





-Currently 15 open complaints.

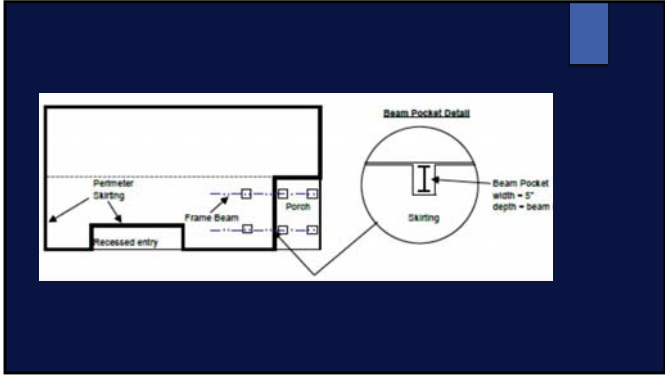
-We have received 9 new complaints since the beginning of this year.

-5 have been sent to the Office of Administrative Hearings for formal resolution.





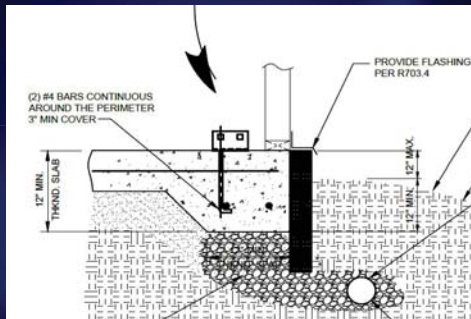


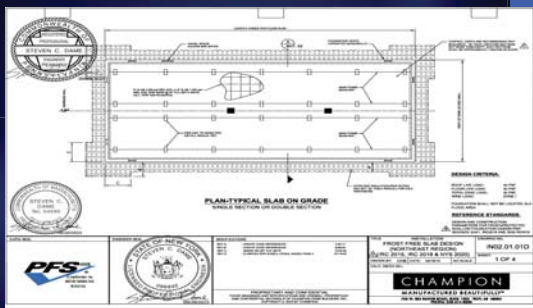


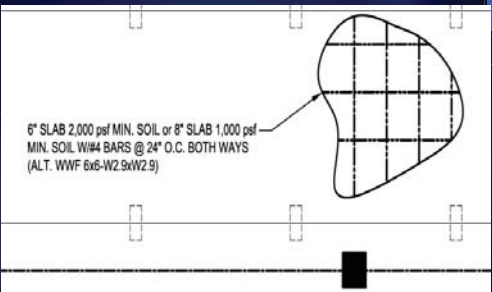


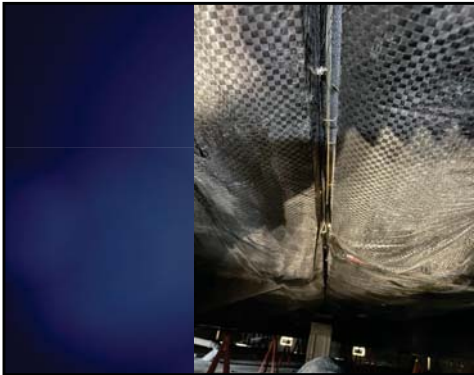












STEP 6. CONNECT FLOORS

Make floor structural connections according to the method described below.

Install toed fasteners through bottom board

Install fasteners at approximately a 45-degree angle (+/- 5 degrees) from horizontal as shown in (Figure 29) using the fastener type, size, and spacing indicated on Table 13.

TABLE 13. FLOOR CONNECTION FASTENING SPECIFICATIONS

Fastener	Type	Size	Spacing		
			Wind Zone I	Wind Zone II	Wind Zone III
Lag screw		5/16" x 5"	36 in.	20 in.	16 in.
Wood screw		#10 x 5"	24 in.	N/A	N/A

* Increase fastener lengths by 3 inches for double rim joists.

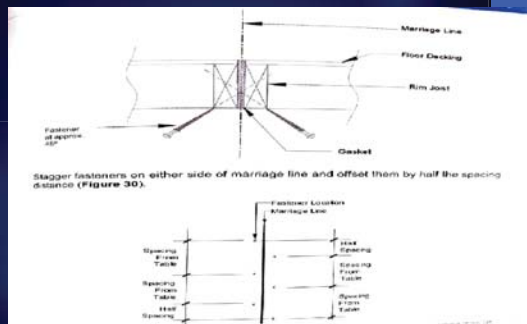
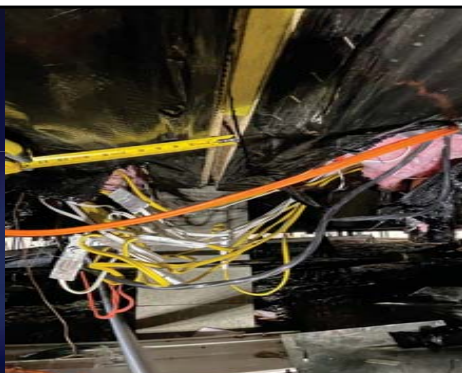
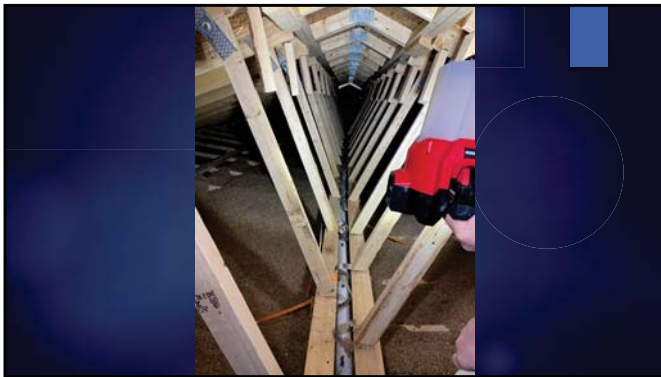
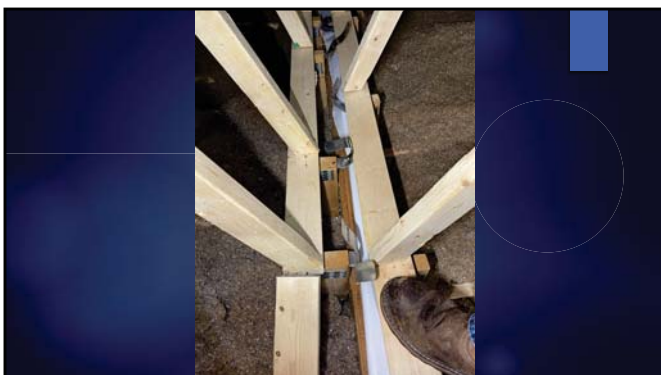


Figure 29. Floor connection through bottom board
(Fasteners must penetrate the rim joist by a minimum of 1½ inches)

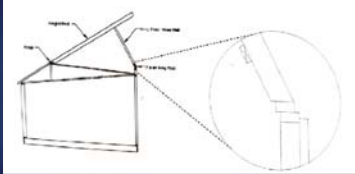


6. **Shim gaps.** Shim any gaps up to one inch between structural elements with dimensional lumber. If any gaps exceed one inch, re-position the home to eliminate such gaps.





4. Secure king posts. Position the hinged king posts (may be a knee wall) atop the fixed king posts or against the wooden stop (Figure 29). The king posts are either hinged to the underside of the hinged-truss top chord or shipped loose as a knee wall stored in the roof cavity. Position them as needed to level the roof, aligning each king post with the king post directly beneath it, and securing it in place per hinged roof truss installation addendum.





STEP 7. CONNECT ROOF

If the marriage line along the roof is not snug, position jacks every 20 feet or less until the shingle l-beam is uniformly in the section until the roof area is tight. Check to make sure the ceiling joint is flush before installing the connections. If not, use a jack and batten to move the ceiling in place, adjusting the batten to work to the edge of the home. Fasten the roof along the marriage line for either double or triple-section homes.

DOUBLE-SECTION HOMES

Make roof structural connections in double-section homes as described below.

Install roof fasteners through roof sheathing

Install the fasteners through the roof deck into the ridge beams or roof rails at an approximately 30-degree angle (± 5 degrees) from horizontal (Figure 32) according to the fastener spacing and specifications in Table 16. Stagger fasteners on each side of marriage line and offset them by half the spacing distance (Figure 30). Spacing indicated is on-center, both sides of ridge. Make sure fasteners penetrate the ridge beam/rail by a minimum of 1-1/2 inches both sides of ridge.

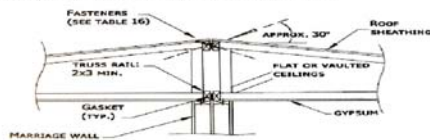
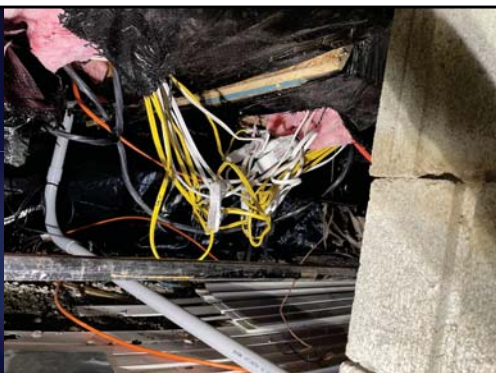
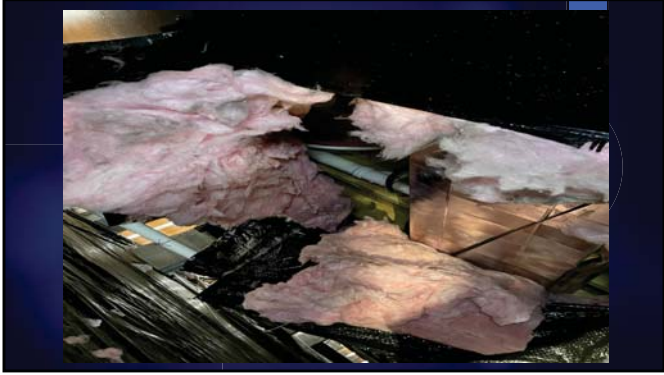


TABLE 16. ROOF CONNECTIONS SPECIFICATIONS

Fastener		Spacing		
Type	Size	Wind Zone I	Wind Zone II	Wind Zone III
Lag screw	5/16" x 5"	28 in.	20 in.	12 in.
Wood screw	#10 x 5"	18 in.	N/A	N/A













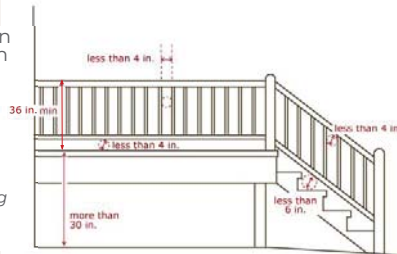
★

MHC Consultants LLC

Residential Code
R321 Guards
Decks, landing more than 30" above grade within 36" horizontally to the edge

Open sided walking surfaces

Guards meeting this drawing



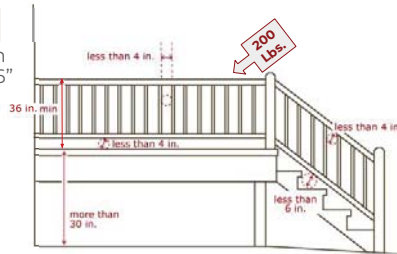
★

MHC Consultants LLC

R321 Guards
Decks, landing more than 30" above grade within 36" horizontally to the edge

Open sided walking surfaces

Guards meeting this drawing



★	MHC Consultants LLC
Residential Code, Appendix BA: BA 102.2 Additions	
Additions shall conform to one of the following:	
<ol style="list-style-type: none">1. Certified under HUD Construction and Safety Standards Act2. Designed and constructed to conform with HUD Construction...3. Designed and constructed to conform with new construction requirements this code (RCNY)	

★	MHC Consultants LLC
Residential Code, Appendix BA: BA 102.2 Additions	
Building additions and accessory structures shall not be structurally supported by the manufactured home.	
Exception. Building additions and accessory structures supported by a MH shall be in accordance with designs provided by the home manufacturer or with designs prepared by a design professional in accordance with acceptable engineering practice.	

	MHC Consultants LLC
Residential Code, Appendix BA: BA 104.2 Alterations and repairs	
<ul style="list-style-type: none">• Alterations and Repairs allowed without requiring compliance with all the requirements of the Uniform Code<ul style="list-style-type: none">– Must conform to requirements of Appendix J– Create no hazard to life, health or safety by such addition, alteration or repair• Alterations and Repairs nonstructural in nature, not affecting structural members or fire protection maybe made with materials similar to original home construction	

Residential Code, Appendix BA:

BA 104.2 Alterations and repairs

- Exception** Installation and/or replacement of glass shall be in conformance with the *fenestration* rating requirements for new installations
 - Fenestration: windows, fixed or operable, doors, glass block, skylights

TABLE CASE 1.2—OPAQUE BUILDING THERMAL ENVELOPE ASSEMBLY MAXIMUM REQUIREMENTS, U-FACTOR METHOD¹

CLIMATE ZONE	4		5		6	
	All Other	Group R	All Other	Group R	All Other	Group R
Roofs						
Insulation entirely above roof deck	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020
Wetted buildings	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020
Attic and other	U-0.020	U-0.020	U-0.020	U-0.020	U-0.019	U-0.019
Walls, above grade						
Wet ²	U-0.020	U-0.020	U-0.020	U-0.021	U-0.021	U-0.021
Wetted buildings	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020
Wetted frames	U-0.021	U-0.021	U-0.022	U-0.022	U-0.022	U-0.022
Wetted frames and other ³	U-0.021	U-0.021	U-0.020	U-0.020	U-0.020	U-0.020
Walls, below grade						
Below-grade wall ⁴	U-0.170	U-0.160	U-0.110	U-0.100	U-0.100	U-0.100
Floors						
Wet ²	U-0.027	U-0.027	U-0.027	U-0.027	U-0.027	U-0.027
Wetted floors	U-0.025	U-0.025	U-0.025	U-0.025	U-0.025	U-0.025

Residential Code, Appendix BA:

BA 104.2 Alterations and repairs

- Exception** Installation and/or replacement of glass shall be in conformance with the *fenestration* rating requirements for new installations
 - Fenestration: windows, fixed or operable, doors, glass block, skylights

TABLE CASE 1.2—OPAQUE BUILDING THERMAL ENVELOPE ASSEMBLY MAXIMUM REQUIREMENTS, U-FACTOR METHOD¹

CLIMATE ZONE	4		5		6	
	All Other	Group R	All Other	Group R	All Other	Group R
Roofs						
Insulation entirely above roof deck	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020
Wetted buildings	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020
Attic and other	U-0.020	U-0.020	U-0.020	U-0.020	U-0.019	U-0.019
Walls, above grade						
Wet ²	U-0.020	U-0.020	U-0.020	U-0.021	U-0.021	U-0.021
Wetted buildings	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020
Wetted frames	U-0.021	U-0.021	U-0.022	U-0.022	U-0.022	U-0.022
Wetted frames and other ³	U-0.021	U-0.021	U-0.020	U-0.020	U-0.020	U-0.020
Walls, below grade						
Below-grade wall ⁴	U-0.170	U-0.160	U-0.110	U-0.100	U-0.100	U-0.100
Floors						
Wet ²	U-0.027	U-0.027	U-0.027	U-0.027	U-0.027	U-0.027
Wetted floors	U-0.025	U-0.025	U-0.025	U-0.025	U-0.025	U-0.025

Residential Code, Appendix BA:

BA 104.2 Alterations and repairs

- Exception** Installation and/or replacement of glass shall be in conformance with the *fenestration* rating requirements for new installations
 - Fenestration: windows, fixed or operable, doors, glass block, skylights

TABLE CASE 1.2—OPAQUE BUILDING THERMAL ENVELOPE ASSEMBLY MAXIMUM REQUIREMENTS, U-FACTOR METHOD¹

CLIMATE ZONE	4		5		6	
	All Other	Group R	All Other	Group R	All Other	Group R
Roofs						
Insulation entirely above roof deck	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020
Wetted buildings	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020
Attic and other	U-0.020	U-0.020	U-0.020	U-0.020	U-0.019	U-0.019
Walls, above grade						
Wet ²	U-0.020	U-0.020	U-0.020	U-0.021	U-0.021	U-0.021
Wetted buildings	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020	U-0.020
Wetted frames	U-0.021	U-0.021	U-0.022	U-0.022	U-0.022	U-0.022
Wetted frames and other ³	U-0.021	U-0.021	U-0.020	U-0.020	U-0.020	U-0.020
Walls, below grade						
Below-grade wall ⁴	U-0.170	U-0.160	U-0.110	U-0.100	U-0.100	U-0.100
Floors						
Wet ²	U-0.027	U-0.027	U-0.027	U-0.027	U-0.027	U-0.027
Wetted floors	U-0.025	U-0.025	U-0.025	U-0.025	U-0.025	U-0.025

- 

[NY] TABLE N1102.1.2 (R402.1.2)
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT*

a. *R*-values are minimum

insulation, the installed R -value of the insulation shall be not less than the R -value specified in the table.

- 

[NY] TABLE N1102.1.2 (R402.1.2)
INSULATION AND PENETRATION REQUIREMENTS BY COMPONENT

For SI: 1 foot = 304.8 mm.
a. Radiuses are minimum.

a. *R*-values are minimums. U-factors and SHGC are maximums. Where insulation is installed in a cavity that is less than the label cavity insulation, the installed *R*-value of the insulation shall be not less than the *R*-value specified in the table.

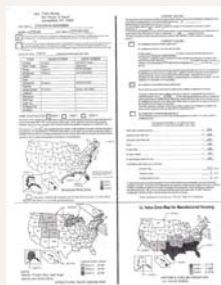
Locate the Data Plate

Confirm

Information

Equipment Data

Design Data



HUD Data Plate

Manufacturer Info
HUD Label
Serial Number
Formaldehyde

MFG. Titan Homes
951 Route 12 South
Saugerfield, NY 13455

UNIT SER. # 019-000-H-A004988A

MODEL # EP8144 HUD SEAL # NTA1931222

☒ This manufactured home is designed to comply with the Federal Manufacture Home Construction and Safety Standards in force at the time of manufacture. This manufacturer certifies this home is compliant with the Title II True Substantial Control Act.

☐ This manufactured home has been constructed in compliance with the approved design and has been registered under the Department of Housing and Urban Development (HUD) in compliance with the Federal Manufacture Home Construction and Safety Standards and the requirements of the Department of Housing and Urban Development (HUD) in effect at the date of manufacture.

DATE OF MFG. 3/2/2020 "DESIGN APPROVED BY PFS"

HUD Data Plate

Manufacturer Info
HUD Label
Serial Number
Formaldehyde

MFG. Titan Homes
951 Route 12 South
Saugerfield, NY 13455

UNIT SER. # 019-000-H-A004988A

MODEL # EP8144 HUD SEAL # NTA1931222

☒ This manufactured home is designed to comply with the Federal Manufacture Home Construction and Safety Standards in force at the time of manufacture. This manufacturer certifies this home is compliant with the Title II True Substantial Control Act.

☐ This manufactured home has been constructed in compliance with the approved design and has been registered under the Department of Housing and Urban Development (HUD) in compliance with the Federal Manufacture Home Construction and Safety Standards and the requirements of the Department of Housing and Urban Development (HUD) in effect at the date of manufacture.

DATE OF MFG. 3/2/2020 "DESIGN APPROVED BY PFS"





HUD Data Plate

Confirm Wind Zone



MHC Consultants LLC

UNIT SER. #

MODEL #

HUD SEAL #

DATE OF MFG.

"DESIGN APPROVED BY PFS"

CHAMPION
HOMES

HUD Data Plate

Roof Zone

North 60 PSF (Snow)
Middle 30 PSF (Snow)
South 20 PSF (Minimum)

CHAMPION
HOMES

HUD Data Plate

Roof Zone

MIDDLE ROOF LOAD ZONE
(30#/PSF)
SOUTH ROOF LOAD ZONE
(20#/PSF)

NEW YORK STATE COUNTIES

CHAMPION
HOMES

HUD Data Plate

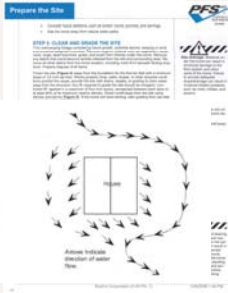
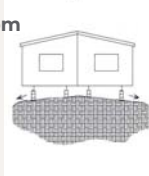
Thermal Zone

Zone 1 0.119
Zone 2 0.096
Zone 3 0.079

Installation Instructions

Prepare the Site

- Crown site away from foundation
 - minimum slope of $\frac{1}{2}$ " per foot for first ten feet
- Direct runoff away from the home



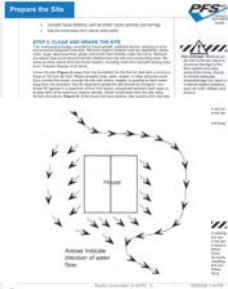
Installation Instructions

Prepare the Site

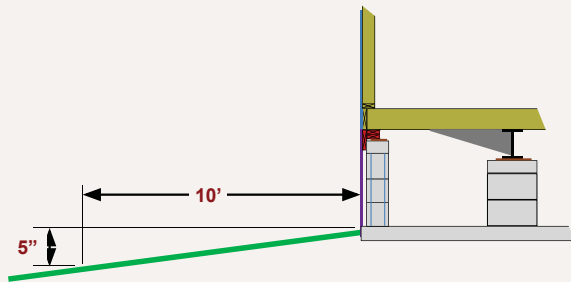
- Crown site away from foundation
 - minimum slope of $\frac{1}{2}$ " per foot for first ten feet
- Direct runoff away from the home



Site drainage. Moisture under the home can result in structural damage to the floor system and other parts of the home. Failure to provide adequate slope/drainage can result in moisture-related problems such as mold, mildew, and erosion.



...minimum slope of $\frac{1}{2}$ " per foot for first ten feet...





Installation Instructions Determine Soil Conditions

Soil Type



Soil Bearing Capacity

Default capacity: 1500 psf,
unless site-specific
information requires lower
values




Installation Instructions Determine Soil Conditions

Soil Bearing Capacity

Soil Type (and classification)	Allowable (psf)
Rock or hard pan (class 1)	4,000
Sandy gravel and gravel; very dense and/or cemented sands; coarse gravel/cobbles; preloaded silts, clays and coral (class 2)	2,000
Sand; silty sand; clayey sand; silty gravel; medium dense coarse sands; sandy gravel; very stiff silt, sand clays (class 3)	1,500
Clay sandy clay, silty clay, clayey silt (classes 4A & 4B)	1,000
Uncompacted fill, peat, organic clays (class 5)	Professional



Soil Type (and classification)



Soil. Inadequate soil bearing capacity or a support system mismatched to the soil characteristics can result in excessive or differential settlement of the home, which can cause the home to go out of level, resulting in jammed doors and windows, cracks in finishes and ruptured plumbing connections.

able (psf)

Professional

[illegible]

used for
ata.

Soil Penetrometer, Pocket Style

Samuel
Samuel's production is designed as a highly sensitive test for use by personnel to check out candidates during the interview. It can be used to assess the candidate's ability to think clearly and to communicate clearly and effectively.

Instructions
A candidate is given 10 minutes, or less, and is requested to write a short story. During writing time, the candidate is to be given no encouragement or suggestions. The candidate may not revise his/her story. The candidate is to be given 10 minutes to write the story. The candidate is to be given 10 minutes to write the story. The candidate is to be given 10 minutes to write the story.

Scoring
The score is calculated on the basis of the candidate's ability to think clearly and to communicate clearly and effectively. The score is calculated on the basis of the candidate's ability to think clearly and to communicate clearly and effectively. The score is calculated on the basis of the candidate's ability to think clearly and to communicate clearly and effectively.

Adaptation
The test is designed for use by personnel to check out candidates during the interview. It can be used to assess the candidate's ability to think clearly and to communicate clearly and effectively. The test is designed for use by personnel to check out candidates during the interview. It can be used to assess the candidate's ability to think clearly and to communicate clearly and effectively.

Install Footings

[illegible]

Install Footings

[illegible]

EXTRA-WEAK LED LIGHT REQUIREMENTS

For the most sensitive applications, such as those requiring the use of color and/or narrow band illumination, the extra-weak LED light source is available. This light source is designed to provide a light level of 0.0001 foot-candles (0.0001 lux) at a distance of 10 feet (3 meters). The light source is available in a variety of colors, including red, green, blue, yellow, and white. The light source is available in a variety of shapes and sizes, including rectangular, circular, and square. The light source is available in a variety of materials, including aluminum, stainless steel, and plastic. The light source is available in a variety of finishes, including brushed metal, polished metal, and painted metal. The light source is available in a variety of mounting options, including surface mount, recessed mount, and pendant mount. The light source is available in a variety of power options, including 12VDC, 24VDC, and 120VAC. The light source is available in a variety of control options, including on/off, dimming, and color changing. The light source is available in a variety of sizes, including 1/4", 1/2", 1", 2", 3", 4", 6", 8", 10", 12", 14", 16", 18", 20", 24", 30", 36", 48", 60", 72", 84", 96", 108", 120", 144", 168", 192", 216", 240", 264", 288", 312", 336", 360", 384", 408", 432", 456", 480", 504", 528", 552", 576", 600", 624", 648", 672", 696", 720", 744", 768", 792", 816", 840", 864", 888", 912", 936", 960", 984", 1008", 1032", 1056", 1080", 1104", 1128", 1152", 1176", 1200", 1224", 1248", 1272", 1296", 1320", 1344", 1368", 1392", 1416", 1440", 1464", 1488", 1512", 1536", 1560", 1584", 1608", 1632", 1656", 1680", 1704", 1728", 1752", 1776", 1800", 1824", 1848", 1872", 1896", 1920", 1944", 1968", 1992", 2016", 2040", 2064", 2088", 2112", 2136", 2160", 2184", 2208", 2232", 2256", 2280", 2304", 2328", 2352", 2376", 2400", 2424", 2448", 2472", 2496", 2520, 2544, 2568, 2592, 2616, 2640, 2664, 2688, 2712, 2736, 2760, 2784, 2808, 2832, 2856, 2880, 2904, 2928, 2952, 2976, 3000, 3024, 3048, 3072, 3096, 3120, 3144, 3168, 3192, 3216, 3240, 3264, 3288, 3312, 3336, 3360, 3384, 3408, 3432, 3456, 3480, 3504, 3528, 3552, 3576, 3600, 3624, 3648, 3672, 3696, 3720, 3744, 3768, 3792, 3816, 3840, 3864, 3888, 3912, 3936, 3960, 3984, 4008, 4032, 4056, 4080, 4104, 4128, 4152, 4176, 4200, 4224, 4248, 4272, 4296, 4320, 4344, 4368, 4392, 4416, 4440, 4464, 4488, 4512, 4536, 4560, 4584, 4608, 4632, 4656, 4680, 4704, 4728, 4752, 4776, 4800, 4824, 4848, 4872, 4896, 4920, 4944, 4968, 4992, 5016, 5040, 5064, 5088, 5112, 5136, 5160, 5184, 5208, 5232, 5256, 5280, 5304, 5328, 5352, 5376, 5400, 5424, 5448, 5472, 5496, 5520, 5544, 5568, 5592, 5616, 5640, 5664, 5688, 5712, 5736, 5760, 5784, 5808, 5832, 5856, 5880, 5904, 5928, 5952, 5976, 6000, 6024, 6048, 6072, 6096, 6120, 6144, 6168, 6192, 6216, 6240, 6264, 6288, 6312, 6336, 6360, 6384, 6408, 6432, 6456, 6480, 6504, 6528, 6552, 6576, 6600, 6624, 6648, 6672, 6696, 6720, 6744, 6768, 6792, 6816, 6840, 6864, 6888, 6912, 6936, 6960, 6984, 7008, 7032, 7056, 7080, 7104, 7128, 7152, 7176, 7200, 7224, 7248, 7272, 7296, 7320, 7344, 7368, 7392, 7416, 7440, 7464, 7488, 7512, 7536, 7560, 7584, 7608, 7632, 7656, 7680, 7704, 7728, 7752, 7776, 7800, 7824, 7848, 7872, 7896, 7920, 7944, 7968, 7992, 8016, 8040, 8064, 8088, 8112, 8136, 8160, 8184, 8208, 8232, 8256, 8280, 8304, 8328, 8352, 8376, 8400, 8424, 8448, 8472, 8496, 8520, 8544, 8568, 8592, 8616, 8640, 8664, 8688, 8712, 8736, 8760, 8784, 8808, 8832, 8856, 8880, 8904, 8928, 8952, 8976, 9000, 9024, 9048, 9072, 9096, 9120, 9144, 9168, 9192, 9216, 9240, 9264, 9288, 9312, 9336, 9360, 9384, 9408, 9432, 9456, 9480, 9504, 9528, 9552, 9576, 9600, 9624, 9648, 9672, 9696, 9720, 9744, 9768, 9792, 9816, 9840, 9864, 9888, 9912, 9936, 9960, 9984, 10000.

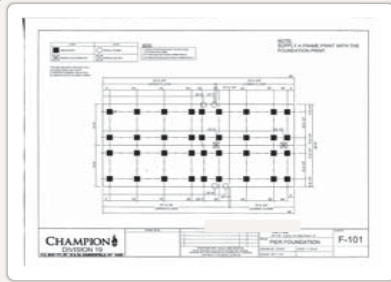
Diagram illustrating the connection of a 12VDC LED strip light system. The system includes a power supply, a switch, and the LED strip. The connections are as follows:

- Power Supply (+) to Switch (+)
- Switch (+) to LED Strip (+)
- LED Strip (+) to LED Strip (-)
- LED Strip (-) to Power Supply (-)

Installation Instructions

Install Footings

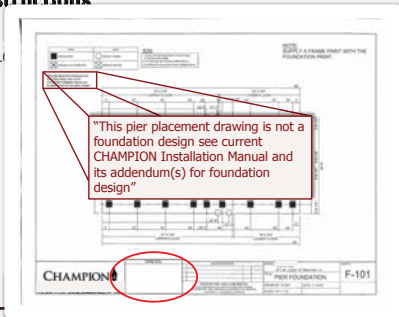
Determine Pier Locations
using Instructions



Installation Instructions

Install Footings

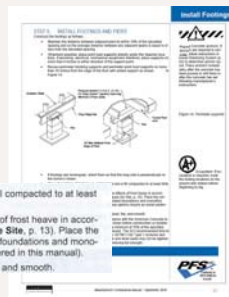
Determine Pier L



Installation Instructions

Install Footings

Undisturbed soil
At/below Frost Line
Level, flat smooth



- Place the bottom of footings on undisturbed soil or fill compacted to at least 90% of its maximum relative density.
- In freezing climates protect footings from the effects of frost heave in accordance with any LAHJ requirements (see **Prepare the Site**, p. 13). Place the bottom of the footings below the frost line (insulated foundations and monolithic slabs are other frost protection options not covered in this manual).
- Make sure the top surface of the footing is level, flat, and smooth.

Installation Instructions

Install Footings

Determine Pier Loads (Frame – no perimeter blocking required)

Roof Load zone and max. section width						
Support Spacing	South (20psf)			Middle (30psf)		
	12ft	14ft	16ft	12ft	14ft	16ft
4ft	2490	2820	3140	2810	3170	3520
6ft	3730	4230	4710	4210	4720	5270
8ft	4980	5640	6270	5610	6340	7030
10ft	6220	7040	7840	7010	7920	8790

Installation Instructions

Install Footings

Determine Minimum Footer Size for Square & Rectangular Shapes
(Default Soil Capacity)

Soil Bearing Capacity	Min. Footing Area (sq. in.)	Min. Footing Size (in.)	8x16 single stack		16x16 double stack	
			Min. Thickness	Max. Capacity	Min. Thickness	Max. Capacity
1500	256	16x16	6	2660	6	2660
	384	24x16	6	4000	6	4000
	576	24x24	8	6000	6	6000
	1024	32x32	12	8000	8	10660

Installation Instructions

Install Footings

Footer size 32" x 32" = 1024 in²



Installation Instructions

Install Footings

6340

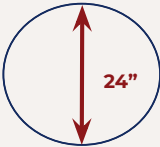
Determine Minimum Footer Size for Circular Shapes
(Default Soil Capacity)

Soil Bearing Capacity	Min. Footing Area (sq. in.)	Min. Footing Dia. (in.)	8x16 single stack		16x16 double stack	
			Min. Thickness	Max. Capacity	Min. Thickness	Max. Capacity
1500	254	18	6	2650	-	-
	452	24	"	4710	6	4710
	615	28	"	6410	"	6410
	800	32	"	8000	"	8370

Installation Instructions

Install Footings

Footer size 24" round



24" Diameter equivalent
 $3.14 \times 12^2 = 452 \text{ sq.in.}$



Installation Instructions

Footer Size

452 sqn

Soil Bearing Capacity	Min. Footing Area (sq. in.)	Min. Footing Dia. (in.)	8x16 single stack		16x16 double stack	
			Min. Thickness	Max. Capacity	Min. Thickness	Max. Capacity
1500	254	18	6	2650	-	-
	452	24	"	4710	6	4710
	615	28	"	6410	"	6410
	800	32	"	8000	"	8370

Installation Instructions

Install Footings

(Frame – no perimeter blocking required) Portion of Table 6 shown.

4710

Roof Load zone and max. section width						
Support Spacing	South (20psf)			Middle (30psf)		
	12ft	14ft	16ft	12ft	14ft	16ft
4ft	2490	2820	3140	2810	3170	3520
5ft	3110	3520	3920	3510	3960	4400
6ft	3730	4230	4710	4210	4760	5270
8ft	4980	5640	6270	5610	6340	7030
10ft	6220	7040	7840	7010	7920	8790



3960

	Soil Bearing Capacity	Min. Footing Area (sq. in.)	Min. Footing Dia. (in.)	8x16 single stack		16x16 double stack	
				Min. Thickness	Max. Capacity	Min. Thickness	Max. Capacity
Re-evaluate Soil Bearing Capacity	1500	254	18	6	2650	-	-
		452	24	"	4710	6	4710
		615	28	"	6410	"	6410
		800	32	"	8000	"	8370
	2500	254	18	6	4410	-	-
		452	24	"	7850	6	7850
		615	28	"	8000	"	10690
		800	32	"	-	"	13960

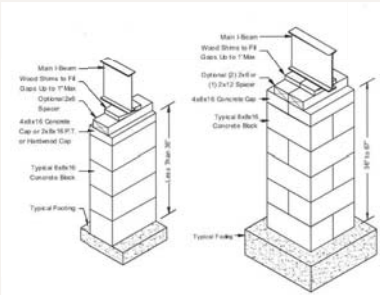
6340



Installation Instructions
Pier Construction

8x16 Single Stack to 36"

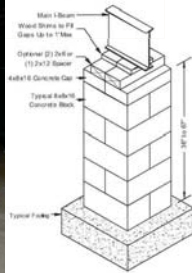
16x16 Double Stack to 67"



**Installation Instructions
Pier Construction**

8x16 Single Stack to 3

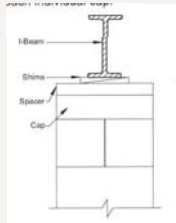
16x16 Double Stack to 2



**Installation Instructions
Pier Construction**

Caps

- Cap hollow block piers to distribute load
- Must be same LxW of pier blocks
- Must be perpendicular to both the main beam and blocks below
- Dimensions per Installation Instructions

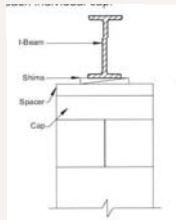


**Installation Instructions
Pier Construction**

Caps

- Cap hollow block piers to distribute load
- Must be same LxW of pier blocks
- Must be perpendicular to both the main beam and blocks below

Champion Permissible Caps
Solid Masonry 4"x8"x16"
PT Lumber 2"x8"x16"
Corrosion Protected Steel min. ¼" thick

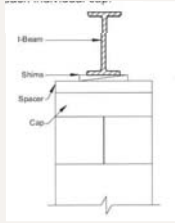


Installation Instructions

Pier Construction

Spacers

- When the space to be shimmed is greater than 1" but less than a solid cap block or pier block, use hardwood dimensional lumber as spacer



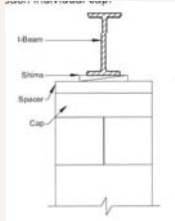
Installation Instructions

Pier Construction

Spacers

- When the space to be shimmed is greater than 1" but less than a solid cap block or pier block, use hardwood dimensional

Champion Permissible Spacers
Nominal 1" or 2" thick lumber
2" or 4" concrete block

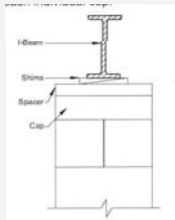


Installation Instructions

Pier Construction

Shims

- Always in pairs
- Fill no more than 1" space
- Driven tight
- For split caps, install shims and spacers over EACH individual cap

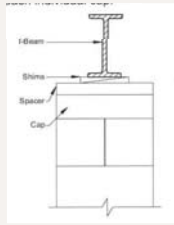


**Installation Instructions
Pier Construction**

Shims

- Always in pairs
- Fill no more than 1" space
- Driven tight
- For split caps, install shims and spacers over EACH individual cap

Champion Permissible Shims/Wedges
Hardwood min. 4" wide x 6" long x 1" thick.
Plastic must be listed with load capacity

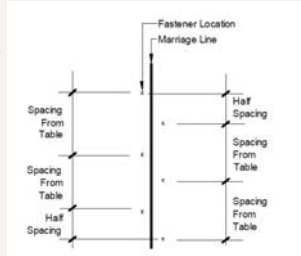


**Installation Instructions
Multi-Sectional Fastening**

5/16" x 4 1/2" lag screw with washer
 36" Spacing

Must penetrate the opposite rim joist by a minimum of 1 1/2"

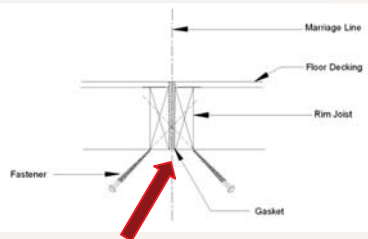
Additional fasteners:
 each end of home
 each side of through-the-rim crossover ducts



**Installation Instructions
Multi-Sectional Fastening**



Gaps between structural elements not to exceed 1". Gaps larger than 1/2" must be filled with plywood or shims. Home sections are to be in contact with each other.



Installation Instructions

Multi-Sectional Fastening



Gaps between elements must be 1". Gaps must be filled with plywood or other material to ensure contact.



MHC Consultants LLC

Marriage Line

Floor Decking

Rim Joist



MHC Consultants LLC

Line

Decking

Joist

Installation Instructions

Multi-Sectional Fastening

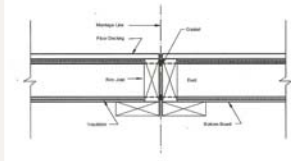
HVAC Crossover Ducts



MHC Consultants LLC

Installation Instructions Multi-Sectional Fastening

HVAC Crossover Ducts

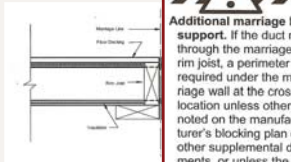


Checking through-the-rim-ducts. Ensure that through-the-rim-duct connections are secure and tight after the home sections are together.

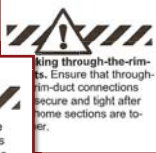
Figure 27. In-Room duct showing crossover through rim joist

Installation Instructions Multi-Sectional Fastening

HVAC Crossover Ducts



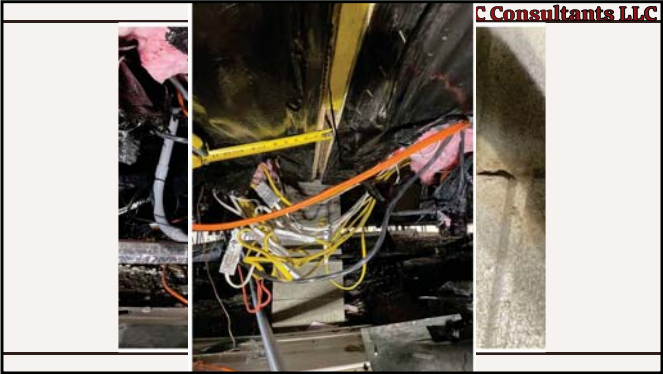
Additional marriage line support. If the duct runs through the marriage line rim joist, a perimeter pier is required under the marriage wall at the crossover location unless otherwise noted on the manufacturer's blocking plan or other supplemental documents, or unless the home is constructed with a perimeter support system.



Checking through-the-rim-ducts. Ensure that through-rim-duct connections are secure and tight after home sections are together.

Figure 27. In-Room duct showing crossover through rim joist









Installation Instructions

Plumbing Issues

Sanitary Sewer

- Piping shall be supported so as to ensure alignment and prevent sagging
- Hangers and anchors shall be of sufficient strength to maintain their share of the weight of pipe and its contents
- Hangers and strapping shall be of approved material

Installation Instructions

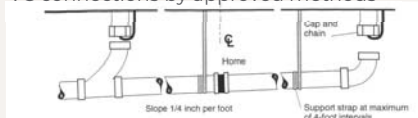
Plumbing Issues

Miscellaneous

- Drain, Waste and Vent

Support pipe 48"oc or less by approved method

ABS to PVC connections by approved methods



Installation Instructions

Plumbing Issues

Miscellaneous

- Drain, Waste and Vent

Support pipe 48"oc or less by approved method

ABS to PVC connections by approved methods




Installation | Plumbing Issue

Miscellaneous

· Drain, Was

Support pipe method

ABS to PVC



MHC Consultants LLC

Installation | Plumbing Issue

Miscellaneous

· Drain, Was

Support pipe method

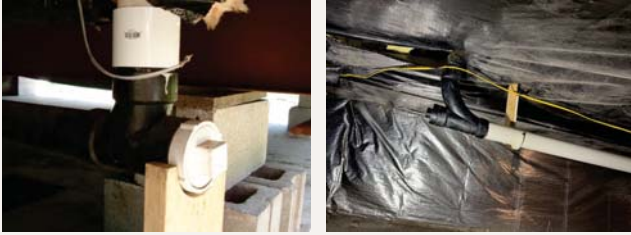
ABS to PVC



MHC Consultants LLC



MHC Consultants LLC



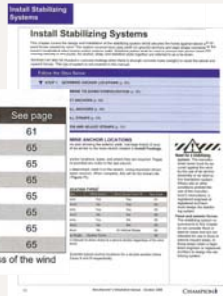
Installation Instructions Stabilizing Systems

Determine anchor types / locations

TABLE 21. ANCHOR LOCATION TYPES¹

Location	Type	Wind Zone 1	Wind Zones II and III	See page
Sidewall	Frame	Yes	Yes	64
	Vertical	No	Yes	65
End wall	Frame	Yes	Yes	65
	Vertical	No	Yes	65
Tag Unit	Frame	Yes	NA	65
	Vertical	No	NA	65
Porch Post	Vertical	No	A Vertical Strap	65
Off Set Unit	Same as Single Section Home			65

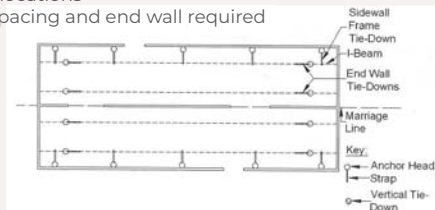
¹ Connect any factory-installed sidewall tie-down straps to a ground anchor regardless of the wind zone in which the home is placed.



Installation Instructions Stabilizing Systems

Determine anchor locations

Sidewall max. spacing and end wall required



Installation Instructions Stabilizing Systems

Sidewall spacing
Utilize appropriate table



Installation Instructions Stabilizing Systems

Sidewall spacing
Utilize appropriate table

TABLE 22. WIND ZONE I SIDEWALL FRAME ANCHOR MAXIMUM SPACINGS

Roof Slope Maximum 4:12 (31 degrees)

Wind Zone	Height from Ground to Top of Wall	Roof Slope	Single Section		Multi Section	
			Roof Slope	Roof Slope	Roof Slope	Roof Slope
WZ 1	0-10 ft	0-10%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	10-15 ft	0-10%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	15-20 ft	0-10%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	20-25 ft	0-10%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
WZ 2	0-10 ft	10-15%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	10-15 ft	10-15%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	15-20 ft	10-15%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	20-25 ft	10-15%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
WZ 3	0-10 ft	15-20%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	10-15 ft	15-20%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	15-20 ft	15-20%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	20-25 ft	15-20%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
WZ 4	0-10 ft	20-25%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	10-15 ft	20-25%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	15-20 ft	20-25%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	20-25 ft	20-25%	12" - 12"	12" - 12"	12" - 12"	12" - 12"

Installation Instructions Stabilizing Systems

Sidewall spacing
Utilize appropriate table

TABLE 22. WIND ZONE I SIDEWALL FRAME ANCHOR MAXIMUM SPACINGS

Roof Slope Maximum 4:12 (31 degrees)

Wind Zone	Height from Ground to Top of Wall	Roof Slope	Single Section		Multi Section	
			Roof Slope	Roof Slope	Roof Slope	Roof Slope
WZ 1	0-10 ft	0-10%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	10-15 ft	0-10%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	15-20 ft	0-10%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	20-25 ft	0-10%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
WZ 2	0-10 ft	10-15%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	10-15 ft	10-15%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	15-20 ft	10-15%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	20-25 ft	10-15%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
WZ 3	0-10 ft	15-20%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	10-15 ft	15-20%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	15-20 ft	15-20%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	20-25 ft	15-20%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
WZ 4	0-10 ft	20-25%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	10-15 ft	20-25%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	15-20 ft	20-25%	12" - 12"	12" - 12"	12" - 12"	12" - 12"
	20-25 ft	20-25%	12" - 12"	12" - 12"	12" - 12"	12" - 12"

Floor Width

Installation Instructions Stabilizing Systems

Sidewall spacing
Utilize appropriate table

Floor Width
Sidewall Height
Height of Pier
Beam Spacing
Roof Pitch

TABLE 22: WIND ZONE I SIDEWALL FRAME ANCHOR MAXIMUM SPACING
Roof Slope Maximum 4:12 (20 degrees)

Floor Width	Sidewall Height	Height from Ground to Top of Pier	Single Section		Multi-Section	
			Beam Spacing 8'-0" to 8'-6"	Beam Spacing 9'-0" to 9'-6"	Beam Spacing 8'-0" to 8'-6"	Beam Spacing 9'-0" to 9'-6"
12' Floor	12' Sidewall	12'-0" to 12'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		12'-6" to 13'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		13'-0" to 13'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		13'-6" to 14'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-0" to 14'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-6" to 15'-0"	8'-0"	10'-0"	8'-0"	10'-0"
	12' Pier	12'-0" to 12'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		12'-6" to 13'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		13'-0" to 13'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		13'-6" to 14'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-0" to 14'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-6" to 15'-0"	8'-0"	10'-0"	8'-0"	10'-0"
14' Floor	14' Sidewall	14'-0" to 14'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-6" to 15'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		15'-0" to 15'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		15'-6" to 16'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		16'-0" to 16'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		16'-6" to 17'-0"	8'-0"	10'-0"	8'-0"	10'-0"
	14' Pier	14'-0" to 14'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-6" to 15'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		15'-0" to 15'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		15'-6" to 16'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		16'-0" to 16'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		16'-6" to 17'-0"	8'-0"	10'-0"	8'-0"	10'-0"

Installation Instructions Stabilizing Systems

Example:
28' Double Wide
4:12 Roof Pitch

TABLE 22: WIND ZONE I SIDEWALL FRAME ANCHOR MAXIMUM SPACING
Roof Slope Maximum 4:12 (20 degrees)

Floor Width	Sidewall Height	Height from Ground to Top of Pier	Single Section		Multi-Section	
			Beam Spacing 8'-0" to 8'-6"	Beam Spacing 9'-0" to 9'-6"	Beam Spacing 8'-0" to 8'-6"	Beam Spacing 9'-0" to 9'-6"
12' Floor	12' Sidewall	12'-0" to 12'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		12'-6" to 13'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		13'-0" to 13'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		13'-6" to 14'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-0" to 14'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-6" to 15'-0"	8'-0"	10'-0"	8'-0"	10'-0"
	12' Pier	12'-0" to 12'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		12'-6" to 13'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		13'-0" to 13'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		13'-6" to 14'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-0" to 14'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-6" to 15'-0"	8'-0"	10'-0"	8'-0"	10'-0"
14' Floor	14' Sidewall	14'-0" to 14'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-6" to 15'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		15'-0" to 15'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		15'-6" to 16'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		16'-0" to 16'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		16'-6" to 17'-0"	8'-0"	10'-0"	8'-0"	10'-0"
	14' Pier	14'-0" to 14'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-6" to 15'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		15'-0" to 15'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		15'-6" to 16'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		16'-0" to 16'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		16'-6" to 17'-0"	8'-0"	10'-0"	8'-0"	10'-0"

Installation Instructions Stabilizing Systems

Example:
28' Double Wide
4:12 Roof Pitch

14' Floor Width

TABLE 22: WIND ZONE I SIDEWALL FRAME ANCHOR MAXIMUM SPACING
Roof Slope Maximum 4:12 (20 degrees)

Floor Width	Sidewall Height	Height from Ground to Top of Pier	Single Section		Multi-Section	
			Beam Spacing 8'-0" to 8'-6"	Beam Spacing 9'-0" to 9'-6"	Beam Spacing 8'-0" to 8'-6"	Beam Spacing 9'-0" to 9'-6"
12' Floor	12' Sidewall	12'-0" to 12'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		12'-6" to 13'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		13'-0" to 13'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		13'-6" to 14'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-0" to 14'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-6" to 15'-0"	8'-0"	10'-0"	8'-0"	10'-0"
	12' Pier	12'-0" to 12'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		12'-6" to 13'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		13'-0" to 13'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		13'-6" to 14'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-0" to 14'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-6" to 15'-0"	8'-0"	10'-0"	8'-0"	10'-0"
14' Floor	14' Sidewall	14'-0" to 14'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-6" to 15'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		15'-0" to 15'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		15'-6" to 16'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		16'-0" to 16'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		16'-6" to 17'-0"	8'-0"	10'-0"	8'-0"	10'-0"
	14' Pier	14'-0" to 14'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		14'-6" to 15'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		15'-0" to 15'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		15'-6" to 16'-0"	8'-0"	10'-0"	8'-0"	10'-0"
		16'-0" to 16'-6"	8'-0"	10'-0"	8'-0"	10'-0"
		16'-6" to 17'-0"	8'-0"	10'-0"	8'-0"	10'-0"

Installation Instructions

Stabilizing Systems

Example:
28' Double Wide
4:12 Roof Pitch

14' Floor Width
96" Sidewall Height

Frame member	Member length	Height from ground to top of frame member	Seismic Force-Resisting System			
			Beam-Column	Beam-Column	Beam-Column	Beam-Column
12 in. x 16 in.	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
12 in. x 20 in.	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
12 in. x 24 in.	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft
			10 ft	10 ft	10 ft	10 ft

Installation Instructions

Stabilizing Systems

Example:
28' Double Wide
4:12 Roof Pitch

14' Floor Width
96" Sidewall Height
28" Height of Pier

Fastener Anchor	Side Wall Anchor	Height from Finish Floor to Top of Anchor	Roof Wind Maximum 6.5(10) 10 (Spacing)					
			Beam Suction			Beam Tension		
			Beam Suction k/ft ²	Beam Suction k/ft ²	Beam Suction k/ft ²	Beam Tension k/ft ²	Beam Tension k/ft ²	Beam Tension k/ft ²
		0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"
		0'-2"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-4"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-6"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-8"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-10"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-12"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-14"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-16"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-18"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-20"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-22"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-24"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-26"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-28"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-30"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-32"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-34"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-36"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-38"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-40"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-42"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-44"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-46"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-48"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-50"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-52"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-54"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-56"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-58"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-60"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-62"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-64"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-66"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-68"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-70"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-72"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-74"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-76"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-78"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-80"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-82"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-84"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-86"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-88"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-90"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-92"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-94"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-96"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-98"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)
		0'-100"	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)	1.02 (40)

Installation Instructions

Stabilizing Systems

Example:
28' Double Wide
4:12 Roof Pitch

14' Floor Width
96" Sidewall Height
28" Height of Pier
99.5" Beam Spacing

[illegible]

Installation Instructions Stabilizing Systems

Example:
28' Double Wide
4:12 Roof Pitch

14' Floor Width
96" Sidewall Height
28" Height of Pier
99.5" Beam Spacing

TABLE 22: WIND ZONE I SIDEWALL FRAME ANCHOR MAXIMUM SPACING
Roof Slope Maximum 4:12 (20 degrees)

Floor Level	Height from Ground to Top of Pier	Single Section		Multi-Section	
		Beam Spacing	Beam Spacing	Beam Spacing	Beam Spacing
12' Floor	12' - 0"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"
	12' - 6"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"
	12' - 12"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"
	12' - 18"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"
14' Floor	14' - 0"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"
	14' - 6"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"
	14' - 12"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"
	14' - 18"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"

* 13' - 05"

Installation Instructions Stabilizing Systems

Example:
28' Double Wide
4:12 Roof Pitch

14' Floor Width
96" Sidewall Height
28" Height of Pier
99.5" Beam Spacing

TABLE 22: WIND ZONE I SIDEWALL FRAME ANCHOR MAXIMUM SPACING
Roof Slope Maximum 4:12 (20 degrees)

Floor Level	Height from Ground to Top of Pier	Single Section		Multi-Section	
		Beam Spacing	Beam Spacing	Beam Spacing	Beam Spacing
12' Floor	12' - 0"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"
	12' - 6"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"
	12' - 12"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"
	12' - 18"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"
14' Floor	14' - 0"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"
	14' - 6"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"
	14' - 12"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"
	14' - 18"	8' - 0"	1' 0" - 1' 1"	8' - 0"	1' 0" - 1' 1"

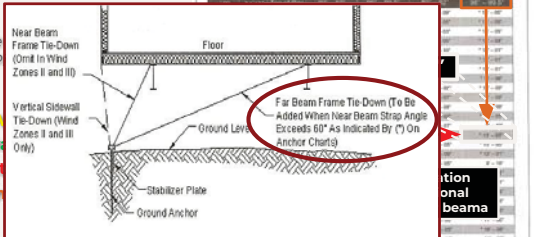
* 13' - 05"

* Indicates a configuration that will require additional strap connected to far beam

Installation Instructions Stabilizing Systems

Example:
28' Double
4:12 Roof P

14' Floor W
96" Sidew
28" Height
99.5" Beam



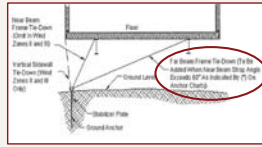
Installation Instructions Stabilizing Systems

Example:
28' Double Wide
4:12 Roof Pitch

28" Height of Pier



28"



Installation Instructions Stabilizing Systems

Side wall anchor

TABLE 21. ANCHOR LOCATION TYPE

Location	Type	Wind Zone I	Wind Zones II and III	Ref page
Side wall	Frame	Yes	Yes	61
	Vertical	No	Yes	65
End wall	Frame	Yes	Yes	65
	Vertical	No	No	65
Tag Unit	Frame	Yes	NA	65
	Vertical	No	NA	65
Punch Proof	Vertical	No	All Vertical Straps	65

CP 201 Code: Frame all Straps - Double Header

Connect any factory-installed side wall tie-down straps to a ground anchor regardless of the wind zone in which the home is placed.



Installation Instructions Stabilizing Systems

Anchor Depths

- ground anchors "shall extend below the established frost line into undisturbed soil."



Installation Instructions Stabilizing Systems

Anchor Depths

- ground anchors "shall extend below the established frost line into undisturbed soil."

Make sure the anchor is of sufficient length such that the top of the helix is below the frost line. Select a shaft diameter sufficient to resist excessive torsion, "ring-off" (when the helix or anchor head separates from shaft) or shaft splitting. Consult the anchor supplier for guidance.



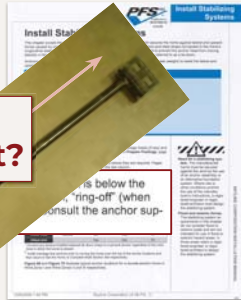
Installation Instructions Stabilizing Systems

Anchor Depths

- ground anchors "shall extend below the established frost line into undisturbed soil."

24"
Sufficient?

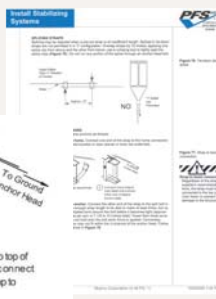
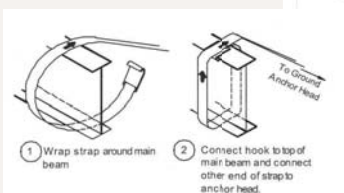
Make sure the anchor is of sufficient length such that the top of the helix is below the frost line. Select a shaft diameter sufficient to resist excessive torsion, "ring-off" (when the helix or anchor head separates from shaft) or shaft splitting. Consult the anchor supplier for guidance.



Installation Instructions Stabilizing Systems

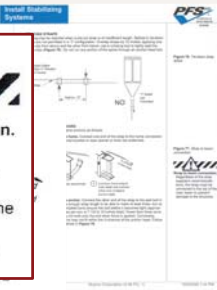
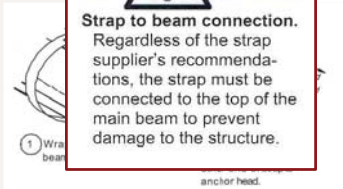
Tie Downs

Install per manufacturer's specifications



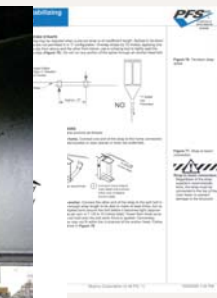
Installation Instructions Stabilizing Systems

Tie Downs
Install per manufacture



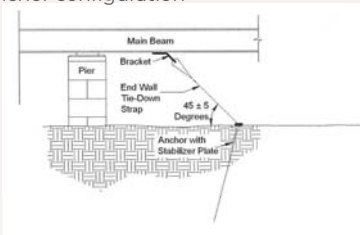
Installation Instructions Stabilizing Systems

Tie Downs
Install per manufacture



Installation Instructions Stabilizing Systems

End wall anchor configuration



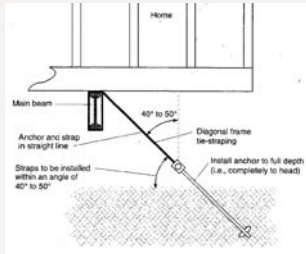
Installation Instructions Stabilizing Systems

End wall and



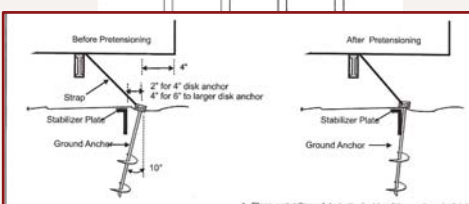
Installation Instructions Stabilizing Systems

Stabilizer Plates?



Installation Instructions Stabilizing Systems

Stabilizer Plates?





Installation Instructions
Stabilizing Systems

Single Slot Buckle

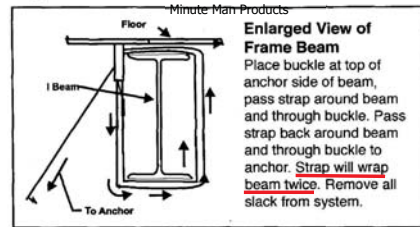


Installation Instructions
Stabilizing Systems

Single Slot Buckle

Single Slot Buckle With Strap

Minute Man Products



Enlarged View of Frame Beam
Place buckle at top of anchor side of beam, pass strap around beam and through buckle. Pass strap back around beam and through buckle to anchor. Strap will wrap beam twice. Remove all slack from system.

**Installation Instructions
Stabilizing Systems**

capable of resisting an
working load of 3150 lbs and
withstand a 50% overload
(4750 lbs).



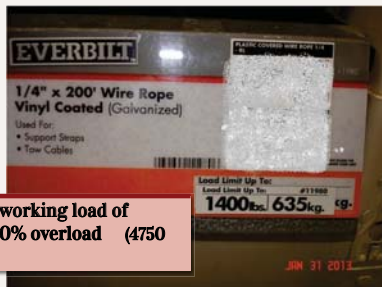
**Installation Instructions
Stabilizing Systems**

capable of resisting an working
load of 3150 lbs and withstand a
50% overload (4750 lbs).

What is the working load of 1/4"
steel cable?



Working load of 1/4"
steel cable: 1400 lbs.
Code Compliant???



**“...capable of resisting an working load of
3150 lbs and withstand a 50% overload (4750
lbs).”**

**Installation Instructions
Stabilizing Systems**

- Manufactured Anchoring Systems
- Certified by design prof.
- Acceptable to AHJ
- Frost protected slab or footing to frost line



**Installation Instructions
Stabilizing Systems**

- Manufactured Anchoring Systems
- Certified by design prof.
- Acceptable to AHJ
- Frost protected slab or footing to frost line



**Installation Instructions
Stabilizing Systems**

- Manufactured Anchoring Systems
- Certified by design prof.
- Acceptable to AHJ
- Frost protected slab or footing to frost line



Installation Instructions Stabilizing Systems

- Manufactured
- Certified by des
- Acceptable to A
- Frost protected



Installation Instru Stabilizing System

- Manufactured
- Certified by des
- Acceptable to A
- Frost protected



Installation Instructions Stabilizing Systems

- Manufactured Anchoring Systems
- Installed per manufacturer's installation instructions

Do You Read Them?



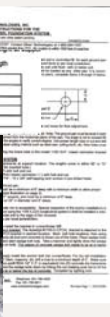
Installation Instructions Stabilizing Systems

- Manufa
- Installed
- instruc



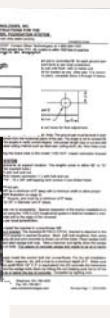
Installation Instructions Stabilizing Systems

- Manufa
- Installed
- instruc



Installation Instructions Stabilizing Systems

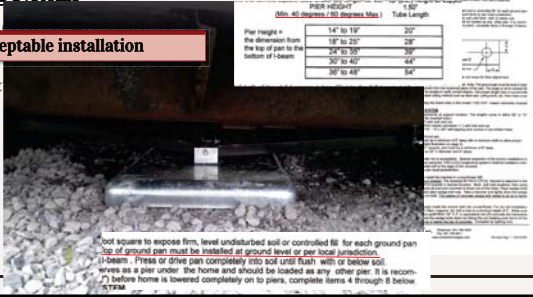
- Manufa
- Installed
- instruc



Installation Instructions

Stabilizing Systems

Not an accepted instruction



There are new installation instructions for all new alternative anchoring systems that started **November 3rd.**

There are new install systems that started native anchoring



★

Important Update:

There are new install systems that started

Must Tie Anchors

GREEN

TIE DOWN

9/9/2025

To Whom It May Concern:

Following the recommendation of the Alabama Manufactured Housing Installation Task Force, along with a growing consensus among industry professionals, vertical anchorage for uplift resistance is recognized as a safety enhancement to any home installation.

Effective September 17, 2025, aligning with the updates to the HUD Code and supported by industry professionals, alternative foundation designs will now exceed HUD Code requirements and include specific uplift protection for all homes being placed in Wind Zone I.

To support a smooth transition and allow distributors and installers to familiarize themselves with this change and align inventories of product, we will allow a grace period through November 3, 2025. During this time, both the prior and updated instructions will be accepted.

Installers and inspectors should refer to the updated installation instructions provided by the anchor system manufacturer to ensure full compliance with the revised standards by November 3, 2025.

Contact your local supplier for updated manufacturer's installation instruction updates or questions regarding this change.

native anchoring

INSTALLATION MANUAL

★

Impo:

There syster

TIE DOWN

MANUFACTURING INGENUITY

Xi2-24 Ground Foundation System Installation

Instructions for Wind Zone I, II & III

Except Florida and California

Effective November 3, 2025

US Patent No.11,898,318

19

The Xi2-24 System Instructions use the lateral and longitudinal struts to replace normal lateral frame tie and longitudinal end tie anchorage and stabilizer plates. In addition the system requires a minimum amount of uplift anchors in Zone I for enhanced wind protection. Check anchor charts for details



Installation Requirements

- Install in any type soil, 48 (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

★

Impo:

There syster

TIE DOWN

MANUFACTURING INGENUITY

Xi2-24 Ground Foundation System Installation

Instructions for Wind Zone I, II & III

Except Florida and California

Effective November 3, 2025

US Patent No.11,898,318

19

The Xi2-24 System Instructions use the lateral and longitudinal struts to replace normal lateral frame tie and longitudinal end tie anchorage and stabilizer plates. In addition the system requires a minimum amount of uplift anchors in Zone I for enhanced wind protection. Check anchor charts for details

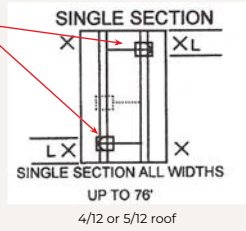


Installation Requirements

- Install in any type soil, 48 (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

Alt. Tie Downs & End Straps

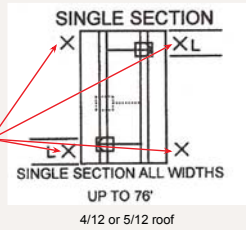
- 2 Lateral & Longitudinal systems
- At least 2 ft but no more than $\frac{1}{4}$ the length from the end



Oliver 1100 V

Alt. Tie Downs & End Straps

- 2 Lateral & Longitudinal systems
- At least 2 ft but no more than $\frac{1}{4}$ the length from the end
- Single Section REQUIRE 2 anchors per side. Not more than 2ft from end.



Oliver 1100 V



**Flood Zone Requirements
R306.1.9 Manufactured Homes**

- The bottom of the frame of new and replacement... shall be elevated to or above the elevation specified in R322.2 or R322.3
- As built certification is required



★

MHC Consultants LLC

Flood Zone Requirements

R306.1.9 Manufactured Homes

- The bottom of the frame of new and replacement... shall be elevated to or above the elevation specified in R322.2 or R322.3
- As built certification is required

HUD places the burden on the Installer to determine whether a home site is wholly or partly in a flood hazard area and to obtain additional designs, if needed.

MHC Consultants LLC

MHC Consultants LLC

Exterior Work

Repair and Seal Bottom Board

- Inspect for holes & gaps
- Replace missing insulation
- Patch large openings & tape small openings – per Installation Instructions

Exterior Work

Repair and Seal Bottom Board

- Inspect for holes &
- Replace missing in
- Patch large opening
- openings – per Ins
- Instructions



A continuous and sealed bottom board is critical for home performance, energy efficiency, protection against moisture problems, prevention of pipe freezing and protection against insects and rodents.

Complete Exterior Work



Exterior Work

Repair and Seal Bottom Board

- Inspect for holes
- Replace missing
- Patch large opening
- openings – per
- Instructions



Complete Exterior Work



Exterior Work

Ground Moisture Retarder

- REQUIRED(by: Manuf & BA402.6)
- Min 6 mil poly
- Joints overlapped 12"
- Seal joints with tape or adhesive
- Weight down with gravel
- Repair voids
- Pre-slab

Complete Exterior Work







Exterior Work

Skirting

- Structural or non-structural perimeter crawl space enclosure
- Extend vents, drains & inlets to outside
- Access (18"x 24" min) near utility connections



Exterior Work

Skirting

- Structural c
- perimeter
- enclosure
- Extend veni
- inlets to o
- Access (18")
- utility con



- Follow perimeter of the homes conditioned space.

Decks & Porches when part of home

Fully Vented Panels installed to allow water to drain





Exterior Work

Ventilation

- REQUIRED (by: Manufacturer & BA115.1) when skirted
- One square foot of vent per 1,500 square foot of under floor area
 - Unless using integral vent skirting vents must be equal size & opposite ends of home
 - One ventilation opening within 3 ft of each corner



★

MHC Consultants LLC

Exterior Work

Ventilation

REQUIRED (by: Manuf & BA115.1) when skirted

• One square foot of underlayment requires

One Sq Ft of *Free Air Vent* per 1500 Sq Ft of Floor Area

• Unless using a vapor barrier, the underlayment must be equal to or greater than the required ventilation.

• One ventilator is required for every 1500 sq ft of floor area.

Home Sq Ft	Sq Ft Vents	Home Sq Ft	Sq Ft Vents	Home Sq Ft	Sq Ft Vents	Home Sq Ft	Sq Ft Vents
1000	.7	1500	1.0	2000	1.3	2500	1.7
1100	.7	1600	1.0	2100	1.4	2600	1.7
1200	.8	1700	1.1	2200	1.5	2700	1.8
1300	.9	1800	1.2	2300	1.5	2800	1.9

Reminder: One sq ft = 144 sq inches

Complete Exterior Vent

2000 - 2500 sq ft

2500 - 3000 sq ft

3000 - 3500 sq ft

3500 - 4000 sq ft

4000 - 4500 sq ft

4500 - 5000 sq ft

5000 - 5500 sq ft

5500 - 6000 sq ft

6000 - 6500 sq ft

6500 - 7000 sq ft

7000 - 7500 sq ft

7500 - 8000 sq ft

8000 - 8500 sq ft

8500 - 9000 sq ft

9000 - 9500 sq ft

9500 - 10000 sq ft

10000 - 10500 sq ft

10500 - 11000 sq ft

11000 - 11500 sq ft

11500 - 12000 sq ft

12000 - 12500 sq ft

12500 - 13000 sq ft

13000 - 13500 sq ft

13500 - 14000 sq ft

14000 - 14500 sq ft

14500 - 15000 sq ft

15000 - 15500 sq ft

15500 - 16000 sq ft

16000 - 16500 sq ft

16500 - 17000 sq ft

17000 - 17500 sq ft

17500 - 18000 sq ft

18000 - 18500 sq ft

18500 - 19000 sq ft

19000 - 19500 sq ft

19500 - 20000 sq ft

20000 - 20500 sq ft

20500 - 21000 sq ft

21000 - 21500 sq ft

21500 - 22000 sq ft

22000 - 22500 sq ft

22500 - 23000 sq ft

23000 - 23500 sq ft

23500 - 24000 sq ft

24000 - 24500 sq ft

24500 - 25000 sq ft

25000 - 25500 sq ft

25500 - 26000 sq ft

26000 - 26500 sq ft

26500 - 27000 sq ft

27000 - 27500 sq ft

27500 - 28000 sq ft

28000 - 28500 sq ft

28500 - 29000 sq ft

29000 - 29500 sq ft

29500 - 30000 sq ft

30000 - 30500 sq ft

30500 - 31000 sq ft

31000 - 31500 sq ft

31500 - 32000 sq ft

32000 - 32500 sq ft

32500 - 33000 sq ft

33000 - 33500 sq ft

33500 - 34000 sq ft

34000 - 34500 sq ft

34500 - 35000 sq ft

35000 - 35500 sq ft

35500 - 36000 sq ft

36000 - 36500 sq ft

36500 - 37000 sq ft

37000 - 37500 sq ft

37500 - 38000 sq ft

38000 - 38500 sq ft

38500 - 39000 sq ft

39000 - 39500 sq ft

39500 - 40000 sq ft

40000 - 40500 sq ft

40500 - 41000 sq ft

41000 - 41500 sq ft

41500 - 42000 sq ft

42000 - 42500 sq ft

42500 - 43000 sq ft

43000 - 43500 sq ft

43500 - 44000 sq ft

44000 - 44500 sq ft

44500 - 45000 sq ft

45000 - 45500 sq ft

45500 - 46000 sq ft

46000 - 46500 sq ft

46500 - 47000 sq ft

47000 - 47500 sq ft

47500 - 48000 sq ft

48000 - 48500 sq ft

48500 - 49000 sq ft

49000 - 49500 sq ft

49500 - 50000 sq ft

50000 - 50500 sq ft

50500 - 51000 sq ft

51000 - 51500 sq ft

51500 - 52000 sq ft

52000 - 52500 sq ft

52500 - 53000 sq ft

53000 - 53500 sq ft

53500 - 54000 sq ft

54000 - 54500 sq ft

54500 - 55000 sq ft

55000 - 55500 sq ft

55500 - 56000 sq ft

56000 - 56500 sq ft

56500 - 57000 sq ft

57000 - 57500 sq ft

57500 - 58000 sq ft

58000 - 58500 sq ft

58500 - 59000 sq ft

59000 - 59500 sq ft

59500 - 60000 sq ft

60000 - 60500 sq ft

60500 - 61000 sq ft

61000 - 61500 sq ft

61500 - 62000 sq ft

62000 - 62500 sq ft

62500 - 63000 sq ft

63000 - 63500 sq ft

63500 - 64000 sq ft

64000 - 64500 sq ft

64500 - 65000 sq ft

65000 - 65500 sq ft

65500 - 66000 sq ft

66000 - 66500 sq ft

66500 - 67000 sq ft

67000 - 67500 sq ft

67500 - 68000 sq ft

68000 - 68500 sq ft

68500 - 69000 sq ft

69000 - 69500 sq ft

69500 - 70000 sq ft

70000 - 70500 sq ft

70500 - 71000 sq ft

71000 - 71500 sq ft

71500 - 72000 sq ft

72000 - 72500 sq ft

72500 - 73000 sq ft

73000 - 73500 sq ft

73500 - 74000 sq ft

74000 - 74500 sq ft

74500 - 75000 sq ft

75000 - 75500 sq ft

75500 - 76000 sq ft

76000 - 76500 sq ft

76500 - 77000 sq ft

77000 - 77500 sq ft

77500 - 78000 sq ft

78000 - 78500 sq ft

78500 - 79000 sq ft

79000 - 79500 sq ft

79500 - 80000 sq ft

80000 - 80500 sq ft

80500 - 81000 sq ft

81000 - 81500 sq ft

81500 - 82000 sq ft

82000 - 82500 sq ft

82500 - 83000 sq ft

83000 - 83500 sq ft

83500 - 84000 sq ft

84000 - 84500 sq ft

84500 - 85000 sq ft

85000 - 85500 sq ft

85500 - 86000 sq ft

86000 - 86500 sq ft

86500 - 87000 sq ft

87000 - 87500 sq ft

87500 - 88000 sq ft

88000 - 88500 sq ft

88500 - 89000 sq ft

89000 - 89500 sq ft

89500 - 90000 sq ft

90000 - 90500 sq ft

90500 - 91000 sq ft

91000 - 91500 sq ft

91500 - 92000 sq ft

92000 - 92500 sq ft

92500 - 93000 sq ft

93000 - 93500 sq ft

93500 - 94000 sq ft

94000 - 94500 sq ft

94500 - 95000 sq ft

95000 - 95500 sq ft

95500 - 96000 sq ft

96000 - 96500 sq ft

96500 - 97000 sq ft

97000 - 97500 sq ft

97500 - 98000 sq ft

98000 - 98500 sq ft

98500 - 99000 sq ft

99000 - 99500 sq ft

99500 - 100000 sq ft

MHC Consultants LLC

Exterior Work

Ventilation Calculations - Integral Skirting

• 28x56 New Home = 1566 sq ft

• Vapor Barrier REQUIRED

• 1 sq ft of vent per 1500 sq ft floor space

MHC Consultants LLC

Exterior Work

Ventilation Calculations - Integral Skirting

• 28x56 New Home = 1566 sq ft

• Vapor Barrier REQUIRED

• 1 sq ft of vent per 1500 sq ft floor space

• Need 1 sq ft of free vent (144 sq inches)

Exterior Work

Ventilation Calculations - Integral Skirting

- 28x56 New Home = 1566 sq ft
- Vapor Barrier REQUIRED
- 1 sq ft of vent per 1500 sq ft floor space
- Need 1 sq ft of free vent (144 sq inches)
- Use 32" tall center vent (13 sq inches)

Exterior Work

Ventilation Calculations - Integral Skirting

- 28x56 New Home = 1566sqft
- Vapor Barrier REQUIRED
- 1 sq ft of vent per 1500 sq ft floor space
- Need 1 sq ft of free vent (144 sq inches)
- Use 32" tall center vent (13 sq inches)
- **144 / 13 = 12 panels**

Need 126 panels to skirt whole house

Exterior Work



Exterior Work



Exterior Work



Exterior Work

Vents are required to be equal size and opposite sides of foundation

Amount of venting required: **144 sq in**



Exterior Work

Vents are required to be equal size and opposite sides of foundation

Amount of venting required: **144 sq in**

Amount of venting provided?
Qty: 2 - 8"x16" block vents



Exterior Work

Vents are required to be equal size and opposite sides of foundation

Amount of venting required: **144 sq in**

Amount of venting provided?
Qty: 2 - 8"x16" block vents
(8x16=128)x2=256 sq in



Exterior Work

Vents are required to be equal size and opposite sides of foundation

Amount of venting required: **144 sq in**

Amount of venting provided?
Qty: 2 - 8"x16" block vents
(8x16=128)x2=256 sq in
All set, right?



Exterior Work

Vents are required to be equal size and opposite sides of foundation

Amount of venting required: **144 sq in**

Amount of venting provided?

Qty: 2 - 8"x16" vents

(8x16=128)x2=256 sqin

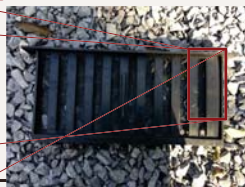
All set, right?



Exterior Work

Vents are required to be equal size and opposite sides of foundation

Amount of venting required: **144 sq in**



Exterior Work

Vents are required to be equal size and opposite sides of foundation

Amount of venting required: **144 sq in**

$144/45=3.2$

Min. 4 vents within 3ft of corners



Accessory Structures

Self supporting unless

DAPIA approved design provided

OR

Designed by a design professional

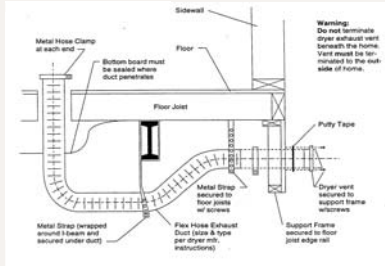


Outside combustion air?

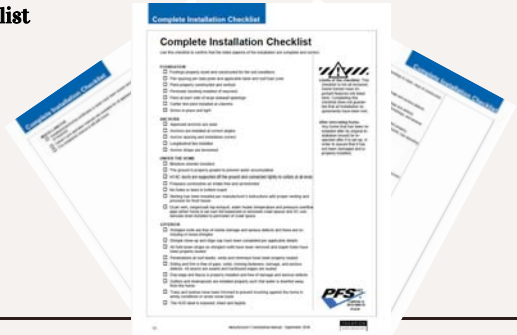


Ventilation and Condensation Control

- Dryer Vents, Condensation Lines, Hot Water Heater Drains, Heat Producing Appliances, etc must extend through skirting to exterior.



Checklist



Checklist

- WATER AND DRAIN SYSTEMS**
- ☐ Crossover and service connection and splices have been properly made with correct materials
 - ☐ Water and drain lines are insulated or otherwise protected from freezing
 - ☐ Pipe supports are installed and properly spaced
 - ☐ ~~Properly installed and tested~~
 - ☐ All necessary inspections and tests have been performed
 - ☐ All hot and cold water lines are properly connected to fixtures, dispense water as labeled, and operate properly
- ELECTRICAL SYSTEMS**
- ☐ The panel amperage matches the connection to the home
 - ☐ The home has been properly grounded
 - ☐ The main power supply has been properly connected and tested by a licensed electrician
 - ☐ All electrical crossovers have been connected
 - ☐ All receptacles, switches, and light fixtures operate properly
 - ☐ Ground fault circuit interrupters operate properly
 - ☐ All exterior lights have been properly installed
- GAS/FUEL OIL SYSTEMS**
- ☐ The gas system pressure test has been conducted
 - ☐ Connections between units are properly made with access as required
 - ☐ The main fuel line has been properly connected and tested by a qualified technician

Checklist

- WATER AND DRAIN SYSTEMS**
- ☐ Crossover and service connection and splices have been properly made with correct materials
 - ☐ Water and drain lines are insulated or otherwise protected from freezing
 - ☐ Pipe supports are installed and properly spaced
 - ☐ ~~Properly installed and tested~~
 - ☐ All necessary inspections and tests have been performed
 - ☐ All hot and cold water lines are properly connected to fixtures, dispense water as

Potable Water Testing

Hydrostatic or Pneumatic:

Hydrostatic method (preferred)

1. Fill all water lines including water heater.
2. Pressurize system.
 - Utilize pump, valve and gauge.
 - Pressurize to 100psi: isolate w/ shutoff
3. Hold pressure 15minutes
4. Find and fix leaks
5. **REPEAT until pass**



☐ The main fuel line has been properly connected and tested by a qualified technician

Checklist

WATER AND DRAIN SYSTEMS

- ☐ Crossover and service connection and splices have been properly made with correct materials
- ☐ Water and drain lines are insulated or otherwise protected from freezing
- ☐ Pipe supports are installed and properly spaced
- ☐ Proper slope has been maintained on all drain lines
- ☐ All necessary inspections and tests have been performed
- ☐ All sinks, basins, tubs, and toilets operate properly
- ☐ All hot and cold water lines are properly connected to fixtures, dispense water as labeled, and operate properly

Remember the Drain System Testing
2 Part Method

- ☐ All hot and cold water lines are properly connected to fixtures, dispense water as labeled, and operate properly
- ELECTRICAL SYSTEMS**
 - ☐ The panel amperage matches the connection to the home
 - ☐ The main power supply has been properly connected and tested by a licensed electrician
 - ☐ All electrical components have been connected
 - ☐ All receptacles, switches, and light fixtures operate properly
 - ☐ Ground fault circuit interrupters operate properly
 - ☐ All exterior lights have been properly installed
- GAS/FUEL OIL SYSTEMS**
 - ☐ The gas system pressure test has been conducted
 - ☐ Connections between units are properly made with access as required
 - ☐ The main fuel line has been properly connected and tested by a qualified technician

1. Drain Tightness
 1. All Fixtures connected plug main drain line
 2. Fill with water to rim of toilet bowl
 3. Hold 15 minutes
 4. Find and fix leaks
 5. REPEAT until pass
2. Max Flow -after Part 1 success
 1. Plug all fixtures and fill with water
 2. Release simultaneously
 3. Find and fix leaks
 4. REPEAT until pass

Checklist

WATER AND DRAIN SYSTEMS

- ☐ Crossover and service connection and splices have been properly made with correct materials
- ☐ Water and drain lines are insulated or otherwise protected from freezing
- ☐ Pipe supports are installed and properly spaced
- ☐ Proper slope has been maintained on all drain lines
- ☐ All necessary inspections and tests have been performed
- ☐ All sinks, basins, tubs, and toilets operate properly
- ☐ All hot and cold water lines are properly connected to fixtures, dispense water as labeled, and operate properly

ELECTRICAL SYSTEMS

- ☐ The panel amperage matches the connection to the home
- ☐ The main power supply has been properly connected and tested by a licensed electrician
- ☐ All electrical components have been connected
- ☐ All receptacles, switches, and light fixtures operate properly
- ☐ Ground fault circuit interrupters operate properly
- ☐ All exterior lights have been properly installed

GAS/FUEL OIL SYSTEMS

- ☐ The gas system pressure test has been conducted
- ☐ Connections between units are properly made with access as required
- ☐ The main fuel line has been properly connected and tested by a qualified technician

Checklist

WATER AND DRAIN SYSTEMS

- ☐ Crossover and service connection and splices have been properly made with correct materials
- ☐ Water and drain lines are insulated or otherwise protected from freezing
- ☐ Pipe supports are installed and properly spaced
- ☐ Proper slope has been maintained on all drain lines
- ☐ All necessary inspections and tests have been performed
- ☐ All sinks, basins, tubs, and toilets operate properly
- ☐ All hot and cold water lines are properly connected to fixtures, dispense water as labeled, and operate properly

ELECTRICAL SYSTEMS

- ☐ The panel amperage matches the connection to the home
- ☐ The main power supply has been properly connected and tested by a licensed electrician
- ☐ All electrical components have been connected
- ☐ All receptacles, switches, and light fixtures operate properly
- ☐ Ground fault circuit interrupters operate properly
- ☐ All exterior lights have been properly installed

GAS/FUEL OIL SYSTEMS

- ☐ The gas system pressure test has been conducted
- ☐ Connections between units are properly made with access as required
- ☐ The main fuel line has been properly connected and tested by a qualified technician

Including
1. A continuity test

Checklist

- WATER AND DRAIN SYSTEMS**
- ☐ Crossover and service connection materials
 - ☐ Water and drain lines are insulated
 - ☐ Pipe supports are installed and proper
 - ☐ Proper slope has been maintained
 - ☐ All necessary inspections and tests
 - ☐ All sinks, basins, tubs, and toilets
 - ☐ All hot and cold water lines are properly labeled, and operate properly

- ELECTRICAL SYSTEMS**
- ☐ The panel amperage matches the connection to the home
 - ☐ The main power supply has been properly grounded
 - ☐ The main power supply has been properly grounded

- GAS/FUEL OIL SYSTEMS**
- ☐ The gas system pressure test has been conducted
 - ☐ Connections between the main fuel line and the gas system have been properly made with correct materials
 - ☐ The main fuel line has been properly connected and tested by a qualified technician



Checklist

- WATER AND DRAIN SYSTEMS**
- ☐ Crossover and service connection and splices have been properly made with correct materials
 - ☐ Water and drain lines are insulated or otherwise protected from freezing
 - ☐ Pipe supports are installed and properly spaced
 - ☐ Proper slope has been maintained on all drain lines
 - ☐ All necessary inspections and tests have been performed
 - ☐ All sinks, basins, tubs, and toilets operate properly
 - ☐ All hot and cold water lines are properly connected to fixtures, dispense water as labeled, and operate properly

- ELECTRICAL SYSTEMS**
- ☐ The panel amperage matches the connection to the home
 - ☐ The home has been properly grounded
 - ☐ The main power supply has been properly connected and tested by a licensed electrician
 - ☐ All electrical crossovers have been connected
 - ☐ All receptacles, switches, and light fixtures operate properly
 - ☐ Ground fault circuit interrupters operate properly
 - ☐ All exterior lights have been properly installed

- GAS/FUEL OIL SYSTEMS**
- ☐ The gas system pressure test has been conducted
 - ☐ Connections between the main fuel line and the gas system have been properly made with correct materials
 - ☐ The main fuel line has been properly connected and tested by a qualified technician

Truss, Engineered Lumber or Timber Construction Placard

"An act to amend the Executive Law, in relation to notice requirements and enforcement for residential buildings with truss type, pre-engineered wood or timber construction."

Addition of Article 18 Executive Law of NY §382-b
Passed by Senate & Assembly 6/20/2014 Signed by Gov. 9/17/2014

19 NYCRR Part 1265 "Residential Structures with Truss Type...Construction"
Adopted 11/18/2014 by Codes Council Effective 1/1/2015

"Each new residential structure and each addition to or rehabilitation of an existing residential structure that utilizes truss type construction, pre-engineered wood construction and/or timber construction shall be identified by a sign or symbol..."

MHC Consultants LLC

Truss ... Placard

6" DIAMETER

REFLECTIVE WHITE

1/2" STROKE

DESIGNATION FOR STRUCTURAL COMPONENTS THAT ARE OF TRUSS TYPE CONSTRUCTION

VF FLOOR FRAMING, INCLUDING PORCHES AND DECKS

VR ROOF FRAMING

VFR FLOOR AND ROOF FRAMING

THE CONSTRUCTION TYPE designation shall be affixed to the placard by the construction type of the structure under construction and the location of the placard shall be as follows:

- VF FLOOR FRAMING, INCLUDING PORCHES AND DECKS
- VR ROOF FRAMING
- VFR FLOOR AND ROOF FRAMING

VF FLOOR FRAMING, INCLUDING PORCHES AND DECKS

VR ROOF FRAMING

VFR FLOOR AND ROOF FRAMING

MHC Consultants LLC

§1265.4 "...affixed to exterior of residential structure"

1. If obscure any means of egress, the placard shall be affixed to exterior of the structure.

2. If no electric box or other structure is located where not likely seen by fire department, the placard shall be affixed to exterior of the structure.

Affixed prior to issuance of permit. Property owner responsible for replacement if necessary.

VFR

MHC Consultants LLC

§1265.4 "...affixed to exterior of residential structure"

1. If obscure any means of egress, the placard shall be affixed to exterior of the structure.

2. If no electric box or other structure is located where not likely seen by fire department, the placard shall be affixed to exterior of the structure.

Affixed prior to issuance of permit. Property owner responsible for replacement if necessary.

VFR

Garage Additions/Add-On Structures



Garage Additions/Add-On Structures

24 CFR 3282.7 "Add-on: any structure (except a structure designed or produced as an integral part of a MH) which, when attached to a MH increases the area, either living or storage..."

Remember- Retailers may not sell MH that has been altered in a way which "causes a failure to conform to" HUD Code

Modifications to MH for purpose of "Add-on" Structures often remove compliance with HUD code

Garage Additions/Add-On Structures

Alternative Construction Approval **REQUIRED**

Issues addressed



Garage Additions/Add-On Structures

Alternative Construction Approval **REQUIRE**

- Issues addressed
- Garage independence & support



Garage Additions/Add-On Structures

Alternative Construction Approval **REQUIRE**

- Issues addressed
- Garage independence & support
 - Roof modification & ventilation



Garage Additions/Add-On Structures

Alternative Construction Approval **REQUIRE**

- Issues addressed
- Garage independence & support
 - Roof modification & ventilation
 - Fire Separation



Garage Additions/Add-On Structures

Alternative Construction Approval **REQUIREMENTS**

Issues addressed

- Garage independence & support
- Roof modification & ventilation
- Fire Separation
- Electrical circuits for Lighting, GFCI & smoke detectors



Garage Additions/Add-On Structures

Alternative Construction Approval **REQUIREMENTS**

Issues addressed

- Garage independence & support
- Roof modification & ventilation
- Fire Separation
- Electrical circuits for Lighting, GFCI & smoke detectors
- Egress Compliance



Garage Additions/Add-On Structures

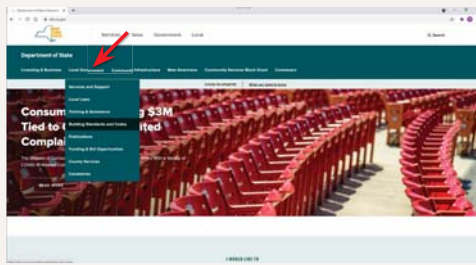
Alternative Construction Approval **REQUIREMENTS**

Issues addressed

- Garage independence & support
- Roof modification & ventilation
- Fire Separation
- Electrical circuits for Lighting, GFCI & smoke detectors
- Egress Compliance
- Light and ventilation

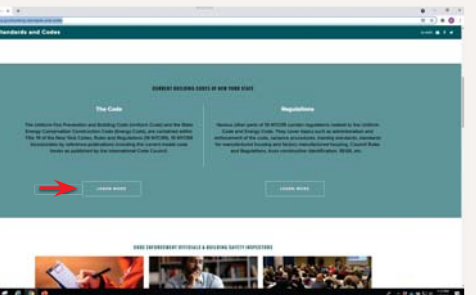


<https://dos.ny.gov>



<https://dos.ny.gov/building-standards-and-codes>





★

MHC Consultants LLC

Redirected:
<https://codes.iccsafe.org/search/titles?searchTermAny=ny>

TITLES

CONTENT

GRAPHICS

3D

4D NAVIGATOR

DATA DATABASE

2020 Fuel Gas Code of New York State (2020 FGC/NYS)

2020 Building Code of New York State (2020 BOC/NYS)

2020 Plumbing Code of New York State (2020 PC/NYS)

2020 Mechanical Code of New York State (2020 MC/NYS)

2020 Residential Code of New York State (2020 RC/NYS)

2020 Property Maintenance Code of New York State (2020 PNC/NYS)

2020 New York State Energy Efficient for Sites and Buildings Except Low-Rise Residential Buildings

2020 Fire Code of New York State (2020 FIC/NYS)

2020 Energy Conservation Construction Code of New York State (2020 ECCC/NYS)

2020 Existing Building Code of New York State (2020 EBC/NYS)

463

★

MHC Consultants LLC

Redirected:
<https://codes.iccsafe.org/search/titles?searchTermAny=ny>

TITLES

CONTENT

GRAPHICS

3D

4D NAVIGATOR

DATA DATABASE

2020 Fuel Gas Code of New York State (2020 FGC/NYS)

2020 Building Code of New York State (2020 BOC/NYS)

2020 Plumbing Code of New York State (2020 PC/NYS)

2020 Mechanical Code of New York State (2020 MC/NYS)

2020 Residential Code of New York State (2020 RC/NYS)

2020 Property Maintenance Code of New York State (2020 PNC/NYS)

2020 New York State Energy Efficient for Sites and Buildings Except Low-Rise Residential Buildings

2020 Fire Code of New York State (2020 FIC/NYS)

2020 Energy Conservation Construction Code of New York State (2020 ECCC/NYS)

2020 Existing Building Code of New York State (2020 EBC/NYS)

464

★

MHC Consultants LLC

Redirected:
<https://codes.iccsafe.org/search/titles?searchTermAny=ny>

TITLES

CONTENT

GRAPHICS

3D

4D NAVIGATOR

DATA DATABASE

2020 Fuel Gas Code of New York State (2020 FGC/NYS)

2020 Building Code of New York State (2020 BOC/NYS)

2020 Plumbing Code of New York State (2020 PC/NYS)

2020 Mechanical Code of New York State (2020 MC/NYS)

2020 Residential Code of New York State (2020 RC/NYS)

2020 Property Maintenance Code of New York State (2020 PNC/NYS)

2020 New York State Energy Efficient for Sites and Buildings Except Low-Rise Residential Buildings

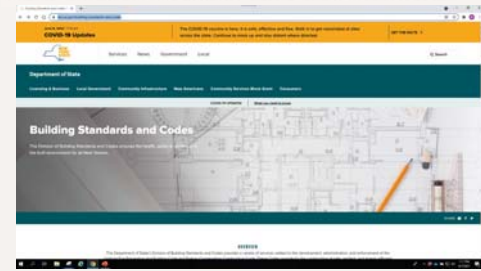
2020 Fire Code of New York State (2020 FIC/NYS)

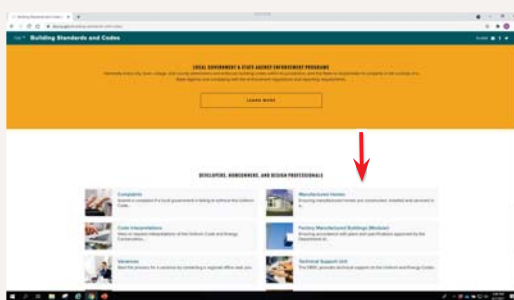
2020 Energy Conservation Construction Code of New York State (2020 ECCC/NYS)

2020 Existing Building Code of New York State (2020 EBC/NYS)

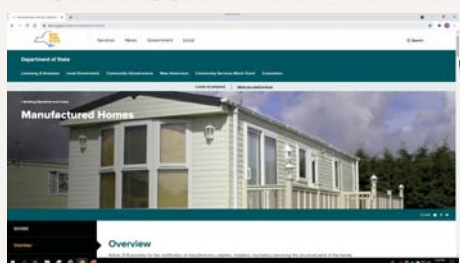
465

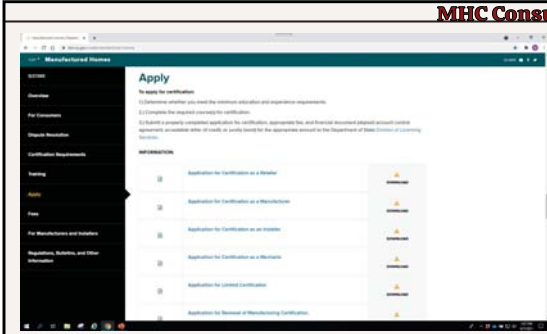
<https://dos.ny.gov/building-standards-and-codes>





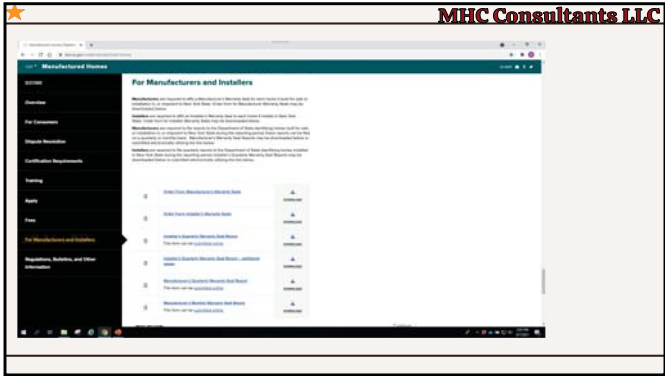
<https://dos.ny.gov/code/manufactured-homes>

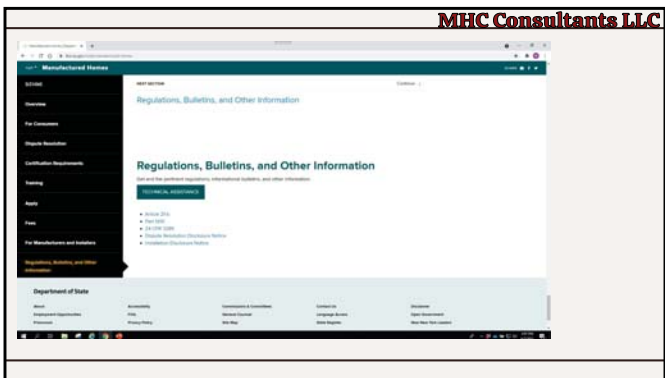


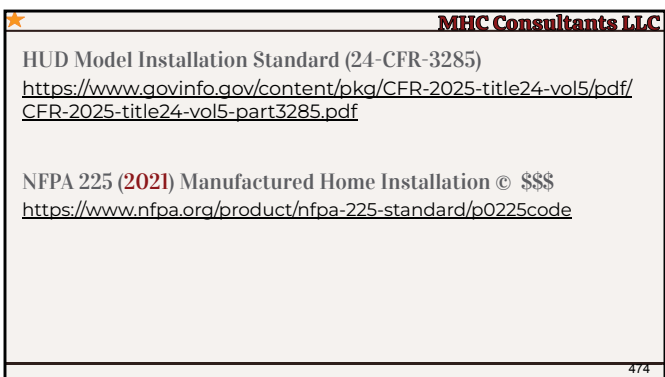












Reminders

- Rule #1 Building Permits and C.O.s are required for the installation



Reminders

- Rule #1 Building Permits and C.O.s are required for the installation
- Rule #2 Follow the Manufacturer's Instructions



Reminders

- Rule #1 Building Permits and C.O.s are required for the installation
- Rule #2 Follow the Manufacturer's Instructions
- Rule #3 C.O. and A.C. Inspection **PRIOR** to move-in



IMPORTANT NOTICE

IMPORTANT NOTICE

IMPORTANT NOTICE

Don't Forget!

2025 Code

Goes into effect 12/31/25

2020 Code

Use Until Then!

478

MHC Consultants LLC

For technical assistance:

Contact Information

New York, Department of State

Division of Building Standards & Codes

One Commerce Plaza

99 Washington Ave.

Albany NY 12231-0001

manufactured.housing@dos.ny.gov

NEW YORK STATE

Department of State

Building Standards & Codes

MHC Consultants LLC

Any questions?

Contact Information

MHC Consultants


160 Wilkinson Rd

Fairport NY 14450

joel@consultwithmhc.com

<https://joel6294.wixsite.com/mhcc>

MHC



MHC Consultants LLC

Contact Information
MHC Consultants
 160 Wilkinson Rd.
 Fairport NY 14450

joel@consultwithmhc.com

If you couldn't take the polls

If your name is wrong on your certificate

Add it to your safe senders list