ENERGY LORGE Insulated Panel Systems



COMMERCIAL INDUSTRIAL COLD STORAGE



Environmental Control You Can Count On







Tongue & Groove Joints

Exterior Wall Systems

Strong

Energy Lok[™] insulated panels can be used in longer spans than typical steel wall panels, which can mean less girts. It can also be used in place of stud wall systems as interior division walls.

Versatile

Energy Lok can be used for Cold Storage walls and ceilings, commercial exterior walls and roofs and interior partition walls. Panel facings can be varied to accommodate your unique job requirements.

Energy Efficient

Energy Lok's expanded polystyrene core has no loss of R-Value over time. Expanded polystyrene R-Value is 4.2 per inch. Optional Neopor[®] or extruded polystyrene R-Value is 4.9 per inch.

Durable

Panel skins offer a variety of facings so you can select the facing that suits your needs. Cold temperatures and harsh environments are no match for Energy Lok panel facings.



Rapid Installation

Panels are quick and easy to install using a simple tongueand-groove design. Panels simply slide together and into place. Quick installation means less labor in the field.

Flexible

USDA, (United States Department of Agriculture) facing options include 26 ga. Painted white steel; .032 and .016 white embossed aluminum; .090 Class A FRP, (Fiberglass Reinforced Plastic); 26 ga. embossed stainless steel and 26 ga. Plastisol embossed steel.

Engineered

Energy Panel Structures, Inc. (EPS) can engineer the Energy Lok system for nearly any application. On-staff engineers can assist you on custom designs.

Cost Effective

The Energy Lok system may save money in energy costs and the panels are less expensive than most urethane foam-filled panels. **Partition Wall**

Experience

EPS manufactures a quality line of insulated panel systems for agricultural, commercial, residential, industrial and cold storage applications. We have supplied panels to some of the largest food processors and distributors in the nation and have been in the cold storage building business since 1981. This experience translates to quality in building products that work.







Roof Systems

Tongue & Groove

Exterior Walls, Partitions, Ceilings







Energy Lok Panel Systems are produced on automated continuous line manufacturing equipment and designed specifically to produce consistent high quality.

Energy Lok panels feature environmentally safe expanded polystyrene bonded to facings of galvanized steel with 40-year warranty paint system.

Standard Product Specifications:

Panel thickness:	2" – 12"
R-Value:	R9 –R51
Panel Width:	46"
Panel Length:	Up to 55'
Joint Configuration:	Tongue and Groove
Insulation Material:	Expanded polystyrene 1 lb. density
Panel Profile:	Mesa Wave profile 1/8" deep x 3/4" wide, 4" o.c. indented longitudinal profile
Panel Facing:	Prepainted stucco embossed 26 ga. galvanic protection coating steel with baked on siliconized polyester paint.
OPTIONS:	Extruded polystyrene core Neopor [®] graphite polystyrene core .032 embossed aluminum 26 ga. stainless steel 26 ga. embossed plastisol 0.090 Class A FRP

Ceiling Panel Suspension

Energy Lok ceiling systems are available in USDA approved facings and utilize a "T" bar suspension system.



Standing Seam Roof Panel System

Energy Lok Standing Seam Roof Panel System is designed to install over roof purlins 5'-0" o.c. and roof slopes of 2:12 and greater. Energy Lok roof panels install easily and provide a bright and durable interior finish. Call EPS for your commercial standing seam roofing needs.





Options

"S" Curve insulation end joint option recommended on exterior walls to reduce shadow lines in wall panels. This option is only available with expanded polystyrene and Neopor core.

Energy Lok panels are available with Extruded Polystyrene cores or Neopor for an R-Value of 4.9 per inch.

Panel facings can be varied from one side to the other. For instance, one side can be 26 ga. painted steel while the other is FRP.

Energy Lok 26 ga. embossed steel skins are available in Polar White, Sand Gold, Ivory, Light Blue and Egyptian White. (Egyptian White also available in smooth.)





Panel facing options include .032 and .016 white embossed aluminum, .090 Class A FRP, 26 ga. embossed stainless steel and 26 ga. Plastisol embossed steel as well as the standard 26 ga. painted steel.

Optional Energy Lok panel accessories are available for every panel application, including base and top attaching channels and angles, fasteners, etc.



General Specifications

Pre-Insulated Metal Panels Division 7, Section 07400 Part 1 — General

1.1 Description

Furnish and install all steel-faced factory-insulated wall panels forming the exterior closure walls, and the accessories used in conjunction with the walls to make them air and water tight.

1.2 Design

The width, thickness, gauges and solid core strength shall be as required to contribute to the combined action of the wall in resisting the design load of

#/sq.ft. inward and #/sq.ft. outward with a deflection not to exceed L/180. In addition to the structural criteria mentioned previously, the panel shall be designed in such a manner as not to exhibit thermal rippling on the face sheet when installed in a multispan condition.

1.3 Shop Drawings

Furnish detailed drawings showing profile and gauge of both exterior and interior panel location, type of fasteners; location, and method of attachment; location and type of sealants and other details as may be required.

1.4 Substitutions

This specification is written with Energy Panel Structures, Inc. Energy LokTM panel as a basis of acceptable performance. No substitutions will be considered unless written request for approval is received in the architect's office at least 14 days prior to date for receipt of bids.

1.5 Submittals

Submit erection/shop drawings for each product specified showing all erection procedures and accessories required.

1.6 Quality Assurance

A. Manufacturer

The manufacturer shall have had at least 5 years experience in the production of continuous foam panels. Manufacturer shall demonstrate past experience with examples of projects of similar type and exposure. B. Installer

The installer shall be authorized by the panel manufacturer.



Part 2 — Products 2.1 Material

A. The basic panel shall be _____ " thick, 46" wide as detailed on the design drawings. The side joint shall be of tongue and groove design. The interior and exterior female joints shall be field caulked. The fastener shall positively lock the face sheet of the panel to the structural supports and provide positive resistance to negative load pull-off.

B. Interior and Exterior Face and Finish

Panel faces shall have shallow 3/4" wide profile 4" o.c. and have a stucco embossed finish. It shall be formed of galvanic protection steel. Panels face colors to be

Paint finishes to be siliconized polyester with minimum dry film finish of 1.0 mil including primer.

C. Insulation — Core insulation shall be:

Virgin expanded polystyrene with a minimum of 1.0 lb. density/cu.ft. density having K factor of .24 BTU/sq.ft./HR/F at 40 mean temperature.

D. Perimeter Trim

Furnish all trim and gauge metal flashing with same coating and color as the exterior face of insulated panels.

2.2 Performance

A. Panels have been tested for and met ASTM E84 Class "A" surface burning and UL 1715 Room fire test.

B. Meets major building code requirements with standard fire suppression system.

C. Insulated panels contain combustible components and may constitute a fire hazard if used or installed improperly. They should not be exposed to open flame or ignition source.

Part 3 — Execution

3.1 Fasteners

Dependent on loading requirements of specific application. Details shown on drawings.

3.2 Erection

The installation of the insulated panels, fasteners, trim, etc. shall be performed in accordance with the approved layout drawings, specifications and manufacturer's installation instructions.

3.3 Damaged Material

Repair or replace any and all panels and trim that has been damaged upon determination of responsibility.

3.4 Material Warranty

Material is under warranty for one year from date of shipment from manufacturer's plant.

NOTE: Contact local code officials and insurance companies about fire suppression systems.

Strong and Dependable

Simply Better Buildings!

You can depend on EPS quality because of our investment in state-of-the-art laminating technology and strict quality control procedures.



Headquartered in northern Iowa, EPS has a local dealer network of more than 400 independent authorized dealers. Additional manufacturing locations are in Perryville, Missouri and Clyde, New York. EPS was established in 1981 and is an employee-owned subsidiary of the Mac Arthur Company of St. Paul, Minn.

INDEPENDENT AUTHORIZED DEALER



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Panel Associatio

100% Employee Owned–100% Committed to Quality













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