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**Important Facts Regarding the Department of Health & Family Services (DHFS), Bureau of Quality Assurance (BQA), Health Services Section (HSS) Plan Review Process  
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- **Precedence:** The most restrictive code governs the review process; i.e., Life Safety Code is more restrictive over the WI Commercial Building code.
- **An application for plan review, with required forms and fees, must be complete before the application and drawings are given to a BQA Health Services Section (HSS) Engineer for review. Failure to submit a complete application will delay the timing of the review.**
- **HFS 124.30(3) establishes a timeline of 45 working days (9 weeks) for BQA HSS Engineers to complete a formal review. This timeline does not start until a complete application is received.**
- **BQA is delegated the authority by the Department of Commerce, to review Health Care Facility construction plans for compliance with the Wisconsin Commercial Building code.**
- **The BQA plan review process does not parallel the review process of the Department of Commerce.**

**Common Errors in Submitting Application for Plan Review:**

<b>Error</b>	<b>Requirement</b>
Application is incomplete: <ul style="list-style-type: none"> <li>• Required fields on application blank</li> <li>• application fails to include correct fees</li> <li>• application mailed/hand-delivered to incorrect BQA office</li> <li>• application fails to include the Permission to Start form</li> <li>• Permission to Start fees not included in the application</li> <li>• Application missing stamped signature of the architect of record</li> <li>• Application missing the signature of the owner or owner's representative</li> </ul>	<a href="http://dhfs.wisconsin.gov/forms/DDES/DDE2333.pdf">http://dhfs.wisconsin.gov/forms/DDES/DDE2333.pdf</a>
Four sets of specifications are not required; one complete set and 3 table of content sheets could be submitted.	<a href="http://dhfs.wisconsin.gov/forms/DDES/DDE2333.pdf">http://dhfs.wisconsin.gov/forms/DDES/DDE2333.pdf</a>

Content found in the Plan Review Submittal Manual of the Dept. of Commerce not submitted.	COMM 61.31(2)(e)
Structural content in the Plan Review Submittal Manual not submitted with the footings and foundation submittals.	COMM 61.31(2)(e)
Plans not "bound" yet loosely stapled	COMM 61.31(2)(c)
Revised submissions do not clearly identify what was revised	Typically a "bubble or cloud" is circled around the change at each respective change.
Secondary roof drainage calculation not submitted	COMM 61.31(2)(e)
Suite boundaries and smoke compartments not shown clearly in the life safety code plan submittals	NFPA 101 Section 18.2.5.4
Suite definition not delineated on plans	NFPA 101 Section 18.2.5.4
Duct smoke detector to actuate smoke dampers at duct penetrations not provided.	WCBC Section 715.3.2.1
HVAC, fire protection and fire alarm plans for remodeling projects not submitted timely.	COMM 61.30.3
Chart on ventilation requirements do not show outside air CFM provided at minimum VAV position.	COMM 61.31(2)(e)
Humidification devices not shown on HVAC plans of ambulatory surgery centers; capability to control temperature and humidity of anesthetizing locations required.	NFPA 99 Section 5-4.1
Designers fail to get input on their design concepts from clinical staff	Designers may not be familiar with clinical standards of practice and how space usage could negatively affect clinicians ability to provide quality patient care

**Recommendations to Improve Drawing Submittals:**

- Provide a summary of HVAC equipment serving the proposed alteration areas; reflecting the sequence of operation
- Provide a separate seismic calculation analysis and sketch showing shear load at ground level, along with an analysis of the shear load due to wind.

**Common Code Violations Found During Plan Review:**

<b>Violation</b>	<b>Code Reference</b>
Smoke evacuation of operating rooms and anesthesia gases not compliant	NFPA 99 Chapter 5
Incomplete smoke barrier wall system	NFPA 101 Section 18.3.7
Hazardous areas not constructed to the proper fire rating	NFPA 101 Section 18.3.2.1 Table 18.3.2.1 and 8.4.1
Doors protecting stairwells are not 60-minute rated in 1-hour enclosures	NFPA 101 Section 8.2.3.2.3.1(2)
Door hardware not coordinated with door rating requirements	NFPA 80
Dead end corridors greater than 20 feet	NFPA 101 Section 18.2.5.10 WCBC 1004.3.2.3
Sliding doors in a corridor system	NFPA 101 Section 18.3.6.3.1, 18.3.6.3.2, Section 7.2.1.4.1

Suite excess access pathways exceed 50 ft when traversing two intervening rooms	NFPA 101 Section 18.2.5.7.
Suites with internal travel distance greater than 50 and 100 feet respectively	NFPA 101 Section 18.2.5.8
Suite travel distances	NFPA 101 Section 18.2.5
Egress from a suite into another suite to reach the corridor system	NFPA 101 Section 18.2.5.9
Suite walls/doors not latched appropriately	NFPA 101 Section 18.3.6.3.1
Fire dampers not shown on HVAC documents	NFPA 101 and NFPA 90A Section 3-4.1
Combination fire/smoke dampers not shown on vertical shafts	WCBC Section 715.5.3.1 NFPA 90A Section 3-4.3
Dampers missing at duct penetrations	WCBC Section 715.3.2.1
Access to duct dampers through partition walls	WCBC Section 715.4
Vertical shafts (more than 2 stories) not designated as an Atrium	NFPA 101 Section 18.3.1.1 and 8.2.5
Fire proofing not shown on structural members	NFPA 101 Section 18.1.6.2 and NFPA 220
Hazardous area separations not properly rated <ul style="list-style-type: none"> <li>• lack proper UL design number</li> <li>• not coordinated with door schedule; door hardware</li> </ul>	NFPA 101 Section 18.3.2.1  need to match life safety drawing
Exit stair openings limited to those necessary for access to the enclosure from normally occupied spaces; corridors, and for egress	NFPA 101 Section 7.1.3.2.1(d)
Horizontal Exits/Smoke Barriers not continuous to ground; shall be continuous from floor to deck	NFPA 101 Section 7.2.4 / 8.3
Exit discharges non-compliant	NFPA 101 Section 7.7
Re-use of existing sprinkler heads non-compliant With necessary sensitivity	NFPA 13
Patients staged in corridors	AIA guideline 7.10B5 NFPA 101 Section 18.3.6.3
25 Feet between intake and exhaust ventilation	COMM 64
286°F sprinklers used in mechanical room (air-handling equipment); is a light hazard, not an ordinary hazard occupancy as defined in NFPA 13 2-1.1 and 2-1.2.1	NFPA 13 Section 5-3.1.1.4.1 (Note Exceptions 1 and 3)
Sprinkler protection not provided in communication rooms	NFPA 101 Sections 20.1.6.3, 18.3.5.1

**Design concepts to avoid:**

Concept	Reason for Concern
Atriums	<ul style="list-style-type: none"> <li>• Allowed in health care occupancies; but do not exempt occupancy separations.</li> <li>• Do not exempt the exit corridor separation requirements pursuant to NFPA 101 Section 18.3.6.1.</li> <li>• Requires corridor walls that form a barrier to limit transfer of smoke pursuant to NFPA 101 Section 18.3.6.2.1</li> <li>• Requires smoke control pursuant to NFPA 92A, 92B and 101 Section 18.2.4.6(e).</li> </ul>

**Common Code Violations Found During Construction Inspections:**

<b>Violation</b>	<b>Code Reference</b>
Fire proofing not patched on structural frame	NFPA 101 Section 18.1.6.1 and NFPA 220
Fire safing missing on penetrations for fire-rated partitions	NFPA 101 Section 18.3.2.1
Listing label missing on fire rated doors	NFPA 80
Incorrect door listing label on a fire rated door	NFPA 80
Rated door without an automatic closing device	NFPA 101 Section 18.3.6.3.4
Sprinkler head missing an escutcheon	NFPA 13
Sprinkler head obstructed by millwork	NFPA 12
Gypsum drywall not taped and mudded the full heights of the wall when it is a fire barrier	NFPA 101 Section 18.3.6.3.4 and U.L. Standards for rated assemblies
Screw heads not mudded on a fire barrier	NFPA 101 Section 18.3.6.3.4 and U.L. Standards for rated assemblies
Combination fire/smoke damper not installed at a vertical shaft	NFPA 90A WCBC 715.5.3.1
No access panel for the fire damper	NFPA 90A and WCBC 715.4
Lack of proper documentation at time of inspection to occupy; i.e., other inspectors such as plumbing, boilers, elevator, local fire department, electrical	Informed of this requirement on the DHFS Conditional Approval letter, yet not provided or lacking at the time of inspection.
Substantial compliance statement not completed at time of onsite inspection	DHFS requires designer sign off for substantial compliance before approval of occupancy.
Electrical engineer missing exit signage and emergency lighting	WCBC and NFPA 101

WCBC: Wisconsin Commercial Building Code (COMM 61-65)

NFPA: National Fire Protection Association

NFPA 101: Life Safety Code

AIA: American Institute of Architects

UL: Underwriters Laboratory