

AMERICAN SOCIETY OF PROFESSIONAL ESTIMATORS

ESTIMATING TODAY

JANUARY / FEBRUARY 2022

**HTETCO a Wood Cladding
Rainscreen System on a
Modular Retail Kiosk**

Call for Nominations

**Escalation, Inflation, Supply
and Demand**

New CPEs + AEPs



ASPE

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2021 - 2022

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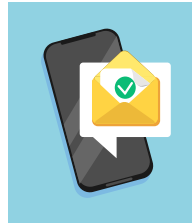
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Education Committee • Estimating Academy



ASPE

Message from the President



I hope that everyone had a safe, healthy, and happy holiday season. It is hard to believe that we are starting another year. My wish for the coming year is that our world has a chance to return to a more normal one.

As you may know, we launched our first five Estimating Academy Courses at the end of November, and we had fifty-five participants! Congratulations to our Education Committee, Mike Alsgaard and our staff for a job well done. Registration for our second round of classes (February 2022) will be starting-soon so please help make our Estimating Academy classes successful by spreading the word.

We will also be working with a marketing consultant to build a new, more user friendly, website this year along with expanding our marketing efforts.

ASPE Membership and all Certification Renewals were due December 31, 2021. If you have not addressed these business items, Please contact Tina or Cinder if you need assistance.

Thank you for your continued support of ASPE!

A handwritten signature in black ink that reads 'Chris Morton'.

M. Chris Morton, FCPE

ASPE National President
2021-2023

Connect at:

cmortonfcpe@outlook.com
Howell Construction
Chapter 5 – Denver



AMERICAN SOCIETY
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ESTIMATORS



Estimating Academy Classes

Construction Materials and Processes

This course is an introduction to the materials and processes of general construction using the Construction Specifications Institute division format and is intended to deepen the understanding of building systems and material science. Topics include sitework & excavation, concrete, masonry, wood, steel, building envelope, openings, and finishes.

Construction Procurement Methods

Designed to help estimators learn the basics of different construction procurement methods, this course touches on the basics of design-bid-build, design-build, construction manager at risk, and public-private partnership with contract negotiation, guaranteed maximum price, and cost plus.

Estimating and Bidding

This course provides an overview of construction estimating as used in winning bids. The course teaches the student the basics of take-off and pricing, and students will be exposed to examples in several disciplines of construction to include commercial building and heavy civil construction estimates.

Fundamentals of Heavy Civil Estimating: Heavy Highway

Walk one through many aspects of estimating a Heavy Highway project, from reviewing plans and specifications to submitting a bid and understanding the results.

Introduction to Construction Estimating I

This self-paced 8-week online course is designed to help estimators learn the basic skills required to takeoff material quantities and produce successful construction estimates.

Plan Reading for Estimating

Strip away all the hieroglyphs, symbols, markings, strange words and on a set of building plans you have an outline of the building to be built. Take your first step in demystifying the art of reading plans. Learn the hidden code behind those strange symbols and grow more confident in how to read plans for estimating.

Register Now!

ASPE's Estimating Academy e-learning courses.

For more information visit - <https://www.aspenational.org/page/EA>

Courses dates for 2022:

- February 21 - April 15, 2022
- May 2 - June 24, 2022
- July 11 - September 2, 2022
- September 19 - November 11, 2022

CONTACT US

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✉ Certification@ASPENational.org
☎ 615-347-0373



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Membership Classification Count (as of 12/08/2021)

Affiliate	71
AEP	56
CPE	480
Estimator	741
Fellow	23
Honorary Member	7
Member Emeritus	50
Student	51
Total	1,479

Welcome to Our New Members (October + November)

NAME	COMPANY	CHAPTER	
Kevin Mazariegos	Mazariegos Builder	Golden Gate	2
Adam Rickers	HL Construction Management	Orange County	3
Lee Hooker	Caretaker Landscape	Arizona	6
Mejai Dyson	Dyson Build Lease	Chicago	7
Brandon Babineaux	Cajun Consulting & Estimating	New Orleans	9
Ivelaw Mitchell	Constructomics. LLC	New York	10
Michael Matos	Nasco	New York	10
AJ Vizoskie		New York	10
Mariana Suarez	Nasco Construction Services	New York	10
Daniel Rivera	CRC Builders Inc	Sacramento	11
Maggie Pape		Houston	18
Megan Monteiro	FCR Enterprises	Baltimore	21
Greg Heiges	Young & Associates	Boston	25
Dexter Bachelder	Togal.AI	Boston	25
Justin Harding	CCS International, Inc.	Boston	25
Banning Stack	SIDE Partnership, LLC	Middle Tennessee	34
Greg Snyder		Viking	39
Nancy Ontiveros	Sarabia's Portable Sanitation	Rio Grande	40
Mark Godfrey	Cawley Partners	Dallas/Ft.Worth	43
Rohan Kulkarni		Dallas/Ft.Worth	43
Vikalpa Pandere	The University of Texas at Arlington	Dallas/Ft.Worth	43
Jon Eldridge		Puget Sound	45
Jorge Fernandez		Tampa Bay	48
John Jarvis	Faithful + Gould	Philadelphia	61
Jacob Theurer	Rockford Construction Company Inc	Western Michigan	70
Michael Gilhool	American Wood Design	Delaware	75
Rebecca Alvarez	AG CM, Inc.	Southwest MAL	91
Russ DonRussello	IES Commercial and Industrial	Southeast MAL	93
Chris Terry	K-Con, Inc.	Southeast MAL	93
Hadeel Dabbagh	BidBow Inc	Northeast MAL	94
Cheng Xu		Northeast MAL	94

Congratulations to New CPEs + AEPs (October + November)

NAME	COMPANY	CHAPTER	
Robert Jackson, CPE	Brosna Construction	New York	10
Brian Antonucci, AEP	Crawford Consulting Services	Three Rivers	44
David Gordon, AEP	Crawford Consulting Services	Three Rivers	44
Gerry Marra, AEP	Crawford Consulting Services	Three Rivers	44
Matthew Miller, AEP	Crawford Consulting Services	Three Rivers	44
Karen Arrington, AEP	35 North		
Alexandra Palutis, AEP	Cullen Construction Management		
Jeremy Matta, AEP	Crawford Consulting Services		



AMERICAN SOCIETY
OF PROFESSIONAL
ESTIMATORS

CALL FOR NOMINATIONS FOR NATIONAL BOARD OF DIRECTORS

The ***American Society of Professional Estimators Governance Committee*** calls attention to your duty as a member in good standing of the Association to nominate those individuals who are qualified, willing to serve, and capable of being an officer of the Society and a Director to establish policy and conduct National business.

Positions to be filled for the 2022-2023 and 2023-2024 year (for a term of two years) are as follows.

- Northwest Region Governor
- Southeast Region Governor
- ✓ With this notice is the Nominations Form to use for submitting a nomination. *(Form also available on the ASPE Website: Home / Board of Directors / Link @ Bottom of Page)*
- ✓ This form must be completed in full, certified by the nominator's Chapter Nominations Committee Chairman or the Chapter President.
- ✓ If the nomination is for a member at large (MAL), the form must be certified by the Governor of the nominee's region.
- ✓ The nomination must also be accepted by the person being nominated and the associated fact sheet completed by him/her.
- ✓ The form must be received **no later than midnight, February 21, 2022.**

Nominations and questions are to be submitted to the Society Business Office at Tina@ASPEnational.org.

Thank you.

ASPE Business Office

2022 AWARDS

Honoring Members + Chapters for their contributions to ASPE and the construction industry
Honoring Member Estimators for their project successes

ESTIMATOR OF THE YEAR

For excellence in advancing the art of construction estimating thru Standards, Ethics and Practice, while leading and training others, and promoting ASPE throughout one's career

CHAPTER PRESIDENT OF THE YEAR

For excellence in leading, promoting and supporting the goals and growth of the Chapter

FELLOW AWARD

For having attained national recognition for achievements in the art of construction estimating and who have made exceptional contributions to the Society

LEGACY - HOWARD S. PROUT FOUNDER OF CERTIFICATION AWARD

For excellence in promoting and utilization of Standards of Ethics and Practice

LEGACY - FRANK E. YOUNG EXCELLENCE IN EDUCATION AWARD

For excellence in pioneering and promotion of Educational Opportunities and Advancements

LEGACY - MERLE W. HECKENLIVELY FOUNDER OF STANDARDS AWARD

For excellence in promoting and utilization of Standards of Ethics and Practice

INDUSTRY AWARDS

Celebrating projects displaying overall estimate efficiency and accuracy, unique and innovative design, technology solutions or community involvement

CHAPTER CHAMPION

For dedicated effort and contributions made to the advancement and growth of the Chapter

CHAPTER ACHIEVEMENT

For excellence in promoting ASPE and supporting its Members at the Chapter level

TECHNOLOGY AWARD

For promoting Technology innovation in advancement of the estimating profession

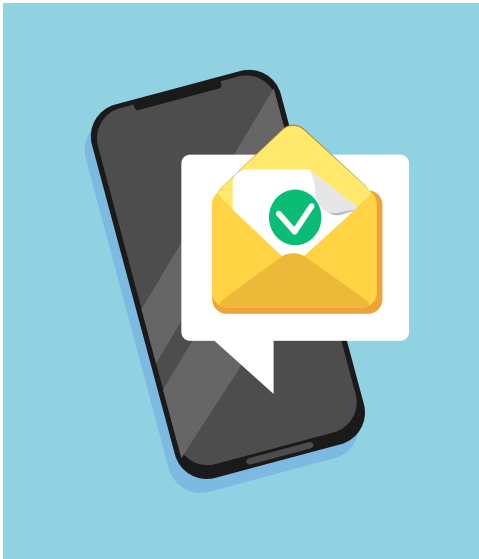
Intent to Submit Forms – Due March 15, 2022

Candidate Nominations + Chapter Applications - Due by April 4, 2022

Begin planning by nominating an ASPE Member who exemplifies the qualities needed and who deserves acknowledgement for their contributions

[ASPENational.org](https://www.aspenational.org/) / [Resources](#) / [Awards Requirements](#) + [Scoresheets](#)

Get Higher Meeting Attendance + Engagement using Video Email



Let's face it. Trying to get more people to our meetings can be a challenge. Post-2020, the best way to solve this problem is through the use of short video emails. Why is that? Because people do business with people and video is the fastest, easiest way to personally invite someone to attend a meeting and engage with you.

Some people are intimidated by video. I get it! I was, too. Guess what? You can use notes! Or, what's more fun is to invite a fellow ASPE member to join you on video to share meeting topics so our members understand the value of attending our meetings. Videos can be from 30 seconds to 2 minutes. I'm pretty sure we can all talk at least that long based on the meetings I've attended! LOL!

The results I've seen from using email and text videos are amazing. Comparing non-video to video emails on the same subject matter, I get about a 100 percent higher open rate. Then I add additional details in the email so people can access the information quickly. Notice I didn't say repeat

the details I included in the video. Your emails can now be shorter (less typing) because you're using video.

Tom Mayer

Chapter 6 - Arizona

tom.mayer@exprealty.com

Now, there are few logistics you need to know. The easiest way to record video is inside your email app. Applications like BombBomb.com; that is the app I use. You open up Gmail or Outlook, click on the BombBomb icon, click record, share your news and excitement about the coming meeting using your computer's camera, stop the video, add your list of people to send it to people and press send. EASY!

Want to do a video onsite? Grab your smartphone. Be sure to buy a lavalier microphone that works with your model of smartphone (see the tools list below). I also use a tripod for my phone so I'm standing back about 5-6ft from the camera. Open your email video app, press Record, and when done, email the video to your list right there from the location.

Another cool feature from the BombBomb app, and maybe other video apps is that I can text a video out to everyone. This is particularly handy for subcommittees and other small groups with whom you want to communicate quickly and easily (and saves typing!). The best part is, they can video text (or video email) you back! They don't need the app to reply.

Success points:

- Do a Google search for video email applications. I find BombBomb.com to be easiest but you'll want to check price points as they can vary based on the type of features you want.
- Use a Call to Action in your Subject line, such "Watch this to find out about our Tuesday ASPE meeting!" or "Watch to find out why cost estimates are going through the roof!"
- Keep your video short, 30 seconds to 2 minutes

Upload your distribution list from your computer to your video email app so you can access from your phone later, too. Trust me. It's easier to upload an Excel file from your computer.

- Pick a fun location if you can. Sitting at your desk is fine but not all that exciting. There's always construction going on here in Phoenix so I head out to a site and shoot my video there once a quarter. You can shoot your video at local places of interest, too.
- Make sure you have permission to email everyone on your distribution list.
- Upload your distribution list from your computer to your video email app so you can access from your phone later, too. Trust me. It's easier to upload an Excel file from your computer.
- Buy a lavalier microphone for your specific phone (\$12 - \$35)
- If shooting your video on a site, I suggest using a 55-inch mobile phone tripod (about \$20) so the viewer sees the area around you, not just the pores on your face doing a selfie video
- MOST importantly, remember that your videos do not have to be perfect. You need to be authentic and friendly. Imagine your best friend standing right behind the camera and you're telling him/her about your upcoming meeting.

So, basically, for about \$30-\$50, you're ready to use video to get more email opens and get people to engage with your email content. That means more attendees and potentially, more members. Win-win!

Want to see some of my video emails? Email me at tom.mayer@exprealty.com or text or call me at (602) 363-0351.

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HTETCO A Wood Cladding Rainscreen System on a Modular Retail Kiosk

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- Section 8: Sample Plans and Take-off
- Section 9: Sample Budget Estimate

SECTION 1: INTRODUCTION

The purpose of this technical paper is intended to give the reader an understanding of how to prepare an estimate for a wood cladding rainscreen system on a commercial modular retail kiosk. The paper encompasses all of the components of a rainscreen system outwards of the exterior sheathing. Take-offs will be performed for the various components of the rainscreen system such as; weather barriers, flashings, screws, siding, insulation, and z-girts. The estimate includes the labor, material, equipment, taxes, modular manufacture's overhead and profit. Once the estimate is complete, it will be analyzed against historical data to verify the accuracy of the estimate. This paper will also highlight areas of importance to mitigate risk during the estimating process to ensure an accurate estimate and ultimately a successful project.

MAIN CSI MASTERFORMAT™

DIVISION 07 00 00 THERMAL AND MOISTURE PROTECTION
07 40 00 CLADDING SUPPORT SYSTEMS
07 46 23 WOOD SIDING
07 25 00 WEATHER BARRIERS
07 21 10 MINERAL WOOL INSULATION
07 62 00 SHEET METAL FLASHINGS AND TRIMS
07 65 26 SELF ADHERED SHEET FLASHINGS

SECTION 2: TYPES & METHODS OF MEASUREMENT

For the purpose of estimating a wood cladding rainscreen system, several types and methods of measurements may be used. We will be using an On-Screen Take-off (OST) software to perform the takeoff for this application. Though a manual take-off can be performed using paper plans and a scale ruler as well, using OST will provide greater efficiency and accuracy during this process. It is crucial to the accuracy of the take-off process to ensure the scale is calculated correctly before performing the take-off. The standard measurement format that will be used is square footage (SF) for an area. The common shapes of the walls that we will be calculating the area for are rectangles and trapezoids. There are also parts of the wood cladding rainscreen system that will use additional units of measure such as linear footage (LF) for Z furring and flashings, and count (EA) for fasteners. The cost of installation labor will be calculated using a cost per unit format, which then can be converted to man hour(s) (MH). Historical data will be used to provide a complete estimate for areas of the drawings that are not clear or incomplete.

SECTION 3: SPECIFIC FACTORS AFFECTING TAKE OFF AND PRICING

There are many factors that need to be considered when pricing a wood cladding rainscreen system. The size of the project and location have the greatest impact on the final cost of any installation. On a conventional build wood cladding rainscreen system weather and seasonal effects would also affect pricing, but due to this being a modular building it will be built in a controlled environment and will not be affected by weather or seasonal effects.

Small Quantities versus Large Quantities

The quantities of materials can have great impacts on an estimate. Due to this project being a small kiosk, the quantity of wood siding that will be ordered will be minimal. Some manufacturers may have minimum quantity requirements or small run set up fees. When one is estimating a project with specialty materials such as siding, it is important to inquire with the manufacturer about their minimum order policies to be sure to include the cost in the estimate. If this project was larger, a bulk quantity discount could be applied. The estimator must be sure to consult with the manufacturer or the distributor before applying or assuming any bulk discount. Quantities may also affect labor pricing due to production rates and labor rates on small projects vs large projects. Small projects unit rates for install labor may be higher than a project with larger quantities, this may be due to mobilization or set up charges and a slower rate of production. The modular manufacturing model is based on speed of production, small projects that are specialized will slow the production rate so a higher labor unit rate will need to be applied to the project to account for slower production rate.

Geographic Location

The geographic location of the project site, material manufacturer, and modular manufacturer may all have effects on pricing. Project site location may also have effects on material cost and labor rates. Material cost may be affected due to certain material manufacturers require the material be purchased from a distributor that is located in the territory of the final project site and not the modular manufacturers location. This could affect material pricing due to market rates in that location, as well as freight pricing to ship the products to the modular manufacturer. For an example if the final project site is located in Florida and the modular manufacturers facility is in Pennsylvania and the material is being shipped from Florida, cost may be incurred due to freight. As discussed above, small quantities may incur additional costs and one of those additional cost could be related to freight and the need to use less than truckload (LTL) shipping. With the modular manufacturing model, geographic location typically has less effect labor pricing due to the majority of the work being completed off-site, but consideration does need to be made for site completion, especially if the building is more than one module. On site labor costs may be prevailing wage or union rates to complete the modular building. These rates do not apply to any off-site work completed.

Seasonal Effects

Typically, in a conventional build application seasonal effects would need to be taken into consideration while estimating the cost of a wood cladding rainscreen system. A wood cladding rainscreen system install could be affected by weather due to the need to stain or seal the wood as well as working in the outdoor elements. Working in cold weather environments may cause an increased labor price or need for tenting the project for proper curing of the stain. By utilizing the modular approach for this project seasonal effects will not need to be taken into consideration due to building in a controlled environment.

LEED or Green-Build Considerations

LEED or Green-Build projects may incur additional costs for material, labor or design fees. Though a Wood Cladding Rainscreen System would be a great way to achieve LEED credits, due to budget restrictions LEED Certification was not sought after for this project. Typically costs increases are recognized on the project's materials due to LEED guidelines such as local sourcing, recycled content, or documentation processes. Also, to achieve LEED certification on a building using a wood cladding, the lumber may need to be imported from outside of the United States due to the requirement that the wood must come from a forest certified by the Forest Stewardship Council (FSC). Overall, LEED can cause a 10-30% escalation on a project cost.

The estimator needs to be aware of what LEED credits are being sought after to determine what affect the credits may have on material procurement and LEED documentation processes.

SECTION 4: OVERVIEW OF COSTS + MARK-UPS

The cost of a wood cladding rainscreen system can be broken down into labor, material, equipment, indirect costs and mark-ups. Once the take-off has been completed and specifications are thoroughly reviewed the estimator can begin calculating costs for each of these sections.

Materials

To begin preparing a material cost estimate for a wood cladding rainscreen system it is most important to determine what components are needed to provide a complete system. The building plans, specifications and historical data will provide the estimator with all of the information needed to determine which materials will need priced. On this project in particular the materials will be: prefinished Western Red Cedar wood siding, 2" 18-gauge rainscreen Z-Girts for siding attachment, 1-1/2" R6.45 mineral wool exterior insulation, sheet weather barrier, flexible flashing, sheet metal flashings, stain, and fasteners. In addition to the actual material pricing, this specific wood siding will also have a delivery fee applied which will need to be included in the estimate.

Labor

Labor costs for installing the wood cladding rainscreen system will be applied in a few different ways depending on the material. The pricing for this project will be based on historical data gathered from previous similar projects performed by the modular manufacturer. When using historical data, the estimator should analyze the size of project that they are using the historical data from, labor rates may vary between small and large projects. If there is not current data for installation labor prices available for certain items a database such as RSMeans can be used. It is important to verify that the labor rate being used from a database accounts for the region in which the project is located and takes into account if any prevailing wage or union labor rates will be applied to the project. This project does not have any applicable prevailing wage or union labor rates due to being built off-site. Also, labor rates for modular manufacturers may be less than a typical project site. Labor can be calculated by the number of hours to complete the task or by a unit cost, such as price per square foot or linear foot. We will be using unit costs for this estimate. Certain projects will require subcontractor pricing for specialized tasks, but for this estimate all pricing will be based on using the modular manufacturers carpenters. Modular manufac-

turers have staff that are trained to do specific tasks, this model can provide a more cost competitive option compared to having the project subcontracted.

Labor Rates by Material Type:

Material Type	Labor Cost	Unit
Wood Siding	\$3.50	SF
Exterior Mineral Wool Insulation	\$0.40	SF
Z-Girts	\$0.50	LF
Sheet Weather Barrier	\$0.25	SF
Flexible Window Flashings	\$2.50	LF
Sheet Metal Flashings	\$1.50	LF

Equipment

Equipment costs can vary greatly from project to project. In order to accurately estimate the equipment cost for a project it is important for the estimator to think through how and where the installation will be performed. For an example, if the project is a multi-story project scaffolding or lifts will be required. Depending on the height and access to the project you may need specialized lifts, such as articulating boom lifts rather than a scissor lift if the installer will not be able to get close to the building. For this project the installers will be able to directly access the building and the building is only 1 story, so the work can be performed off of ladders and scaffolding so no additional equipment costs will be required for this project.

Indirect Costs and Mark-ups

Determining indirect costs and mark-ups on a modular project has its similarities and differences to a conventional project. A modular project will have greater indirect costs applied to the project due to having the overhead costs of a manufacturing facility, procurement department, sales teams, and project management costs are applied as an indirect project cost as a part of overhead because the project manager may be assigned to multiple projects at once rather than being billed to a single project. Indirect costs will also include the standard labor burdens for insurances and benefits. Additional indirect costs may include shop drawings or engineering for attachment, as well as material mockups for the architect's approval if required. It is important for the estimator to understand what the contract structure will be on the project prior to calculating overhead and profit. The contract could be a stipulated sum contract or a cost-plus contract. On a stipulated sum contract, or fixed price contract the overhead and profit markups are built into the final lump sum price. On a cost-plus fixed percentage contract, the contractor and owner will agree to a certain percentage to be added to the project cost to cover the contractors overhead and profit. On a cost-plus fixed fee contract, the contractor and owner agree to

have a fixed fee that is independent of the project cost which will should cover profit and overhead. This project will be a stipulated sum contract. Overhead will be calculated as a percentage of the project cost. The modular manufacturers standard overhead mark-up is 18%. Profit will also be applied as a percentage of the project cost at a rate of 15%.

SECTION 5: SPECIAL RISK CONSIDERATIONS

When preparing an estimate for a wood cladding rainscreen system there are some apparent risks that need to be accounted for. One of the biggest risks on this project is the volatility of pricing in the lumber market. The volatility can be attributed to many things such as wood species and availability, currently the global pandemic is also causing a lumber shortage across the country. The estimator should get current pricing for the material and inquire about any known future price increases and incorporate it into their estimate. Another risk for this project is the long lead time on the wood siding material. The vendor quoted this material with an 8-10 week lead time. The estimator will need to determine if this lead time will affect the project schedule and if so will need to inquire about expediting fees or add overtime labor costs to the project. This project specification also requires the vertical wood siding to be continuous pieces without splices, this will increase the waste factor that needs to be applied to the siding material and will add additional cost to the project.

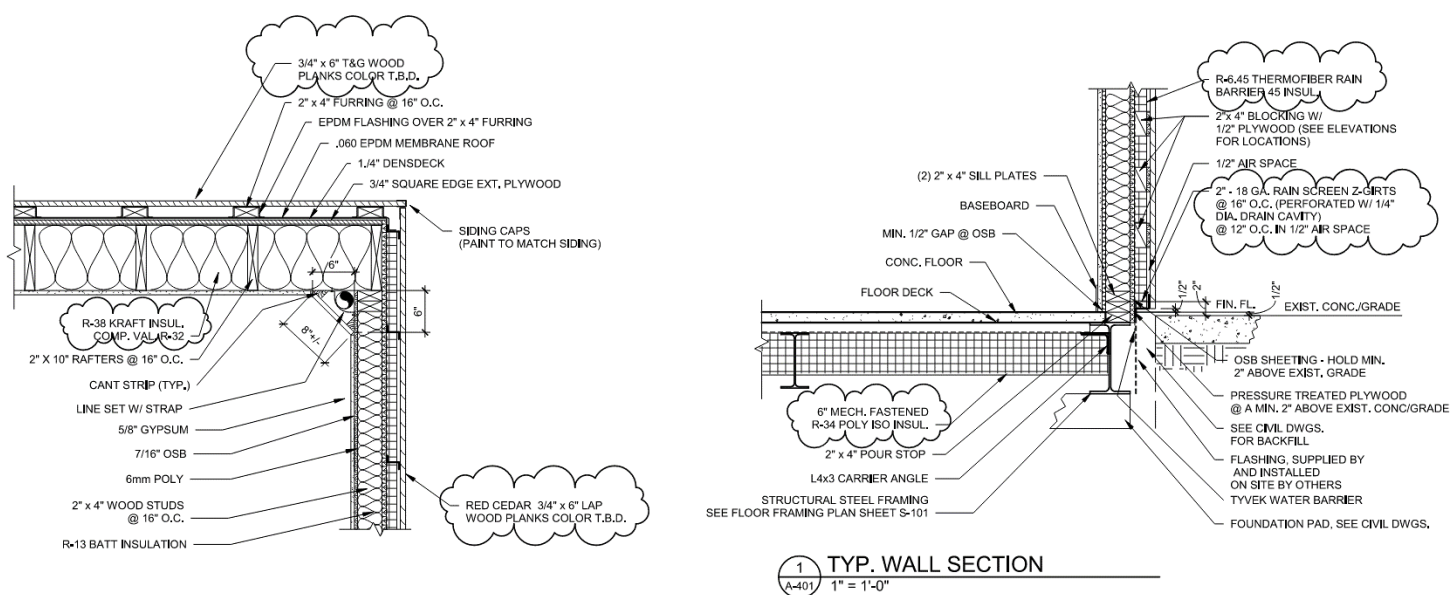
SECTION 6: RATIOS & ANALYSIS

When the estimator completes their estimate, it is very important to double check it. Due to the project having small quantities of material, it is important that the estimator calculates the number of man hours that the cost per unit allows for each task. Once calculating the man hours for the tasks, the estimator can then use past projects labor information to determine if the correct amount of man hours have been included. If the man hours seem low the estimator will need to increase the cost per unit rate to account for the smaller project size. For this project if the estimator assumes an hourly rate of \$28.00 per hour the labor hours for siding install would total 86.2 MH. The estimator should compare the man hours from this estimate to a similar projects labor reports to verify accuracy. Another analysis an estimator should perform is comparing the cost per square foot of this project versus historical data on other projects or the percentage of the wood cladding rainscreen system of the entire project. Historically on modular buildings with similar exterior finishes, the exterior cladding system is 15-18% of the total project cost.

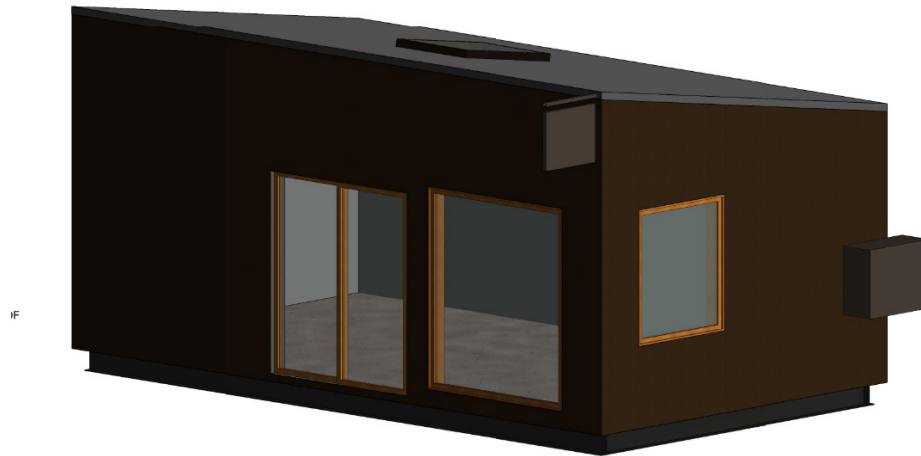
SECTION 7: MISCELLANEOUS PERTINENT INFORMATION

When preparing the estimate, it is crucial to thoroughly review all plans and specifications related to the project. Within the specifications it may have warranty requirements, special submittal and mock up requirements that need to be included as a cost to the project. Certain rainscreen systems may also require engineered shop drawings or may cause additional wall loading that is not accounted for by the architect which may require additional structure for attachment. If these requirements or calculations are not clear in the specifications or on the drawings the estimator should submit an RFI for clarification or direction so they can include the costs or exclude these items on their pricing exclusion statement. These items among others can cause an estimate to inaccurate if not captured or qualified correctly at bid time.

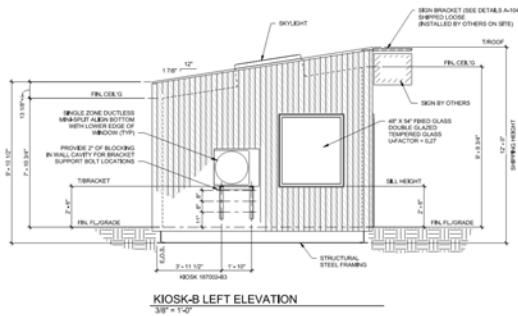
SECTION 8: SAMPLE PROJECT DRAWINGS



HTETCO a Wood Cladding Rainscreen System on a Modular Retail Kiosk... continued

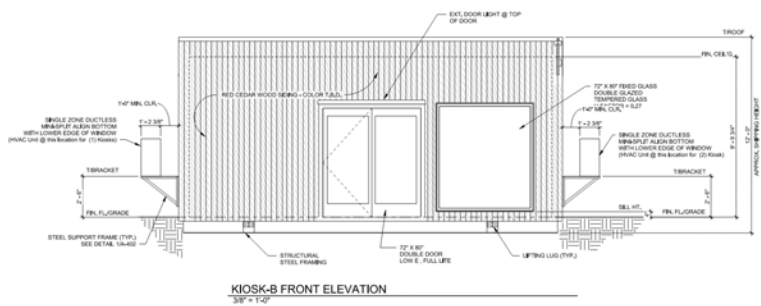


KIOSK B - LARGE



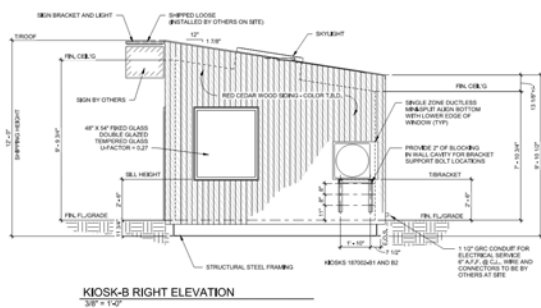
KIOSK-B LEFT ELEVATION

3/8" = 1'-0"



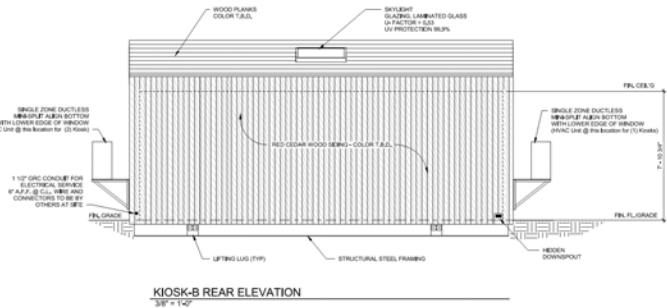
KIOSK-B FRONT ELEVATION

3/8" = 1'-0"



KIOSK-B RIGHT ELEVATION

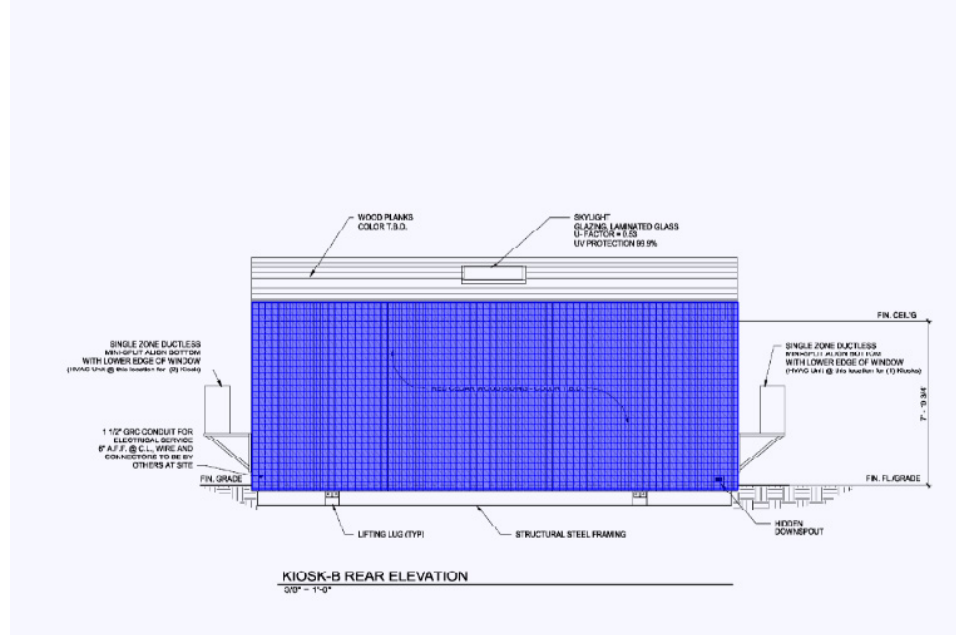
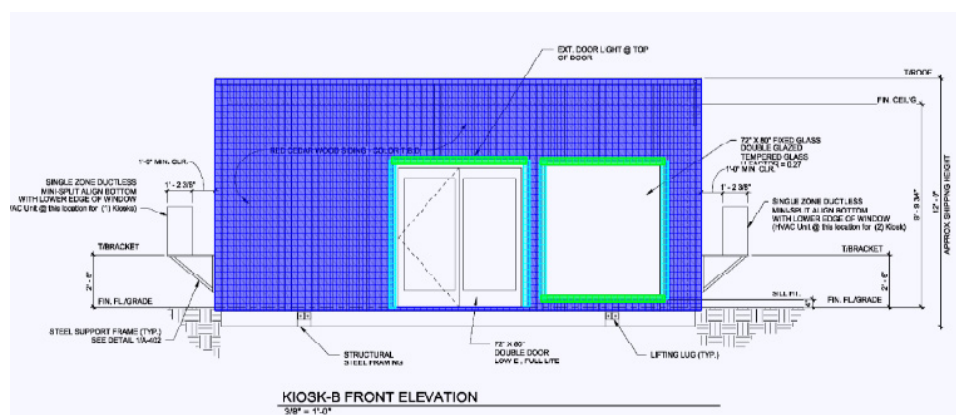
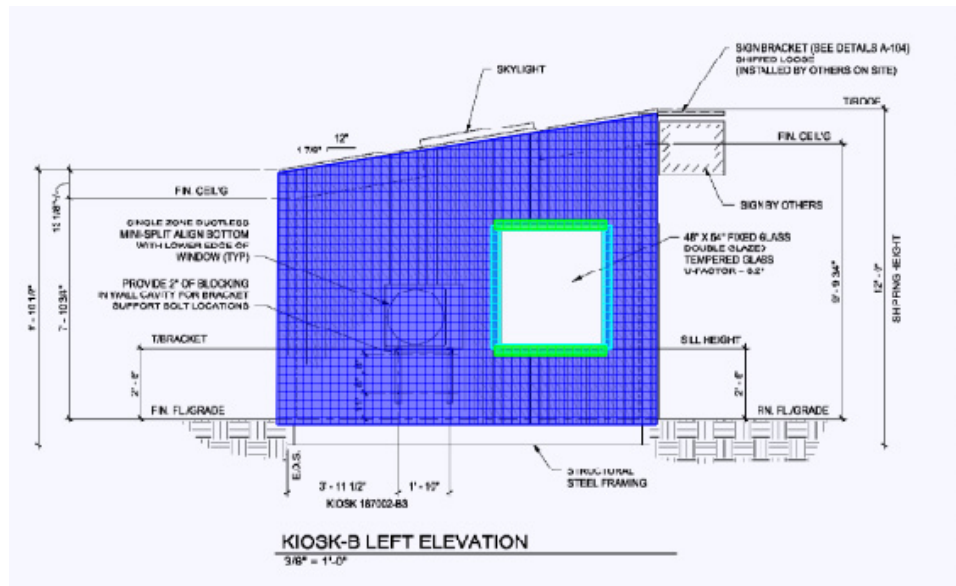
3/8" = 1'-0"



KIOSK-B REAR ELEVATION

3/8" = 1'-0"

SECTION 9: SAMPLE TAKE-OFF



MATERIAL TAKE-OFF				
Description	QTY	Waste %	Total	UOM
Red Cedar Wood Siding	627	10%	690	SF
Sheet Weather Barrier	627	5%	658	SF
Flexible Flashings	80	5%	84	LF
Metal Flashings	35	5%	37	LF
1.5" Exterior Mineral Wool Insulation	627	5%	658	SF
2" 18-GA Z-Girt	639	0%	639	LF
#8 1-1/4 SS Fasteners	1	0%	1	BOX
Touch Up Stain	1	0%	1	Gal

ESTIMATE DETAIL							
Project: POP UP KIOSKS				Client: US RETAIL			
Estimate Date: 8.21.20				Total SF: 297			
ITEM	QTY	UNIT	TAX	MATERIAL UNIT COST	MATERIAL SUBTOTAL	LABOR UNIT COST	LABOR SUBTOTAL
Red Cedar Wood Siding	690	SF	Y	\$ 5.70	\$ 3,931.29	\$ 3.50	\$ 2,413.95
Sheet Weather Barrier	658	SF	Y	\$ 0.21	\$ 138.25	\$ 0.25	\$ 164.59
6" Flexible Flashings- Openings	84	LF	Y	\$ 0.37	\$ 31.08	\$ 2.50	\$ 210.00
29 Ga Metal Flashings- Head & Sill	37	LF	Y	\$ 0.89	\$ 32.71	\$ 1.50	\$ 55.13
1.5" Exterior Mineral Wool Insulation	658	SF	Y	\$ 1.05	\$ 691.27	\$ 0.40	\$ 263.34
2" 18-Ga Z-Girt	639	LF	Y	\$ 0.68	\$ 434.52	\$ 0.50	\$ 319.50
Touch Up Stain	1	GAL	Y	\$ 40.00	\$ 40.00		
Insulation Set Up Charge	1	EA	N	\$ 750.00	\$ 750.00		
Red Cedar Wood Siding Freight	1	EA	N	\$ 1,750.00	\$ 1,750.00		
Stainless Steel Siding Fasteners							
#8- 1-1/4" Self Drilling Screws	1	BOX	Y	\$ 167.25	\$ 167.25		
Total					\$7,966.37		\$ 3,426.50
Summary							
Total Direct Costs							\$ 11,392.87
Tax		6%					\$ 327.98
Overhead		18%					\$ 2,109.75
Profit		15%					\$ 2,074.59
Total Cost							\$15,905.20
Assumptions and Exclusions							
1. Engineered Shop Drawings Are NOT Included							
2. 1 Year Standard Warranty							
3. Wage rates are based on open shop labor and prevailing wage rates do <u>not</u> apply to modular construction							

SECTION 10: GLOSSARY

- LF- Linear Foot
- LTL- Less Than Truck Load
- OST- On- Screen Take-Off
- Prevailing Wage- The prevailing wage rate is the basic hourly rate paid on public works projects to a majority of workers engaged in a particular craft, classification or type of work within the locality and in the nearest labor market area
- Rainscreen- an exterior cladding infrastructure that sits away from a building's outside wall's weather- resistant barrier, creating an air cavity directly behind the cladding that helps protect the building's important weather resistive barrier
- RSMeans- Database of current construction cost estimates
- SF- Square Foot
- Z-Girt- Z Shaped cladding attachment system that consists of continuous galvanized steel framing members which can be applied vertically, horizontally or crossed

SECTION 11: REFERENCES

- <https://knightwallsystems.com/rainscreens/what-is-a-rainscreen/>
- <https://imarkmetal.com/products/roof-wall-systems/facade-substructure/subgirts>
- <https://www.owenscorning.com/en-us/insulation/products/thermafiber-rainbarrier-45-continuous-insulation>
- <https://harvest-timber.com/>
- <https://www.rsmeans.com/>
- <https://www.arcat.com/>
- <https://www.aiacontracts.org/articles/183501-four-common-construction-contracts-you-need-to-understand>



Escalation, Inflation, Supply and Demand ---What should Estimators do?



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Even if you send out letters of intent, the language we are seeing in proposals are not holding pricing as in the past. .

Today Estimators are working in one of the most complex market times in the last 30 years. I can make that statement as that is my tenure. With that amount of time in the world of construction, one may think I should be able to shrug this current situation off as yet another wave in market ups and downs but many indicators point to this being different.

What makes this feel different? We have always had to contend with escalation. Over the years in the same market location, I have monitored RS Means City Cost Index, sometimes referred to the Turner Cost indices or even ENR indices early in my career. Notwithstanding some blips, we could project, 2-4% per year for my market area. Watching our union labor contracts, we would see the parallel every year of 2-4% labor cost increase as a supporting factor. Each trade being different but seemingly averaging out just below 3%. When logging our historical data, we would maybe see 1-3% increase comparatively to other projects previously estimated the prior year. I was very confident to forecast pricing a project that would be forthcoming in the next year with these close ranges.

Union Labor in our location currently has continued in the same track to date but it is no longer a predictor. Material pricing has become increasingly volatile and unpredictable in almost every market. Only recently have we heard inflation now used in reports. I am not an economist, but inflation is here. I have had the “luxury” (in a twisted way) of re-visiting several projects that were suspended in 2020 and then pursued to re-start in 2021/22. Some owners knew there would be an increase. Others, expected the perceived lack of work going in place to have kept the market competitive, only to be sorely disappointed. Trying to explain this market to an owner is even harder as the myriad of reasons for pricing increases changes every month – not year, not quarter, and still no real word of inflation was being used in our economic outlooks until just in the last few weeks.

I was on the team that responded to an RFP in March 2021. The RFP process afforded us the opportunity to give our “best and final offer” after a lengthy committee review in September 2021. All design parameters remained. We updated for delayed start impacting labor rates, current market conditions materials unit pricing and the Mechanical, Electrical, Plumbing and Fire Protection (MEPFP) trades. This forecasted a 12% increase in 6 months. One particularly important caveat is that this was a cast in place structure NOT steel. In September 2021, I was asked to do the similar exercise with a concrete frame high rise we had estimated in March 2018. All things the same – what would the increase be for 2022 start in the same time frame? I again entered new labor rates and current materials pricing and estimated a 13.46% increase. Same caveat – concrete frame building. This seemed to align somewhat with my other re-price. Can I surmise a trend? No.

June 2021 I updated an October 2019 estimate for an existing historical building retrofit with current pricing I had on hand. I had not yet gone to bid as drawings were being refreshed BUT I had the MEPFP Design Build team update their pricing. We saw a 6.38% overall increase which incorporated a 42% projected increase in Metals, 82% in fire protection, 22% in HVAC and 6% in electrical. One month later with another pricing exercise the same scope increased 11.99% in lieu of the 6.38%. Then three months later (October 2021) with a final estimate of the same scope of work but the Construction Documents it priced out at an additional 6.6% increase.

So, now in the 18% range still without being a steel frame. Incorporated into that last increase was a 27% increase for the steel studs and drywall – 1 month later, same scope – same schedule! the same scope increased 11.99% in lieu of the 6.38%. Then three months later (October 2021) with a final estimate of the same scope of work but the Construction Documents it priced out at an additional 6.6% increase. So, now in the 18% range still without being a steel frame. Incorporated into that last increase was a 27% increase for the steel studs and drywall – 1 month later, same scope – same schedule!

Incorporated into that last increase was a 27% increase for the steel studs and drywall – 1 month later, same scope – same schedule!

Now, I have to ask what about my previous pricing projections? All of my projects have steel studs and drywall. Should these price increases stick, our budgets are in trouble. We will need to design and value engineer knowing this to make these projects successful. Should these projects have been bids with pricing held the typically 90-day award period, we wouldn't have this luxury. The projects would likely be "upside down" at the signing of the contract. This supports the most unusual of market conditions.

Initially, I could explain wood, piping and metals increases. Now, as I talked to subcontractors/suppliers, the list of reasons grew deeper. Manufacturer increases 20-30% monthly, continued raw materials increase, supply chain limits, delivery dates beyond schedule, had enough work, labor shortage, tired of re-pricing, scope not clear, risk in existing conditions, concern of historical requirements and on and on. I had bids in one area of work varying \$460,000 to \$1,132,000 with Construction Documents. Obviously, this example is NOT market driven BUT in a market as volatile as it is, this just adds to the overall risk in securing a project in this market and waiting for financing and contract and wondering if any or which bids will be honored once you can send out your contract. (Wow, that run on sentence pretty much surmises the manic feeling!)

Even if you send out letters of intent, the language we are seeing in proposals are not holding pricing as in the past. The following are concerning clauses associated with the proposals I received for the same project for the metals scope of work the 3rd Quarter of 2021:

- "Bid does not account for a Force Majeure, such as COVID-19, and any implications to the project, including but not limited to performance, travel restrictions, business closings, CDC recommendations, government orders on any disruption to maintaining a suitable, safe and fully staffed jobsite"
- "This budget is based upon current mill pricing (9/14/2021). XXXXXXX Company reserves the right to adjust its price (up or down) due to changes in mill pricing prior to award"
- "This proposal is contingent on a lack of impact by the coronavirus national emergency. Given the existence of the coronavirus pandemic, XXXXXXX Company will use its best efforts to staff and supply this project to meet the scheduled completion date. However, XXXXXXX Company reserves its right to seek an excusable extension of time if XXXXXXX Company or its subcontractors and suppliers are unable to perform due to the illness or its impact, supply shortages or governmental restraints on business, travel and / or assembly. To the extent that the project is suspended pursuant to the terms of the proposal XXXXXXX Company, we intend to seek additional costs associated with the suspension.
- "This proposal will expire: 10/13/2021" (which was one month after proposal date)
- "Pricing is only offered for budgetary purposes and does not represent a commitment to perform this work"
- "Our budgetary pricing is present day for material, freight and bought-out items (bolts, paint, miscellaneous metals, metal deck, metal joists, stairs, etc. and is based upon Nucor-Yamato pricing list as of September 13, 2021."
- "Generally speaking, over the past year XXXXXXX Company has seen the cost of steel increase approximately \$50/ton each month. Amongst other considerations, our Escalation Breakout noted.... primarily consists of a projected \$200/ton increase that we believe could be reasonably expected between today and early 22Q1 (when we expect materials would likely be ordered and other large costs committed). XXXXXXX Company does not have any special knowledge about future costs, and therefore offer no guarantee that this projection is correct in any way.

- “This proposal is conditioned upon an appropriate force majeure clause being included in the contract, which will grant the Contractor a period of relief in performance and appropriate cost relief where circumstances arise that are beyond our control due to COVID-19 related events”

I have been clear my project pricing increase examples did not include steel frame. With these types of clauses, you can see that steel pricing currently is the most volatile. If we pass on these same clauses to our owner, how can they secure financing? One of these clauses alone is alarming. With these all together, what can we tell an owner the cost will be? What pricing can I tell my Project Executives to use that won't put us at risk, or on the flip side, kill the project?

One may think I am divulging company secrets by sharing this data. It should be considered anecdotal – yet very real in my one particular instance. My point of this article comes down to: In this market, if any estimator relies on yesterday's information, they will be wrong. There always has been material and labor escalation but now there is inflation and supply chain implications yet to be measured or forecasted. This market does not remotely allow estimators to use “standard” unit prices for any extended time period. Use your re-pricing exercises to monitor your market and revise your data. Share information with your peers. Wood was the first to send us on the “tilt-a-whirl” market ride. It still has not settled. SYP is trending different than SPF. Every region is impacted differently by labor, supply chain and materials changes. It is imperative, now more than ever, to do our due diligence and confirm pricing in every facet of our trades and every different location we work in. Make sure that everyone you secure pricing from is responding with the current market condition.

Will this eliminate that queasy feeling we get when closing an estimate right now and say, “this is the number”? No, this market has shattered that “go home and be able to sleep” working environment we once enjoyed. Yes, it is the number today, now, but likely not tomorrow. If we as the estimator have put forth every effort in securing the most current and informed pricing, we can then know we are providing the most accurate pricing today. This takes away a portion of the risk. I would then suggest we agree to hold pricing as long as the key materials suppliers or subcontractors are holding pricing. This should balance some of the additional risk in this market environment. This market requires us to be savvy estimators and risk mitigators. Additionally, it requires us to communicate with our owners and competitors these market conditions, so we all share the same expectations and project outcomes in the market.



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Education Tab - Scholarship

2022 ASPE Critical Calendar: January - June

January

- 1 New Fiscal Year Begins!
- 3 AEP/CPE Status: Expiring /AEP's/CPE's revoked for non-renewal (*Renewal due 12/31/2021*)
- 17 Call for Nominations: Candidates begin submitting applications for Board of Directors positions
- 31 ASPE Membership: Membership suspended for non-renewal (*Renewal due 12/31/2021*)
- 31 Deadline: Member Profile Updates for inclusion in *2022 Membership Directory + Buyers' Guide*

February

- 4 Chapter Reports due to Regional Governors
- 21 Last day for nomination of candidates for Board of Directors to Society Business Office (SBO)
- 25 Last day for SBO to confirm qualifications of candidates for election to the Board of Directors

March

- 4 Last day for SBO to determine the voting body for the election of Board of Directors
- 7 Last date to issue Ballots for the Board of Directors Election
- 4 2022 Summit - Registration Opens for Chapter Representatives
- 15 Deadline to submit "Intent to Submit" form for Award Submittals
- 21 Last date to vote in Board of Directors Election
- 25 Last day to announce Board of Directors election results

April

- 1-30 Chapters hold annual elections
- 4 All Award Nominations / Applications due to SBO
- 11 Deadline for Chapters to identify their 2022 Summit Chapter Representative
- 25 Award Winners to be announced (to Winners only)
- 29 Scholarship applications due to SBO

May

- 12 Deadline for Chapters to submit Chapter elections result form to SBO
- 27 Scholarship Winner(s) to be announced (to Winners only)
- 30 SBO Closed for Memorial Day

June

- 7 Last day for Chapter Reports to Governors and SBO
- 7 Committee and Technical Committee Chairs progress reports due to their respective Vice President and SBO
- 10 Last day for Board of Director Reports to SBO for Electronic Board Books
- 23 Board of Directors Meeting at Summit
- 24-25 2022 Estimators Summit
- 25 2022-2023 Board of Directors take Office

ASPE CHAPTER MEETINGS

ARIZONA

Arizona #6

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Please Note: Information is subject to change. Report changes in your Chapter's information with an email to Tina@ASPEnational.org

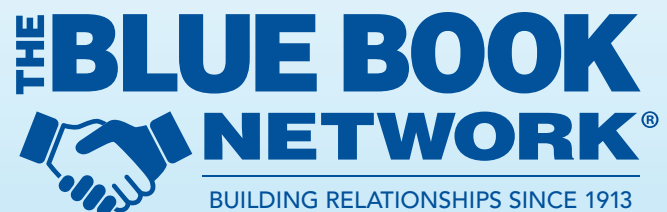
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