

9 INSUL-DECK CHECKLIST

Never use defective or sub-standard shoring, formwork, reinforcement, or concrete.

Incompatibilities: Insul-Deck’s Expanded Polystyrene (EPS) is **combustible** – keep away from excessive heat, sparks, open flames, or any other sources of ignition. EPS dissolves in hydrocarbons (e.g. fuels, oils, tar), organic solvents (e.g. acetone/ketones, benzene, paint thinner), ethers, esters, aldehydes and amines. Ensure that all sealants, primers, and other materials in contact with EPS are compatible (water-based)

NOTE: This checklist is guide for builders but is not intended to be a complete list of tasks for every project. The general contractor or building owner are solely responsible for completion of all project details per approved plans, building codes and best practices.

Pre-Construction

<input type="checkbox"/>	Final Structural plans and specifications on site (check with Engineer of Record for revisions)
<input type="checkbox"/>	Shoring plan by qualified shoring engineer on site
<input type="checkbox"/>	Insul-Deck Layout and Panel Cut-List on site
<input type="checkbox"/>	Reinforcement specifications confirmed and order placed for steel components and supplies
<input type="checkbox"/>	All other required materials, tools and supplies ordered or on site
<input type="checkbox"/>	Penetrations through floors/roofs identified and planned (not coinciding with joists)
<input type="checkbox"/>	Ensure that walls/columns/piers/pilings/beams and other supporting elements of the floor/roof structure are within specifications, especially regarding the placement, spacing, and sizes of reinforcing steel that connects to the Insul-Deck assembly and the elements poured together with it
<input type="checkbox"/>	Make provisions for safety & PPE, site access, delivery, handling and storage; see Insul-Deck Safety Data Sheet (SDS) at www.insuldeck.com/SDS.pdf
<input type="checkbox"/>	Pre-Construction Meeting with all affected trades

Shoring

<input type="checkbox"/>	Ensure adequate bearing capacity of surface for shoring installation, including load distribution if needed (such as double layers of 2x10" [50x250mm] planks)
<input type="checkbox"/>	Inspect every piece used in shoring before/during erection
<input type="checkbox"/>	Follow Shoring plan exactly with all shoring supports, beams and accessories installed per engineered plans and shoring provider’s instructions
<input type="checkbox"/>	Confirm all pins, restraints, cross-bracing and safety equipment is correctly installed for service
<input type="checkbox"/>	Inspection & sign-off by shoring designer/engineer/authorized personnel prior to use of shoring

Formwork, Falsework, Reinforcement

<input type="checkbox"/>	Always inspect each Insul-Deck panel BEFORE placement on shoring: - Both metal ribs must be straight and continuous - EPS must be well-fused (beads are bonded together, providing part strength)
<input type="checkbox"/>	Place Insul-Deck panels per plans and/or Insul-Deck Layout, either butting to walls or sitting on top of wall-ICF form insulation; install EPS plugs (supplied with every order) to cover large holes
<input type="checkbox"/>	Never place excessive loads on formwork: don’t step into Insul-Deck joists, don’t place heavy loads onto formwork, don’t “heap” concrete
<input type="checkbox"/>	Repair minor damage to Insul-Deck joist “wings” and secure with plywood & fasteners
<input type="checkbox"/>	Ensure continuity of Insul-Deck joists and slab into the other structural elements (wall-ICF may need to be cut to allow flow of concrete between wall and T-beam joists)
<input type="checkbox"/>	Install formwork, falsework, bracing for all slab-edges, beams, staircases and similar elements
<input type="checkbox"/>	Install sleeves/blockouts for penetrations (never at joists without EOR permission), conduit, anchor bolts, hangers, plates, and other embeds
<input type="checkbox"/>	Ensure connections between concrete elements exactly per plans. Foam completely removed where Insul-Deck panels cross walls, columns, pilasters, or similar.
<input type="checkbox"/>	Place T-beam joist reinforcing steel on rebar-chairs / dobie-blocks (often 4' OC) maintaining specified concrete cover (per structural plans or min. ¾"). Splice per plans (avoiding mid-span splices).
<input type="checkbox"/>	If specified, install stirrups in Insul-Deck joists
<input type="checkbox"/>	Place & secure slab reinforcing bar or welded wire mesh positioned per plans or at center of slab (on chairs or bolsters). Install welded wire reinforcement in maximum possible lengths, and offset end laps in both directions, splice laps with tie wire. Splice rebar per plans (avoiding splices over walls/beams).
<input type="checkbox"/>	Place & secure negative moment reinforcing steel at floor/roof connections and beams per structural plans (e.g. extending into both slab and wall/beam at perimeters, often 24" or 12" O/C and coinciding with Insul-Deck joists)
<input type="checkbox"/>	Place & secure reinforcement of all other concrete elements (in beams, above walls etc.)

Pre-Pour

<input type="checkbox"/>	Check Insul-Deck elevation and level (e.g. laser level) and adjust using shoring screw jacks
<input type="checkbox"/>	Re-check dimensions, layout, level and alignment of all other elements
<input type="checkbox"/>	Check alignment & bracing of slab edge supports (including around entire perimeter and openings), e.g. bracing/vertical supports/slab-ties in place every 12-24" [30-60cm] and aligned (e.g. using continuous horizontal whaler)
<input type="checkbox"/>	Top Of Slab elevation indicated via elevation markers and/or chalk lines on inside of slab-edge forms
<input type="checkbox"/>	Confirm all utility penetrations/blockouts through Insul-Deck assembly do not interrupt T-beam joists, are accurately placed and secured for pour
<input type="checkbox"/>	Re-check special formwork / falsework locations for adequate repairs/support/secureness (e.g. spliced or damaged panels, penetrations through Insul-Deck metal ribs)
<input type="checkbox"/>	Check that all required embed plates, anchors, bolts, other embeds, as specified on drawings, are in place, available, and secured prior to concrete placement
<input type="checkbox"/>	Re-check all reinforcing steel specifications & placement and how it is secured against displacement. Photos taken of rebar placement for documentation.
<input type="checkbox"/>	Inspection and final sign-off of Shoring by shoring designer/engineer of record prior to pour
<input type="checkbox"/>	Check all forms, tops of walls, columns, beams and similar structural elements that support the assembly are clean / free of debris. Reinforcement clear of loose rust and mill scale.
<input type="checkbox"/>	Concrete vibrators (pencil or small diameter), straightedges and all other required tools, supplies, embeds on site and powered
<input type="checkbox"/>	For Hot Weather expected for Pour (as needed): Chilled water or ice added to mix; Admixtures (retarder / plasticizer) added to mix or available at site; Plan to pour during colder parts of the day and/or spray forms & rebar with water to reduce surface temperature
<input type="checkbox"/>	For Cold Weather expected (as needed): Hot water added to mix; Admixtures (accelerator / plasticizer) added to mix or available at site; Plan to remove snow or ice build-up and place warming blankets
<input type="checkbox"/>	Compressive strength, aggregate size, slump requirements of concrete ordered per plans along with additives; confirm with concrete provider incl. delivery trucks spaced to allow finish crew enough time

Concrete Placement and Post-Pour

<input type="checkbox"/>	Safety person designated and provided with flashlight and warning device (air horn or whistle) and with clear view of shoring area from outside of the perimeter. Clear action-plan for warning signals shared with entire crew.
<input type="checkbox"/>	Confirm ALL ACCESS TO AREAS UNDERNEATH POURED SLAB IS BLOCKED TO PREVENT ENTRY during and after the pour – remind entire crew of same
<input type="checkbox"/>	Entire crew briefed on pour sequence & safety
<input type="checkbox"/>	Check and document specifications, age, additives, placement, and consolidation of all concrete placed along with environmental conditions during concrete pours (take core samples if needed)
<input type="checkbox"/>	Place and consolidate concrete per required standards (such as ACI 302.1R) – never heap concrete. Protect bottoms of Insul-Deck T-beam joists from excessive loads: use pencil vibrators carefully inside joists (don't jam them down hard), don't step into joists, direct concrete flow onto thick portions of Insul-Deck, use reducer hose on pump
<input type="checkbox"/>	Screed slabs level or to the specified pitch at the Top of Slab elevation, maintaining surface flatness within tolerances
<input type="checkbox"/>	Place all wet-set embeds (anchors, bolts etc)
<input type="checkbox"/>	<u>Never remove any shoring until cleared to do so</u> , usually by the Engineer of Record
<input type="checkbox"/>	After placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical damage/deformation
<input type="checkbox"/>	Initial Moist Curing if needed: as soon as free water has disappeared and before surface is dry, keep concrete continuously moist (e.g. for not less than three days) by water ponding, water-fog spray, or saturated burlap
<input type="checkbox"/>	Final Moist Curing if needed: after initial curing and before surface dries, install and seal Moisture-Retaining Covers or Curing Compounds
<input type="checkbox"/>	After Engineer of Record or codes allow it, remove shoring and clean up site
<input type="checkbox"/>	Install approved 15-minute thermal barrier (such as ½" drywall) over all exposed Insul-Deck