



The AES Performance Wall is ideally suited for our customers in the medical device, micro-electronics, semiconductor, and food industries. This modular wall system features a steel stud frame and batten system, non-shedding, demountable wall panels and flush doors with vision panels. Its versatility makes it an ideal choice for any industry looking to create clean, controlled manufacturing space.

***AES “Right Fit Solutions”  
Your One-Stop Source for your Cleanroom needs***

AES Clean Technology, Inc. has been providing quality cleanrooms and controlled environments to meet our customer’s varied needs for 25 years. AES “Right Fit Solutions” feature our own application-specific cleanroom equipment as well as integrated components from leading manufacturers. All of the products offered meet AES performance criteria, industry standards and can be integrated into new or existing cleanroom facilities.

AES is committed to offering the “Right Fit Solutions” to meet your needs, your budget, and your schedule. We understand that “one size fits all” does not work for every application and are ready to customize our products without sacrificing value.

## **FEATURES**

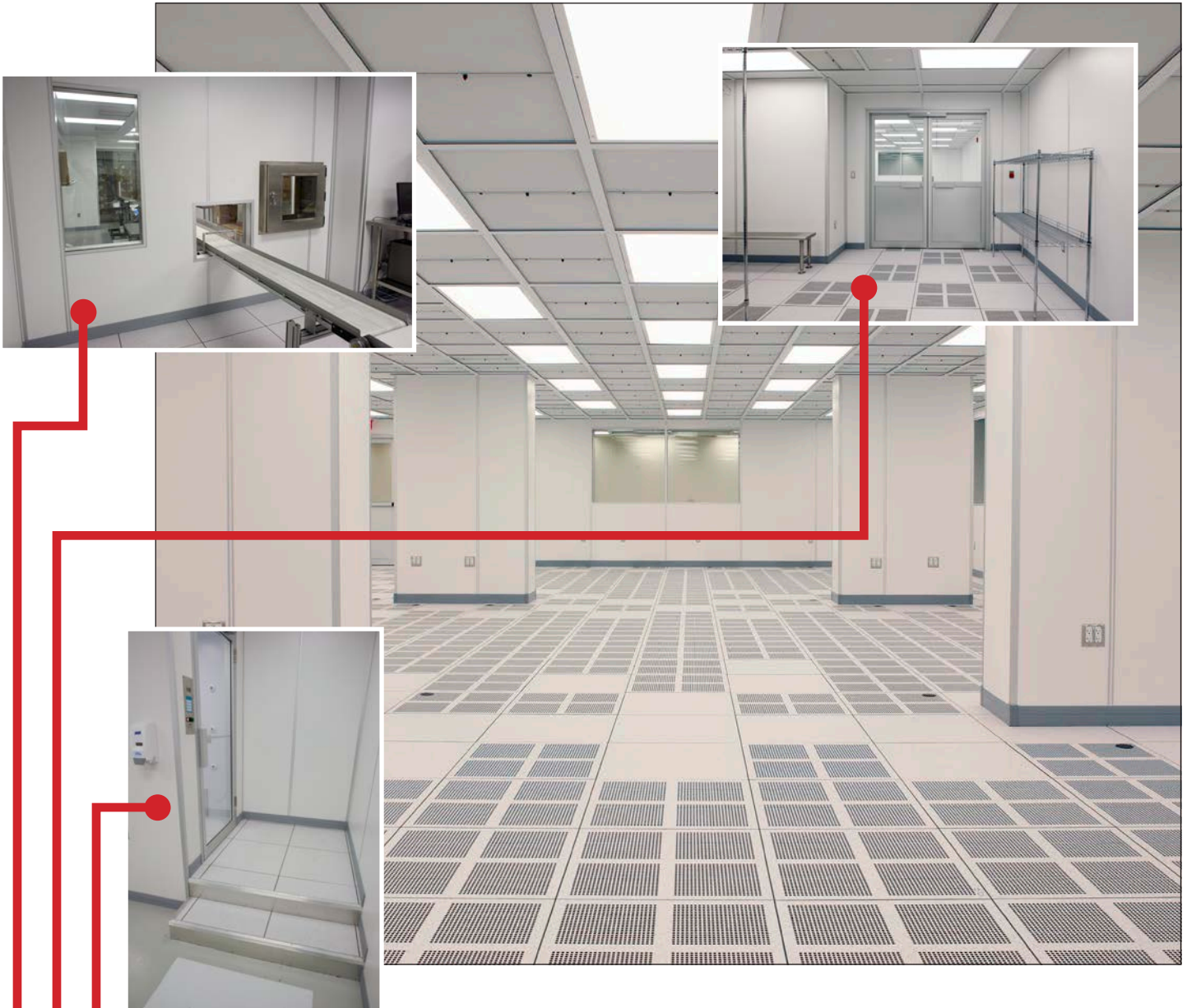
- Fully demountable, non-progressive construction
- Wide variety of panel facings available
- Integrate with our AES Pharma walk-on ceiling or our gasketed T-grid ceiling system
- Variable cavity wall design for return air or utilities eliminates need for expensive external ductwork
- Partitions can be easily serviced or reconfigured

## **BENEFITS**

- Fast, clean modular construction and minimal maintenance saves time and money
- Panels can be easily removed, allowing for equipment moving, then reinstalled
- Large supply of stock inventory

▼ ISO 5 (Class 100)

- 2" Heavy-Duty Grid
- HEPA Fan Filter Modules
- Raised Floor
- "Finger Wall" Returns



Optional Air Shower Entry

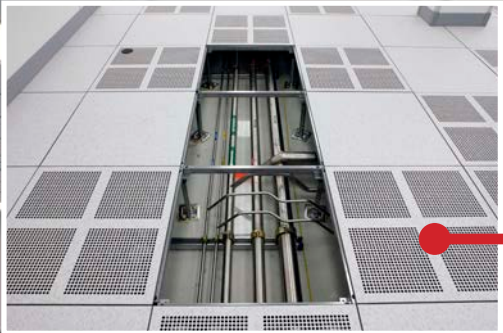
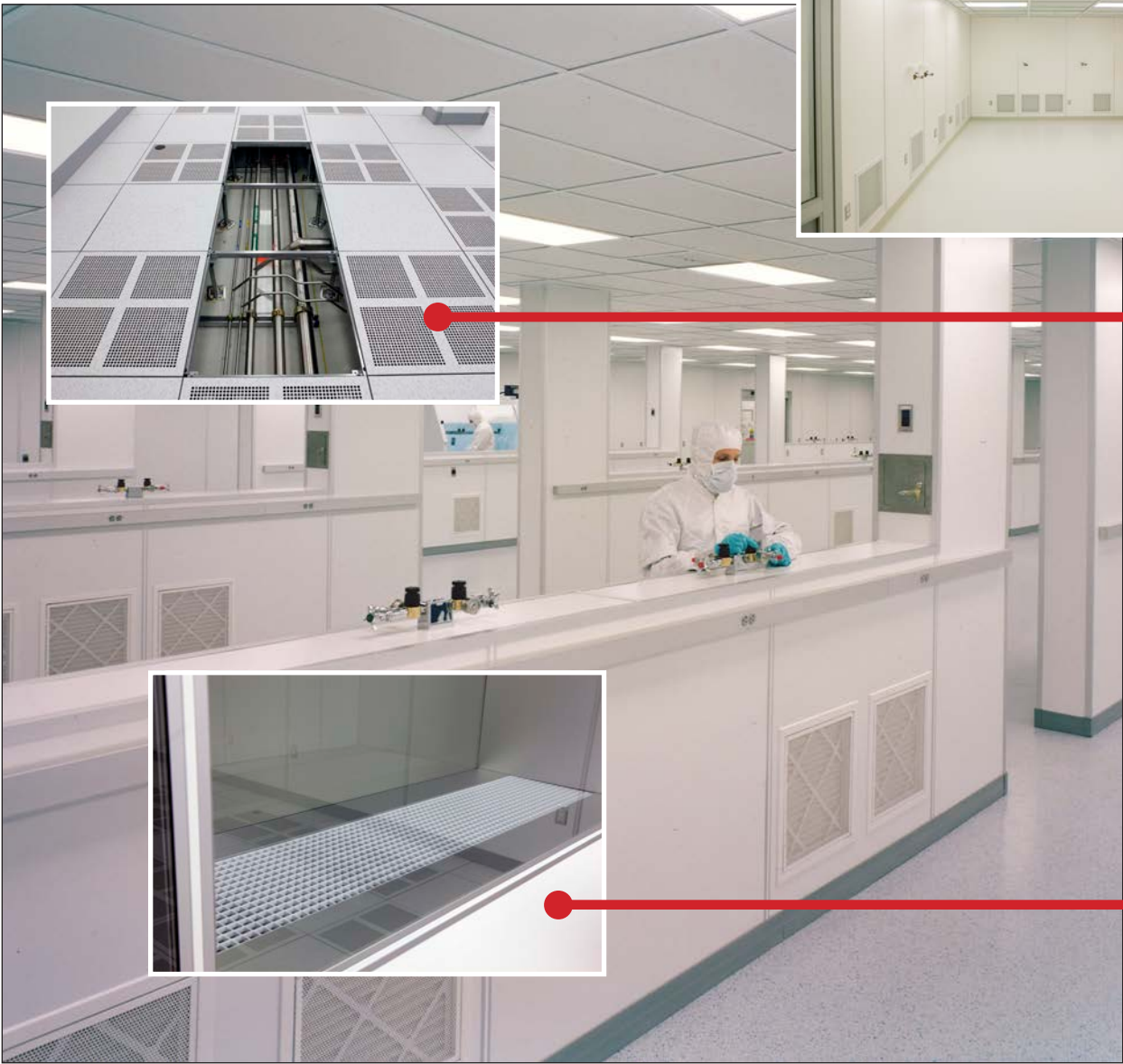
Double Door Option

Conveyor & Pass Thru Integration

Flush Window Detail ►



▼ Half Height Wall with Utility and Return Air Columns



Return Air Through Double Window

Micro-Electronics Application with Process Utilities and Raised Floor Option



▲ Photolithography Room (Micro-Electronics Industry)

# Technical Data

## WALL PARTITIONS:

1/2" thick wall panel is a durable, non-shedding, particle-free panel suited for cleanroom environments. Standard wall panel is melamine composite panel (MCP), non-fire retardant.

## CAVITY CONSTRUCTION:

Variable cavity wall design allows air returns to be part of the interior wall cavity, where applicable, eliminating the need for expensive external ductwork.

## FRAMING & EXTRUSIONS:

Partitions are mounted to 3-5/8" deep x 18-gauge galvanized steel studs. Single, one-piece unspliced universal "Z" shaped stud with slotted face to accept resilient type wire clips or drill-point screws.

## EXPOSED TRIM:

Exposed trim consists of clear anodized aluminum batten strips with vinyl inserts. Inside and outside corner trim is clear anodized aluminum with vinyl inserts.

## GASKETING:

1-1/8" wide x 1/8" thick closed cell polyvinyl chloride foam tape with pressure sensitive adhesive on one side is applied at all seams and joints in back of the aluminum trim on one or both sides of the wall.

## FASTENERS:

Metal clips and screws are specially designed and properly sized for application of panels to metal studs.

## WALL BASE:

4" high rigid PVC baseboard screws into place without adhesive. A horizontal insert bead conceals the fastening screws.

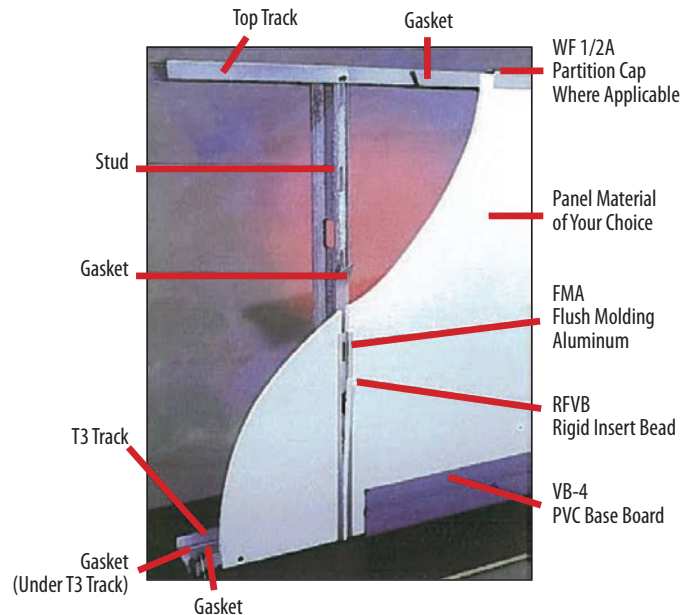
## WINDOWS:

Flush, non-progressive window units, using an aluminum glazing system, have no exposed fastenings or visible glass stops and provide for single glazing.

## DOORS:

Flush doors include door frame, door and standard hardware

- Door frame is 1-3/4" wide x 4-1/2" deep x size of door opening, constructed of clear anodized aluminum, .110" thick extruded aluminum alloy, clear anodized finish.
- Door is 1-3/4" thick with 1/4" thick clear tempered glass top panel and .110" thick extruded clear anodized aluminum bottom panel.
- Standard door hardware consists of
  - 4-1/2" ball-bearing type hinges
  - Latch lock with paddle on the push side
  - Lever handle on the pull side
  - Heavy-duty closer (one per leaf)
  - Surface mounted, fixed type door sweep



## OPTIONS

- Wall panel options include:
  - Single-layer or composite materials including:
    - Fire retardant MCP (Melamine composite panel)
    - FRP (Fiberglass-reinforced plastic) over gypsum or polypropylene
    - White baked enamel aluminum skin over honeycomb core
    - White baked enamel aluminum skin on one side of foil backed gypsum board
  - Composite panel of uPVC over galvanized steel with 1/2" aluminum honeycomb core
  - Anti-static – ESD panels
- Framing Options include:
  - 6" stud system
  - 1" to 2-1/2" furring studs
  - Double stud design for variable width cavity
- Exposed trim options include:
  - Aluminum powder coated or PVC
- Windows with double glazing
- Door Options include:
  - Steel door frame
  - Steel doors
  - Fully glazed doors
  - Safety glass vision panels
  - Emergency panic device
  - Automatic door operators