RPS VBOX

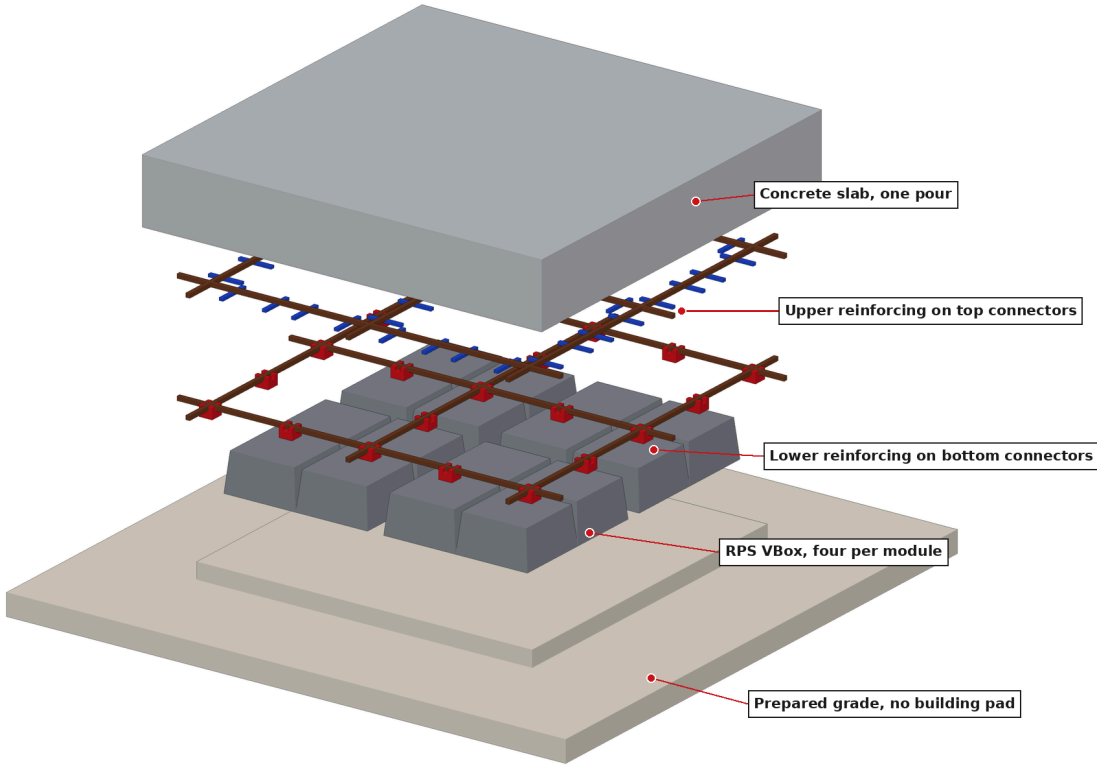
Void formed concrete slabs

SPEED STARTS AT THE SLAB.

OUT OF THE GROUND SOONER.

Two way ribbed slab on grade. Stay in place void forms, ribs at 5 ft on center, monolithic placement.

Rebar or post tension. Same VBox, same connectors. Designed with standard ACI and PT methods; no new design pathway.



THE VALUE

3.5 WEEKS BACK ON THE SCHEDULE.

The slab is an early bottleneck. Take the building pad off the critical path, and framing and every trade behind it start weeks sooner.



Foundation to slab, RPS schedule model for a representative 20,000 SF building. Project durations depend on the site and the foundation design.

SPEED

- No engineered building pad.
- Self aligning forms. No custom forming. No layout errors.
- Framing and every trade behind the slab start sooner.

PREDICTABILITY

- Layout and counts are set before anyone mobilizes.
- The pad, the biggest unknown on problem soil, is off the schedule.
- Ribs, beam and cap in one placement.

PERFORMANCE

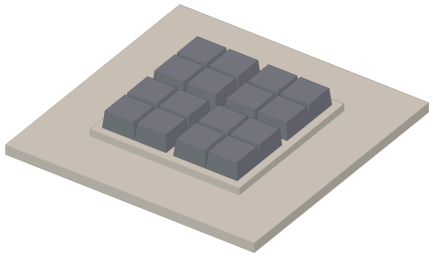
- Stiff two way ribbed slab, ribs on 5 ft centers.
- Rebar or post tension, same VBox and connectors.
- Standard ACI and PT methods, by the Engineer of Record.

THE DIFFERENCE IS THE PAD.

Same site work. The engineered building pad goes away, and with it nearly half the foundation schedule.

INSTALLATION

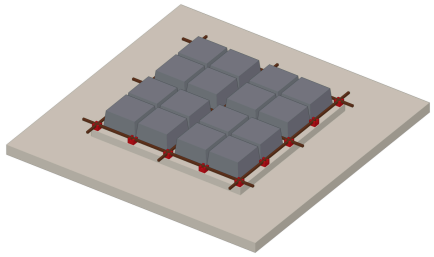
FOUR STEPS, ONE POUR.



1

SET THE VBOX

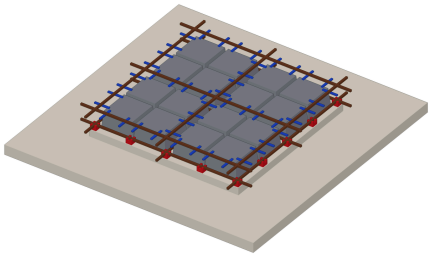
Four per module on prepared grade. The gap between modules forms the rib.



2

LOWER STEEL

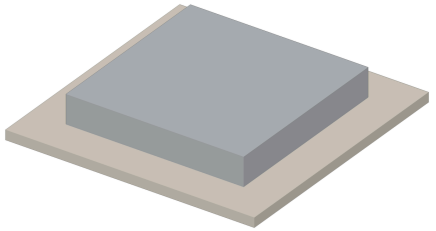
Bottom connectors at every rib junction seat the lower bars or tendons.



3

UPPER STEEL

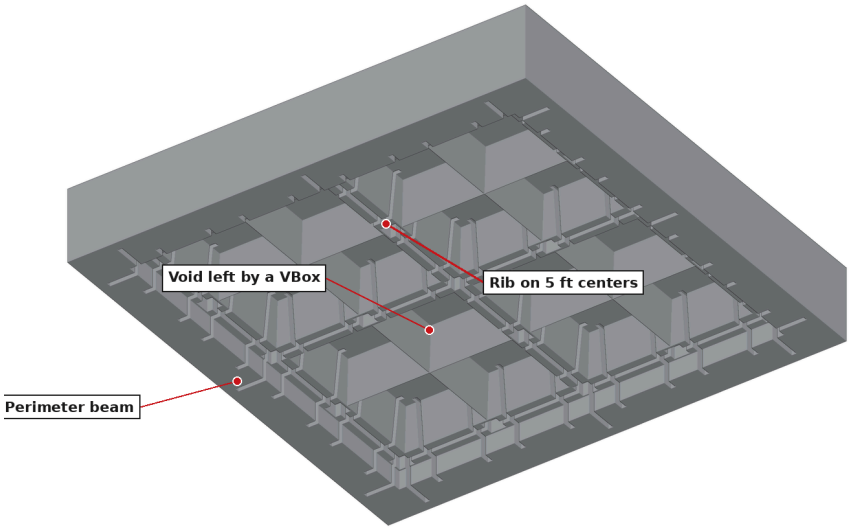
Top connectors bridge box to box and carry the upper steel over the ribs.



4

POUR

Ribs, perimeter beam and cap in a single placement.



THE UNDERSIDE

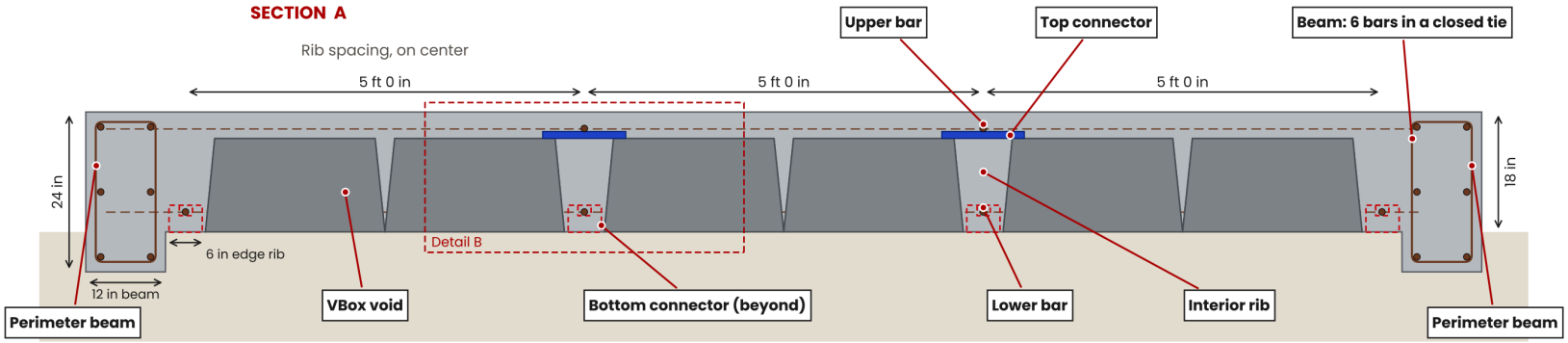
THE STRUCTURE YOU POUR.

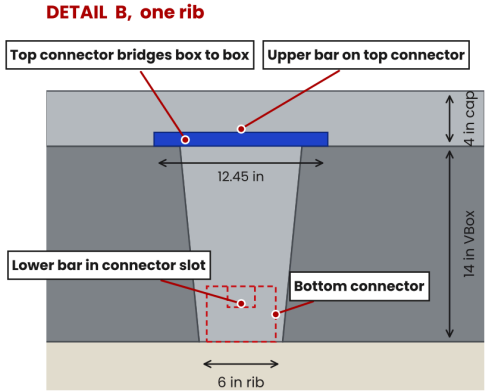
Flip the slab and the system is plain: a two way grid of ribs on 5 ft centers tied into the perimeter beam, with a cap over every VBox.

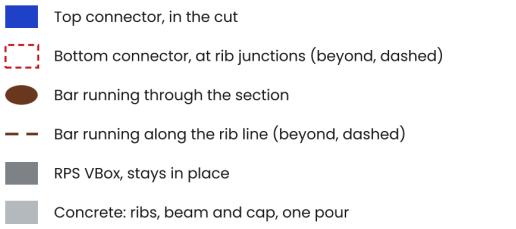
The VBox forms stay in place. The steel lives in the ribs and over them.

TYPICAL SECTION

STEEL IN THE RIBS.







Section A cut through a line of top connectors. Section A bars drawn 2x for legibility; Detail B bars at true #4 size. Beam bars and ties shown typical. Bar sizes, spacing, ties and cover by the Engineer of Record. Rebar shown; post tension tendons sit in the same connectors.

ITEM	TYPICAL
VBox footprint	30 in square
VBox heights	10 in and 14 in (14 in shown)
Module	Four VBox, 60 in square
Rib spacing	5 ft on center, both ways

ITEM	TYPICAL
Rib width	6 in at the base
Slab depth	18 in over 14 in VBox, 4 in cap
Perimeter beam	12 in wide, 24 in deep
Reinforcing	#4 rebar typical, or post tension; two levels