JANUARY 2026

INSULATED CONCRETE FLOORS & ROOFS



ALL-IN-ONE SYSTEM - BUILT FOR PERFORMANCE.

Plastbau® Technology
INSUL••DECK®

What is Insul-Deck?

Insul-Deck is a stay-in-place forming system for insulated concrete floors and roofs. Each lightweight panel combines EPS insulation with integrated steel furring to support concrete and construction loads with minimal shoring. Panels are factory-cut to length, lightweight with crane-free install, and form efficient T-beam structures—delivering strength, energy efficiency, and long-term performance with a finish-ready underside.

Applications

- Floors, roofs, elevated slabs
- Residential, commercial, and institutional buildings

Ideal for:

- High-performance custom homes
- Schools, healthcare, and civic buildings
- Suspended garage floors, rooftop patios, and green roofs
- Disaster resilient structures such as safe rooms, shelters, and vaults
- Elevated buildings and flood zones
- Radiant Heat Floors



How It Works

Insul-Deck panels are molded EPS forms with built-in steel ribs to create an efficient forming deck. The panels are placed on shoring, rebar is installed, and concrete is poured to form the structural, monolithic T-beam joist slabs. Once cured, the panels stay in place as insulation with space to easily run utilities, and a finish-ready surface.

- EPS form with integrated steel furring
- Supports concrete and required loads
- No formwork removal or crane required
- Ready for drywall or other finishes

Built for Real-World Conditions.

From high-load commercial to elevated residential floors, Insul-Deck is engineered to perform in every scenario. Various panel thicknesses allow design flexibility. The continuous insulation minimizes thermal bridging, improves energy efficiency, and delivers consistent comfort in any climate. With minimal maintenance and a lifespan measured in centuries, Insul-Deck keeps buildings strong, quiet, and efficient year after year.

Delivering More Than Structure

Insul-Deck combines structural integrity with end-user benefits that stand out. Its fire-rated, mold-resistant, and energy-efficient system enhances indoor comfort and air quality—while qualifying for insurance deductions* in disaster-prone areas. The result is a high-performing, code-aligned system that adds value long after the concrete is poured.

***Contact us today to learn if your project qualifies for available insurance discounts with proof of loss mitigation.**

Why choose Insul-Deck?

01 Engineered Simplicity

- Combines formwork, insulation, and space for utilities in each integrated panel
- Factory-cut to length—ready to install
- Reduces waste and streamlines installation

02 Lightweight & Crane-Free

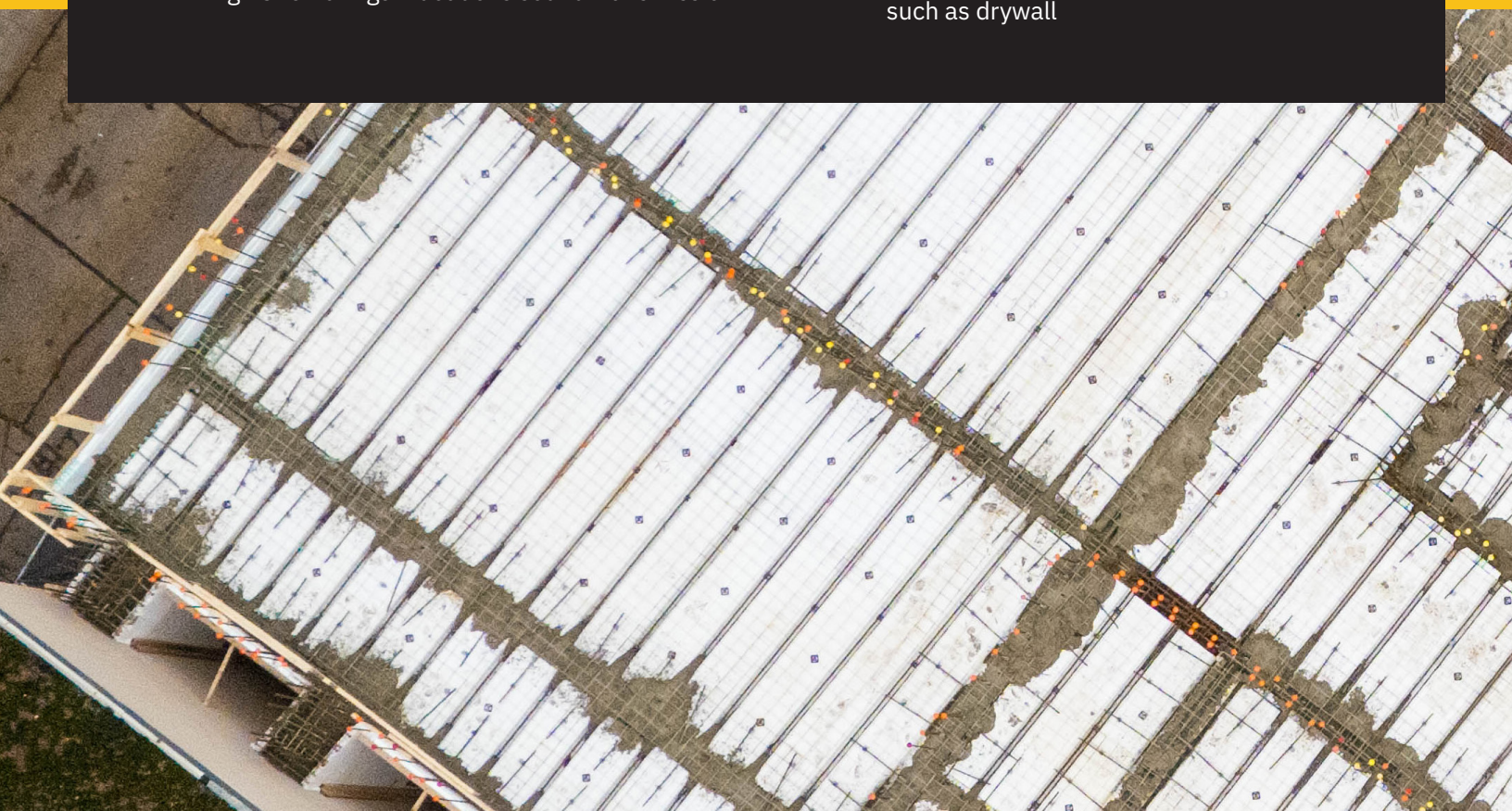
- Install by hand—no crane required
- Lightweight for easy elevated installs
- Great for sites with limited equipment access

03 Proven Performance

- Allows clear spans up to 33 ft. or more with use of EPS top hats
- R-16 to R-25 thermal performance
- EPS form thicknesses range from 7" to 12.5"
- 1 to 4-hour fire resistance ratings (USA/Canada)
- High STC Ratings – deadens sound transmission

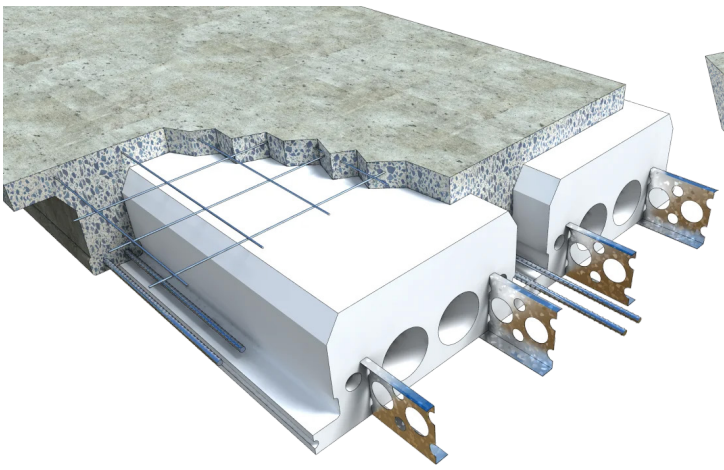
04 Easy Integration

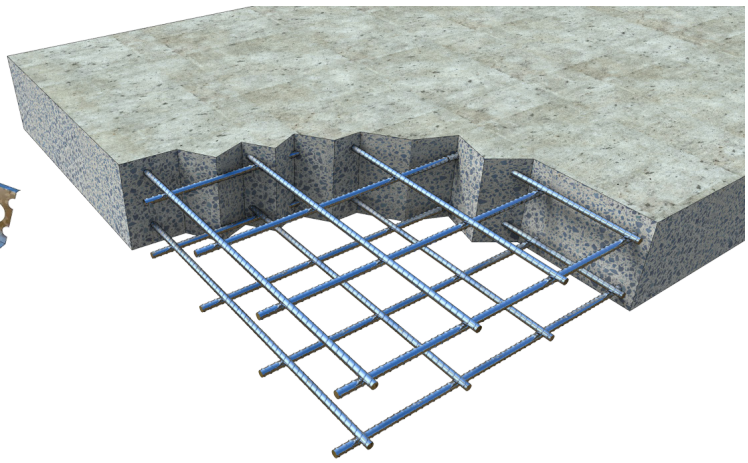
- Seamlessly integrates with ICF, CMU, and concrete/steel beams
- Pre-formed chases for MEP
- Compatible with radiant heat, rooftop decks, garages and green roofs
- Allows direct attachment of ceiling finishes such as drywall



Insul-Deck vs. Traditional Slab

For 1500 ft² with 24 ft Span & 40 psf Live Load





11" Insul-Deck + 2 $^{1}/_{2}$ Slab		8" Traditional Slab
19.5 yd³	Concrete	36.6 yd³
3,835 lb	Steel	6,081 lb
42 tons	Self-Weight	77.1 tons

By reducing your concrete and reinforcement requirements with Insul-Deck, you lower self-weight allowing less shoring, less structural support from foundations, and greater design flexibility.

January 2026 | #IDBR-01 | © 2026 Insul-Deck. All Rights Reserved.

65 Grady Knight Industrial Ct. Villa Rica, GA 30180-2107 USA
1 (800) 475-6720 | www.insuldeck.com | insuldeck@insuldeck.com

Plastbau® Technology
INSUL••DECK®