

What is a Waffle Slab Foundation?

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A Waffle Slab Foundation, also known as a ribbed slab foundation, is an above-ground concrete foundation that is designed to withhold incredible load-bearing capacity for single family, multi-family, and light commercial structures.

A concrete waffle slab foundation is recommended for any structure built in regions that experience expansive, rocky, or hydro collapsible soils.

Waffle slab construction process is done by pouring concrete over void forms made from Styrofoam or plastic boxes. One of the most popular style of these forms are known as Waffleboxes. Waffleboxes are 8.5 or 12-inch forms made of recycled plastic that are easily placed, securely fit together, and provide a void space for expansion of soils.



How is it different?

As opposed to the outdated alternative of *in-ground* rib slabs, a waffle slab foundation is able to accommodate expansion and movement of soils that are otherwise known to cause major structural problems in building foundations. These problems often result in windows that won't open, doors that won't close, cracks in the wall, and foundation failures that require expensive repairs.

Another advantage of waffle slab foundations over ribbed slabs are their efficiency with regards to time and materials used. With waffle foundations, there is no trenching or off-haul of soils required. Builders benefit from the fact that they often use up to 20% less concrete and steel when building a waffle slab foundation. Not only saving them money on labor and materials, but also giving them more time for their next project.

Environmental Considerations

Environmental engineers note that any process that results in the reduction of raw materials will also reduce carbon emissions energy consumption. Since the construction of an above ground waffle slab foundation typically results in a 20% reduction in materials needed, a similar or even greater reduction in carbon emissions follows. Because Wafflemat Foundations only use recycled plastic as opposed to the traditional Styrofoam alternative, the system is also more environmentally stable.



The Wafflemat Advantage:

When Waffleboxes are placed, they are linked together with patented brackets that also serve as connection points for post tension cables. These post tensioned cables are the main load-bearing factor, so it is extremely important that they are installed properly. This task is made easy with Wafflemat!

With an abundance of knowledge and recourses, Wafflemat is with you every step of the way through your construction process. The Wafflemat website is a trusted source containing ample information in the form of instructional videos, informative blogs, and support from Wafflemat employees.

What are you waiting for?

In conclusion, a waffle slab foundation is the best foundation for a house that sits upon rocky or hydro collapsible soils. Its reinforced concrete upholds a high degree of resistance to wind, rain, and flooding. Waffle concrete slabs are much more stable than those built directly into the ground and much less susceptible to structural failures. Finally, because Waffleboxes are made of recycled plastic, and waffle slab foundations use 20% less materials you can feel good knowing that your foundation system is contributing to a