

EBTECH EXPANDED POLYSTYRENE (EB-EPS-S) COMPOSITE PANEL

Ebtech Expanded Polystyrene Foam (EB-EPS-S) composite panel cores are comprised of a rigid foam insulating material, which is bonded between sheets of structurally rated Oriented Strand Board (OSB). These panel cores offer superior strength, thermal performance, ease of installation as well as finish-ready exterior and interior surfaces. EB-EPS-S panel cores can be modified to customer specifications using Ebtech's proprietary sandwich technologies. The composite construction of EB-EPS-S panels improves installation time. EB-EPS-S panels are an ideal component for most low-rise commercial LEED and Green building projects. Panel thicknesses vary between 4-1/2" to 12-1/4" and are available up to 4 feet wide and 24 feet long.

Benefits

- Excellent structural properties
- Design flexibility
- Comprehensive range of thicknesses and lengths
- Variety of skin configurations
- Wide selection of R-values
- Built-in electrical chase
- Ideal for Green building projects
- Superior insulating value; up to 60% savings on heating and cooling costs
- Factory warranty

Structural Properties

Ebtech EB-EPS-S panels are structural, so there is usually no need for a framework of wood or steel studs. Panels create a continuous whole-wall system that is stronger than traditional framing methods, thus eliminating substantially thermal bridging, breaks, or air infiltration, protecting against wind loads and insects as well as enhancing earthquake resistance.

R-Values

Panels are engineered to be thermally stable, maintaining their R-value over time, and can reduce heating and cooling energy consumption significantly. The whole wall efficiency can be 60% higher than that of a 2x6 R-19 traditional construction.

Spline System

The preferred method for panel connections is the use plywood keysplines or dimensional lumber splines for additional load-bearing support if required. This method is easy to install and maintains insulation through the joint.

Fire Resistance

The foam used in EB-EPS-S panels holds a Class 1 Fire Resistance rating - the highest rating available for combustible materials. Because the core of the Ebtech panel is solid, there is no air cavity in a wall or roof to permit a "chimney effect." A chimney effect promotes and hastens fire spread, and is inherent with open cavity enclosure systems such as stick framing.