

Order Plans @ WWW.WHITELINE.COM

AIR DEVICE SCHEDULE						
MARK	SERVICE	MANUFACTURER MODEL	STYLE	FRAME TYPE	FACE SIZE	NOTES
CD1	SUPPLY AIR	TITUS 300RL	DOUBLE DEFLECTION	DUCT MOUNT	REF DRAWINGS	A
CD2	SUPPLY AIR	TITUS TMS	CEILING GRILLE 4-WAY	LAY-IN	12X12	A
RAG1	RETURN AIR	TITUS 350RL	SIDEWALL	SURFACE MOUNT	REF DRAWINGS	A
TG1	TRANSFER AIR	TITUS 350RL	WALL TRANSFER	SURFACE MOUNT	REF DRAWINGS	A
TG2	TRANSFER AIR	TITUS 350RL	DOOR TRANSFER	SURFACE MOUNT	REF DRAWINGS	A

GENERAL NOTES (APPLY TO ALL ABOVE):
 1. PROVIDE MOUNTING FRAME TO MATCH CEILING TYPE. VERIFY WITH ARCHITECT'S PLANS PRIOR TO ORDERING.
 2. BRANCH DUCT SIZE SHALL BE SAME AS NOTED DIFFUSER NECK SIZE UNLESS NOTED OTHERWISE.
 3. FINISH TO MATCH CEILING, WALL, OR DOOR. REFERENCE ARCHITECTURAL.
 4. ACCEPTABLE MANUFACTURERS: METALAIRE, CARNES, TUTTLE & BAILEY, PRICE & TITUS. (NO SUBSTITUTIONS)

NOTES:
 A. ALL STEEL CONSTRUCTION.

EQUIPMENT SCHEDULE																		
MARK	MANUFACTURER	MODEL	OUTSIDE AIR (CFM)	SUPPLY FAN		DX COOLING COIL			EXTERNAL STATIC PRESSURE	COOLING CAPACITY		GAS HEAT		V/PH	MCA	MOCP	WEIGHT (LBS)	NOTES
				CFM	HP	NOMINAL TONS	EER	IEER/SEER		TOTAL (BTU/H)	SENSIBLE (BTU/HR)	HEATING INPUT (BTUH)	HEATING OUTPUT (BTUH)					
AC-1	YORK	ZJ150N15	1,200	5,000	3.0	12.5	12.0	13.0	0.75	170,800	121,300	180,000	144,000	208/3	70	90	1,280	A
AC-2	YORK	ZJ120N15	1,000	4,000	2.0	10	12.0	12.8	0.75	130,000	96,000	180,000	144,000	208/3	48.9	60	1,070	

GENERAL INFORMATION (ALL UNITS):
 1. UNITS FURNISHED BY MECHANICAL CONTRACTOR. INSTALLATION AND STARTUP BY MECHANICAL CONTRACTOR.
 2. PROVIDE UNIT WITH STANDARD ECONOMIZER WITH BAROMETRIC RELIEF DAMPER, CONTROLLED VIA BAS.
 3. PROVIDE UNIT WITH FACTORY MOUNTED SMOKE DETECTOR IN THE MAIN SUPPLY AND RETURN DUCT (OR AS REQUIRED BY LOCAL JURISDICTION).
 4. INTERLOCK UNIT SMOKE DETECTOR WITH UNIT AND WITH FIRE ALARM CONTROLS, PER CODE.
 5. PROVIDE UNIT WITH MOUNTED AND WIRED DISCONNECT FOR SINGLE-POINT ELECTRICAL CONNECTION.
 6. PROVIDE 4" REINFORCED CONCRETE PAD WITH VIBRATION ISOLATION PADS.
 7. CONTROLS PROVIDED BY BUILDING MANAGEMENT SYSTEM.
 8. FUEL SOURCE FOR UNITS IS NATURAL GAS.
 9. ALL ROOF TOP UNITS SHALL HAVE R-410A REFRIGERANT. NO R-22 SHALL BE PERMITTED.
 10. PROVIDE STANDARD STATIC VFD DRIVES, UNLESS NOTED OTHERWISE.
 11. PROVIDE ONE YEAR COMPLETE PARTS AND LABOR WARRANTY.
 12. PROVIDE ADDITIONAL FOUR YEAR WARRANTY COVERING COMPRESSORS.
 13. PROVIDE FIELD INSTALLED FLUE DISCHARGE DEFLECTOR.
 14. PROVIDE FIELD INSTALLED DUAL ENTHALPY SENSORS AND CO2 SENSOR. INSTALLATION BY MECHANICAL CONTRACTOR.
 15. PROVIDE COPPER COP SYSTEM FOR STORES WITH A RISK CLASS OF 2,3, AND 4. COORDINATE INSTALLATION WITH LOW VOLTAGE ISS.
 16. PROVIDE HAIL GUARDS.

NOTES:
 A. ELECTRICAL CONTRACTOR TO PROVIDE MOUNTED AND WIRED GFCI CONVENIENCE RECEPTACLE.

VOLUME/BALANCE DAMPER SCHEDULE	
TYPE	MANUFACTURER/MODEL
ROUND	RUSKIN MDRS25
RECTANGULAR	RUSKIN MD35

NOTE:
 REFER TO SPECIFICATION FOR ACCESSORIES

CONTACTS:
 RUSKIN - (816) 761-7476

VENTILATION CALCULATIONS SINGLE ZONE ASHRAE STD. 62.1-2013 (IMC 2015)										
LOCATION	AREA	UNIT SERVED BY	OCC. LOAD/1000 SQ. FT	TOTAL OCCUPANTS (Pz)	CFM/PERSON (Rp)	CFM/SQ. FT (Ra)	ZONE EFFECTIVENESS (Ez)	BREATHING ZONE (Vbz)	ZONE OUTDOOR AIRFLOW (MIN, Voz)	O/A PROVIDED
SALES AREA-101	6,921	AC-1,2	15	104	7.5	0.12	0.8	1,609	2,011	2,040
OFFICE/BREAK-102	90	AC-1	50	5	5	0.06	0.8	28	35	40
TRIBUNE-103	75	AC-1	0	0	0	0.06	0.8	5	6	10
SALES SUPPORT-106	23	AC-2	0	0	0	0.12	0.8	87	108	110
TOTAL	7,809			108				1,728	2,160	2,200

AIR BALANCE SCHEDULE						
MARK	SUPPLY AIR	OUTSIDE AIR	RETURN AIR	EXHAUST AIR	BLDG. PRESSURE	% OUTSIDE AIR
AC-1	5000 CFM	1200 CFM	3800 CFM	-	+ 1200 CFM	25
AC-2	4000 CFM	1000 CFM	3000 CFM	-	+ 1000 CFM	25
EF-1	-	-	-	75 CFM	- 75 CFM	-
EF-2	-	-	-	75 CFM	- 75 CFM	-
TOTAL	9000 CFM	2200 CFM	6800 CFM	150 CFM	+ 2050 CFM	25

FAN SCHEDULE									
MARK	AREA SERVED	MANUFACTURER MODEL	CFM	ESP	MOUNTING FAN TYPE	V/PH/HZ WATTS	DRIVE	CONTROL METHOD	NOTES
EF-1	MEN-104	GREENHECK SP-A110	75	0.25"	INLINE	120/1/60 48.7	DIRECT	SWITCH	
EF-2	WOMEN-105	GREENHECK SP-A110	75	0.25"	INLINE	120/1/60 48.7	DIRECT	SWITCH	

GENERAL INFORMATION (ALL FANS AS APPLICABLE):
 1. PROVIDE WALL DISCHARGE CAP, GRAVITY BACKDRAFT DAMPER, BIRDSCREEN, AND SAFETY MOUNTED DISCONNECT.
 2. FANS MUST BE AMCA CERTIFIED AS WELL AS UL OR ETL LISTED.
 3. PROVIDE FACTORY PRE-WIRED FAN SPEED CONTROLLER FOR DIRECT DRIVE FANS.
 4. PROVIDE CEILING EXHAUST GRILLE.
 5. INTERLOCK WITH RESTROOM LIGHTS.
 6. ENSURE MINIMUM 10'-0" CLEARANCE FROM AIR INTAKES, DOORS, AND OPERABLE WINDOWS.
 7. ALL FANS ARE PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR.

GAS UNIT HEATER SCHEDULE								
MARK	AREA SERVED	MANUFACTURER/MODEL	GAS INPUT	CFM	FAN HP	VOLTS/PHASE	MOCP	NOTES
UH-1	SALES SUPPORT-106	REZNOR/UDAP45	45,000	629	0.06	120/1	15	A,B,C,D,E,F

GENERAL INFORMATION (ALL UNITS):
 1. ALL UNITS ARE 120V, 1 PHASE, 60 HERTZ.
 2. INSTALL BOTTOM OF HEATER AT ELEVATION INDICATED ON DRAWINGS UNLESS NOTED OTHERWISE.
 3. UNIT HEATERS ARE PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR.
 4. THERMOSTAT SHALL BE CONTROLLED BY LOADING DOOR WITH DELAYED TIMER.
 5. UNIT HEATERS SHALL BE UL LISTED.

NOTES:
 A. PROVIDE UNIT WITH FACTORY MOUNTED AND WIRED DISCONNECT FOR A SINGLE-POINT ELECTRICAL CONNECTION.
 B. PROVIDE FACTORY THERMOSTAT FIELD WIRED BY MECHANICAL CONTRACTOR.
 C. PROVIDE WITH MANUFACTURER'S STANDARD LOUVER AND CEILING MOUNTING BRACKET.
 D. PROVIDE WITH 24V CONTROL TRANSFORMER.
 E. PROVIDE WITH 2-STAGE THERMOSTAT.
 F. PROVIDE MANUAL SHUT OFF VALVES.

pb2
 architecture + engineering

1000 Albemarle Street, Suite 100
 Raleigh, NC 27601
 Tel: 478.636.3545
 Fax: 478.636.1209

Engineer of Record
 Joshua D. MacCall, P.E.
 South Carolina License No. 33036
 COA Number: 4672

STIPULATION FOR REUSE:
 THIS DRAWING WAS PREPARED FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED. IT IS NOT TO BE REUSED FOR ANY OTHER PROJECT OR SITE WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. ANY REUSE OF THIS DRAWING FOR ANY OTHER PROJECT OR SITE WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT IS PROHIBITED. THE ARCHITECT ASSUMES NO LIABILITY FOR ANY DAMAGE OR INJURY TO PERSONS OR PROPERTY ARISING FROM THE REUSE OF THIS DRAWING. THIS PROJECT IS NOT AN ADVERTISED AND MAY BE CONTRARY TO THE LAW.

FAMILY DOLLAR STORE

1145 WHITE HORSE RD.
 GREENVILLE, SOUTH CAROLINA

JOB NUMBER: 2017.0123

ISSUE BLOCK	

CHECKED BY: TES
 DRAWN BY: BEH
 PROTO CYCLE: 2016-01
 DOCUMENT DATE: 06.22.17



MECHANICAL SCHEDULES