## OXYGEN & VACUUM SYSTEM NOTES

7 DESIGNATES A OXYGEN / VACUUM SYSTEM NOTE

GENERAL NOTE - INSTALL 18 GAUGE CONTROL WIREING PER MANUFACTURE'S REQUIREMENTS/RECOMMENDATIONS BETWEEN PRESSURE/VACUUM SWITCHES, MANIFOLD, CONTROL PANEL AND MASTER ALARM PANEL AND AREA ALARM PANEL LOCATIONS.

- OXYGEN MANIFOLD. UNIT SHALL BE OHIO MEDICAL CORPORATION MODEL #263432-02 WITH A 2X2 HEADER BAR, 1/2" RELIEF VALVE (SET AT 75psig) #232600 AND PIPE AWAY FOR RELIEF VALVE #232602. FULLY AUTOMATIC MANIFOLD SHALL HAVE A NEMA 4X ENCLOSURE AND BE UL LISTED. PRESSURE CONTROL CABINET SHALL CONTAIN DUAL PRESSURE REGULATORS AND SWITCHES THAT INSURE AN UNINTERRUPTED FLOW OF GAS TO THE PIPELINE. THE CABINET SHALL HAVE THREE PRESSURE GAUGES, ONE FOR EACH SUPPLY SIDE AND ONE FOR PIPELINE DELIVERY. IT SHALL BE AUTOMATIC SWITCH, HEADER BARS SHALL BE MODULAR IN DESIGN, ALLOWING FOR FUTURE EXPANSION. EACH INLET PORT SHALL BE EQUIPPED WITH AN
- 2 HEADER BAR ON EACH SIDE OF MANIFOLD PER NOTE 1 ABOVE, PROVIDE PIGTAILS FOR CONNECTION TO CYLINDERS (BY OWNER). COORDINATE EXACT INSTALLATION LOCATION OF HEADERS WITH OWNER. MANIFOLD AND HEADERS SHALL BE INSTALLED PER NFPA REQUIREMENTS AND IN COMPLIENCE WITH MANUFACTURE'S RECOMENDATIONS.

INDIVIDUAL CHECK VALVE. HEADER BAR SHALL INCLUDE A MASTER SHUTOFF VALVE.

- 3 LOCKABLE VALVE FOR SYSTEM SHUTDOWN ADJACENT TO MANIFOLD ASSEMBLY. VALVE SHALL BE 261600-05 BY OHIO MEDICAL CORPORATION WITH LABEL KIT 261645. MININMUM SIZE OF 3/4" FOR OXYGEN AND 1" FOR VACUUM. INSTALL PER MANUFACTURE'S RECOMMENDATIONS TO COMPLY WITH NFPA REQUIREMENTS.
- 4 PROVIDE GAS SPECIFIC DEMAND CHECK ASSEMBLY CONSISTING OF OHIO MEDICAL CORPORATION MAINLINE PRESSURE SWITCH #261709 AND P500-GAUGE-100 FOR OXYGEN AND P-500-GAUGE-VAC FOR VACUUM UTILIZING PART #261933 AND INSTALLED PER MANUFACTURE'S RECOMMENDED INSTALLATION DIAGRAM. PROVIDE 1/2" OXYGEN SUPPLY PIPE UP WALL TO CEILING FOR DISTRIBUTION PER DRAWING.
- 5 PRESSURE RELEASE VENT PIPING FOR PRESSURE RELIEF VALVE(S) TO THE OUTSIDE PER MANUFACTURE'S RECOMMENDATIONS, CONTRACTOR SHALL SELECT AN APPROPRIATE DISCHARGE POINT AND SHALL COORDINATE EXACT LOCATION WITH THE LANDLORD. TERMINATE PIPING PER MANUFACTURE'S RECOMMENDATIONS.
- 6 MEDICAL VACUUM EQUIPMENT THAT WILL BE SIMILAR TO OHIO MEDICAL HEALTHCAIR® SYSTEM MODEL NO 5300B-T2V PACKAGED SYSTEM - 3 HP ELECTRIC MOTOR DRIVEN PUMPS, A 80 GALLON RECEIVER AND A U.L. LISTED DUPLEX ELECTRICAL CONTROL SYSTEM MOUNTED IN A NEMA 12 ENCLOSURE. ALL SYSTEM COMPONENTS SHALL BE INSTALLED FOR A COMPLETE INSTALLATION AND PER MANUFACTURE'S RECOMMENDATIONS AND STANDARD DETAILS.
- A. FOR MOTOR PROTECTION, THE EQUIPMENT SHOULD NOT BE OPERATED IN AN AMBIENT TEMPERATURE ABOVE 104°F.
- B. EQUIPMENT CONFORMS TO THE NATIONAL ELECTRICAL CODE.
- C. THE SYSTEM SHALL MEET THE 2012 IFC AND 2012 NFPA 99 REQUIREMENTS. D. SYSTEM MUST BE CERTIFIED BY AN APPROVED MEDICAL GAS CERTIFICATION COMPANY AFTER INSTALLATION
- OXYGEN DISTRIBUTION PIPING IN CEILING, SEE PLAN FOR MAIN PIPE SIZES (1/2" MIN), PIPING SHALL BE INSTALLED PER NFPA AND MANUFACTURE'S REQUIREMENTS AND PER THE MATERIAL SPECIFICATIONS. (SEE SPEC BOOK).
- 8 VACUUM DISTRIBUTION PIPING IN CEILING, SEE PLAN FOR MAIN PIPE SIZES (3/4" MIN), PIPING SHALL BE INSTALLED PER NFPA AND MANUFACTURE'S REQUIREMENTS. PIPING SHALL BE SIZED PER MANUFACTURE'S RECOMENDATIONS FOR THE VARIOUS LOCATIONS/DEMANDS.
- 9 OXYGEN AND VACUUM PIPING (SEE PLAN FOR PIPE SIZES) (SEE NOTES #7 & #8) DOWN IN WALL TO ZONE VALVE BOX. SEPARATE LINES FOR EACH VALVE BOX. VALVE BOX SHALL BE OHIO MEDICAL CORPORATION BRAND MODEL #261902-XXXX WITH GAUGE PORT. IT SHALL BE CONSTRUCTED OF STEEL AND THE FRAME ALUMINUM, WITH A TINTED, PLEXI-GLASS PULL OUT WINDOW. THE VALVE SHALL BE OXYGEN CLEANED, FULL PORT, THREE-PIECE BALL TYPE. COORDINATE MOUNTING HEIGHT WITH OWNER AND LOCAL JURISDICATION REQUIREMENTS AND INSTALL PER MANUFACTURE'S RECOMMENDATIONS. OXYGEN AND VACUUM PIPING (SEE NOTES #7 & #8) UP IN WALL DISTRIBUTION PIPING IN CEILING.

10 - OXYGEN AND VACUUM PIPING (SEE NOTES #7 & #8) DOWN IN WALL TO MEDICAL GAS AND VACUUM OUTLET (VACUUM OUTLET TO INCLUDE SLIDE BRACKET NEXT TO VACUUM OUTLET). MEDICAL GAS OUTLETS SHALL BE OHIO MEDICAL CORPORATION BRAND, DIAMOND QUICK-CONNECT - FOR OXYGEN PART #261010-1-T15 - FOR VACUUM PART NUMBER #261010-5 WITH VR-C3UT-OMAT VACUUM WALL REGULATOR WITH OHMEDA WALL INLET AND NIPPLE CONNECTOR. FOR VACUUM SLIDE PART NUMBER 261690, VERIFY LOCATION OF SLIDE PLATE WITH OWNER PRIOR TO INSTALLATION. OUTLETS SHOULD INCLUDE ONE PIECE, HIGH IMPACT, FLAME-RETARDANT IVORY TRIM PLATE. ALL OUTLETS SHALL BEAR THE UL LABEL AND BE CLEANED FOR OXYGEN SERVICE. OUTLETS SHOULD INCLUDE PRIMARY AND SECONDARY CHECK VALVES, WALL OUTLETS SHALL HAVE GAS SPECIFIC BACK BODY WITH A STEEL MOUNTING PLATE, COORDINATE EXACT MOUNTING HEIGHT/LOCATION WITH OWNER PRIOR TO INSTALLATION.

- 11 COMBINATION MASTER/AREA ALARM FOR OXYGEN AND VACUUM SYSTEMS. UNIT SHALL BE A OHIO MEDICAL CORPORATION COMBINATION 10 POINT MASTER ALARM/ 6 GAS AREA/10 POINT MASTER ALARM WITH \*LONWORKS #261895-101212, ALLOWING IT TO INTERFACE WITH A FUTURE BUILDING AUTOMATION SYSTEM. IT SHALL COMPLY WITH FCC PART 15. IT SHALL HAVE HIGH VISIBILITY LED READOUTS, IT SHALL BE EQUIPPED WITH REMOTE SENSORS (REFER TO NOTE 9 BELOW), COORDINATE EXACT LOCATION OF INSTALLATION WITH CASEWORK AND OWNER PRIOR TO INSTALLATION.
- 12 REMOTE SENSORS, ONE FOR OXYGEN AND ONE FOR VACUUM, LOCATED ON THE DOWN STREAM (SOURCE) SIDE OF THE DISTRIBUTION PIPING AFTER EACH OF THE ZONE VALVE BOXES. PROVIDE ALL ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION PER MANUFACTURE'S RECOMMENDATIONS.
- 13 VACUUM EXHAUST EXHAUST PIPING TO THE OUTSIDE PER MANUFACTURE'S RECOMMENDATIONS. CONTRACTOR SHALL SELECT AN APPROPRIATE DISCHARGE POINT AND SHALL COORDINATE EXACT LOCATION WITH THE LANDLORD, SELECTED LOCATION SHALL BE A MIN OF 10 FEET FROM ANY INTAKE DEVICE OR ANY WINDOWS OR DOORS. TERMINATE PIPING PER MANUFACTURE'S RECOMMENDATIONS

