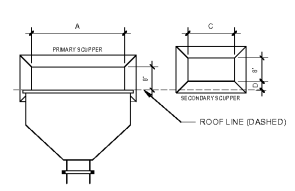


PRIMARY SCUPPER WIDTH - 38" SECONDARY SCUPPER WIDTH - 36"
SQ FT TOTALS SHOWN INCLUDE THE MAIN ROOF AREA, CANOPY AREA, AND THE AREA OF ALL VERTICAL WALLS THAT DIVERT WATER BACK TO THE MAIN ROOF AREA.
FOR ALL RAINWATER THAT IS DIVERTED TO THE CANOPY ARCHITECTURAL PLANS
HEIGHT OF ALL SCUPPERS (PRIMARY AND SECONDARY)
EQUALS HEIGHT OF A STD. CMU (8")
SCUPPERS & SEADERS ARE DESIGNED PER THE REQUIREMENTS OF THE F.P.C.
1 TALL CANOPY PARAMET
2 TALL SEADERS

FOR ALL RAINWATER THAT IS DIVERTED TO THE CANOPY ARCHITECTURAL PLANS
- PRIMARY SCUPPER DRAINS SIZED PER 2012 IPC TABLE 1107.3
EACH PRIMARY SHALL BE 38X8 @ 3.25" HEAD HEIGHT, 4.5" RAINWTR
FOR A MAXIMUM ROOF AREA OF 15,295 SQ. FT. PER SCUPPER.
- SECONDARY SCUPPERS SIZED PER 2012 IPC FIGURE 1107.3
EACH PRIMARY DRAIN HAS (2) 36X8 SECONDARY ROOF SCUPPERS @ 4.5" RAINWTR.
- GUTTERS SIZED PER 2012 IPC TABLE 1107.3
- DOWNSPOUTS SIZED PER 2012 IPC TABLE 1107.3



PLUMB - SCUPPER SIZING

ROOF AREA
SUPERMARKET ROOF AREA (ROOF, PARAPET, INT CANOPY) = 48,704 FT2
LOADING DOCK ROOF AREA (ROOF, PARAPET, INT CANOPY) = 1,525 FT2

LOADING DOCK ROOF AREA TABLE

MARK	DIMENSION	MARK	DIMENSION
A	38"	D	37"
C	38"		

5 PLUMB - ROOF DRAINS CALCULATIONS

ROOF PARAMETERS
SUPERMARKET ROOF AREA (ROOF, PARAPET, INT CANOPY) = 48,704 FT2
LOADING DOCK ROOF AREA (ROOF, PARAPET, INT CANOPY) = 1,525 FT2

ROOF AREA
SUPERMARKET ROOF AREA (ROOF, PARAPET, INT CANOPY) = 48,704 FT2
LOADING DOCK ROOF AREA (ROOF, PARAPET, INT CANOPY) = 1,525 FT2

SCUPPER SIZING
REQUIRED CAPACITY PER PRIMARY SCUPPER AT A RAINFALL RATE = 5 IN/HR
REQUIRED FLOW RATE PER PRIMARY SCUPPER (IN GPM) = 692 GPM/SCUPPER
REQUIRED PRIMARY SCUPPER COVERAGE AREA IN FT2 = 12,178 FT2/SCUPPER

ACTUAL PRIMARY SCUPPER CAPACITY @ MAXIMUM ROOF DRAINAGE RATE
SCUPPER HYDRAULIC DIMENSIONS: 38 IN LENGTH AND 3.1 IN HEAD HEIGHT
ACTUAL PRIMARY SCUPPER CAPACITY FLOW RATE PER FRANCIS FORMULA = 704 GPM/SCUPPER
ACTUAL PRIMARY SCUPPER COVERAGE AREA = 12,295 FT2/SCUPPER

REQUIRED CAPACITY PER SECONDARY SCUPPER AT A RAINFALL RATE = 5 IN/HR
REQUIRED FLOW RATE PER SECONDARY SCUPPER (IN GPM) = 318 GPM/SCUPPER

ACTUAL SECONDARY SCUPPER CAPACITY @ MAXIMUM RAINFALL RATE
SECONDARY SCUPPER HYDRAULIC DIMENSIONS: 36 IN LENGTH AND 2 IN HEAD HEIGHT
ACTUAL SECONDARY SCUPPER CAPACITY FLOW RATE PER FRANCIS FORMULA = 319 GPM/SCUPPER

RAIN LEADER SIZING PER IPC TABLE 1106.2(1)
RAIN LEADER DIMENSIONS: 8 IN x 8 IN (EQUIVALENT DIA = 8 IN)
REQUIRED RAIN LEADER FLOW AREA = 12,178 FT2/RAIN LEADER
ACTUAL AREA CAPACITY OF 8 IN x 8 IN RAIN LEADER = 23,700 FT2/RAIN LEADER

LOADING DOCK ROOF PRIMARY & SECONDARY SCUPPER SIZING
REQUIRED CAPACITY PER PRIMARY SCUPPER AT A RAINFALL RATE = 5 IN/HR
REQUIRED FLOW RATE PER PRIMARY SCUPPER (IN GPM) = 40 GPM/2nd SCUPPER
REQUIRED PRIMARY SCUPPER COVERAGE AREA IN FT2 = 783 FT2/2nd SCUPPER

ACTUAL PRIMARY SCUPPER CAPACITY @ MAXIMUM ROOF DRAINAGE RATE
PRIMARY SCUPPER HYDRAULIC DIMENSIONS: 12 IN LENGTH AND 2 IN HEAD HEIGHT
ACTUAL PRIMARY SCUPPER CAPACITY FLOW RATE PER FRANCIS FORMULA = 177 GPM/2nd SCUPPER
ACTUAL PRIMARY SCUPPER COVERAGE AREA = 5,677 FT2/2nd SCUPPER

REQUIRED SECONDARY SCUPPER CAPACITY AT A RAINFALL RATE = 5 IN/HR
REQUIRED FLOW RATE PER SECONDARY SCUPPER (2) IN GPM = 40 GPM/2nd SCUPPER

ACTUAL SECONDARY SCUPPER CAPACITY @ MAXIMUM RAINFALL RATE
SECONDARY SCUPPERS HYDRAULIC DIMENSIONS: 12 IN LENGTH AND 2 IN HEAD HEIGHT
ACTUAL SECONDARY SCUPPER CAPACITY FLOW RATE PER FRANCIS FORMULA = 152 GPM/2nd SCUPPER
ACTUAL SECONDARY SCUPPER COVERAGE AREA = 2,932 FT2/2nd SCUPPER

RAIN LEADER SIZING PER IPC TABLE 1106.2(1)
RAIN LEADER DIMENSIONS: 4 IN x 4 IN (EQUIVALENT DIA = 4 IN)
REQUIRED RAIN LEADER FLOW AREA = 783 FT2/RAIN LEADER
ACTUAL AREA CAPACITY OF 4 IN x 4 IN RAIN LEADER = 3,886 FT2/RAIN LEADER

GREASE INTERCEPTOR SINKS VENTILATION - PUBLIX 48180010 TYPE

GREASE TRAP SIZING METHOD: # 2 - SEE COMMENTARY SECTION 5.1

DEPARTMENT	FIXTURE	NUMBER OF FIXTURES	UNIT	WIDE	DEPTH	SINK VOLUME	FIXTURE DRAIN TIME	SINK FLOW RATE	GPM	MULTIPLY FLOW	Kitchen Sink Capacity	Sink Dimensions
Seafood	3-compartment K-SINK	3	18	20	12	16.82	6.75	7.4	7.4	5.5	3x18x20x14	
	hand sink	1	9	12	6	2.805	1	1.0	0.0	0.0	9x12x6	
	floor drains	4	0	0	0	0	0	0	0.0	0.0		
Produce	3-compartment K-SINK	2	18	20	12	16.82	6.75	7.4	14.8	11.1	3x18x20x12	
	hand sink	1	9	12	6	2.805	1	1.0	0.0	0.0	2x18x20x12	
	floor drains	2	0	0	0	0	0	0	0.0	0.0	9x12x6	
Cheese	dishwasher	0	0	0	0	0	0	0	0.0	0.0		
	hand sink	1	9	12	6	2.805	1	1.0	0.0	0.0	2x18x20x14	
	floor drains	1	0	0	0	0	0	0	0.0	0.0	9x12x6	
Bakery	3-compartment K-SINK	1	30	24	16	19.28	6.75	8.1	8.1	6.1	3x11x24x16	
	hand sink	1	9	12	6	2.805	1	1.0	0.0	0.0	9x12x6	
	floor drains	4	0	0	0	0	0	0	0.0	0.0		
Bakery Scullery	Pan Wash K-SINK	1	30	24	16	19.28	6.75	8.1	12.0	9.0		
	3-compartment K-SINK	1	30	24	16	19.28	6.75	8.1	7.4	5.5		
	hand sink	1	9	12	6	2.805	1	1.0	0.0	0.0	9x12x6	
Deli / Sandwich	3-compartment K-SINK	1	30	24	16	19.28	6.75	7.4	7.4	5.5	3x18x20x12	
	hand sink	1	9	12	6	2.805	1	1.0	0.0	0.0	9x12x6	
	floor drains	2	0	0	0	0	0	0	0.0	0.0		
Deli / Veggie Prep	1-compartment K-SINK	1	18	20	12	16.82	2.25	7.4	7.4	5.5	2x18x20x12	
	hand sink	2	9	12	6	2.805	1	1.0	0.0	0.0	9x12x6	
	floor drains	2	0	0	0	0	0	0	0.0	0.0		
Deli Scullery	3-compartment K-SINK	1	30	24	16	19.28	6.75	7.4	7.4	5.5	3x18x20x12	
	Dishmachine	1	0	0	0	0	0	0	0.0	0.0		
	Sliced Table K-SINK	1	20	20	8	10.59	2.25	4.8	4.8	3.5	1x20x20x6	
Aprons	hand sink	2	9	12	6	2.805	1	1.0	0.0	0.0	9x12x6	
	floor drains	2	0	0	0	0	0	0	0.0	0.0		
	1-comp container/SINK	1	12	10	6	3.117	1	1.0	0.0	0.0	1x12x10x6	
Café	3-compartment K-SINK	0	30	24	16	19.28	6.75	0.0	0.0	0.0	3x11x24x16	
	hand sink	0	9	12	6	2.805	1	0.0	0.0	0.0	9x12x6	
	floor drains	0	0	0	0	0	0	0	0.0	0.0		
SEAS-TOTAL									66.1	65.8	GPM	

Exceptions:
It is unlikely that the deli scullery 3-compartment (prep) and Dishwasher will have simultaneous flow = 6.5
It is unlikely that the hand sinks will operate simultaneously when the sinks are in use. = 0.0
Floor washdown will not occur simultaneously when the department's sinks are in use. Hence the floor drains will not flow. = 0.0
The produce sinks are not connected to the grease waste system. = 0.0
TOTAL Maximum anticipated flow through rating with all fixtures flowing = 65.8 GPM

Grease Interceptor size with a 20 to 30 minute detention period (use 30 mins)
Retention Time = 30.0 x 60.3 = 2409 Gallons
Average time to drain a sink's compartment = 2.25 mins
Use (2) 1250 Gallon Grease Interceptors

PLOT DATE:
August, 21 2018

No.	Description	Date

STORE NUMBER
1687
Tattersall Park
US 280 & Highway 19
Hoober
Shelby Co., AL

48.10
V814.2018
SIENNA LITE

**SANITARY
WASTE
MEZZANINE
PLUMBING PLAN**

As indicated

P2.2

Order Plans @