SPRING 2017 QUARTERLY REVIEW

BUILDING PLAN REVIEW | FIRE SAFETY PLAN REVIEW | CONSULTING SERVICES

FSCI

IN THIS ISSUE

OUR GOAL IS TO COMPLETE ALL PLAN REVIEWS WITHIN 10 BUSINESS DAYS

PRESIDENT'S MESSAGE

An FSCI update from Keith Frangiamore, FSCI President

Exciting changes at FSCI

In the past two years, as our client base grew by over 15%, we struggled to meet our time commitments on projects. At first, the delays were confined to peak times, but as our work increased the delays became more prevalent. Our team members worked diligently to minimize the plan review process delays without affecting the quality of work.

We strive to add great people to our FSCI team. The selection, interview and on-boarding process can consume up to six months to find the best candidates. As part of our strategic planning process, we began to search for new team members in late 2016. As a result, we hired the following new team members:

In January this year, FSCI hired John Kobylas, an additional fire protection plan reviewer in our Michigan office. In February, we hired Scott Kunzie as a fire protection plan reviewer/consulting division consultant in the Illinois office. In March we hired an additional Administrative Assistant, Brooke Wadman, in the Illinois office. We also hired Scott McBride as a fire protection plan reviewer in the Illinois office.

FSCI is now interviewing for two more positions to fill out our team this Spring, one additional administrative assistant and one additional fire protection plan reviewer.

FSCI's goal is now, and always will be, to provide the best quality 3rd party services in the agreed upon time frame. We are committed to continuously improve all services we provide to our loyal clients and customers.

THE PAST 20 YEARS

by Matt Davis, Senior Fire Protection Consultant

This July I will celebrate two decades of working with Fire Safety Consultants Inc. In comparison, the average person works at a single job for less than 5 years, drives a single car for less than 10 years, and lives in a single home for only 13 years. I fit into two of the three categories having 3 homes and 7 cars in that time. When I was asked to write this article I knew instantly that I wanted to reflect on the changes that I have seen in the fire protection industry over the past 20 years. It is easy for us to forget how far and fast technology has come.

When I started, the BOCA National Building Code, 1996 edition was the current code being used in this area of the country. The Standard Building Code and the Uniform Building Code were being used in other areas of the USA. The 1996 BOCA was less than 360 pages and the Fire Protection section, Chapter 9, was only 16 pages long.

The handbook for the 1994 NFPA 13, The Standard for Automatic Sprinkler Systems, was 790 pages and that included 13R and 13D. A quick side note. In looking this up I discovered that NFPA 13D was officially adopted in 1975, before specific test data and before the quick response or residential sprinklers were developed. In the early 80's the standard was radically altered and new sprinkler types were incorporated. 13R did not appear until the 1989 edition of the standard. I note this because I had no idea that 13D had been around that long. When I started, I don't believe FSCI was reviewing any Single Family Home Sprinkler systems. In 2016 we reviewed over 250.

The 2016 edition of NFPA 13's handbook has expanded to be over 1,200 pages and that does not include 13R and 13D. They each have their own handbook that is over 400 pages by itself. NFPA 13 has seen changes to almost all aspects of its requirements with new fire testing being done. We have seen the rise of ESFR and Specific Application sprinklers due to higher design density requirements for warehouse and big box retail stores. This is to account for the commodities being stored. TV's alone have gone from about 10% plastic to almost 90% plastic in the past 10 years.

The handbook for the1993 edition of NFPA 72, The National Fire Alarm Code, was less than 400 pages. It had a section that covered radio communication networks and addressable fire alarm systems, but the amount of information and requirements for these system were limited. Conventional (zoned) control panels were common, and large systems required enormous secondary power.

NFPA 72 has also gone through drastic changes over the years to address new technologies and our better understanding of how people behave in emergencies. The 2016 edition of the handbook is over 1,100 pages and address items from mass notification systems to IP communications for fire alarm systems. We have also seen old mechanical horns be replaces with new electronic horns, and new Zenon and LED strobe appliances. These advances in technology have allowed battery sizes to be drastically reduced. However we have also learned that minimum sound level of 75 dbA is not always sufficient to wake people in an emergency situation. The introduction of low frequency sounders, (required in all sleeping areas) and higher intensity strobe appliances (required in accessible sleeping rooms) are just two new steps into protecting people in fire and life safety situations.

NFPA 2001, The Standard for Installation of Clean Agent Extinguishing Systems addresses Halon replacements for special hazards and computer rooms, was brand new with the first edition being released in 1994. NFPA 14 had been around since 1912, however the 1993 and 1996 editions saw a complete "reorganization" of the standard implementing actual testing and performance of standpipe system in fire conditions. NFPA 20, the Standard for the Installation of Fire Pumps is even older, dating back to 1899, but it also underwent some major changes for the 1996 edition including much stricter requirements for electrical services and limitations on capacity for in-line pumps to make them more reliable than ever.

Today, the International Building Code (IBC), or state specific versions of it, are used throughout the country, with the 2015 edition being the most current. This edition, without commentary, has grown to 700 pages and Chapter 9 is over 40 pages. Some of the changes include automatic sprinkler protection for all "I" use groups (BOCA 96 only required sprinklers in

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EMPLOYEE SPOTLIGHT

Lisa Tyner

Lisa Tyner has been with Fire Safety Consultants, Inc. since October of 2015 as an Administrative Assistant. Based in our Regional Office in Pleasant Ridge, MI, Lisa is the “go to” person for our MI clients, as well as, keeping the MI office running like a well-oiled machine. Lisa processes all incoming plan reviews for our regional office, formats and sends out inspection reports, and actively participates in the Marketing Committee for both the Corporate and Regional offices.

Prior to FSCI, Lisa worked for an engineering firm as an Administrative Assistant to the Executive Staff. During that time, Lisa worked to fine-tune her Microsoft Office, organizational and customer service skills which make her such a valuable asset to our staff and our customers. After seven years at her previous company, Lisa knew it was time for a change so she could broaden her skill set and learn new aspects of the administrative field. We are thrilled that she joined us at FSCI!

Lisa has a 15 year-old daughter who also keeps her very busy and their calendar full of fun high school activities. When Lisa has the luxury of some spare time, she enjoys sewing, crocheting, reading and geocaching with her daughter, now that winter in Michigan seems to have finally passed!

EMPLOYEE SPOTLIGHT

Totie Leanardo

Augusto Leonardo, better known around the office as “Totie”, joined Fire Safety Consultants in January 2015. Totie is a Sr. Consultant in our Building & Life Safety Division. Totie is responsible for conducting plan reviews and answering code questions for building, accessibility, and life safety projects. You will also find Totie out on a building inspection every now and then. Totie comes across as the “silent type”, but he has quite the sense of humor!

Totie has a degree in architecture with an architect’s license from the Philippines. He has an extensive background in commercial design, planning, and construction. He has worked as a Project Architect for over 20 years and a Project Manager for over 5 years for an architectural firm. He also worked as a Construction Project Administrator with Governors State University, IL. In addition, he has worked on projects in Saudi Arabia and Papua, New Guinea.

Totie has been married for 37 years and has two adult children. He is a proud grandparent to his two year-old grandchild. He enjoys traveling, golfing, and working around the house.

SEMINAR INFORMATION - SPRING 2017

Stay up to date on the latest Fire, Building and Life Safety code changes and equipment by attending one of our seminars. FSCI is teaching seminars throughout the United States, led by our experienced staff of Matt Davis, Keith Frangiamore, Brent Gooden, George Michehl & Warren Olsen. Whether you are a Contractor, Architect, Technician, Engineer or an Authority Having Jurisdiction, each seminar is full of practical insights and first-hand experiences to help you comply with applicable codes and standards. FSCI can also provide custom seminars at your location. Be sure to check out our schedule of upcoming seminars on our website. Contact us to learn more by emailing info@firesafetyfsci.com or by calling our office at (847) 697-1300.

Click here to see the latest seminar schedule

LITTLE KNOWN FACTS

2015 - International Building Code

Chapter 3 provides explanations of the various use group classifications found in the building code. The Group B (business) occupancy classification includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Group B occupancies include, but is not limited to the following:

- Food processing establishments and commercial kitchens not associated with restaurants, cafeterias and similar dining facilities not more than 2,500 square feet.

The code distinguishes, based on size, between food processing operations that are not directly associated with a restaurant. Those 2,500 square feet or smaller fall under the Group B classification. For example, a small catering business would fall under this classification. Additionally, a food related business that does not provide a space for their product to be eaten on-site, such as carry-out sandwich shop would also be classified as a Group B occupancy.

In contrast, a commercial kitchen or food processing facility larger than 2,500 square feet would be classified as a Group F (factory) occupancy.

Totie Leonardo, Sr. Plan Review Consultant

NFPA 72 – 2016 Complete Versus Partial Detector Coverage

Automatic fire detection requirements are found in the model building and fire codes, as well as, the Life Safety Code. Most users of NFPA 72 understand that the scoping requirements related to necessary fire alarm systems are not found in NFPA 72. Model codes, and Life Safety Code, reference the use of NFPA 72 for alarm system design requirements.

When a designer looks to Chapter 17 of NFPA 72, Section 17.5.3 provides guidance to the extent of detector coverage required in the system design. The two primary choices are found in 17.5.3.1, Total (Complete) Coverage, and 17.5.3.2, Partial or Selective Coverage. With some exempted areas modified by 17.5.3.1.1 through 17.5.3.1.5, total coverage provides detection throughout spaces large and small within a building.

The requirements of partial coverage are much more limited. For both options the code indicates, “Where required by other governing laws, codes, or standards…” Since the model codes do not provide specifics on which option is to be used, and NFPA 72 only describes the differences between the two options, it is typically left up to the code official to determine the extent of coverage which should be provided within buildings. A consistent, internal policy by the code official is recommended so all similar buildings are addressed in a like manner.

Warren Olsen, VP Building and Life Safety

2015 International Mechanical Code

When Is a Type 1 Kitchen Hood Required?

IMC Section 507 addresses Commercial Kitchen Hoods. Section 507.2 requires that a Type 1 hood be installed where cooking appliances produce grease or smoke as the result of the cooking process. Additionally, Type 1 hoods are to be installed over all medium-duty, heavy-duty and extra-heavy-duty cooking appliances. Note that light-duty appliances are not automatically required to have a Type 1 hood, however, if the appliances produce grease or smoke, a Type 1 hood is required. The IMC Commentary also clarifies that it is not the intent of the code to require Type 1 hoods based on the possibility of smoke due to the accidental burning of food.

Fred Hoegler, VP Fire Protection

WE’RE LISTENING!

Tell us what you are interested in learning about!

Email us at: info@firesafetyfsci.com