

# NYC FIRE CODE TRAINING



CUNY SOLAR + STORAGE INSTALLERS WORKSHOP 2021

# ROOFTOP ACCESS



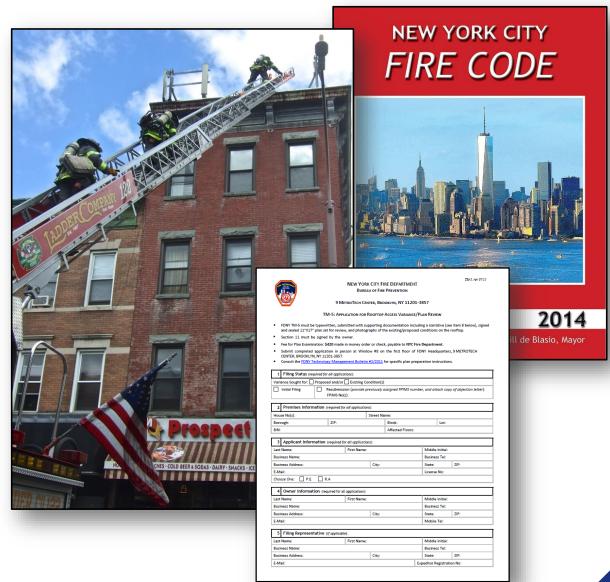
April 28, 2021 John Ingenito



### **OVERVIEW**



- 1. Firematics & Operations
- 2. 2014 NYC Fire Code: Sections FC504.4 & FC512
- 3. Common Non-Compliant Installations, Solutions and How to File





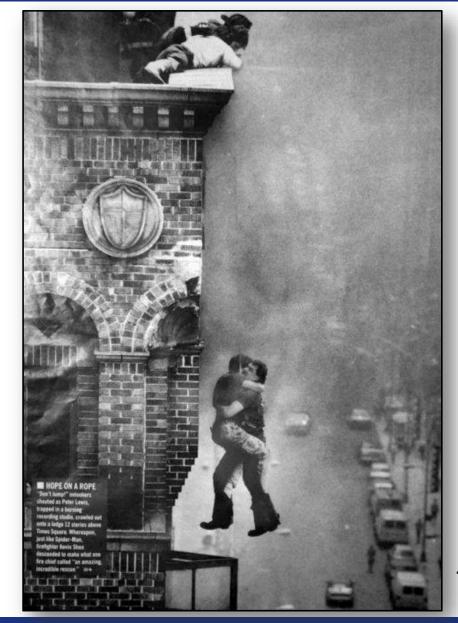


# FIREMATICS & OPERATIONS



# NEW YORK'S BRAVEST







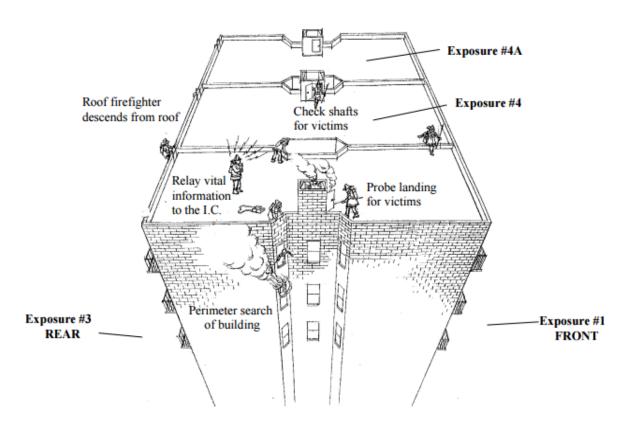
NOTHING SHALL DETER THE MEMBER
ASSIGNED THE ROOF POSITION FROM
CARRYING OUT THE ASSIGNED DUTIES.

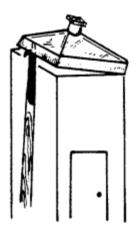


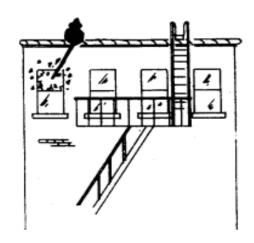
# ROOF POSITION REQUIREMENTS



- A **perimeter search** shall include the sides, rear and shafts of the building.
- •Transmitting **vital information** to the Incident Commander.







•Roof **ventilation** Via opening bulkhead doors, breaking upper level windows and skylights, opening hatches, cutting the rooftop etc.

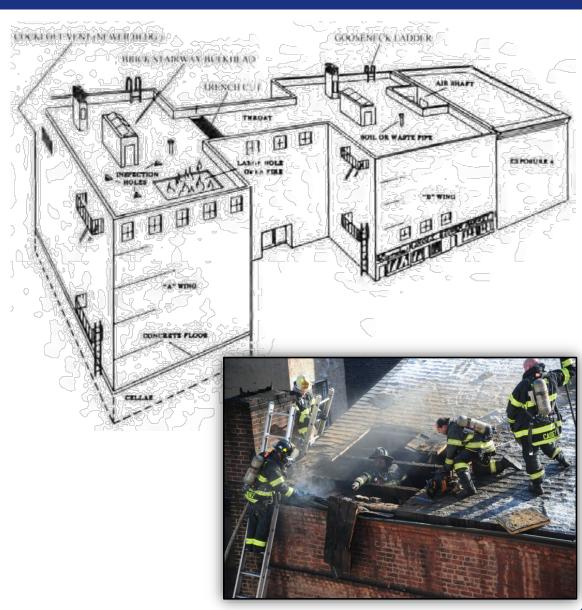


# VENTING AND TRENCH CUTS



Rooftop Venting is Key in the early stages of the Fire Operations and is critical for:

- Relieving the upper portions of the building of heat, smoke and gases
- Increasing survival time of evacuating, trapped or unconscious victims.
- Making Search and Rescue operations more efficient and effective
- Increasing efficiency and effectiveness of hose operations and extinguishment
- Limiting horizontal spread







# 2014 NYC FIRE CODE: SECTIONS FC504.4

ROOFTOP ACCESS AND OBSTRUCTIONS

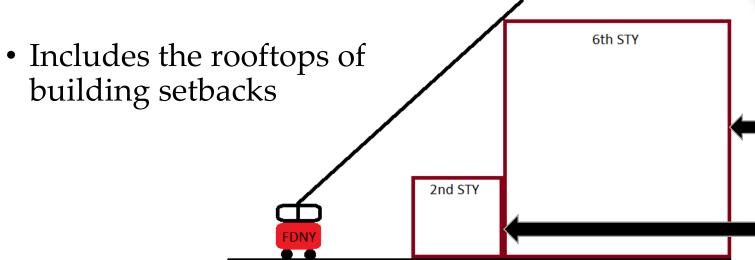


## OVERVIEW OF FC504.4



• 2014 Fire Code effective as of March 30<sup>th</sup>, 2014

• Buildings that are 100 feet or less in height and have a slope of 20 degrees or less





All Rooftop Levels 100' and under must comply with the requirements of FC504.4



# PERIMETER ACCESS OPENINGS

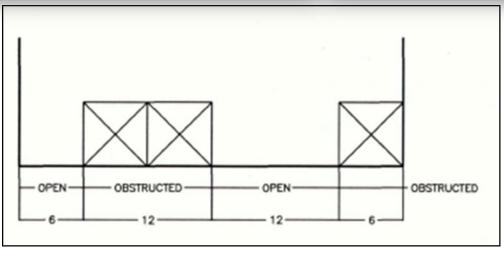


### FC504.4.1

- Every 12 FEET of frontage width requires 6 FEET open
- There can be NO MORE than 12 FEET of obstructed rooftop area between distinct openings
- Pattern depends on building size
- Only calculated for an apparatus accessible exposure
  - Includes side streets, parking lots and exposures where a truck can drive







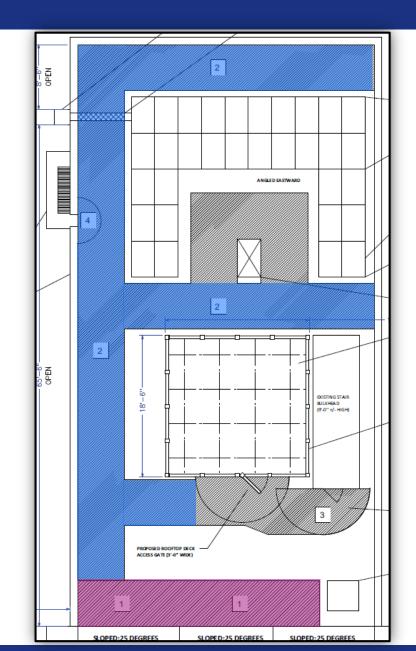


## PERIMETER ACCESS OPENINGS



### FC504.4.3

- Perimeter access location shall be a min. of 6' in each direction & connect to clear path
- Fence shall not obstruct access landing and shall provide access to clear path via gate.
- Gates
  - 3' wide, inward swinging
  - May be secured by padlock or chain
  - Able to be cut by standard bolt cutter



Clear Path

Perimeter Access



# LANDING AREA MEASUREMENTS



 Measurements are taken from inside face of parapet wall

• Raised/Decorative Parapets: Indicate height of all segments





# LANDING AREA MEASUREMENTS



SLOPED PARAPETS: "Usable" Rooftop Perimeter Access Landing Area begins where slope meets flat portion of roof.





<u>DECORATIVE CORNICES:</u> Not considered "usable" as part of the Perimeter Access Landing Areas. Calculations must begin on the main rooftop level and after the termination of the façade wall.



# PERIMETER ACCESS OBSTRUCTIONS



### FC504.4.1[5]

Structures affixed to an exterior building wall below the roof line shall not obstruct fire apparatus aerial ladder access to the rooftop perimeter access locations. Including but not limited to:

- Sun Control Devices
- Awnings
- Solar Panels
- Fire Escapes









# SCAFFOLDING & SIGNAGE



### • FC504.4.1[6]

- Existing scaffolding modified to provide access onto rooftop
- New scaffolding be designed to provide secure landings onto rooftop





### • FC504.4.2

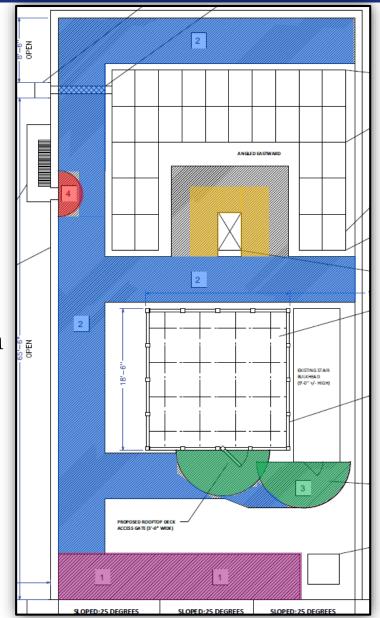
 Rooftop access signs and markings TBD by Fire Department through plan examination



# CLEAR PATHS AND CLEARANCES



- FC504.4.4
  - Clear path is 6' wide & 9' tall
  - Traverses front to rear & side to side
  - Distinct clear path every 100 linear feet.
- FC504.4.4[1]
  - Clear path connects to access landings
- FC504.4.4[2]
  - Fire escape, bulkhead door, scuttles, skylights shall be accessible from clear path
  - 3' wide access around scuttles & skylights on 3 sides
- FC504.4.4[3] see FC504.4.7
- FC504.4.4[4]
  - Fences crossing clear path shall provide gate(s)



- Clear Path
- Fire Escape
- Door Clearance
- Skylight Clearance
- Perimeter Access



# CLEAR PATHS AND CLEARANCES







### FC504.4.6

- Required rooftop clearances
  - Roof door: 6' clear radius from hinge
  - Fire Escape & Roof Ladders: 3' clear radius from each side of the ladder or landing



# CODE INTERPRETATION: CLEARANCE FOR SCUTTLE AND SKYLIGHT "TO THE MAXIMUM EXTENT PRACTICABLE"



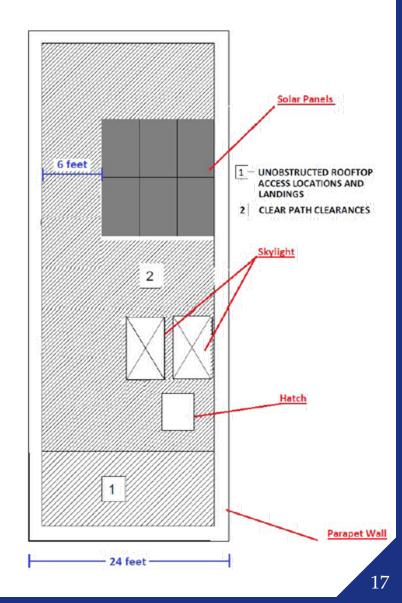
### Summary of the guidelines:

For Rooftops constructed pursuant to plans approved by DOB or the FDNY on or before December 31, 2017 Scuttles and Skylights that do not have 3 feet of clearance on 3 sides will be considered to be in compliance with FC504.4 when clearance is limited by any parapet wall or Qualifying Encroachment:

- Attic ventilator
- Chimney
- Plumbing ventilation pipe
- Freestanding HVAC condenser with a capacity of 5 tons or more.

- Bulkhead
- Hatch
- Scuttle
- Skylight

Note: This does not mean that the Rooftop itself is in compliance with FC504.4. Upon alteration to the rooftop any other non compliant features, including obstructions to the required Scuttles and Skylights clearance that are not listed above, will trigger the requirement to file with the FDNY.





# CODE INTERPRETATION: CLEARANCE FOR SCUTTLE AND SKYLIGHT "TO THE MAXIMUM EXTENT PRACTICABLE" -FULL TEXT-



Frequently Asked Question #37 of Chapter 5 of the Fire Code Guide http://www1.nyc.gov/assets/fdny/downloads/pdf/business/nyc-fire-code-guide.pdf

The skylight and scuttle clearance requirement is intended to provide firefighters access to these building features to allow heat and smoke to be vented from the building during a fire. Such venting facilitates interior firefighting operations and helps control fire spread. Clearance in several directions affords firefighters the maneuverability they need to breach the skylight or open the scuttle, and allows firefighters to remain upwind of the heat and smoke that pours out once they accomplish this task.

By stating "to the maximum extent practicable," the Fire Code recognizes that an owner's ability to provide three feet of clearance around rooftop skylights and scuttles may be constrained by the layout of the rooftop. It would be impossible or impracticable to move parapet walls and other permanent building features that lie within three feet of a skylight or scuttle (including most building features termed "Qualifying Encroachments" in Frequently Asked Question #38 of Chapter 5 of the Fire Code Guide).

Accordingly, the Fire Department interprets the "maximum extent practicable" language of FC504.4.4(2) with respect to skylight/scuttle clearance as follows:

A skylight or scuttle will be deemed in compliance with FC504.4.4(2), even though there is less than three feet of clearance on three of its sides, when:

1.the rooftop was constructed pursuant to plans approved by the Department of Buildings or Fire Department on or before December 31, 2017; and

2.the clearance is limited by any parapet wall or Qualifying Encroachment – attic ventilator, bulkhead, chimney, hatch, plumbing ventilation pipe, scuttle, skylight, or roof-mounted heating/air conditioning equipment (HVAC) – except a freestanding HVAC condenser with a capacity of 5 tons or less.

A solar, telecommunications or other rooftop installation will not be disapproved by the Department of Buildings and/or the Fire Department based on the lack of the required skylight/scuttle clearance, provided it meets the foregoing guidelines.

Newly-designed and constructed buildings should provide such clearance or obtain a modification (variance) from the Fire Department in accordance with FC104.8. An applicant unable to comply with any other requirement of FC504.4.4 also may request a modification.



# CLEAR PATHS: MULTIPLE ROOF LEVELS

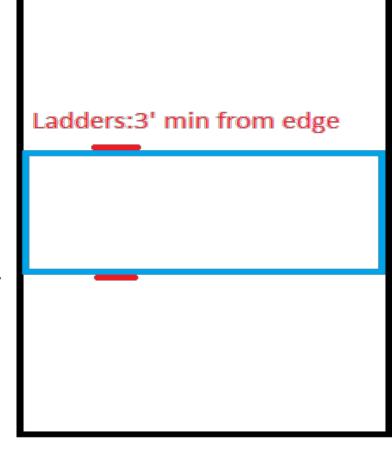




### FC504.4.4[5]

Ladders or other approved means must be provided for elevation differences of 16 feet or less

Exception: setback is less than 6' (No ladders)



24' OPEN 123 Front Street



# IRREGULAR SHAPED BUILDINGS FC504.4.4[6]



### REQUIRE ADDITIONAL CLEAR PATHS

### Example: "H" shaped buildings



- Each wing of the building will need its own clear path from front to rear and side.
- All the wings clear paths must connect to each other.
- There must be a clear path that goes across the throat of the building
- The throat of the building must have a path from front to rear and side to side.



# ROOFTOP CLEAR PATH PROTECTION



### FC504.4.5

- Consists of 42" high (measured from roof surface ) railing, parapet or barrier.
- Provided for open shafts, building perimeter and/or unprotected elevation differences along the clear path.

### **Exception:**

Height differentials of 6 feet or less.





# MAINTAIN ROOFTOP FUNCTIONALITY







Rooftop installations shall **Not** obstruct or interfere with the normal functions of a rooftop such as drainage



# FC504.4.7 & FC504.4.8





- Conduits and Piping FC504.4.7
  - Labeled as required
  - Considered obstructions if greater than 12" ht or 24" width, non-combustible crossover required.
- Telecommunications Installations <u>FC504.4.8</u>
  - Transmitter labeling
  - Signage as required for antennas, powered equipment, and related equipment



## ROOFTOP GARDENS & GREEN ROOFS



### • FC504.4.9

- Shall not cause obstruction to required rooftop access, clear path, or rooftop door/fire escape clearances
- Vegetation shall not exceed 12" in height
- <u>FC318.5</u> & Plumbing Code 429.1
  - Hose connection to an approved water supply required for square footage exceeding 250 sq ft





# ROOFTOP SOLAR FC504.4.10





Rooftop solar installations shall be designed, installed, operated and maintained in accordance with FC512





# 2014 NYC FIRE CODE: SECTION FC512

ROOFTOP SOLAR
PANEL INSTALLATIONS



## OVERVIEW OF FC512



• Solar Panel on Flat Roofs shall comply with all requirements of <u>FC504.4</u>

### **Exception to the clear path requirement:**

- **Approved** hinged mechanism for **clear path** obstructed by solar panels, NEEDS FD Certificate of Approval, TM-2 App. (FC 512.2[1])
- Acceptable encroachments on the clear path for narrow buildings, 25 feet or less (FC 512.2[2])





# CLARIFICATION OF FC512.2[2]



### Summary of the guidelines:

<u>FC512.2[2]</u> allows for "Qualifying Encroachments" to encroach upon the clear path to a limited extent and under the following circumstances:

- 1) The building rooftop must be 25 feet or less in width and/or depth
- 2) The design of the solar panel installation necessitates substantial rooftop coverage
- 3) The encroachment does not reduce the width of the clear path beyond the amount approved by the Fire Department. [minimum width of 4 feet]
- 4) Qualifying Encroachments may not limit the perimeter access landing areas or any required rooftop clearances other than the clear path unless otherwise permitted under separate FDNY guidelines.
- 5) Proposed installation must be filed with DOB or the FDNY for full plan review.
  - PROFESSIONAL CERTIFICATION MAY NOT BE USED IN LIEU OF PLAN REVIEW
- 6) Installation must comply with all other requirements of the fire code including those of FC504.4



# CLARIFICATION OF FC512.2[2]

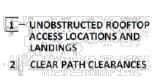


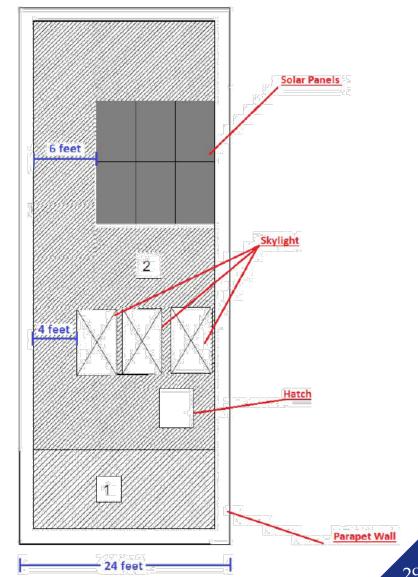
### Qualifying Encroachments:

- Attic ventilator
- Chimney
- Plumbing ventilation pipe
- Freestanding HVAC condenser with a capacity of 5 tons or more.

- Bulkhead
- Hatch
- Scuttle
- Skylight

Solar Panels are NOT considered to be a Qualifying Encroachment and may not limit the clear path





### PENDING CODE REVISION OR RULE PROMULGATION, THE FIRE DEPARTMENT WILL IMPLEMENT FC512.2 BY APPLYING THE FOLLOWING INTERIM GUIDELINES TO ROOFTOP CLEAR PATH ENCROACHMENTS BY PERMANENT BUILDING FEATURES:

Frequently Asked Question #39 of Chapter 5 of the Fire Code Guide http://www1.nyc.gov/assets/fdny/downloads/pdf/business/nyc-fire-code-guide.pdf

- 1) The building rooftop has a width or depth of not more than 25 feet; and
- 2) The filed plans indicate (in a note or other approved manner) that encroachment on the clear path is necessary to accommodate the design of the solar installation, which requires coverage across all or substantially all of one or more of the rooftop dimensions; and
- 3) Only the following permanent obstructions ("Qualifying Encroachments") may encroach upon and thereby reduce the clear path width at one or more locations: attic ventilators; bulkheads; chimneys; hatches; plumbing ventilation pipes; scuttles; skylights; and roof-mounted heating, air conditioning equipment; and
- 4) The 6-foot rooftop clear path width required by **FC504.4** shall be provided and maintained across the rooftop in accordance with **FC504.4**, except that Qualifying Encroachments may encroach upon and reduce the width of such clear path up to 2 feet (24 inches). The Qualifying Encroachments are not limited in length or height, but shall not reduce the width of the clear path at any point to less than 4 feet (48 inches); and
- 5) The Qualifying Encroachments may not encroach upon the rooftop landing areas required by **FC504.4.3**, which shall be kept free of obstructions for the required six-foot by six-foot dimension; and
- The rooftop solar panel installation is filed with the New York City Department of Buildings for full plan review in accordance with that agency's filing procedures (not under professional certification in lieu of plan review), or is filed with the Fire Department's Bureau of Fire Prevention for plan review in accordance with Fire Department filing procedures; and
- 7) The solar panel installation complies with all other Fire Code requirements, including all other requirements of **FC504.4**.

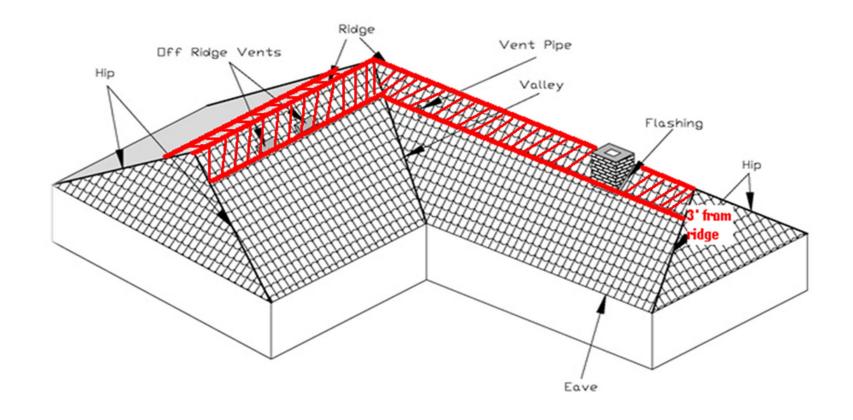
The Department of Buildings will approve a solar panel installation with Qualifying Encroachments in the clear path (and the Fire Department will approve a rooftop access plan with such encroachments) if the plan meets these guidelines.



## PITCHED ROOFTOPS



- Solar Panels on Pitched Roofs, greater than 20°
  - Provide 3 feet of clearance along BOTH sides of the ridgeline of each roof (FC 512.3.1 & FC 512.3.2)





## PITCHED ROOFTOPS



- Location of Panels & Markings (FC 512.4)
  - Locate conduits along dips and valleys away from ridge line (peaked roofs)
  - Solar panel equipment shall be labeled: "WARNING: PHOTOVOLTAIC POWER SOURCE" in white capital letters no less than 3/8" in height on a red background



# ALLOWANCE FOR ONE OR TWO FAMILY DWELLING



Summary of the guidelines:

One or two family dwelling whose slope is 9.5 degrees or greater do not have to comply with the requirements <u>FC504.4</u>.

# **HOWEVER**

These rooftops instead must comply with <u>FC512.3</u>. You must provide 3 feet of clearance along BOTH sides of the ridgeline of each roof



# ALLOWANCE FOR ONE OR TWO FAMILY DWELLING -FULL TEXT-



ACCORDINGLY, PENDING CODE REVISION OR PROMULGATION OF A RULE, THE FIRE DEPARTMENT WILL INTERPRET FC504.4 AND FC512.3 IN ACCORDANCE WITH THE FOLLOWING INTERIM GUIDELINES:

Frequently Asked Question #35 of Chapter 5 of the Fire Code Guide http://www1.nyc.gov/assets/fdny/downloads/pdf/business/nyc-fire-code-guide.pdf

- 1) A one or two-family home with a shallow-pitched roof (a roof slope of not less than 2/12, or 9.5%) shall comply with FC512.3, not FC504.4.
- 2) A one or two family dwelling that is primarily a flat-roof building shall comply with FC504.4, even if a portion of the roof is shallow-pitched or has a pitch exceeding 20%. For example, a brownstone-type building shall comply with FC504.4, not FC512.3, notwithstanding it having a pitched roof element (such as a mansard) or a penthouse or bulkhead with a pitched roof.
- 3) A shallow-pitched or pitched portion of the building rooftop must be kept free of obstructions if it can be traversed to gain access onto, or across, the otherwise flat roof. Owners may request guidance from the Bureau of Fire Prevention as to the appropriate treatment of shallow-pitched or pitched portions of flat-roofed buildings.
- 4) This interim guideline shall not apply to shallow-pitched roofs on buildings other than one or two family dwellings (Occupancy Group R-3).





# COMMON NON-COMPLIANT INSTALLATIONS, SOLUTIONS AND HOW TO FILE



# WHAT REQUIRES AN APPLICATION?



Non-compliance, whether its existing or proposed



Any of the following:

- New equipment on a rooftop including: Cell Sites, Solar/PV Arrays, HVAC, Fencing
- Vertical Enlargements (penthouses, bulkheads, new floors)
- Accessory/Incidental use of roof: deck, bar, greenhouse
- Green Roofs, Blue Roofs
- New Building Construction
- Cantilever buildings

Note: All rooftop access designs falling under the above mentioned situations may <u>NOT</u> be self-certified by a PE or RA. They must be submitted to the FDNY Rooftop Access Unit for review.



# EXAMPLES OF NON-COMPLIANCE

















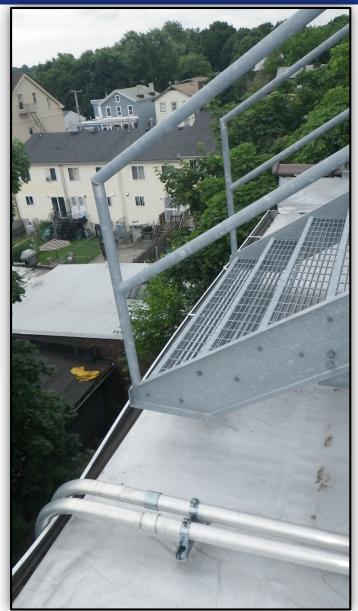


# THE STAIR TO NOWHERE!!!!!!





YES!
THIS IS ACTUALLY
SOMETHING WE
FOUND ON A ROOFTOP.







### WHAT DOES NOT REQUIRE AN APPLICATION?



- Work on rooftops that are over 100' in height.
- Ordinary repair and maintenance on roofs which includes but not limited to:
  - Reroofing
  - Repair parapet
  - Façade repair
  - Like for like replacement of equipment that is **NOT** an upgrade of equipment

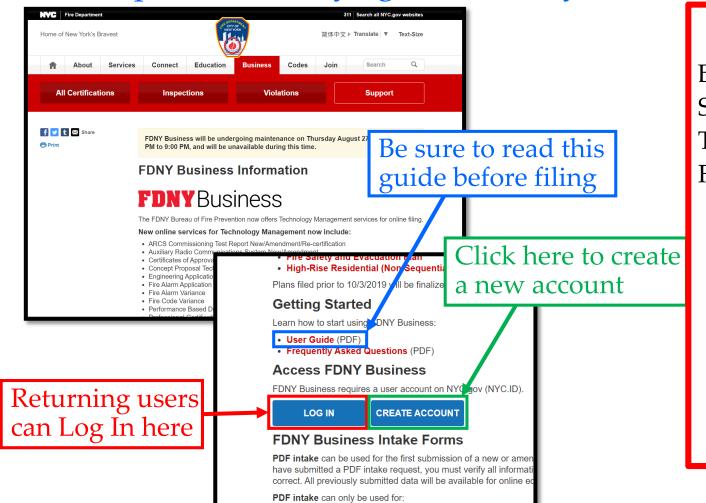


## HOW TO FILE A ROOFTOP VARIANCE



### Apply through the FDNY Business Portal

https://www1.nyc.gov/site/fdny/business/support/fdny-business.page



### **Note:**

Be sure to follow this Path:

Select "Design and Installation"

Then "Technology Management Application"

Finally select "Rooftop Variance"

# DO NOT SELECT FIRE CODE VARIANCE.

FIRE CODE VARIANCE IS NOT
USED FOR ROOFTOP
VARIANCES



### HOW TO FILE A ROOFTOP VARIANCE



#### **Application Fees**:

- New Application: \$420
- Resubmission Fees: Not required provided that the application is resubmitted within 6 Months of the Letter of Deficiency's issuance date.

### **Required Docs**:

- TM-5 Application
- 11"x17" plans original seal & signature
- Narrative for scope of work
- Photographs of current conditions on rooftop
- All other relevant docs such as determinations form other city agencies, FDNY summonses, etc.

Note: All docs must be in PDF format



### TM-5 APPLICATION



TM-5, rev 07/15

#### NEW YORK CITY FIRE DEPARTMENT **BUREAU OF FIRE PREVENTION**

9 METROTECH CENTER, BROOKLYN, NY 11201-3857

TM-5: Application for Rooftop Access Variance/Plan Review

- . FDNY TM-5 must be typewritten, submitted with supporting documentation including a narrative (see Item 8 below), signed and sealed 11"X17" plan set for review, and photographs of the existing/proposed conditions on the rooftop.
- · Section 11 must be signed by the owner.
- . Fee for Plan Examination: \$420 made in money order or check, payable to NYC Fire Department.
- . Submit completed application in person at Window #8 on the first floor of FDNY Headquarters, 9 METROTECH

	CENTER, BROOKLYN, NY 11201- Consult the <u>FDNY Technology N</u>		#2/2011 fo	or specific plan pre	eparation ins	tructions		
1	Filing Status (required for all	applications):						
Vari	ance Sought for: Proposed a	and/or Existing Con	ndition(s)					
	-  -	ubmission ( <i>provide pre</i> MS No(s):	eviously as	ssigned FPIMS nun	nber, and att	ach copy	of objection letter):	
2	Premises Information (requ	uired for all applications	):					
House No(s): Street Name:								
Borough: ZIP:			Block:			Lot:		
BIN:			Affected Floors:					
_								
3	Applicant Information (req		s):					
	Name:	First Name:				Middle Initial:		
Busi	ness Name:		В		Busines	Business Tel:		
Busi	ness Address:		City:		State:		ZIP:	
E-M	ail:				License	No:		
Cho	ose One: P.E R.A							
4	Owner Information (require	ed for all applications):						
Last	Last Name: First Name:					Middle Initial:		
Busi	ness Name:			Busines	Business Tel:			
Business Address:			City:		State:		ZIP:	
E-M	ail:			Mobile	Mobile Tel:			
5	Filing Representative (if ap	pplicable):						
Last	Name:	First Name:			Middle	Initial:		
Busi	ness Name:	-			Busines	s Tel:		
Busi	ness Address:	City:		State:		ZIP:		
E-M	ail:				Expeditor R	egistratio	n No:	

Telecommunications	Antennas and/or Equipment	t Penthouse/N	ew Floor(s)	
Company Name:			of Floors(if applicab	nle):
Solar Array and/or Ed		Occupiable R		
Size of Array (No.	. of Panels):	Rooftop	Deck	
HVAC/MEP Equipmen	nt	Rooftop	Restaurant/Bar	
Green Roof/ Blue Roo	of	Other (if nee	ded):	
_				
7 DOB Filing Status	(required for all applications):			
Filed with DOB? NO				
YES	S ► Copy of PW-1, S	Schedule A and Certificate of C	ccupancy attached	?
f yes above): DOB Applic	cation No(s):			
	ation (required for all applica			
ompose a narrative des	cription that addresses item.	s 8a and 8b. Append the sepa	rate narrative to yo	our submission packet.
	specific nature of the modifi Fire Code or Fire Department	cation sought, and describe th t Rule(s).	e difficulty in comp	lying with the
b Explain, in detail, how intended to ensure p		e effect of modifying the code	or rule requiremen	t. Include all measures
c Previously filed FDNY	Variance Application(s) for t	he aforementioned prop erty.	Indicate either FPII	MS No/s) or EPIN/s) and
•	ed/objections/denied):		maicate cities i i i	vio ivo(s) of 11 liv(s), and
status of filing (granted  Application submitted	ed/objections/denied):	ued violation, specifically for R		
status of filing (granted  Application submitted	ed/objections/denied): d in response to an FDNY-issi (if yes, complete below the fi	ued violation, specifically for R		
status of filing (granted  Application submittee  NO YES: (	ed/objections/denied): d in response to an FDNY-issi (if yes, complete below the fi	ued violation, specifically for R elds below) ▼		tructions?
status of filing (grant) d Application submitte NO YES: (	ed/objections/denied): d in response to an FDNY-issi (if yes, complete below the fi  Number	ued violation, specifically for R elds below) ▼ Description	ooftop Access/Obs	tructions?
status of filing (grant d Application submitte	ed/objections/denied): d in response to an FDNY-iss (if yes, complete below the fi  Number  eristics and Fire Protection	ued violation, specifically for R elds below) ▼ Description on Features (required for all a	ooftop Access/Obst	tructions?  Disposition
status of filing (grant) d Application submitte NO YES: ( NOV/VO/Summons  9 Building Characte Occupancy Classificatio	ed/objections/denied): d in response to an FDNY-iss (if yes, complete below the fi  Number  eristics and Fire Protection:  Building Height (f	ued violation, specifically for R elds below) ▼ Description on Features (required for all a t):	ooftop Access/Obst	Disposition
status of filing (grant) d Application submitte NO YES: ( NOV/VO/Summons  9 Building Characte Occupancy Classificatio Construction Classificatio	ed/objections/denied): d in response to an FDNY-issi (if yes, complete below the fi  Number  Pristics and Fire Protection: Building Height (i  Building Stories (i	ued violation, specifically for R elds below) ▼ Description on Features (required for all a t):[	ooftop Access/Obst	Disposition  klered  prinklered
status of filing (grant) d Application submitte NO YES: ( NOV/VO/Summons  9 Building Characte Occupancy Classificatio	ed/objections/denied): d in response to an FDNY-issi (if yes, complete below the fi  Number  Pristics and Fire Protection: Building Height (i  Building Stories ( Stairs Leading to	ued violation, specifically for R elds below) ▼  Description  On Features (required for all a t):  No):  Roof (No):	pplications):  Partially Sprin  Non-Sprinl	Disposition  klered  prinklered
status of filing (grant) d Application submitte NO YES: ( NOV/VO/Summons  9 Building Characte Occupancy Classificatio Construction Classificatio	ed/objections/denied): d in response to an FDNY-iss (if yes, complete below the fi  Number  Pristics and Fire Protection: Building Height (to be in Building Stories (to Stairs Leading to Fire Escape(s) to	ued violation, specifically for R elds below) ▼  Description  on Features (required for all a t):	pplications):    Partially Sprin   Non-Sprin   Standpipe	Disposition  klered brinklered klered
status of filing (grant) d Application submitte NO YES: ( NOV/VO/Summons  9 Building Characte Occupancy Classificatio Construction Classificatio	ed/objections/denied): d in response to an FDNY-iss (if yes, complete below the fi  Number  Pristics and Fire Protection: Building Height (to be in Building Stories (to Stairs Leading to Fire Escape(s) to	ued violation, specifically for R elds below) ▼  Description  On Features (required for all a t):  No):  Roof (No):	pplications):    Partially Sprin   Non-Sprin   Standpipe	Disposition  klered brinklered klered
status of filing (grant) d Application submitte NO YES: ( NOV/VO/Summons)  9 Building Characte Occupancy Classificatio Construction Classificatio	ed/objections/denied): d in response to an FDNY-iss (if yes, complete below the fi  Number  Pristics and Fire Protection: Building Height (to be in Building Stories (to Stairs Leading to Fire Escape(s) to	ued violation, specifically for R elds below) ▼  Description  on Features (required for all a tt):  No):  Roof (No):  Roof?	pplications):    Partially Sprin   Non-Sprin   Standpipe	Disposition  klered brinklered klered
status of filing (grant) d Application submitte NO YES: ( NOV/VO/Summons)  9 Building Characte Occupancy Classificatio Construction Classificatio Construction Dat	ed/objections/denied): d in response to an FDNY-iss (if yes, complete below the fi  Number  Pristics and Fire Protection: Building Height (to be start a bedding to Fire Escape(s) to Interior/Exterior:  Eation (required for all applications)	ued violation, specifically for R elds below) ▼  Description  on Features (required for all a tt):  No):  Roof (No):  Roof?	pplications):  Partially Sprin  Non-Sprin  Standpipe Fire Alarm	Disposition  klered brinklered klered
status of filing (grant) d Application submitte NO YES: ( NOV/VO/Summons)  9 Building Characte Occupancy Classificatio Construction Classificatio Construction Data  10 Applicant Certific	ed/objections/denied): d in response to an FDNY-iss (if yes, complete below the fi  Number  Seristics and Fire Protection: Building Height (to Stairs Leading to Fire Escape(s) to Interior/Exterior:  Cation (required for all application): I certify that the information	ued violation, specifically for R elds below) ▼  Description  on Features (required for all a tt):  No):  Roof (No):  Roof?	pplications):  Partially Sprin  Non-Sprin  Standpipe Fire Alarm	Disposition  klered brinklered klered
status of filing (grant) d Application submittee NO YES: ( NOV/VO/Summons  9 Building Charactee Occupancy Classificatio Construction Classificatio Construction Date  10 Applicant Certific Inder penalty of perjury, pplicant Name (please p	ed/objections/denied): d in response to an FDNY-iss (if yes, complete below the fi  Number  Seristics and Fire Protection: Building Height (to Stairs Leading to Fire Escape(s) to Interior/Exterior:  Cation (required for all application): I certify that the information	ued violation, specifically for R elds below) ▼  Description  on Features (required for all a tt):  No):  Roof (No):  Roof?	pplications):    Partially Spring   Non-Spring   Standpipe   Fire Alarm	Disposition  klered brinklered klered
status of filing (grant) d Application submittee NO YES: ( NOV/VO/Summons  9 Building Charactee Occupancy Classificatio Construction Classificatio Construction Date  10 Applicant Certific Inder penalty of perjury, pplicant Name (please p	ed/objections/denied): d in response to an FDNY-iss (if yes, complete below the fi  Number  Seristics and Fire Protection: Building Height (to Stairs Leading to Fire Escape(s) to Interior/Exterior:  Cation (required for all application): I certify that the information	ued violation, specifically for R elds below) ▼  Description  on Features (required for all a tt):  No):  Roof (No):  Roof?	pplications):  Partially Sprin  Non-Sprin  Standpipe Fire Alarm	Disposition  klered brinklered klered
status of filing (grant) d Application submitte NO YES: ( NOV/VO/Summons  9 Building Characte Occupancy Classificatio Construction Classificatio Construction Date  10 Applicant Certific Inder penalty of perjury, pplicant Name (please p	ed/objections/denied): d in response to an FDNY-iss (if yes, complete below the fi  Number  Seristics and Fire Protection: Building Height (to Stairs Leading to Fire Escape(s) to Interior/Exterior:  Cation (required for all application): I certify that the information	ued violation, specifically for Relds below) ▼  Description  On Features (required for all all):  No): Roof (No): Roof?	pplications):    Partially Spring   Non-Spring   Standpipe   Fire Alarm	Disposition  klered brinklered klered
status of filing (grant)  Application submittee NOV/VO/Summons  Building Charactee Occupancy Classification Construction Classification Construction Date  Applicant Certific Under penalty of perjury, Applicant Name (please poignature >	ed/objections/denied): d in response to an FDNY-iss (if yes, complete below the fi  Number  Building Height (f  Building Stories (  Stairs Leading to  Fire Escape(s) to   Interior/Exterior:  Cation (required for all applications, it (required for all applications))	ued violation, specifically for Relds below) ▼  Description  On Features (required for all all):  No): Roof (No): Roof?	pplications):    Pully Sprin   Non-Sprin   Standpipe   Fire Alarm	Disposition  klered brinklered klered

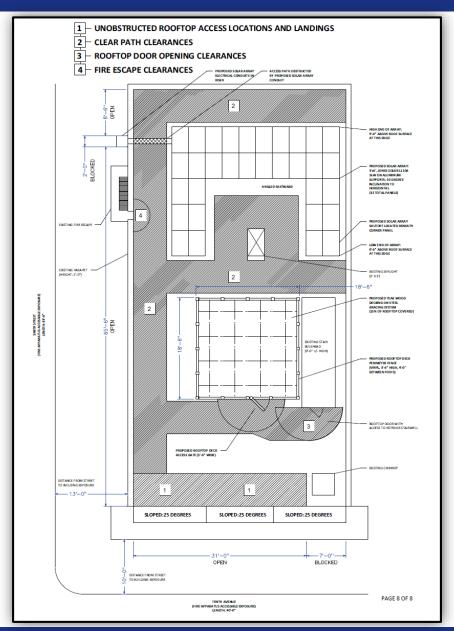


## SAMPLE PLAN - FLAT ROOF



#### Include on 11x17 plans

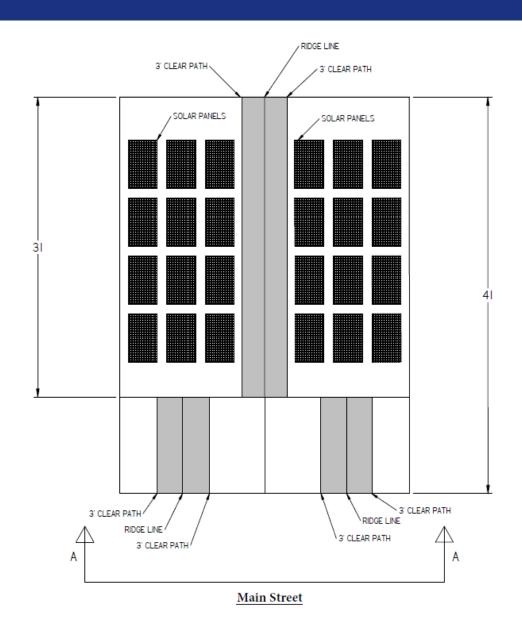
- Entire rooftop, not only area of work proposed
- Label all existing building features
- Label all proposed work as "Proposed"
- Label all apparatus accessible exposures including parking lots
- Demonstrating compliance, showing required clearances
- State areas of non-compliance
- Proposed mitigation for non-compliance
- All submitted plans must have an original signature and PE/RA stamp

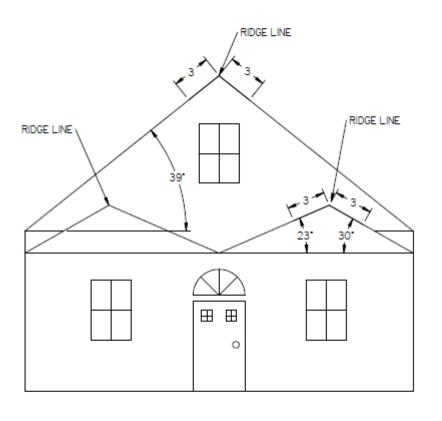




# SAMPLE PLAN – PITCHED ROOF







VIEW A-A



### ADDITIONAL RESOURCES



• <u>Fire Code – Section FC504 and Section FC512</u>: in the NYC Fire Code, specifically regarding rooftop access and clear path.

- New York City Fire Code Guide (Formerly FAQs): posted on the Fire Department's web site in response to many of the industry's questions.
- Office of Technology Management Bulletin #2/2011 (Rev. 4/2016): This is a guidance document for the convenience of the public. It does not substitute for any applicable laws, rules or regulations.



### UNIT CONTACT INFORMATION



- Email us at: <u>FDNY.BusinessSupport@FDNY.nyc.gov</u>
- Chief of Technology Management: Chief Brian Cordasco
- Chief of Technology Management: Chief Paul Brincat
- Assistant Deputy Director of Tech MGMT: Winnie Lei, P.E.
- Rooftop Access Unit Supervisor: John Ingenito
- Plan Examiners: Fares Rezk, Gennadiy Lak and Erik Perez.

### Mailing Address:

Rooftop Access Unit, Tech MGMT, Room 3W-2,

9 MetroTech Center,

Brooklyn, NY 11201-3857