

INTERIOR FINISHES (Chapter 8)

Acoustic development (803.3.2) _____ Floor finish (805.6, 808.0)
 Flame spread (803.4) _____ Inter or hangings and decorations (807.6)

FIRE PROTECTION SYSTEMS (Chapter 9)

FIRE SUPPRESSION SYSTEMS (Where required)

Assembly (A-1, A-3, A-4) (904.2) _____
 Assembly (A-2) (904.3) _____
 Educational (E) (904.4) _____
 High-rise multi-family _____
 Institutional (I) (904.6) _____
 Mercantile (M), Moderate hazard storage (S), Library and industrial (IF) (904.7) _____
 Residential (R-1) (904.8) _____
 Residential (R-2) (904.8) _____
 Residential care (904.12) _____
 If no less than story (904.11) _____
 Special occupancy areas (902.1.1, 904.12) _____
 Covered mall buildings (407.10) _____
 High-rise buildings (903.2, 903.3) _____
 Museums (404.7, 404.8) _____
 Underground structures (905.3) _____
 Public garages (506.3.1) _____
 Solid stages (411.7) _____
 Stages and raised platforms (411.6) _____
 Special amusement buildings (413.4) _____
 IIPM facilities (410.4) _____
 Hospitals, banks and storage rooms (412.5) _____
 Libraries, schools buildings (407.1) _____
 Exit discharge chutes (903.4) _____
 Drying rooms (408.6) _____
 Warehouse and industrial exhibition rooms (903.6) _____
 Parking vaults (901.4) _____

FIRE SPRINKLER SYSTEMS

NFPA 13 system (907.2) _____
 NFPA 12P system (908.2.2) _____
 NFPA 12B system (908.2.3) _____
 Design (906.3) _____
 Actuation (906.4) _____
 Sprinkler alarms (906.5) _____
 Sprinkler riser (906.7) _____
 *See also: Sprinkler Plan, Firezone Review

LIVABLE AREA SPRINKLER SYSTEMS

Where permitted (907.2) _____
 Design (907.3) _____
 Actuation (907.4) _____
 Alternative connection (907.8) _____
 Remote supply (907.8.1) _____
 Chase connection (907.8.2) _____
 Shared water (907.8.3) _____

OTHER SUPPRESSION SYSTEMS

Water-spray fixed systems (908.0) _____
 Carbon dioxide extinguishing systems (908.0) _____
 Dry-chemical extinguishing systems (910.0) _____
 Foam extinguishing systems (911.0) _____
 Halogenated extinguishing systems (912.0) _____
 Clean agent fire extinguishing systems (913.0) _____
 Wet-chemical range hood extinguishing systems (914.0) _____

SIA MULTIPLE SYSTEMS

_____ Raising height (915.2.1)
 _____ Raising area (915.2.2)
 _____ Walls (915.2.3)
 _____ Stages (915.2.4)
 _____ Approval system (915.3, 915.3.1)
 _____ Piping design (915.4)
 _____ Water supply (915.5)
 _____ Control valves (915.6)
 _____ Class connection (915.7)

FIRE DEPARTMENT CONNECTIONS

_____ Required (916.1)
 _____ Connections (916.2)

WATER HYDRANTS

_____ Fire hydrants (917.1)

FIRE ALARM SYSTEMS

_____ Approval (918.4)
 _____ Assembly (A-1), Educational (E) (918.4.1)
 _____ Business (B) (918.4.2)
 _____ Fire hazard (H) (918.4.3)
 _____ Institutional (I) (918.4.4)
 _____ Residential (R-1) (918.4.5)
 _____ Residential (R-2) (918.4.6)
 _____ Location details (918.5)
 _____ Power supplying (918.5, 918.7)
 _____ Alarm notification appliances (918.8)
 _____ Voice alarm signaling system (918.9)

AUTOMATIC FIRE DETECTION SYSTEMS

_____ Approval (919.3)
 _____ Institutional (I) (919.4.1, 919.4.2, 919.4.3)
 _____ Non-dwelling (N-1) (919.4.4)
 _____ Smoke detector output requirements (919.5)
 _____ Zones (919.6)

SINGLE AND MULTIPLE SMOKE DETECTORS

_____ Residential (R-1) (920.3.1)
 _____ Residential (R-2) (920.3.2)
 _____ Institutional (I) (920.3.3)
 _____ Interconnection (920.4)
 _____ Battery backup (920.5)

FIRE EXTINGUISHERS

_____ Approval (921.1)
 _____ Required (921.2)

SMOKE CONTROL SYSTEMS

_____ Passive system (922.1.1)
 _____ Mechanical system (922.1.2)
 _____ Smoke removal (922.3)
 _____ Activation (922.4)
 _____ Standby power (922.5)

SMOKE AND HEAT VENTS

_____ Size and spacing (923.2)

SUPERVISION

_____ Fire suppression systems (924.1)
 _____ Fire alarm systems (924.2)

CASE 2 - MIXED USE SEPARATED USE GROUPS (13, 15, 17)

Using Table 502.1, identify the allowable height and area of each of the separated use groups within the building. Construct an area chart showing the building volume area which results in a sum of ratios of 1.00 or less and all allowable heights (as modified by Section 502.4) equal to or greater than the actual height of the use groups are permitted.

Story	Use Group	Actual floor area	Adjusted floor area*	Actual height	Allowable height (Table 502)	Ratio
1	A-3	24,414	24,414	40	50	0.8
2	A-3	24,414	24,414	40	50	0.8
3	A-3	24,414	24,414	40	50	0.8
4	A-3	24,414	24,414	40	50	0.8
5	A-3	24,414	24,414	40	50	0.8
6	A-3	24,414	24,414	40	50	0.8
7	A-3	24,414	24,414	40	50	0.8
8	A-3	24,414	24,414	40	50	0.8
9	A-3	24,414	24,414	40	50	0.8
10	A-3	24,414	24,414	40	50	0.8
11	A-3	24,414	24,414	40	50	0.8
12	A-3	24,414	24,414	40	50	0.8
13	A-3	24,414	24,414	40	50	0.8
14	A-3	24,414	24,414	40	50	0.8
15	A-3	24,414	24,414	40	50	0.8
16	A-3	24,414	24,414	40	50	0.8
17	A-3	24,414	24,414	40	50	0.8

*Adjusted floor area = actual floor area/area within barrier

Adjusted floor area = $\frac{24,414}{1.0} + \frac{24,414}{1.0} + \dots = 24,414$

Allowable area (Table 502) = $1.0 \times 24,414 + \dots = 24,414$

Permitted types of construction: Fire Resistant Type of construction assumed for every (502.3) IRC

UNL MIXED AREA ONE STORY BUILDINGS

Use Group Classification (502.1)	Building height (Group foot) (502.1)	Type of construction (502.1)	Automatic sprinkler system (507.1.5.1.2)	Area within (502.2)	Fire area (502.2)
Small buildings (502.1.1)	High-ratio use groups (507.1.2)	Exterior walls (507.2)	Fire-resistance (502.4)		
Mechanics					

SPECIAL USE AND OCCUPANCY (Chapter 4)

COVERED MALL BUILDINGS	HIGH-RISE BUILDINGS
Tenant separations (402.4)	Automatic sprinkler system (402.2)
Egress (402.5)	Automatic sprinkler modifications (402.8)
Mail (402.6)	Automatic fire detection (402.4)
Structural elements (402.7)	Fire alarm signaling systems (402.5)
Roof coverings (402.8)	Fire department communication (402.6)
A-2 occupancy (402.9)	Fire control strategies (402.7)
Automatic sprinkler system (402.10)	Egress (402.8)
Standpipes (402.11)	Stairway systems (402.9)
Departmental egress (402.12)	Exit door doors (402.10)
Area requirements (402.14)	

MEANS OF EGRESS (continued)

General limitations (1006.0)	✓	✓	General limitations (1006.0)
Area movement or egress elements (1006.1)	✓	✓	Area movement or egress elements (1006.1)
Types and location of egress (1006.2)	✓	✓	Types and location of egress (1006.2)
Exit access travel distance (1006.3) and (1006.5)	✓	✓	Exit access travel distance (1006.3) and (1006.5)
Accessible means of egress (1006.4)	NA	→	Accessible means of egress (1006.4)
Emergency escape (1006.4)	NA	→	Emergency escape (1006.4)
Exit access passageways and corridors (1007.0)	NA	→	Exit access passageways and corridors (1007.0)
Aisles and accessways (1007.0)	NA	→	Aisles and accessways (1007.0)
Stairlands (1007.0)	NA	→	Stairlands (1007.0)
Interior stairways (1007.1 - 1007.11)	✓	✓	Interior stairways (1007.1 - 1007.11)
Exterior stairways (1007.1 - 1007.10)	✓	✓	Exterior stairways (1007.1 - 1007.10)
Staircase and balustrades (1007.10)	✓	✓	Staircase and balustrades (1007.10)

ACCESSIBILITY* (Chapter 11)

Required (1103.0)	✓	✓	Required (1103.0)
Administrative rooms (1103.0.1)	✓	✓	Administrative rooms (1103.0.1)
Public facilities (1103.0.2)	✓	✓	Public facilities (1103.0.2)
Accessible entrances (1103.0.3)	✓	✓	Accessible entrances (1103.0.3)
See also Accessibility Plan Review Record			See also Accessibility Plan Review Record

INTERIOR ENVIRONMENT (Chapter 12)

Room dimensions (1204.0)	✓	✓	Room dimensions (1204.0)
Floor spaces (1210.1 - 1210.2)	✓	✓	Floor spaces (1210.1 - 1210.2)
Drainage (1206.2 - 1206.4)	✓	✓	Drainage (1206.2 - 1206.4)
Airborne noise (STC) (1214.2)	✓	✓	Airborne noise (STC) (1214.2)
Structural-borne sound (1214.3)	✓	✓	Structural-borne sound (1214.3)
Ballpools (1215.0)	✓	✓	Ballpools (1215.0)

BUILDING ENVELOPE (Chapters 13, 14, 15)

Exterior wall coverings (Chapter 14)	✓	✓	Exterior wall coverings (Chapter 14)
Wall cladding and veneers (1403.0)	✓	✓	Wall cladding and veneers (1403.0)
Performance requirements (1403.0)	✓	✓	Performance requirements (1403.0)
See Energy Conservator Plan Review Record			See Energy Conservator Plan Review Record

