Estimating Today

Mile High Bound!
Join us in Denver! Annual Summit 2017

Meet the new Executive Director

ACCE Accreditation
PIE Exam: What's next?
President’s Message

Marcene N. Taylor, CPE
ASPE National President
mtaylor@mticost.com

What estimators do for work daily is unique to us. When you are at a dinner party and someone asks what you do, you can reply that you’re a construction cost estimator but that is going to require some explanation. Usually by the second sentence of explanation, the person’s eyes have glazed over; and they don’t really understand. Despite that, what we do is cool; and we should be recognized by our peers for our efforts. At ASPE, we spend a lot of time talking about our organization and how to help chapters create value to drive membership, but we don’t spend enough time honoring our career accomplishments.

For the first time this year, ASPE is honoring what estimators do. I hope you have taken the time to consider the new for 2017 Industry Awards. We are excited to acknowledge the accomplishments of our members and their firms for their work. There are three industry awards:

- Best Estimate – Award for the best overall estimate of a proposed project in any sector with benchmarks such as estimate efficiency, accuracy, revisions, client satisfaction, tools and technology, and solutions for unexpected challenges.
- Best Project – Award for the combination of excellence across the entire scope and process of a project with benchmarks such as budget control, safety, value to the community, project management, team work, efficiency, and innovation.
- Most Innovative Project – Award for the project that displays the most unique and innovative processes with benchmarks such as innovative or creative design build, technology solutions, green innovation, community involvement, and addressing concerns.

The application forms are easy with narratives and pictures. I hope you take advantage of the opportunity to receive acknowledgement from your peers for the cool things you do as well as to have your company honored with us. The Industry Awards will be awarded on Friday, July 14, 2017 at the Mile-High Summit. This year’s Summit is going to be completely new for ASPE, and you are going to be really excited by the changes. Space for the Summit is limited, so please register quickly to be a part of the new ASPE!

Get Published in the ET!

to better serve you... Estimating Today requests that you, the members of the American Society of Professional Estimating, help us to make this newsletter informative. We want to hear from you. Please share your real-time project experiences, ideas and thoughts. Know of a hot topic or trend? Contact us, and we will gather information on the subject and report our findings here in Estimating Today. Proud of a project? Send it over; we will publish it in the project profile section, which, by the way, is a great way to have free advertising of your company’s achievements and contract awards. We want to provide our members with information valuable to their personal and professional development, and we need you!

Below is a listing of potential articles; if you have an idea, let us know.

We can help, but we need your input first.

- Professional development, educating estimators, certification of estimators
- Technology, software update, bidding with electronic documents
- Careers in estimating – guidance, leadership, and motivation
- Profiles of prominent estimators in the industry
- Labor shortage
- Accident prevention and loss control
- Trends in Estimating
- Disaster remediation estimating
- Sustainable materials
- LEED®
- Escalation and shortages
- Construction problem solving and decision making
- Contract documents and construction law
- Providing estimates for negotiated work and improving bid packages

Project Profile Articles:

In addition to articles, Estimating Today welcomes project profiles of our members. This is an excellent way to highlight your company’s accomplishments. We encourage any company to submit a project description and associated four-color artwork, in jpeg format, to the editorial staff for inclusion.

To get your article published in the ET, contact Tina Cooke at tina@aspenational.org.

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ASPE Launches New Proficiency in Estimating Exam

Starting June 2017, ASPE will offer a new Proficiency in Estimating Exam (PIE). Designed with both employers and entry estimators in mind, the PIE Exam tests estimating skills appropriate for an entry level estimator with two years of experience. The Exam may be requested by a potential employer as a pre-screening process or voluntarily taken by new estimators to highlight their skills in preparation for a job search.

Demonstrating proficiency in this Exam can assist employers in determining the competency of entry level estimators before hiring them. For example, suppose an employer received a resume professing estimating experience. How can an employer be sure that the estimating experience listed on the resume is more than helping out on bid day a few times? The PIE Exam tests a variety of typical skills that are required by estimators including simple mathematical calculations, technical knowledge and basic contract fundamentals.

From the perspective of an entry level estimating applicant, the PIE test provides a specialized certificate that can be added to supplement a resume in order to validate competency. Passing the PIE Exam will help showcase the applicant for further consideration. In addition, taking this Exam also demonstrates the extra initiative on the part of the applicant. This will help a resume stand out and move to the top of the pile!

The PIE Exam is the product of many ASPE members and staff including the Standards Technical Committee. The PIE Exam was beta tested and refined to arrive at an exam that will be a benefit to both employers and prospective entry level estimators. Visit www.aspenational.org to learn more.

By: Karla Wurtshorn, CPE
Philadelphia Chapter 61
Standard Committee Member
Why is there a shortage?

How exactly did this shortage happen? There are a number of contributing factors. Baby Boomers, those born between the years of 1943-1964, are aging, and many are retired or close to retiring. Millennials, those born between the years of 1980’s to late 1990’s, have been raised with a college versus “trades” focus. In fact, there has been limited social acceptance, and in some cases, a stigma, of having a job in the trades versus one that requires a 4-year college degree. Statistics point to the fact that this shortage will be exacerbated by the following. The number of adults, aged 18 to 26, is expected to decline over the next 5 years, and the number of those younger is expected to stay flat for the next 10 years. However, there are 80 million people between the ages of 10 and 30, so despite the decline, the available number of employable adults is still rather large.

The solution seems simple but it’s not.

It is clear that the construction industry as a whole, with the help of state and federal funding, needs to make technical education a priority in high schools and community colleges. However, many states, not to mention the federal government, appear to be cutting expenses rather than investing in the future of the technical education system. That doesn’t help with the public’s somewhat negative perception of careers in construction. With so much emphasis on college education, a career in the trades has often been looked down upon. As a result, there hasn’t really been a number of contributing factors. Baby Boomers, those born in the 1980’s to late 1990’s, have been raised with a college versus “trades” focus. In fact, there has been limited social acceptance, and in some cases, a stigma, of having a job in the trades versus one that requires a 4-year college degree. Statistics point to the fact that this shortage will be exacerbated by the following. The number of adults, aged 18 to 26, is expected to decline over the next 5 years, and the number of those younger is expected to stay flat for the next 10 years. However, there are 80 million people between the ages of 10 and 30, so despite the decline, the available number of employable adults is still rather large.

Why Generation Y?

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A career in the trades can be lucrative though...

A job in the trades can be financially compelling. Consider this. A four year college education can run somewhere between $100,000 to $160,000 plus interest on student loans. Trade school can run somewhere between $6,000 and $30,000 depending on the trade and the duration of the schooling. At the high end, then, a student would save $130,000 (plus interest) on schooling and they would be able to work at their trade during schooling, immediately making money.

There are also other advantages of a career in a trade. Most of the trades are experiencing growth ahead of other professionals. Jobs for electricians, for example, are experiencing a 14% growth rate and this rate is projected to last until at least 2024, well ahead of other jobs. Jobs for estimators are on the rise as well! Industry professionals say that the estimator shortage across all trades is approximately 150,000 and from what we see, that number is probably much higher. As demand increases for seasoned estimators, so do salaries. In effect a person could start off in the trade as an apprentice and work his or her way into an office position in estimating or project management, catapulting their earning capacity to that rivaling a college graduate!

A job in the trades also offers job security that is unrivaled in any other industry. Skilled trade labor cannot be outsourced to another country, like so many jobs have been of late. Another advantage? Unlike many professional careers, a skilled tradesman’s work is done at the end of the day and there is no reason to check emails or stay “plugged in” to the job. And, unlike a desk job when at times it feels like you are getting little accomplished, there is a sense of satisfaction from manual work done skillfully.

Untapped potentials?

So we still haven’t solved the problem of getting people into the construction field. I think that there are more people available that what the Bureau of Labor and Statistics estimates. Consider those that are unemployed. There are “discouraged workers” who have stopped looking for work because they don’t think there are any available jobs. What if training was available? Would they move toward the trades?

There are also two groups of individuals that the construction industry could tap—returning veterans and women. Some tradesmen are returning veterans and due to illness or injury they cannot work in the field anymore but they can still be a valuable sources to the trades. How about training them for positions in estimating or project management? Positions for women are also available in construction trades, although women have not been “traditional” construction workers. However, with the advance of groups reaching out to women to join the trades, they can be viable construction workers. The National Association of Women in Construction estimates that in 2014, women accounted for 8.9% of all people working in the construction industry, and in construction, women earn on average 93.4% of what men make. In terms of the construction estimating field, opportunities for women are vast and women traditionally make better estimators than men!

How Will the Trades Catch the Interest of the Millennials?

The Millennials are an interesting group. They grew up with the Internet, cable television, video games (the sophisticated ones!) and so much more. They literally have the world at their fingertips. This group has been labeled “self-absorbed,” “special” (think about ‘everyone gets a medal’ and participation trophies), and “coddled.” On the flip side, this group is team oriented, interested in learning (especially where it involves technology), and in finding their place in a corporate culture that promotes from within.

Communication is the key with this group of young people, but it’s not the “old fashioned” methods that work. It’s a collaborative approach to work; it’s using social media; it’s using training to keep them interested and moving forward. Mentoring works well here, especially when paired with a mentor that can effectively communicate with a person that may not be the best communicator. (Let’s face it. Texting is not the best form of communication yet it is the preferred method over talking on the phone or emailing.) Keep in mind though, that, in general, the construction industry isn’t one to coddle; it’s all about productivity. And in finding their place in a corporate culture that promotes from within.

Technology also offers huge appeal to this group. When advertising a position within your company, use the words that they want to hear—software, advanced methods, tablets, efficient new methods to completing a task. It all helps. When recruiting, also consider the use of social media. This generation is the most plugged in to social media than any other. Believe it or not, “having a life” is also extremely important to this group. They expect flexibility.

Yet the construction industry is not usually flexible. Flexi-
Moving Forward

Construction is moving at a fast pace with a growth rate of 22% per year. The shortage of qualified workers must be addressed sooner rather than later. The reality is that the younger generations are different and as such, a different approach must be used to attract and retain these workers. Corporate culture must shift a bit from what was used to work with the Baby Boomers towards what will work with Generation X and Generation Y, also known as Millennials. For Millennials, work is a means to an end yet they are looking for a “quality of work” environment that respects their opinions, offers a career path, promotes teamwork, and a dynamic, changing environment that is not boring. Industry trade associations must band together to collectively appeal to this group. Social media must be at the forefront of this campaign—Twitter, Facebook, Instagram, You Tube, and LinkedIn are all vehicles to deliver the message. The companies that do the best job of recruiting, managing, training and retaining newer members of the trade will be the most successful; it certainly is a long term project. It’s going to take construction companies of all trades to think differently, unlike any time in the past. As the industry ages, we will not have a choice but to employ new methods to attract and retain new workers. It’s not going to be easy but it is going to be absolutely imperative as the economy rebounds and even more construction takes place. What will you do to ensure that this happens?

By: Linda Candels

Linda Candels, is co-founder of Candels Estimating LLC, an outsourced estimating consultant specializing in electrical take-offs, value engineering, budgeting. She currently holds the position of president of Candels Estimating Training LLC and is a board member of the Consulting Estimator’s Roundtable and a member of ASPE. Located in Fort Myers, FL, Candels Estimating and Training has a nationwide clientele.
SECTION 1: INTRODUCTION

The purpose of the following technical paper is to provide the reader general information on how to estimate the painting of an exterior masonry wall. There are several components that can be part of painting a masonry wall such as sealers, repellents, sealants/caulking. However, this paper will only focus on the application of a primer and top coating to a new exterior concrete wall surface comprised of “masonry units”. The paper will be presented from the view of a painting subcontractor.

Main CSI Division
Division 09 - Finishes

Main CSI Subdivisions
Subdivision 09 90 00 - Painting and Coatings

Brief Description
The use of masonry unit walls is common in facilities such as elementary schools, prisons, carwashes, or where abuse to the facility is a concern. Unfortunately, the standard gray color of a typical masonry unit is not quite appealing especially if it makes up a large amount of exterior walls. The requirement to paint new exterior masonry addresses the look of an unfinished product along with preserving a porous material. Adding further protection to a durable material minimizes the amount of future maintenance and increases the overall longevity of the wall. Properly painting an exterior masonry wall often proves advantageous to the project considering the long term benefits over the initial cost.

SECTION 2: TYPES AND METHODS OF MEASUREMENT

Paint is quantified by surface area, referred to as square feet, however suppliers sell and quote large amounts of painting materials by the gallon. Traditionally, paint manufacturers suggest a coverage area per gallon based on the type of paint and certain conditions. The suggested paint coverage areas typically range between 200 and 300 square feet per one gallon of paint. Keep in mind that the suggested coverage areas are usually considered a "rule-of-thumb" and may not account for waste, multiple coats, and unusual surface conditions. In regards to painting an exterior masonry wall, the amount of square feet covered by a gallon of paint is highly dependent on whether the masonry wall is comprised of smooth or "split-face" units. Another concern affecting the amount of materials used but also the productivity is the method in which the paint materials are applied. The estimator must recognize the projects conditions and identify the most effective method for applying the required paint material. The concerns with different surfaces and the appropriate method of application will be discussed further in the section below (Section 3: Factors that Affect Take-Off and Pricing).

The overall floor plans and exterior elevations in a set of construction documents are best used to calculate the surface area (square feet) of an exterior wall surface. The use of a digital take-off tool is ideal in measuring and keeping a total tabulation of exterior or walls on a large project in a short period of time. Therefore, a digital tool eliminates excessive use of the architect’s scale that requires the estimator to keep a manual tabulation. Be cautious with noted scales on the plan documents by confirming with a noted dimension.

The aerial view of a floor plan allows the estimator to accurately identify and measure the horizontal dimension (length) of all exterior walls that require painting. The floor plan allows the estimator to accurately measure curved walls along with identifying alcoves; that many times do not appear on the exterior elevations. Any curved walls that do appear in the exterior elevations many times depict a foreshortened view that would cause inaccuracies in the take-off. The estimator should also view the site plans for dumpster enclosures and retaining walls that are usually constructed of masonry and require painting. The site and floor plans usually identify a masonry wall with a cross-hatching pattern. The exterior elevations are then used to determine the vertical dimension (height) of the exterior wall. In turn, the length and the height are multiplied to calculate the overall surface area (square feet) of the exterior wall. Additional areas for openings and changes in materials are gathered from the exterior elevations. If available, the estimator will need to review building sections and wall sections to help confirm wall heights and material transitions that may not be as distinct in the exterior elevations.

The estimator should recognize the amount of openings that can lead to reduced production for "masking" the openings or "cutting-in" around them. The estimate should deduct for large openings exceeding 100 square feet. In turn, reducing the amount of surface area for calculating materials is can be displaced by the increase of labor cost to account for each opening. Once the surface area of the wall is known, the estimator can apply multipliers for waste or unique conditions such as type of paint, surface texture, and method of application. The use of a waste factor covers the extra materials that assist in completing the project but considered not a part of the final product. A waste factor typically accounts for color selections and stored paint materials for the owner’s future use. This waste factor is applied to the original amount of calculated materials. Adjusting the manufacturer’s suggested coverage areas is the preferred method to account for unique conditions. These adjustments are gathered from the estimator’s previous project experience along with accurately utilizing historical data. The estimator should be cautious and carefully evaluate all project conditions that may affect one or several components of the material take-off. The calculations can then be summarized to determine the amount of paint required for the project.

Material Take-off Review
The material take-off is done by first measuring the wall for both the horizontal and vertical lengths in order to calculate the area. A spreadsheet with formulas added (see Section 9: Sample Material Take-Off and Pricing) can assist in accounting for required gallons of paint along with factoring waste, surface conditions, openings, and various dimensions.

SECTION 3: FACTORS THAT AFFECT TAKE-OFF AND PRICING

Small versus Large Quantities
The size of the project should always be kept in mind when estimating any type of project. The smaller projects with fewer quantities tend to have a higher unit cost than larger projects with far more amount of materials. At times a supplier may offer a discount when a large amount of materials are being purchased for a single project. However, the same discount might not be available on the next project that has half the amount of materials. Also, keep in mind that it will cost the same for the supplier to deliver twenty gallons of paint as it would to bring out forty gallons. Quantity also has a direct impact on production rates and the overall labor cost. A larger project offers more time to absorb any learning curves ultimately increasing the effectiveness of the operation and reducing the labor cost.

Effects of Application
Completing the project in a timely fashion is heavily dependent on the method of application. If unexpected or unproductive time is spent on a project utilizing personnel due to improper application, the labor cost begins to increase. The preferred method for applying paint to a masonry wall is with an airless paint sprayer. The use of a block filler primer before spraying allows for fewer top coats which helps provide the required amount of coverage in less time. The painting of a masonry surface without a block filler primer is a slower process that would most likely require additional materials to achieve the desired coverage. Other methods include using paint rollers and brushes; however these methods prove to be the most time consuming thus affecting the productivity.

Geographic Location
The material, equipment, and labor costs are impacted to some degree by geographic location. The ability to acquire the required materials for a project should...
be determined beforehand. Additional cost may arise for delivery and handling of materials if a local supplier is not available to fill the order. Also, some project sites may have challenging terrain with steep grades thus requiring the use of wheeled man-lifts and required personnel to operate such machinery. Unfortunately, the availability of skilled painters and laborers varies from one location to another and greatly affects the ability to perform top quality results. If the appropriate personnel are not factored in then the consequences usually mean decreased productivity and work that must be redone at a loss to the company. Remember, using an appropriate labor force that contributes will also add cost to the project for provisions such as fuel, lodging, meals, and incidentals.

Weather
The main issue with unexpected weather changes is the reduction in productivity that causes labor cost to increase. The fact that painting an exterior masonry wall occurs outside should force the estimator to adjust production rates based on anticipated changes in weather at different times of the year. The use of relevant past productivity is most likely the best adjustment tool. Also, the estimator can gather weather records and identify common trends to determine when the most adverse weather conditions may occur during the project schedule. The weather conditions that greatly impact the painting of an exterior masonry wall are high winds, precipitation, and extreme temperatures.

SECTION 4: OVERVIEW OF LABOR, MATERIAL, EQUIPMENT, INDIRECT COSTS, AND MARK-UPS
The total price for painting an exterior masonry wall is broken down into three categories labor, materials, and equipment. Taking the time to review all plans and specifications will ensure that proper components are included in the project cost. The following sections will also inform how a contractor’s indirect costs and mark-ups play a factor in the estimate.

Larger and more complex projects will require a closer analysis to determine the best crew make-up that ensures the most productivity with the lowest cost. An estimator should understand that an increase in personnel doesn’t necessarily affect the productivity in a positive way. As discussed earlier, labor productivity can be affected by the availability of skilled labor, site constraints, and adverse changes in weather.

Material
The required amount of paint can be calculated from the total square feet area and priced by the gallon. A sufficient amount of time should be taken to properly list and organize all required materials. The initial time used helps evaluate and adjust any future changes in an accurate and timely fashion. Keeping track of supplier discounts on materials and knowing when to apply them can often dictate who gets the project. As discussed earlier, a waste factor should be added and based upon the calculated gallons of paint being applied. The estimator must also remember to include other possible charges to the materials such as sales tax and delivery costs.

Equipment
For every project a close consideration should be given to what type of equipment is needed and how much is actually required. A close survey of the site conditions will help determine what equipment is needed to effectively complete the project. Depending on the size of the project the estimator may need to factor in the use of scaffolding, man-lifts, and airless sprayers. If the company does not own the equipment that is needed or the equipment is occupied on another project it can be rented from a local equipment company. The opportunity to rent a piece of equipment by the day or week can be cost less than purchasing new equipment and having to deal with recouping the investment, especially if it’s a small project. Small tools can also be handled by itemizing or applying a percentage on labor costs to cover items such as rollers, brushes, and masking tools.

INDIRECT COSTS
The indirect costs applied to the direct costs above are for items that allow the company to perform and complete the project. Such indirect costs include bonding, insurance, temporary facilities, and fuel. The estimator can list and add all necessary indirect cost or most commonly a percentage is applied to the direct cost. A percentage for indirect cost is different for each company and should be determined by specific project conditions.

MARK-UPS
The gain from a company’s capital investments is considered being profitable. In other words, the remaining revenue after paying for both direct and indirect costs for the project is a profit for the company. This is usually handled by applying a percentage mark-up to the entire cost. Depending on the company, mark-ups can be separated with distinct percentages for overhead and profit; some companies chose to view mark-ups as a total combination of overhead and profit. Applying the correct mark-ups can be influenced by several factors such as competition, risk, and the amount of work the company has backlogged. Most companies have upper management apply the final mark-ups because of the overall goal to have a successful project along with future growth for the company.

SECTION 5: SPECIAL RISK CONSIDERATIONS
The following risk or concerns are some of the most impactful items that the estimator should consider when finalizing the estimate. Being that painting an exterior masonry wall occurs outside only increases the level of risk an estimator has over the actual cost upon performing the work. The estimator cannot control all possible risks however one can anticipate the situation and determine whether to account for it in the final cost. Some of the risks are:
1. Adverse weather conditions (i.e., high winds, precipitation, extreme temperatures)
2. Available skilled labor force
3. Material availability
4. Site conditions (i.e., sloping/steep grades, limited staging area)
5. Surface conditions (i.e., Smooth, Split-face)
6. Existing surfaces to be re-painted

SECTION 6: RATIOS AND ANALYSIS
The proven method to determine accuracy in an estimate comes from previous results on projects performed by the company. It’s important to gauge the estimate to a project with similar conditions in order to have an accurate comparison. Certain conditions such as quantities, crew size, and productivity have the greatest impact on an accurate comparison. The estimator should take the time to review the estimate for any possible mathematical errors before determining that the historical data proves the initial estimate false. Ratios are another helpful tool when verifying unit cost in comparison to the total cost. A typical ratio for painting an exterior masonry wall is for the material cost to fall between 45 to 65 percent of the total cost. Experience and keeping track of project results is vital for an estimator to create a systematic approach to accurately compare projects. If lack of experience is an issue, the estimator can use
publications or software programs to determine a starting point on completing a project specific estimate. Keep in mind that many industry sources provide cost information that does not consider unique site conditions or local competition to name a few.

**Section 7: Miscellaneous Pertinent Information**

The most frequent cause in producing inaccurate estimates is failure to examine all project documents. All project documents not only include floor plans, walls sections, and details but specifications as well. Most importantly, front-end documents (General and Supplementary Conditions) contain information on working hours, weather days, and provisions on price increases. On the same note, the specifications may require that certain items such as scaffolding be provided and installed by the general contractor for use by all trades. If the estimator is unaware of such a provision and includes it in the project costs then it could reduce the chances of getting the job. Numerous other items that may be requested as part of the painting estimate which we have not gone over today are power washing, sealants/caulking and water-repellants.

**Section 8: Sample Drawings and Details**

This section includes examples of floor plans, elevations, and details commonly used to estimate the cost of painting exterior masonry walls.
Section 10: Terminology/Glossary

Masonry Unit: natural or manufactured building units of burned clay, stone, glass, concrete, etc.

Rule-of-Thumb: a statement or formula that is not exact but is close enough for practical work.

Split-Face Unit: concrete masonry units with one or more faces produced by purposeful fracturing of the unit to provide architectural effects in masonry wall construction.

Masking: the temporary covering of areas adjacent to those to which paint is to be applied.

Cutting-In: a painting technique used to paint around the edges of an object or areas, such as trim, light fixture, or an opening.

Section 11: References


Section 9: Sample Material Take-Off and Pricing

Please note that the following take-off and sample estimate is not based on the plans included in Section 8.

**MATERIALS**

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**PERCENTAGE OF APPLIED MATERIALS**

| Waste Factor               | 10%    | $28.25 | 135.60    |
| Temporary Protection (Risk of Material) | 20% | $28.25 | 576.00 |
| Subtotal                   | 238    | $6,440.49 | 332.99   |

**TOTAL MATERIALS**

19,800 SF

$10.31

6,989.48

**LABOR** (1 Supervisor, 1 Painter, 1 Cleaner, & 1 Common Laborer)

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**TOTAL LABOR**

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$10.31

3,769.70

**TOOLS AND EQUIPMENT**

<table>
<thead>
<tr>
<th>Item</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Misc. Tools (Knives, Brushes, etc., 10% of Labor)</td>
<td>$319.17</td>
</tr>
<tr>
<td>Airless Paint Sprayer (misting Only)</td>
<td>$319.17</td>
</tr>
<tr>
<td>Scaffold (Provided by the General Contractor)</td>
<td>$319.17</td>
</tr>
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</table>

**TOTAL TOOLS & EQUIPMENT**

19,800 SF

$0.04

881.86

**SUMMARY**

<table>
<thead>
<tr>
<th>Item</th>
<th>Total Cost</th>
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</thead>
<tbody>
<tr>
<td>Materials</td>
<td>$19,800 SF</td>
</tr>
<tr>
<td>Labor</td>
<td>$19,800 SF</td>
</tr>
<tr>
<td>Tools and Equipment</td>
<td>$19,800 SF</td>
</tr>
<tr>
<td>Overhead (15%)</td>
<td>$3,664.32</td>
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<tr>
<td>Profit (15%)</td>
<td>1,740.65</td>
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<tr>
<td>Total</td>
<td>21,400.65</td>
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Estimate Notes:

1. Two 10’ x 25’ Exterior Door Openings were deducted from the South Elevation calculation.
2. The shown coverage area & unit cost is an average based on (1) coat of black filler primer and (1) coat of top paint.
3. The shown productivity rate is an average for both the black filler primer and top coat.
4. Equipment is based on a 40 hour work week.
5. Productivity adjustments have been made to the South Elevation & Exterior Exclusion walls.
6. Excludes the cost for scaffolding, to be provided by the general contractor.

Click Here for PDF Drawings
ASPE Industry Awards


ASPE wants to highlight your efforts, your company, and your project success! The new Industry Awards emphasize the positive results an estimator brings to the construction process. Individual estimators, as well as members of a company's estimating team, have an opportunity to be recognized for their contributions for the successful delivery of projects of varying sizes. Share with your fellow estimators the exciting projects on which you work and feature the companies you partner with.

Submission process is easy! We want everyone involved!

Submit by Wednesday – June 7th

As an ASPE member, show others what makes the Art of Estimating a rewarding and exciting career!

Submit Today!

Introducing the Newly added awards for 2017...

Industry Awards

Intentions to Submit? Don’t wait any longer! June 7th Deadline.

Best Estimate

The ASPE Industry Best Estimate Award is given to the entry in its sub-category that displays the best overall estimate of a proposed project across any sector. Benchmarks can include, but are not limited to the following:
- Estimate Efficiency
- Estimate Accuracy, Budget and Materials
- Revisions
- Client Satisfaction
- Tools and Technology Used
- Solutions for Unexpected Challenges

Best Project

The ASPE Industry Best Project Award is given to the entry in its sub-category that displays a combination of excellence across the entire scope and process of the project submitted. Benchmarks can include, but are not limited to the following:
- Budget Control
- Safety, Staff and Environmental
- Value to the Community
- Project Management
- Team Work
- Materials Efficiency
- Project Innovations
- Use of Advanced Techniques/Software

Most Innovative Project

The ASPE Industry Most Innovative Award is given to the entry in its sub-category that displays the most unique and innovative benchmarks across the entire scope and process of the project submitted. Benchmarks can include, but are not limited to the following:
- Innovative Design Build
- Creative Design Build
- Technology Elements of Project
- Technology Solutions
- Green Innovation
- Community Involvement
- Addressing Environmental or Coding Concerns

All Entries Must Include a Project Narrative

Your narrative must not exceed a maximum of 750 words. The narrative should focus on why the project should be considered the best in its category. This information will also be used for the award presentation should you win an award. Note: The descriptions of each of the required elements are meant to be used as guidelines. You should interpret all criteria based on your own unique project submission and respond accordingly.

Visual Presentation:

While points are not awarded for the visual presentation, the photos may impact your entry. In that they help to tell your story. Support your narrative with photos that show the scope and process of the project and any challenges described in the narrative. You may include up to 3 photos in your project submission.

NOTE: ASPE reserves the right to adjust categories based on number of submissions received.

Three ASPE Industry Award Categories:

Each award is separated by project categories that are defined by project budgets and final costs. They are the same classifications for all three awards:
- Projects Under $5 million
- Projects Between $5 million and $10 million
- Projects Above $10 million

Call to submission before deadlines on upcoming 2017 Awards!
Executive Director Corner

M. Todd Dyer
Executive Director
Todd@aspenational.org

My dad taught me about hard work. A truck driver who dropped out in the eighth grade, twelve hour days were the norm for him. In my thirty plus years in the construction industry I have been surrounded by people who value hard work the same as he did. Workers in our industry regularly work sixty plus hour weeks and our busy modern lifestyles mean very limited time for volunteer and membership activities after work and family obligations. Coupled with that, the past twenty years has seen a diametric shift in how we engage with one another. Generation X and Millennials’s sense of community and fellowship is defined as much on Facebook, Instagram, and Twitter as it is face to face. This evolution has resulted in many associations that were formed in pre-Internet days dropping members in droves.

Our Society has faced the same issues as almost every other. Membership has been going down. Our leadership recognized this, saw the trends and the need for change. As with many things now, you either adapt or die. My conversations with our Governors has been uniformly grim. “The chapters are dying” is a unanimous theme I heard, and our membership trends back them up.

That’s the bad news. So, what do we do now? Can we fight the overwhelming trends? The answer is yes and no. If we try to do things the way we always have, the answer is “no”. We will be doomed to riding the trend to extinction. However, if we change, we can flourish. The opportunities are there. According to the Bureau of Labor Statistics in 2014 there were over 200,000 cost estimators and they were expanding at 9% per year. That is a huge audience.

That begs the question, “how do we change?” We must focus on our customer, you! We must be able to show you how you cannot afford to NOT be a part of ASPE. We have to bring you value.

ASPE is made up of so many amazing people. Our association’s leadership has worked tirelessly for the good of ASPE. They have taken a stand, made the tough decisions, and built the foundation for us to grow. Our business office staff is made up of hard workers who are focused on serving our members. Most importantly though is our greatest resource, you, our members. I have never seen a group of people who care so much about their organization and who are so committed to its future. So many of you give freely of your time to make the Society a better place.

I am so honored that I get to be a part of it. This is where I want to be. I will be reaching out to you all soon. Each of us has something to offer. Those of you who want to give of your time and talents, we can use you.

We have all the parts we need to be extremely successful. We are assembling teams to develop plans on how we get there. Then all we need to do is execute. We will roll up our sleeves and do what it takes. Then soon we will look back and see how far we have come.

It’s going to be a wonderful journey, and I can’t wait to take it with you.
BEYOND THE NAMES

Don’t miss this opportunity to learn a little more about the featured speakers for the 2017 Annual Summit in Denver, Colorado.

Gift Cards of any denomination* or small door prizes (suitable for traveling) will be raffled at the 2017 Annual Summit.

*Make sure the gift card value is shown on card.

Please mail gift card donations to:
Jennifer Cochran
Society Business Office
2525 Perimeter Place Drive
Suite 103
Nashville, TN 37214

Donate By
June 30, 2017
KJ McCorry, Speaker for Efficiency Inc.
Creating Time Efficiency & Managing Multiple Priorities

At the end of your workday do you feel exhausted, overwhelmed and unproductive? In today’s busy world it is important for workers to be as effective as they can with the limited hours of time during the day. If the unexpected interruptions and crises are affecting your productivity, then it is time to take control of your workday!

Objectives: In this workshop you will learn how to:
• Implement practical and specific time management skills that will increase your effectiveness and reduce time-wasted activities
• Gain confidence in managing your time, schedule and priorities
• Manage your day in the midst of a busy and hectic work environment

Niel Nicholaisen, Chief Information Officer, OC Tanner
Two Concrete Things That Accelerate Transformation

In today’s fast-paced, rapidly-changing world, what can organizations and leaders do to make sure that they focus their innovation where it matters most and how can they unleash their teams to do their best work? In this session, Niel Nickolaisen, award-winning technology leader and author of "The Agile Culture" and "Stand Back and Deliver" presents the two models he uses to ensure organizational, team and personal success:
• Purpose Alignment helps us define what creates our competitive advantage, what deserves our innovation and for which things good enough is good enough.
• The Trust / Ownership Model proposes that the primary role of a leader is to create a culture – but what culture unleashes talent, improves engagement and focuses on outcomes? A culture of trust and ownership.

Niel uses a number of examples and one over-arching case study as he shares these models. His goal is that by the end of the session, participants are ready to use these models in their roles.

GAIN CRITICAL INSIGHT
THAT KEEPS YOUR BUSINESS MOVING FORWARD

UNPARALLELED GUIDANCE

Nora Burns, Speaker & Hiring Consultant
It’s Not Actually Worse Than Death: Surviving (and THRIVING at) Public Speaking

Fear of public speaking is quite common; unfortunately that fear can cripple your career, since it’s almost impossible to be successful without having to present to a large group at some point, no matter what your formal job title or function may be. Whether you are responsible for presenting to your team, a larger group within your organization, or to an external audience, it pays to learn how to present with confidence and competence.

This practical session covers the basics you need to know for successful presentations in a fun, interactive way – and we promise, no one has ever died or even required hospitalization as a result of this workshop!

Objectives: Upon completion of this program, participants will be able to...
• Be more comfortable presenting to large or small groups
• Understand the role that content, delivery, and visual aids play in an effective presentation
• Demonstrate audience awareness and incorporate interaction
• Capture and maintain the attention of an audience
• Utilize techniques to control nervous energy
• Design effective presentations and utilize a variety of visual aids effectively

Andy Mofit, LEED AP & Director of Preconstruction
Leveraging Historical Costs to Maximize Cost Intelligence

Leveraging historical costs for construction companies is easy to talk about but hard to do. It takes time and effort, and frequently it is viewed as time away from more demanding priorities. Even if historical costs are captured, often they are not captured in a way that maximizes their usefulness. In this presentation, the audience will learn about effective ways to structure your cost data so that historical trends can be recognized and used in cost forecasting. The following topics will be discussed in the presentation:
• Recognizing the importance retaining project cost information
• Overcoming the challenge of getting started and staying with it
• The unique benefits of Trimble Modelogix as a historical cost database
• Real world examples of leveraging cost information

This session has qualified for Professional Development Hours (PDH) accreditation.
April 20, 2017

Ms Ashley Stone
American Society of Professional Estimators
2525 Perimeter Place Drive STE 103
Nashville, TN 37214

Dear Ms Stone,

At its Mid Year Meeting, The American Council for Construction Education (ACCE) reviewed the application for re-recognition of American Society of Professional Estimators (ASPE) Certified Professional Estimator program. The Council had available to it the reports of the Recognition Committee and the self-evaluation reports provided by ASPE.

This letter is to inform you that the Council has voted to recognize your programs as meeting the rigorous standards of ACCE. As a result of the quality of your, organization and the programs, ACCE recognizes this program for a period of 3 years, beginning February 24, 2017 through February 28, 2020.

A renewal of recognition will be scheduled at the end of the 3-year period. We will require a self-evaluation study, in preparation for this reaffirmation. This report will be due in the ACCE office not later than November 1, 2019.

The Board of Trustees of ACCE extends congratulations on this re-recognition. We wish you continued success with your program, and feel confident that your graduates, the building community and the Nation are richer for your efforts.

Best regards,
American Council for Construction Education

Michael M. Holland, CPC AIC
President & CEO

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**Welcome New Members!**

<table>
<thead>
<tr>
<th>Member</th>
<th>Company</th>
<th>Chapter</th>
</tr>
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<tbody>
<tr>
<td>Ray Chandler</td>
<td>Lamb Oxford MTC Inc.</td>
<td>Los Angeles 1</td>
</tr>
<tr>
<td>Brad Avrit</td>
<td>WEXCO International Corporation</td>
<td>Los Angeles 1</td>
</tr>
<tr>
<td>Craig Rossi</td>
<td>Farwest Insulation Contracting</td>
<td>Golden Gate 2</td>
</tr>
<tr>
<td>Tommy Mendoza</td>
<td>BlackSand Builders</td>
<td>Golden Gate 2</td>
</tr>
<tr>
<td>Christopher Ingram</td>
<td>Ingram Fire Protection Inc.</td>
<td>Golden Gate 2</td>
</tr>
<tr>
<td>Steve Ferrero</td>
<td>S Ferrero</td>
<td>Golden Gate 2</td>
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<tr>
<td>Franklin Lee</td>
<td>M Lee Corporation</td>
<td>Golden Gate 2</td>
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<tr>
<td>Brant Helms</td>
<td>Sunstate Equipment Co.</td>
<td>San Diego 4</td>
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<tr>
<td>Courtney Judith</td>
<td>Hensel Phelps</td>
<td>Denver 5</td>
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<tr>
<td>Brad Babel</td>
<td>Sampson Construction Co., Inc.</td>
<td>Denver 5</td>
</tr>
<tr>
<td>Christopher Stanley</td>
<td>DanCar Energy Construction, LLC</td>
<td>Denver 5</td>
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<td>Thomas Hughes</td>
<td>Rosendin Electric, Inc.</td>
<td>Arizona 6</td>
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<tr>
<td>Pamela Smith</td>
<td>ALPA Construction</td>
<td>Chicago 7</td>
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<td>Timothy Ericson</td>
<td>Consigli Construction Co, Inc.</td>
<td>Boston 25</td>
</tr>
<tr>
<td>Jonathan Walker</td>
<td>Consigli Construction Co, Inc.</td>
<td>Boston 25</td>
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<tr>
<td>Adelaja Emmanuel</td>
<td>National Grid US</td>
<td>Boston 25</td>
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<tr>
<td>Bill Leary</td>
<td>WHL Enterprises Inc TA Bill Leary AC &amp; Heating</td>
<td>Garden State 26</td>
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<tr>
<td>Danny Johnson</td>
<td>Prodigy Wood Inc.</td>
<td>Buckeye 27</td>
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<tr>
<td>Danny Duque</td>
<td>Sano-Rubin Construction Services, LLC</td>
<td>Empire State 42</td>
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<tr>
<td>Don Hensel</td>
<td>Sano-Rubin Construction Services, LLC</td>
<td>Empire State 42</td>
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<tr>
<td>Rui Liu</td>
<td>University of Florida</td>
<td>Orlando 50</td>
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<tr>
<td>Todd Geisler</td>
<td>Geisler Brothers Company</td>
<td>Quad City 71</td>
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<tr>
<td>Nate Zelger</td>
<td>Estes Construction</td>
<td>Quad City 71</td>
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<tr>
<td>Bill Cole</td>
<td>Glaziers Center</td>
<td>Western New York 77</td>
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<tr>
<td>Michael Ramos</td>
<td>Inpro</td>
<td>Brew City 78</td>
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<tr>
<td>Asradee Cravens</td>
<td>A&amp;D Supply Company</td>
<td>Landrun-Oklahoma City 80</td>
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<tr>
<td>John Sylvester</td>
<td>CCI Energy and Construction Services, LLC</td>
<td>Southwest MAL - 91</td>
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**Announcing ASPE’s Latest CPE’s**

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<thead>
<tr>
<th>Member</th>
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<th>Chapter</th>
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</thead>
<tbody>
<tr>
<td>Stephen Sekeres, CPE</td>
<td>Sekeres CM Services</td>
<td>Los Angeles 1</td>
</tr>
<tr>
<td>Scott Weaver, CPE</td>
<td>Haskin Electric, Inc</td>
<td>Columbia-Pacific 54</td>
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On March 3, 2017, estimators from all over the Midwest began to arrive at the Hotel Covington in Covington, KY for the ASPE Central Plains 2017 Spring Regional Meeting, hosted by ASPE Chapter 38 Southwestern Ohio and their president David Rowland. The festivities got underway that evening with a fun but unofficial group dinner at local eatery Blinkers Tavern, located at the south end of the historic Roebling Suspension Bridge, which was built in 1865 and has been spanning the Ohio River, connecting downtown Cincinnati and Covington since the time of the Civil War.

The next morning, after an hour of networking and breakfast, the conference got underway in the Duveneck meeting room at the Hotel Covington. ASPE VP2 Mel Cowen, CPE led a presentation/discussion on the many changes that our ASPE has recently undergone, and is still undergoing. We discussed the change in office management, changes to the ASPE website, plans for the annual Estimator’s Summit in Denver set for July 2017, and got an update from ASPE national Education Committee member Deanne Goodlaxson, CPE on content for the Summit, and brainstormed ideas to identify chapter activities and membership development. We also got an update from ASPE national Awards committee member Phil Tourner, CPE on the new award categories and processes that the committee has launched. The morning’s events concluded just before lunch with Eric Soriano and Chapter 32’s presentation: “How to Develop and Present an Estimating Academy”, which was very well presented and very well received. Phil, Eric, and I all attested to the quality of an event that can arise from the careful planning that Eric’s presentation demonstrated, as each was in attendance at Chapter 32’s event just a month earlier in Kansas City, where over 160 attendees participated in the day long event with four course tracks and ample opportunity for networking, all of which was a great way to promote estimating as a profession and ASPE as an association.

Next up was a delicious lunch featuring sautéed salmon and southern fried chicken, and all the goodies that go with both. With full bellies we all next enjoyed the day’s keynote speaker, whose presentation could have gone on for the rest of the day – it was that interesting and riveting, and generated a lot of great discussion and what if scenarios. Timothy B. Thoma, Manager of Project Services for the Environment and Infrastructure division of AMEC Foster Wheeler, based in their Cincinnati office, dazzled us with his topic “Identifying and Managing Risk as Part of the Bidding Process”. Tim defined many different risk types, and strategies for dealing with each, from eliminating them altogether to accepting them and assigning a dollar value to their impacts to the overall project. Tim’s presentation was relevant for all – from owners, GCs, CMs, subcontractors and even suppliers, and helped many of us realize that we already practice risk management in our everyday duties as estimators without necessarily recognizing it as such. He also included our Canons of Ethics as they relate to the various methods of risk mitigation, and emphasized the importance of fairness to all parties in the bidding and buyout processes.

Tim’s presentation concluded the official meeting, but that evening, we had our official social-fun activity: we transported ourselves on a luxury bus to US Bank Arena in downtown Cincinnati for a night of minor league ice hockey and associated fun, including Weiner dog on ice races and puck chucking, which involved hurling onto the ice (at the designated time of course) a small, felt covered plastic hockey puck, intended to land closest to center ice. It was all great fun as our 30 estimators and their guests watched with 8000 others as the Cincinnati Cyclones defeated the Adirondack Thunder 3-1.

All in all, we had a great weekend in Covington. As a veteran of many such events in my 13 years as an ASPE member, I can say with certainty that the time felt like past events where our members really enjoyed the content, the food, the activities, and the events, and left to go back to their chapters with stories of fun and learning and great memories of time well spent with their brother and sister estimators, and good ideas to implement at their chapters. There was a noticeable feeling of optimism for the future of ASPE in the room, thanks in large part to the efforts of the ASPE national board to make the necessary changes that will allow ASPE to adapt and evolve smartly as our world and our industry change. I thank all who attended and spent their chapter and their own resources to travel to the Cincinnati area for this important event. I also recognize event sponsors Turner Construction, Mod Space, CORT Furniture Rental, and DG Frondorf and Associates for their financial support to Chapter 38 to help this event become a reality.
A MILE HIGH SUMMIT

DENVER
COLORADO

2017 ANNUAL MEETING AND ESTIMATORS SUMMIT
JULY 12-15, 2017