

# INC<sup>®</sup> Pre-Assembled Structures “Drop-In-Place” Noise Control

**Pre-Engineered • Factory Finished • High Performance • Rugged Durability**

INC pre-assembled structures offer a high performance, cost-effective alternative to field built designs based on either conventional construction materials or modular acoustical components. Our pre-assembled structures are the ideal solution for projects facing limited time, space or funding. By controlling every aspect of the design and assembly in our factory, we can guarantee levels of mechanical, structural and acoustical performance that are difficult to

## Take Advantage of These Benefits

- ✓ Demanding Design Possibilities
- ✓ Controlled Fit & Finish Details
- ✓ Shorter Overall Project Lead Times
- ✓ Minimal Site Down Time and Expense
- ✓ No Construction Mess or Disruption
- ✓ Crane or Fork Lift Portability
- ✓ Fixed Total Project Cost
- ✓ High Acoustical & Structural Performance
- ✓ Guaranteed Finished Results



## Typical Applications

The design parameters of an INC pre-assembled structure is limited only by shipping and handling restrictions that may exist. Ideal applications include:

- Operator Control Rooms
- Pulpits
- Crane Cabs
- Quiet Rooms
- Security Rooms
- Genset Enclosures
- Test Chambers
- Factory Offices
- QC Rooms
- Construction Site Offices
- Speech Isolation Booths
- Outdoor Equipment Enclosures
- Broadcast / Communication Center
- Test Cells
- Military SCIF
- Mechanical / Electrical Equipment Housing
- Computer Rooms
- Power Plant Control Rooms
- .... and many more



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# INC<sup>®</sup> Pre-Assembled Structures

## Construction Basics

Our general construction method will depend largely upon the design and performance criteria specified for any given project. For medium duty industrial and commercial applications we will typically base the design around using our modular acoustical panel system called Panl-Wall<sup>®</sup> and incorporate unitized assembly methods and floors when required. This can be as simple as assembling a modular panel enclosure for example, on to a unitized base frame or floor with fork-lift capability.



For more robust structures requiring greater portability, high acoustical performance and resistance to severe environments, we may begin with a complete, fully welded structural sub-frame upon which we will construct walls and ceiling with either pre-engineered modular components or built-up insulated construction with steel skins.

### Doors & Access Points

Single and double leaf acoustical hinged doors as well as manual and automated sliding doors are available to provide personnel and parts entry and exit wherever needed. In addition we offer a full compliment of access plugs and removable panels for local access.



### Viewing Windows

High performance double glazed window units are available in a wide range of sizes and glazing materials to suit the most critical requirements. Our windows can be sized and arranged to provide unlimited viewing access.

### Silenced Ventilation

Fully silenced acoustically compatible ventilation systems are available to integrate with any Panl-Wall<sup>®</sup> structure. We offer a variety of ventilating fans and air conditioners along with acoustically and aerodynamically designed silencers, baffles and vent panels.



### Lighting & Electric

For general lighting and convenience electrics we offer basic components for either surface or concealed mounting.

### Portability & Handling

Our structures can be designed for handling by fork lifts or overhead cranes either lifting from either top or base mounted lifting points.

### Severe Service Option

For use in extremely harsh environments such as steel mills, pulp & paper plants, mines, rolling mills, etc., INC has developed our Severe Service Option which includes cladding all exposed outside corners and edges with  $\frac{3}{8}$ " thick structural angle, fully welded corners and joints, heavy lifting plates and brackets and heavily reinforced floors and bases. Heavy gauge exterior surfaces up to  $\frac{1}{4}$ " thick steel.



### Load Bearing Ceilings

INC can provide a load bearing ceiling to allow storage or equipment placement on top of your pre-assembled structure or to allow for two-story stacking of structures.

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## Construction Styles & Options

To provide solutions for the widest variety of applications, INC Pre-Assembled Structures feature an array of related components providing high performance acoustical characteristics combined with rugged structural integrity and design flexibility. A range of basic panel constructions and joining methods are offered each providing a unique combination of acoustical and mechanical features to best meet your specific requirements.

### Design Choices

INC offers these distinct construction designs to meet any application:

#### H-Member Joint

#### Tongue-and-Groove Plenum Style

#### Outdoor Interlock

#### Seamless Unitized

### Construction Options

- Wall construction up to 8" thick"
- Sound transmission loss ratings up to STC-52 and NRC=1.05
- Interior sound absorption ratings up to NRC=1.05
- Fully insulated and vibration isolated floors
- Standard material is electro-galvanized steel, available in G90 galvanized steel, cold rolled steel, aluminum and stainless steel
- Standard construction material gauges from 22 gauge to 18 gauge
- Heavy duty construction material gauges up to ¼" steel plate
- All panels meet ASTM E84 Class I fire rating ... fire resistive panel construction available in 60 and 90 minute designs based on ASTM E119 criteria



### Performance Enhancements

- RFI / EMI Shielding
- X-ray Shielding
- Ballistic Impact Resistance
- Outdoor Weather Resistance

### Portability / Handling Options

- Fork liftable from base using dedicated fork tubes
- Crane liftable from base using fixed or detachable lifting brackets
- Crane liftable from top using lift eye and plates
- Base casters and levelers available for some applications



Base Casters



Dedicated Fork Tubes

# INC<sup>®</sup> Doors and Windows

## Acoustical Personnel Doors

We offer a variety of hinged and sliding doors to accommodate most personnel access requirements. Our doors are fully compatible with all Panl-Wall<sup>®</sup> and Pre-Assembled components both structurally and acoustically.

**Door Performance Ratings of STC-30 • STC-40 • STC-47 • STC-52**

### Standard Door Features & Available Options

- From 2' to 4' wide single leaf swing
- From 6' to 10' wide double leaf swing
- Standard units from 6', 7', 8' and 10' high
- Single and double sealed units
- Magnetic and compression acoustical seals
- Lift-off and level swing hinges
- Several latch and lock styles
- Panic egress hardware
- Viewing Windows
- Door closers
- Automatic door operators
- Single and bi-parting slide doors
- Custom sizes and configurations available
- Doors available in all construction materials to match panels



## Acoustical Viewing Windows

Available as either integrated factory glazed units or as modular windows sized and designed to meet your requirements.

**Window Performance Ratings of STC-45 • STC-52**

### Acoustical Window Features & Available Options

- From 12" x 12" up to 48" x 96" window size
- Double glazed using leak proof automotive grade gasket
- Moisture absorbing desiccant eliminates fogging
- Available in tempered, safety or wire reinforced glass up to 1/2" thick
- Polycarbonate or Lexan<sup>®</sup> available
- Impact resistant units available to UL Level 3 bullet resistance
- Custom shapes, slanted and cantilevered windows available



# INC<sup>®</sup> Options & Accessories

## Factory Finishes

INC can apply expert high quality factory finishes to any of our Pre-Assembled Structures:

- Industrial duty air-dry enamel paint systems
- Catalyzed epoxy and chemical cure paint systems
- UV inhibited paint coatings
- Themec Endurashield<sup>®</sup> outdoor coatings
- Textured finishes



## Interior Finishes

- Typically our interior wall surfaces are perforated and acoustically absorptive
- Solid interior surfaces are available and may be treated with individually mounted decorative fabric wrapped acoustical panels
- Floors may be supplied as painted or unpainted flat or diamond plate steel or may be finished with a variety of industrial grade tiles and finishes
- Custom work benches, tables and shelving available



Custom Work Table

## Local Access

You won't have to compromise on local access for maintenance, parts loading or unloading, inspection or other requirements with our array of options.

- Access plugs
- Removable panels
- Hinged access ports

## Ventilation

A complete range of silenced ventilation packages are readily available to meet most requirements and are fully compatible with your completed INC<sup>®</sup> structure.

- Ducted and non-ducted exhaust fans
- Silenced vent panels, baffles, and plenums
- Ducted and non-ducted air conditioning units
- Acoustical louvers and silencers

## Lighting & Electric

A variety of electrical accessories are available that can be incorporated into your system including:

- Convenience wall receptacles and switches
- Several styles of lighting including fluorescent with discreet ballasts
- Load and distribution centers
- Exposed or concealed wiring packages
- Telephone & data lines



Factory Wiring

Standard Options .... Custom Results!

# How They're Made

By fabricating and assembling our structures entirely in our factory, INC is able to guarantee the fit, finish and performance of all our pre-assembled units. Here is a sampling of the many steps involved:



Custom Base Section Being Fabricated



Custom Floor Section Being Fabricated



Custom Load Bearing Roof Section Being Fabricated



Modular Wall Panels Being Assembled Onto Base



Custom Suite Being Assembled



Assembled Structure Ready for Finishing Trim



Electrical & Finish Work Being Completed



Custom Cantilevered Walls & Windows Being Assembled

Versatility • Choices • Selection • Performance • Satisfaction

## ***INC Custom Engineered Solutions***

**Analysis • Design • Manufacture • Turnkey Solutions • Results**

*Uniquely Applying Our Expertise to Your Specific Project Needs*

INC manufactures and distributes a broad range of high performing products and structures used to solve the most common to the most unusual and complex noise control applications ... from a simple soundproof partition to a jet engine test cell ... INC does it all. We are unique in our ability to provide truly customized systems in a timely and cost-effective manner. With INC, your specific project needs and performance goals will never be compromised simply to fit into a standard product offering or pre-conceived solution.

Our Custom Engineered Solutions Group provides structures used for three basic approaches to noise control:

- Enclose or isolate noisy equipment or operations
- Enclose or isolate personnel, operators and technicians
- Create controlled test and measurement environments

Our line of Pre-Assembled Structures falls squarely in the center of our Custom Engineered Solutions activity and as such, we do not have a list of standard sizes and configurations. Each is designed to meet the criteria that you require and is unique in that regard. For INC to prepare a proposal and price quotation we need you to tell us about the performance requirements you are seeking including acoustics, aesthetics, mechanical and structural design goals.



## **Additional INC Product Information**

If you are considering an INC Pre-Assembled Noise Control Structure you may also find these additional INC publications of interest:

- ✓ **INC Panl-Wall<sup>®</sup> Modular Acoustical Metal Panels** (Bulletin # 002-1006)
- ✓ **INC Outdoor Noise Barriers** (Bulletin # 004-1003)
- ✓ **INC Test & Measurement Chambers** (Bulletin # 005-1001)
- ✓ **INC Dyno Test Rooms for Powersports Industry** (Bulletin # 001-3004)
- ✓ **INC Flexible Noise Control Curtain Systems** (Bulletin # 006-1002)



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