Good morning.

My name is Ken Pearl.
Welcome to my presentation- Defending the Code
Course Description

This Course instructs Professionals in the importance of Building Codes in both its relevance in the design and engineering of building projects as well as its overall value as a tool in protecting health, safety and welfare of the general public as well as the durability of building themselves. The objective is to provide Professionals with a better base of knowledge in how to defend the importance, purpose, intents, application and authority of Building Codes in matters where they may encounter resistance from the Public, Contractors, Public Officials, Elected Leaders, etc., and how to use the importance of Building Codes as a tool in advocating for more sustainable buildings and communities. The course is presented from the perspective of a practicing Forensic Architect using case studies from various post-construction investigations and expert witness services in litigation matters to assist in reinforcing the applicable importance of professional licensing standards, code compliance regulations, personal interaction skills, and common contract obligations relevant to matters governed by Building Codes.
I'm still from a company call Building Science Services...
You may know me from the presentation I just did a couple minutes ago.  haha

(normal)
I am with a company called Building Science Services.
You may recognize me-
I have also have an Architecture & CM firm called Architecture Unlimited. Some of you my know me from there.
Learning Objectives

At the end of the this course, participants will be able to:

• To understand the Building Professional’s role in defending, protecting and advocating the role of the Building Code in building design, construction, maintenance, and use.

• To understand the limitations of the Building Code’s authority and effectiveness without the cooperation of various Building Professionals, Community Leaders, and related participants.

• To understand the application of design, enforcement, and administrative intents of the Building Code thru the analysis of sample case studies to provide examples and comparisons of effective vs. ineffective practices.

• To reinforce the importance and value of the Building Code as well as the practice of improved methodologies for communicating such importance and value.

Quick review of Learning Objectives

The AIA has approved this presentation for 1-hour education credit.
(skip during multiple presentations)

Quick Introduction of speaker background
I’m sure most of you are familiar with the Building Code. What we’ll do that’s a little different is talk thru my perspective working as a Forensic Architect.

My background is design and construction. I’ve been licensed and practicing as an Architect and Construction Manager for almost 30 years. Most of my time is spent fixing things or resolving disputes.
Introduction:

- Why talk about ‘Defending the Code’?

Why would we talk about defending the Code.

Well, we as RA’s, PE’s, and CEO’s probably get this a little already....

I know from my work as a traditional Architect dealing with a difficult Client, but particularly when I work as an Expert Witness, I often feel like I’m defending the Code. Sometimes, I find myself talking a lot about the actions of Design Professionals as well as Building Inspectors..., both good and bad.
Introduction:

- “This is what the code says”
- “That is not something the code says…:"

Sometimes I’m talking about what the code says. ‘Here of the Words…’
Just read them, and understand them.

Sometimes I’m talking about what the code has never said, or more often, never intended.
Careful with ‘rules of thumb’, or instinct answers.
(people using it wrong, or using it to support unfounded legal claims)
Sometimes I’m talking about other regulations and laws the code makes important as well. (sample reference code..)

Sometimes I’m talking about specific actions in the code when the code says “Show me..., Demonstrate that..., Prove it...”
(samples from code)
Being a normal practicing Architect, I’m working with the current codes like everybody else. As a Forensic Architect, I’m still actively working with Codes going back 30 or more years on a regular basis.

What’s fascinating about that is that it really gives you a great perspective of the Code. And I don’t want to get to weird here,…

But a perspective that this Book comes off as a very smart, very experienced person.

(pics of variety of code books in one pile)
And it's not just as a person that knows a lot of very smart things, but you can just tell there is a million stories behind the scenes that gave it that backbone of experience.

I'd like to think the code watches most of us working and says “Nice job – That’s what I was trying to get accomplished”

I also have to think the Code sometimes is looking over my shoulder at my case files and yells out “What are you people doing? – Have we learned nothing?”

(pics of archaic headlines)
Well, obviously the Code doesn’t talk to us, per se. It just sits there.

(pic of code book)

In reality, it’s a book with words, and nothing more than an inanimate object,... a thing,... a noun,... A TOOL!

(pic of code book = wrench tool)

And like a tool, it can’t do much without human interaction. It needs us in order to be useful.

(pic of person using a wrench)
Well, obviously the Code doesn’t talk to us, per se. It just sits there.

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(pic of code book = wrench tool)

And like a tool, it can't do much without human interaction. It needs us in order to be useful.

(pic of person using a wrench)
Introduction:

- Comparing active enforcement vs. none...

To make that point, think about this comparison –
If you never saw police patrolling an interstate, what’s the likelihood drivers would be speeding faster and faster as it became known no one was watching anymore?

(pic of troopers on thruway with radar)
How many of you just put your foot on an imaginary brake??
Introduction:

- Any Enforcement of Laws relies on Community presence

Just like Criminal laws rely on the presence of Police in our communities, Building Codes rely on your presence in the community as well.

If you don’t make yourself knowledgeable about the code, if you don’t bother to patrol you trouble areas, if you can’t communicate effectively with everybody from the average confused citizen, to the toughest contractors, to your periodically changing community leaders,...

Then the building code is going to suffer as a tool valued by the community.
Using that comparison again,

Think about a key distinction between you as Code Enforcement and Police as law enforcement. How do you exercise your discretion on behalf of the Code?
What happens when a car rolls thru a stop sign? Quick blast of the lights and siren, and the process of issuing a ticket begins.

But maybe it’s a busy contractor having a bad day,
And he turns out to be a good guy and he feels horrible?

The police can exercise discretion and let him off with a warning.
Why? – Because the hazard has already passed.
Nobody got hit. The Police decided he learned his lesson, and its pretty like the contractor will be watching stops signs better the rest of the day.

(pic of police traffic stop)
Introduction:

❖ vs. Code Enforcement...

Well, it's different for you.

What if the next day, that same Contractor forgot to get some truss diagrams with engineering stamps into you?

Can you exercise the same discretion?

‘Hey – He’s a nice guy and he’s done good work in the past. I’ll let it slide.’
The key to that answer is –

Where is the hazard? Is it in the past and over like the stop sign incident? Or is it something into the future?

Like maybe after a roof collapses during a snow storm 7-8 years later...
When every body first realizes the Engineer forgot some snow loading information.
Here’s a summary of my key points when talking about the Need to Defend the Building Codes.

**Introduction:**

- A quick review of Why Code Defense is needed…
  - Represents experience & lessons learned
  - Requires an active community presence
  - Requires active participation by ‘tool users’
  - Allows for human control thru ‘discretion’…
    - *But think about nature of hazard in discretion*

It represents experience and lessons learned. We value that.
It’s good to learn from your mistakes, but it’s better to learn from other people’s mistakes

People tend to take things for granted. And that leads to things being less valued. The code’s value needs to be defended.

One important way is the Code needs an active presence in the community. Websites, patrols, enforcement actions, office hours.

Another important tool for Defending the Code, or Defending the Value of the Code,… is simply our active use of the Code as a tool.

Use it, know it, talk about it when communicating with people.
Your knowledge in using or speaking about the code shows its not your opinion to debated or ignored,

Your ability to speak the code gives you credibility, and in turn your credibility gives the code authority.

And finally, your use of discretion is not for you,… but its on behalf of the code. Use it with a clear understanding as to whether a gap in defending the code is laying the groundwork for someone’s future expense or tragedy.
Ok, let's take a look at how those thoughts apply to real-world case studies.
Here's the first one.
This was a small matter, but a common one. You're looking at a small restaurant in a small community.

Late 2000's. A woman exiting the building falls going down these stairs and hurts herself. She takes the Owner of the building to court and sues for a lot of money.
For background information,
The Owner testifies he bought the building in 1999 and initially used it for several years as a retail shop.
Under the Code, that’s an M – Occupancy, Mercantile.

The Owner testifies he closed his business in 2002 and did some remodeling for a new tenant.
That new tenant was a new restaurant start-up.
Under the Code, that’s an A – Occupancy, more specifically an A-2.

The Owner testifies this local restaurant lasted only a year or so, and the eventually, he found a new tenant.
In 2004, this new tenant is a national restaurant chain and together, they remodel the building again.

This tenant is successful and remains the sole occupant of the building still to this day.
It should be noted this building is located on a highly visible location right on the main drag in this town.
The Owner also testifies that in addition to his entrepreneurial endeavors, he has, and remains a part-time elected official running an important department in this same town.

The Owner testifies that he was told by his contractor and local building inspector that he is required to build to code, BUT.
That permits are not required.
Public records at the building department seem to confirm this since there is almost no record of permits.

The Owner testifies that in spite of the fact he works in the same building as the inspector he claims he consulted with, he can not recall his name.
The local building inspector has retired in recent years, and not surprisingly, the new building inspector is obviously wondering why people like me are making inquiries.
And finally, the Owner testifies that he had to reconstruct these stairs sometime in the mid-2000s shortly before the women fell.

Now, let’s clarify that I’m not saying anybody did anything wrong, I’m only passing on factual information presented by the Building Owner.
So let’s get to the event.

In 2008, This women falls while descending these stairs.
Without getting into the specific code compliance details, here’s the jist of her claim.

- Any version of any code since 1984 says that this building went thru a Change-of-Occupancy
- At least 2 of these codes had requirements to alter this stair configuration to modern code and barrier-free requirements.
- The stair reconstruction project itself had specific code requirements that were not followed.
- The fact there we’re no claims by the Owner, or records at the municipality that permits were ever recorded showed a willingness to avoid code responsibilities resulting in advanced negligence.
The obvious question for our purposes...
Was the Code defended?

Probably not. Hard to say for sure but it seems hard to believe there wasn't an opportunity.

Let’s assume, just for our purposes today, there was a failure to enforce here. Would it be fair to assume this Owner thought he was enjoying some latitude in the Code and might have been saving on some money and effort?

But then the lawsuit... Then the lawsuit payments. In hindsight, could the Code have saved the victim some pain?.... And the Owner some money?
Case Study - 2

- Change-of-Occupancy, B-Business to A-2 Assembly

Case Number 2. This is a little strange but it’s a true story that involves my regular architecture practice.

A guy buys a small real-estate office and remodels it to open up an Ice Cream Parlor. I had no involvement in this project but its located near my house, and I’ve got young kids at the time, so they’re obviously making sure I’m aware of it.

This Owner also has a Change-of-Occupancy issue. Changing from a B-Business to an A-2 Assembly. But it’s a very small building and I suspect he’s taking advantage of provisions in the Existing Building Code to minimize the amount of improvements required.

Somehow, he pulls this off without having any toilet rooms available to the public.
Business goes very well.
Several years later he adds a large patio with a permanent roof structure attached to the original building.

I’m aware there was a permit because I saw it displayed in the window. But somehow that project ends again with no publicly available restrooms.
Coincidently, I have a client that owns a restaurant about a 100 yards away across an open lot. One day I’m at their place picking up food and while we’re chatting, they complain to me about ice cream patrons that have been coming into their place to use the bathrooms.

They never throw anyone out, but they’re a little annoyed about the extra cleaning and septic service work in the building they just remodeled a few years earlier, a remodel that was required to include large, modern, publicly available toilet rooms.

At first it wasn’t that bad. But with the new patio, there are whole baseball teams and soccer teams, and more starting to get into the habit of crossing the lot over to the neighbor’s toilets.

They want to know from me if its legal, and if they can complain to the town. I don’t want to get involved. This is a place my kids go with neighbor kids. Last thing I need is my kids finding out I disrupted ice cream operations.
But this is where the story get strange.
Coincidentally, I had just completed a similar project for a completely different client, ... far away in a separate county.

He bought an old road barn and converted it to an Ice Cream parlor, and ... AND, added an outdoor patio with a large attached permanent roof.
But he happens to live in my same town, and he too, has been studying this first Ice Cream parlor.

One day I get a call. He’s mad and he wants to know why I told him he had to pay for large, space consuming, modern, public toilet rooms...
When this other guy didn’t...

He wants to talk about some fee money being returned for over-design.

Now... I’m involved.
So I take a look at the code review I did a year or two earlier.
Plus, I’m taking a look at a code review for a project I had no involvement in.
(And, nobody is paying me for this...)

So the question again is, Was the Code defended?
Case Study - 2

- For 2nd Ice Cream Parlor – Yes
- For 1st Ice Cream Parlor - No

On the 2nd Ice Cream Parlor – Yes, a double check showed I did my job right.
On the 1st Ice Cream Parlor – No, and here’s why...

Section 202 of the Existing Building Code defines an ‘Addition’ as “An extension or increase in floor area... of a building or structure”.

Section 502.1 of the Building Code defines area in this case as “the building area surrounded by exterior walls and /or fire wall”...
But it also says “.... Areas of the building not provided with surrounding walls shall be included in the Building Area if such areas are included within the horizontal projection of the roof”

This means it was an addition involving a NEW building area.
Without belaboring the details of additions under the Existing Building Code, it meant the 1st Ice Cream Parlor was supposed to have public toilet rooms.
So on one issue, I was able to put my check book away.
And on the second issue, I was able to help the restaurant people make a reasonable and educated request to the local building department.

Surprisingly, the neighboring Ice Cream Parlor was ticked. He thought it was kind of OK to let his customers hike over to the other Owner’s toilet rooms, simply because the Building Department didn’t tell him there was anything wrong with it.

To their credit, the Building Department admitted it missed the issue and started enforcement action.

The lesson learned – Defending the Code can play a role in helping to insure Fair Business Practices.
Case number 3.
A nice family from out of state buys a second home in NYS. They spend hundreds of thousands of dollars remodeling, expanding, and repairing the home.
They consult with the building department before starting.
They hire a design professional just as required.
They get stamped plans.
They get a permit.
They hire a contractor who’s based locally.
They call for inspections as required.
Case Study - 3

- House Alterations/Additions = House Problems...

Not long after the work is completed,
Water is coming in where it shouldn’t be.
Foundations are cracking even after repair efforts
Ice is forming where ice never was
And drywall is cracking, even after repairs and re-painting
A new stair is so steep, it feels more like a ladder.

A new building inspector who has replaced a recently retired predecessor, comes to take a look.
The inspector is relatively inexperienced but is savy enough to borrow some expertise from a neighboring code official.
The family is informed there are code violations. The family complains and asks about inspections they had. The building department includes the municipality’s attorney in a meeting, and after that never clarifies their findings nor takes any enforcement action.

Somehow after this process, the Family is referred to my office.

I conduct a preliminary meeting and walk-through. It’s not to far away so I stopped at the building department. The Inspector is not in, but the assistant let’s me look thru the permit file.
Here’s a summary of what I found after those 2 brief visits.

- I’m quickly seeing code violations and more...
- There are no energy code documents included in the permit submission.
Concrete piers were built without specified footings, instead on existing slabs.
Case Study - 3

- Other concrete piers are bearing on shallow slab edges
Case Study - 3

- Summary Findings from Initial Forensic Review

- There is unprotected wood framing and sheathing located below grade.
- Structural designs indicate concealed beams and headers that should be bending in excess of 2 inches or more.
Not surprisingly, there is visible sagging of beams and headers
50% of the roof structure includes new wood trusses, none with any record of being prepared by a design professional and none with any calculations for me to check.
- An Owner with 2 separate design contracts. One for about 95% of the fees to a person with no license. And one to a licensed design professional that only reflects about 5% of the fees paid.

Keep in mind... This was just initial review...
I met with the Family to provide some initial information and convey the magnitude of my preliminary findings...
I was later called by an Attorney representing the family. He asked if I had seen a valid CofO. I had.
He asked if I had met with the Building Inspector. I said no, he was not there during my visit, and he did not return my later follow-up call.
He asked if I shared my initial findings with anyone. I said no.

He thanked me on behalf of the family and I have never heard from anybody again.
It is my understanding the house may have been sold.
So we ask again, 
Does it look like the code was defended?

I never had a chance, and it looks like everybody else involved may be in a full retreat from the matter.
The issues with this house are probably going to rise again. This is a reminder that as tough as it may be to deal with a frustrated Owner or a less than competent design professional, we probably won’t find it gets any easier at a later date.
This is Case Study 4.
A new house project.
Designed and built as a very high-end home, probably about $1.5 to $2 million dollar project.

I get a call from a law firm representing a manufacturer that made a product used in the house. There is a significant lawsuit going on between the Owner and the Product Manufacturer.

The law firm provides me with the construction plans as well as some other documents. Although it doesn’t specifically related to the product issue at hand, it becomes immediately apparent the plans are showing me blatant code violations.

I inform the law firm the plans they provided me couldn’t be the actual permit plans, and with that, some travel and a site visit is arranged.

And to my surprise,... the plans I have do in fact match the actual construction of the home.
There are quite a few of these code issues, but I just want to share 2 features we found with you today.

The first, this is the door between the house and the attached garage. This door and wall is in fact identified as a fire separation in the plans.
  - Does anyone see a problem with the door?
  - Does anyone see a problem related to energy code compliance?
  - Does anyone see a problem with the use of foam plastic?
The second feature. This is the ground floor plan. The house has 2 floor levels, this lower level is slab-on-grade with a walk out at grade level, no crawl or basement space.

This is the lower ground floor. It has 3 rooms I’m focusing you on, 2 are noted as bedrooms and 1 is noted as an office.

The one noted as Bedroom 3 has the earmarks of a master bedroom and it looked fine on paper.
But the one marked Bedroom 2, on paper, didn’t have a code required ‘Emergency Escape & Rescue Opening’. We later learned there was a window provided in the actual construction so I marked my plan in red.

There is no Bedroom 1, but there is a room that looks like a bedroom. It too had a door and a clothes closet like a bedroom, but it was labeled ‘Office’.
Here’s a picture of the house. The current Owner is a single person and lives in what you can see is a beautiful waterfront property. No other family or kids live here. The ‘Office’ is located here buried into the hillside just under what you see as the upper level front entry.

Let’s put aside for a moment any debate about what the code defines as a ‘sleeping room’... What do you think are the odds are that a room the size of a bedroom, with a clothes closet typical of a bedroom, equipped with a smoke detector required in a bedroom,...

...What do you think the odds are that the next Owner of this home might be a family that will use this room as the bedroom that is appears to be?
This is the ‘Office’ room on the inside. No escape opening.
Here’s a picture of the house from the other side. Similar configuration, but now we’re looking at Bedroom 2 which is buried her into the same hillside.
But there’s a twist. It does have a window. This is it viewed from the outside.
And this is the Bedroom 2 viewed on the inside.
Note the tall ceilings.
...And not these things on the wall...
And this is Bedroom 2’s escape opening.... Way up actually position above the 9 foot ceilings in a separate hollowed-out clear story. You can obviously see its equipped with wall mounted ladder rungs that gets you up there.

Does anyone think this is a legal R310 Emergency Escape and Rescue Opening? If you do, please do not raise your hand but send me an email later and I can share more detail with you.

The person who built this house could afford an aggressive lawsuit against the product manufacturer.
The person who built this house could afford to hire 3 different design professionals, in addition to the original design professional that designed the home, all to serve as opposing experts.
Each of those experts refused to acknowledge our findings of code violations other than to say ‘Not relevant’ to the product lawsuit.

In other words, people spent a lot of money and went way out of their way to stay as far away from the Building Code as they could.
But this was in fact a private lawsuit, this was not a code enforcement action.

The lawsuit was settled to the satisfaction of my client, the Product Manufacturer. The last I heard, the previous Building Inspector had moved on and the new Inspector was not planning any enforcement action.

Again, I ask... Was the Code defended?
From my vantage point, No.

Now in case your wondering, I expressed to the law firm that hired me that no matter what settlement was, I was required under my separate licensing obligations to be satisfied that either opposition experts were providing proper advise and counsel to the Owner on these code issues, or that it was my duty to forward this findings to proper authorities.

The law firm accommodated me. It’s now been a couple years. To date the code remains undefended.
And this is our final Case study. Case Number 5

This is a shopping plaza that had been around since the 1950s or 1960s. In the late 1990’s, the largest Tenant in the Plaza was a successful retail store that sold furniture, appliances and consumer home electronics. The store was called Rosa’s and they decided to buy the whole plaza, and remodel it as part of an expansion to the Rosa’s business.
For speed, the design and construction teams applied for a ‘shell-only’ building permit. A separate ‘interior construction’ permit would be applied for in a month or so after designs were finalized.

Right away, the building department found problems with the designs. These are actual notes from the building department on the permit drawings.
- Travel distance too far
- Fire rating needs to be upgraded
- Fire area too large

Separate records showed a discussion was going on about installing a sprinkler system to solve these code compliance problems.

But record also showed the cost of a sprinkler systems was not in the Construction Manager’s contract and he was directing the Architect to find a way solve it without the building department,... and without the added sprinkler expense.
This process went on for quite some time. Naturally the Owner is getting frustrated with his teams,…
And with the Building Department.
Records show he starts looking for help from local elected officials.

The pressure on people in this project was growing.
Case Study - 5

- Unmanaged problems lead to PRESSURES...

The Owner is pressuring the CM
The CM is pressuring the Architect, and everyone including elected officials is now pressuring the Building Department.

Its not too long after this pressure build-up, they come up with a quick solution.
Case Study - 5

- The Solution…

1. Perimeter fire fighting access

It was agreed they could avoid the approximately $70-80 thousand cost of adding a sprinkler system if they agreed to do 3 things.

1. Provide 100% fire fighting access around the building perimeter.
Case Study - 5

- The Solution...

1. Perimeter fire fighting access
2. Sub-divide from single to smaller Fire Areas

2, Sub-divide the building into smaller separate fire areas.
And 3, Convert the construction classification from Type 2B to Type 2A.

The problem was solved for the most part. Long-delayed permits were issued. Construction and normal inspections started. The value of this first phase was little under $1 million dollars.

Soon after, they caught up on the Phase II permit for interior work which accounted for another contract value of about $1 to 1.2 million dollars.

(Pause before next slide.....)
This is Joe....
Joseph F. Muscato, Jr.

2 years after construction was completed, on the morning of April 3rd, 2001...
Joe went to his job as the Manager of this retail store we’re talking about, which was called Rosa’s Superstore.
He was married, 3 young children, he was 48 years old.

The store he managed had a very large public retail floor space with a separate warehouse section in the back.
If you walked thru it today, it would look like a cross between a Best-Buy with large open space for different sales departments and an Ethan-Allen Furniture Store with many, many walled-off areas to simulate small room spaces like living rooms, or dining rooms, or bedrooms.
At approximately 4:20 in the afternoon, Joe was at work when someone hiding themselves amongst the small room displays set fire to a furniture piece and left the store. There was no smoke detection equipment required by code at that time and it was determined the fire burned about 10 minutes without anyone noticing.

The fire did not spread laterally, but did quickly grow vertically up into the suspended ceiling system above. Staff and customers eventually noticed the fire, but it looked small within the context of this very large store, so people didn’t sense they were trapped or in immediate danger. There was obvious concern but it was reported there wasn’t much panic. Staff made efforts to extinguish the fire, patrons started to proceed to the exits.

Within very short time, Joe realized his staff’s efforts were not working. He had already started evacuating remaining patrons and he directed someone to call 911. He then directed the staff to evacuate except for a small team to help him quickly check that no one else was still left in the building.
During this time, visibility remained good. The lighting and power was still active. Panic was limited. And the fire appeared limited to an isolated area.

What nobody knew was that a large volume of smoke, fire and heat was accumulating in the plenum space between the ceiling and the roof deck.

Satisfied the store was evacuated, Joe and 1 other employee realized something was wrong above them and made their final dash for the doors.
At approximately 4:35, the growing fire, smoke and more importantly, hot gases accumulating in the massive, but confined plenum space above suffered a catastrophic flashover.

Joe’s associate just barely made it thru the instant black smoke out the door ahead,.... But Joe himself did not make it. His body was found later after the fire was under control.

It was had only been about 14 to 15 minutes after the fire started, but just that fast, Joe was gone.

(INsert 20 second news footage from 2001 fire scene)
The building was a total loss and became a crime scene
Case Study - 5

- The aftermath…

Sadly, it wasn’t til a day or so later that someone noticed Joe’s car was still sitting alone in the back parking lot.

(pause)
My role started later during litigation events. There was A LOT of it but I was involved only in support of Joe’s widow.

The case action was complex, difficult and lengthy, but I like to share some key findings.
Remember those building features that were supposed to solve the problem of installing an un-budgeted sprinkler system?

- The 100% perimeter area for fire access. It actually never existed. There was a large open lawn on one particular side. But the building actually sat right on the property line and the actual open lawn was somebody else’s property. The building on the right shows the current Rosa’s Plaza as it sits today. The building on the left shows a different store building. Back in 1999, this was a large empty lawn. A lawn that belonged to another property Owner intending to building their own plaza. But in 1999, this empty lot was being used to account for 25% more fire access credit than a simple review of a property survey showed was available.
- The conversion of building elements to change from Type 2B to Type 2A construction? Never happened.
Case Study - 5

- Key Code Findings:
- Never any real 100% perimeter fire access…
- Never any real Conversion from 2B to 2A…
- 2A’s fire-rated ceiling never provided…

- The fire rated ceiling? It was never installed.
The creation of smaller fire areas by modifying existing demising walls into fire walls? Wasn’t feasible and never happened either.

Here’s the thing that was so troubling for me on this case. The Building Code at the time was pretty clear that it wanted a new sprinkler system. But it was offering some trade-offs if someone really, really didn’t want to do it. But the challenge for this older, previously remodeled building was that trade-offs where so technically difficult and expensive in their own right, that the obvious question was - Why bother? – Just put the sprinkler system in.

And what was even more troubling, most everybody involved left some kind of record that they knew this was becoming more trouble that it was worth. But they had already wasted weeks, even months chasing solutions that were never very feasible and looking for someone or something to take the pressure off them in any way that would allow them to avoid the added expenses they had missed in their contracts.

Records showed that relieve came when elected leadership responded,… not to the defense of the code,… but to the defense of everyone’s frustration. Weeks or even months of permit hold-ups were suddenly ended with promises to deal with outstanding issues later during construction.
Case Study - 5

- More Key Code Findings:
- Records showed professional design stamps missing
- Records showed major Code reviews not included in work

The Phase 1 permit drawings associated with the Building Shell permit did at least have design professional’s stamp to start pointing a finger at.

The Phase 2 permit drawings for all the interior work? Nobody was ever required to stamp those plans. And worse, the many, many drawings included in the permit package – Each and everyone of them not only was missing and design professional certifications, but included a warning that it did not include and form of code review.
There’s certainly a lot more to the story behind this tragedy, but I think this should provide enough info to answer the our question again...

Was the code defended?

How would history been changed if it had?
Introduction:

- It's important for us to 'Defend the Code'
- It relies on us to defend it....

The Building Code relies on us.

It relies on as Building Owners
As Design Professionals
As Contractors and Manufacturers
As Code Officials
And it relies on us Public Officials.
Our job isn’t to just use it,
Our job is to defend it when necessary.

You know as well as anyone, what we do can be fulfilling,
it can be boring,
it can be frustrating,
It can be all kinds of things...
But it will always be important.
Any questions or comments?
That concludes the presentation.

Thank you for your attention.

Any follow-up thoughts....

You can email me at my email address....

Or you can follow our work on our website at ...

Or connect with me on Linkedin.

Thanks again