

# TL-0015 — Rebar Chairs on PREPRUFE<sup>®</sup> Membranes

## Technical Letter

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The PREPRUFE<sup>®</sup> 300R Waterproofing Membrane is designed for use in horizontal sub-slab applications as well as several other grades of PREPRUFE<sup>®</sup>. The construction sequence typically consists of the following steps: preparing compacted earth, stone or mud slab substrate, installing PREPRUFE<sup>®</sup>300R Waterproofing Membrane, placing the steel reinforcement and pouring the concrete slab. Steel reinforcement is placed directly over the waterproofing membrane and it is important that the reinforcement (rebar) chairs are selected to be compatible with the waterproofing membrane.

There are several types of commercially available rebar chairs that are typically used and include concrete or brick supports (referred to as blocks, pavers or dobies), individual steel chairs and continuous steel chairs (referred to as beam bolsters). In addition, steel chairs and bolsters are available with plastic caps or are plastic dipped. Generally, rebar chairs are placed 2 ft (0.67 m) on center.

### Compatible Rebar Chairs

A rebar chair that is compatible with any PREPRUFE<sup>®</sup> Waterproofing System will distribute the load of the steel reinforcement sufficiently such that there is no risk of the chair puncturing the waterproofing membrane when fully loaded with the weight of the reinforcement steel and other common auxiliary loads.

There are several commercially available rebar chairs that are compatible with the horizontal grades of PREPRUFE<sup>®</sup> Membrane and are recommended as described below.

- **Compacted Earth or Stone Substrate** — Concrete or brick (blocks, pavers, or dobies) rebar supports are required when a horizontal grade of PREPRUFE<sup>®</sup> Membrane is installed over a compacted earth or stone substrate.
- **Mud Slab Substrate** — Concrete or brick (blocks, pavers or dobies) rebar supports are most preferred when a horizontal grade of PREPRUFE<sup>®</sup> Membrane is installed over a mud slab. Individual chairs or beam bolsters that are plastic dipped may be acceptable options based on their profile, contact your GCP representative.
- If PREPRUFE<sup>®</sup> is installed over underslab drainage composites (e.g. HYDRODUCT<sup>®</sup>), GCP approved rigid insulation or carton/void forms, follow instructions for compacted earth or stone substrate referenced above.

### Incompatible Rebar Chairs

Rebar chairs that are not plastic dipped or create a risk for puncture are not compatible with PREPRUFE<sup>®</sup> Waterproofing Systems and are not recommended.

## Conclusion

It is very important to specify a compatible reinforcement (rebar) chairs to be used over PREPRUFE® Waterproofing Systems. Concrete or brick supports (blocks, pavers, or dobies) are clearly the best choice, since they distribute the weight of the steel reinforcement and other common auxiliary loads over a large area and, therefore, decrease the risk of punctures to the waterproofing membrane resulting from point pressures.