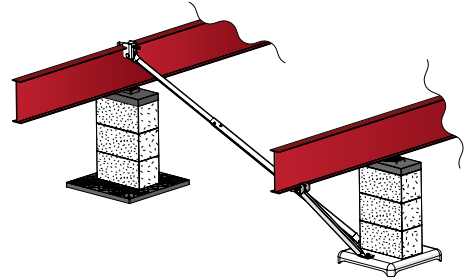


The Xi2 System (2024 Version) Instructions use the Lateral and Longitudinal struts to replace normal lateral frame tie and longitudinal end tie anchorage and stabilizer plates. The home manufacturer may require additional vertical anchor ties that are unique to a home's design. Check the manufacturers installation instructions for set-up requirements.



Installation Requirements

- Install in any type soil, 4B (175-275 lbs.) or better.
- Main rail spacing must be 75.5" – 99.5", 112" exception with proper strut.
- Maximum pier height at system 48", with 6" maximum rise from location of system to end of home. For all other piers use the home manufacturers set up instructions.
- Maximum vertical projection at sidewall is 9' wall and roof rim (9' wall and 12" eave). Higher walls may be used, when possible for design loads to be adjusted accordingly. For 10' walls, check with Tie Down.
- Longitudinal strut angle no more than 50 degrees and no less than 25 degrees. The longitudinal component of the Xi2 system replaces end frame ties. Check manufacturers requirements.
- The Xi2 System is installed on or under one of the pier footers required by manufacturers set up instructions, no other base pad required. If home is already set, a new pier can be added between existing piers as long as the other requirements are met.
- For roof slopes greater than 20 degrees, (4.37" in 12" pitch) see page 3.
- Two systems designed to work with each other must be placed as evenly as possible. Measuring from the center of the block/pier, systems are to be placed a minimum of 2' to a recommended maximum of 10' (when needed may be a maximum of 1/4 the length of the home) from each end of home as shown on pier placement chart. Components of the Xi2 system such as the longitudinal strut and connecting hardware, may extend beyond pier location and can face in or out as long as both systems share the same direction, both either facing in or both facing out.
- This System only replaces normal lateral frame tie and or longitudinal end tie anchorage. Wind Zones II and III (100+ mph) require vertical sidewall anchorage for high wind areas. The home manufacturer may require additional vertical anchor ties that are unique to the home's design. These locations may include shear walls, marriage line ridge beam supports, and rim plates. Check the manufacturer's installation instructions for set-up requirements.

Xi2-24 components exceed HUD code 3280.306 g "Anchoring equipment exposed to weathering shall have a resistance to weather deterioration at least equivalent to that provided by a coating of zinc on steel of not less than 0.30 ounces per square foot of surface coated. The Xi2-24 Foundation System by Tie Down complies with 24CFR Part 3280 & 3285 when installed in accordance with the instructions provided by Tie Down.



WARNING: This product can expose you to chemicals including Nickel, which is known to the State of California to cause cancer. For more information go to: www.P65Warnings.ca.gov



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Up To Date/Expanded
Concrete & Ground
Installation Manual

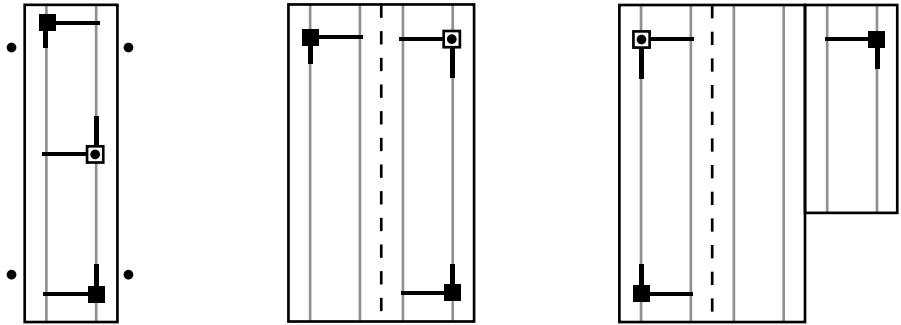
Instruction #08463 (D2044 - Rev. 5/24/24)

Xi2 Lateral Stabilization

●
Approved Anchor*
with strap from
45 to 90 degrees

Xi2 System
Placement

3rd System
for placement



Wind Zones I & II

Single Section Home
0 - 76' Box 2 Xi2 Systems
Over 76' Box 3 Xi2 Systems

Double Section Home
0 - 76' Box 2 Xi2 Systems
Over 76' Box 3 Xi2 Systems

Triple Section Home
0 - 76' Box 2 Xi2 Systems
Over 76' Box 3 Xi2 Systems

Wind Zones III

Single Section Home
0 - 64' Box 2 Xi2 Systems
Over 64' Box 3 Xi2 Systems

Double Section Home
0 - 64' Box 2 Xi2 Systems
Over 64' Box 3 Xi2 Systems

Triple Section Home
0 - 64' Box 2 Xi2 Systems
Over 64' Box 3 Xi2 Systems

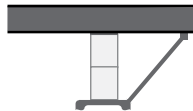
* For Wind Zone I - approved uplift anchor and strap from 45 to 90 degrees, within 10' of end of home on single sections. Anchors within 2' of end in Missouri.

NOTE: Diagram represents single section up to 16' width, double section up to 32' width, and triple section homes up to 48' width.

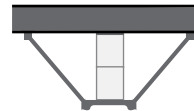
Xi2 Longitudinal Stabilization for Wind Zones II & III

When using longitudinal stabilization only, in higher wind zones, Systems must be spaced as evenly as possible, no more than 10' from the end of the home. Longitudinal Struts DO NOT replace anchors on single section homes.

NOTE: On triple section homes in WZ II & III an additional longitudinal system is required. It should be installed on the center section.



Use One Strut (per end)
for WZ I



Use Two Struts (per end)
for WZ II & III

Xi2-24 System Requirements for Roof Pitches Higher than 20 degrees

Additional Systems:

On a single section home, the 3rd system is placed in the middle of the home. When using 3 or 4 systems (double and triple sections), install on opposite corners. If needed, a 5th system would be in the center of the unit on either side.

Length (Feet)	Wind Zone I				Wind Zone II				Wind Zone III			
	5:12	6:12	7:12	9:12	5:12	6:12	7:12	9:12	5:12	6:12	7:12	9:12
34	2	2	2	2	2	2	2	2	2	2	3	3
36	2	2	2	2	2	2	2	3	2	2	3	3
38	2	2	2	3	2	2	2	3	2	3	3	3
40	2	2	2	3	2	2	2	3	3	3	3	3
42	2	2	3	3	2	2	3	3	3	3	3	3
44	2	2	3	3	2	2	3	3	3	3	3	3
46	2	3	3	3	2	3	3	3	3	3	3	4
48	2	3	3	3	3	3	3	3	3	3	3	4
50	3	3	3	3	3	3	3	3	3	3	3	4
52	3	3	3	3	3	3	3	3	3	3	4	4
54	3	3	3	3	3	3	3	3	3	3	4	4
56	3	3	3	3	3	3	3	3	3	3	4	4
58	3	3	3	3	3	3	3	3	3	3	4	4
60	3	3	3	3	3	3	3	3	3	3	4	5
62	3	3	3	3	3	3	3	3	4	4	4	5
64	3	3	4	4	3	3	4	4	4	4	4	5
66	3	3	4	4	3	3	4	4	4	4	4	5
68	3	4	4	4	3	4	4	4	4	4	5	5
70	3	4	4	4	3	4	4	4	4	4	5	5
72	3	4	4	4	4	4	4	5	4	4	5	5
74	4	4	4	5	4	4	4	5	4	5	5	5
76	4	4	4	5	4	4	4	5	4	5	5	6
78	4	4	4	5	4	4	4	5	4	5	5	6
80	4	4	4	5	4	4	4	5	4	5	5	6

Fig. 3-1

Xi2-24 Foundation System Installation for Ground Pads

Step 1 - Ground Pad

- Stand the ground pan on its side. Slide a carriage bolts through the pan washers passing through the ground pad as shown right in Fig 3-2.
- Attach two star washers over the carriage bolts on top of the ground pan, securing both bolts in place as in Fig 3-2.
- Clear all organic matter and debris from the pad site.
- Place pad centered under I-beam.
- Press or drive pan into ground until the top of the pan is level and flush with prepared surface.
- Stack the pier blocks as needed.

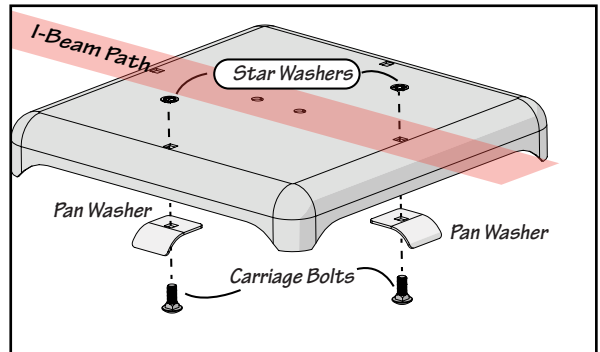


Fig. 3-2

Step 2 - Longitudinal Beam Clamps

- Position two longitudinal beam clamps on both sides of the I-beam. The I-beam frame will slide into the slot on the clamp.
- Raise the longitudinal strut upward and position it between the two beam brackets as shown right in Fig. 3-3.
- Insert a 4" carriage bolt through the clamp, strut, and opposite clamp as shown right.
- Attach a flange nut to the carriage bolt. Note: the two "loose" beam clamps will appear to be out of alignment with the frame.
- Do Not tighten beam clamps.

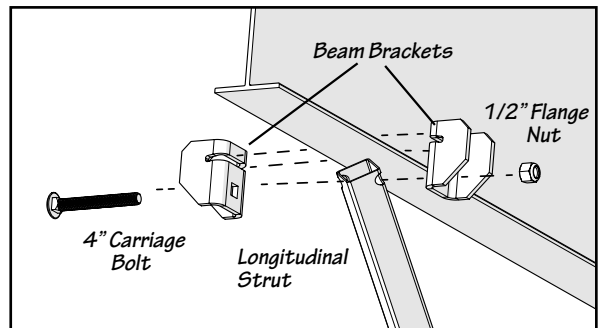


Fig. 3-3

Step 3 - Longitudinal Strut

- Slide the end of the longitudinal strut over the carriage bolt on the ground pad.
- Slide a pan washer over the carriage bolt, install a flange nut over the carriage bolt as show right in Fig. 4-1
- Using a 3/4" deep socket/impact driver, tighten the flange nut on the ground pad.
- Pull outward on the longitudinal beam clamp removing any slack between the clamp and ground pad.
- Using a 3/4" deep socket/impact driver, tighten the flange nut on the beam clamp.
Note: As the bolt/nut tighten, the two beam clamps with begin to crimp the I-beam frame.

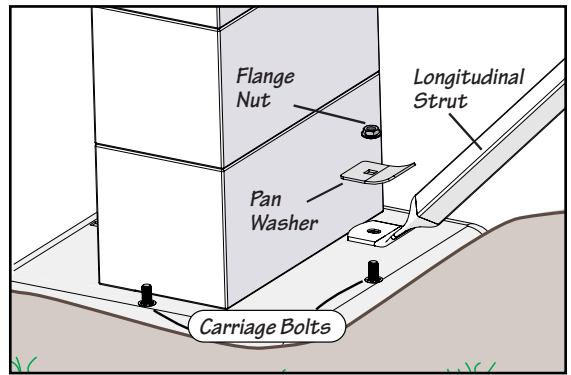


Fig. 4-1

Step 4 - Lateral Strut Beam Attachment

- Extend the lateral strut outward to the opposite side I-beam.
NOTE: The fully extended strut must maintain a minimum 6" to 8" overlap between inner and outer tubes.
- Slide the "J" bolt over the I-beam and between the home frame.
- Slide the beam clamp over the "J" bolt end passing through the top of the beam clamp and slide the clamp over the I-beam frame as shown in Fig. 4-2. Attach flange nut over the "J" bolt and loosely tighten nut.
- Align/insert the lateral strut end in the mounting slot on the bottom of the beam clamp as shown in Fig. 4-2.
- Pass a carriage bolt through the beam clamp and lateral strut coming out the opposite side beam clamp. Loosely tighten flange nut. Do not tighten nut.
- Slide the assembled beam clamp with the mounted lateral strut left or right aligning the strut perpendicular to the pad.
- Once the beam clamp/strut attachment is in its final location, tighten the two flange nuts.

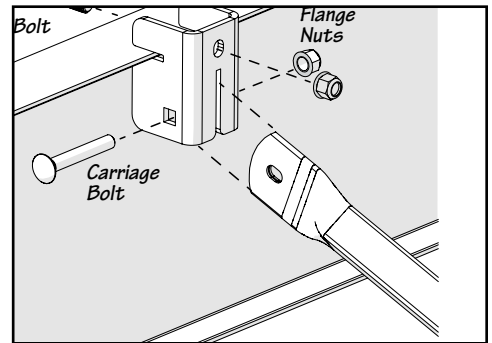


Fig. 4-2

Step 5 - Lateral Strut Base Attachment

- Slide the end of the lateral strut over the carriage bolt on the ground pad.
- Slide a pan washer over the carriage bolt/lateral strut, install a flange nut over the carriage bolt as show right in Fig. 4-3.
- Using a 3/4" deep socket/impact driver, tighten the flange nut on the **ground pad**.
- Using a 3/4" deep socket/impact driver, tighten the flange nut on the **beam clamp**.

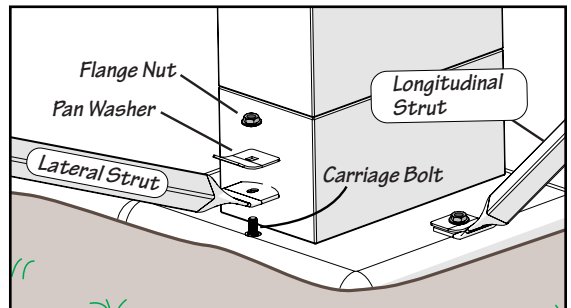


Fig. 4-3

Step 6 - Strut Fasteners

- Secure the extended lateral strut by mounting 4 self tapping screws in the 4 holes in the outer lateral tube as shown in Fig. 4-4. Attach two screws per side.

Lateral Strut Beam Attachment

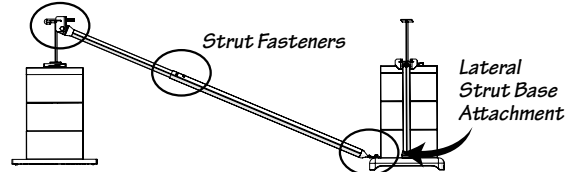


Fig. 4-4