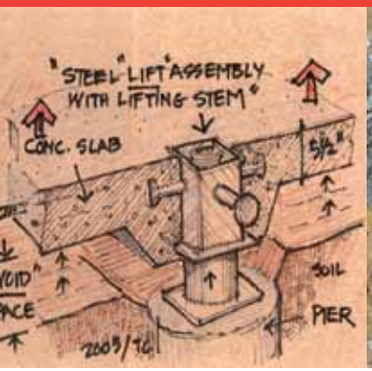






SLABTEK™

Structural Foundation System

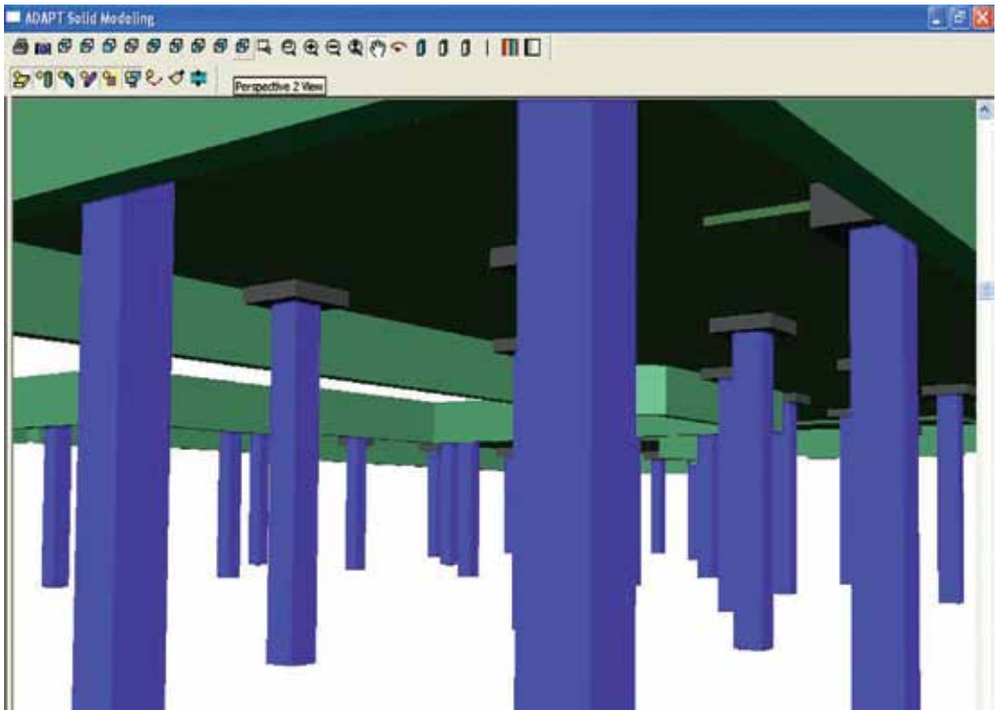
SLABTEK™, a technological advancement in foundation designs for residential and lightweight commercial structures

SlabTek™ is a patent allowed process for concrete foundations within the low-rise commercial and residential industries. SlabTek combines industry proven two-way flat-plate foundation technology with an innovative lifting process to create a foundation system that virtually eliminates foundation movement.

SlabTek is a manufacturing and distribution company that designs and manufactures the SlabTek mechanisms that are used within the SlabTek foundations. We do not engineer nor install foundations. The design of the foundations are up to qualified engineers and the installation of the foundations are performed by qualified concrete contractors. SlabTek provides consulting and training services on an as-needed basis as it regards to installation and or lifting of the SlabTek foundation.

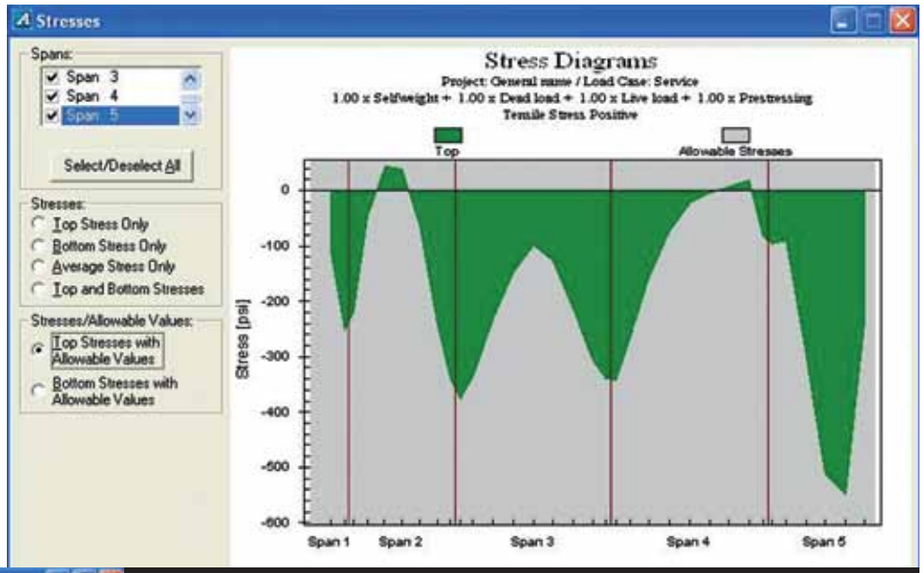
"As a second generation custom home building team, the priority of a solid foundation is the first phase of all projects. The SlabTek™ foundation system has removed all anxiety about building on the expansive soils of the North Texas areas where we build. This concept will be the future norm in construction."

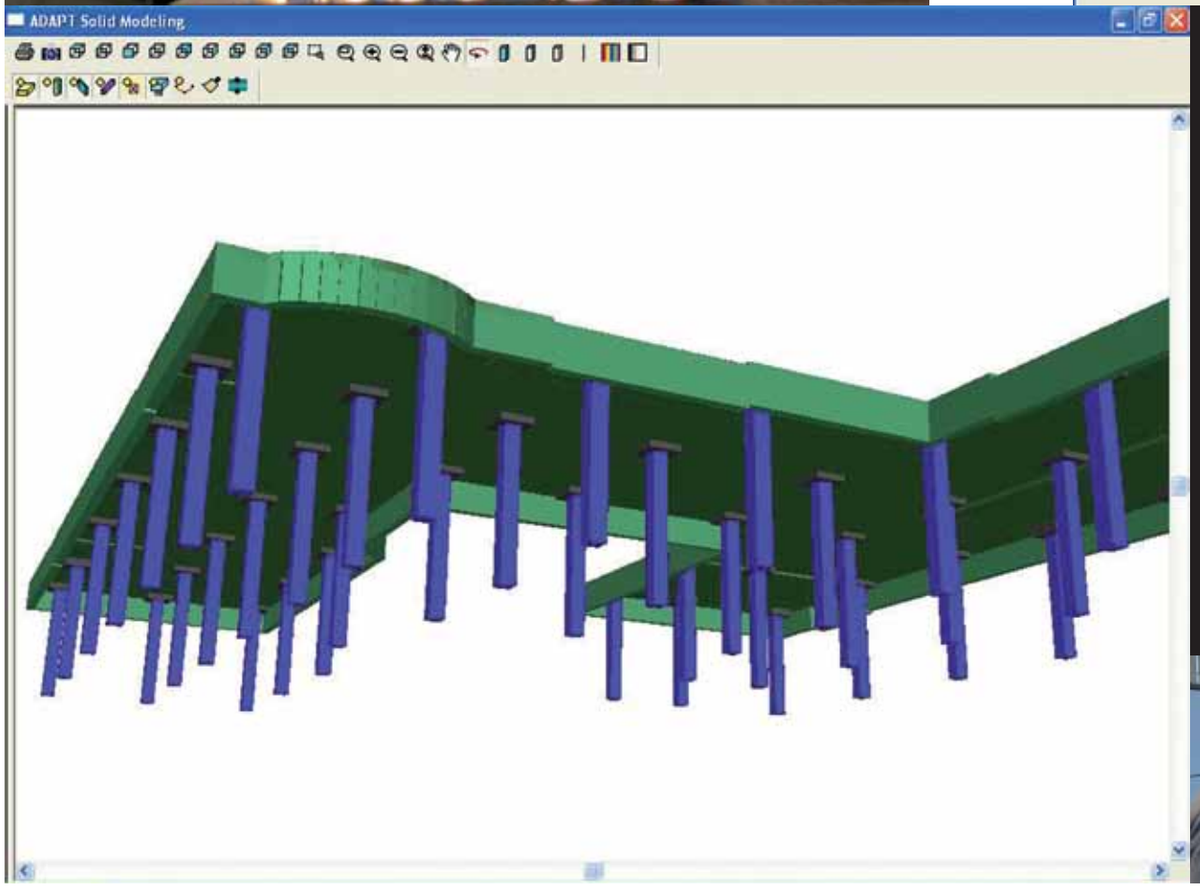
David Huntsman
Larry Walker
Huntsman-Walker Construction



SlabTek foundation system is based upon accepted engineering principles that have proven to be successfully implemented for decades in commerical constuction applications. The SlabTek system is stronger, takes less time to install and is more economical than most traditional foundation systems.

SlabTek foundations are installed as a flat-slab-on-grade foundation with an exterior turn down beam, but no interior beams. The slab rests on a series of piers or spread footers. The foundation is reinforced with either post-tension cables or conventional steel reinforcing. After the concrete has cured, the foundation is elevated above the ground using the SlabTek lifting mechanisms. The amount of lift is dependent on the type of soils and void required to eliminate foundation movement due to expansive or settlement of the soils. By elevating the foundation, SlabTek foundations do not require the soils to be compacted or treated in any manner to control their stability or activity. SlabTek can also be adjusted at the time of lift to take out the majority of construction tolerances in order to create a flatter more level like finished product. The SlabTek process is stronger, cheaper and faster than most of the foundation systems in the market today and cuts down on foundation related warranty issues.

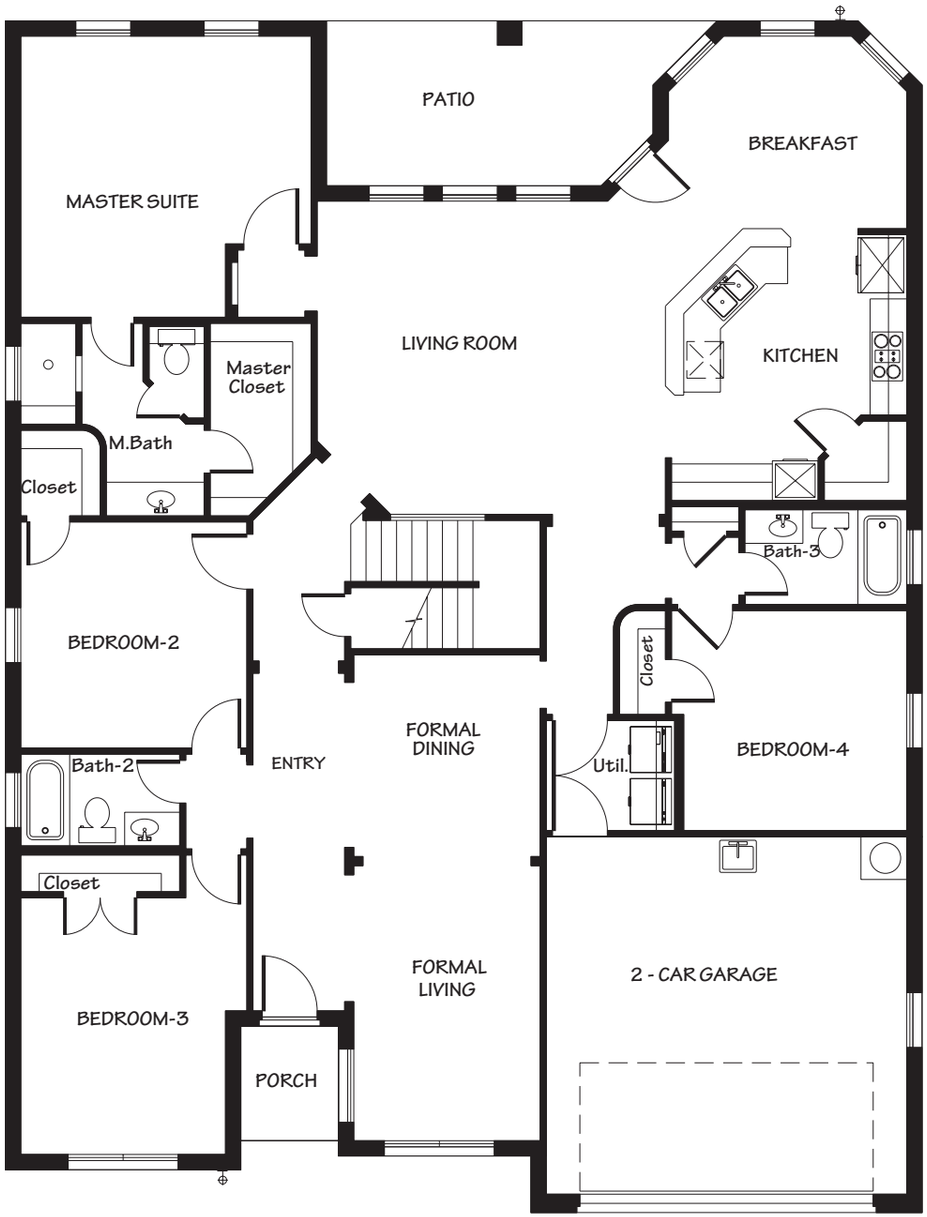


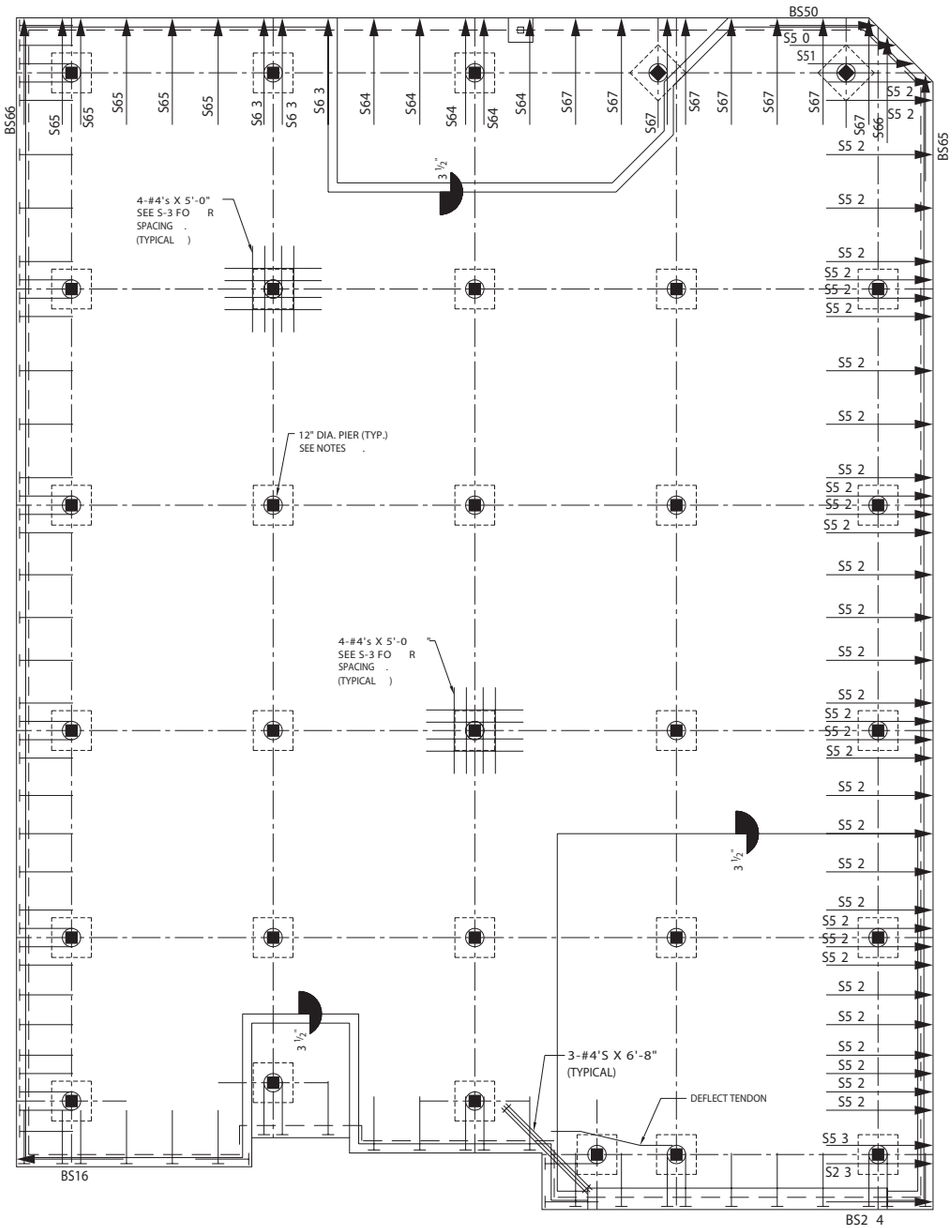


Childress Engineering Services, Inc. is an approved structural engineering firm that designs SlabTek foundations and certifies the lift of the foundation.

CES is not the only firm allowed to design or certify the lift of SlabTek foundations. Any structural engineer with proper qualifications can design a SlabTek foundation.

ADAPT™ is a software company that sells software capable of analyzing the SlabTek foundations. This software provides training on how to use their program to analyze SlabTek foundations. ADAPT is not the only software that can be used, but is the one recommended by SlabTek.


PATIO
BREAKFAST
MASTER SUITE
LIVING ROOM
KITCHEN
Master Closet
M.Bath
Closet
Bath-3
BEDROOM-2
Closet
FORMAL DINING
ENTRY
Util.
BEDROOM-4
Bath-2
Closet
FORMAL LIVING
2 - CAR GARAGE
BEDROOM-3
PORCH


BS50
S5 0
S51
S5 2
S5 2
BS66
BS65
S65
S65
S65
S65
S65
S6 3
S6 3
S6 3
S64
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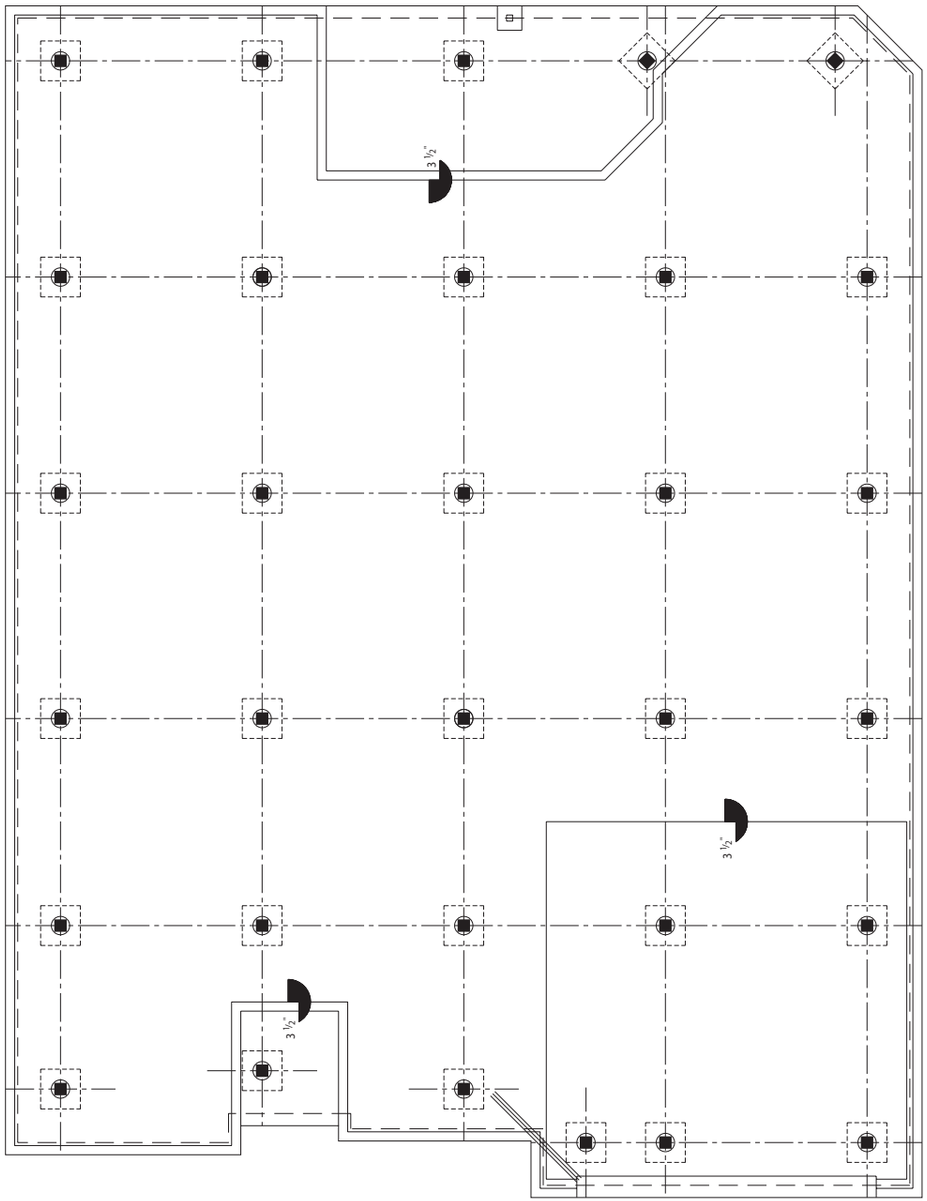
S67
S67
S67
S67
S67
S67
S67
S66
3 ½"
4-#4's X 5'-0"
SEE S-3 FO R
SPACING .
(TYPICAL)
12" DIA. PIER (TYP.)
SEE NOTES .
4-#4's X 5'-0
SEE S-3 FO R
SPACING .
(TYPICAL)
3 ½"
3 ½"
3-#4'S X 6'-8"
(TYPICAL)
DEFLECT TENDON
S5 2
S5 3
S2 3
BS16
BS2 4



Advantages

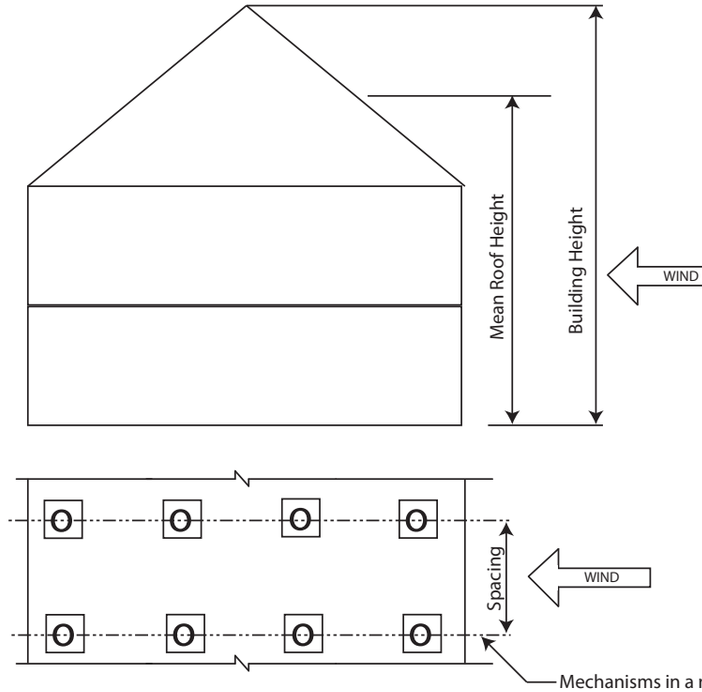
- SlabTek can be utilized in low bearing capacity soils with slope stability issues.
- SlabTek can be used as a solution when geotechnical data is unreliable. SlabTek is not dependent on the nature of the soils near the surface.
- SlabTek is significantly less expensive and more reliable than water injection or chemical stabilization of highly expansive soils.
- SlabTek can be utilized in colder climates to avoid problems with frost heave.
- SlabTek can be fitted with engineered seismic dampers to minimize damage to the structure from seismic forces.
- SlabTek provides a gap or space between soil and foundation to isolate concrete and eliminate possible concrete corrosion.
- SlabTek can utilize drilled concrete piers or engineered "helical" piers and require significantly fewer piers than traditional suspended slabs.
- SlabTek construction processes are not affected by weather conditions.
- SlabTek can save valuable days of construction time compared to traditional pier and beam or suspended slabs.
- SlabTek virtually eliminates warranty concerns such as cracks in the brick or drywall.

TECHNICAL DATA

LOAD CAPACITY

Mechanism Capacity for Two-Story House (Wind 90 mph)

1. Gravity Loads:		**DL (psf)**	**LL (psf)**
	Roof	10	20
	Ceiling	5	10
	2nd Floor	10	40
	1st Floor	66	40
	Total	91	110
2. Wind Loads:			
	Building Height (ft)	34	
	Mean Roof Height (ft)	27	
	Wind Speed (mph)	90	
	Exposure	C	
	Importance Factor: I	1	
	Topographic Factor: Kzt	1	
	Adjustment Factor:λ	1.37	ASCE 7-05
	Wind Pressure at Exp. B, H=30’	11.50	ASCE 7-05
	Total Wind Pressure PS (psf)	15.76	
3. Mechanism 4.75 x 4.75 x 1.375			
	Square Plate Width	4.75	in
	Bolt Size (Fy=75 ksi)	1.5	in
	Plate Thickness	1.375	in
	Concrete Strength Fc’	3000	psi
	Capital Slab Thickness	10	in
	Capital Construction Tolerance	0.00	in
	Capital Design Thickness	**10.00**	**in**



Wind Speed 90 MPH	DL=91psf, LL =110psf WL=15.76psf	**Mechanism 4.75 x 4.75 x 1.25 Loading Capacity (kips) for Two-Story House**								
		Mechanism Spacing (ft) Wind Direction								
	Mechanism in a Row // Wind Direction	Loads	7	8	9	10	11	12	13	14
6” LIFT	3	Max. (DL+LL)	41.00	41.00	41.00	39.00	36.00	33.00	NG	NG
		Min. DL	8.00	9.00	11.00	12.00	13.00	14.00	NG	NG
		WL	1.25	1.43	1.61	1.79	1.96	2.14	2.32	2.50
	4	Max. (DL+LL)	41.00	41.00	41.00	41.00	41.00	41.00	40.00	40.00
		Min. DL	6.00	7.00	8.00	9.00	10.00	11.00	11.00	12.00
		WL	0.94	1.07	1.21	1.34	1.47	1.61	1.74	1.87
	5	Max. (DL +LL)	41.00	41.00	41.00	41.00	41.00	41.00	41.00	41.00
		Min DL	5.00	6.00	6.00	7.00	8.00	9.00	9.00	10.00
		WL	0.75	0.86	0.96	1.07	1.18	1.29	1.39	1.50
	6	Max. (DL + LL)	41.00	41.00	41.00	41.00	41.00	41.00	41.00	41.00
		Min DL	4.00	5.00	5.00	6.00	7.00	7.00	8.00	8.00
		WL	0.62	0.71	0.80	0.89	0.98	1.07	1.16	1.25

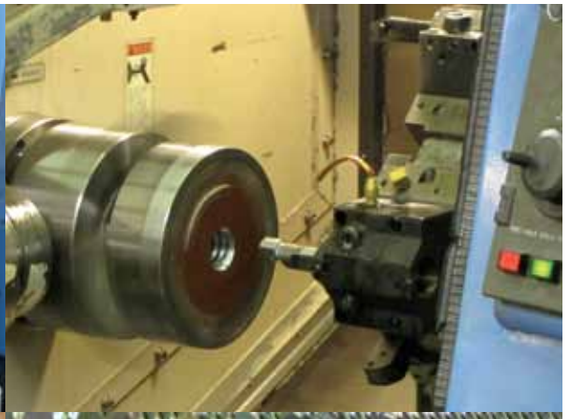
*Charts and diagram above are used for example only and are based upon a typical two story house application. Please refer to a qualified engineer for project specific calculations.

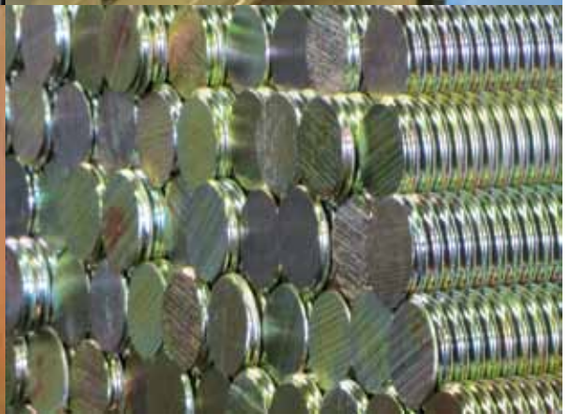
SlabTek mechanisms are designed, tested and manufactured to meet and exceed design requirements. Utilizing state-of-the-art manufacturing processes and quality materials, SlabTek has developed a product that will give a high performance alternative to conventional foundation methods.

TESTING

SlabTek suspended foundation system has been rigorously tested by an independent laboratory to verify its strength and stability.

MANUFACTURING

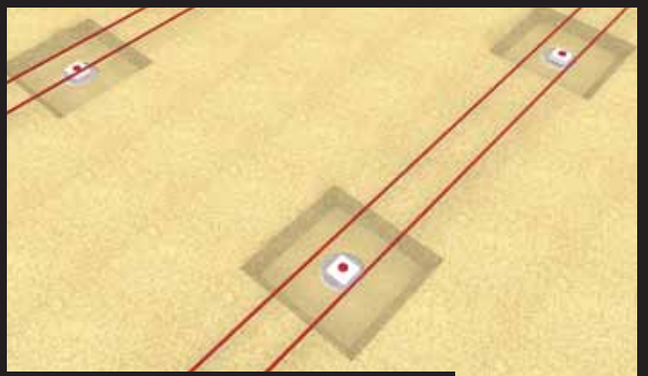




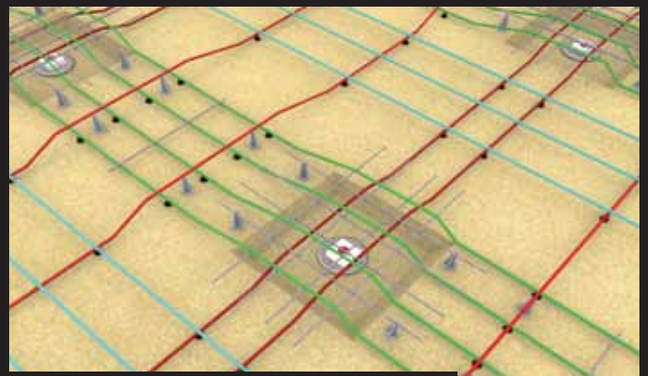
MATERIAL SPECIFICATIONS

Part	Size	Material
SlabTek Base Plate	6” x 6” x ½”	ASTM-A36
SlabTek Nelson Stud	½” Ø x 4 x 2⅛”	ASTM-A108
SlabTek Puck	4¾” x 4¾” x 1¼”	ASTM-A36
SlabTek Adjustable Sleeve	2½” Ø x 7 - 8¾”	HDPE
SlabTek Lifting Bolt	1½” x 4 x 8”, 10”, 12”, 15”	ASTM-A75
SlabTek Base Plug	1½” Ø	Steel, Aluminum or Plastic
SlabTek Installation Cap	3” Ø x 1” x 2¼” Ø x 2”	2lb. Crosslink Polyethlylene
SlabTek Finish Cap	2½ Ø	Plastic

STEP 1
DRILL PIERS

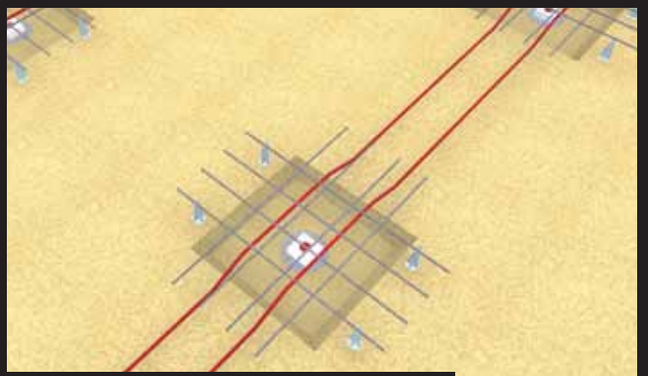


STEP 4
INSTALL DISTRIBUTED CABLES

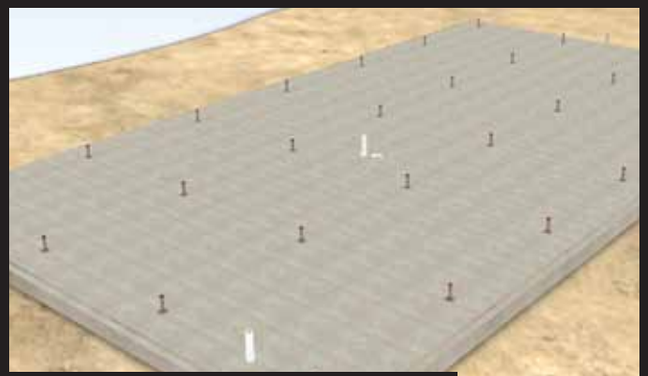


STEP 7
INSTALL REMAINING CABLES

STEP 2
INSTALL MECHANISM

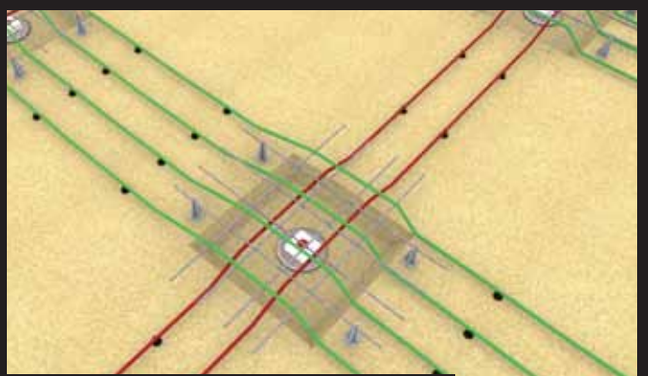


STEP 5
INSTALL REBAR



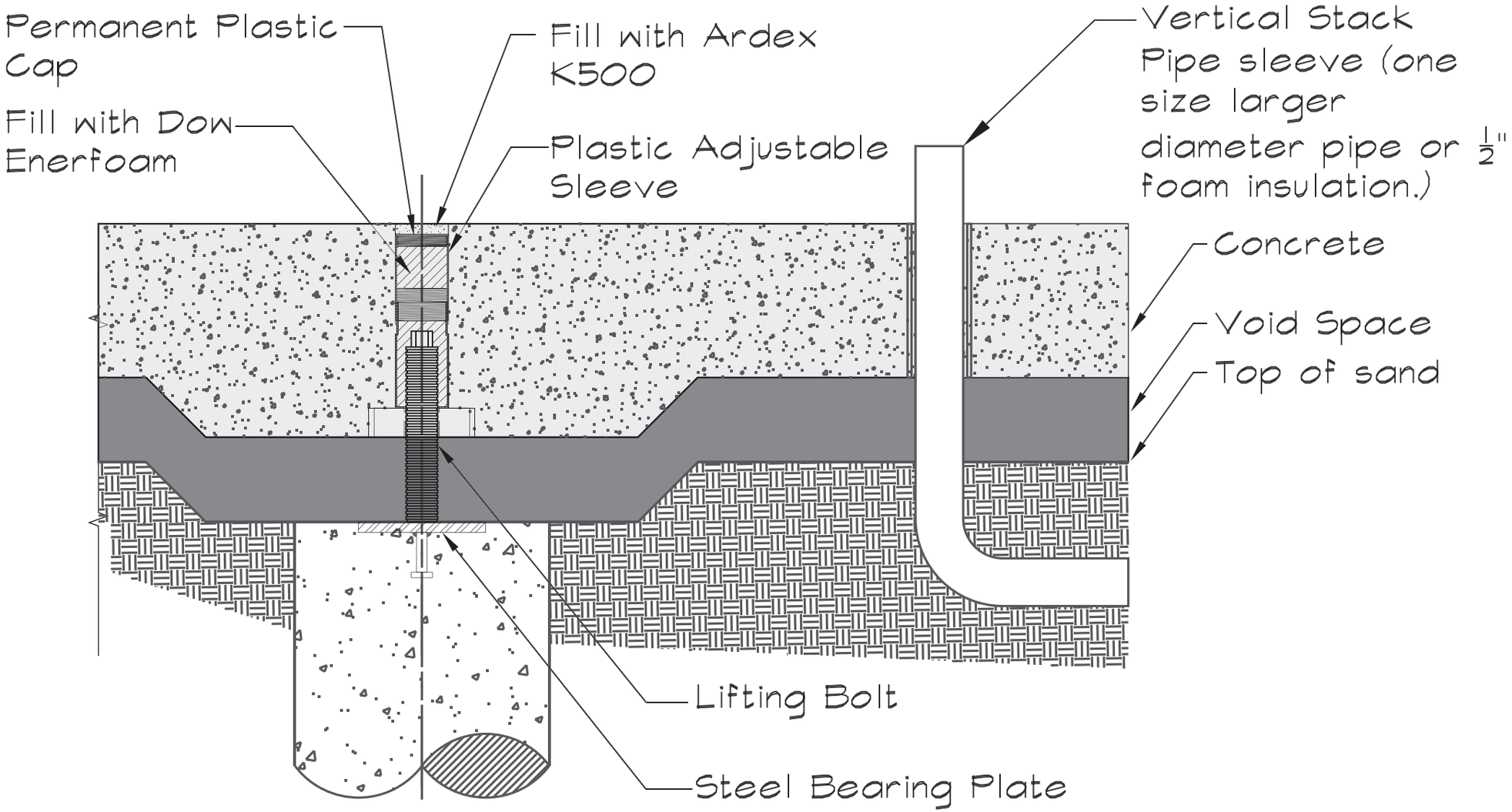
STEP 8
POUR AND EXPOSE MECHANISM

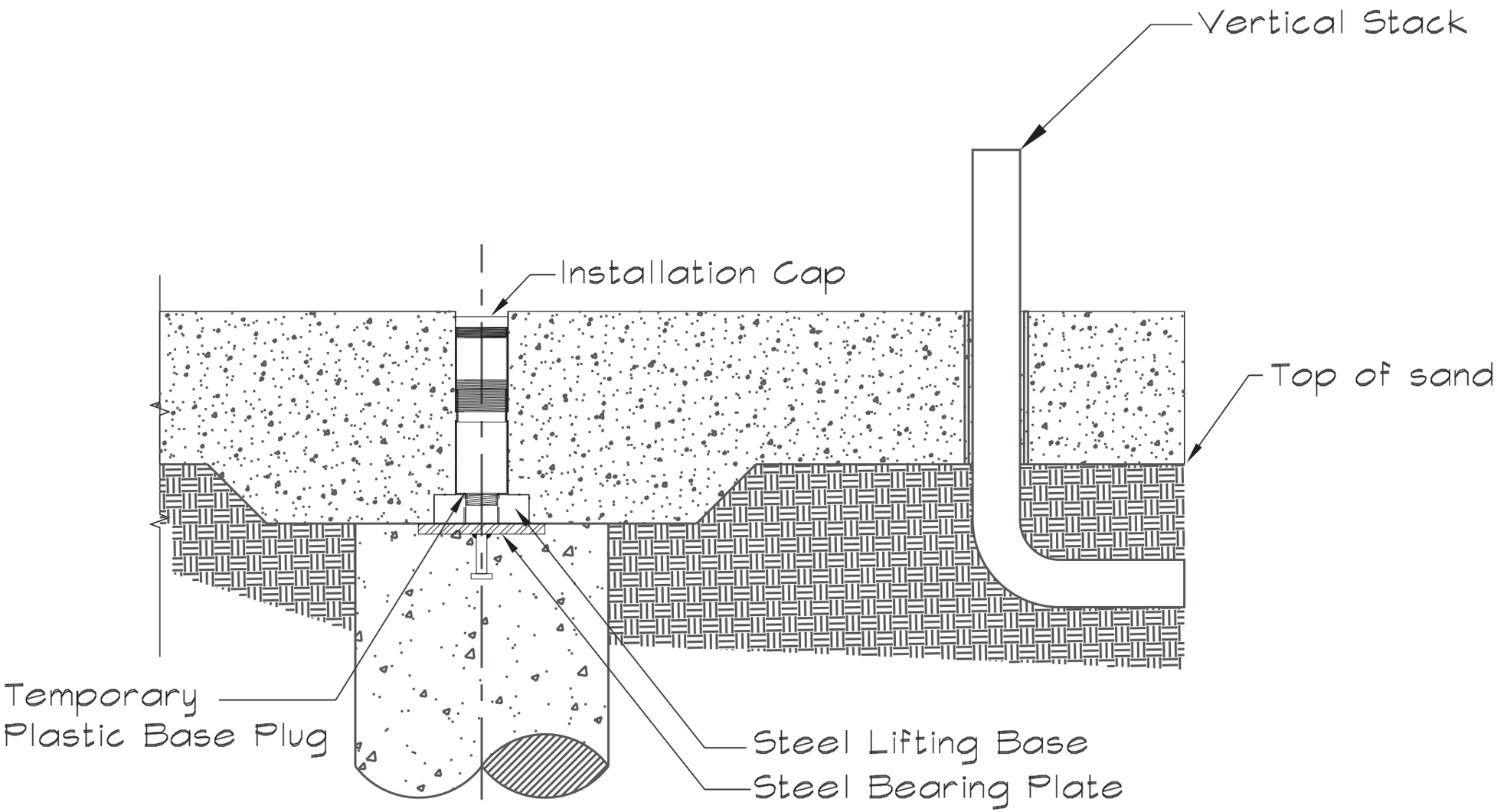
STEP 3
INSTALL CAPITAL

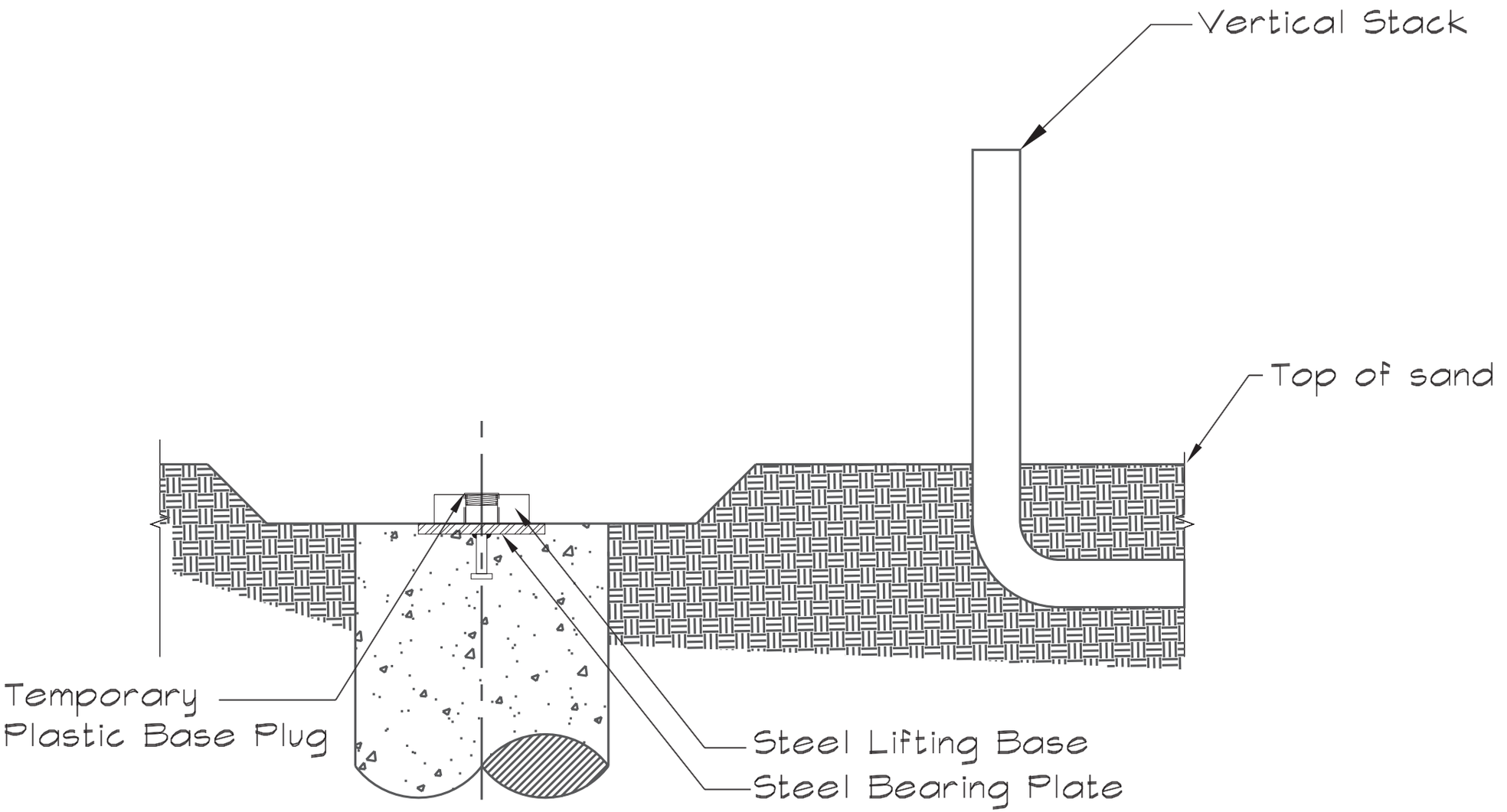


STEP 6
INSTALL PROFILE CABLES

STEP 9
LIFT FOUNDATION


Permanent Plastic Cap
Fill with Dow Enerfoam
Fill with Ardex K500
Plastic Adjustable Sleeve
Vertical Stack Pipe sleeve (one size larger diameter pipe or ½" foam insulation.)
Concrete
Void Space
Top of sand
Lifting Bolt
Steel Bearing Plate


Vertical Stack
Installation Cap
Top of sand
Temporary
Plastic Base Plug
Steel Lifting Base
Steel Bearing Plate


Vertical Stack
Top of sand
Temporary
Plastic Base Plug
Steel Lifting Base
Steel Bearing Plate

FREQUENTLY ASKED QUESTIONS

Q: What is SlabTek?

A: SlabTek is a new foundation design method which combines the construction ease of a slab-on-grade foundation with the performance of an elevated slab. This is accomplished by constructing the foundation on grade, then lifting it, resulting in a void between the foundation and soil. SlabTek utilizes profiled post tensioned strands, eliminating the need for interior beams. This profiled strand design has traditionally been utilized in commercial structures such as parking garages, bridges, and multi-story office buildings.

Q: What are the benefits of SlabTek?

A: An important benefit of SlabTek is reduced risk of foundation movement. Since the slab portion of the foundation is not supported by or in contact with the soil, it is not affected by soil shrinkage or swelling resulting from seasonal moisture change. This isolation is also accomplished by an elevated/structural slab or pier and beam foundation system. However, SlabTek offers the risk reduction without the hassle of void cartons or undesireable wood floor systems. A SlabTek foundation is more economical than an elevated slab or pier and beam foundation; the cost is comparable to a post-tension/rebar slab-on-grade foundation with piers.

Q: How far do your raise the foundation?

A: SlabTek recommends raising the foundation at least one (1) inch above what is commonly called the PVR or Potential Vertical Rise. This is the amount of movement the soil is expected to expand when the soils go from a dry to a wet condition as defined by the geotechnical engineer.

Q: How is the plumbing affected by SlabTek?

A: For the most part, plumbing is installed identical to most suspended slabs or even slabs-on-grade. The plumbing can be sleeved to allow the foundation to be elevated without affecting the plumbing systems or the plumbing can be raised with the foundation.

Q: Do I still have to have good drainage?

A: SlabTek is designed to eliminate seasonal movement and to resist soil movement up to the amount the foundation has been elevated. The drainage around the structure does not have to be as controlled as a slab-on-grade foundation. But under poor drainage conditions, the soil can move more than expected which can reduce the void under the foundation. Therefore, minimum drainage conditions are required.

Q: Will animals invade the void under the foundation?

A: Certain animals are known for burrowing under foundation and SlabTek is no different. But there is not more likelihood of animals burrowing under SlabTek foundations because of the void. This is because the air under the foundation is not vented and there is no free oxygen available. This not habitable to most animals.

Q: Does SlabTek provide any value in energy savings?

A: Yes. SlabTek is elevated above the ground. The air between the ground and the concrete foundation acts as an insulator. Therefore in the cold winters, the ground will not transfer to the elevated foundation.

Q: Will the SlabTek bolts rust?

A: The bolts utilized by SlabTek are electronically zinc plated. This process is one of the best methods for resisting rust. In addition, the bolts are coated with special grease that provides additional resistance.

Q: How do I learn more about SlabTek?

A: Visit SlabTek.com to find out more about this innovative slab system or call us at 214-451-6630.

WHAT PEOPLE ARE SAYING ABOUT SLABTEK™

"My experience with SlabTek began four years ago as one of the first custom home builders to install the SlabTek foundation system. I was so sold on the technology, that I became a "certified installer". My 15 years experience in the general contracting business gives me a bit broader view of how everything works together. I have installed SlabTek in a number of locations here it proved to generate very sizeable savings over conventional methods. Because it is so technologically superior to other slab methods, I now specialize in SlabTek foundations."

Bill Donald
Manager, Smart Slabs, LLC

"Water injection of expansive soils is great if you think the water will stay where you put it -- forever. My confidence in this assumption has always been a little shaky. SlabTek's solution provided us a cost competitive option that doesn't require me to worry about the moisture content of the soil under my slab for the next 20 years."

Malcolm McLeod
Custom Home Builder

"SlabTek is the long awaited answer to the need for an economic way to create structurally suspended slabs. When compared to the use carton forms, SlabTek is a faster, more convenient and less costly way to create a suspended slab. We, at Advanced Foundation Repair, are delighted to be working with SlabTek to lift slabs."

Frederick S. Marshall
President, Structural Repair, LLC
General Partner for
Advanced Foundation Repair, LP

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SLABTEK™

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