



Understanding Commercial Property Underwriting: 'COPE' in ALL its Glory!

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Construction C	Occupancy O
Protection P	Exposure E

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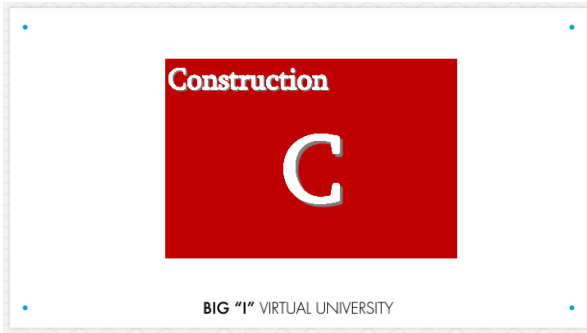
COPE Underwriting

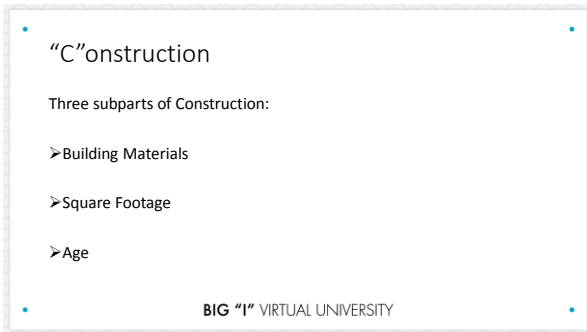
The modern property policy can be traced back to just after the Great Fire of London in 1666

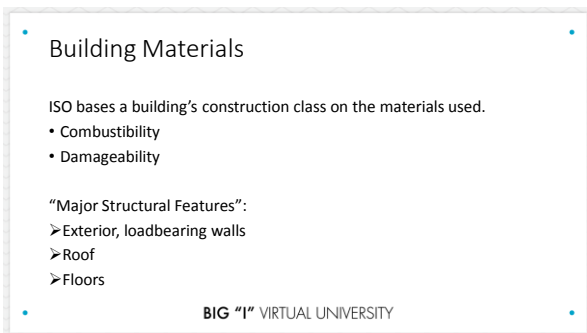
Property underwriters still use the same information to evaluate a risk:

- Construction (C)
- Occupancy (O)
- Protection (P)
- Exposure (E)

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• "Primary" Structural Feature - Walls •

Exterior, loadbearing wall types:

- Masonry
- Fire resistive/modified fire resistive
- Non-masonry/non-fire resistive
- Combustible (i.e. wood)

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• "Secondary" Structural Feature – Roof/Floors •

Roof and floor types:

- Concrete
- Fire resistive/modified fire resistive
- Noncombustible/slow burning
- Wood or materials not included above

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• Developing the Construction Class •

The lower the number, the **worse** the classification:

- "1" – Frame
- "2" – Joisted-Masonry
- "3" – Noncombustible
- "4" – Masonry Noncombustible
- "5" – Modified Fire Resistive
- "6" – Fire Resistive

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Four Rules of Classification

1. If the exterior, loadbearing walls are “combustible” (wood or a combustible assemblage), the entire building is rated as construction class “1” regardless of the roof material.
2. If rule “1” does not apply and if the exterior, loadbearing wall is noncombustible or “slow burning,” the structure’s construction class is based on the roof and floor construction materials – but in no case can the construction class be better than the classification assigned to the walls.

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Four Rules of Classification - Continued

3. If the loadbearing walls are masonry, fire resistive, or modified fire resistive, the construction becomes a function of the floor/roof materials.
4. “Major structural features” are often an assembly of several parts. If the walls are anything other than masonry, modified, or fire resistive material, the entire assemblage is classed using the most combustible or susceptible member of the assemblage.

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Assigning the Correct Construction Class

Wall Material	Floor/Roof Material	Construction Class	C-10
Wood/Combustible	Wood/Combustible	Frame	1
Non-Comb. Masonry	Wood/Combustible	Frame	1
Wood/Combustible	Non-Comb. Non-Burning	Frame	1
Wood/Combustible	Concrete, Modified Fire Resistive	Frame	1
Masonry	Wood/Combustible	Non-Comb. Masonry	2
Modified Fire Resistive	Wood/Combustible	Non-Comb. Masonry	2
Non-Comb. Masonry	Non-Comb. Non-Burning	Non-Combustible	3
Non-Comb. Masonry	Concrete, Modified Fire Resistive	Non-Combustible	3
Masonry	on Fire Resistive	Masonry Non-Comb.	4
Modified Fire Resistive	Non-Comb. Non-Burning	Masonry Non-Comb.	4
Fire Resistive	Non-Comb. Non-Burning	Masonry Non-Comb.	4
Masonry	Concrete, Modified Fire Resistive	Modified Fire Resistive	5
Modified Fire Resistive	on Fire Resistive	Modified Fire Resistive	5
Fire Resistive	Concrete, Modified Fire Resistive	Modified Fire Resistive	5
Fire Resistive	Concrete or Fire Resistive	Fire Resistive	6
Fire Resistive	Concrete or Fire Resistive	Fire Resistive	6

Notes:
 1. For walls and floors made of concrete, masonry, or other non-combustible materials, the construction class is determined by the floor/roof material.
 2. For walls and floors made of wood, the construction class is determined by the floor/roof material.
 3. For walls and floors made of masonry, fire resistive, or modified fire resistive, the construction class is determined by the floor/roof material.
 4. For walls and floors made of masonry, fire resistive, or modified fire resistive, the construction class is determined by the floor/roof material.
 5. For walls and floors made of masonry, fire resistive, or modified fire resistive, the construction class is determined by the floor/roof material.
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Mixed Construction: What Happens Now?

- The walls don't match!
- The roof and floors use different materials!

The "major structural feature" is assigned the LOWER classification...

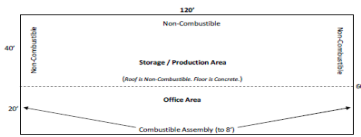
Unless...

66 2/3% of the feature is of the superior class

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Mixed Walls (Combustible Assembly)

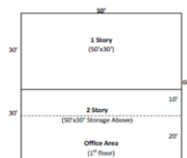
Total Exterior Wall Area (500' perimeter x 20 feet tall)	3,000 square feet
Combustible Assembly Wall Area (1500' exterior perimeter x 8 feet high)	1,200 square feet (40.0%)
Non-Combustible Wall Area (1500' exterior perimeter x 2 feet high) + (2000' exterior perimeter x 10 feet high)	2,320 square feet (66.4%)



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Floor and Roof

Total Floor and Roof Area (50' x 60' x 2) + (50' x 30')	4,500 square feet
Combustible Floor Area (50' x 30')	1,500 square feet (33.33%)
Non-Combustible Roof Area (100' x 60')	3,000 square feet (66.67%)



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“Ancillary” Construction Features

- Don’t change the construction class.
- Change the characteristics.
 - A large amount of combustible interior walls (including assemblies)
 - Combustible flooring (bowling alleys)
 - Combustible exterior attachments

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Square Footage Matters

Directly impacts the difference between:

- Maximum Possible Loss (MPL)
- Probable Maximum Loss (PML)

Requires a review of the possibility of a total or constructive total loss

Affects the importance of the “Protection” (“P”) features in place

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Age is More Than a State of Mind

- Have the systems been maintained and updated as necessary?
- When were the last updates?
- What was the extent of those updates?
- Who did the updates?

Ordinance or Law (Building Code) issues!

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"O"ccupancy

Occupancy has two parts:

- What the insured does
- How the insured manages the "hazards" associated with what they do (known as the "Hazards of Occupancy")

What is a "Hazard":

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What They DO!

Two primary occupancy classifications:

Each class of insured presents its own "basic" risk of property loss.

The greater the basic risk of loss, the more closely the underwriter analyzes the operations/occupancy.

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HOW They DO What They DO!

Similar insureds may be dissimilar in their operations.

Each insured presents its own **"hazards of occupancy."**

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"Hazards of Occupancy"



All three share the same construction classification, protection class, square footage, general methods of doing business, and experience. The only difference is how flammable/combustible liquids are stored.

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Hazards of Occupancy - Again



Both share the same construction classification, protection class, square footage, general methods of doing business, and experience. The only difference is the maintenance of the hood and duct system.

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Other Hazards to Consider

- Housekeeping
- The amount of combustible materials within the building
- The condition of major systems (heating and wiring)
- Dust-collection systems for woodworking and like operations
- Use of spark-reduction/arresting equipment where necessary
- The amount and storage of any other potentially hazardous materials
- Cooking equipment protection
- Portable heating systems
- Smoking control in and around the building

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"P"rotection

Protection features LESSEN the amount of property damage!

Classed as:

- Public or Private
- Active or Passive

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Public Fire Protection

- Fire departments are the only protection feature classified as "public."
- They are funded by local governments to protect a somewhat large area.
- Each fire department is inspected and assigned a grade – its public protection class (PPC).

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Public Protection Class (PPC)

- Most fire departments are inspected and graded by ISO
- Each department is assigned a number grade ranging between 1 and 10 (and now 10W).
- The lower the number, the more effective ISO (or other jurisdictional authority) considers the department.
- Public protection grades are based on factors such as: 1) department response times, 2) water supply, 3) personnel training, 4) equipment and communications, and 5) personnel (paid versus volunteer).



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Public Protection Breakdown



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Split Classifications

- When a fire department is assigned two PPCs
- A function of the structures distance from a creditable water supply:
 - Hydrant 
 - Draw point 
- Historically: 6/9 or 5/8B
- Changed in 2013:
 - X or Y

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Private Protection Features

- Sprinkler Systems (Active) **"Active"**: Human presence is not required for activation. However, human involvement is ultimately necessary.
- Alarm Systems (Active)
- Fire Extinguishers (Passive) **"Passive"**: Human presence is required or it is "just there." Passive features take no action on their own.
- Fire Doors/Fire Walls (Passive)

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Sprinkler Systems – Good to Have If...

- Can the system meet the demands of the current operation?
- What type of system?
- What is the system's condition?
- Is the water supply adequate?
- How much unprotected areas?
- Adequate clearance below the heads?
- Any high-rack storage?
- Has the system been properly tested?

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Alarm Systems – Only as Good as the Support

- Type of system?
- Who receives the alarm?
- What type of external communication is used?
- What protection exists if the power is off?
- Are there any unprotected areas?
- Are there any special features?
- Is the system installed properly?

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Fire Extinguishers – Sitting There Since 1818

- Are there an appropriate number for the building?
- Are they properly located and at eye level?
- Are they in the path of natural exit?
- Are they the correct size?
- Are the fire extinguishers the correct type:
 - Class A – Paper, wood, etc. (anything that produces "A"sh)
 - Class B – Flammable or combustible liquids (anything that "B"oils)
 - Class C – Electrical fires (anything that has a "C"harge)
 - Class D – Combustible metals such as shaved magnesium
 - Class K – Cooking oils and fats ("K"itchen)
- Are the extinguishers maintained properly?

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Fire Walls and Fire Doors

- Remember, the size of a building directly affects the difference between its MPL and PML.
- To lower the PML, divide the building into "fire-containing compartments"
- Compare the benefits of "Compartmentalization" on the PML:
 - Location 1: A 15,000 square foot, one story building open from end to end; or
 - Location 2: A 15,000 square foot, one story building divided into three equal 5,000 square foot sections by fire walls and fire doors.

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Fire Walls and Fire Doors

Fire WALLS must meet certain minimum standards:

- Continuous masonry wall
- At least 6" to 8" thick (based on the masonry material used)
- Must come into direct contact with fire resistive, masonry, or noncombustible roof or walls
- Must pierce "slow burning" or combustibles (including assemblies) roof or walls
- HVAC ducts must be protected by at least ONE 1½ hour damper
- Any openings must be protected by proper "fire doors"

What is a "Proper Fire Door"

- Self-closing
- Listed for 3 hour protection (Class "A" by UL) or have a sprinkler curtain
- Cannot be blocked open

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"E" xposures

What external hazards directly or indirectly alter or affect the underwriting characteristics of the building?

- Located near a high-hazard operation;
- A geographically-specific hazard;
- Recent building code changes.

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A BAD Exposure



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Use COPE Knowledge to Your Advantage

- Allows better planning when gathering the property information.
- Knowing what to provide and why to provide specific information makes the underwriting process smoother and, hopefully, quicker.
- You can better assist clients when they are planning upgrades to current structures or constructing new buildings.

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You Will Receive:

- A copy of the "Assigning the Proper Construction Class" sheet


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March 2017 LIVE Webinar

Is the Absolute Pollution Exclusion Really Absolute?
Hint: NO!

- Dispelling the myth of the "APE"
- Learn seven, maybe eight, explicit or implicit exceptions within the pollution wording.

MARCH 15, 2017
1:00 p.m. to 2:30 p.m. ET
CE will not be offered for this webinar.



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