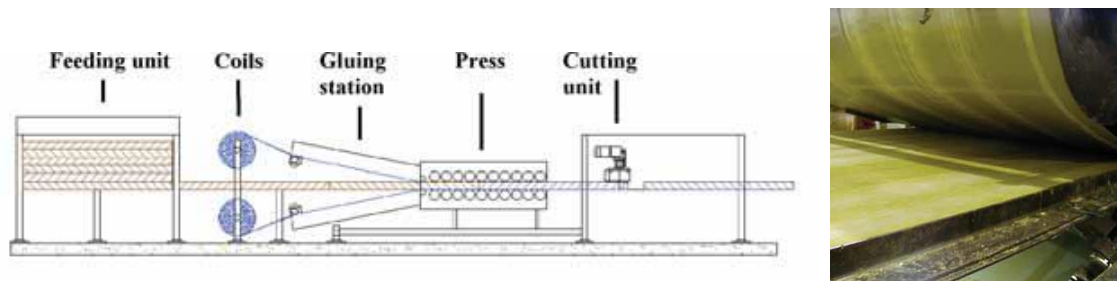


INSULATED BUILDING PANELS



Insulated building panels are enjoying growth overseas due to their improved insulation performance and ease of construction. They are manufactured under factory controlled conditions utilizing a light weight insulation core sandwiched between two facing materials making insulated panels lightweight, quick to erect and free from problems of compression shrinkage and cold bridging associated with other forms of construction. Production of insulated panels may be continuous or discontinuous.

Process Diagram Continuous Laminator



Structural Insulated Panels

Structural insulated panels (SIPs) are a sandwich panel comprising two structural faces - usually Oriented Strand Board, sandwiching a rigid core of

Foamed Polyurethane (PU) foam or Polyisocyanurate foam (PIR) or

Adhered Expanded Polystyrene (EPS) or Extruded Polystyrene (XPS) foam

Other suitable facings include plywood, MgO board and fibre cement. The result is a building system that is extremely strong and energy efficient. Due to the jointing methods used, structural insulated panels (SIPs) offer superior insulation and air-tightness over traditional construction methods or systems.

SIP panels may be used in floors, walls and roofs for residential and commercial buildings.



Insulated Metal Panels

Insulated metal panels (IMPs) are a sandwich panel comprising two metal faces sandwiching a rigid core of

Foamed Polyurethane (PU) foam or Polyisocyanurate foam (PIR) or
Adhered Extruded Polystyrene (XPS) foam.

Insulated metal panels give architects and engineers extensive choice in project design. IMPs can be produced in various dimensions (length, width and thicknesses), and feature different joints, metal surface profiles, embossments, colours and high thermal insulation values. The growth of sandwich/insulated metal panels overseas has also been supported by their simple, fast and economic installation process. In some cases, these panels replace products that use tilt-up installation methods. Tight pre-engineered joints provide a practical solution to design challenges like thermal bridges and air and moisture infiltration.

Polymer Group supply both polyurethane and polyisocyanurate expanding foam systems for foam-in-place insulated panels and also carry a range of polyurethane adhesives for gluing EPS and XPS board stock to timber, cementitious and metal facings.

To find out more about insulated panels please contact the sales office on 0800 999-001 or email sales@polymer.co.nz.

Polymer Group Ltd is a strategic alliance partner with Huntsman Polyurethanes. Huntsman's raw materials and insulation technology are utilized by some of the world's leading sandwich/insulated metal panel producers.

