



MODEL CD2000 CHEM-DEMIL AIR HANDLING FILTER SYSTEM
SPECIFICATION

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| System Air Flow Rate | Up to 2000 CFM @ 7" W.G. |
| System Design Pressure | ±20" W.G. |
| Temperature Range of Air Entering Filter | 50°-130°F |
| Flow Order | Prefilter/HEPA/Charcoal/Charcoal/HEPA/Fan |
| Prefilter Type | Dry disposal group III-type per ARI Standard 850, Class 1 per UL Standard 900 |
| Prefilter Bank Configuration | 1 bank, 2 high × 1 wide |
| Prefilter Efficiency | 80-85% ASHRAE Standard 52-76 |
| HEPA Filter Type | Throw away, extended media, dry-type, bayonet-type per MIL-HDBK-144 |
| HEPA Filter Bank Configuration | 2 banks, 2 high × 1 wide |
| HEPA Filter Efficiency | 99.97% on 0.3 micron particles |
| Charcoal Adsorber Cell Type | Type II per IES Standard CS-8 |
| Charcoal Adsorber Bank | 2 banks, 6 cells high × 1 wide |
| Charcoal Adsorber Bank Air-to-Adsorbent Residence Time | Minimum 0.25 seconds @ maximum system flow rate |
| Total System Air-to-Adsorbent Residence Time | Minimum 0.5 seconds @ maximum system flow rate |
| Adsorbent Type | 8 × 16 mesh activated coconut shell carbon per ANSI N509 (non-impregnated) |

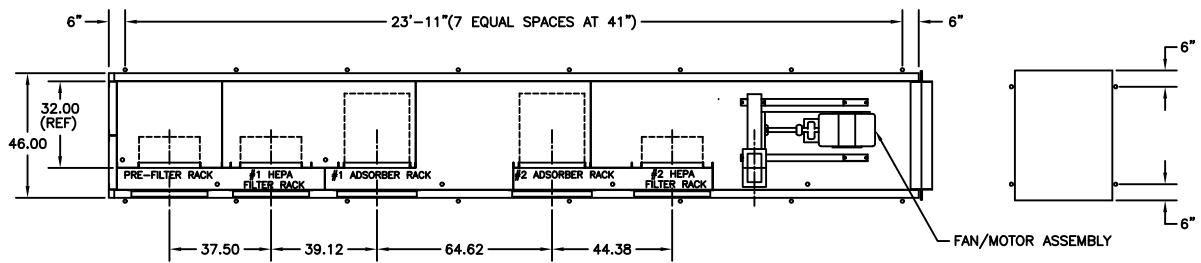
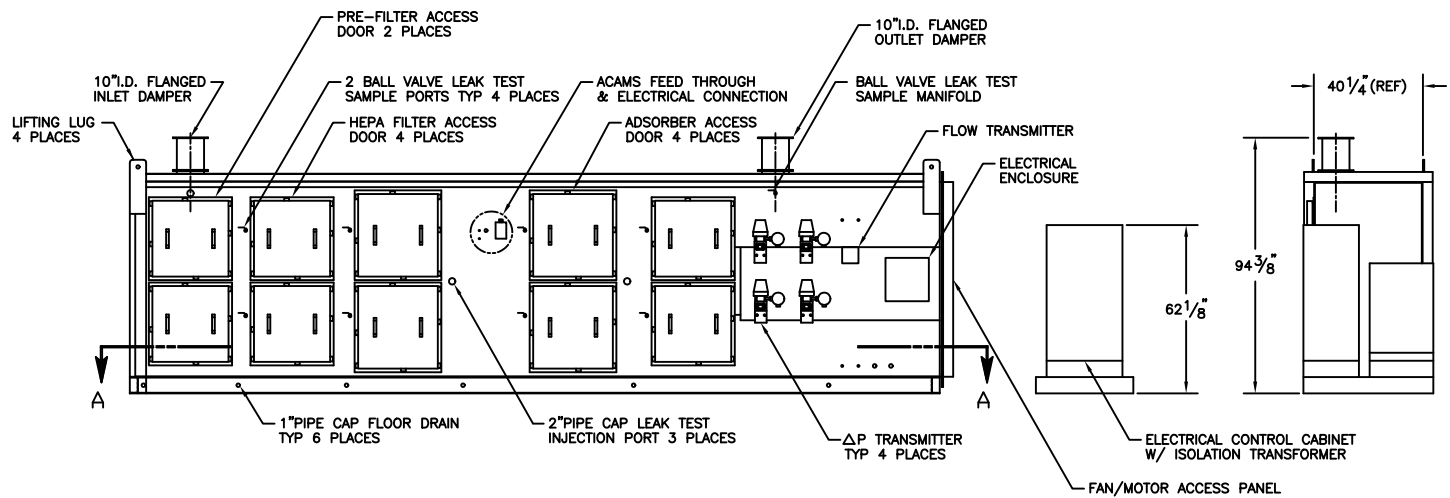
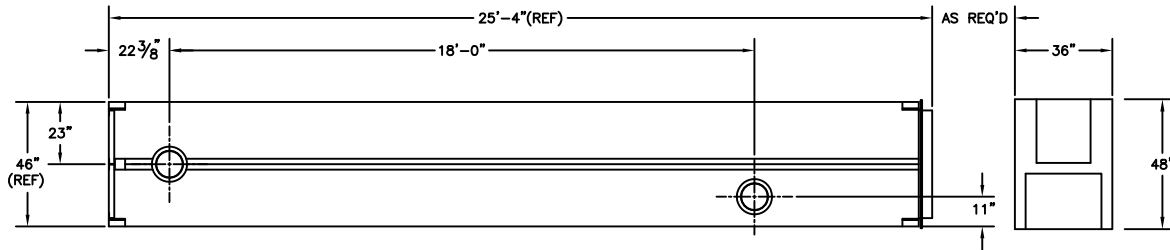
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| Inlet / Outlet Dampers | 10" diameter butterfly dampers (bubble-tight) with pneumatic actuator |
| Instrumentation | Differential pressure indicator / transmitters across prefilter and HEPA banks as well as across entire filter system, 4-20 mA Flow indicator / transmitter, 4-20 mA |
| Maximum Housing Leakage Rate | 0.1 SCFM/ sq. ft. of housing surface at 10" W.G. |
| System Design Standard | ANSI N509-1989 |
| Housing Materials of Construction | Stainless Steel, type 304L |
| Fan Type | Centrifugal single width, single inlet, arrangement 4, backward curved wheel |
| Motor Type | 5 Hp, totally enclosed, fan-cooled, 3600 RPM |
| Motor Speed Control | Variable frequency drive |
| Utility Requirements | 480 VAC, 3 phase, 60 Hz for system power, 90 psig plant air for damper actuators and in-place test usage |

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| REVISIONS | | | |
|-----------|-------------|------|----------|
| NO. | DESCRIPTION | DATE | APPROVED |
| | | | |



SECTION A-A

| QTY. | PART OR DESCRIPTION NO. | QUANTITY OR DESCRIPTION | UNIT |
|--|-------------------------|-------------------------|--|
| PARTS LIST | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMAL EQUIV. SHOWN | | CONTRACT NO. | IONEX Research Corporation P.O. Box 602 Steamboat, CO 80480 |
| TOLERANCES AND FINISHES | DECIMALS | ANGLES | |
| ±1/2 | .X ± .2 | ± 2' | |
| | .XX ± .12 | | |
| | .XXX ± .062 | | |
| MATERIAL | CHECKED | DATE | 2/7/00 |
| APPROVED | DATE | DATE | 2/7/00 |
| DO NOT SCALE DRAWING | ISSUED | PRODUCTION ORDER NO. | SIZE D |
| | | | DRAWING NO. 7035 |
| | | SCALE NONE | SHEET 1 of 1 |