



**BIO-GRID**  
CLEANROOM CEILING SYSTEM

FLUSH CEILING GRID SYSTEMS  
FOR CLEANROOMS, HOSPITALS,  
AND OR SUITES



Integrated Laminar Airflow Technology and LED Lighting.

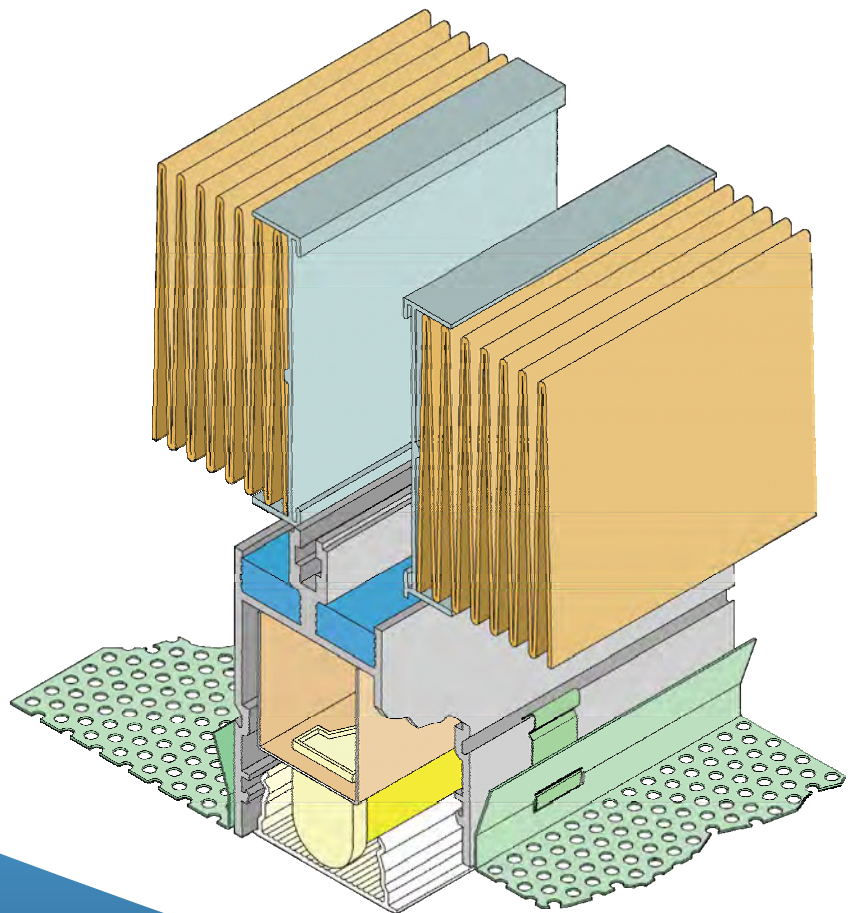


**BIO-GRID**  
CLEANROOM CEILING SYSTEM

## TOP LOAD POWDER COATED EXTRUDED ALUMINUM FLUSH CEILING GRID SYSTEM

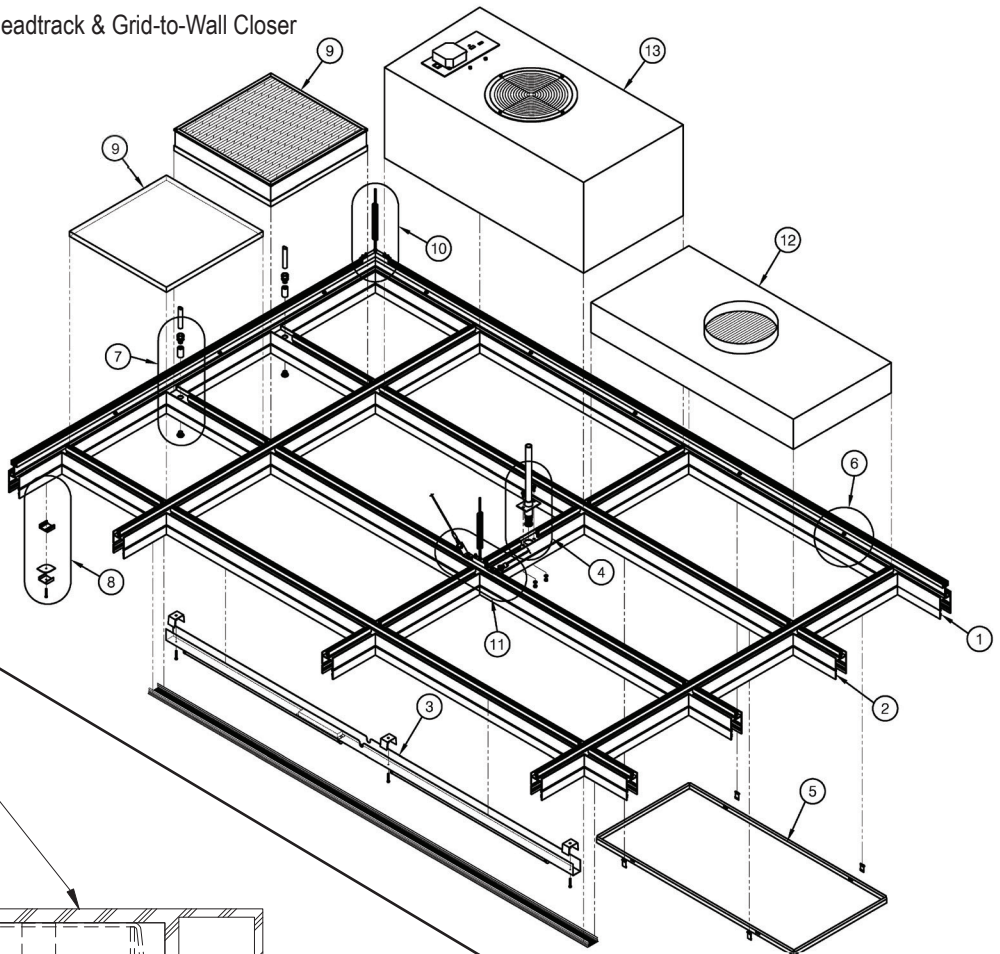
### FEATURES:

- Laminar flow air distribution technology
- MERV 14, HEPA and ULPA filter options
- 2.5" Flush Ceiling Grid System with integrated lighting (T5, T8, LED)
- Factory welded grid modules are manufactured in sizes up to 8ft x 24ft
- Grid-to-grid connections have pre-machined bolt holes for ease of installation
- Grid modules have integrated fire protection
- Top Load with GEL seal integrated into the grid frame
- Bottom 'Snap-In' Flush Face Screen that aerodynamically evens the airflow under the grid modules
- Grid is a proven product with over 1 Million square feet installed
- Installation takes a fraction of the time, manpower, and cost of conventional stick-built systems
- Fall protection hardware available
- Seismic bracing available
- Ducted Filters and Fan Filter Units available



**Integrated Laminar Airflow Technology and LED Lighting.**

1. Perimeter Grid 91249 - Extruded Aluminum
2. Interior Grid 91229 - Extruded Aluminum
3. Integral Light Fixture, Ballast, Wire Separator,
4. Fixture Clips Sprinkler Penetration
5. Face Screen and Clips
6. Module to Module Connection
7. Electrical Conduit Penetration Headtrack & Grid-to-Wall Closer
8. HEPA/ULPA Filter and Blank Pan
9. Corner Suspension Hanger
10. Interior Intersection Hanger and Seismic
11. Bracing Ducted Filter Module
12. Fan Filter Unit (FFU)



INTERIOR, EXTRUDED  
ALUM. POWDER  
COATED (96140)

LIGHT FIXTURE  
RETAINER CLIP,  
POWDER COATED

LIGHT FIXTURE  
RACEWAY,  
POWDER COATED

LED DRIVER

LED MODULE

LENS, CLEAR OR  
AMBER ACRYLIC

### LED INTEGRAL LIGHT FIXTURE DETAIL



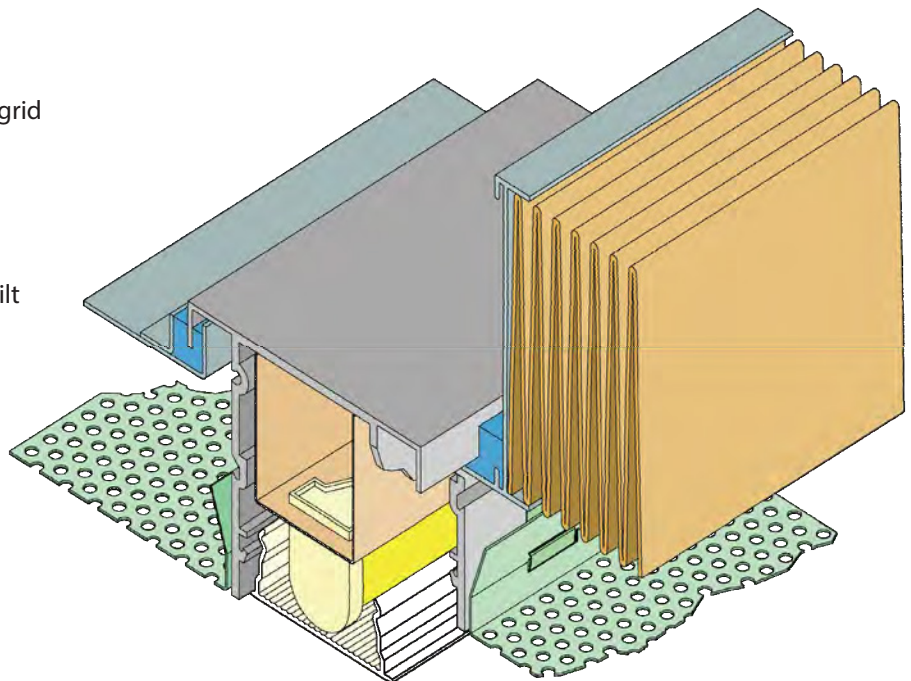


**BIO-GRID**  
CLEANROOM CEILING SYSTEM

## BOTTOM LOAD POWDER COATED EXTRUDED ALUMINUM FLUSH CEILING GRID SYSTEM

### FEATURES:

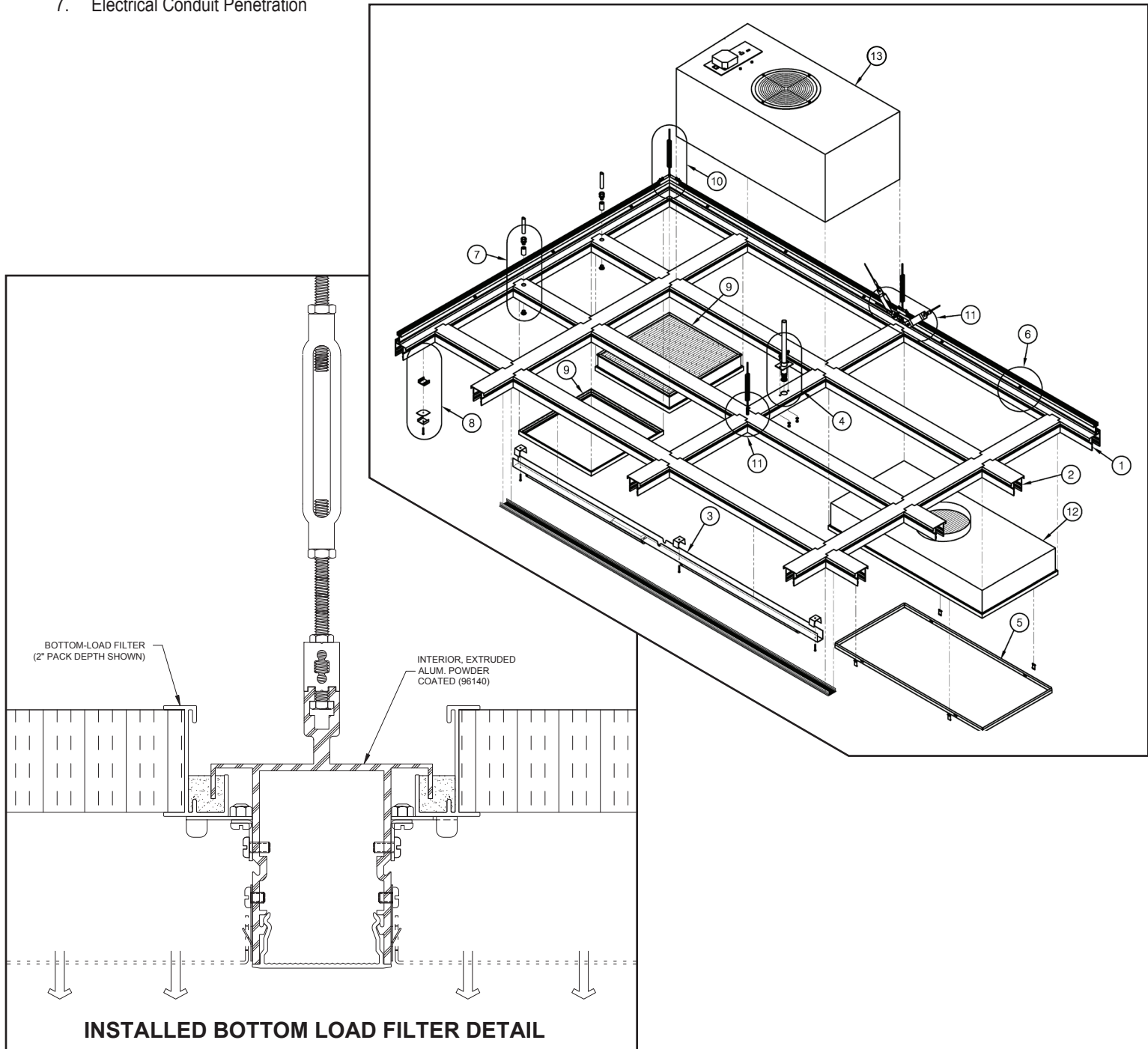
- Laminar flow air distribution technology
- MERV 14, HEPA and ULPA filter options
- 2.5" Flush Ceiling Grid System with integrated lighting (T5, T8, LED)
- Factory welded grid modules are manufactured in sizes up to 8ft x 24ft
- Grid-to-grid connections have pre-machined bolt holes for ease of installation
- Grid modules have integrated fire protection
- Bottom Load filters with integrated GEL seal
- Bottom 'Snap-In' Flush Face Screen that aerodynamically evens the airflow under the grid modules
- Grid is a proven product with over 1 Million square feet installed
- Installation takes a fraction of the time, manpower, and cost of conventional stick-built systems
- Fall protection hardware available
- Head Track connections available
- Seismic bracing available
- Ducted Filters and Fan Filter Units available



**Integrated Laminar Airflow Technology and LED Lighting.**



1. Perimeter Grid 96141 - Extruded Aluminum
2. Interior Grid 96140 - Extruded Aluminum
3. Integral Light Fixture, Ballast, Wire Separator, Fixture Clips
4. Sprinkler Penetration Detail
5. Face Screen and Clips
6. Module to Module Connection
7. Electrical Conduit Penetration
8. Headtrack & Grid-to-Wall Closer
9. HEPA/ULPA Filter and Blank Pan
10. Corner Suspension Hanger
11. Interior Intersection Hanger and Seismic Bracing
12. Ducted Filter Module
13. Fan Filter Unit (FFU)



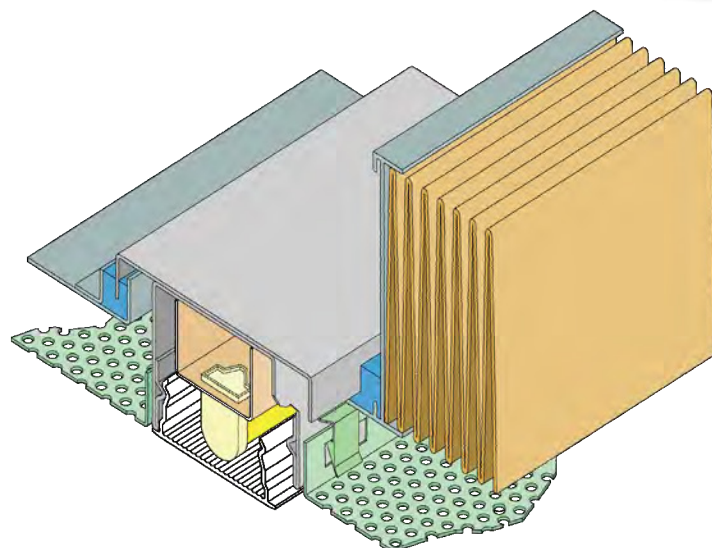


**BIO-GRID**  
CLEANROOM CEILING SYSTEM

## BOTTOM LOAD STAINLESS STEEL FLUSH CEILING GRID SYSTEM

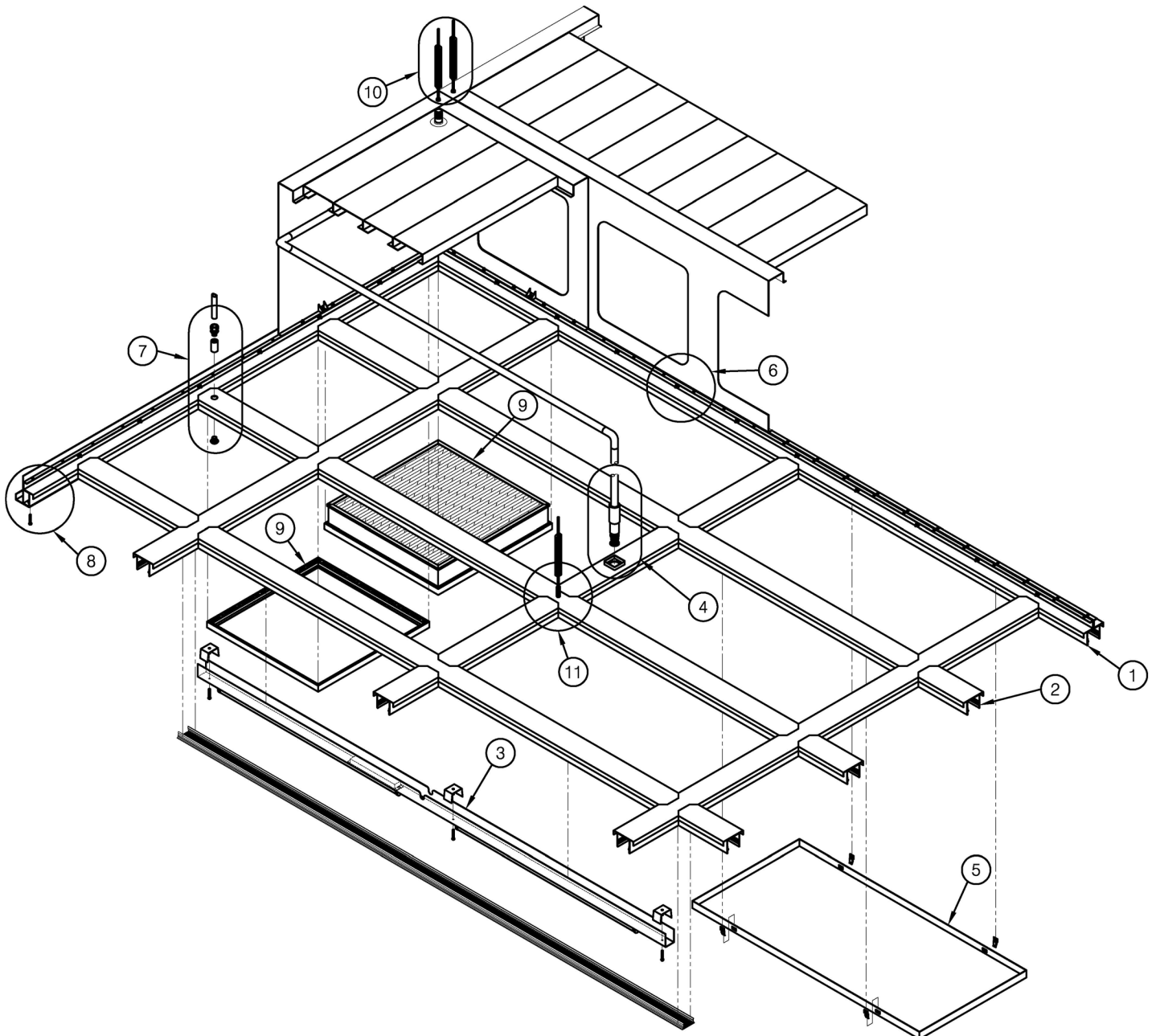
### FEATURES:

- Laminar flow air distribution technology
- MERV 14, HEPA and ULPA filter options
- 2.5" Flush Ceiling Grid System with integrated lighting (T5, T8, LED)
- Factory welded grid modules are manufactured in sizes up to 8ft x 24ft
- Grid-to-grid connections have pre-machined bolt holes for ease of installation
- Stainless steel grid modules are constructed from 304 or 316 grade material
- Grid modules have integrated fire protection
- Bottom load filters with integrated GEL seal
- Bottom 'Snap-In' Flush Face Screen that aerodynamically evens the airflow under the grid modules
- Grid is a proven product with over 1 Million square feet installed
- Installation takes a fraction of the time, manpower, and cost of conventional stick-built systems
- Head Track connections available
- Seismic bracing available



**Integrated Laminar Airflow Technology and LED Lighting.**

1. Perimeter Grid - Stainless Steel
2. Interior Grid - Stainless Steel
3. Integral Light Fixture, Ballast, Wire Separator, Fixture Clips
4. Sprinkler Penetration Detail
5. Face Screen and Clips
6. Module to Module Connection
7. Electrical Conduit Penetration
8. Grid-Wall Connection Detail
9. HEPA/ULPA Filter and Blank Pan
10. Corner Connection Hanger
11. Interior Intersection Hanger





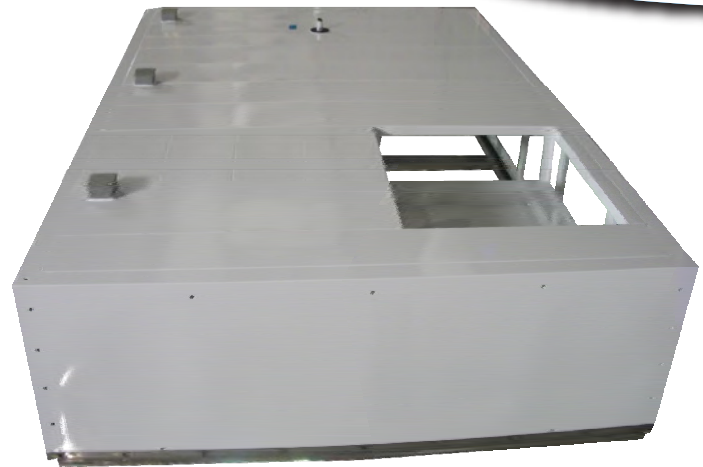


**BIO-GRID**  
CLEANROOM CEILING SYSTEM

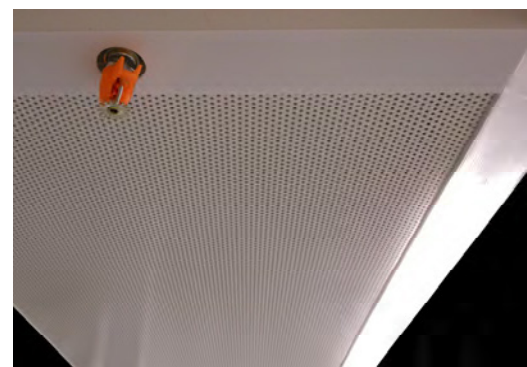
## PLENUM MODULES FLUSH CEILING GRID SYSTEM

### FEATURES:

- Plenum modules provide direct support for recirculation air handlers
- Plenum modules eliminate the need for field built plenums
- Plenum modules reduce pressure drop within the cleanroom ceiling system
- Modules can be manufactured with shared air openings to balance air flow to adjacent plenums
- Plenum modules can be attached to either top load, bottom load, or stainless steel flush grid systems
- Plenum-to-plenum connections have pre-punched bolt holes for ease of installation
- Plenum modules are suspended from existing structure or a custom floor mounted structure can be provided
- Plenum modules have integrated fire protection
- Plenum modules have integrated electrical wiring
- Modules are available in sizes up to 8ft x 24ft



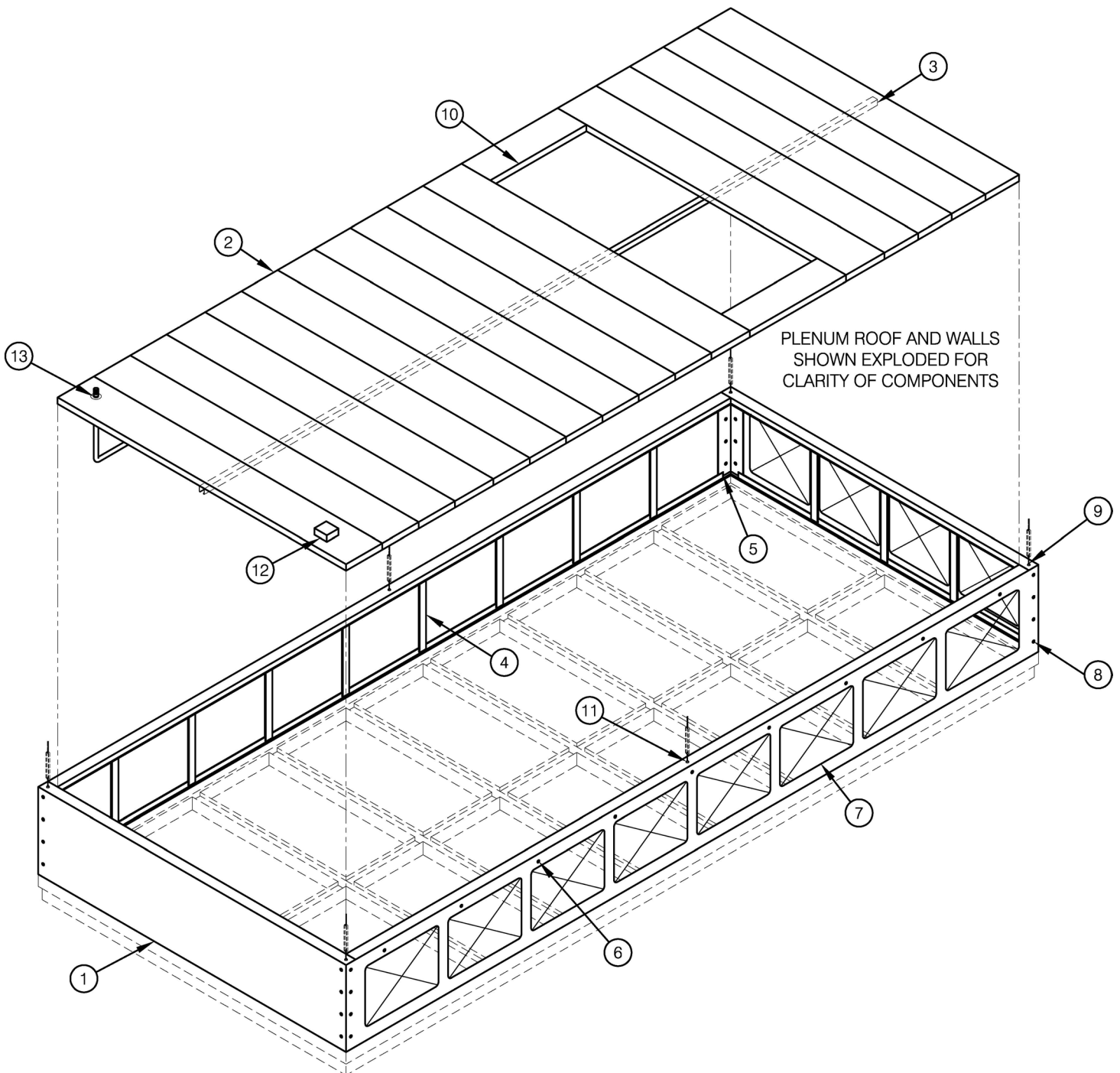
TOP OF PLENUM MODULE SHOWN WITH  
DIFFUSION SCREEN AND STAINLESS GRID



BOTTOM FACE OF PLENUM MODULE  
SHOWN WITH SPRINKLER AND LIGHTS

**Integrated Laminar Airflow Technology and LED Lighting.**

1. Plenum Side and End Wall
2. Plenum Roof Panels
3. Reinforcement for Roof Support and Leveling Grid Below
4. Vertical Plenum Stiffeners
5. Corner Connection Angle
6. Module to Module Connection
7. Module to Module Shared Air Opening
8. Module to Module Connection or Structural Column Support Point
9. Plenum Supply Air Opening
10. Mid-Span Suspension Point
11. Electrical Junction Box
12. Sprinkler Drop Penetration





**BIO-GRID**  
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## FAN POWERED PLENUM MODULES FLUSH CEILING GRID SYSTEM

### FEATURES:

- Fan powered plenums are ideal for retrofits with no space available for recirculation air handlers
- Provides great redundancy in the system
- Available with complete control system, controlled by a PC with interface to building management systems
- Wall Mount Fan Controller - can control up to 200 fan and motor assemblies
- Available with handheld controller to individually set and control each fan/motor assembly
- Plenum modules eliminate the need for field built plenums
- Modules can be manufactured with shared air openings to balance air flow to adjacent plenums
- Plenum modules are suspended from existing structure or a custom floor mounted structure can be provided
- Plenum modules have integrated fire protection
- Plenum modules have integrated electrical wiring
- Modules are available in sizes up to 8ft x 24ft



SHOWN WITH  
RETURN AIR PLENUM

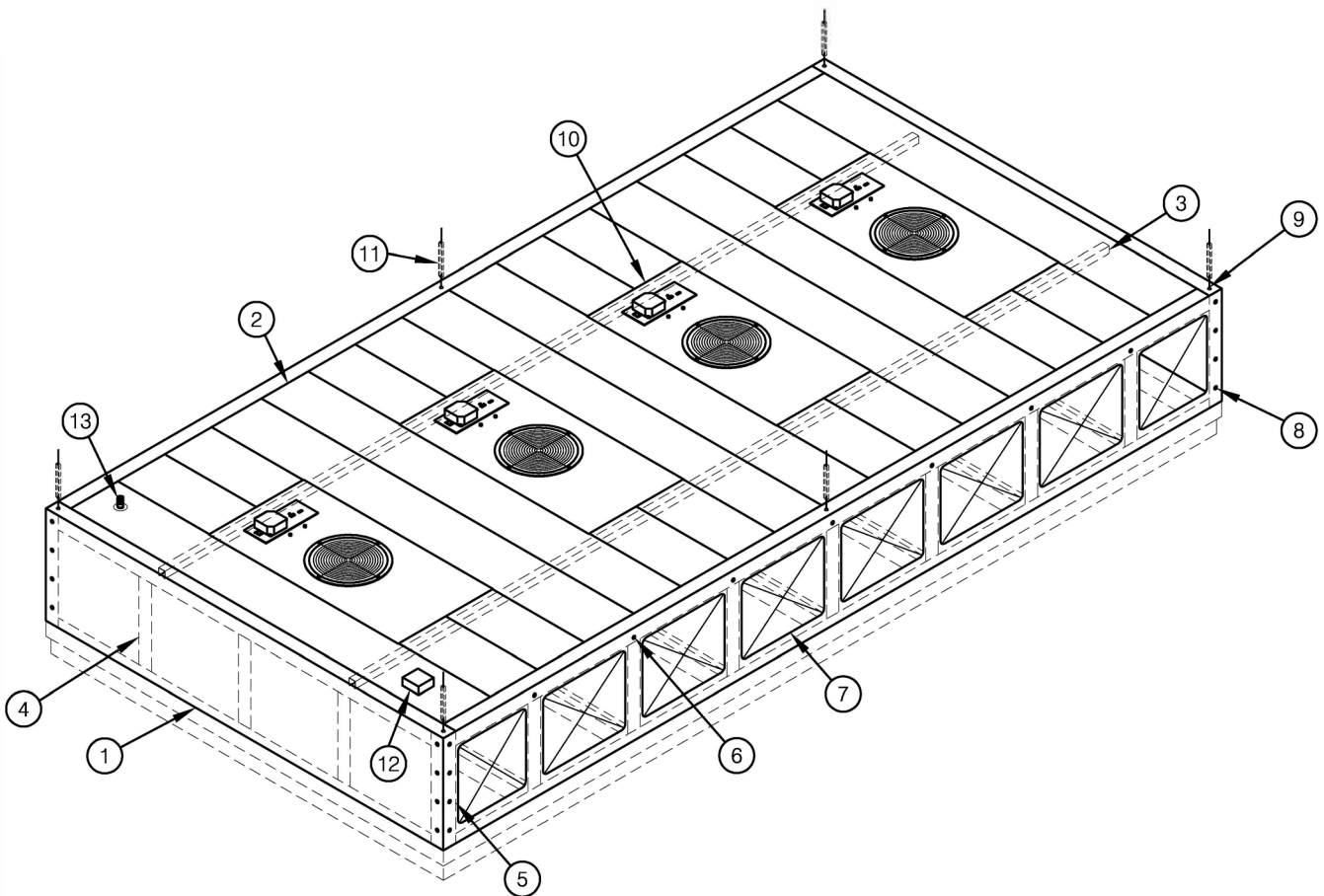
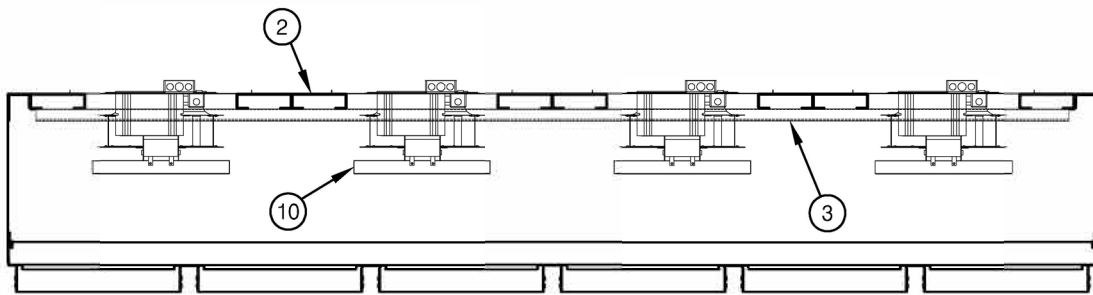


INSIDE FAN POWERED PLENUM MODULE

**Integrated Laminar Airflow Technology and LED Lighting.**



1. Plenum Side and End Wall
2. Plenum Roof Panels
3. Reinforcement for Roof Support and Leveling Grid Below
4. Vertical Plenum Stiffeners
5. Corner Connection Angle
6. Module to Module Connection
7. Module to Module Shared Air Opening
8. Module to Module Connection or Structural Column Support Point
9. Corner Suspension Point
10. TPA - Fan Powered Plenum
11. Mid-Span Suspension Point
12. Electrical Junction Box
13. Sprinkler Drop Penetration



# BIO-GRID

CLEANROOM CEILING SYSTEM



## **FLUSH CEILING GRID SYSTEMS**

- Top Load extruded aluminum ceiling grid system
- Bottom Load extruded aluminum ceiling grid system
- Bottom Load stainless steel ceiling grid system

## **PLENUM MODULES**

- Plenum Modules with integrated lighting, fire protection and filtration systems
- Fan Powered Plenum Modules with integrated custom control systems

## **AIR HANDLERS BY THERMAL CORPORATION**

- Recirculation Air Handlers with Direct Drive fans
- Custom Make-up Air Handlers.

## **LAMINAR FLOW AND RADIAL PATTERN HOSPITAL/CLEANROOM DIFFUSERS**

- Aluminum and Stainless Steel Models
- Steri-System OR Air Curtain Systems

