



TEXAS DEPARTMENT OF LICENSING & REGULATION

P.O. Box 12157 • Austin TX 78711-2157

(512) 539-5735 • (800) 803-9202 • FAX (512) 539-5736

ihbtech@tdlr.texas.gov • www.tdlr.texas.gov

IHB – Installation Inspection – Checklists for Industrialized Housing

Foundation Inspection Checklist

Effective August 1, 2017

Installation Address: _____

Date of Inspection: _____

IHB One- and Two-Family Inspection Checklist – These checklists are a guide to the minimum code compliance items for this inspection. This checklist is only a guide and does not necessarily constitute a complete list of items to be checked, nor may all check points be applicable.

| Item # | Check Point | *Code Compliance | | Comments |
|--------|---|------------------|----|----------|
| | | YES | NO | |
| F1 | Reference Chapter 4 of the IRC, Chapter 18 of the IBC, ACI 318, and the NEC Visually conforms to the foundation design type and details | | | |
| F2 | Footings are supported on undisturbed natural soils or engineered fill designed and tested in accordance with accepted engineering practice | | | |
| F3 | Soil bearing capacity complies with the engineered foundation plan (minimum 1,500 psf or soils investigation required): Soil Bearing Pressure = _____ psf Soil Type _____ | | | |
| F4 | Expansive soil site: Soil investigation required or top/subsoils removed, or soil stabilized by chemical dewatering or presaturation. (Foundation <i>shall</i> be designed for expansive soils in accordance with section 1805.8 of the IBC) Reference Technical Bulletin TB 10-01 for more information about Expansive Soils. | | | |
| F5 | Footings are free of debris and standing water | | | |
| F6 | Exterior footings are at least 12" below undisturbed ground or below frost line, whichever is greater | | | |
| F7 | Minimum footing depth (thickness of footing) not less than 6" or as required on plans, whichever is greater | | | |
| F8 | Minimum footing width not less than foundation design or minimum requirements of code, whichever is greater | | | |
| F9 | Top surface of footing forms are level | | | |
| F10 | Bottom surface of footings do not exceed a 1:10 slope (not to exceed 1 unit vertical in 10 units horizontal or 10% slope) or footing is stepped as required by code | | | |
| F11 | Placement on or adjacent to slopes greater than 1 unit vertical in 3 units horizontal comply with applicable section of the IRC or IBC | | | |
| F12 | Anchor bolts properly positioned per the engineered foundation design details | | | |
| F13 | Continuous reinforcement as required on foundation plan (check grade, placement, overlap and coverage [not less than 3"]) Reinforcement is accurately placed and secured against displacement | | | |
| F14 | Vapor barrier, where required, extends under foundation footings. | | | |
| F15 | Electrode bonded with Ufer clamp to minimum 20' steel reinforcement in foundation forms with minimum 2" concrete cover (note: no vapor barrier under footing for minimum of 20') Reference Technical Bulletin TB 09-01 for more information about this requirement | | | |
| F16 | The roughed in drainage is adequate | | | |

* Complies with mandatory building codes, approved on-site construction drawings, engineered unique on-site drawings, and engineered foundation drawings

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Set Inspection Checklist

Installation Address:

Date of
Inspection:

| Subtask | Item # | Check Point Reference the IRC, the IBC, the IECC, and ACI 318 | *Code Compliance | | Comments |
|--|-------------|---|------------------|----|----------|
| | | | Yes | No | |
| Drainage (Required where minimum code specified drainage cannot be obtained) | S1 | Drain tiles or pipe are installed at or below the area to be protected | | | |
| | S2 | Drain tiles or pipe discharge into an approved drainage system | | | |
| | S3 | Drain tiles or pipe are installed on at least 2 inches of gravel that is larger than pipe perforations or tile joints | | | |
| | S4 | Drain tiles or pipe are covered by at least 6 inches of gravel | | | |
| | S5 | If drain tile has open joints, then the joints are covered with strips of building paper | | | |
| Plumbing, Electrical, and Cross Over Connections | S6 | Plumbing connections properly made, correct size, slope, support, and materials | | | |
| | S7 | Electrical crossover connections properly made in accessible junction boxes or listed wire connectors approved for use | | | |
| Foundation Wall, Piers, Footings | S8 | Under-floor space cleaned of all debris and organic materials, including, but not limited to, forms used to place concrete, removable hitch, tires, and axles | | | |
| | S9 | Concrete mix ordered provides minimum specified compressive strength as required by code or the foundation plans, whichever is greater – attach concrete trip ticket or concrete test report to inspection report | | | |
| | S10 | Minimum foundation wall thickness (see foundation design) | | | |
| | S11 | Construction materials and types of lateral support meet the foundation design | | | |
| | S12 | Hollow piers capped with 4” solid masonry or concrete or cavities of top course filled with concrete or grout or other approved materials | | | |
| | S13 | Foundation walls, piers and other permanent supports extend below the frost line | | | |
| | S14 | Piers are properly spaced and do not exceed the maximum height requirements of code or foundation design | | | |
| | S15 | Footing projection is minimum 2” but not more than depth (thickness) of footing | | | |
| | S16 | Foundation construction follows the foundation design and details. Foundation design is for specific site (manufacturer’s typical may not be used) | | | |
| Anchorage and Installation | S17 | Ground, or soil anchors were not used | | | |
| | S18 | Use of correct anchor system as per foundation design | | | |
| | S18a | Off frame designs: Sill plate is secured to foundation as per design and/or code | | | |
| | S18b | On frame designs: Galvanized steel tie down straps properly spaced at correct angle and tied to concrete encased anchor bolts with no slack per design and code | | | |
| | S19 | Lag bolts installed at marriage line connection of floors are correct size and properly spaced (see manufacturer’s installation instructions) | | | |
| | S20 | Hinged roof strut strapping installed correctly (see manufacturer’s installation instructions) | | | |
| | S21 | Lag bolts installed at marriage line connection of roofs are correct size and properly spaced (see manufacturer’s installation instructions) | | | |
| | S22 | End walls straight, gasket material installed between marriage walls for energy compliance | | | |
| | S23 | No damage to trusses. If damaged, attach truss engineer’s requirements for repair | | | |

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Final On-Site Inspection Checklist

| Installation Address: | | Date of Inspection: | | | |
|-----------------------|------------|---|------------------|----|----------|
| Subtask | Item # | Check Point | *Code Compliance | | Comments |
| | | | YES | NO | |
| ENERGY | EN1 | Air leakage – Mandatory code requirement: Blower door test completed, test report attached. Reference Technical Bulletin <i>IHB TB 12-02, revised April 17, 2017</i> , for more information. | | | |
| | EN2 | Duct testing completed – Mandatory code requirement – indicate which test was completed and attach copy of test report: Postconstruction test Rough-in test | | | |
| | EN3 | Mechanical equipment meets federal efficiency requirements | | | |
| | EN4 | Mechanical equipment sized per heating/cooling load calculations. Equipment installed in accordance with equipment manufacturer's instructions | | | |
| | EN5 | Mechanical equipment and appliances labeled with title or publication number for the operation and maintenance manual. Maintenance instructions provided | | | |
| MECHANICAL | M1 | Equipment and appliances installed on site meet requirements of manufacturer's approved drawing or unique engineered drawings | | | |
| | M2 | Mechanical system piping insulated as required by code | | | |
| | M3 | Ducts insulated as required by code, seams and joints sealed per code | | | |
| | M4 | Duct work installed properly including size, support, no bends > 90 degrees, and is not compressed, twisted, or in contact with the ground | | | |
| | M5 | Minimum access provided for appliances and heating and cooling equipment | | | |
| PLUMBING | P1 | Plumbing meets requirements of manufacturer's approved details or unique engineered design | | | |
| | P2 | Plumbing systems protected from physical damage, breakage, corrosion, and freezing | | | |
| | P3 | Hose connection provided with vacuum breaker or backflow preventer | | | |
| | P4 | Hose bibbs subject to freezing are equipped with an accessible stop-and-waste-type valve inside the building so that they can be controlled and/or drained during cold periods | | | |
| | P5 | Joints between different piping materials made with approved fittings | | | |
| | P6 | An accessible main shutoff valve is provided near the entrance of the water service | | | |
| | P7 | Plumbing connections properly made, correct size, slope, support, and of approved materials | | | |
| | P8 | Discharge pipe of water heater discharges to the floor, to an indirect waste receptor or to the outdoors as required per code | | | |
| GAS | G1 | Gas piping in accordance with approved details or unique engineered details | | | |
| | G2 | Piping materials meet minimum standards per code | | | |
| | G3 | Piping supported as required by code | | | |
| | G4 | Shutoff valves provided as required by code | | | |
| | G5 | Piping protected from physical damage and corrosion | | | |
| | G6 | Condensate piping sloped as required by code. Drips provided where wet gas exists | | | |

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Final On-Site Inspection Checklist (Continued)

| Installation Address: | | Date of Inspection: | | | |
|---|------------|--|------------------|----|----------|
| Subtask | Item # | Check Point Reference the IRC, the IBC, the IECC, and ACI 318 | *Code Compliance | | Comments |
| | | | YES | NO | |
| ELECTRICAL | E1 | Electrical in accordance with approved drawings or unique engineered drawings (i.e. any finished electrical work identified on the approved plans as being site installed; or, in cases where a garage or porch is constructed on site, the completed electrical work indicated on the engineered drawings for the structure) | | | |
| | E2 | System service grounding | | | |
| | E3 | Circuits are properly identified on the panel box cover | | | |
| | E4 | Exposed cables and raceways supported and protected | | | |
| | E5 | Disconnect means and outlet installed for servicing of HVAC equipment | | | |
| | E6 | Exposed electrically conductive parts (i.e. metal boxes, metal siding) are properly bonded | | | |
| CRAWL SPACE AND DRAINAGE | C1 | Materials used to enclose crawl space protected from decay or corrosion | | | |
| | C2 | Minimum crawl space access of 16" x 24" | | | |
| | C3 | Minimum net area of openings for crawl space ventilation | | | |
| | C4 | One crawl space ventilation opening within 3 feet of each corner of building | | | |
| | C5 | Materials for ventilation openings | | | |
| | C6 | Minimum 6" in 10' slope of finish grade from structure or drains provided as per code | | | |
| | C7 | Finished grade of under-floor space as per engineered design or as per code | | | |
| | C8 | Foundation drainage provided as required by code where the finished floor of the crawl space is below the finished grade. | | | |
| BUILDING FINAL | BF1 | Completed roof covering properly installed | | | |
| | BF2 | Minimum net area of openings for enclosed attics or rafter space ventilation | | | |
| | BF3 | Interior wall coverings completed in accordance with manufacturer's approved details, installation instructions for wall coverings, and code | | | |
| | BF4 | Windows and doors operate properly without binding | | | |
| | BF5 | Stairs have the maximum tread rise and minimum width as per code | | | |
| | BF6 | Stairs and landings have the required width and positively anchored to building | | | |
| | BF7 | Handrail and Guards comply with code | | | |
| | BF8 | Unique on-site details completed as per engineered design (i.e. details for a garage or porch installed on site) and in compliance with codes | | | |
| Note any items carried over from the set inspection here | | | | | |
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Final On-Site Inspection Checklist (Continued)

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|--|--------|--|---------------------|----|----------|
| Subtask | Item # | Check Point Reference the IRC, the IBC, the IECC, and ACI 318 | *Code Compliance | | |
| | | | YES | NO | |
| Note any items carried over from the set inspection here | | | | | |
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Additional Comments – You may also use this space to document any construction completed by the installation permit holder that affects the compliance of the construction covered by the inspector’s contract or work order (note that violations are to be reported on the *Violation Report* form, form #076ihb):
