

TABLE 3410.7  
SUMMARY SHEET — BUILDING CODE

Existing occupancy <u>Business</u>	Proposed occupancy <u>Business</u>
Year building was constructed <u>1960</u>	Number of stories <u>6</u> Height in feet <u>85</u>
Type of construction <u>IB/IV</u>	Area per floor <u>7400</u>
Percentage of open perimeter <u>&lt; 5</u> %	Percentage of height reduction <u>45.5</u> %
Completely suppressed: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Corridor wall rating <u>None</u>
Compartmentation: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Required door closers: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Fire-resistance rating of vertical opening enclosures <u>Exterior stairs / 1hr. @ Elevator shafts</u>	
Type of HVAC system <u>V.A.V. / chilled water</u> , serving number of floors <u>6</u>	
Automatic fire detection: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Type and location <u>Smoke detectors N.I.C.</u>
Fire alarm system: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Type <u>Honeywell FCI72 N.I.C.</u>
Smoke control: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Type _____
Adequate exit routes: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Dead ends: <u>≤ 35'</u> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Maximum exit access travel distance <u>75' actual - 200' allow.</u>	Elevator controls: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Means of egress emergency lighting: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <u>N.I.C.</u>	Mixed occupancies: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

SAFETY PARAMETERS	FIRE SAFETY (FS)	MEANS OF EGRESS (ME)	GENERAL SAFETY (GS)
3410.6.1 Building Height	+5	+5	+5
3410.6.2 Building Area	+24	+34	+34
3410.6.3 Compartmentation	0	0	0
3410.6.4 Tenant and Dwelling Unit Separations	0	0	0
3410.6.5 Corridor Walls	-5	-5	-5
3410.6.6 Vertical Openings	+1.5	+1.5	+1.5
3410.6.7 HVAC Systems	-15	-15	-15
3410.6.8 Automatic Fire Detection	-4	-4	-4
3410.6.9 Fire Alarm System	-10	-10	-10
3410.6.10 Smoke control	****	0	0
3410.6.11 Means of Egress	****	0	0
3410.6.12 Dead ends	****	0	0
3410.6.13 Maximum Exit Access Travel Distance	****	+0.63	+0.63
3410.6.14 Elevator Control	0	0	0
3410.6.15 Means of Egress Emergency Lighting	****	0	0
3410.6.16 Mixed Occupancies	0	****	0
3410.6.17 Automatic Sprinklers	0	0+2=0	0
3410.6.18 Incidental Use	0	0	0
<b>Building score — total value</b>	<b>5</b>	<b>7.13</b>	<b>7.13</b>

\*\*\*No applicable value to be inserted.

TABLE 3410.9  
EVALUATION FORMULAS<sup>a</sup>

FORMULA	T.3410.7	T.3410.8	SCORE	PASS	FAIL
FS-MFS ≥ 0	<u>5</u> (FS)	- <u>24</u> (MFS) =	<u>-19</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ME-MME ≥ 0	<u>7.13</u> (ME)	- <u>34</u> (MME) =	<u>-26.87</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GS-MGS ≥ 0	<u>7.13</u> (GS)	- <u>34</u> (MGS) =	<u>-26.87</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. FS = Fire Safety                      MFS = Mandatory Fire Safety  
 ME = Means of Egress                MME = Mandatory Means of Egress  
 GS = General Safety                    MGS = Mandatory General Safety

• Mixed Occupancy? 3410.6.1b

• bldg height value 3410.6.1.1

$$= \frac{(AH) - (EBH)}{12.5} (cf) = \text{(Unlmtd.)}$$

Or

$$= (AS - EBS)(cf) = (11 - 6)(1) = \boxed{5}$$

• bldg area

$$AA = \frac{(SP + OP + 100)}{100} \times (UL)$$

use values in tbl. 3410.8  
acc. to IBC code option.

6 1/4" slab

• compartmentation Cat a

must have min 6 1/2" conc fir. to achieve req'd chr. rating

• tenant sep. Cat. e

• corrid. walls - cat e.

• Vert openings - VO = PV x CF

$$= 1 \times 1.5 = 1.5$$

• HVAC - cat. e

• Automatic fire detet. - some smoke detectors  
Honeywell - FC172 - not up to code  
according to Fred Fath.

◦ Fire Alarm System: Existing system not up to code. Cat. A

◦ Smoke control: No known systems.  
Cat. A.

→ ◦ Means of egress: Capacity of means of egress complies. Cat. B

◦ Dead end corridors: Cat. B

◦ Travel dist.:  $P_{ts} = 20 \times \frac{200 \text{ (Allowable)} - 75' \text{ (actual)}}{200}$   
 $= \boxed{0.625}$

◦ Elevator Ctrl: Cat. B, less than 25' above entry level

◦ egress lighting: Cat. A = NP

◦ mixed occup: N/A

◦ sprinklers: Cat. C not req'd / not prov.