to execute and services cannot be performed until the process is complete.

Introduction:

In 2015, the Texas Legislature adopted House Bill 1295, which added section 2252.908 of the Government Code. This new law states that a governmental entity or state agency may not enter into certain contracts with a business entity unless the business entity submits a disclosure of interested parties to the governmental entity or state agency at the time the business entity submits the signed contract to the governmental entity or state agency. The law applies only to a contract of a governmental entity or state agency that either (1) requires an action or vote by the governing body of the entity or agency before the contract may be signed or (2) has a value of at least \$1 million. Note: Galveston College require that all contracts valued at \$50,000 or more be approved by its governing body, the Board of Reagents.

The Texas Ethics Commission adopted rules necessary to implement that law. The Commission adopted the Certificate of Interested Parties Form (Form 1295) on October 5, 2015. The Commission also adopted Chapter 46 on November 30, 2015 in furtherance of that law.

VI. INTERPRETATIONS OF THE SPECIFICATIONS:

- 1. Only the interpretation or correction so given by the Director of Purchasing, in writing, shall be binding and prospective Vendors are advised that no other source is authorized to give information concerning, or explain or interpret, the bid/proposal document.
- 2. Every request for such interpretation or correction must be in writing, addressed to the Director of Purchasing. All such interpretation and supplemental instructions will be in the form of written

addenda to the solicitation documents prior to the openings. Your questions concerning the specifications must be submitted in writing or by fax to (409) 944-1506, email, vhenries@gc.edu. Answer(s) may be sent by FAX or email to all known possible vendors on question(s) to conditions or specification(s).

VII. WARRANTIES:

1. Detailed explanation of all warranties must be provided with the bid/proposal.

VIII. <u>DELIVERY EXPECTATIONS:</u>

- 1. The items delivered must be FOB, Galveston College, 4015 Avenue Q, Galveston, Texas, 77550, and delivery and installation must be made in accordance with this specification.
- 2. Delivery time must show either the number of days required to deliver or the exact date of delivery of the items under normal conditions after receipt of the Purchase Order to the exact location.
- 3. The contractor must notify the Purchasing Office not later than 72 hours in advance of shipments not being fulfilled as specified.

IX. <u>TAX EXEMPTION:</u>

1. The district is exempt from State Tax and Local Tax. **Do not include tax in your bid**. If it is determined that tax was included in the bid it will not be included in the tabulation or in any awards. Tax exemption certificates will be furnished upon request.

X. PRICE QUOTATIONS:

- 1. A response may not be withdrawn or canceled by the Respondent prior to the ninety-first (91st) day following the date designated for the receipt of response and only prior to award.
- 2. Unit price on quantity specified, extend, and show total. The unit price shall always govern.
- 3. Texas law states businesses operating outside of Texas must state a percentage cost added to a bid, if the state will reciprocate a percentage increase in a Texas bid. Place this information on the Vendor Information Report.

XI. WITHHOLDING OF FUNDS:

1. The College may withhold 25% of the final payment when applicable for all technical equipment (including software) provided to the College verifying receipt of documentation and the performance of the equipment for 30 days.

XII. ADJUSTMENTS AND CANCELLATIONS:

1. All adjustments and cancellations will be made by the Purchasing Office and confirmed by FAX or email.

XIII. GENERAL CONDITIONS:

1. You are notified that although the College is required to submit purchases of all contracts of \$10,000 to competitive bidding or proposals, it is not required to accept the lowest bid/proposal. In such

purchases the lowest bid/proposal may be rejected if the Board of Regents, in the exercise of its best judgment, feels that the bid/proposal of one other than the low bidder/proposer will best serve the interest of the College.

2. Galveston College reserves the right to accept or reject any or all quotations/proposals and/or bids by item or in entirety and to waive all formalities. This inquiry implies no obligation on the part of the buyer, nor does the buyer's silence imply any acceptance or rejection of any quotation offer.

XIV. PURCHASE ORDER:

1. The College shall not be responsible for any goods delivered or services performed without its Purchase Order, signed by an authorized representative.

XV. AWARDING THE BID/PROPOSAL:

- 1. The successful vendor(s) may be selected based on the criteria previously listed, as well as, the prices offered for the items listed, the discounted price of the items not mentioned in this package, the length of the time the contract is guaranteed, and/or the quality of the services offered.
- 2. The College reserves the right to award to multiple or single vendors. If the company does not wish for the bid/proposal submitted to be split, the company must state "this bid/proposal is all or nothing".
- 3. The College will award by package total, by line item, or total cost of the bid/proposal whichever is in the best interest.

END OF DOCUMENT

FORM A

Galveston College Project # 1016076.01 Construction of the Galveston College Abe & Annie Seibel Hall

PRICE PROPOSAL

Use bid form Provided in the EYP Architecture and Engineering bid documents

For the price(s) listed below, our firm hereby offers to provide Galveston College with a proposal for consideration.
Company Name
RID FORM

Form B

REFERENCE DATA SHEET

Vendor:	
	tact person, telephone number, and appropriate information on the with requirements similar to those included in this proposal. ollege's Discretion.
Company Name	
Address (include ZIP)	
Contact Person	Phone Number
Product(s) and/or Service(s) used	
Company Name	
Address (include ZIP)	
Contact Person	Phone Number
Product(s) and/or Service(s) used	
Company Name	
Address (include ZIP)	
Contact Person	Phone Number
Product(s) and/or Service(s) used	
Company Name	
Address (include ZIP)	
Contact Person	Phone Number
Product(s) and/or Service(s) used	

Form C

VENDOR QUESTIONNAIRE

Please answer all questions. Attach additional sheets as necessary

usiness		

1.	Name of the firm under which y	ou do business:			
2.	Address:				
	Phone No: State Fax No:			te	
	E-mail:	Fede	ral Tax ID:		
	Tax ID#	(11-d	igit comptroller tax pa	ıyer #)	
	Type of Organization: (check all	applicable)			
	<> Individually –Owned	<> Partnership	<> Corporation	<> Joi	nt Venture
	<> Private If a corporation, enter the date of	<> Public of incorporation and			
	Date:	State: _		 	
4.	Name of Person Assigned to Ad	count:			
5.	Number of Employees:	·····			
6.	The number of years you have	been in business ur	nder the present firm I	name:	
7.	Enter any other names your firn years for each:	n has done busines	s under, indicate the o	dates, loca	tions, and number of
	Identify name, title and telephor bind the Contractor to a contractor	ne number of persor	n(s) in your organizati		
Qι	ualifications and Experience:				
8.	Describe the general backgrour	nd and services prov	vided by your firm; us	e additiona	al sheets as necessary
9.	Qualifications of the general pro	ject manager/supe	visor assigned to this	account:	

FORM D VENDOR STATEMENT

Galveston College **Purchasing Office** 4015 Avenue Q Galveston, Texas 77550

Having carefully examined the specifications and conditions prepared by the Purchasing Office, Galveston College and agreeing to conform to conditions set out in the contract, we, the undersigned, propose to furnish all supplies and/or perform all services as awarded per our bid, to subsequently guarantee materials delivered as set in the specifications, and to replace any item damaged in shipment.

The undersigned affirms that they are duly authorized to execute this contract, that this company, corporation, firm, partnership or individual has not prepared this bid in collusion with any other bidder, and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned or by any employee or agent to any other person engaged in this type of business prior to the official opening of this bid.

1.	In the event the undersigned Bidder intends to deviate from the general terms and conditions or specifications, a statement of deviation and description of changes must be attached to this bid.							
2.	All Bidders must co	omplete this page, sig	gn, and return with l	bid or bid m	ay be considered No	n-Responsive.		
3.	•	The undersigned Bidder certifies as indicated that it is exempt from or is current in payment of all franchise tax due Exempt Current						
4. Our bid is submitted according to (check appropriately)								
	No deviation	_ Yes deviation	(Statement/Des	scription At	tached)			
NAM	IE OF FIRM		AGENT	TITLE/OF	FICIAL POSITION	_		
SIGN	IATURE OF AGENT	Γ						
MAII	LING ADDRESS			CITY	STATE	ZIP		
PHO!	NE NUMBER		FAX 1	NUMBER				

FORM E

FELONY CONVICTION NOTICE

Statutory citation covering notification of criminal history contractor is found in the Texas Education Code 44.034. Following is an example of a felony conviction notice:

FELONY CONVICTION NOTIFICATION

State of Texas Legislative Senate Bill No. 1, Section 44.034, Notification of Criminal History, Subsection (a), states "a person or business entity that enters into a contract with a school district must give advance notice to the district if the person or an owner or operator of the business entity has been convicted of a felony. The notice must include a general description of the conduct resulting in the conviction of a felony."

Subsection (b) states "a school district may terminate a contract with a person or business entity if the district determines that the person or business entity failed to give notice as required by Subsection (a) or misrepresented the conduct resulting in the conviction. The district must compensate the person or business entity for services performed before the termination of the contract."

THIS NOTICE IS NOT REQUIRED OF A PUBLICLY-HELD CORPORATION

I, the undersigned agent of the firm named below, certify that the information concerning notification of felony convictions has been reviewed by me and the following information furnished is true to the best of my knowledge.

VE	NDOR'S NAME
	THORIZED COMPANY OFFICIAL'S NAME (Printed)
Α.	My firm is a publicly held corporation, therefore, this reporting requirement is not applicable. Signature of Company Official:
В.	My firm is not owned nor operated by anyone who has been convicted of a felony: Signature of Company Official:
C.	My firm is owned or operated by the following individual(s) who has/have been convicted f a felony:
	Name of Felon(s):
	Details of Conviction(s):
	Signature of company Official:

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity					
This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.	OFFICE USE ONLY				
This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).	Date Received				
By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.					
A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.					
Name of vendor who has a business relationship with local governmental entity.					
Check this box if you are filing an update to a previously filed questionnaire. (The law recompleted questionnaire with the appropriate filing authority not later than the 7th business you became aware that the originally filed questionnaire was incomplete or inaccurate.)	ss day after the date on which				
Name of local government officer about whom the information is being disclosed.					
Name of Officer					
Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary. A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor? Yes No B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity? Yes No					
Describe each employment or business relationship that the vendor named in Section 1 n other business entity with respect to which the local government officer serves as an ownership interest of one percent or more.					
Check this box if the vendor has given the local government officer or a family member as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.					
7					
Signature of vendor doing business with the governmental entity	Dale				

House Bill 89 Verification Form

The undersigned affirms that he/she is duly authorized to provide this information by the person(s) or business entity making the proposal and the information provided below concerning companies that boycott Israel thoroughly reviewed and verified and is, therefore, current, true and accurate to the best of my knowledge.

Pursuant to the provisions of Subtitle F, Title 10, Texas Government Code, section 2270.001:

- (1) "Boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes, and
- (2) "Company" means a for profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or any limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of those entities or business associations that exist to make a profit.
 - Does not boycott Israel currently, and
 - Will not boycott Israel during the term of the contract with Galveston College.
 - Is not currently listed on the State of Texas Comptroller's Companies that Boycott Israel List located at http://comptroller.texas.gov/purchasing/publications/divestment.php

Name of Business Entity:
Authorized Signature:
Printed Name & Title:

IF AWARDED THE CONTRACT

House Bill 1295 (If Awarded Contract)

The Texas Legislature adopted House Bill 1295, which was added to Section 2252.908 of the Government Code. The law states that a governmental entity agency or state agency may not enter into certain contracts with a business entity unless the business submits a disclosure of interested parties (Form 1295). This disclosure requirement applies to a contract entered into on or after January 1, 2016.

If awarded a contract, the vendor may be required to complete and submit this form. GC will be unable to execute and services cannot be performed until the process is complete.

Introduction:

In 2015, the Texas Legislature adopted House Bill 1295, which added section 2252.908 of the Government Code. This new law states that a governmental entity or state agency may not enter into certain contracts with a business entity unless the business entity submits a disclosure of interested parties to the governmental entity or state agency at the time the business entity submits the signed contract to the governmental entity or state agency. The law applies only to a contract of a governmental entity or state agency that either (1) requires an action or vote by the governing body of the entity or agency before the contract may be signed or (2) has a value of at least \$1 million. Note: Galveston College require that all contracts valued at \$50,000 or more be approved by its governing body, the Board of Reagents.

The Texas Ethics Commission adopted rules necessary to implement that law. The Commission adopted the Certificate of Interested Parties Form (Form 1295) on October 5, 2015. The Commission also adopted Chapter 46 on November 30, 2015 in furtherance of that law.

Filing Process:

On January 1, 2016, the Commission made available on its website a new application that must be used to create a Certificate of Interested Parties Form 1295. A business entity must use the application to enter the required information to create Form 1295 and print a copy of the completed Form, which will include a unique certification number. <u>An authorized agent of that business entity must sign the printed copy of the Form and have the form notarized.</u> The completed Form 1295 must then be filed with the governmental body or state agency with which the business entity is entering into the contract (Galveston College, in this case).

The governmental entity or state agency must notify the Commission, using the Commission's application, of the receipt of the filed Form 1295 not later than the 30th day after the date the contract binds all parties to the contract. The Commission will post the completed Form 1295 on its website within seven business days after receiving notice from the governmental entity or state agency.

Information regarding how to use the filing application is available here:

https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm. *Please click on the links under "Instructional Videos for Business Entities" and the "Frequently Asked Questions" for very helpful information.*

Summary:

If you submitted an offer that may result in a contract valued at \$50,000 or more, and that offer is accepted by the Galveston College Board of Regents, then you will be contacted by the Purchasing Department who will instruct you to complete Form 1295 on the Texas Ethics Commission website:

https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm. Please note that you must then print the Form, sign it, have it notarized, and then finally deliver it back to Galveston College Purchasing Office.

CERTIFICATE OF INTERESTED PARTIES					FORM 1295			
	Complete Nos. 1 - 4 and 6 if the Complete Nos. 1, 2, 3, 5, and 6	OFFI	OE UBE ONLY					
1	Name of business entity filing form, entity's place of business.	ess						
2	Name of governmental entity or stat which the form is being filed.							
3	3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.							
4		City, State, Country	Natu	ne of Interes	of Interest (check applicable)			
	Name of Interested Party	(place of business)	Ç.	ntrolling	Intermediary			
		All xt.						
Г		0, 6.						
		till Tal						
		5. 5.						
		10 110						
Г		(S)						
		7.						
	2	79						
5	Check only if there is NO Interested	Party.						
6	AFFIDAVIT	I swear, or affirm, under penalty of perjury	, that th	e above disclo	sure is true and correct.			
	Signature of authorized agent of contracting business entity							
	AFFIX NOTARY STAMP / SEAL ABOVE							
	Swom to and subscribed before me, by the said, this the day							
	of, 20, to certify which, witness my hand and seal of office.							
	Signature of officer administering oath	Printed name of officer administering oath		Title of office	er administering oath			
	ADD ADDITIONAL PAGES AS NECESSARY							

SECTION 08 51 13 ALUMINUM WINDOWS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Extruded aluminum windows with fixed sash.
- B. Factory glazing.

1.02 RELATED REQUIREMENTS

- A. Section 05 50 00 Metal Fabrications: Steel lintels.
- B. Section 07 90 05 Joint Sealers: Perimeter sealant and back-up materials.
- C. Section 08 80 00 Glazing.

1.03 REFERENCE STANDARDS

- A. AAMA/WDMA/CSA 101/I.S.2/A440 North American Fenestration Standard/Specification for windows, doors, and skylights; 2011.
- B. AAMA CW-10 Care and Handling of Architectural Aluminum From Shop to Site; 2015.
- C. AAMA 1503 Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections; 2009.
- D. AAMA 2603 Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2015.
- E. AAMA 2605 Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels; 2013.
- F. ASTM A123/A123M Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2015.
- G. ASTM B221 Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2014.
- H. ASTM B221M Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes [Metric]; 2013.
- ASTM D2244 Standard Practice for Calculation of Color Differences from Instrumentally Measured Color Coordinates: 2011.
- J. ASTM D4214 Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films; 2007.
- K. ASTM D523 Standard Test Method for Specular Gloss; 2014.
- L. ASTM E1966 Standard Test Method for Fire Resistive Joint Systems; 2007 (Reapproved 2011).
- M. ASTM E330/E330M Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference; 2014.
- N. ASTM E1105 Standard Test Method for Field Determination of Water Penetration of Installed Exterior Windows, Skylights, Doors, and Curtain Walls, by Uniform or Cyclic Static Air Pressure Difference; 2015.
- O. FLA (PAD) Florida Building Code Online Product Approval Directory; database at www.floridabuilding.org.
- P. TDI Texas Revisions to the 2006 International Building Code; 2008.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene one week before starting work of this section.

1.05 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide component dimensions, information on glass and glazing, internal drainage details, and descriptions of hardware and accessories.
- C. Performance Validation: Provide specified performance validation before submitting shop drawings or starting fabrication.
- D. Shop Drawings: Prepared by system manufacturer. Indicate opening dimensions, framed opening tolerances, method for achieving air and vapor barrier seal to adjacent construction, anchorage locations, glazing, and installation requirements.
 - 1. Shop drawings shall be a complete representation of any and all work included for a complete and proper installation of the fixed glazing system including but not limited to:
 - a. Extruded framing, anchors, and brackets, wall thicknesses.
 - b. Joinery, joinery seals, and sealant types fully noted.
 - c. Flange continuity through the corners and their seals which shall be compatible with perimeter flashing system.
 - d. Fasteners and anchors with anchor sizes, types, and spacing fully noted.
 - 2. Drawings sealed and signed by Professional Engineer licensed at the State in which the Project is located.
- E. Samples: Submit two samples, 12 by 12 inch in size illustrating typical corner construction, accessories, and finishes.
- F. Grade Substantiation: Prior to submitting shop drawings or starting fabrication, submit one of the following showing compliance with specified grade:
 - 1. Evidence of AAMA Certification.
 - 2. Evidence of WDMA Certification.
 - Evidence of CSA Certification.
 - 4. Test report(s) by independent testing agency itemizing compliance and acceptable to authorities having jurisdiction.
- G. Test Reports: Prior to submitting shop drawings or starting fabrication, submit test report(s) by independent testing agency showing compliance with performance requirements in excess of those prescribed by specified grade.
- H. Submit two samples, 3 x 5 inches of aluminum finish.
- Test Reports: Test reports, less than 24 months old, on mock-up of a system which, in Architect's opinion, is similar in scope and configuration to specified construction and certifies compliance with Performance Requirements.
- Report of field testing for water leakage.
- K. Design Data: Provide complete calculations on structural aspects of window design and application including framing deflections and stresses, anchor stresses, effects of sunshades, sunshade components and the localized effects as prepared, sealed and signed by a structural engineer licensed by the State in which the Project is located.
- L. Manufacturer's Installation Instructions: Include complete preparation, installation, and cleaning requirements.
- M. Operation and Maintenance Data: Operation and maintenance instructions.
- N. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.06 QUALITY ASSURANCE

- A. Designer Qualifications: Design structural support framing components under direct supervision of a Professional Structural Engineer experienced in design of this Work and licensed at the State in which the Project is located.
 - Prepare, certify, and submit in 8½" x 11" format a fully coordinated set of calculations that substantiate and justify the compliance of the complete application of the Work with this section including; embeds and inserts, anchors and fasteners, deflections and stresses of framing members and ancillary supports, structural sealant stresses, and consideration of movement and tolerance.
- B. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum three years of documented experience.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Comply with requirements of AAMA CW-10.
- B. Protect finished surfaces with wrapping paper or strippable coating during installation. Do not use adhesive papers or sprayed coatings that bond to substrate when exposed to sunlight or weather.

1.08 FIELD CONDITIONS

- A. Do not install sealants when ambient temperature is less than 40 degrees F.
- B. Maintain this minimum temperature during and 24 hours after installation of sealants.

1.09 WARRANTY

- A. See Section 01 78 00 Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a five year period after Date of Substantial Completion.
- C. Provide five year manufacturer warranty against failure of glass seal on insulating glass units, including interpane dusting or misting. Include provision for replacement of failed units.
- D. Provide twenty year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking.
 - Chalking: No more than that represented by a No.8 rating based on ASTM D4214.
 - 2. Color Retention: No fading or color change in excess of 5 Hunter color difference units, calculated in accordance with ASTM D2244.
 - Gloss Retention: Minimum of 30 percent gloss retention, when tested in accordance with ASTM D523.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Basis of Design: Thermal Windows Series 4150.
- B. Aluminum Windows:
 - 1. Kawneer Company, Inc.: www.kawneer.com.
 - 2. TRACO: www.traco.com.

2.02 WINDOWS

- A. Aluminum Windows: Extruded aluminum frame and sash, factory fabricated, factory finished, with operating hardware, related flashings, and anchorage and attachment devices.
 - 1. Frame Depth: 4 inches.
 - 2. Fabrication: Joints and corners flush, hairline, and weatherproof, accurately fitted and secured; prepared to receive anchors; fasteners and attachments concealed from view; reinforced as required for operating hardware and imposed loads.
 - 3. Perimeter Clearance: Minimize space between framing members and adjacent construction while allowing expected movement.

- 4. Movement: Accommodate movement between window and perimeter framing and deflection of lintel, without damage to components or deterioration of seals.
- 5. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.
- 6. Fabricate internal blind unit frames with mitered and reinforced corners. Assemble internal blind unit operable panel complete with hardware and internal linkage within exterior window unit framing under the responsibility of one manufacturer.
- 7. Thermal Movement: Design to accommodate thermal movement caused by 180 degrees F surface temperature without buckling stress on glass, joint seal failure, damaging loads on structural elements, damaging loads on fasteners, reduction in performance or other detrimental effects.
- 8. Overall U-value, Including Glazing: 0.50, minimum in accordance with AAMA 1503.
- B. Performance Requirements: Provide products that comply with the following:
 - 1. Grade: AAMA/WDMA/CSA 101/I.S.2/A440 requirements for specific window type:
 - a. Performance Class (PC): LC.
 - 2. Performance Validation: Windows shall comply with AAMA/WDMA/CSA 101/I.S.2/A440 performance requirements as indicated by having AAMA, WDMA, or CSA certified label, or an independent test report for indicated products itemizing compliance and acceptable by authorities having jurisdiction.
 - 3. Design and size windows to withstand the following load requirements, when tested in accordance with ASTM E330/E330M using test loads equal to 1.5 times the design wind loads with 10 second duration of maximum load:
 - 4. Wind-Borne-Debris Resistance: Identical full-size glazed assembly without auxiliary protection, having Florida Building Code "FLA (PAD)" approval for Large and Small Missile impact and pressure cycling at design wind pressure.
 - 5. Overall U-value, Including Glazing: 0.5, maximum, measured on the window size required for this project.
 - 6. Conform to TDI Texas Revisions to International Building Code for Windstorm Resistant Construction, Seaward Zone.
 - a. Conform to ASTM E1966 Large Missle Test.
- C. Punched Windows, Ribbon Windows; Fixed, Non-Operable Type:
 - 1. Basis of Design: Series 4150 manufactured by ThermalWindows.
 - 2. Construction: Thermally broken. Poured-in-place, two part polyurethane.
 - 3. Glazing: Wet glazed.
 - 4. Glazing Method: Inside.
 - 5. Muntins: Frame applied snap-on aluminum muntins as detailed with sloped profiles at exterior window surface.
 - a. Provide frame-applied snap-on muntins on exterior side of all windows on East Elevation.
 - b. Stick-on, glue-on and glaze-in type muntins unacceptable.
 - 6. Panning: Custom aluminum panning and trim as detailed.
 - 7. Mounting: Full surround flanges.
 - 8. Exterior Finish: Pigmented organic coating.
 - 9. Interior Finish: Pigmented organic coating.

2.03 COMPONENTS

- A. Glazing: Sealed Insulated Glass Unit: Factory glazed, set in butyl tape and secured with snap on aluminum glazing stop at interior.
 - 1. Overall Thickness: 1 inch
 - 2. Outer Lite: 3/16" annealed Comfort Select 28

- a. Tint: Gray.
- 3. Laminated Inner Lite:
 - a. Outer Pane: 1/8 inch clear annealed glass
 - b. Interlayer: 0.090 DuPont SentryGlass Plus Interlayer
 - c. Inner Pane: 1/8 inch clear annealed glass.
- B. Member Wall Thickness: Framing member minimum wall thickness of 0.078 inch providing structural strength to meet performance requirements.
- C. Interior trim, mullion covers, stool extensions: Formed or extruded aluminum, minimum 0.125 inch thickness for framing members, 0.050 inch thickness for glazing stops and similar components.
- D. Fasteners: Stainless steel.
- E. Perimeter Anchors: Aluminum.
- F. Sealant for Setting Sills and Sill Flashing: Non-curing butyl type.
- G. Sealant and Backing Materials: As specified in Section 07 90 05.
- H. Transition Assembly: Pre-engineered, finished aluminum and silicone materials forming an air and vapor barrier transition assembly for bridging continuously between the window assembly and adjacent air and vapor barrier materials.
 - 1. Product: Proglaze ETA System 1 manufactured by Tremco: www.tremcosealants.com.

2.04 MATERIALS

- A. Extruded Aluminum: ASTM B221 (ASTM B221M), 6063 alloy, T6 temper.
- B. Concealed Steel Items: Profiled to suit mullion sections; galvanized in accordance with ASTM A123/A123M.

2.05 FINISHES

- A. Finish:
 - Pigmented Organic Coatings: AAMA 2603; polyester or acrylic baked enamel finish; color as scheduled.
 - 2. Finish Color: Bronze.
- B. Apply 1 coat of bituminous coating to concealed aluminum and steel surfaces in contact with dissimilar materials.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that wall openings and adjoining air and vapor seal materials are ready to receive aluminum windows.

3.02 INSTALLATION

- A. Install windows in accordance with manufacturer's instructions.
- B. Install window assembly in accordance with AAMA/WDMA/CSA 101/I.S.2/A440.
- C. Use anchorage devices to securely attach frame assembly to structure.
- D. Attach window frame and shims to perimeter opening to accommodate construction tolerances and other irregularities.
- E. Separate dissimilar metals. Use gasketed fasteners where required to eliminate possibility of corrosive or electrolytic action between metals.
- F. Align window plumb and level, free of warp or twist. Maintain dimensional tolerances and alignment with adjacent work.
- G. Install sill and sill end angles.

- H. Provide thermal isolation where components penetrate or disrupt building insulation. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.
- Install transition assembly. Coordinate attachment and seal of perimeter air barrier and vapor retarder materials.
- J. Install glass and infill panels in accordance with requirements specified in Section 08 80 00.
- K. Install perimeter sealant in accordance with requirements specified in Section 07 90 05.

3.03 TOLERANCES

A. Maximum Variation from Level or Plumb: 1/16 inches every 3 ft non-cumulative or 1/8 inches per 10 ft, whichever is less.

3.04 FIELD QUALITY CONTROL

- A. Provide the services of the manufacturer's field representative to observe installation and make report.
- B. Contractor shall employ and pay for services of an independent testing agency to perform specified testing.
- C. Make available to testing laboratory for conducting testing, scaffolding, rigging and incidental equipment as required to access the test specimens.
- D. Test installed windows for compliance with performance requirements for water penetration, in accordance with ASTM E1105 using uniform pressure and the same pressure difference as specified for laboratory testing.
 - Perform test on the first glazed unit installed. Installation of subsequent units shall not proceed until unit has passed test. In the even of test failure, perform required remedial Work and retest. Units subsequently installed shall include modifications made on unit that has passed test.
 - 2. At 50 percent of system completion, perform tests on three installed glazed units as selected by Architect. Installation of subsequent units shall not proceed until units have passed test. In event of test failure, perform required remedial Work and retest. Repeat procedure until units pass test. Units subsequently installed shall include modifications made on units that passed test.
 - 3. At 75 percent of system completion, perform tests on three installed glazed units as selected by Architect. Installation of subsequent units shall not proceed until units have passed test. In event of test failure, perform required remedial Work and retest. Repeat procedure until units pass test. Units subsequently installed shall include modifications made on units that passed test.
 - 4. In the event that system failures necessitate retesting, pay costs of retesting plus fees and expenses incurred by Architect and Owner's Consultants.
 - 5. If any window fails, test additional windows at Contractor's expense.
- E. Correct windows that have failed field testing and retest until performance is satisfactory.

3.05 CLEANING

- A. Remove protective material from factory finished aluminum surfaces.
- B. Remove excess glazing sealant by moderate use of mineral spirits or other solvent acceptable to sealant and window manufacturer.

END OF SECTION

EYP, Inc. 08 51 13 - 6 ADD 01

SECTION 08 80 00 GLAZING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Insulating glass units.
- B. Glazing units.
- C. Glazing compounds and accessories.

1.02 RELATED REQUIREMENTS

- A. Section 07 92 00 Joint Sealants: Sealants for other than glazing purposes.
- B. Section 08 11 13 Hollow Metal Doors and Frames: Glazed lites in doors and borrowed lites.
- C. Section 08 14 16 Flush Wood Doors: Glazed lites in doors.

1.03 REFERENCE STANDARDS

- A. 16 CFR 1201 Safety Standard for Architectural Glazing Materials; current edition.
- B. ANSI Z97.1 American National Standard for Safety Glazing Materials Used in Buildings, Safety Performance Specifications and Methods of Test; 2010.
- C. ASCE 7 Minimum Design Loads for Buildings and Other Structures; 2010, with 2013 Supplements and Errata.
- D. ASTM C864 Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers; 2005 (Reapproved 2011).
- E. ASTM C920 Standard Specification for Elastomeric Joint Sealants; 2014.
- F. ASTM C1036 Standard Specification for Flat Glass; 2011.
- G. ASTM C1048 Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass; 2012.
- H. ASTM C1193 Standard Guide for Use of Joint Sealants; 2013.
- I. ASTM C1376 Standard Specification for Pyrolytic and Vacuum Deposition Coatings on Flat Glass; 2015.
- J. ASTM E1300 Standard Practice for Determining Load Resistance of Glass in Buildings; 2012a.
- K. ASTM E2190 Standard Specification for Insulating Glass Unit Performance and Evaluation; 2010.
- L. GANA (GM) GANA Glazing Manual; 2009.
- M. GANA (SM) GANA Sealant Manual; 2008.
- N. IGMA TM-3000 North American Glazing Guidelines for Sealed Insulating Glass Units for Commercial & Residential Use; 1990 (2004).
- O. NFRC 100 Procedure for Determining Fenestration Product U-factors; 2014.
- P. NFRC 200 Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence; 2014.
- Q. NFRC 300 Test Method for Determining the Solar Optical Properties of Glazing Materials and Systems; 2014.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; require attendance by each of the affected installers.

B. Coordinate with installation of other components that comprise the glazing systems.

1.05 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data on Insulating Glass Unit and Glazing Unit Glazing Types: Provide structural, physical and environmental characteristics, size limitations, special handling and installation requirements.
- C. Product Data on Glazing Compounds and Accessories: Provide chemical, functional, and environmental characteristics, limitations, special application requirements. Identify available colors.
- D. Samples: Submit two samples 12 by 12 inch in sizeof glass units, showing coloration and design.
- E. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.06 QUALITY ASSURANCE

- A. Source Limitations: Obtain glass and fabricated glass products through one source from a single manufacturer for each glass type.
- B. Perform Work in accordance with GANA (GM), GANA (SM), and IGMA TM-3000 for glazing installation methods.
- C. Fabricator Qualifications: Company specializing in work of this section with minimum ten years of documented experience.
- D. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years documented experience.
- E. Electrical Components: Listed and classified by UL as suitable for the purpose specified and indicated.

1.07 FIELD CONDITIONS

- A. Do not install glazing when ambient temperature is less than 40 degrees F.
- B. Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

1.08 WARRANTY

- A. See Section 01 78 00 Closeout Submittals, for additional warranty requirements.
- B. Insulating Glass Units: Provide a five (5) year manufacturer warranty to include coverage for seal failure, interpane dusting or misting, including replacement of failed units.
- C. Low-e Coating: Provide a ten (10) year warranty to include coverage for deterioration of low-e coating and replacement of same.

PART 2 PRODUCTS

2.01 PERFORMANCE REQUIREMENTS - EXTERIOR GLAZING ASSEMBLIES

- A. Provide type and thickness of exterior glazing assemblies to support assembly dead loads, and to withstand live loads caused by positive and negative wind pressure acting normal to plane of glass.
 - 1. Design Pressure: Calculated in accordance with ASCE 7.
 - 2. Comply with ASTM E1300 for design load resistance of glass type, thickness, dimensions, and maximum lateral deflection of supported glass.
 - Provide glass edge support system sufficiently stiff to limit the lateral deflection of supported glass edges to less than 1/175 of their lengths under specified design load.
 - 4. Glass thicknesses listed are minimum.

- B. Vapor Retarder and Air Barrier Seals: Provide completed assemblies that maintain continuity of building enclosure vapor retarder and air barrier.
 - 1. In conjunction with vapor retarder and joint sealer materials described in other sections.
 - 2. To utilize the inner pane of multiple pane insulating glass units for the continuity of the vapor retarder and air barrier seal.
- C. Thermal and Optical Performance: Provide glass products with performance properties as indicated. Performance properties are in accordance with manufacturer's published data as determined with the following procedures and/or test methods:
 - 1. Center of Glass U-Value: Comply with NFRC 100 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 6.3 computer program.
 - 2. Center of Glass Solar Heat Gain Coefficient (SHGC): Comply with NFRC 200 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 6.3 computer program.
 - 3. Solar Optical Properties: Comply with NFRC 300 test method.

2.02 GLASS MATERIALS

- A. Float Glass: Provide float glass based glazing unless noted otherwise.
 - 1. Annealed Type: ASTM C1036, Type I Transparent Flat, Class 1 Clear, Quality-Q3.
 - 2. Heat-Strengthened and Fully Tempered Types: ASTM C1048, Kind HS and FT.
 - 3. Fully Tempered Safety Glass: Complies with ANSI Z97.1 and 16 CFR 1201 criteria.
 - 4. Tinted Type: ASTM C1036, Class 2 Tinted, Quality-Q3, color and performance characteristics as indicated.
 - 5. Thicknesses: As indicated; provide greater thickness as required for exterior glazing wind load design.

2.03 INSULATING GLASS UNITS (TYPE - IG)

- A. Insulating Glass Units: Types as indicated.
 - 1. Durability: Certified by an independent testing agency to comply with ASTM E2190.
 - 2. Coated Glass: Comply with requirements of ASTM C1376 for pyrolytic (hard-coat) or magnetic sputter vapor deposition (soft-coat) type coatings on flat glass; coated vision glass, Kind CV; coated overhead glass, Kind CO; or coated spandrel glass, Kind CS.
 - 3. Provide safety (tempered) glass both lites where required by Code and loading conditions.
 - 4. Metal Edge Spacers: Aluminum, bent and soldered corners.
 - 5. Spacer Color: Black.
 - 6. Edge Seal:
 - 7. Color: Black.
 - 8. Edge Seal: Compatible with glazing compound joint sealers, adjacent materials, and glazing accessories.
 - 9. Purge interpane space with dry air, hermetically sealed.
- B. Type IG-1 Insulating Glass Units: Vision glass, double glazed.
 - 1. Applications: Exterior glazing unless otherwise indicated.
 - 2. Space between lites filled with air.
 - 3. Outboard Lite: Annealed float glass, 1/4 inch thick, minimum.
 - a. Tint: Gray.
 - b. Coating: VUE-50, on #2 surface.
 - 4. Laminated Inboard Lite:
 - a. Outer Pane: Heat-strengthened float glass, 1/4 inch thick, minimum.
 - 1) Tint: Clear.
 - b. Interlayer: Polyvinyl butyral (PVB); 0.060 inch thick.
 - c. Inner Pane: Heat-strengthened float glass, 1/4 inch thick, minimum.
 - 1) Tint: Clear.
 - 5. Total Thickness: Approximately 1.1 inch.

- 6. Thermal Transmittance (U-Value), Summer Center of Glass: 0.25, nominal.
- 7. Visible Light Transmittance (VLT): 44 percent, nominal.
- 8. Solar Heat Gain Coefficient (SHGC): 0.25 percent, nominal.
- 9. Basis of Design: 1-5/16" VUE1-50 Insulating Laminated Glass manufactured by Viracon

2.04 GLAZING COMPOUNDS

A. Butyl Sealant: Single component; ASTM C920, Grade NS, Class 12-1/2, Uses M and A, Shore A hardness of 10 to 20; black color.

2.05 ACCESSORIES

- A. Setting Blocks: Silicone, with 80 to 90 Shore A durometer hardness; ASTM C864 Option II. Length of 0.1 inch for each square foot of glazing or minimum 4 inch x width of glazing rabbet space minus 1/16 inch x height to suit glazing method and pane weight and area.
- B. Setting Blocks (Fire-Rated Glazing): Hardwood or calcium silicate; glass width by 4 inches by 3/16 inch thick.
- C. Spacer Shims: Neoprene, 50 to 60 Shore A durometer hardness; ASTM C864 Option II. Minimum 3 inch long x one half the height of the glazing stop x thickness to suit application, self adhesive on one face.
- D. Glazing Tape, Back Bedding Mastic Type: Preformed, butyl-based, 100 percent solids compound with integral resilient spacer rod applicable to application indicated; 5 to 30 cured Shore A durometer hardness; coiled on release paper; black color.

2.06 FABRICATION

- A. Fabricate glazing units in sizes required to glaze openings indicated for Project, with edge and face clearances, edge and surface conditions, and bite complying with written instructions of product manufacturer and referenced glazing publications, to comply with system performance requirements.
- B. Orient pattern and draw of glass pieces in same direction. Place waves in sheet glass parallel to floor.
- C. Clean-cut or flat-grind vertical edges of butt-glazed monolithic lites in a manner that produces square edges with slight kerfs at junctions with outdoor and indoor faces.
- D. Grind smooth and polish exposed glass edges and corners.
- E. Tinted Glass: Cut clean to avoid edge stress. Nipping will not be permitted.
- F. Tempered and Heat Strengthened Glass: Fabricate each light before treatment. Cut to size, provide holes and cutouts required for accessories and other work that is attached to glass, finish edges.
 - 1. Treat heat strengthened and tempered glass by horizontal process in such a manner as to have roller distortion in a horizontal direction as installed n the building.
 - 2. Identify tempered glass with a permanent non-removable label.

G. Glazing Gaskets:

- 1. Fabricate compression gaskets in lengths recommended by gasket manufacturer to fit openings exactly, with allowance for stretch during installation.
- 2. Except for outside glazed systems, glazing gaskets are to have factory molded corners inside and out and shipped to the destination in full gasket "frames".

PART 3 EXECUTION

3.01 VERIFICATION OF CONDITIONS

- A. Verify that openings for glazing are correctly sized and within tolerances, including those for size, squareness, and offsets at corners.
- B. Verify that the minimum required face and edge clearances are being provided.

- C. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and support framing is ready to receive glazing system.
- D. Verify that sealing between joints of glass framing members has been completed effectively.
- Proceed with glazing system installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Clean contact surfaces with appropriate solvent and wipe dry within maximum of 24 hours before glazing. Remove coatings that are not tightly bonded to substrates.
- B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.
- C. Prime surfaces scheduled to receive sealant where required for proper sealant adhesion.

3.03 INSTALLATION, GENERAL

- A. Install glazing in compliance with written instructions of glass, gaskets, and other glazing material manufacturers, unless more stringent requirements are indicated, including those in glazing referenced standards.
- B. Install glazing sealants in accordance with ASTM C1193, GANA (SM), and manufacturer's instructions.
- C. Do not exceed edge pressures around perimeter of glass lites as stipulated by glass manufacturer.
- D. Set glass lites of system with uniform pattern, draw, bow, and similar characteristics.
- E. Set glass lites in proper orientation so that coatings face exterior or interior as indicated.
- F. Prevent glass from contact with any contaminating substances that may be the result of construction operations such as, and not limited to the following; weld splatter, fire-safing, plastering, mortar droppings, etc.
- G. Setting Blocks:
 - 1. Size and place in accordance with glass manufacturer's recommendations and design calculations for each project system.
 - 2. Placement and profile of seting block within the glazing channel shall not inhibit drainage for each fenestration system specified.

3.04 FIELD QUALITY CONTROL

- A. Glass and Glazing product manufacturers to provide field surveillance of the installation of their products.
- B. Monitor and report installation procedures and unacceptable conditions.

3.05 CLEANING

- A. Remove excess glazing materials from finish surfaces immediately after application using solvents or cleaners recommended by manufacturers.
- B. Remove non-permanent labels immediately after glazing installation is complete.
- C. Clean glass and adjacent surfaces after sealants are fully cured.
- D. Clean glass on both exposed surfaces not more than 4 days prior to Date of Substantial Completion in accordance with glass manufacturer's written recommendations.

3.06 PROTECTION

A. After installation, mark pane with an 'X' by using removable plastic tape or paste; do not mark heat absorbing or reflective glass units.

B. Remove and replace glass that is damaged during construction period prior to Date of Substantial Completion.

END OF SECTION

EYP, Inc. 08 80 00 - 6 ADD 01

SECTION 10 11 01 VISUAL DISPLAY BOARDS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Markerboards.

1.02 RELATED REQUIREMENTS

- A. Section 06 10 00 Rough Carpentry: Blocking and supports.
- B. Section 09 06 00 Finish Schedule: Fabric manufacturer and color.
- C. Section 09 21 16 Gypsum Board Assemblies: Concealed supports in metal stud walls.

1.03 REFERENCE STANDARDS

- A. AAMA 2603 Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2015.
- B. AAMA 611 Voluntary Specification for Anodized Architectural Aluminum; 2012.
- C. ANSI A135.4 American National Standard for Basic Hardboard; 2012.
- D. ASTM A424/A424M Standard Specification for Steel, Sheet, for Porcelain Enameling; 2009a.
- E. ASTM F793 Standard Classification of Wall Covering by Use Characteristics; 2010a.
- F. FS L-P-1040 Plastic Sheets and Strips (Polyvinyl Fluoride); Revision B, 1977.

1.04 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's data on markerboard, tackboard, tackboard surface covering, trim, and accessories.
- C. Shop Drawings: Indicate wall elevations, dimensions, joint locations, special anchor details.
- D. Samples: Submit two samples 12 by 12 inch in size illustrating materials and finish, color and texture of the following:
 - 1. Dry Marker Board
 - 2. Aluminum Finish: 2 inch long, each type/color.
- E. Manufacturer's printed installation instructions.
- F. Maintenance Data: Include data on regular cleaning, stain removal.
- G. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- B. Installer Qualifications: Company specializing in performing work of this section with minimum three years documented experience.

1.06 WARRANTY

- A. See Section 01 78 00 Closeout Submittals, for additional warranty requirements.
- B. Provide "Life of Building" warranty for markerboard to include warranty against discoloration due to cleaning, crazing or cracking, and staining.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Visual Display Boards:
 - 1. Claridge Products and Equipment, Inc: www.claridgeproducts.com.
 - 2. Polyvision Corporation (Nelson Adams): www.polyvision.com.
 - 3. Platinum Visual Systems: www.pvsusa.com

2.02 VISUAL DISPLAY BOARDS

- A. Markerboards: Porcelain enamel on steel, laminated to core.
 - 1. Color: As selected from manufacturer's full range.
 - 2. Steel Face Sheet Thickness: 24 gage, 0.0239 inch.
 - 3. Size: As indicated on drawings.
 - 4. Mounting Height: As shown on drawings.
 - 5. Frame: Extruded aluminum.
 - 6. Frame Profile: Narrow, square corner.
 - 7. Frame Finish: Anodized, natural.
 - 8. Accessories: Provide chalk tray.

B. Lecture Cabinet:

- 1. Manufacturer/Model: Claridge, Model No 518-4PL.
- 2. Size: 48 inches wide x 48 inches high.
- 3. Style: Radius Corners
- 4. Dry Marker Boards, center panel.
 - a. Color: White.
- 5. Tackboards, door interior faces.
 - a. Fabric: Vinyl coated fabric.
 - b. Color: As selected from manufacturer's full range. Panel edges shall be face-fabric wrapped.
- 6. Mounting System: Standard with manufacturer.
- 7. Hardware: Continuous piano hinges.
- 8. Accessories:
 - a. White sketching pad.
 - b. Dry erase pens, 4 each.
 - c. Display Rail with cork inset.
 - d. Spring clip hooks for charts.

2.03 MATERIALS

- A. Porcelain Enameled Steel Sheet: ASTM A424/A424M, Type I, Commercial Steel, with fired-on vitreous finish.
- B. Vinyl Coated Fabric: ASTM F793 Category VI; clear top overcoat of polyvinyl fluoride in accordance with FS L-P-1040 Type 1, Grade B, Class 2, 0.0005 inch thick.
- C. Hardboard for Cores: ANSI A135.4, Class 1 Tempered, S2S (smooth two sides).
- D. Adhesives: Type used by manufacturer.

2.04 ACCESSORIES

- A. Temporary Protective Cover: Sheet polyethylene, 8 mil thick.
- B. Dry Marker Pens, Erasers: Manufacturer's standard. Provide full range of colors, two pens each color; one eraser each marker surface.
- C. Dry Marker Tray: Self-adhesive aluminum tray.
 - 1. Size, inches: 12 long x 2-1/2 high x 2-1/2 deep.

- 2. Product: ACDT12 manufactured by Egan Visual Inc.
- D. Mounting Brackets: Concealed.
 - 1. Top: Z-bar hangers.
 - 2. Bottom: Anchor brackets.
- E. Concealed splice joints for markerboard.
- F. Extruded aluminum H-batten joints for tackboard, surfaced with matching vinyl-coated fabric.

2.05 ALUMINUM FINISH

- A. Polyester Finish: Electrostatically applied thermoplastic, polyester powder coating complying with AAMA 2603.
- B. Clear anodize, AAMA 611 AAM12C22A44.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that internal wall blocking is ready to receive work and positioning dimensions are as indicated on shop drawings.

3.02 INSTALLATION

- A. Install boards in accordance with manufacturer's instructions.
- B. Refer to drawings for locations and mounting heights.
- C. Secure units level and plumb.
- D. Butt Joints: Install with tight hairline joints.

3.03 CLEANING

- A. Clean board surfaces in accordance with manufacturer's instructions.
- B. Cover with protective cover, taped to frame.
- C. Remove temporary protective cover at Date of Substantial Completion.

END OF SECTION