TACTICAL CONSIDERATIONS
of structures within the district

An Interactive table top exercise
to discuss items of concern
on the fire ground of a:
Split level , Taxpayer ,
Mixed Occupancy & Big Box Store

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What style of Private Dwelling is Pictured Here?

Split Level

Do we have split level homes in our district – if so where ?

All Over – Salisbury, off Powells Ave...

What makes a split levels unique and a concern for us?

Fire Flow Path

What about this style private dwelling ?

Also a Split Level, but this one is expanded with rooms **not only** above the garage level but also the Entry level

Expanded Split Level

Clue a Split opposed to High Ranch – entry level is ½ height of floor below

Do we have the same concerns as with a non expanded Split ?

Even more concerns – because we have even more fire flow path, covering more floors and possibly effecting more potential victims , since these added rooms are typically bedrooms

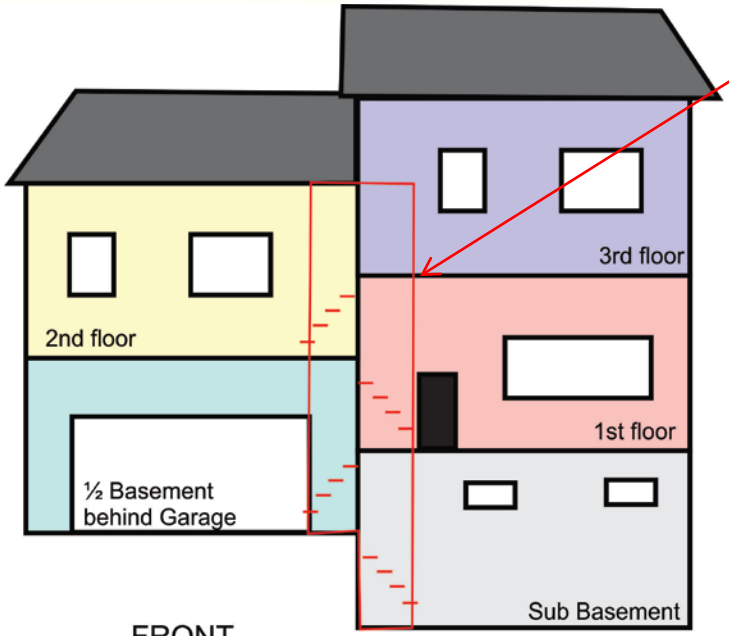
*Expanded splits **may** present more problems, in a different way & will be discussed later*

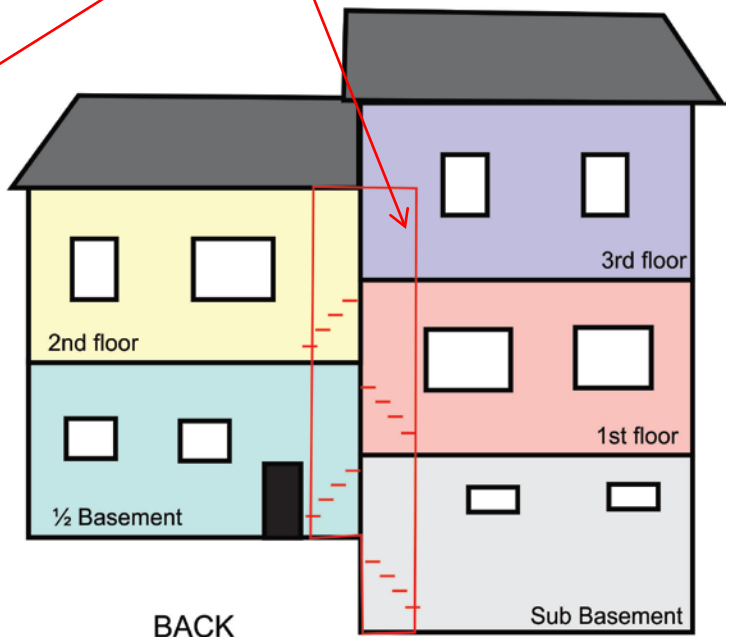
Why is fire flow path such a concern in a Split ?

Fire can easily spread through out one of these structures due to:

Over sizes eves – fire out a window can easily extend into attic space

Center Chimney like center stairs





What may this rapid fire flow do – causing concern?

Traps Occupants -
It can also trap us if we use poor tactics

Where are Utilities typically found (*the Laundry Room*) in a split ?

Behind the Garage or Rear of ground floor

What about the Kitchen?

Entry Level - rear

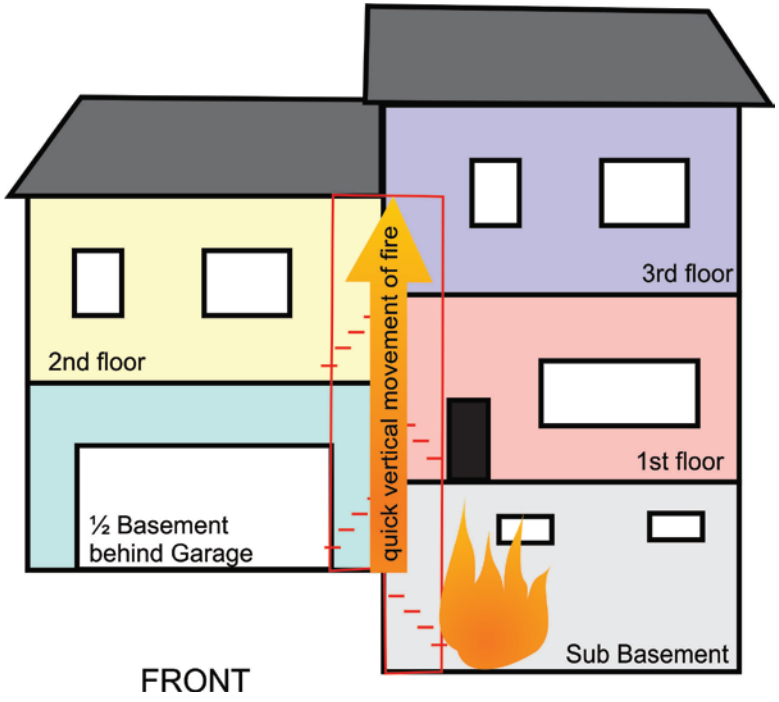
What about the Bedrooms?

Second level and 3rd (if extended) – above our kitchen & the laundry/ utilities...

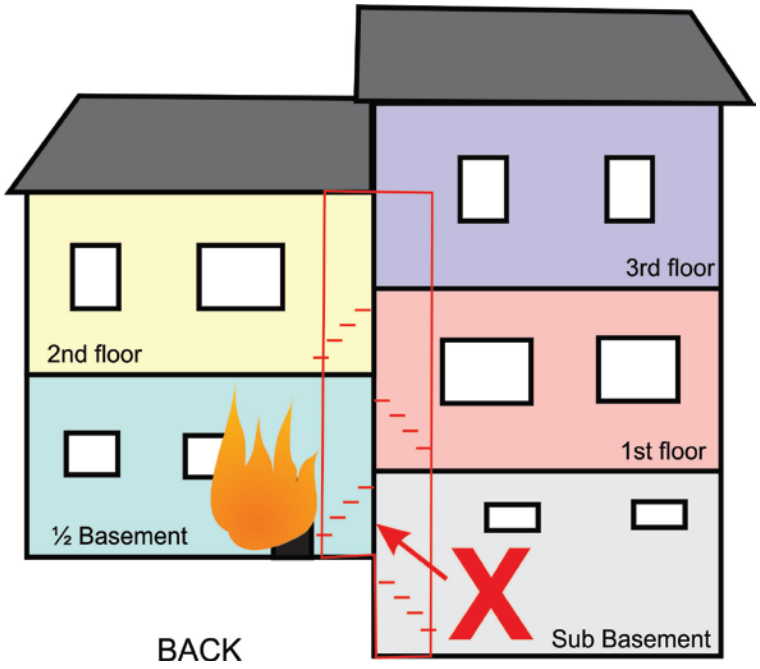
So should we be extra concerned when we hear a 2 am kitchen fire or drier fire in these split level homes ?

Most definitely should

Examples of fire flow and how traps occupants ?



Fire in sub basement can travel up stairs
Trapping occupants all floors

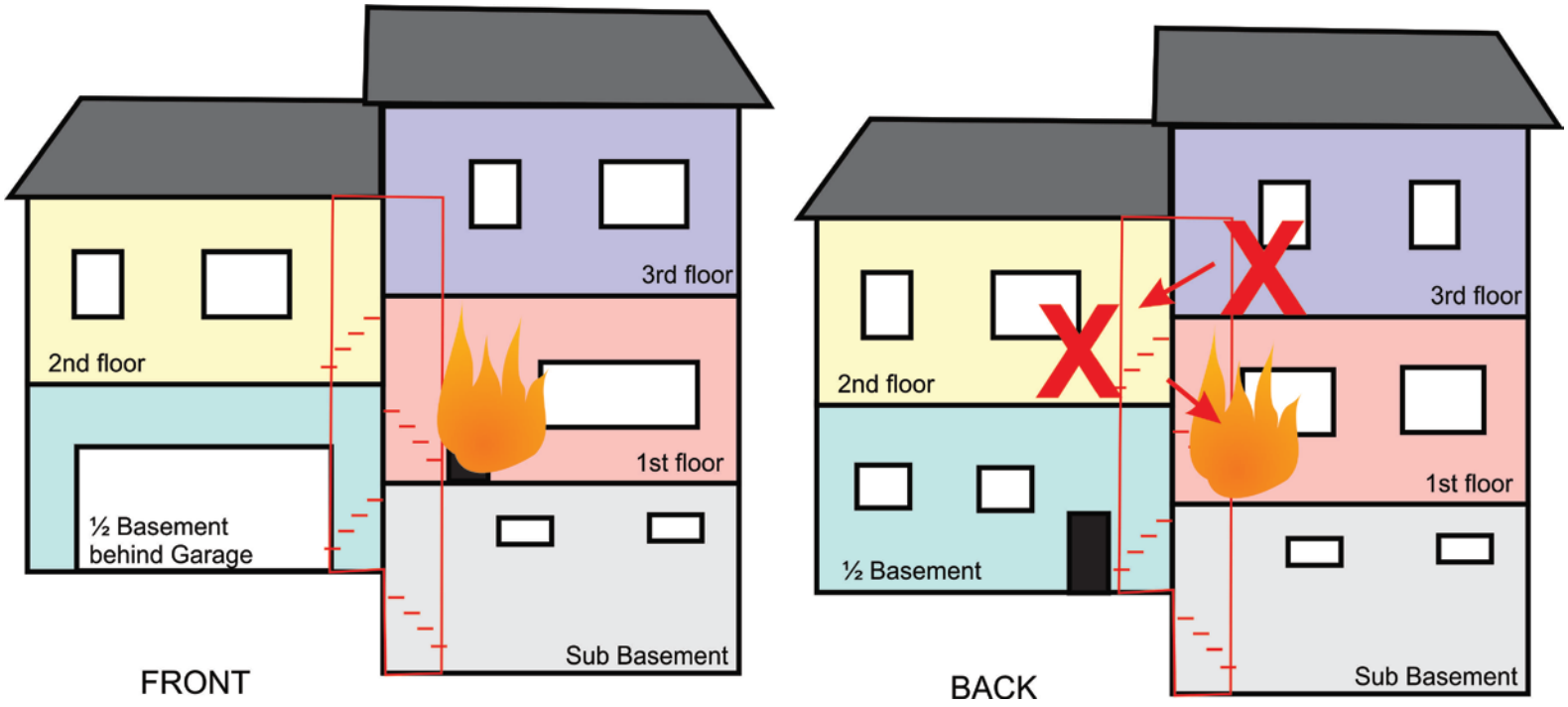


Fire in laundry area can definitely
Trap occupants in sub basement

What is the Sub Basement typical : Storage or Living Space?

Probably when originally built – Storage, Today count on it being living space until proven otherwise " always a potential for a life hazard "

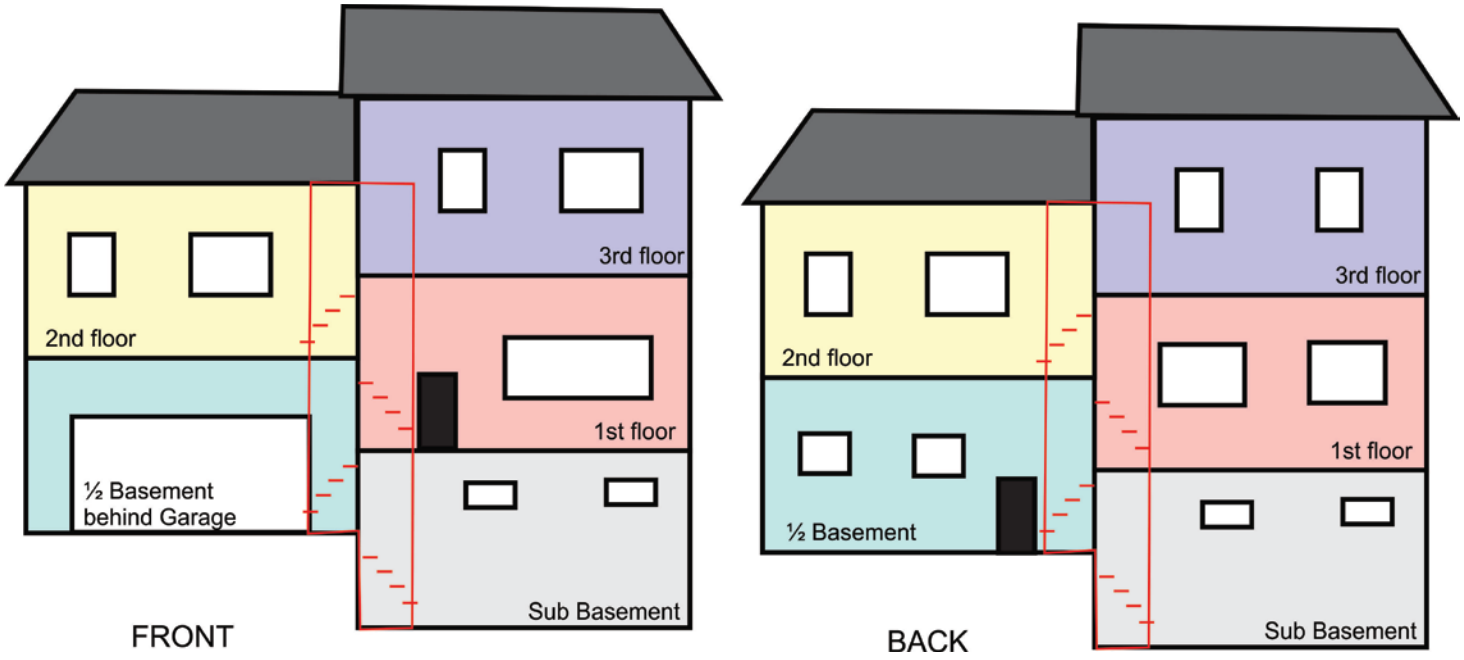
Examples of fire flow and how traps occupants ?



A kitchen fire that extend out of the kitchen – **WILL** cut off the stairs preventing 2nd floor and 3rd floor (if one) from getting out the front, back or garage doors.

Although occupants on ½ basement and sub basement should be able to get out via the rear door – **IF ONE** ! This door needs to be noted in your 360.
Who should be in that back yard noting – OV Position

What else can you see that may be a concern for US as Firefighters?



If you were in the ½ basement (in the Laundry room) and needed to call a mayday, What floor would you say you are on?

Ground Floor, Basement, ½ Basement, Garage Level ...
and does EVERYONE on the fire ground Call it the same thing? – A real concern!

Typically the front door is 1st floors – but a person entering the back door, you may think your on the 1st floor but your actually in the ½ basement.

How structurally sound are our district's Split Levels?

Who remembers the Waterbury Ln Fire 1/14?

<u>How much fire was in that house and how much structural integrity was compromised?</u>

Very little if any – This house held up very well.
(especially with amount of fire upon arrival)
Had sagging to floor of bedroom above Garage
<u>Reason</u>: Most if not all the splits in our district were built post WWII 1950-60's so we're dealing conventional Platform Construction and with no Engineered material or Trusses.
If built today – Much Different Results !

<u>When should we consider a structural integrity issues</u>?

1. Like with any fire – duration of burn.
   How long was that fire burning before we put water on it.
2. When was it build,
   but also just as important - when was it **modified or extended**

What is new construction telling us or a warning sign of ?

Cheap materials – Firefighter killers

We no longer see solid 2x8 or 2x10

Today (Post 1990's) we're more apt to see – engineered materials:

Engineered Truss

Engineered wood Truss

But Most Popular in Home construction
Engineered I Beams

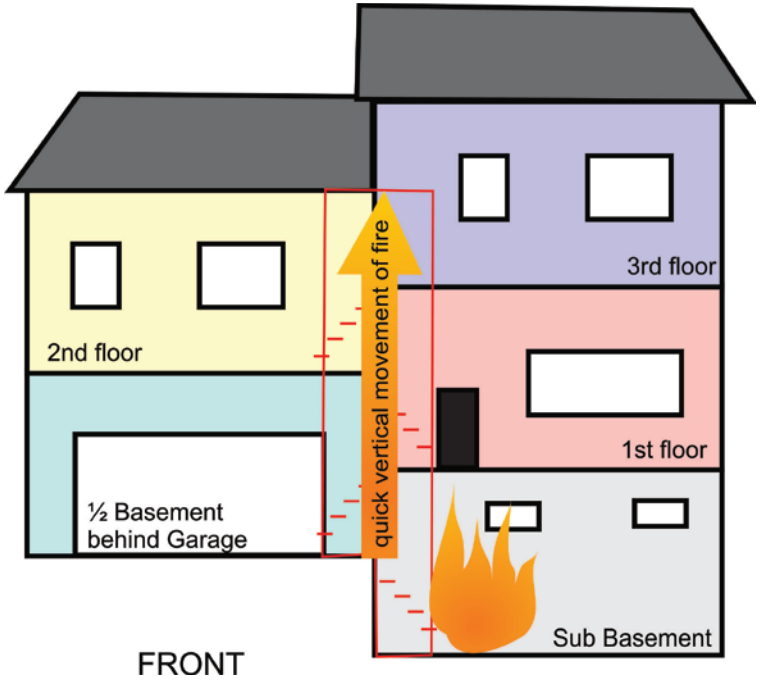
How Long does an Engineered I Beam Last under fire conditions - Before they Fail?

What about now?

Play VIDEO

Next Questions – How much time has passed from the time the fire started, it was noticed, then called in to us and you are now on scene ready to enter the structure with your charged line ?

Now that we know these issues, what can we do to address fire flow ?



As with any fire, the 1st due engine primary objective is to get water to the fire area and **CONTAIN** it! - Only then should we be Venting.
Early Vertical ventilation will promote the fire advancing up that "chimney" stairs

By doing this, what else have you also achieved – which is also a primary objective of the first due engine ?

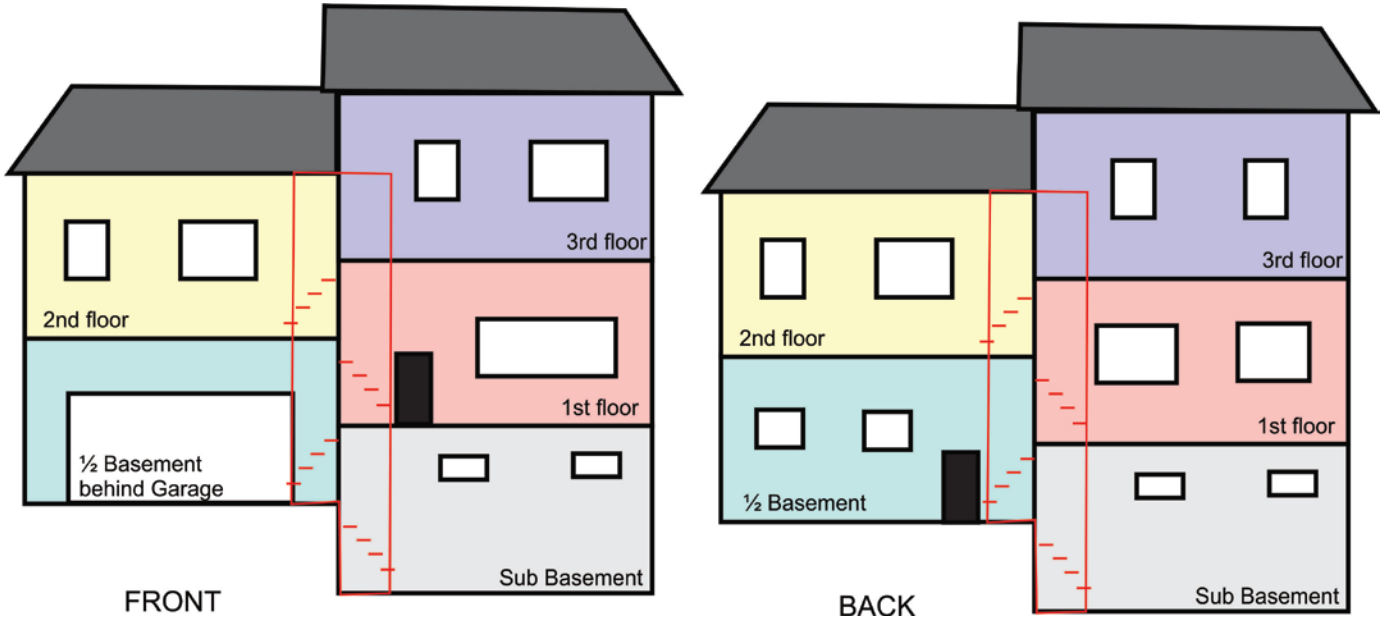
Protected the interior stair case , so searches can be conducted for the potential victims and they can be removed safely.

Can we do this utilizing Tank Water or do we have to be on Hydrant ?

Think about a 2.5 gallon water can and how much fire you can contain when its used properly. Now you have 500 gallons , 200 x that amount. (Play Video)

Being inside, we don't know what is going on with getting a hydrant, but we know: in contain mode we can keep that fire in check, while the searches are conducted.
If we go into extinguish mode and fail to extinguish the fire on tank, & don't get a hydrant, what have we done, if we run out of water, to the other members through out the structure doing their searches... ? Possible Trapped them!

How do we address identifying the different levels ?

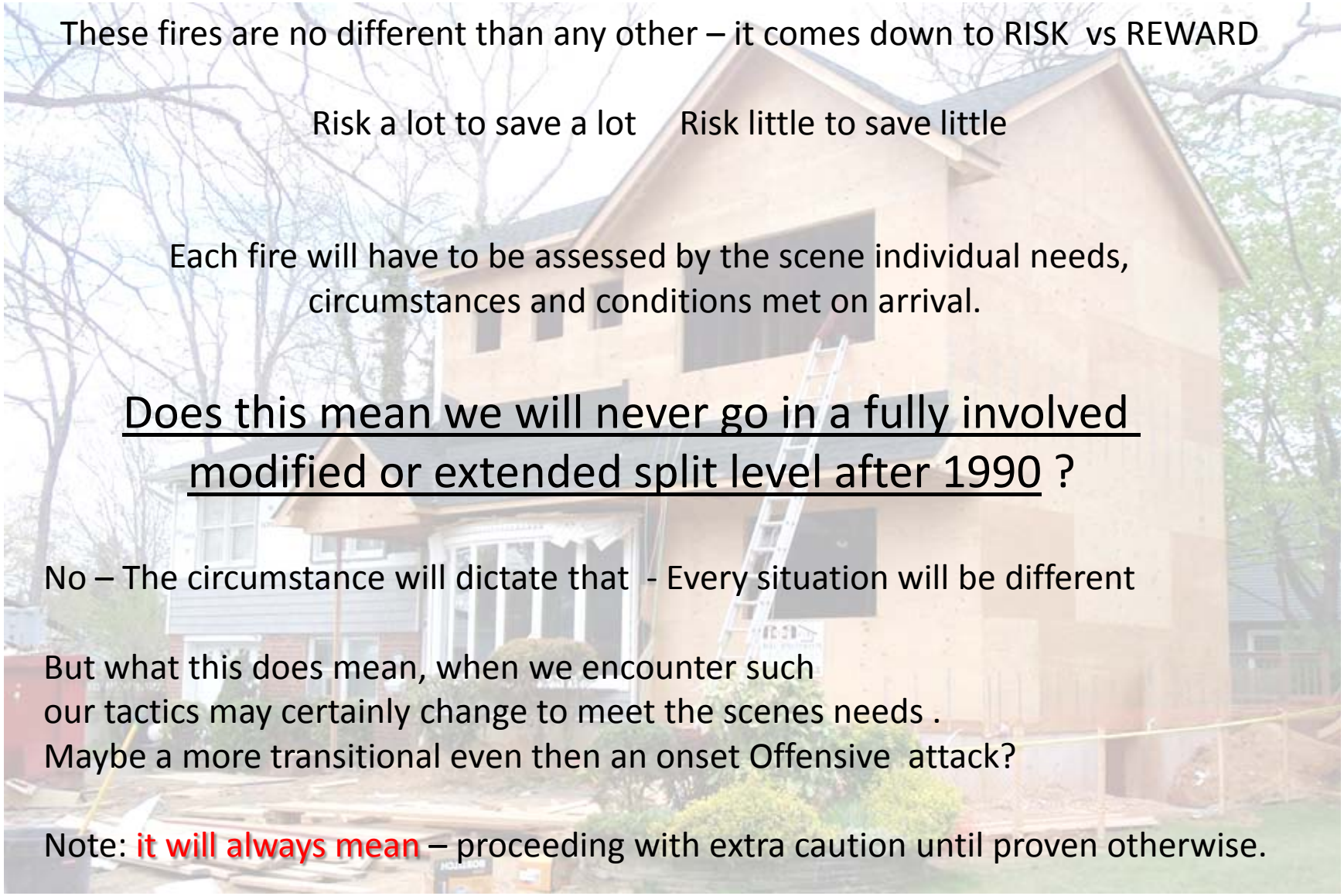


This really needs to addressed by a SOG and training – which states "the **front** entry door at all fires will be deemed the First floor **"** - doing so will allow all members from our dept to be the same page – always.

Then when Mutual Aid come in, they will be told by Command at their briefing and they can advise all their personnel – front door is 1st floor.

Since we don't, I'd suggest being specific in you transmission when talking floors: "Garage Level" , "front door level", "1 floor down from front door level " ... In LUNAR – " I went in front door – up 2 sets of stairs..."

What about the possible structural integrity issues?



These fires are no different than any other – it comes down to RISK vs REWARD

Risk a lot to save a lot Risk little to save little

Each fire will have to be assessed by the scene individual needs, circumstances and conditions met on arrival.

Does this mean we will never go in a fully involved modified or extended split level after 1990 ?

No – The circumstance will dictate that - Every situation will be different

But what this does mean, when we encounter such
our tactics may certainly change to meet the scenes needs .
Maybe a more transitional even then an onset Offensive attack?

Note: it will always mean – proceeding with extra caution until proven otherwise.

What type of structure do we have here?

2 Story Taxpayer

Do we have taxpayers in our district – if so where ?

Down town USA - Post Ave

Anyone know why these are called Taxpayers?

These type building were your typical old time “Mom and Pop” style business where they lived on the 2nd floor and the store paid the taxes.

Looking at this building and from our past knowledge - what assessments can we make from just this front view?

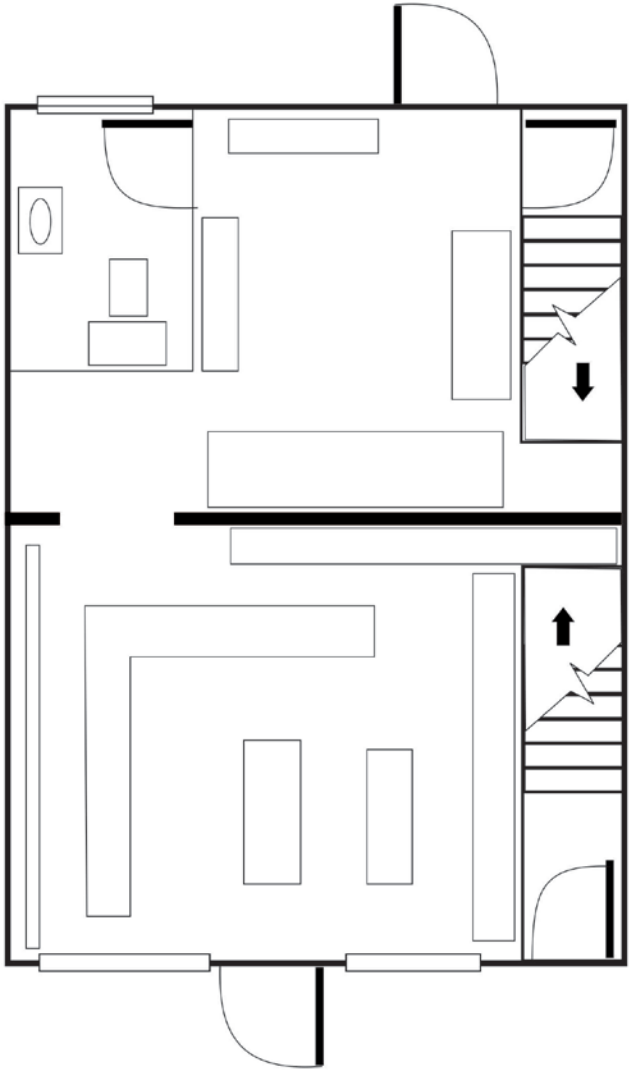
1. 2 story – isolated building
   fire wall at either side
   fire not likely extend 2 or 4 side
2. Deli 1st Floor -
   2nd Floor Office ? due to Large window but more than likely apartment(s) - **occupancy**
3. Entry to Deli – Front center
   Entry 2nd floor – independent of deli - black door at 1/4 corner
4. NO Street side Basement entrance (sidewalk)
   But may have been at one Time due to different sidewalk
5. Roof – Flat or pitch to rear

From our knowledge of laws and ordinances what other assessments can we possibly make ?

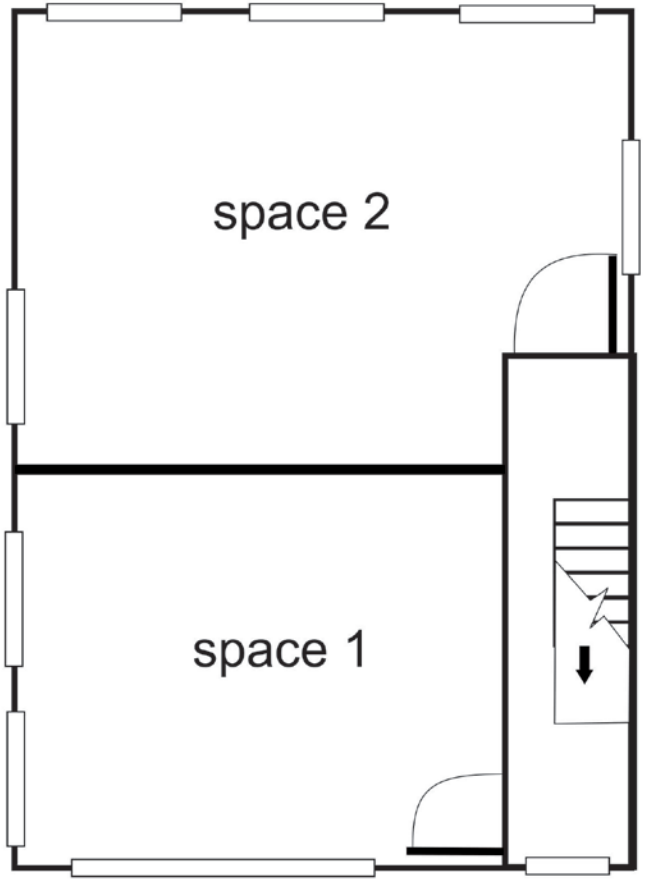
REQUIRED 2 Means of Egress - so Rear door into Deli

- Possible rear door with stair access to 2nd floor,
- Possible Rear Fire Escape **or**
- Cheapest, so (Most Likely) Windows on side 2 – 4 with access to adjacent roofs

Let's say our Preplan data has this for 1st and 2nd floor layouts – What assessment can we make from this ?

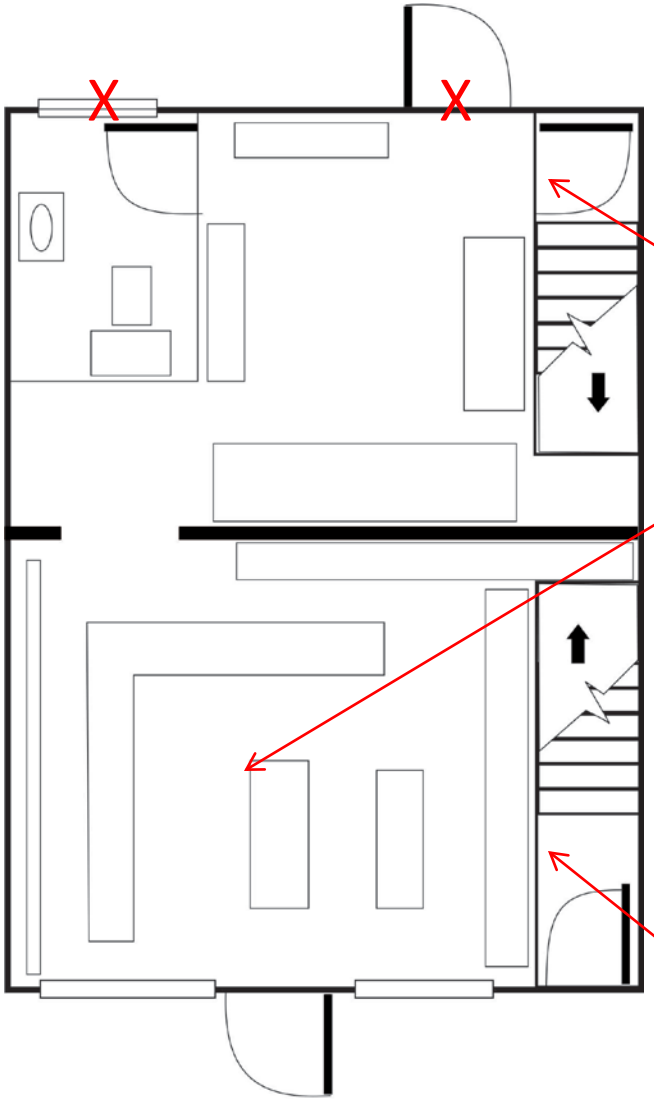


First Floor



Second Floor

What do we know about the 1st Floor?



1st Floor:

A Front and a Rear Entrance into the deli

Basement entrance 3/4 Corner –
from inside only,
no 2nd means egress = storage only ?

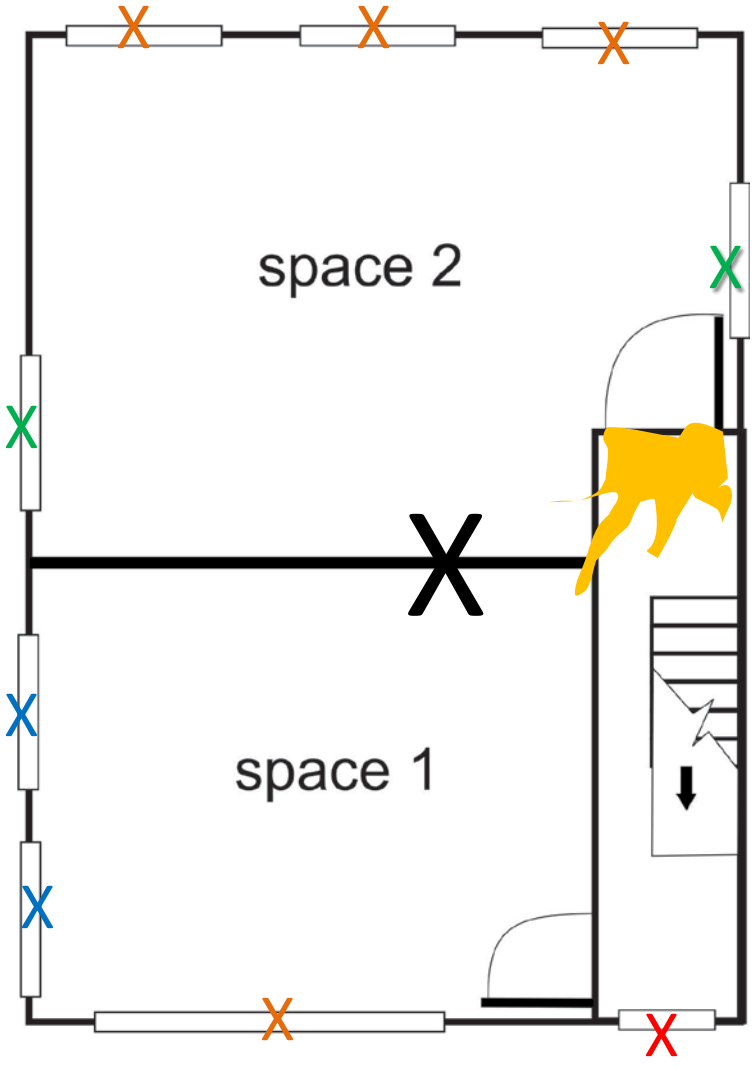
Deli – Maze like conditions

Only Rear ventilation is via Rear door and
Bathroom window -(door needs to be removed)

Venting Basement only be achieved via
a hole in 1st floor or behind team entering it

Stairs to 2nd floor protected by 1 hrs rated
(5/8 sheetrock framed wall)
and no entrance to 2nd floor from Inside the deli

What do we know about the 2nd Floor?



Second Floor

2nd Floor:

divided into 2 independent spaces (apartments)

X 2nd floor window 1/4 corner will give access to hall – just ifo the front apartment door

2nd Means Egress are windows –

X Front apartment: Side 2 only – good for VEIS

X Rear apartment : side 2 and 4 - both good for VEIS

X Sides 1 and 3: Need Ladder to windows - VEIS

Fire in Rear Apartment, if door left open – MAY Trap Occupancy in front Apartment

X 3 wall in front Apartment or 1 wall in rear apartment can be breached for place of refused ICO Emergency

Laddering exposure - 2 side will give you access to both 2nd floor apartments , were exposure 4 just rear – **so do 3 exposure 1st**.

Taking into account what we learned from our assessment – Where is our Life Hazards?

During Business Hours – High in Deli – less when closed and at all times the Occupancy on 2nd Floor

Which Fire would have a Bigger Life Hazard:

1. In Rear of deli
2. In front of deli
3. Basement fire in deli
4. On the stairs going to the 2nd floor
5. Rear Apartment 2nd floor
6. Front Apartment 2nd floor?

All have potential of serious life hazard, there are a few factors we still need to know especially time of day, **Off Face Value** – the fire on the stairs always cuts all 2nd floor egress!

Taking into account what we learned from our assessment – What type of construction do you think we have and should it be of a concern – if so why?

Old Downtown USA's – Westbury
Your Talking construction dating
Back early 1900 – Build with mass
Wood Frame - "true two bys"
And Masonry walls – aka Class III

Although the wood will burn, it will stay structural sound for quite some time.

What may be a concern is a Basement Fire. Why?

With the basement only having 1 access and with the door closed off to 1st floor – you could have a fire burn/smolder down there for quite some time until eventually burning through to 1st floor, *presenting as 1st floor content fire*, then when we advance on the fire area all of a sudden a portion of the floor give way and we have firefighter(s) in basement.

The member forcing the rear door – should also get that basement door open just inside and see if they get a push of heat and smoke – advising the fire is below advancing line.

Taking into account what we learned from our assessment – Talking Basement – What can we expect down there?

Storage – since only 1 access

Does this mean there isn't
Food prep station, another kitchen,
Office, sleeping quarters... ?

Expect Anything!
Not everything is done to code .
Hopefully being inspected yearly?

Can we expect Neatness/Order or Clutter ?

Expect Clutter – Hope for Neatness and Order – Hopefully our preplan info will help us?

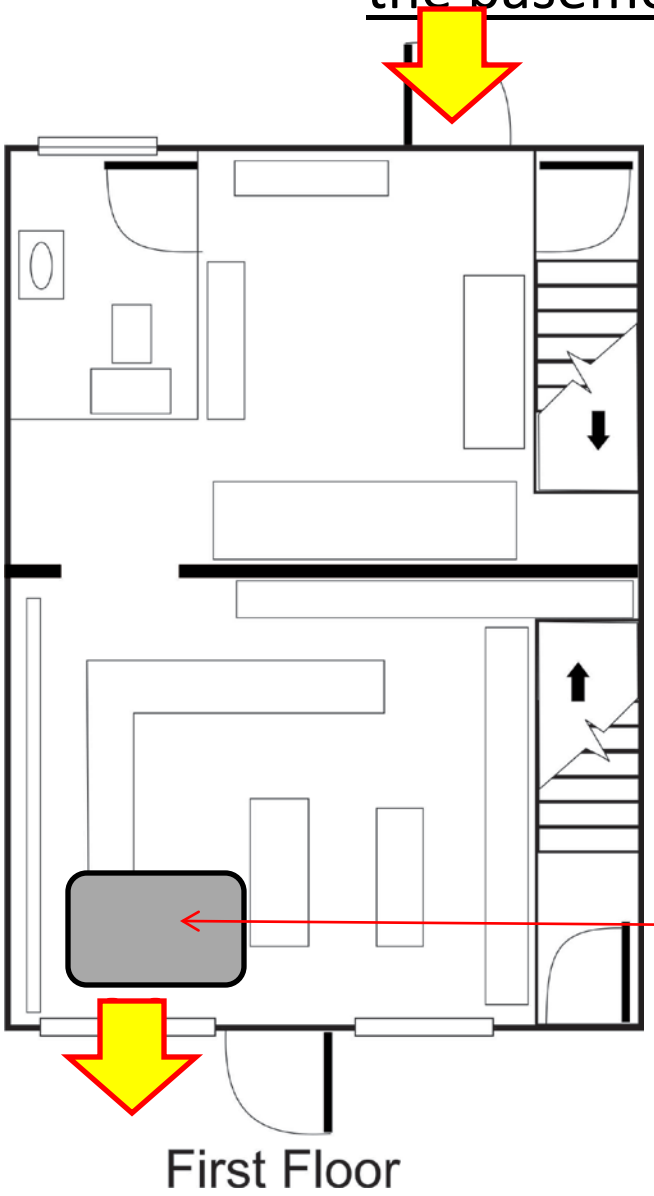
What about Fire Load – What kind of fire load would you expect in a Deli Basement?

Heavy – Bags, Cups, Styrofoam = Petroleum, stock...

What about Basement Stairs – What material can we expect them be made out of?

In Early 1900 building, I'd expect concrete – if any other use extreme caution,
Again 1 means of access/egress – how long has the fire been burning before noticed and what has that done to the stairs integrity - if not concrete or steel

Taking into account what we learned from our assessment – If we had a known basement fire – would it be better to enter the basement from the front door or rear door?



Back door – strait shot down the basement stairs and keeps advancing over a potentially weakened Floor?

Why else would this be a good idea?
If we opened up on this basement fire – where is this Fire/Smoke/Steam going?

They will be rolling right back over our heads because only point of ventilation is the stairs we went down. How do we alleviate this?

How do we get Ventilation – ahead of the line when There are no Natural points – Windows – Bilco... ?

We'll make it - by cutting a hole in the floor in front of the 2 big front window and taking these front windows.

What can we do to enhance this ventilation point?

Positive pressure back door with a Fan(s)

The ladder truck takes front of building - Ladders roof since a 2nd floor apartment fire – Roof Team goes to the roof to cut a hole, and your assigned OV – where are you putting your extension ladder?

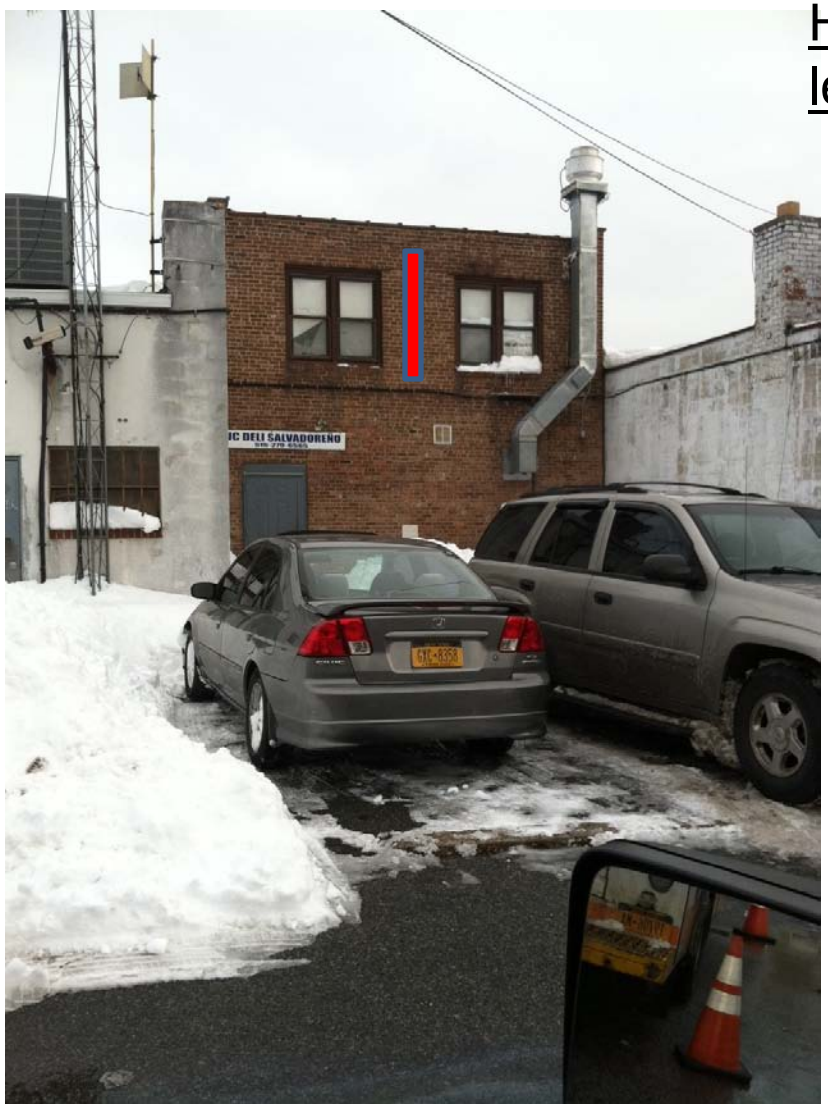
Ideally OV wants to get to the Rear – *The Ladder truck can cover the front*. If you have reports of a Victim trapped on 2nd floor unless you absolutely know the fire is in the rear apartment, I'd throw 24' to roof of Laffey go to roof, since you can VEIS both front and rear apartments. and will be quicker then back.

If you know the fire is in the rear apartment, going to the rear - to the back windows is a much better choice.

Understand since ladder truck is now in front and your in the middle of the block,
I'd look in the **"Store for Rent" and** if I saw a Strait run to a back door,
I'd K tool front door – walk Ladder through this building and into the rear.

This may be quicker and you won't be exhausted from the walk with the ladder and tools around the block? This will also allow quicker rear access for all. – (Your help)

You've made it to the back – this is what you find.
What assessment can you make – from what you know ?



Has anything changed – from what we've learned or been told?

Do we still see a back window in the deli ?

NO – Looks like they may have been some modifications - the bathroom now being part of the kitchen area *since it now has the vent for the stove hood*.

What else can we see that is different?

The 3 set of windows in rear are now 2,
Why may have this been done?

Maybe to accommodate for the vent but
Maybe a wall was put up splitting this area,
Single Room Occupancies (SRO). MORE $

If so – will VEIS allow you to check the entire area, will your vent be as effective ...
Things you need to recognize.

You've made it to the back – this is what you find.
What assessment can you make – from what you know ?

No Parapet like with the front or sides!

When we see a change in our Pre Plan info we need to recognize how is this changing things for us .

Example – With the bathroom no longer in the 2/3 corner – where is it now ?
Maybe Basement, 2nd floor ??

What else is important to note - in our observation of the rear of all these stores?

All 3 stores depth are different

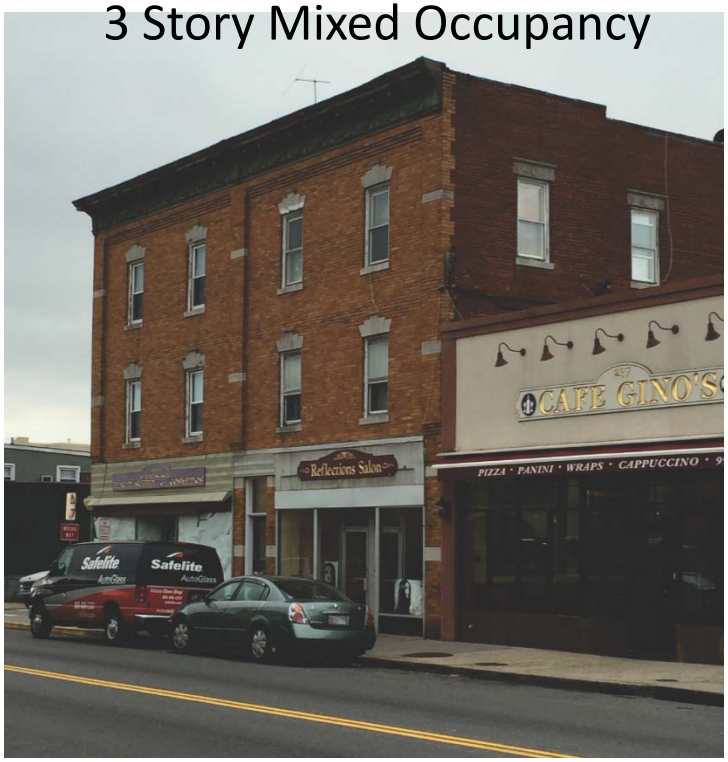
Who is this important information for ?

Roof – especially when all 3 building are the same height.
With the fronts all the same elevation, the backs may be perceived as being the same but it's typically not the case, and under smoke conditions firefighter have fallen of the roof.

Why else do they typically fall off ?

What type of structure do we have here?

3 Story Mixed Occupancy



Do we have Mix Occupancies in our district – if so where ?

Down town USA - again Post Ave

How does this differ from the 2 story Taxpayer we just did ?

They are very similar, with a lot of the same concerns, just on a much larger scale, since now we have 2 Business' on ground floor and Multiple apartment covering 2 floors

Looking at this building and from our past knowledge - what assessments can we make from just this front view?

2 independent stores fronts are separated by a possible hallway & stairway to the floors above

2 Floors of residential occupancy above these 2 commercial store on 1st floor – access trough door between these 2 stores - *Stairs leading up*

If a central stairway – at least 2 separate apartments on <u>each of the floors</u> above ?
(1 on either side of stairs at **minimum**)

The Pizzeria is a different building with fire stop separating it form the 2 others stores

Cars Parked in front of my present problems if wanted to use tower on front stores

See no fire escapes on side 4 – if not on side 2 or 3 - possibly a 2nd sets of stairs in the Center Hallway – a front and a rear stair case?

If we walked around to the back and this was what we saw, how accurate was our front assessment or would it need to be updated or changed a bit?

There is a rear fire escape – centered – meaning probably covers apartment to either side of the center hallway.

Door in Rear – centered and lines up with the Front door = this hallway goes through front – back?

Side door – side 2 near rear – possible rear door to the commercial store **or** office area of this store (small AC Unit) **or** even another apartment. This Door needs to be investigated more to see where it leads us.

If we learn this door is to a different area /apartment we can expect the 2nd egress of the stores and this apartment be in the center hallway

There is another rear door – possible 2nd egress for the front store but since "**added on**" could just be storage, Owners closet ... and gives no access into building at all ? Need to do more investigating to find out.

If we walked around to the back and this was what we saw, how accurate was our front assessment or would it need to be updated or changed a bit?

We can see a Gooseneck off fire escape giving occupants a means to escape from the roof, this may be a clue to what else can we probably expect to be on the roof ?

Roof Access via the interior staircase – on roof called?

Bulkhead = Stairs

Scuttle = Ladder

If we have a scuttle or bulkhead – why is it important to get open and by who?

Roof Position – the sooner it gets open the sooner the conditions in stairway will get better for people escaping and us entering. Why else?

Person(s) escaping to roof may have become overcome and now unconscious inside

If we walked around to the 2 side and this was what we saw, how accurate was our front and rear assessment **or** would they need to be updated or changed a bit?

What do we see that's important ?

Another Fire Escape

What is this telling us ?

Besides possible having 2 apartment:
1 on the north side of the center hallway and another on the south – there is a good chance we also have another one in the front of the south side of this building.

It is also telling us, since we don't have another fire escape on the north side, that these apartments on the north and the south don't mirror each other.

If we walked around to the 2 side and this was what we saw, how accurate was our front and rear assessment **or** would they need to be updated or changed a bit?

Knowing these apartment don't mirror each other - if you were assigned searches and rolled up to this – what could you do to get the layout of this fire apartment.

Should we be forcing the apartment door *below the visible fire floor* (meaning the 2nd floor) before going on to the 3rd floor ?

Not a bad idea – fire may have started there, rolled up the wall and exposed as 3rd floor fire, this could ultimately prevent you from being trapped above the fire, later.

Once this door is open, if you don't get no push of smoke or heat from this apartment, is this apartment likely involved? NO - but what can we do quickly before we advancing to the 3rd floor, to make your Search there a bit easier & effective - *knowing our conditions will be worst there* – helping you ?

Take a mental note of that apartments layout – the above apartment will typically be the same layout – Kitchen above kitchen – bedroom above bedroom ... Not 100%

We said that 2 side door needed more investigating – What do we notice ?

Staircase just inside door leading up.

Is this a 2nd staircase to all or Only to a specific area ?

With the Fire escapes – this could be stairs to only an specific area and not covering ?

With the stairs being here, what can we expect the window to the left be:
a room of the front store **or**
a separate area ?

Separate area – as we though seeing that small A/C unit from our rear view assessment.

We said that 2 side door needed more investigating – What do we notice ?

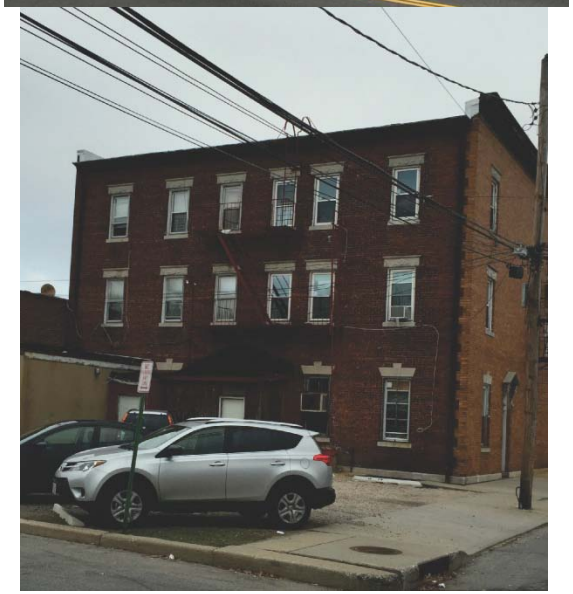
What do we think about this?

Home made fence made into a security gate - will need to be removed if we're taking this window.

Will we be taking it for that 3rd floor fire we just showed?

Probably not – 1st floor or Basement fire more likely especially if effects this side of the building

Using our assessment - what would be some of our Tactical considerations with this building?



Is there a Life Hazard?

Yes – same as the taxpayer just on a larger scale

What would some of the First Engine & First Truck Initial priorities be ?

Engine : get the 1st line established and in contain mode protecting that interior stair case – especially if that hall has access to either of the stores and either are on fire.

Truck : They have a bunch.

1. **Roof** – 360 over all sides,
   Get the bulkhead or scuttle open – clearing smoke for this hallway. - Once Open :
   Open Natural openings – Skylights - especially if 3rd floor fire – Opening returns checking fire in cockloft.
2. **Searches** – 1st fire area, 2nd above fire area – **ideally** both at the same time with 2 crews (FE/Can – inside) (OV – VEIS)

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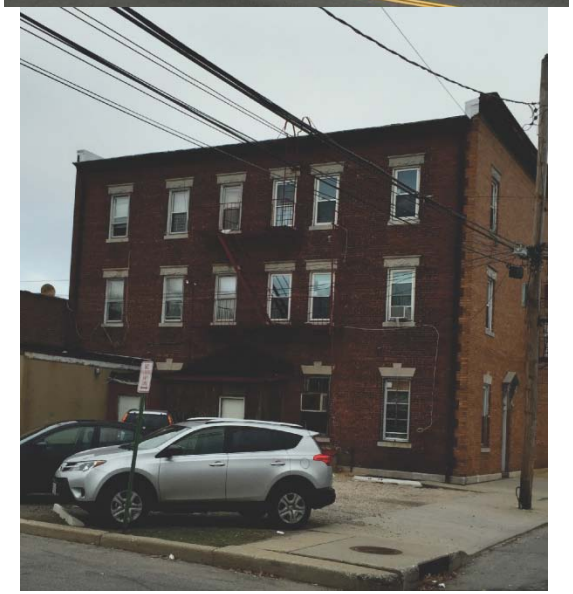


Do we think this building would have a basement?

There are no clues of such from the outside but more then likely - YES.

Would a basement fire be a concern ? If so Why

Where would this basement stair more then likely be, especially if we don't see basement access in front Sidewalk or outside rear ?

More then like under the stair going up to 2nd floor

Would his be a concern if there was a basement fire ?

Yes especially if this is the only access and by us going down the smoke is coming up – into this hallway of escaping residents

Using our assessment - what would be some of our Tactical considerations with this building?

What could we expect be in the basement?

Would the basement be a large open area encompassing the entire building footprint,
divide into 2 - a side for each of the 2 stores only or
lead to a common hall with multiple rooms one for each tenants to have storage ?

We wouldn't know unless we had a preplan –
We'll find out when we get down there – **expect anything**

Being there is no outside Sidewalk Entry Stairs –
(Front or Back) - I'd rule out basement is 2 divided sides and would lean towards common hall and multiple areas for each tenants to have storage – Maze Conditions?


Front Sidewalk Entry Stairs



Rear Entry Stairs – aka Bilco Doors

Using our assessment - what would be some of our Tactical considerations with this building?

If we had a basement fire and there was an exterior entrance into the basement along with the interior staircase – Which would we use to attack the fire ?

As long as the floor was good to get access the interior stairs – the interior stairs should be used – this way these exterior stairs can be the points of ventilation without having to be concern with extension into the building.

It could be debated – take the Safest & Quickest means to get water on the fire,

Just note if these outside stairs are used to attack the fire –
your point of vents should be something other then the interior staircase –
filling the hallway with heat and smoke and a line should be at the interior stairs for protection.

Using our assessment - what would be some of our Tactical considerations with this building?

Are the Wires on the 2 side a concern for us ?

Not unless we had to make a rescue of someone out a 2 side window – it would be a concern just to use more caution and would require use of a ground ladder Opposed to an aerial device.

Could we get 4 side Ladder coverage using both Ground and multiple aerials if needed?

Yes – We could access 4 side window from the roof of the pizzeria

What type of structure do we have here?

Our TYPE II Construction – " Big Box Store "

Do we have these in our district – if so where ?

Plenty – Costco, Home depot, Target, Wal Mart...

Is a Class II's a huge fire concern for us?

No Remember definition of a class II - Non Combustible
With a class II were not dealing with a structure fire but more a content fire.
One of our biggest concern upon arrival maybe dealing with people!

What are the Construction type?

Type I

Fire Resistant – aka “fire proof”
Characteristics: Mass, > 5 floors, concrete floors,
Steel protected by concrete type material...

Type II

Non- Combustible - New construction see today
Characteristics: Masonry walls, Metal roof,
Our Big box store, strip malls... Typically sprinklers

Type III

Ordinary – Older Commercials
Characteristics: Masonry walls, Wood roof,
Our “Downtown USA” post ave ...

Type IV

Heavy Timber –
Characteristics: Massive wood support structure
Our Churches, Stables – where massive wood columns

Type V

Framed – Residential
Characteristics: walls and roof made of combustible
Materials – Our everyday residential home

Why is knowing Construction type important ?





Are our tactics going to be the same in each structure?

NO !

Knowing we have a type II with bar truss and metal decking are we sending a roof Team to the roof to cut a hole ?

NO !

Are we as concerned of fire extension in a Type 1 Apartment building as we would be if it was a type 5 ?

NO !

Knowing the type of building will allow you to set incident priorities much quicker - With concern A being more important than concern B or C ...

Ok we have a Type II – "Big Box Store" – Knowing this what assessments can we immediately make upon arrival?

1. Masonry walls, metal deck roof
2. New construction – sprinklers and due to size – also Standpiped

All good things = content fire

What's the next thing we should be looking for as enter the parking lot?

Where are the people (workers/shoppers)

If they are standing outside and it's 20 degrees out, what this telling us?

Probably something going on inside

What is the Life Hazard Potential for this building ?

Yes great potential – realistically with Smoke detectors, sprinklers large multiple exits... this drops the potential of victims – (most who can will self remove prior our arrival)

Our **greater** concern is when there is a catastrophic event that cause the fire – "stove Explosion" - these events - victims will be due to the event and a rescue(s) more probable.

Doing our 360 of this building what assessment can we make ?

Front – or Side 1

Is it ? When address was Stewart Ave and we turned right in Parking Lot. Thoughts ?

Yes – Front entry = Side 1 unless Command deems otherwise and if so EVERYONE on fire scene should know this!

Thoughts about these multiple large Garage style door ifo ?

What is the smoke conditions going to be if each of these doors are open, Will we be on our knees? No – we should be able to walk right to the fire area

Does this mean we should open these doors asap – No matter what ?

No – if needed for immediate evacuation of occupants - Maybe

If one is open and smoke isn't coming out it – what is this saying?

Smoke not down to that level yet or wind direction is forcing air inwards – into building

In the end – we need to control the ventilation – so open when/as needed – not automatic
We could be doing more harm then good if we open before have control of the fire

Doing our 360 of this building what assessment can we make ?

Right side – or Side 4

See multiple loading dock bays - Good or Bad ?

Unless open and windward side feeding air to Fire – it a Good thing .
Huge opening into building can be used for : Access/Egress, Ventilation, even fire attack if it's the closest entry point to fire area?
Maybe Quicker to get water on fire from this point than through front door or connect to standpipe?

What about Laddering this side of building - Thoughts ?

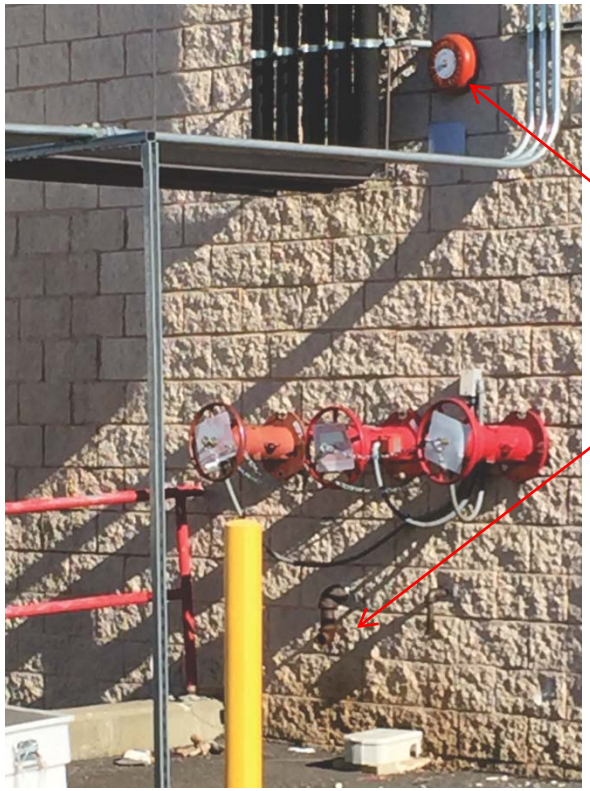
Why? – didn't we say type II – metal Q decking – are we sending anyone to roof ?
Unless there is someone on roof to rescue – Not going to waste energy .

What can we say about that hydrant we see - Thoughts ?

Do we know if this is a hydrant off the town water grid or is it a "yard hydrant"
How can we make that assessment? - will we us it if it's a the Yard hydrant ?

Best way to tell is our Preplan – If we don't have one – Next see if it's the same style/ color as the one on the street . If they matches - probably off the town water?
Private yard hydrants are NOT maintained by Town Water, so typically different.

Doing our 360 of this building what assessment can we make ?



Right side – or Side 4 closer to rear – Side 3

What assessments can we make from this ?

3 OS&Y valves = 3 zones in the sprinkler system

1 – Gong and 1 - Drain — Not Ringing – No water from Drain = No Sprinkler Activation

How important is it to get control of these Valves (if activation) and if so, Why ?

Important to control – Once we get water to the Fire area – these activated sprinkler will keep the smoke from lifting making condition poor in the fire area until the sprinkler is shut down- allowing environment to lift.

Since there are 3 valves only 1 gong and 1 drain how do we know which valve or zone is the one flowing the water ?

With an ungloved hand – feel – you should feel vibration or water flow in the valve moving water - if not and when in doubt turn off all of them.

Once shut down are you done – go get another assignment?

No – your there until signal 12 – you may be called upon to turn back on, if loose control

Doing our 360 of this building what assessment can we make ?

Rear side – or Side 3

Rear and all sides we see doors like this – what Assessment can we make of this?

Emergency exit door – how do we know this?

No door hardware from the outside = not entry

Inward or Outward opening door?

Outward – flush with frame , (exit = Outward per code)
Not recessed = inward opening

What kind of hardware could we expect inside?

Panic Bar – push arm – may even be alarmed

When would we force these Doors?

As stated earlier – we don't just want to open doors . We need to control air flow and Ventilation... Does this mean they can't be immediately forced?

Yes – Force immediately – could be victim just inside – check then close, but with a chock...
Prevent from closing locked again. This way when ready to open it can be immediately opened

What assessment can we make from immediately walking inside?

Bar Truss

Sky Light – Hopefully polycarbonate "Plexiglass" rating about 200 degrees so when temps at roof increase they will melt – providing ventilation since we wont be going to roof to open (Truss)

High :18- 20' to roof = smoke will lift and with big footprint it will be a while before smoke banks down

What can we make of this?

2nd floor offices

Should this be a concern -

If so Why?

YES – a Fire anywhere on the floor – all the smoke and heat is 1st going to overtake this area (Hotter – worst conditions above the fire)

Any Occupants on onset of fire may stay, thinking it may be a place of refuge -
It needs to be searched ASAP – Longer it takes to search – the worst conditions will become.

What assessment can we make from immediately walking inside?

What's our fire load in a building like this ?

Remember contents fire – not structure – Type II

Heavy – depending on area of store

Expect worst condition in stock area – opposed to the can goods or Tire section vs Bakery ...

Do we think Searching / Aisles will be an area of concern?

Shouldn't – with Skylights, Garage doors, ceiling height and large footprint ...
Smoke shouldn't get so low that were that low that can't manipulate aisles.

Does This mean we don't need to bring in a search rope?

No – we should still bring a search rope – what about that 2nd floor, the Loading dock or Stock areas – use when confronted with smaller more confined areas, but still large.
When we get to these areas, we can deploy outside them, before entering,
because me may encounter far worst conditions, beyond these points.

Always consider - conditions on exit may not be the same as when you entered !

What assessment can we make from immediately walking inside?

What about refrigeration units – Should we be concerned ?

Again, will smoke get down to the levels that it's a concern ?

If searching one, know this is a big walking refrigerator. This one give you a few options all side walls – after removing item of selves can give you egress outside the unit.

Others you may not be so lucky -1 way in and out

Note – If smoke is that bad, on a TIC when scanning this area – these glass doors may appear to be windows to the outside ? They will show was a cooler temperature - Remember - but did we see outside windows... ? No

Don't use for a point of ventilation – Not going to work , I've seen it done before !

What assessment can we make from immediately walking inside?

What about this - a concern ?

Absolutely – How much weigh is on
One of these shelves?

What if there is a Fire on one of these Shelves?

What is it doing to the supporting shelf above?

Burning it away.

What are these shelves made of ?

If we're lucky Full Metal Deck,
Realistically – cheapest material allowable

What about open racks,
found supporting
Lumber or pipes
in Home Depot... ?

What assessment can we make from immediately walking inside?

What will happen when it does burn away?

Contents of that shelf is coming down
(collapse)

Where will this fire extend?

Up – Bay at the back – jump isle depending?

What can we do to prevent it collapsing on us as we attempt to put fire out?

1. Don't work directly under it until can be better assessed.
2. Use the reach of the nozzle

What can say about the sprinkler effectiveness on this fire ?

Maybe able to keep fire somewhat in check , but not extinguishing it.
(not the sprinklers purpose – keep fire protection so people can escape)

What else is this sprinkler doing ?

Water at 8lbs per gallon is being absorbed by the cardboard, contents adding even more weight to an potentially already weakened shelf

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SOME FINAL THOUGHTS

- We gave you a lot of information to think about – these are question with time and experience you will be automatically answering, just by looking at these structures.

- This is why riding the front seat is more than blowing the siren and talking on the radio. Every call, this is the way the member in that front seat needs to be thinking - then processing what they see and encounter – allowing them to making good choices and keep people under their control safe.

- don't be complacent, ever scene is different, expect the worst and hope for the best.

- Every AFA, False alarm, even just shopping in a location in the district ... You should be looking around, assessing the location, what if this place was on fire, taking mental notes ... This way when it's life or death, you know the answers you need to be asking. You've Experienced before!

- Can never know too much, or be too prepared ..... This will keep you safe!