



Installation Manual Addendum

October 6, 2016

Subject: *Special Foundation Systems – Tie Down Engineering Xi2 Foundation Systems*

This letter is intended to serve as an addendum to the Oak Creek/Platinum Homes Installation Manual as it pertains to foundations. Oak Creek/Platinum Homes has determined that Tie Down Engineering’s Xi2 Systems are acceptable for use on Oak Creek/Platinum Homes in Wind Zones 1, 2, and 3 under the following conditions:

- Maximum sidewall height = 90” or 96” (see table)
- Main I-beam spacing = 99.5”
- Maximum eave projection = 12”
- Single Wide home widths from 164” to 210”
- Double Wide home widths from 328” to 372”
- Maximum roof pitch <20 degrees
- Maximum prier height = 36”
- All foundation systems are installed per manufacturers installation instructions

In addition to the Xi2 Foundation Systems, ground anchors and strapping (3150 lbs. allowable load) may need to be installed vertically to the sidewall, evenly spaced along the home (beginning no more than two feet from either end of the home) to restrain against uplift and over turning forces. No additional anchoring of the main beams is required when using the Xi2 System.

The minimum number of systems & anchoring required as follows:

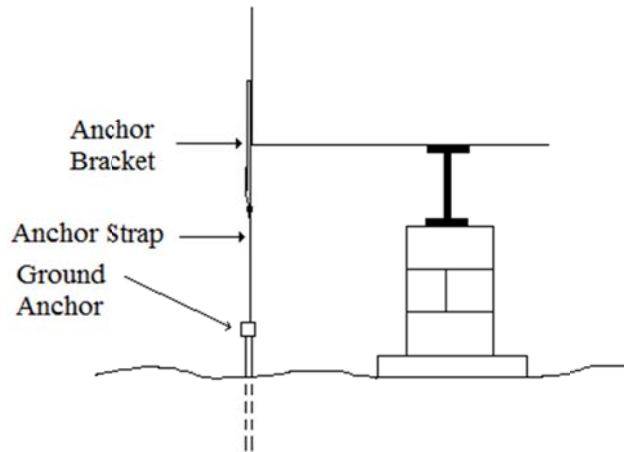
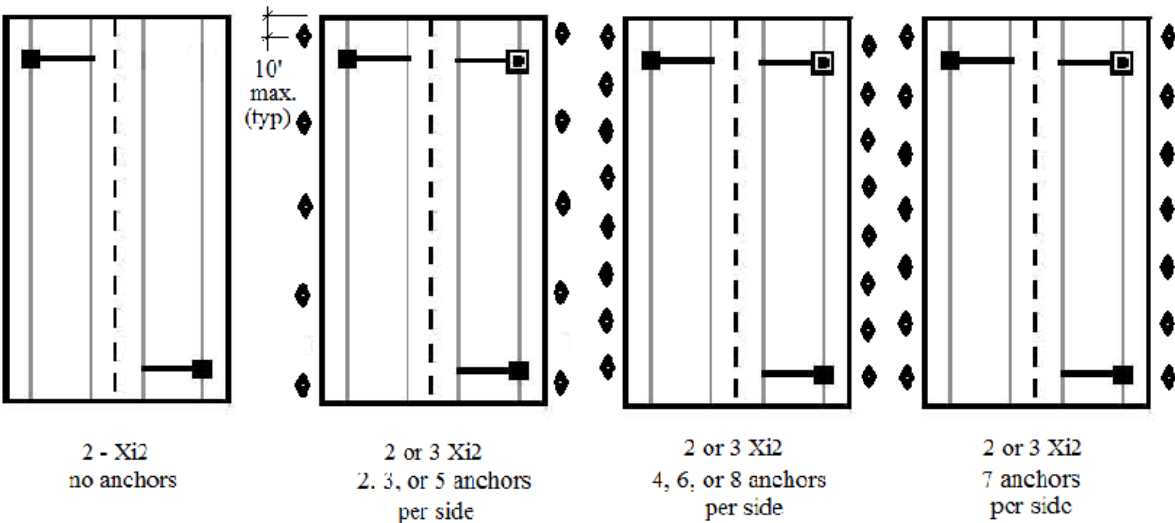
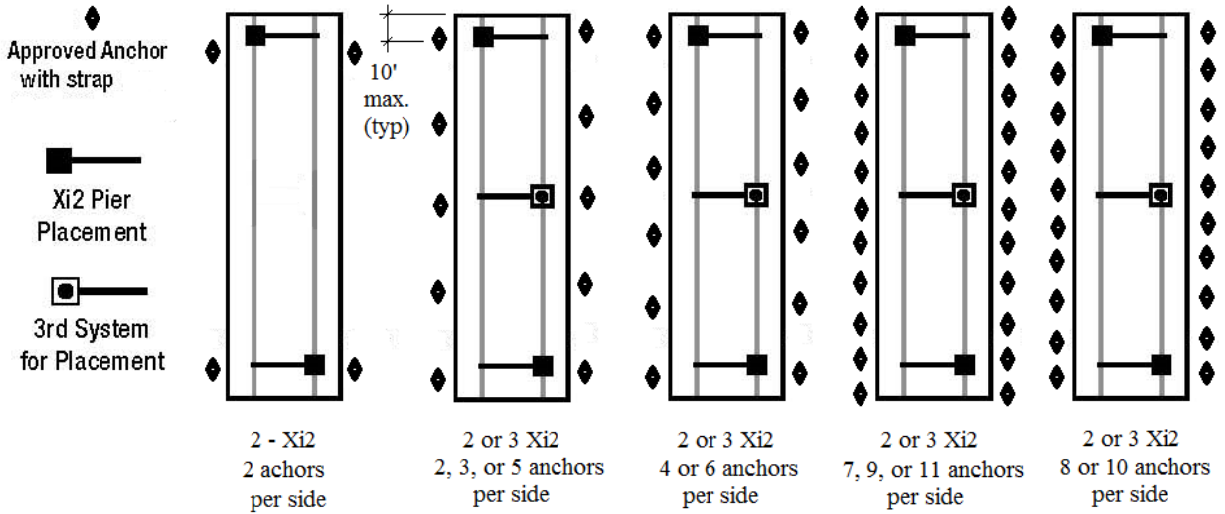
Xi2 Foundation System						
	90" Max. Sidewall			96" Max. Sidewall		
	Max. Box Length	No. of Xi2 Systems	No. of Anchors at Each Side	Max. Box Length	No. of Xi2 Systems	No. of Anchors at Each Side
Singlewides						
WZ1	78'	2	2	78'	2	2
WZ2	52'	2	5	48'	2	5
	60'	2	6	56'	2	6
	72'	2	7	64'	2	7
	78'	2	8	72'	2	8
				78'	3	9
WZ3	52'	2	7	48'	2	7
	60'	3	8	56'	2	8
	68'	3	9	64'	2	9
	78'	3	10	72'	3	10
				78'	3	11
Doublewides						
WZ1	78'	2	0	78'	2	0
WZ2	56'	2	3	52'	2	3
	72'	2	4	68'	2	4
	78'	2	5	78'	3	5
WZ3	48'	2	5	48'	2	5
	60'	2	6	56'	2	6
	68'	3	7	64'	2	7
	78'	3	8	78'	3	8



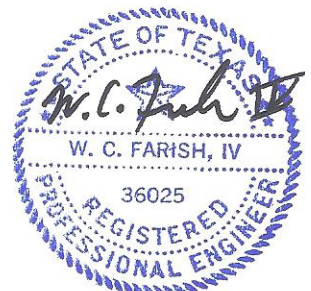
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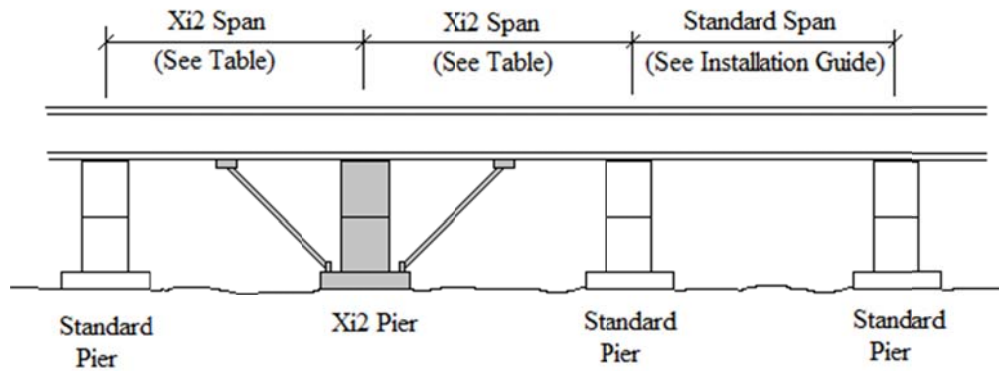
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The Xi2 Foundation Systems and ground anchors shown in the table shall be located as shown below:



Typical Anchor at Sidewall Detail





Xi2 Pier Span to Adjacent Piers

Concrete block piers and pads shown. Scheme is same for other approved piers and pads

36" Max. Pier Height

Xi2 Pier Span to Adjacent Piers			
Min. Soil Bearing	Min. Footing Size	Max. Section Width	
		186 in.	210 in.
1000 psf	21" x 21" x 8"	n/a	n/a
	24" x 24" x 8"	n/a	n/a
	30" x 30" x 10"	n/a	n/a
	36" x 36" x 10"	3'-6"	3'-0"
1500 psf	21" x 21" x 8"	n/a	n/a
	24" x 24" x 8"	n/a	n/a
	30" x 30" x 10"	4'-3"	3'-9"
	36" x 36" x 10"	10'-0"	10'-0"
2000 psf	21" x 21" x 8"	n/a	n/a
	24" x 24" x 8"	n/a	n/a
	30" x 30" x 10"	10'-0"	9'-3"
	36" x 36" x 10"	10'-0"	10'-0"
2500 psf	21" x 21" x 8"	n/a	n/a
	24" x 24" x 8"	5'-6"	4'-10"
	30" x 30" x 10"	10'-0"	10'-0"
	36" x 36" x 10"	10'-0"	10'-0"
3000 psf	21" x 21" x 8"	3'-5"	3'-0"
	24" x 24" x 8"	9'-5"	8'-4"
	30" x 30" x 10"	10'-0"	10'-0"
	36" x 36" x 10"	10'-0"	10'-0"
4000 psf	21" x 21" x 8"	9'-6"	8'-5"
	24" x 24" x 8"	10'-0"	10'-0"
	30" x 30" x 10"	10'-0"	10'-0"
	36" x 36" x 10"	10'-0"	10'-0"



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As stated in the Tie Down Engineering installation instructions the Xi2 is intended to replace one of the typical piers along the main beams of the home, and it may do so only as long as the criteria shown in the table above are followed. In no case can the span of the Xi2 piers exceed those for the standard piers as shown in the *Oak Creek Installation Guide*. The footings in the table above for the Xi2 system are indicated as cast-in-place concrete, but, where the 21"x21"x8" size is indicated in the table they may be replaced by the 21"x21" steel pads by Tie Down Engineering. The steel pads may not be used as a substitute in 4000 psf soils. The rest of the footings under the home may be any type approved in the *Oak Creek Installation Guide*.

In accordance with the Tie Down Engineering installation instructions any skirting installed with the home needs to be of the type that does not imposed any lateral loading on the home. Acceptable skirting includes vinyl skirting, any ventilated type, and any "tear away" skirting.

The conclusions in this letter are based on test reports provided by Tie Down Engineering as well as DAPIA approved comparison calculations performed by Oak Creek/Platinum Homes Engineering and QC departments.

For all other items pertaining to Tie Down Engineering's System, please reference Tie Down Engineering's current installation instructions

See the Oak Creek/Platinum Homes set up manual for all other applicable set up requirements not covered by this letter.

Sincerely,



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