

# READY TO UPGRADE YOUR CLEANROOM?



## **SIMPLIFY YOUR UPGRADE WITH CEG MEMBRANE DIFFUSION**

- FOR USE IN ALL CLEANROOM APPLICATIONS (900+ SUCCESSFUL INSTALLATIONS).
- PHARMACEUTICAL AND MEDICAL DEVICE COMPATIBLE ~ CAN BE ASEPTICALLY CLEANED.
- PROVIDES HIGHLY AESTHETIC & VIRTUALLY FLUSH APPEARANCE.
- SIMPLE REMOVAL & INSTALLATION FOR ACCESSIBILITY.
- **PROVIDES 100% UNIDIRECTIONAL AIRFLOW REGARDLESS OF NUMBER OF FILTERS!**
- ANY NUMBER OF SHAPES CAN BE ACCOMODATED.

## CEG MEMBRANE DIFFUSION CAN PROVIDE YOUR UPGRADE NEEDS

- REDUCE FILTER QUANTITY.
- LOWEST COST DUAL GRID DIFFUSION SYSTEM ON THE MARKET.
- MINIMIZES DOWNTIME COSTS COMPARED TO OTHER METHODS OF UPGRADES.
- ELIMINATES TURBULENT AIR ZONES AT LIGHTS AND BLANK-OFF PANELS.
- REDUCES CROSS-CONTAMINATION AND ROOM TURBULENCE.
- ENHANCED **AIR FLOW PATTERN** PROVIDES IMPROVED **CLEANLINESS CLASS!**
- OPTIONAL FEATURES INCLUDE VITON SPLINE, PORON GASKET, RIV-NUTS (FOR BOLT-ON INSTALLATIONS), AND POWDER COAT PAINT.



**CEG**  
CONTROLLED ENVIRONMENTS GROUP, LLC

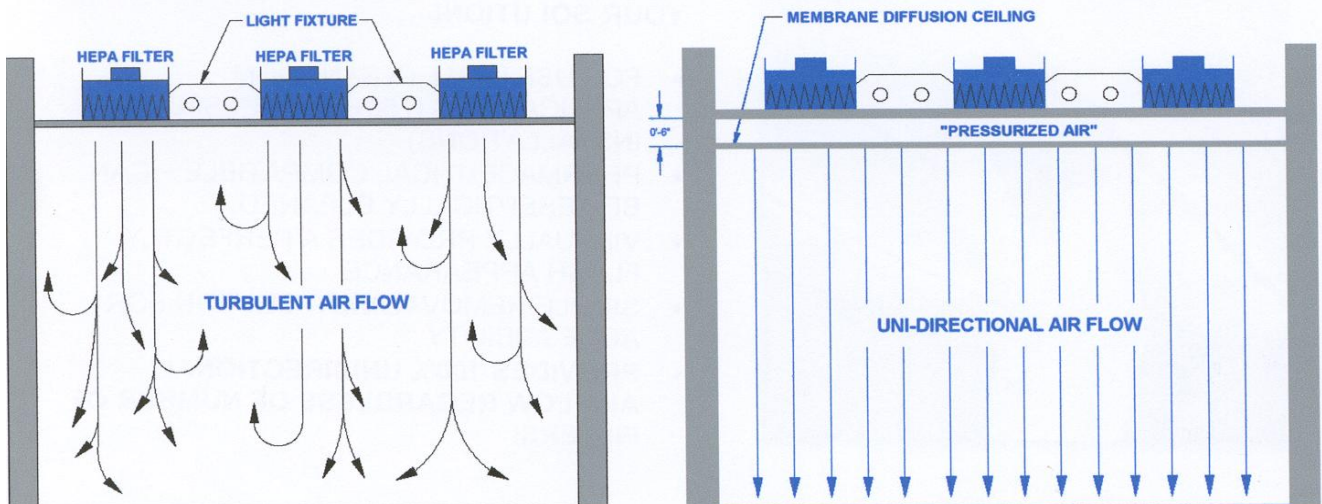
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TECHNICAL SUMMARY 

# CEG MEMBRANE DIFFUSION TECHNICAL DESCRIPTION

The dual grid ceiling system creates a slight positive pressure which re-diffuses the air uniformly across the entire ceiling entrance plane. True uni-directional flow is delivered to the room regardless of filter variations or filter coverage, eliminating turbulent air flow as air travels from the entire ceiling plane.



**U.S PATENT NUMBER:**

4,603,618

**MEMBRANE MATERIAL:**

Woven Polypropylene Monofilament. Membrane fabric: satin weave, lightweight translucent color, with UV additives.

**MEMBRANE PANEL WEIGHT:**

**(MD Series)** Approximately .44 lbs. per square foot.  
(1 panel- nominal 2' x 4' = 3.40 lbs.)  
**(MLW Series)** Approximately .38 lbs. per square foot.  
(1 panel- nominal 2' x 4' = 3.0 lbs.)  
**(MLP Series)** Approximately .50 lbs. per square foot.  
(1 panel- nominal 2' x 4' = 4.0 lbs.)

**SUPPORT SYSTEM:**

**(MD Series)** Membrane fabric is set on standard 2' x 4' acrylic eggcrate panels. **(MLW Series)** Membrane fabric is stretched tight onto an anodized aluminum frame. **(MLP Series)** Specifically designed for Biotech/ Pharmaceutical application. Membrane fabric is stretched on both sides on an anodized aluminum frame with epoxy sealed edges.

**ASSEMBLY:**

Panels are manufactured by Controlled Environments Group in an ISO Class 5 (Class 100) cleanroom. Panels are bagged, crated, and shipped to the jobsite for installation into the ceiling grid.

**SEVERAL PRESSURE DROP MODELS AVAILABLE:**

For laminarity at 0.03" to 0.10" W.G. Membrane fabric is matched to room velocity requirements to deliver air more uniformly across the ceiling plane.

**FIRE CHARACTERISTICS:**

Membrane fabric is classified Class "A" product as defined by the ASTM E-84 fire test.

**OPENINGS & PENETRATIONS:**

Penetrations for sprinkler heads or conduits can be made anywhere in panel and finished off with standard escutcheons. Special sealing is not required.

**ACCESS:**

Membrane panels lift out for access to HEPA/ULPA filters and lights.

**AVAILABLE SPECIFICATIONS:**

Complete guide specifications available upon request.

**ALPIQ CG® SERIES PANELS:**

The Alpiq CG® series is basically the same as the MLP series described above. However, the Alpiq CG® panels are manufactured in Switzerland. They include a welded anodized aluminum extruded frame with the polyester fabric adhered to the frame. CEG is Alpiq's North American Sales Rep.