



INFINITY SLAB™

APPLICATION GUIDE

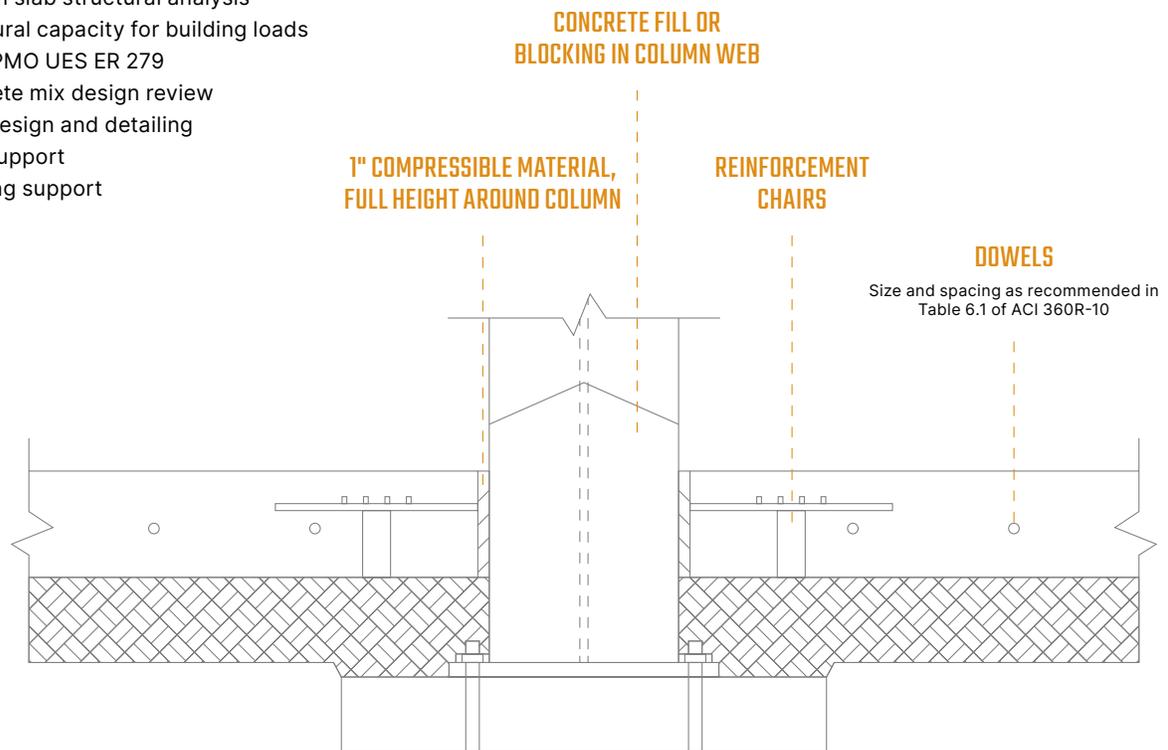
EXTENDED JOINT SLAB ON GROUND

With hundreds of millions of square feet of slabs installed, Helix® Micro Rebar® is the only concrete reinforcement that helps to prevent cracks from forming, providing highly durable, longer-lasting slabs capable of carrying higher loads than possible with other solutions.

Extending joints to over 100 feet improves slab strength and limits joint maintenance. Helix Steel has you covered from mix design to implementation, assuring a successful project every time.

INCLUDED WITH EVERY INFINITY SLAB™:

- Custom slab structural analysis
- Structural capacity for building loads per IAPMO UES ER 279
- Concrete mix design review
- Joint design and detailing
- Field support
- Ongoing support



DESIGN INFINITY SLAB

Helix Steel offers four Infinity Slab™ options. Those that use only Helix Micro Rebar are designed with a specially engineered low-shrinkage mix specified by Helix Steel, based on locally available materials. The Infinity Max™ option uses conventional concrete with Helix Micro Rebar and standard rebar.

Infinity Slab Type	Description	Design
Infinity 25™	Low shrinkage mix. Jointed with up to 25' joint spacing. No slip sheets. No dowels required. Wet cure.	Helix only IAPMO ER 279 Class C or Cs Minimum dosage: 15 lb/yd ³
Infinity 50™	Low shrinkage mix. Jointed with up to 50' joint spacing. Single slip sheet required. Dowels required. Wet cure.	Helix only IAPMO ER 279 Class C or Cs Minimum dosage: 15 lb/yd ³
Infinity 100™	Low shrinkage mix. Jointed with up to 100' joint spacing, joint armoring in high-traffic areas required.	Helix only IAPMO ER 279 Class C or Cs Minimum dosage: 27 lb/yd ³
Infinity Max™	Hybrid rebar/WWF with Helix. Joint spacing >100'. Double slip sheet. Armored joints required in high-traffic areas. Wet cure.	Hybrid – Rebar + Helix IAPMO ER 279 Class C or Cs

HOW TO SPECIFY

Specifying Helix Micro Rebar reinforcement is easy with this Application Guide and Evaluation Report.

ONE

Add a note to your technical drawing with the Helix Micro Rebar reinforcement dosage indicated on the design table.

Example: Helix® Micro Rebar® dosage of 27 lb/yard³

TWO

When a written specification is required, identify Helix Micro Rebar as the product you are using.

Example: Helix Micro Rebar reinforcement is a 1.0 inch (25 mm) twisted steel wire meeting ASTM A820 Type I. Product is certified under ICC-ES ESR-3949 and manufactured under ISO 9001-2015 at a facility with 10 or more years of experience operating in the U.S.A. The product shall be transported, stored, and applied to the concrete mixture in accordance with the manufacturer's recommendations. Contact Helix Steel (734-322-2114 or sales@helixsteel.com) or the Engineer of Record with any questions regarding this specification.

HOW TO IMPLEMENT

NOTE

All slabs are rated to carry design loads even if the slab is cracked. Random cracks can occur in any extended joint system and should be filled with a semi-rigid joint compound to protect edges.

For complete instructions on how to mix, place, and finish, visit helixsteel.com/resources/implementation.

There are no special instructions needed for Helix Micro Rebar reinforced concrete — convey, pump, and place as with normal concrete. It is compatible with all pump systems, but be sure to check for balls on the pump screen or at the chute discharge.

Helix Steel engineering should be kept informed of all pre-pour meetings and pour schedules. A pre-pour inspection of the site and detailing is required.

This Helix Micro Rebar reinforcement alternative design information is provided in accordance with the requirements of performance-based alternative allowances in the code.