

WP Fail-Safe



[Assembly Video on Youtube.com](#)

25" Specification Sheet

VOLUME	Height Inches	Volume Cubic Feet	Cubic Yards
25" Base	10	2.78	0.1031
25" Reducer	10	1.51	0.056
Tower (Per 12"x18" Section)	18	1.18	0.0436
Total		5.47	0.2027

AREA	Height In Inches	Area Square Inches	Square Feet
25" Base	10	480.86	3.34
25" Reducer	10	480.86	3.34
Tower (Per 12"x18" Section)	18	113.04	0.79

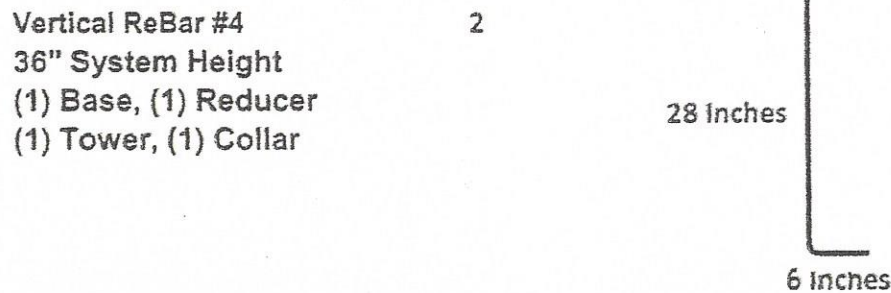
Assumed Soil Bearing Pressure 1500 psf Per IBC and IRC
Allowable Load
25" Base Capacity 5009 LBS

Ready Mix Requirement

Assume one 80 pound bag of ready-mix will make 1/3rd of a cubic foot of concrete.

	Quantity	Weight
25" Base Requirement	4.4 bags	352 lbs
25" Reducer Requirement	3.0 bags	240 lbs
Tower (Per 12"x18" Section)	2.0 bags	160 lbs
Total Bags	9.4 Total Bags	
Total Weight		752 lbs

Cut Sheet: ReBar #4	Quantity	Length
25" Base Only	4	19 3/4 Inches
25" Base Only	2	23 1/4 Inches



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FORM FOOTER™

Structural Design
2009 International Building Code*

1604.8 Anchorage.

1604.8.1 General. Anchorage of the roof to walls and columns, and of walls and columns to foundations, shall be provided to resist the uplift and sliding forces that result from the application of the prescribed loads.

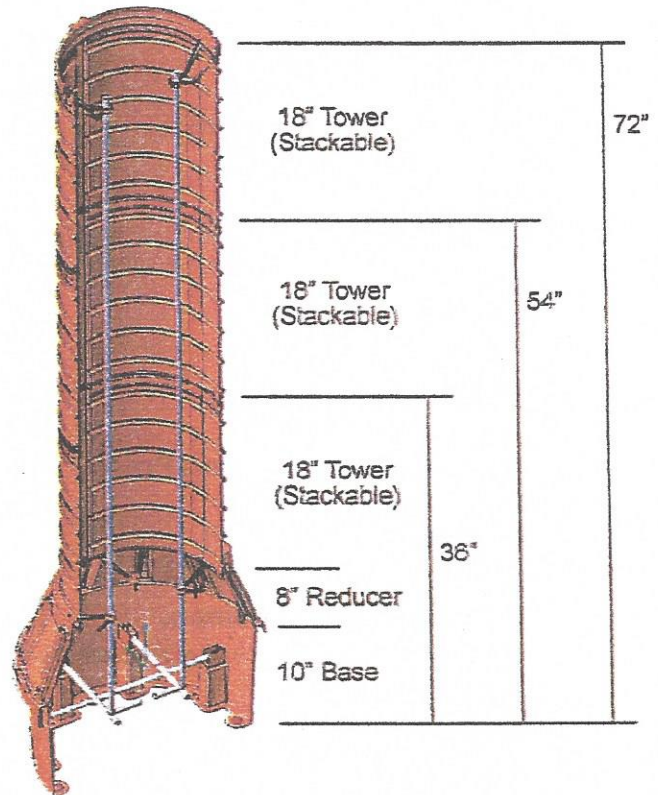
1604.8.3 Decks. Where supported by attachment to an *exterior wall*, decks shall be positively anchored to the primary structure and designed for both vertical and lateral loads as applicable. Such attachment shall not be accomplished by the use of teonails or nails subject to withdrawal. Where positive connection to the primary building structure cannot be verified during inspection, decks shall be self-supporting. Connections of decks with cantilevered framing members to exterior walls or other framing members shall be designed for both of the following:

1. The reactions resulting from the dead load and live load specified in Table 1607.1, or the snow load specified in Section 1608, in accordance with Section 1605, acting on the cantilevered portion of the deck.
2. The reactions resulting from the dead load and live load specified in Table 1607.1, or the snow load specified in Section 1608, in accordance with Section 1605, acting on the cantilevered portion of the deck, and no live load or snow load on the remaining portion of the deck.

1604.9 Counteracting Structural Actions. Structural members, systems, components and cladding shall be designed to resist forces due to earthquake and wind, with consideration of overturning, sliding and uplift. Continuous load paths shall be provided for transmitting these forces to the foundation. Where sliding is used to isolate the elements, the effects of friction between sliding elements shall be included as a force.

1604.10 Wind and Seismic Detailing. Lateral-force-resisting systems shall meet seismic detailing requirements and limitations prescribed in this code and ASCE 7, excluding Chapter 14 and Appendix 11A, even when wind *load effects* are greater than seismic *load effects*.

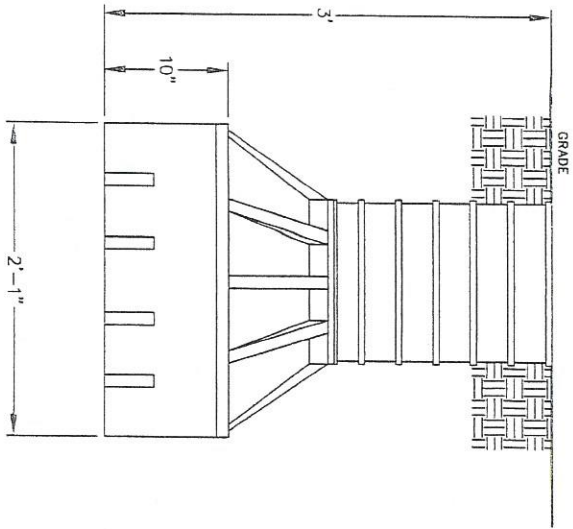
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2009 International Building Code Chapter 16

"Continuous Load Paths shall be provided for transmitting these forces to the foundation."

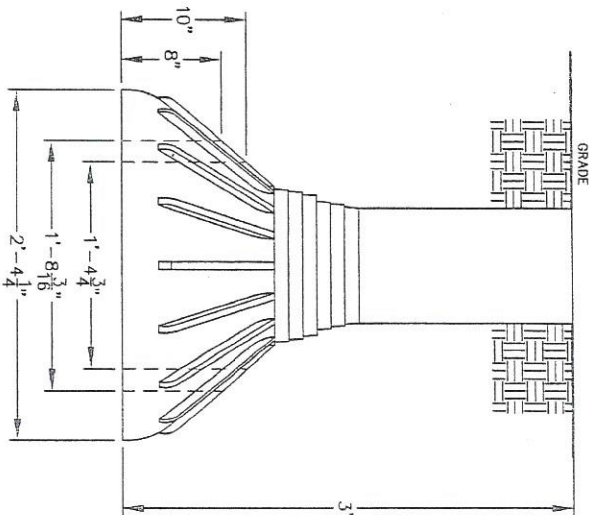
- Seismic = Load = Tension = Rebar Required
- Wind = Load = Tension = Rebar Required
- Overturning = Load = Tension = Rebar Required
- Sliding = Load = Tension = Rebar Required
- Uplift = Load = Tension = Rebar Required



FAIL SAFE

LOAD CAPACITY:
 3.4 SQ. FT.
 5,110 POUNDS

THE WP FAIL SAFE FOOTING PROVIDES A POSITIVE BEARING ACROSS THE ENTIRE BASE. THE BASE MAINTAINS A MINIMUM DIMENSION THAT PROPERLY DISTRIBUTES LOADS TO GRADE. THE FOOTING IS SIZED TO MAINTAIN THE CODE APPROVED SOIL BEARING PRESSURE OF LESS THAN 1,500 POUNDS PER SQUARE FOOT.



OTHER FOOTING

LOAD CAPACITY:
 1.56 SQ. FT.
 2,363 POUNDS

OTHER FOOTINGS INCLUDE A TAPER IN THE BASE THAT DOES NOT ALLOW THE ENTIRE BASE TO SUPPORT THE LOADS. THE CODE REQUIRES A MINIMUM FOOTING THICKNESS OF 10" AND THESE FOOTINGS MEASURE ONLY 17" IN DIAMETER AT THAT THICKNESS. THIS IS A REDUCTION OF OVER 50% OF THE TOTAL FOOTING AREA. THIS AREA REDUCTION INCREASES THE LOAD ON EACH SQUARE FOOT OF SOIL AND MAY EXCEED THE ALLOWABLE SOIL BEARING PRESSURE.

PRINTED, SIGNED AND SEALED ON: 4/23/10
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FILE # WP-AJ-FAIL-SAFE	DATE: 04/23/10
WP FAIL SAFE	REINFORCED FOUNDATION SYSTEM
SCALE: NONE	

SHEET
G1

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