

MODEL THD-1500

Where shown on plans, provide custom fabricated Anemostat model THD-1500 heavy-duty, extruded aluminum suspension systems that provides lay-in installation of the laminar flow air outlets, recessed fluorescent lights and trim plates for accessory equipment. Closed cell gaskets shall be provided on the THD-1500 grid members to prevent air leaks around equipment installed on the grid system and the transfer of air between the ceiling plenum and occupied space. Gaskets may be omitted from the grid where the equipment being installed includes gaskets. The modular grid shall be fabricated of extruded aluminum inverted tee members with a minimum thickness of 1/8", a minimum height of 1-3/4", and exposed face of 1-1/2". All exposed edges shall be radiused .015". The modular tee section frames shall be notched, mitered, and heliarc welded at the intersections of T / L member mating joints. Where total installed grid system size exceeds 5' x 10', the system shall be fabricated and shipped in sub-sections. The mating members of sub-sections shall be fabricated of half tee or "L" members butted together and shall have dimensions identical to the basic full tee member. The "L" extrusion members shall be of an interlocking design such that mating L members, when fastened together, assure a hair-line seam between abutted sections and a leak-proof seal. No gasketing or sealant shall be required between mating L sections for a leak-proof joint. The butting "L" extrusions shall use clips to hold mating L sections together during hoisting and installation. The tee and "L" extrusion members shall be pre-punched on 12" centers for galvanized hanger wire supports. The number of hanger wires shall be equal to and spaced to match the number

of grid corners or intersections and provide support for all members formed with the split tee or "L" members. Hanger wire shall be adequate to support a load of 10 lbs. / Ft² of ceiling surface. A full tee member shall be installed at the perimeter of the grid assembly to transition to the perimeter plaster ceiling. Where the grid system or portion of the grid system is directly adjacent to the wall/ceiling line, provide "L" members for direct attachment to the wall. The perimeter outside or inside corners as installed, shall consist of mitered joints. The THD-1500 suspension system shall be manufactured by the laminar flow air outlet manufacturer, and shall be installed under Section _____ . The grid system manufacturer shall forward plan details showing orientation of grid or grid sub-sections to the installing contractor.

The grid system finish shall be:

- Option 1: Arctic White epoxy finish
- Option 2: Mill Finish
- Option 3: Natural Anodize

MAGNA-PAK HEPA FILTERS

High Efficiency Particulate Air (HEPA) filters shall be Model HF-5 Magna-Pak filters provided by Anemostat or approved equal, where shown on the plans or as scheduled. The HEPA filters and associated HEPA filter ceiling modules shall be provided by the same manufacturer and responsibility for fit and compatibility shall be by that manufacturer.

Filters shall have a minimum DOP efficiency of (99.97%)(99.99%) @ .3 micron particles, and be individually factory tested and scanned for efficiency and pressure drop in accordance with IEST-RP-CC001. A label shall be affixed to each filter frame indicating serial number, model number, tested performance, and rated air flow.

Boron Silicate glass fiber filter media shall be laminar flow grade with a minimum pleated height of 5" utilizing corrosion-proof plastic separators. The ratio of total media area to active filter face area shall be at least 50:1 providing extremely long life expectancy. Filters frames shall be fabricated using light weight, rigid, anodized aluminum extrusion with mitered corners and corner gussets, and sealed with urethane potting material for leak-proof construction.

Media shall be permanently bonded to the frame with 100% solid polyurethane. Filters shall be of the energy-saving type and shall have an initial static pressure drop rating that does not exceed .27" w.g. at 100 fpm face velocity. Media integrity is preserved up to a static pressure drop of 4" w.g.

Filter seal shall be anti-gravity, self-healing fluid/gel type to provide leak proof interface. Gel to be 2 part urethane with low outgassing properties. Filter gel pocket shall be specifically designed and dimensioned to interface with HEPA filter ceiling module integral knife edge.

Filters shall be shipped separate from the ceiling filter modules, and individually enclosed in sealed, poly bags. Filters shall be strapped for ease of removal from the carton to eliminate potential damage from handling or fingers damaging media. Filter packaging shall include a minimum of 2" dead space between the filter and carton wall.

LIGHT ALERT

Each filter module shall include the Anemostat Light Alert filter monitoring system, providing a visual alarm at the face of the diffuser when the filter reaches a pre-determined pressure drop. A red LED indicator, minimum 100,000 hr rating, shall be factory installed integral with the filter module and located at the face of the assembly. A differential pressure sensor shall be factory set to the scheduled change-out pressure, and shall monitor the pressure drop across the filter, indicating the filter condition. A

low voltage 24 vac power supply circuit shall be provided to each diffuser under Division _____ of these specifications. The system shall not be affected by room pressure changes.

Provide Anemostat model LA-24 light alert power supply to provide a source of 24vac for up to 40 Light Alert units

