Industrialized Housing and Buildings

Technical Bulletin

IHB TB 08-01 – Foundation System Designs

Revised March 31, 2010

The rules governing foundation system designs for industrialized housing and buildings were revised effective June 1, 2006. All foundations are now required to be designed and sealed by a licensed Texas engineer. Typical foundation designs provided by the manufacturer can not be used.

Manufacturers and REF Builders are required to provide critical load points, including the actual loads, for attachment of the house, building, or component to the foundation, but are not required to provide a typical foundation system. Foundation systems that are included in the manufacturer’s systems package, or in the REF Builder’s construction documents, must be designed and sealed by a licensed Texas engineer and comply with all the requirements of the rules governing industrialized housing and buildings, including specifying the address or the area (neighborhood or other similar area) for which the foundation is designed.

The Industrialized Builder (builder) shall have a foundation system design sealed by a Texas licensed engineer on file for every house or building installed by the builder unless another registered builder assumes the responsibility for the installation of the house or building [Rule § 70.73]. Alternately, the end user of the house or building may assume responsibility for the installation of the house or building provided that the end user has applied for, and received, an installation permit from this Department. The builder responsible for sale or lease of the house or building shall maintain evidence of the builder registration number or installation permit number of the person responsible for installation.

The person (builder or installation permit holder) responsible for installation of the house or building shall maintain a copy of the foundation design for a minimum of 10 years from the date of successful completion of the final inspection of the installation of house or building.

Each foundation system design shall comply with the mandatory building codes referenced in §§ 70.100 and 70.101 and shall contain complete details for the construction and attachment of the house or building on the foundation, including, but not limited to the following [Rule § 70.73(g)].

- The address or area for which the foundation is suitable
- The minimum load specifications, including wind loads, seismic design loads, soil bearing capacity, and if the foundation is designed for expansive soils
- Site preparation details
- Material specifications
- Requirements for corrosion resistance, protection against decay, and termite resistance
- Size, configuration, and depth below grade of all footings, piers, and slabs including, but not limited to, details of concrete reinforcement, spacing of footings and piers, capping of piers, and mortar or concrete fill requirements for piers
- Fastening requirements, including, but not limited to, size, spacing, and corrosion resistance
- Requirements for surface drainage
- Details for enclosure of crawl space, including details for ventilation and access