



In 2012, Proof Productions, Inc. was commissioned to build an 85' tall "Eiffel Tower" scenic element, designed by Mimi Lien, for the Philadelphia International Festival of the Arts in the Grand Atrium of the Kimmel Center.

Theatrical set building from an ETCP perspective

"WHAT CAN BE IMAGINED CAN BE BUILT!" This has been the motto of Proof Productions, Inc. since the company was formed in 2002. The "imagined" part often comes in the form of drawings and renderings from a designer. More often than not, these drawings are conceptual

or visual in nature and do not include construction details, rigging attachments, structural framing, or electrical schematics. In the case of an automated element, the details can be even more complicated. What looks like a stationary wrought iron gate on paper may be accompanied

with the *simple* instructions requiring the piece mechanically open and close within a fully adjustable time period of 5 – 60 seconds, have DMX control capability, and be rigged to fly. This is unheard of in the construction and manufacturing industry, where every component is precisely drawn by an architect or mechanical engineer and where very little is left to the experience and ingenuity of the fabricator. We are pleased to state that things are quite different in our world, the theatrical fabrication industry. That connection between designer drawings and a safe and functional set piece is where some of the magic happens.

"Make it fly." That term probably has a hundred different meanings, depending on who is reading it. But it only has one meaning to certified riggers in the rigging industry, and it's not always a simple request. We are fortunate enough to have just as much experience with on-site rigging and installation as we do with set building. Our ETCP-certified riggers are also our in-house mechanics. They know that you can't just bolt a D-ring to the top of a scenic element and call it "rigged to fly." From the moment a designer's drawing is evaluated by our team, our mechanics are hands-on with design of the framing structure,

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rigging attachment points, selection of rigging hardware, and weight calculations. Underneath that meticulously-painted wood surface is an intentional steel skeleton that is designed to carry the entire weight of the unit to a predetermined amount of rigging points. We also take into consideration that

An ETCP insurance discount?

By Neil Huff, Taylor & Taylor Associates

I was recently asked by ETCP Certification Manager, Meredith Moseley-Bennett, "How much of a discount does a certified rigger get on their liability insurance because of their ETCP Certification?" Since there is no simple answer to this question and since no insurance carrier has specifically filed an ETCP Certification schedule credit with any state department of insurance, I thought I would pose this same question to the insurance carriers themselves.

I approached the underwriting managers of two insurance companies with whom we place coverage for Certified Riggers. The response was the same from both carriers. Traveler's and ProSight Specialty both stated that an ETCP Certification can result in as much as a 20% discount, but there are other underwriting considerations that go into whether or not they will give the full credit to a specific risk.

Since all risks are not created equal, it would not make underwriting sense for an insurance carrier to give the same rate credit simply because one person in the company has passed an ETCP Certification exam. I believe that we would all agree that Rocky Paulson is one of the best and most experienced riggers on earth. Should Rocky be expected to pay the same rate (per thousand dollars in exposure) as another Certified Rigger that has only satisfied the minimum qualifications to sit for the exam? What about the size of the company? Would you expect a company with \$5,000,000 in rigging receipts to pay the same rate as a company with only \$50,000? While both companies deserve an ETCP Certification discount, other factors must be taken into consideration to arrive at a "final rate." The ultimate premium a company pays is made up by multiplying the final rate by the premium exposure (sales, payroll, et cetera). Size and prior loss experience do make a difference! Insurance is like anything else—you can usually obtain a discount by buying in bulk. Generally, the larger businesses usually pay a lower rate per thousand dollars of exposure.

Insurance underwriters are trained to analyze the risk characteristics of each applicant and credit or debit the base rate depending on the individual risk factors. Each applicant is evaluated on its own merit. So what are some of the other factors that are taken into consideration in the rate development process besides ETCP Certification and company size?

Other risk factors

- Loss history of your company
- Types of shows: Whether you do theatre, concerts, industrials, corporate events, et cetera.
- Types of venues: Theatre, arena, stadiums/outdoors, roof systems, tents, exhibition halls, hotels, et cetera. Do you employ high riggers or ground riggers?
- Touring or non-touring: Are you in the same venue all the time, or are you in a different venue every night?
- Management: What is the employee selection process? What is management's attitude toward safety and training? If management takes these issues seriously, it permeates the entire organization.
- Employees: Do you have training programs and continuing education?

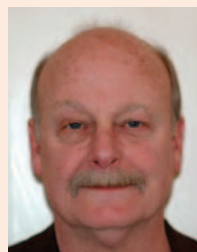
- Certification: What is your ratio of ETCP Certified Riggers to non-certified riggers?
- Safety program: Have you implemented a written safety program? Have regular meetings? Do you provide OSHA training?
- Adherence to standards: Do you comply with ANSI standards, including those developed under PLASA's Technical Standards Program, relevant parts of the *Event Safety Guide*, NFPA, and NEC regulations?

The answers to the above questions will determine whether the insurance company underwriter considers the risk a superior, average, or inferior risk and the corresponding rate to be offered by the insurance carrier (if they are willing to underwrite the risk).

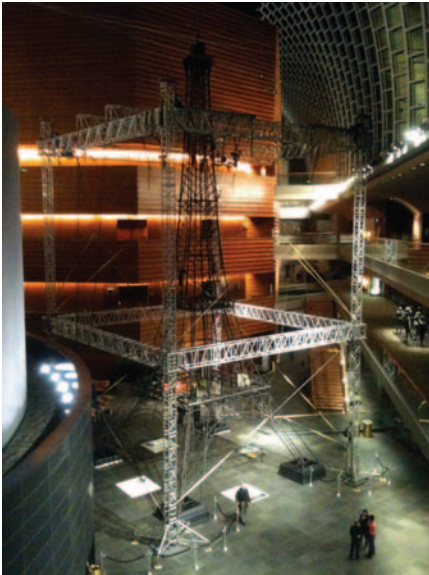
How do I know if I am getting a good deal or not?

First of all, make sure you are dealing with an agent or broker that specializes in entertainment risks and, specifically, technical production. If your agent has never heard of ETCP, the PLASA Technical Standards Program (TSP), or the Event Safety Alliance (ESA), chances are they are not the right person. Second, make sure you discuss the factors listed above with your agent and why your company should be considered a superior risk. Third, make sure that the insurance company underwriters know why you should be considered a superior risk and get the highest discount available.

Again, if the insurance company has never heard of ETCP, TSP, or the ESA, chances are it is not the right insurance company for your company. Finally, ProSight Specialty Insurance Company has done more than any other insurance company to promote safety in the live entertainment industry by supporting the ETCP and the Technical Standards Program and making standards available to anyone free of charge. Ultimately, it is this free exchange of safety information that will have the greatest impact on rates for companies in the live entertainment business. If people practice safer business techniques, the claims experience will improve, and the actuaries will look more favorably on the industry based on quantifiable claims history.



Neil Huff has been serving as insurance broker for many members of the association since 1988. He recently sold his agency PRISM, Inc. to Taylor & Taylor Associates, a leading entertainment insurance brokerage. Neil can be reached at 864 836 4197 or nhuff@taylorinsurance.com.



The “Eiffel Tower” was fabricated using a massive self-climbing truss structure with four vertical ground-supported towers and two moving truss platforms.

on-site riggers, whether it’s our crew or venue staff, will need to inspect all critical rigging components. Attachment points and hardware are designed to be accessible and replaceable. Essential framing members are left exposed or are equipped with removable access panels. These are more than just user-friendly features. Proper rigging design is an essential and necessary component in the critical path from conceptual design to

“What may be technically complex must ultimately be practical, reliable, safe, and serviceable in the field.”

installation in the theatre, arena, or event.

In 2012, we were commissioned to build the “Eiffel Tower” scenic element for the Philadelphia International Festival of the Arts (design by Mimi Lien). Designed at more than 85’ high, built entirely out of 9,000 lb of steel, and destined for installation in the Grand Atrium of the Kimmel Center, we were presented with a number of challenges. Although the tower would be ground-supported, something of that height is typically assembled with the

assistance of a crane. It was determined on a site evaluation that, not only could we not utilize crane equipment due to access limitations into the building, the building did not have adequate roof structure to accommodate overhead lifting via chain hoists. Our solution was to design and fabricate a massive self-climbing truss structure that featured four vertical ground-supported towers and two moving truss platforms. We designed the scenic tower to be fabricated in layers. Each layer was equipped with structural framing and strategically-placed rigging points. The entire 85’ structure was successfully stack-built, from the ground up, under the supervision of ETCP-certified riggers. The project was made possible as a result of the collaboration between the riggers, mechanics, designers, and fabricators.

“Make it move or light it up.” Automation and set electricians is often an integral part of set design. From moving features to backlit panels, the fabrication shop is presented with the task of bridging the designer’s vision with the technical components required to create a functioning piece. Automation can require any combination of electric-powered devices including solenoids, gear motors, relays, limit switches, et cetera. Lighting can include a variety of lighting types (LED, halogen, fiber optic) that require a wide range of voltages. Control requirements can range from simple contact closures to more complex DMX and computer control. Our ETCP-certified electricians are hands-on with the entire automation, lighting, and control design process, including the initial concepts (i.e. brainstorming), R&D, and final fabrication. What may be technically complex must ultimately be practical, reliable, safe, and serviceable in the field. The method by which a component ties into house/venue power is just as important as how the unit operates internally. The importance of implementing proper electrical practices from design to installation is vital to the overall effectiveness and safety of any scenic

element that is equipped with electrically-powered components.

We see the certification process as a necessary step in the future success of our industry. Since the early days of scenic fabrication, craftsmen have been turning a designer’s vision into reality. Every year since then, set design has matured with the demanding taste of the audience; scenic elements have grown to be bigger, brighter, and more elaborate. We as an industry are obligated to match this growth with

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a proactive, vigilant approach to safety. The adage “well that’s how we’ve always done it” is not credible in an industry that is constantly evolving. There has always been, and will always be, an expectation of safety. That expectation should be met with qualified and certified professionals that are involved with every step of the theatrical design, fabrication, and installation process. It is the actions of responsible producers, designers, mechanics, and technicians that have made our industry a successful one. And it will be that same group of people that will advance this industry. ■



Matthew Hughes is General Manager at Proof Productions, Inc.; he joined the company in 2003. With a background in live event production and customer service, Matthew oversees project management, client relations, and the day-to-day operations of Proof Productions.

All three ETCP examinations will be offered in one session in Ft. Worth, TX at USITT on March 29, 2014 at 9:00 a.m. Application deadline: March 3, 2014.