

BUILDING SCIENCE SERVICES


Provider No. - TBD

Course Title No. - NYS Property Maintenance Code
A Forensic Architect perspective

Course Title No. -

Speaker - Kenneth W. Pearl, R.A.


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Personal Background


- ❖ Forensic Architect
 - Industrial Engineer by education
 - Licensed Architect by profession
 - Working in Design & Construction since 1986
 - Practicing Architect, CM & GC since 1995
 - Developing Properties since 2003
 - Repair, Remodeling, Corrections, Disputes



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History of PMCs

- ❖ Building Codes have a long history
 - Back to Hammurabi's Code (1700-1800 B.C.)
 - Liability of Builder for house collapse
 - Liability for property damaged while in care of others
- ❖ Historically rooted in health, safety & welfare
- ❖ 2 key drivers of modern PMC
 - Complaints
 - Disputes
- ❖ PMCs still found widely in both State & Local code level





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Learning Objectives

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


1. To understand the history of the PMC
2. To understand the purpose of the PMC
3. To understand the application of the PMC
4. To reinforce the importance and value of the PMC

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Purpose of PMCs



- ❖ 2010 NYS BC stated purpose
 - Sec. 101.3 – This Code is intended to provide minimum requirements to safeguard public safety, health, and general welfare....***from fire and other hazards attributed to the built environment.***
- ❖ 2010 NYS PMC stated purpose
 - Sec. 101.3 – This Code is intended to provide minimum requirements to safeguard public safety, health and general welfare ***insofar as they are affected by the occupancy and maintenance of structures and premises.***



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Purpose of PMCs



- ❖ To set minimum standards for –
 - What's too messy or cluttered
 - What's too deteriorated
 - What's too overgrown
 - What's too misused

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Application of PMCs



- ❖ BC guides us when we're doing something...
 - Building
 - Remodeling
 - Repairs
 - Alterations
 - Change of Occupancy
 - Design & Engineering
 - Inspection Procedures
 - Etc.

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Purpose of PMCs



- ❖ To set minimum standards for –
 - Settling complaints
 - Keeping safety an active requirement
 - Improving durability in buildings
 - Maintaining value in buildings

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Application of PMCs



- ❖ PMC guides us when we're **not** doing something...
 - Rust, Rot, Corrosion, Deterioration
 - Stress, Strain, Fatigue
 - Clutter, Overgrowth
 - Damage, Misuse
 - Etc.

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Application of PMCs


- ❖ Building Code vs. Property Maintenance Code
 - BC guides us when we're doing something...
 - PMC guides us when we're **not** doing something...

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Application of PMCs


- ❖ Can the BC apply to a pre-existing legal building?



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Application of PMCs


- ❖ Can the BC apply to a pre-existing legal building?
 - No, not typically
 - But BC 101.4.5 directly refers you to the PMC
 - And BC 101.4.8 indirectly refers you to the PMC thru the Existing BC



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Application of PMCs


- ❖ Can the BC make provisions apply to a pre-existing legal building?
 - Part 102.8.1 EBC – Legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as per the PMC and the FC
 - Example – An existing building constructed in 1986 was not required in 2010 to show conformance with more restrictive requirements of the 2010 NYS Energy Conservation Code



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Application of PMCs



- ❖ Can the BC apply to a pre-existing legal building?
 - No, not typically
- ❖ Can the PMC apply to a pre-existing legal building?



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Application of PMCs


- ❖ Can the PMC make newer code provisions apply to a pre-existing legal building?
 - Yes
 - Part 306.1 in both 2007 & 2010 PMC – At least 1 handrail is required on stairs 4 or more risers, and guardrail on surfaces 30 inches or more above adjacent surfaces. ***(Provision did not exist 1984 or 2002 versions)***

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Application of PMCs



- ❖ Can the BC apply to a pre-existing legal building?
 - No, not typically
- ❖ Can the PMC apply to pre-existing legal building?
 - Yes
 - Section 101.2 Scope – All existing residential and non-residential structures and all existing premises...



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Importance of PMC

- ❖ Case Study – Siding Failure
 - PMC 304.6 Exterior Walls - ...free from holes, breaks & loose or rotting materials; and maintained weather proof...






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Importance of PMC

❖ Case Study – Synthetic Stone Siding Failure

- PMC 304.6 Exterior Walls - ...free from holes, breaks & loose or rotting materials; and maintained weather proof...
- PMC 103.5 – Workmanship...
- RBC 703.7.4 – Masonry Veneer Anchorage...






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Importance of PMC

❖ Case Study – EIFS Failure

- PMC 304.6 Exterior Walls – ...free from holes, breaks & loose or rotting materials; and maintained weather proof...
- PMC 103.5 Workmanship – ...per mfc. instructions






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Importance of PMC

❖ Case Study – Rusting Handrail

- PMC 304.2 Protective Treatment – ...All metal surfaces subject to rust or corrosion shall be coated to inhibit such rust and corrosion...





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Importance of PMC

❖ Case Study – Real Estate Inspections & Finance

- Building Owners are very aware of liabilities and maintenance problems in buildings
- Banks can be even more aware
- How effective is your community outreach?





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Importance of PMC

❖ Case Study – Deck Collapse

- PMC 107.1.1 Unsafe Structures –
- PMC 304.2 Protective Treatment –
- PMC 304.4 Structural Members –
- PMC 304.10 Stairways, decks, porches & balconies –






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Importance of PMC

❖ Case Study – Real Estate Inspections & Finance


- Property Condition Reports
- Pre-purchase Property Inspection Reports
- Home Inspections
- Etc.

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Importance of PMC



- ❖ Case Study – Real Estate Inspections & Finance
 - PMC 101.2 Scope –
 - ✓ ...applies to all existing residential and non-residential structures
 - ✓ ...and to all existing premises
 - ✓ ...and constitute minimum reqs. & standards
 - ✓ ...and responsibilities of Owners, Operators, & Occupants



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Importance of PMC



- ❖ Case Study – Building Design (2002 – 2007)
 - 2002 PMC 702.1 Unobstructed exit paths – See FC
 - 2002 FC1011.3 Keeping exits free of snow & ice

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Importance of PMC



- ❖ Case Study – Building Design
 - Do you use the PMC in plan reviews for new construction and remodel projects?
 - Lets look at the last 4 versions of the Code going back 30 years

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Importance of PMC



- ❖ Case Study – Building Design (2007 – 2010)
 - 2007 PMC 702.1 Unobstructed exit paths – See FC
 - 2007 Fire Code1027.3 Keeping exits free of snow & ice

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Importance of PMC



- ❖ Case Study – Building Design (1984 - 2002)
 - 1984 BC 765.5(7) Snow & Ice Design at Exits
 - 1984 BC 1162.5(b) Keeping exits free of snow & ice

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Importance of PMC

- ❖ Case Study – Building Design (2007 – 2010)
 - 2010 PMC 702.1 Unobstructed exit paths – See FC
 - 2010 Fire Code1028.3 Keeping exits free of snow & ice





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Importance of PMC

❖ Case Study – Building Design (Key Points)


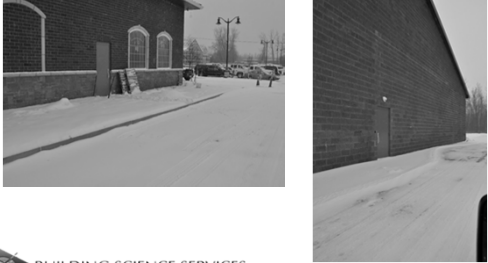
- Key Points - Snow & Ice at Egress points
 - ✓ Pre-2002 covered direct in Building Code
 - ✓ Post-2002 covered indirectly in Building Code thru PMC and FC
 - ✓ Exception for dedicated snow removal staff?
 - No – none provided in codes
 - Yes – via formal variance approvals



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Importance of PMC



❖ Case Study – Building Design (Key Points)



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Importance of PMC



❖ Case Study – Building Design (Key Points)



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Importance of PMC



❖ Case Study – Building Design (Key Points)



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Importance of PMC



❖ Case Study – Building Design (Key Points)



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Importance of PMC



❖ Case Study – Building Design (Key Points)



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Importance of PMC



- ❖ Case Study – Building Design (Key Points)

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Final Review



- ❖ History of the PMC
- ❖ Purpose of the PMC

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Importance of PMC



- ❖ Case Study – Building Design (Key Points)

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Final Review

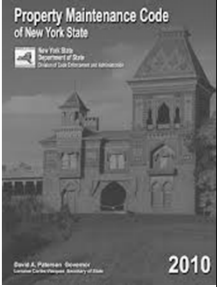

- ❖ History of the PMC
- ❖ Purpose of the PMC
- ❖ Application of the PMC

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Final Review



- ❖ History of the PMC

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Final Review


- ❖ History of the PMC
- ❖ Purpose of the PMC
- ❖ Application of the PMC
- ❖ Importance of the PMC





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Questions or Comments






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Thank You

This concludes the
Continuing Education Systems Course

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