

Highlighting Guide for Commercial HVAC License

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Book 1: Modern Refrigeration & Air Conditioning 19th, 20th & 21st eds.

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Book 2: International Fuel Gas Code

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[M]_CHIMNEY, CLOTHES DRYER	12	sect. 202	2-2	sect. 202
[A] CODE OFFICIAL, COMBUSTION AIR	12	sect. 202	2-2	sect. 202
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Book 3: International Mechanical Code

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[A] Permits	3	sect. 106	1-4	sect. 106
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[BF] Fire damper	13	sect. 202	2-5	sect. 202
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Book 6: Pipefitter's Handbook 3rd Edition

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Book 7: Manual J - Residential Load Calcs, 8th Edition

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Book 8: MANUAL N 2008

COMMERCIAL LOAD CALCULATION 5th Edition

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29 CFR 1926 OSHA Construction Industry regulations

Section #	Keyword(s) or Topic in the INDEX
SECTION – 1926	
.16	The prime contractor is responsible for complete project.
.21	Safety training required
.25	Scrap lumber with nails protruding shall be removed from work areas
.50 (2)	Contents of first aid in a weatherproof container
Safety Equipment	
.102(a)(3)	Use of corrective lenses in spectacles
.102(a)(5)	Table E-1 guide for selection of face/eye protection
.104(d)	Safety belt lanyard, min ½" nylon, no greater than 6ft fall
.105I(1)	Safety nets 8ft beyond, 25ft max. under edge of platform
Fire Protection	
.150 TABLE F-1	Types of fire extinguishers
.154(b)(4)	Heaters at least 10ft from tarpaulins & canvas covers
.200 TABLE G-1	Accident prevention tag colors
Material Storage	
.250(b)(1)	Not stored within 6ft of hole in floor or 10ft of ext. wall
.250(b)(4)	bags stacked by stepping back layers and cross-keyed every 10 bags high
.250(b)(6)	Bricks strapped no higher than 7ft. loose bricks 4ft then tapered
.250(b)(7)	Blocks stacked higher than 6ft tapered back ½ block/tier
.250(b)(8)	Lumber piles no higher than 20ft, 16ft when stacked manually
Debris Clean-Up	
.252(a)	Waste material dropped more than 20feet must use chute
Small Tools	
.300(d)(3)	Circular saws must have constant pressure switch
.302(b)(4)	Compressors not to exceed 30 psi for cleaning
.302(e)(1)	Powder activated tools operated by trained employees
.304(d)	Circular saws must have guards above/below base plate
Gases and Welding	
.350(a)(9)	Gas cylinders shall always be secured in an upright position
.350(a)(10)	Oxygen cylinders separated from fuel/gas cylinders by 20ft and from oil and grease
.350(a)(11)	Cylinders stored inside, at least 20 feet from combustible materials

.350(d)(1)	Before connecting regulator, valve shall be opened slightly and closed immediately
.350(f)(3)	Fuel/gas hoses shall be inspected at beginning of each shift
.351(d)(3)	Shut off power when welder stops and you leave the area
.353(b)(3)	Welder working in confined spaces must have lifeline
.403 TABLE K1/K2	Min. 30" in front of electrical equipment working area clearance
Scaffolding	
.451(A)(1)	Must support without failure four times intended load
.451(b)(2)	Each platform or walkway shall be at least 18" wide
.451(b)(3)	Front edge of platform not more than 14" from face of work
.451(b)(3)(i)	Outrigger platforms not more than 3" from face of work
.451(b)(3)(ii)	For plastering, not more than 18" from face of work
.451(b)(4)	Platform must extend min. 6" past the support
.451(b)(5)(i)	Platform less than 10 feet shall not extend more than 12" past the support
.451(b)(5)(ii)	Platform more than 10' shall not extend more than 18" past the support
.451(b)(7)	Platforms overlapping to form a long platform must overlap at least 12" over a support
.451(b)(10)	Scaffold components shall not be intermixed
.451(l)(2)	Scaffold uprights must be supported on base plates/mud sills
.451(e)(2)(iii)	Scaffolds more than 35' must have rest platforms at least every 35' when using hook-on or attachable ladders
.451(e)(8)	Going from one scaffold to another must not be no more than 14" horizontally and 24" vertically from other surface
.451(g)	On scaffold over 10' above a lower level, must use a personal fall arrest system or guard rails
.451(g)(4)(ii)	Guardrail height 38"-45"
.452(w)(2)	Castors shall be capable of being locked
.501(b)(2)	If constructing a leading edge above 6 feet, must have fall protection
.501(b)(9)(ii)	In overhand bricklaying when reaching more than 10" below the walk platform, must have fall protection or guard rails
.501(b)(14)	Wall openings above 6', lower edge less than 39" need fall protection or guard rails
.502(b)(1)	Guardrail height 42" plus or minus 3"
.502(b)(2)(iii)	Intermediate vertical members of guardrail not more than 19"
.502(b)(9)	Wire rope guardrails must be flagged at least every 6 feet
.502(l)(4)(i)	Safety nets drop test at least 400 lbs.
.502(d)(8)	Horizontal lifelines must have a safety factor of two
.502(d)(17)	Body harness must be attached in center of wearers back
.502(f)(1)(i)	Mechanical equipment not used, warning line 6 feet from roof edge

.502(f)(2)(ii)	Wire rope warning lines located at least 34" or more than 39" above the working surface
.502(i)	Covers
.502(j)(7)(i)	Roof materials not stored within 6 feet of roof edge
.1501(15)(i)	Min. distance between crane and 50kv or less transmission line is 10'
Excavation and Soils	
.650(B)	Kickout – Accidental release/failure of a crossbrace
.651(l)(2)	Means of egress in trenches more than 4' deep, travel no more than 25'
.651(g)(1)(i)	Excavations more than 4 feet deep where hazardous atmosphere may occur, air tested prior to employees entering trench
.651(j)(2)	Materials not placed/stored within 2 feet of edge of excavation
.652(a)(1)(ii)	Competent person to check excavation less than 5 feet for potential cave-in
Appendix A to Subpart P Type "A" (i)	Soil classifications: Type A is cohesive soil (1.5 tons/sf)
Appendix A to Subpart P, (d)(2)	Observe soil when excavated, clumps-cohesive, if not granular
Appendix B to Subpart P, Fig. B-1	Excavation Slope configuration table
Steel Construction	
.754(B)(1)	No more than 8 stories between the erection floor and the upper most permanent floor
.754(b)(2)	No more than 4 stories or 48 feet of unfinished bolting or welding above the uppermost permanent floor
.754(b)(3)	Fully planked deck or net required within 2 stories or 30 feet under any erection work
.757(e)(3)	Weight of bundle of joist bridging not more than 1,000 lbs.
Ladders	
.1053(B)(1)	Side rails of ladder shall extend 3 feet above platform
.1053(b)(5)(i)	Bottom of ladder shall be ¼ working length of ladder from wall
.1053(b)(13)	Top rung of ladder shall not be used as a step
.1053(b)(20)	Must face the ladder when ascending or descending
.1903.16	Citations from OSHA shall be posted within 3 days on jobsite

1910.147	LOCKOUT/TAGOUT. To prevent energizing equipment that is being worked on
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