ELECTRICAL LOAD CALCULATIONS

PANEL : A

200 AMP, 240 VOLT / 120 VOLT, SINGLE PHASE, 3-WIRE

LOAD SERVED	LOAD A	LOAD B	BRKR TRIP	CKT NO	A	B	CKT NO	BRKR TRIP	LOAD A	LOAD B	LOAD SERVED
LIGHTS (INCLUDES RECEPTACLES @ 125)	1365		15/1	1			2	15/1	540		RECEPTS (3KVA)
EQUIPMENT: LIGHTING (324+63=375 VA) @ 125		500	15/1	3			4	60/2		5050	HVAC
WATER HEATER (4500 @ 125)	2813		25/2	5			6		5050		
		2813		7			8			0	
WATER HEATER (4500 @ 125)	2813		25/2	9			10		0		
		2813		11			12			0	
	0			13			14		0		
		0		15			16			0	
	0			17			18		0		
		0		19			20			0	
	0			21			22		0		
		0		23			24			0	
	0			25			26		0		
		0		27			28			0	
	0			29			30		0		
		0		31			32			0	
TOTAL	6791	6181							5690	5050	TOTAL

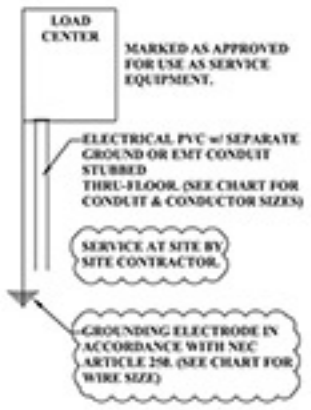
TOTAL CONNECTED LOAD	12981	LOAD A	11331	LOAD B	
ADDITIONAL LOAD FOR NON NEC LIGHTING			0	WATTS	
(CALCULATED LOAD - CONNECTED LOAD)					
TOTAL CALCULATED LOAD			23812	WATTS	99 AMPS

WIRING SIZES

15 AMP CIRCUITS #14 COPPER**
20 AMP CIRCUITS #12 COPPER**
25 AMP CIRCUITS #10 COPPER**
30 AMP CIRCUITS #10 COPPER**
40 AMP CIRCUITS #8 COPPER* OR **
45 AMP CIRCUITS #6 COPPER**
45 AMP CIRCUITS #8 COPPER*
50 AMP CIRCUITS #8 COPPER*
50 AMP CIRCUITS #6 COPPER**
60 AMP CIRCUITS #6 COPPER* OR **
90 AMP CIRCUITS #4 COPPER*
90 AMP CIRCUITS #3 COPPER**
100 AMP CIRCUITS #2 COPPER*
100 AMP CIRCUITS #1 COPPER**

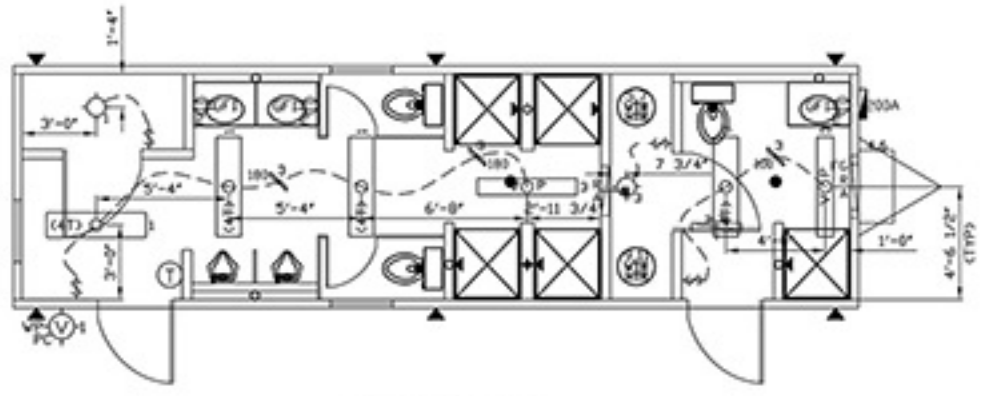
* 75°C. MIN. TEMPERATURE RATING WITH EQUIPMENT TERMINATIONS LISTED AND IDENTIFIED FOR 75°C. TYPE THW, THWN, THHN WIRE OR MC CABLE.

** TYPE NM OR SC CABLE (FROM 60° COLUMN TABLE 310-16).



CONDUIT & CONDUCTOR CHART

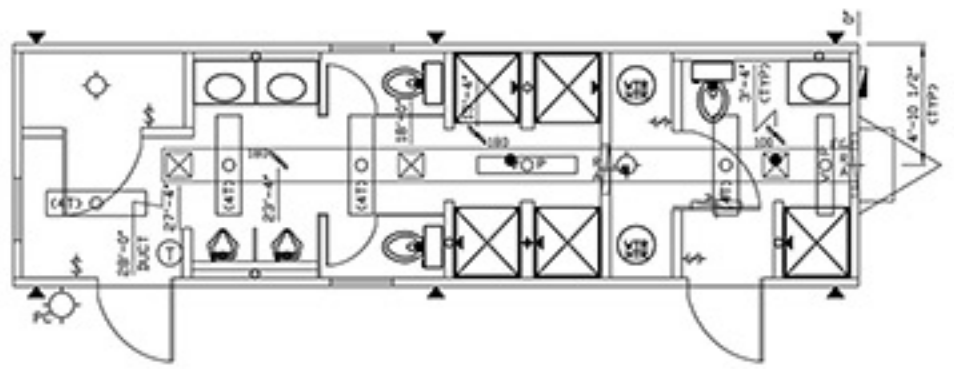
240 VOLT SERVICE RATING	CONDUCTOR SIZE (AWG OR KCMIL) TYPE OF WIRE	PVC CONDUIT 3" UNDERGROUND	EMT CONDUIT	GROUNDING ELECTRODE CONDUCTOR SIZE
60 AMP, 1 PHASE	(2) #6	3"	#8	3"	#8
100 AMP, 1 PHASE	(2) #3	3 1/2"	#6	1 1/2"	#8
100 AMP, 3 PHASE	(3) #3	3 1/2"	#6	1 1/2"	#8
125 AMP, 1 PHASE	(2) #2	3 1/2"	#6	1 1/2"	#8
125 AMP, 3 PHASE	(3) #2	3 1/2"	#6	1 1/2"	#8
150 AMP, 1 PHASE	(2) #1	3 1/2"	#6	1 1/2"	#6
150 AMP, 3 PHASE	(3) #1	3 1/2"	#6	1 1/2"	#6
200 AMP, 1 PHASE	(2) 1/0	3"	#4	2"	#6
200 AMP, 3 PHASE	(3) 1/0	3"	#4	2"	#6
225 AMP, 1 PHASE	(2) 2/0	3"	#4	2"	#6
225 AMP, 3 PHASE	(3) 2/0	3"	#4	2"	#6
250 AMP, 1 PHASE	(2) 3/0	3"	#4	2"	#6
250 AMP, 3 PHASE	(3) 3/0	3"	#4	2"	#6
300 AMP, 1 PHASE	(2) 4/0	3 1/2"	#4	2 1/2"	#6
300 AMP, 3 PHASE	(3) 4/0	3"	#4	2 1/2"	#6
400 AMP, 1 PHASE	(2) 300 KCMIL OR (3) #3/0	3 1/2"	#2	(2) 1 1/2"	#4/0
400 AMP, 3 PHASE	(3) 300 KCMIL OR (3) #3/0	(2) 3"	#2	(2) 2"	#4/0
500 AMP, 1 PHASE	(2) 350 KCMIL OR (3) #4/0	(2) 3 1/2"	#2	(2) 2 1/2"	#4/0
500 AMP, 3 PHASE	(3) 350 KCMIL OR (3) #4/0	(2) 3"	#2	(2) 2 1/2"	#4/0
600 AMP, 1 PHASE	(3) 500 KCMIL OR (3) 250 KCMIL	(3) 3 1/2"	#2	(3) 2 1/2"	#4/0
600 AMP, 3 PHASE	(3) 500 KCMIL OR (3) 250 KCMIL	(3) 3"	#2	(3) 2 1/2"	#4/0
1,000 AMP, 1 PHASE	(4) 500 KCMIL OR (3) 350 KCMIL	(4) 3 1/2"	#2	(3) 2 1/2"	#4/0
1,000 AMP, 3 PHASE	(4) 500 KCMIL OR (3) 350 KCMIL	(4) 3"	#2	(3) 2 1/2"	#4/0



ELECTRICAL PLAN

NOTES:

1. DEVICE HEIGHTS: SWITCH HEIGHTS ARE NOTED FROM FINISHED FLOOR TO BOTTOM OF BOX (UNLESS NOTED), RECEPT HEIGHTS ARE NOTED FROM FINISHED FLOOR TO CENTER OF BOX (UNLESS NOTED) & JUNCTION BOX AND OTHER DEVICE HEIGHTS ARE NOTED FROM FINISHED FLOOR TO BOTTOM OF BOX. (UNLESS NOTED).



HVAC PLAN

SYMBOL	DESCRIPTION
▼	TIE DOWN, WALL TYPE
WH	WATER HEATER
FD	FLOOR DRAIN LOCATION
	WATER INLET LOCATION
	MAIN DRAIN LOCATION
○	PLUMBING VENT THRU ROOF
T	THERMOSTAT, 42" A.F.F.
	CEILING EXHAUST FAN (CFM AS NOTED)
	8"x8" CEILING SUPPLY AIR DIFFUSER
$	15 AMP, SWITCH
	42" AFF (UNLESS NOTED)
GFI	15 AMP, DUPLEX GFI RECEPT
	42" AFF (UNLESS NOTED)
PC V VP	VANDAL RESISTANT EXT. INCANDESCENT
	LIGHT w/ PHOTO CELL, VP, 80" A.F.F.
	CEILING MOUNTED INCANDESCENT LIGHT
VDP	4' DOUBLE TUBE SURFACE MOUNTED
	FLUOR. VAPOR PROOF LIGHT w/ DIFFUSER
(4T)	4' (4) TUBE SURFACE MOUNTED
	FLUORESCENT LIGHT w/ DIFFUSER
	LOAD CENTER

DRAWING LEGEND

PE SEALS:

ALL ITEMS THAT ARE CLOUDED ARE FIELD INSTALLED

REV	DESCRIPTION	DATE	BY

DEAR JOHN TRAILER SALES

PROJECT NAME: 1038RR/SHOWER

PLANT LOCATION: BRISTOL IN

MODEL: 1038
DATE: 10/20/10
DRAWN BY: AM
DRAWING SCALE: 1/4"=1'-0"
QUOTE NO.: QTE0000829I-A
SERIAL NO.: IN-037545
DRAWING NUMBER: EH1