

**2015 IBC REFERENCES**

**CHAPTER 2 DEFINITIONS**

**FIRE SEPARATION DISTANCE:** THE DISTANCE MEASURED AT RIGHT ANGLES FROM THE BUILDING FACE TO AN IMAGINARY LINE BETWEEN TWO BUILDINGS ON THE LOT.

**CHAPTER 3 USE AND OCCUPANCY CLASSIFICATION**

**303.3 ASSEMBLY GROUP A-2:** INCLUDES ASSEMBLY USES INTENDED FOR FOOD AND/OR DRINK CONSUMPTION INCLUDING BANQUET HALLS AND RESTAURANTS.

**308.6 INSTITUTIONAL GROUP I-4, DAY CARE FACILITIES:** SHALL INCLUDE BUILDING AND STRUCTURES OCCUPIED BY MORE THAN FIVE PERSONS OF ANY AGE WHO RECEIVE CUSTODIAL CARE FOR FEWER THAN 24 HOURS PER DAY.

**CHAPTER 5 GENERAL BUILDING HEIGHTS AND AREAS**

**TABLE 504 ALLOWABLE BUILDING HEIGHT AND AREA:**  
SECTION 504.3 ALLOWABLE BUILDING HEIGHT WITH FIRE SPRINKLER: 60'

**SECTION 504.4 ALLOWABLE STORIES WITH FIRE SPRINKLER:** 2 STORIES

**TABLE 506 ALLOWABLE BUILDING AREA:**  
TYPE OF CONSTRUCTION FOR THIS GROUP A-2 BUILDING SHALL BE TYPE V-B CONSTRUCTION EQUIPPED WITH A SPRINKLER PER 903.3.1.2.

**506.2.4 MIXED-OCCUPANCY, MULTISTORY BUILDINGS**  
 $A_x = [A_1 + (N_2 \cdot I_2)]$  (ALLOWABLE AREA PER STORY)  
 $A_1 = 18,000$  SQFT  
(PER TABLE 506.2; A-3, SM, TYPE V-B; = 18,000 SQFT)  
 $N_2 = 6,000$  SQFT  
 $I_2 = 0.50$

$I_2 = [F/P - 0.25] \cdot (N/30)$   
 $F = 344$  FT  
 $P = 527$  FT  
 $N = 30 \cdot (344/527) = 30$   
 $I_2 = [(344/527) - 0.25] \cdot (30/30) = 0.5$   
 $A_x = 18,000 + (6,000 \cdot 0.5) = 21,000$  SQFT

ALLOWABLE BUILDING AREA = 21,000 SQFT PER FLOOR  
PROPOSED BUILDING AREA = 8100 SQFT FOR 1ST FLOOR  
2900 SQFT FOR 2ND FLOOR

**508 MIXED USE AND OCCUPANCY**

**508.1 GENERAL:** WHERE A BUILDING OR PORTION THEREOF CONTAINS TWO OR MORE OCCUPANCIES OR USES, THE BUILDING OR PORTION THEREOF SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF SECTION 508.2, -3, -4 OR -5 OR A COMBINATION OF THESE SECTIONS.

**508.2 ACCESSORY OCCUPANCIES:** ACCESSORY OCCUPANCIES ARE THOSE OCCUPANCIES THAT ARE ANCILLARY TO THE MAIN OCCUPANCY. AGGREGATE ACCESSORY OCCUPANCY SHALL NOT OCCUPY MORE THAN 10% OF THE FLOOR AREA. NO SEPARATION IS REQUIRED BETWEEN ACCESSORY OCCUPANCIES AND THE MAIN OCCUPANCY. THE ADMINISTRATIVE AREA IS AN ANCILLARY USE AND IS LESS THAN 10% OF THE FIRST FLOOR AREA.

**508.4 SEPARATED OCCUPANCIES:** NOT APPLICABLE: THERE IS ONLY THE GROUP A OCCUPANCY.

**CHAPTER 6 TYPES OF CONSTRUCTION**

**TABLE 601 FIRE-RESISTANCE RATING REQUIREMENTS FOR TYPE V-B STRUCTURAL FRAME:** 0 HOUR  
**BEARING WALLS (ALL):**  
EXTERIOR: 0 HOUR  
INTERIOR: 0 HOUR  
**NONBEARING WALLS:**  
EXTERIOR: 0 HOUR (30' DISTANCE PER TABLE 602)  
INTERIOR: 0 HOUR  
**FLOOR CONSTRUCTION:** 0 HOUR  
**ROOF CONSTRUCTION:** 0 HOUR

**TABLE 602 FIRE-RESISTANCE RATING REQUIREMENTS BASED ON FIRE SEPARATION DISTANCE**  
FOR OCCUPANCIES M, B & U IN A TYPE VB BUILDING LOCATED 10 TO 30 FEET FROM AN IMAGINARY LINE BETWEEN TWO BUILDINGS, THE FIRE-RESISTANCE RATING MUST BE 0. IF LOCATED 5 TO 10 FEET, THE RATINGS MUST BE 1 HOUR.

**602.5 TYPE V, TYPE V CONSTRUCTION IS THAT TYPE OF CONSTRUCTION IN WHICH THE STRUCTURAL ELEMENTS, EXTERIOR WALLS AND INTERIOR WALLS ARE OF ANY MATERIALS PERMITTED BY THIS CODE.**

**CHAPTER 9 FIRE PROTECTION SYSTEMS**  
**903.2.6 GROUP 1 AN AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED THROUGH BUILDINGS WITH A GROUP 1**

**CHAPTER 10 MEANS OF EGRESS**

**1004 OCCUPANT LOAD**  
**1004.1 DESIGN OCCUPANT LOAD IS SHOWN IN TABLE**  
ASSEMBLY (CHAIRS ONLY) (A2) = 7 SF NET  
ASSEMBLY (TABLES AND CHAIRS) (A2) = 15 SF NET  
BUSINESS AREAS (B) = 100 SF GROSS  
CLASSROOM AREA (C) = 20 SF NET  
DAY CARE (I-4) = 35 SF NET  
KITCHEN (A2) = 200 SF GROSS  
LOCKER ROOM = 50 SF GROSS  
STORAGE/MECHANICAL AREAS = 300 SF GROSS

**1004.3 POSTING OF OCCUPANT LOAD:** EVERY ROOM OR SPACE THAT IS AN ASSEMBLY OCCUPANCY SHALL HAVE THE OCCUPANT LOAD OF THE ROOM OR SPACE POSTED IN A CONSPICUOUS PLACE NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY FROM THE ROOM OR SPACE.

**1005 EGRESS WIDTH:**  
MINIMUM REQUIRED EGRESS WIDTH, WITH AN THE AUTOMATIC FIRE SPRINKLER SYSTEM, THE TOTAL WIDTH OF MEANS OF EGRESS SHALL NOT BE LESS THAN THE FOLLOWING:

THE OCCUPANT LOAD SERVED BY THE MEANS OF EGRESS TO BE AS FOLLOWS:

MULTIPLIED BY 0.2 INCHES PER OCCUPANT FOR STAIRWAYS.  
MULTIPLIED BY 0.15 INCHES PER OCCUPANT FOR OTHER EGRESS COMPONENTS.

**1005.5 DISTRIBUTION OF EGRESS CAPACITY:** MULTIPLE MEANS OF EGRESS SHALL BE SIZED SUCH THAT THE LOSS OF ANY ONE MEANS OF EGRESS SHALL NOT REDUCE THE AVAILABLE CAPACITY OF LESS THAN 50% OF THE REQUIRED CAPACITY.

**1005.7 DOOR ENGRAVEMENT, DOORS, WHEN FULLY OPENED SHALL NOT REDUCE THE REQUIRED MEANS OF EGRESS WIDTH BY MORE THAN T; DOORS IN ANY POSITION SHALL NOT REDUCE THE REQUIRED WIDTH TO LESS THAN ONE-HALF.**

**1007 ACCESSIBLE MEANS OF EGRESS.**  
**1007.1 ACCESSIBLE MEANS OF EGRESS SHALL BE PROVIDED WITH NOT LESS THAN ONE ACCESSIBLE MEANS OF EGRESS, WHERE MORE THAN ONE MEANS OF EGRESS IS REQUIRED BY SECTION 1015.1 OR 1021.1 FROM ANY ACCESSIBLE SPACE, EACH ACCESSIBLE PORTION OF THE SPACE SHALL BE SERVED BY NOT LESS THAN TWO ACCESSIBLE MEANS OF EGRESS.**

**1010 DOORS, GATES AND TURNSTILES**  
**1010.1 SIZE OF DOORS:** THE MINIMUM WIDTH OF EACH DOOR OPENING SHALL BE SUFFICIENT FOR THE OCCUPANT LOAD THEREOF AND SHALL PROVIDE A CLEAR WIDTH OF NOT LESS THAN 32".

**1010.1.2 DOOR SWING.**  
EGRESS DOORS SHALL BE OF THE PIVOTED OR SIDE-HINGED SWINGING TYPE.  
DOORS SHALL SWING IN THE DIRECTION OF EGRESS TRAVEL WHERE SERVING AN OCCUPANT LOAD OF 50 OR MORE PERSONS.

**1010.1.3 DOOR OPENING FORCE**  
THE FORCE FOR PUSHING OR PULLING OPEN INTERIOR SWINGING EGRESS DOORS, OTHER THAN FIRE DOORS, SHALL NOT EXCEED 5 POUNDS. THE DOOR SHALL SWING OPEN WHEN SUBJECTED TO A 15 POUND FORCE.

**1010.1.4 DOOR OPERATIONS, EXCEPT AS SPECIFICALLY PERMITTED BY THIS SECTION EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.**  
DOOR HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES ON DOORS REQUIRED TO BE ACCESSIBLE BY CHAPTER 11 SHALL NOT REQUIRE TIGHT GRASPING, TIGHT FINCHING OR TWISTING OF THE WRIST TO OPERATE.

**1010.1.10 PANIC AND FIRE EXIT HARDWARE:** DOORS SERVING ROOMS OR SPACES WITH AN OCCUPANT LOAD OF 50 OR MORE IN GROUP A OCCUPANCY SHALL BE PROVIDED WITH A LATCH OR LOCK THAT IS PANIC HARDWARE OR FIRE EXIT HARDWARE.

**1016 EXIT ACCESS**  
EGRESS THROUGH INTERVENING SPACES.  
2. EGRESS FROM A ROOM OR SPACE SHALL NOT PASS THROUGH ADJOINING OR INTERVENING ROOMS OR AREAS, EXCEPT WHERE SUCH ADJOINING ROOMS OR AREAS ARE ACCESSORY TO ONE OR THE OTHER AND PROVIDE A DISCERNIBLE PATH OF EGRESS TRAVEL TO AN EXIT.  
3. AN EXIT ACCESS SHALL NOT PASS THROUGH A ROOM THAT CAN BE LOCKED TO PREVENT EGRESS.  
5. EGRESS SHALL NOT PASS THROUGH KITCHENS, STORAGE ROOMS, CLOSETS OR SPACES USED FOR SIMILAR PURPOSES.  
THE COMMON PATH OF TRAVEL SHALL NOT EXCEED 75 FEET.

**1017 EXIT ACCESS TRAVEL DISTANCE**  
MAX. TRAVEL DISTANCE w/ SPRINKLER SYSTEM FOR GROUP A OCCUPANCY = 250 FEET

**CHAPTER 11 ACCESSIBILITY**

**1104 ACCESSIBLE ROUTE**  
**1104.4 FOR MULTI-STORY BUILDINGS, AN ACCESSIBLE ROUTE IS NOT REQUIRED TO LEVELS THAT HAVE AN AGGREGATE AREA OF NOT MORE THAN 3,000 SF AND ARE ABOVE ACCESSIBLE LEVELS.**  
PROPOSED 2ND STORY = 2,843 SF.

**SECTION 29 PLUMBING SYSTEMS - WA STATE AMENDMENTS**

**2902.1.1 NUMBER OF FIXTURES**  
TABLE 2902.1 (WA STATE AMENDMENTS)  
GROUP A-2: RESTAURANTS & BANQUET HALLS; SEASONAL OUTDOOR SEATING INCLUDED PER FOOTNOTE D. TOTAL OCCUPANTS: 860  
OCCUPANTS (4430 MALE, 430 FEMALE)

**WATER CLOSETS:**  
MALE = 430/75 = 6  
REQUIRED: 6 WC  
PROPOSED: 3 WC, 1 URINALS  
FEMALE = 430/75 = 6  
REQUIRED: 6 WC  
PROPOSED: 3 WC

**LAVATORIES:**  
MALE = 250/100 = 3  
REQUIRED: 3 LAV  
PROPOSED: 5 LAV  
FEMALE = 250/60 = 3  
REQUIRED: 3 LAV  
PROPOSED: 7 LAV

**2902 REQUIREMENTS, PLUMBING FIXTURES SHALL BE PROVIDED IN THE MINIMUM NUMBER SHOWN IN TABLE 2902.1 (WASHINGTON STATE AMENDMENTS).**  
THE OCCUPANT LOAD SHALL BE DIVIDED EQUALLY BETWEEN THE SEXES. TO DETERMINE THE OCCUPANT LOAD OF EACH SEX, THE TOATAL OCCUPANT LOAD SHALL BE DIVIDED IN HALF.

**2902.5 DRINKING FOUNTAINS.**  
DRINKING FOUNTAINS ARE NOT REQUIRED FOR DINING ESTABLISHMENTS. (PER 2015 IFC 410.4)

**2902.8 WATER.** EACH REQUIRED ... LAVATORY ... SHALL BE EQUIPPED WITH HOT AND COLD RUNNING WATER NECESSARY FOR ITS NORMAL OPERATION.

**DOWNSPOUT CALCULATIONS**

**PROPOSED ROOF AREA:**  
14,286 FT<sup>2</sup>

**MODIFIED ROOF AREA**

PER TABLE 1-1 DESIGN AREAS FOR PITCHED ROOFS  
PITCH FROM LEVEL TO 3 IN/FT WILL HAVE A "B" FACTOR OF 1.00.  
∴ ROOF AREA X PITCH FACTOR = 14,286 SF \* 1.00 = 14,286 FT<sup>2</sup>

**REQUIRED DOWNSPOUT CAPACITY**

PER TABLE 1-2 RAINFALL DATA AND DRAINAGE FACTORS  
WASHINGTON SEATTLE AREA, CALCULATED ROOF AREA DRAINED PER DOWNSPOUT AREA IS 360 FT<sup>2</sup>/IN<sup>2</sup> FROM STORE WHICH SHOULD BE EXCEEDED ONLY ONCE IN 100 YEARS  
∴ MODIFIED ROOF AREA / 360 FT<sup>2</sup>/IN<sup>2</sup> = 14,286 FT<sup>2</sup> / 360 FT<sup>2</sup>/IN<sup>2</sup> = 39.68 IN<sup>2</sup>

**DOWNSPOUTS SELECTION/ REQUIREMENT**

PROPOSE PLAIN 3" ∅ DOWNSPOUTS.  
TABLE 1-3 DIMENSIONS OF STANDARD DOWNSPOUTS, PLAIN ROUND DOWNSPOUT WITH 3" ∅ HAS 1.01 IN<sup>2</sup> CAPACITY.

**# OF DOWNSPOUTS**

REQ'D D.S. CAPACITY / PROPOSED D.S. CAPACITY = 39.68 IN<sup>2</sup> / 1.01 (IN<sup>2</sup>/3" ∅ DOWNSPOUTS) = 5.6 DOWNSPOUTS  
∴ 6 DOWNSPOUTS ARE REQUIRED

**PROVIDE DOWNSPOUTS:**

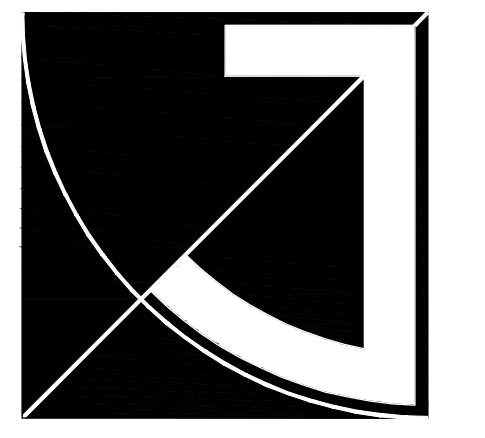
(1) 3" ∅ DOWNSPOUTS  
(2) 3" ∅ DOWNSPOUTS

OCCUPANCY SCHEDULE				
ROOM NAME	USE	AREA	SF/PERSON	OCCUPANTS
DINING	ASMBLY - UC	1,903	15	127
BANQUET SPACE	ASMBLY - C	4,659	7	666
KITCHEN	KITCHEN	1,590	200	8
SNACK BAR	KITCHEN	204	200	1
OFFICE	BUSINESS	87	100	1
STORAGE	STORAGE	661	300	2
MECHANICAL	STORAGE	167	300	1
CLASSROOM	CLASSROOM	714	20	36
CHILDCARE	DAYCARE	598	35	17
BRIDAL	LOCKER ROOM	471	50	9
TOTAL OCCUPANTS				867

THE APPROVED CONSTRUCTION PLANS, DOCUMENTS AND ALL ENGINEERING MUST BE POSTED ON THE JOB AT ALL INSPECTIONS IN A VISIBLE AND READILY ACCESSIBLE LOCATION.

FULL SIZED LEDGIBLE COLOR PLANS ARE REQUIRED TO BE PROVIDED BY THE PERMITEE ON SITE FOR INSPECTION

**FOR REFERENCE ONLY**  
**PRCA20220482**



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**PLAN APPROVAL**  
The plans submitted for review are approved in accordance with local state applicable standards. This approval does not relieve the applicant of the responsibility of compliance with the applicable codes.  
Approved with comments: 05/02/2018  
PROJECT NAME/ADDRESS

**STEP BY STEP**

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**PROJECT NUMBER**

16006

**DRAWING TYPE**

PERMIT DOCUMENTS

**ISSUE DATE**    **ISSUE DESCRIP.**    **NO.**

10.11.17    PERMIT

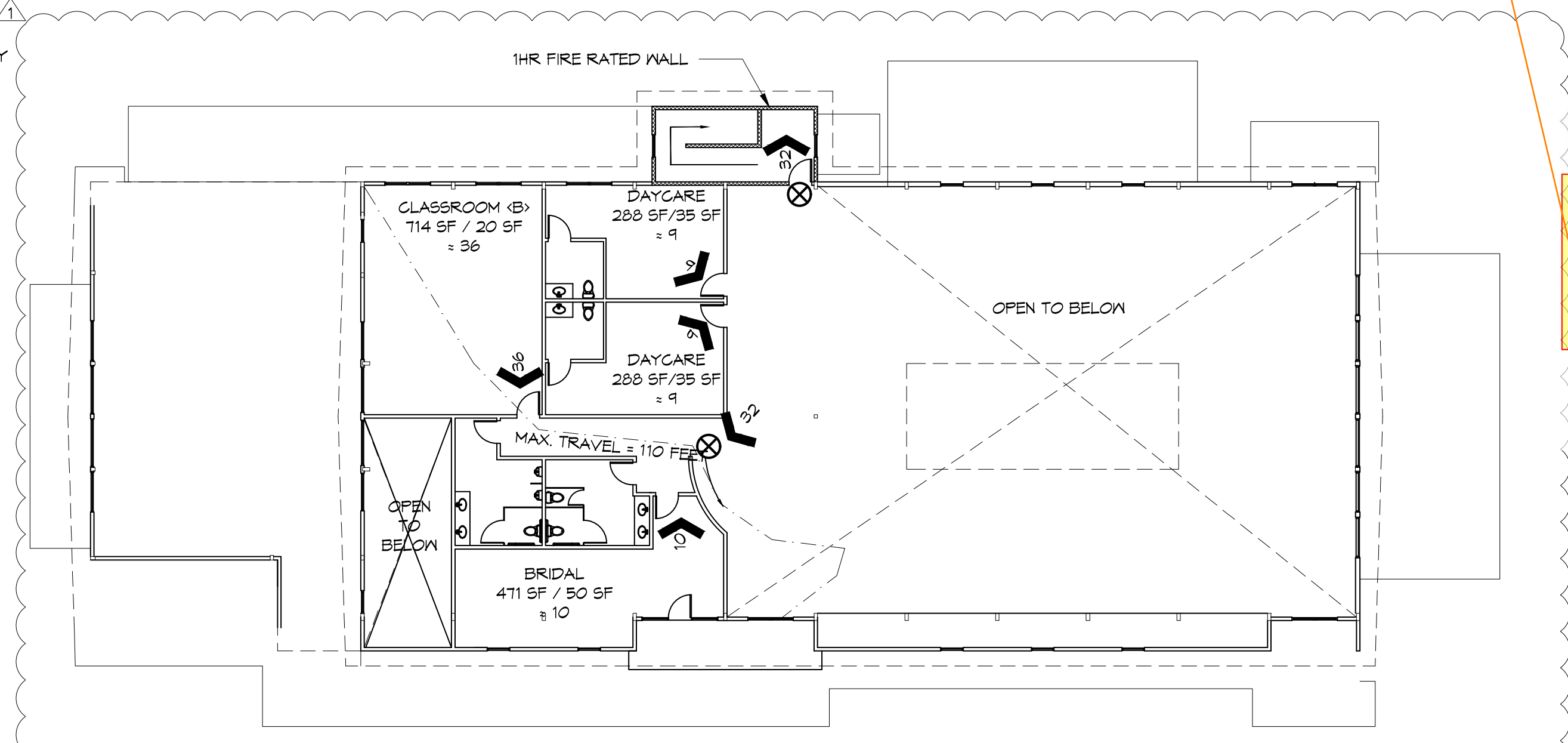
02.01.18    REVISION

**SHEET TITLE**

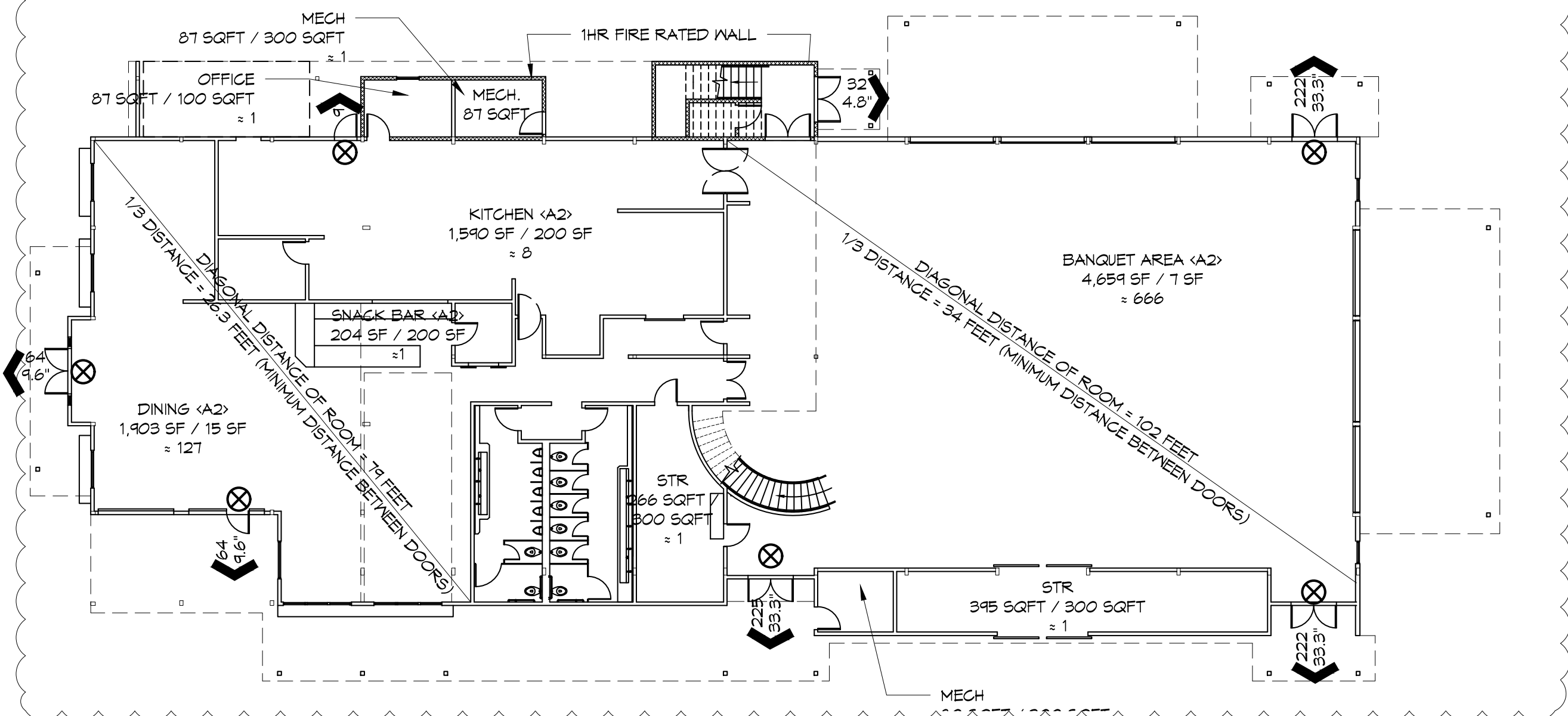
**CODE SHEET COMMONS**

**SHEET #**

**GC2.1**



**SECOND FLOOR PLAN**  
SCALE: 1/16" = 1'-0"



**FIRST FLOOR PLAN**  
SCALE: 1/16" = 1'-0"