

BULLETIN

SIPLAST ROOF INSULATION SYSTEMS

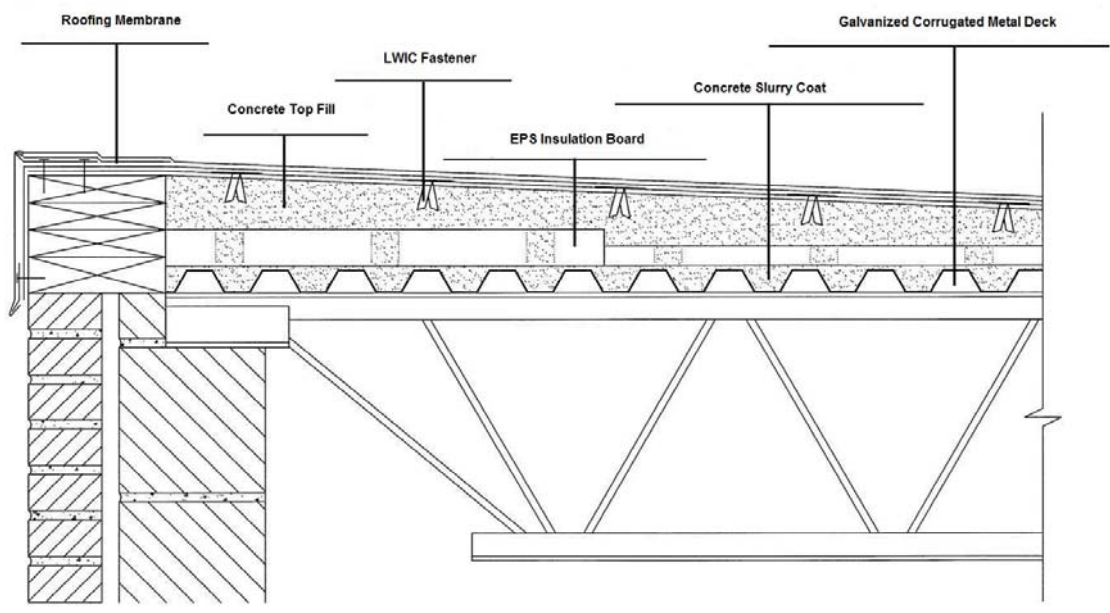
Siplast Lightweight Insulating Concrete Roof Insulation Systems

Sustainable Building Envelope Design – The Engineered System

Bulletin 6 – SRIS-0906

Siplast Lightweight Insulating Concrete Systems have proven to be valuable elements of sustainable building design. The two primary components of lightweight insulating concrete systems, Portland cement and expanded polystyrene, combine to create a reroofable deck. Because it is reroofable, lightweight insulating concrete is consistent with sustainable building design philosophies. Additionally, by increasing long-term thermal efficiency, lightweight insulating concrete helps reduce energy resource requirements.

In a lightweight insulating concrete system, Portland cement is combined with either soft aggregate or pre-generated foam to form a lightweight fill. Expanded polystyrene board is encapsulated in the lightweight fill, resulting in an engineered composite system that functions as a monolithic substrate for the roof membrane, and potentially functions as a contributor to the structural diaphragm component of the building envelope. This multiple functionality demonstrates an efficient use of materials contributing to the goals of sustainability and environmental sensitivity. The sustainable characteristics of the components of Siplast Lightweight Insulating Concrete Systems will be discussed in depth in future bulletins.



These components combine to produce synergistic sustainable characteristics and will be discussed in depth in future bulletins.



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