

| SUPPLY GRILLE SCHEDULE (S.G.) | | | | | | | | | | | |
|-------------------------------|--------|-----------|----------------|-----------------|-------|----------|--------|--------|-------|--------|---------|
| NO. | TYPE | CFM RANGE | NECK/FACE SIZE | INLET DUCT DIA. | MAT'L | VOL DMPR | FINISH | FRAME | THROW | MODEL | REMARKS |
| 5-6 | LOUVER | 0-75 | 24 X 24 | 6" | ALUM. | (1) | WHITE | LAY-IN | 4-WAY | TMS-AA | "TITUS" |
| 5-8 | LOUVER | 76-275 | 24 X 24 | 8" | ALUM. | (1) | WHITE | LAY-IN | 4-WAY | TMS-AA | "TITUS" |
| 5-10 | LOUVER | 276-375 | 24 X 24 | 10" | ALUM. | (1) | WHITE | LAY-IN | 4-WAY | TMS-AA | "TITUS" |
| 5-12 | LOUVER | 375-550 | 24 X 24 | 12" | ALUM. | (1) | WHITE | LAY-IN | 4-WAY | TMS-AA | "TITUS" |
| 5-14 | LOUVER | 551-750 | 24 X 24 | 14" | ALUM. | (1) | WHITE | LAY-IN | 4-WAY | TMS-AA | "TITUS" |

- ACCEPTABLE MANUFACTURERS: TITUS, KRUEGER, CARNES, SHOEMAKER.
- NOT ALL SUPPLY GRILLES SCHEDULED ARE USED ON THE PROJECT.
- PROVIDE R-6 MOLDED BACKED INSULATION BLANKET.
- BRANCH DUCT SIZE TO GRILLE SHALL BE SAME SIZE AS NECK UNLESS OTHERWISE NOTED.
- (1) VOLUME DAMPER AT THE GRILLE INDICATED BY A "D" AFTER THE GRILLE DESIGNATION. EXAMPLE: S65D-6 IS S65-6 WITH A DAMPER.

| RETURN GRILLE SCHEDULE (RG) | | | | | | | | | | | |
|-----------------------------|-----------|----------|----------------|-----------------|-------|----------|--------|------------|---------|---------|--|
| NO. | TYPE | MAX. CFM | NECK/FACE SIZE | FLEX. DUCT DIA. | MAT'L | VOL DMPR | FINISH | FRAME | MODEL | REMARKS | |
| 2-6 | EGG CRATE | 75 | 24 X 24 | 6" | ALUM. | (1) | WHITE | LAY-IN (3) | 50F (5) | "TITUS" | |
| 2-8 | EGG CRATE | 250 | 24 X 24 | 8" | ALUM. | (1) | WHITE | LAY-IN (3) | 50F (5) | "TITUS" | |
| 2-10 | EGG CRATE | 450 | 24 X 24 | 10" | ALUM. | (1) | WHITE | LAY-IN (3) | 50F (5) | "TITUS" | |
| 2-12 | EGG CRATE | 750 | 24 X 24 | 12" | ALUM. | (1) | WHITE | LAY-IN (3) | 50F (5) | "TITUS" | |
| 2-14 | EGG CRATE | 1,100 | 24 X 24 | 14" | ALUM. | (1) | WHITE | LAY-IN (3) | 50F (5) | "TITUS" | |
| 2-16 | EGG CRATE | 1,600 | 24 X 24 | 16" | ALUM. | (1) | WHITE | LAY-IN (3) | 50F (5) | "TITUS" | |
| 2-18 | EGG CRATE | 2,200 | 24 X 24 | 18" | ALUM. | (1) | WHITE | LAY-IN (3) | 50F (5) | "TITUS" | |

- ACCEPTABLE MANUFACTURERS: TITUS, KRUEGER, CARNES, SHOEMAKER.
- NOT ALL RETURN GRILLES SCHEDULED ARE USED ON THE PROJECT.
- PROVIDE MIN. 8" DEEP PLENUM BOX AT ALL RETURN GRILLES (TYP.)
- BRANCH DUCT SIZE TO GRILLE SHALL BE SAME SIZE AS NECK UNLESS OTHERWISE NOTED.
- (1) VOLUME DAMPER AT THE GRILLE INDICATED BY A "D" AFTER THE GRILLE DESIGNATION. EXAMPLE: RG2D-6 IS RG2-6 WITH A DAMPER.
- (3) SURFACE MOUNT BORDER WITH NO SCREW HOLES FOR LAY-IN APPLICATION.
- (5) 1/2 X 1/2 X 1/2 CORE

| DUCTWORK AND DUCTWORK INSULATION SCHEDULE | | | | | | | |
|---|---------------------|------------|----------------------|------------------|---------------------|---------------------|------|
| SERVICE | LOCATION | DUCT MAT'L | SMACNA PRESS. CLASS. | INSULATION | | INSUL JACKET | |
| | | | | RECTANGULAR DUCT | ROUND DUCT | | |
| SUPPLY | SINGLE ZONE SYSTEMS | CONCEALED | GALV. ST. | +1" | 1.5" FLEX. F.G. | 1.5" FLEX. F.G. | N.R. |
| RETURN | UPSTREAM OF FAN | CONCEALED | GALV. ST. | -1" | 1.5" FLEX. F.G. | 1.5" FLEX. F.G. | N.R. |
| EXHAUST | DOWNSTREAM OF FAN | CONCEALED | GALV. ST. | +1" | 1.5" FLEX. F.G. (1) | 1.5" FLEX. F.G. (1) | N.R. |

- N.R. = NOT REQUIRED
- EXPOSED = VISIBLE FROM OCCUPIED SPACE. DOES NOT INCLUDE DUCTWORK ABOVE WALK-ON CEILINGS AND IN MECHANICAL ROOMS.
- CONCEALED = HIDDEN FROM VIEW BY WALLS AND CEILINGS. INCLUDES DUCTWORK ABOVE WALK-ON CEILINGS AND IN MECHANICAL ROOMS.
- MATERIALS: GALV. STEEL: ASTM A653, LOCK FORMING QUALITY, 1.25 OUNCES/ S.F. ZINC COATING (G90 IN ACCORDANCE WITH ASTM A90 BOTH SIDES).
- ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK SHALL BE SEALED PER IECC 403.2.9.
- (1) INSULATE FROM 18" UPSTREAM OF THE BACKDRAFT DAMPER TO THE POINT WHERE THE DUCT EXITS THE BUILDING.

| ELECTRICAL/STARTER/DISCONNECT SCHEDULE | | | | | | | | | | | | | | | | | | |
|--|-----------------|------|------|------|---------|------|-----|--------|----------|----------|--------------|-------------|----------------|------------|----------|---|--|---------|
| SYM. | ELECTRICAL DATA | | | | STARTER | | | | | | | | | | | | | REMARKS |
| | HP | KW | AMPS | MCA | MOP | VOLT | PH. | TYPE | LOCATION | FURN. BY | AUX. CONTACT | ACCESSORIES | SMOKE DETECTOR | DISCONNECT | FURN. BY | | | |
| RTAC-1 | - | - | - | 31.0 | 45 | 208 | 3 | INTEG. | INTEGRAL | EM | - | - | - | 3R | EM (4) | - | | |
| RTAC-2 | - | - | - | 19.0 | 25 | 208 | 3 | INTEG. | INTEGRAL | EM | - | - | - | 3R | EM (4) | - | | |
| RTAC-3 | - | - | - | 25.0 | 30 | 208 | 3 | INTEG. | INTEGRAL | EM | - | - | - | 3R | EM (4) | - | | |
| CEF-1 | - | 0.08 | - | - | - | 120 | 1 | (1) | (1) | EC | - | - | - | R | EM | - | | |
| CEF-2 | - | 0.08 | - | - | - | 120 | 1 | (1) | (1) | EC | - | - | - | R | EM | - | | |
| CEF-3 | - | 0.23 | - | - | - | 120 | 1 | (2) | (2) | EC | - | - | - | R | EM | - | | |
| CEF-4 | - | 0.23 | - | - | - | 120 | 1 | (3) | (3) | EC | - | - | - | R | EM | - | | |

- STARTER TYPE: INTEG. = INTEGRAL: PROVIDED INTEGRAL WITH EQUIPMENT.
- FURNISHED BY: EM = EQUIPMENT MANUFACTURER, HC = HEATING CONTRACTOR, EC = ELECTRICAL CONTRACTOR
- ACCESSORIES: PL = LED PULL SWITCH, PB = PUSH BUTTON
- DISCONNECT: NR = NOT REQUIRED, R = REQUIRED, 3R = NEMA 3R
- REMARKS: H.W. = HARD WIRED, REC. = RECEPTACLE
- VERIFY VOLTAGE AND PHASE WITH ELECTRICAL CONTRACTOR BEFORE ORDERING EQUIPMENT.
- (1) POWER ROUTED THRU INTERIOR LIGHTING CONTRACTOR BY E.C. SEE ELECTRICAL PLANS.
- (2) LOCAL WALL SWITCH PROVIDED BY E.C. TO TURN ON FAN.
- (3) FAN WIRE TO REVERSE ACTION THERMOSTAT BY E.C.
- (4) DISCONNECT FACTORY MOUNTED AND PREWIRED BY EQUIPMENT MANUFACTURER.

| CABINET EXHAUST FAN SCHEDULE (C.E.F.) | | | | | | | | | | |
|---------------------------------------|-------------|---------|-----|-------------|------|-------------|------------|------------------------|-------------|-------------|
| NO. | AREA SERVED | TYPE | CFM | S.P. * W.C. | RPM | MOTOR WATTS | MAX. SONES | DUCT COLLAR SIZE (IN.) | MODEL | REMARKS |
| 1 | TOILET RM | CEILING | 100 | 0.38 | 950 | 80 | 2.7 | 6 | SP-B110 (3) | "GREENHECK" |
| 2 | TOILET RM | CEILING | 100 | 0.38 | 950 | 80 | 2.7 | 6 | SP-B110 (3) | "GREENHECK" |
| 3 | LAB | CEILING | 300 | 0.5 | 1070 | 224 | 4.5 | 8 X 8 | SP-A510 | "GREENHECK" |
| 4 | MECH RM | CEILING | 300 | 0.5 | 1070 | 224 | 4.5 | 8 X 8 | SP-A510 | "GREENHECK" |

- ACCEPTABLE MANUFACTURERS: GREENHECK, COOK, PENN-BARRY, CARNES.
- SUPPORT FROM STRUCTURE. ISOLATE FAN AND ASSOCIATED DUCTWORK.
- PROVIDE SPEED CONTROL MOUNTED ON FAN HOUSING. INTERNAL PLUG-IN DISCONNECT AND BACKDRAFT DAMPER
- (3) PROVIDE WHITE ALUMINUM GRILLE.

| ROOF CAP SCHEDULE | | | | | | | | | | | |
|-------------------|---------|------|--------|-----|------|--------|--------|------------|-------------|--|--|
| NO. | SERVICE | TYPE | THROAT | CFM | APD. | SCREEN | DAMPER | MODEL | REMARKS | | |
| 1 | EXHAUST | FLAT | 6 | 100 | 0.01 | BIRD | NO | RCC-7 (1) | "GREENHECK" | | |
| 2 | EXHAUST | FLAT | 6 | 100 | 0.01 | BIRD | NO | RCC-7 (1) | "GREENHECK" | | |
| 3 | EXHAUST | FLAT | 10 | 600 | 0.09 | BIRD | NO | GRS-10 (1) | "GREENHECK" | | |

- ACCEPTABLE MANUFACTURERS: GREENHECK, CARNES
- (1) PROVIDE 14" HIGH ROOF CURB.

| ROOFTOP AIR CONDITIONING UNIT SCHEDULE (RTAC) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----------|------------|------------|----------|------------|-----------|-----------|------------|-----|-------------|----------|-------------|------------|------------|----|--------|---------|-------------|----------------|---------------------|------|----------|------|-------------|------------|-----------|-------------|---------------|-------|---------|----------------|
| NO. | NOM. TONS | SUPPLY CFM | RETURN CFM | EXT. SP. | DRIVE TYPE | MOTOR BHP | MOD. TYPE | RELIEF BAR | FAN | COOLING | | | | HEATING | | | | OUTSIDE AIR | SMOKE DETECTOR | CURB HEIGHT BY MFR. | TYPE | MCA | MOP | VOLT/ PHASE | EFFICIENCY | | | WEIGHT (LBS.) | MODEL | REMARKS | |
| | | | | | | | | | | EAT DB / WB | MBH CAP. | AMB. TEMP F | NO. COMPR. | NO. STAGES | KW | MBH IN | MBH OUT | | | | | | | | NO. STAGES | MIN. CODE | UNIT RATING | | | | TEST PROC. |
| 1 | 5 | 1,775 | 1,775 | 1 | DIRECT | 1.05 | - | X | - | 80/67 | 54.4 | 105 | 1 | 1 | - | 67 | 54 | 2 | ECON (2) | NO (1) | 14" | STANDARD | 31.0 | 45 | 208/3 | 14.0 SEER | 14.0 SEER | ARI 210/240 | 850 | 48FC | CARRIER (4)(5) |
| 2 | 2 | 1,075 | 1,075 | 1 | DIRECT | 0.55 | - | X | - | 80/67 | 31.7 | 105 | 1 | 1 | - | 67 | 54 | 2 | ECON (2) | NO (1) | 14" | STANDARD | 19.0 | 25 | 208/3 | 14.0 SEER | 14.0 SEER | ARI 210/240 | 850 | 48FC | CARRIER (4)(5) |
| 3 | 3 | 1,475 | 1,475 | 1 | DIRECT | 0.79 | - | X | - | 80/67 | 44.0 | 105 | 1 | 1 | - | 67 | 54 | 2 | ECON (2) | NO (1) | 14" | STANDARD | 25.0 | 30 | 208/3 | 14.0 SEER | 14.0 SEER | ARI 210/240 | 850 | 48FC | CARRIER (4)(5) |

- CALL TO FURNISH RTAC UNITS AND CURB. H.C. / G.C. TO INSTALL. CONTACT PAUL WITZ AT Paul.Witz@carrier-utcc.com.
- SEE MOTOR SPECIFICATIONS FOR MOTOR REQUIREMENTS.
- PROVIDE WITH 2" ASHRAE STD 52.2 MERV 8 T.A. FILTERS.
- RTAC DESIGNED TO PREVENT RAIN INTRUSION INTO THE AIRSTREAM WHEN TESTED AT DESIGN AND NO AIRFLOW PER SECTION 58 OF UL 1995.
- PROVIDE UNIT MOUNTED NEMA 3R DISCONNECT, STAINLESS STEEL HEAT EXCHANGER, LIQUID-TIGHT THRU UNIT BASE ELECTRICAL CONNECTION, HINGED ACCESS PANELS AND HINGED DOOR FOR ECONOMIZER.
- PROVIDE WITH CARRIER EDGE PRO PROGRAMMABLE COMMERCIAL THERMOSTAT MODEL 33CS2P25-03.
- (1) DUCT SMOKE DETECTOR IS NOT REQUIRED PER IMC 606.2.1 AS RETURN AIR FLOW DOES NOT EXCEED 2,000 CFM IN ANY LOCATION AND SYSTEMS DO NOT SHARE COMMON SUPPLY OR RETURN AIR DUCTS.
- (2) PROVIDE ULTRA LOW LEAK CODE COMPLIANT ECONOMIZER WITH FAULT DETECTION, ENTHALPY CONTROL AND BAROMETRIC RELIEF.
- (4) PROVIDE WITH HAIL GUARD FOR CONDENSING COILS.
- (5) PROVIDE EPOXY COATED CONDENSER COIL TO PROVIDE PROTECTION IN COASTAL ENVIRONMENTS.



Always a Better Plan
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PROJECT INFORMATION

TENANT BUILD-OUT FOR:
ASPEN DENTAL
660 W. LINTON BLVD., STE. 380 • DELRAY BEACH, FL 33444

PROFESSIONAL SEAL

SHEET DATES

ISSUE DATE MAY 29, 2019

REVISIONS

| NO. | DATE | DESCRIPTION |
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