Polyisocyanurate

Description: Polyisocyanurate foam board insulation is produced from a polyisocyanurate-based chemical sandwiched between fiberglass-reinforced organic felt facers or inorganic coated fiberglass facers. Polyisocyanurate products are available in two densities, 20 psi and 25 psi.

Siplast specifications call for the use of polyisocyanurate products having a coated fiberglass facer (non-organic) (ASTM C1289 Type II, Class 2) when panels are applied over new concrete substrates. This includes all layers when multiple layers are used.

Standards: ASTM C1289:
- Type II Class 1 Grade 2: 20-psi organic facer
- Type II Class 1 Grade 3: 25-psi organic facer
- Type II Class 2 Grade 2: 20-psi coated-glass facer
- Type II Class 2 Grade 3: 25-psi coated-glass facer

Application Methods:

1. Asphalt: A maximum panel size of 4 feet by 4 feet is required when panels are applied with hot asphalt.

2. Mechanical Attachment: Polyisocyanurate can be mechanically attached. When panels are mechanically attached over a metal deck, the panel thickness must be sufficient to span the flutes of the metal deck. Siplast minimum fastening requirements call for 1 fastener per 3 square feet of panel area. See published schematics for fastening frequencies. Contact Siplast for fastening frequencies to meet specific codes/approvals.

3. Insulation Adhesive: A maximum panel size of 4 feet by 4 feet is required when panels are applied with Para-Stik or Parafast Insulation Adhesive. See published schematics for bead spacing sequences.

4. Maximum Individual Panel Thickness: A maximum individual flat-stock panel thickness of 2.7 inches is recommended. For configurations requiring more than 2.7 inches in total thickness, a multiple layer configuration is recommended.

Membrane Application Direct to Approved Overlament Panel:

Hot Asphalt: Approved perlite or high-density fiberboard.

PA-311 Adhesive: Perlite, high density fiberboard, DensDeck Prime, Securock Gypsum Roof Board, Securock Cement Roof Board, DEXcell FA Glass Mat Roof Board, and DEXcell Cement Roof Board.

SFT Adhesive: Perlite, high-density fiberboard, DensDeck Prime, Securock Gypsum Roof Board, Securock Cement Roof Board, DEXcell FA Glass Mat Roof Board, and DEXcell Cement Roof Board.

Torch<sup>1</sup>: DensDeck Prime, Securock Gypsum Roof Board, Securock Cement Roof Board, DEXcell FA Glass Mat Roof Board, and DEXcell Cement Roof Board.

Self Adhesive: DensDeck Prime, Securock Gypsum Roof Board (primed), Securock Cement Roof Board (primed), DEXcell FA Glass Mat Roof Board and DEXcell Cement Roof Board (primed).

<sup>1</sup>Siplast recommends that all practices pertaining to NRCA CERTA guidelines be followed when torching methods are employed. This includes performing a fire watch following any torch applications. Always have approved fire-extinguishing equipment nearby.