

#49-0072– 05/12

Inspection of Factory Manufactured Homes (Modular Homes)

**Based on the 2010 Editions of
the Codes of New York State**

**NEW YORK STATE
DEPARTMENT OF STATE
Division of Code Enforcement and
Administration
One Commerce Plaza
99 Washington Avenue
Albany, NY 12231-0001
(518) 474-4073 Fax (518) 474-5788
[www. dos.ny.gov/DCEA](http://www.dos.ny.gov/DCEA)
info@dos.ny.gov/DCEA**




 New York State
 Department of State

INSPECTION
 OF
FACTORY
MANUFACTURED HOMES
(MODULAR HOMES)

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR

DEPARTMENT OF STATE CESARA PERALES, SECRETARY OF STATE

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR

DEPARTMENT OF STATE CESARA PERALES, SECRETARY OF STATE

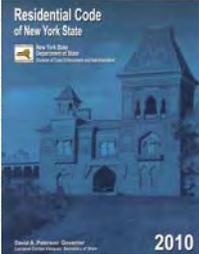
FACTORY MANUFACTURED HOMES

- §R105.1 Factory Manufactured Homes (Modular Homes).** *Such homes shall be constructed and installed in accordance with the requirements of this code and shall bear an Insignia of Approval issued in accordance with the "Official Compilation of Codes Rules and Regulations of the State of New York," 19 NYCRR Part 1209, Regulations and Fees for Factory Manufactured Homes.*

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR

DEPARTMENT OF STATE CESARA PERALES, SECRETARY OF STATE

FACTORY MANUFACTURED HOMES

- It's a detached one or two family dwelling or a townhouse regulated by the
 



NEW YORK STATE ANDREW W. CUOMO, GOVERNOR

DEPARTMENT OF STATE CESARA PERALES, SECRETARY OF STATE

Definition: Modular Home

- §R202 FACTORY MANUFACTURED HOME (MODULAR HOME).**
A structure designed primarily for residential occupancy, constructed by a method or system of construction whereby the structure or its components are wholly or in substantial part manufactured in manufacturing facilities, intended or designed for permanent installation, or assembly and permanent installation, on a building site.

Modular Homes
Factory Manufactured Home

Whatsa Modular???



NEW YORK STATE ANDREW W. CUOMO, GOVERNOR

DEPARTMENT OF STATE CESARA PERALES, SECRETARY OF STATE

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR

DEPARTMENT OF STATE CESARA PERALES, SECRETARY OF STATE

Modular Homes

- What Are Modular Homes?**
 - Built in sections
 - Conform to all codes
 - Transported to site
 - Installation inspected by CEO

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Site Built Homes

- **What Are Site Built Homes?**
 - Constructed on site
 - 'stick-built'
 - Conform to all codes
 - Generally increase in value

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

TODAY'S TOPICS OF DISCUSSION

- The Approval Process
- Building Permit
- Plans and Construction Documents
- Foundation Plan Review
- Inspection of Foundation Installation
- Installation Instructions
- Inspection of Installation
- Accessories
- Resolving Complaints

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

IN SERVICE TRAINING CREDIT

- This course is approved for **6 hours** of in-service training
- To get credit for this course you must attend **all 6 hours**, complete the registration card and sign both attendance sheets

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Modular Homes Lesson 2

- The Approval Process
- Building Permit
- Plans and Construction Documents
- Foundation Plan Review
- Inspection of Foundation Installation
- Installation Instructions
- Inspection of Installation
- Accessories
- Resolving Complaints

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Modular Plans

- Approved by DOS
- Permit Set
- Factory use
- Set Plan

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

DOS Unit Approval Process

- Role of the Department of State
- Quality Assurance at the Factory
- Insignia of Approval



NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Unit Approval Process

- Third Party Review Application Procedure
 - The manufacturer must submit the following:
 - Qualifying Application Form
 - Plans, specifications, calculations, and other documentation
 - The Submission Development Worksheet

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Unit Approval Process

- Modular plan submissions:
 - Must demonstrate clear compliance with all applicable code requirements.
- Submissions must include items such as:
 - Window/door schedule showing required light/vent/egress has been provided
 - Required fire separations
 - Required fire stopping/draft stopping
 - Safety glazing where required
 - Energy Code compliance

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Unit Approval Process

- High Wind Plan Submissions Must Indicate:
 - Engineering Methodology
 - Engineering Calculations
 - Roof Truss Certifications, and required truss connectors
 - Building Sections showing critical building details

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Unit Approval Process

- High Wind Plan Submissions Must Indicate:
 - Floor openings within allowable aspect ratios
 - Shear wall panels providing sufficient shear wall area
 - Hold down and tie down connections
 - Allowable plan offsets

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Unit Approval Process

- Common Occurrences
 - “Old Code” references or standards shown on plans submissions
 - Submissions missing seal and signature of design professional.
 - **Submissions sealed, but not reviewed by licensee sealing the documents.**

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Unit Approval Process

- Engineering must be provided for all major structural elements.
 - Headers, beams, supporting structure (columns)
 - Long span beam and connectors
 - Roof truss certifications
 - Building Sections all typical and non-typical areas of construction

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Unit Approval Process

- Truss Connections must be shown
 - Truss web to web and assembled Truss to building bearing points
 - Uplift and lateral connections, and tension connections at truss bottom chord
 - Nailed connections may not be adequate

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

The Purchase

- From a Dealer/Retailer
- From the Factory
- Documents for the OWNER

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Modular Homes

- The Approval Process
- **Building Permit**
- Plans and Construction Documents
- Foundation Plan Review
- Inspection of Foundation Installation
- Installation Instructions
- Inspection of Installation
- Accessories
- Resolving Complaints

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

The Building Permit

- The Players
 - Code Official
 - Builder/Developer
 - Retailer/Factory
 - Set Crew

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

The Code Official

- Permit Review
 - Proof of Workers Comp.
 - Sealed and Signed Drawings
- Issue Permit
- Construction Inspections
- Issue Certificate of Occupancy

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

The Builder

- Secure the Permit
- Site Preparations
- Inspect for Transit Damage
- Inventory “Ship Loose” materials
- Locate Units on Site

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Retailer/Factory

- Retailer:
 - May be a facilitator
 - May respond to complaints
- Factory:
 - Overall responsibility for quality assurance
 - Generally the accountable party for the unit by our regulations

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Set Crew

- Responsible to, or working for, the factory
- Inspect for damage, prior to acceptance
- Confirm acceptability of site and foundation
- Place the boxes and bolt together the pieces

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Building Permit Documentation

- Approved Plans
- NYS Licensed design
- Design Criteria

DEPARTMENT OF STATE
CODES DIVISION
ALBANY, NY 12231-0001
Stamp of Approval for a System, Model or Component

Application No. _____ Manufacturer's No. _____ Date of Approval _____

NOTICE: This approval is applicable only to those components of the factory manufactured buildings that are fabricated and produced at the factory manufacturer's facility. The approval shall not relieve the manufacturer from responsibility for construction, quality or installation from the approval document.

By _____

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Approved Model???

- Go to DOS Home Page
 - dos.state.ny.us
- Search for: Directory of Manufactured Building Approvals

www.dos.state.ny.us

www.dos.state.ny.us

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Approved Models

<p>SKYLINE CORPORATION www.skylinehomes.com PO Box 743 2520 Bypass Road Bklyn, NY 11214-1394</p> <p>Approval No. M043-04-021 Expiration Date: Approved until June 30, 2011 (2010 RCNYS Update Pending)</p>	HR: M034 Ph: (800)348-7469 Fax:(574)294-6521
<p>STERLING MODULAR HOMES 3661 Transit Road P.O. Box 473 Depew, NY 14043</p> <p>Approval No. M037-04-048 Expiration Date: Approved until June 30, 2011 (2010 RCNYS Update Pending)</p>	HR: M037 Ph: (716) 685-0505 Fax:(716) 685-0066
<p>WESTCHESTER MODULAR HOMES, INC. HR: M 0659 www.westchestermodular.com 39 Reagans Hill Road Wingdale, NY 12124 Approval No.: HR 0659-02-008 Expiration Date: Approved until June 30, 2011 (2010 RCNYS Update Pending)</p>	Ph: (800) 832-3888 (945) 832-9450 Fax:(945) 832-6696

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Modular Homes

- The Approval Process
- Building Permit
- Plans and Construction Documents
- Foundation Plan Review
- Inspection of Foundation Installation
- Installation Instructions
- Inspection of Installation
- Accessories
- Resolving Complaints

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Approved Plans

- Must bear the manufacturer's approval number for the model being installed.
- May be subject to restrictions for on site-specific conditions, such as wind, snow, and seismic loadings.
- Approvals remain in effect for a period of two years
 - Approvals may have been extended beyond the expiration date.
 - A copy of the extension letter must be provided to the code enforcement official

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Plans and Instructions

- “Discrete” Plans
- Foundation Design
- Site Plan
- Utility Locations and Details

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

“Discrete” First Floor Plan

Architectural drawing of a first floor plan. It shows a layout of rooms including a living area, kitchen, and bathroom. A central staircase is labeled '1ST STAIR'. The drawing includes numerous annotations such as '1ST STAIR LEFT', '1ST STAIR RIGHT', and '1ST STAIR FRONT'. It also shows structural details like 'CONCRETE FLOOR' and 'WOOD FLOOR'. A note at the bottom reads 'MATCH: 2000 F.P. TO CENTER LINES OF FINISHES & FINISH DETAILS'.

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

“Discrete” Second Floor Plan

Architectural drawing of a second floor plan. It shows a layout of rooms including a bedroom, bathroom, and kitchen. A central staircase is labeled '2ND STAIR'. The drawing includes numerous annotations such as '2ND STAIR LEFT', '2ND STAIR RIGHT', and '2ND STAIR FRONT'. It also shows structural details like 'CONCRETE FLOOR' and 'WOOD FLOOR'. A note at the bottom reads 'MATCH: 2000 F.P. TO CENTER LINES OF FINISHES & FINISH DETAILS'.

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Systems

Architectural drawing showing a cross-section of a house. It illustrates the structural frame, roof, and interior systems. Key components are labeled, including 'ROOF TRUSS', 'WOOD FLOOR', 'CONCRETE FLOOR', and 'STAIRS'. A note on the right side reads 'See Electrical Details'.

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

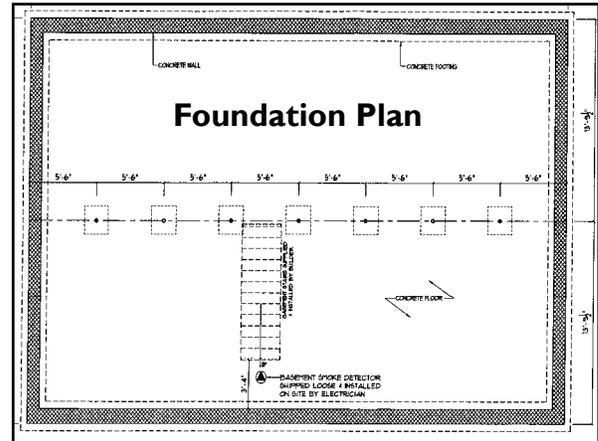
FOUNDATION PLAN

Architectural drawing of a foundation plan. It shows the layout of the foundation walls and footings. Dimensions are indicated as 'D/DE', 'B/BE', 'A/AE', and 'C/CE'. The drawing is labeled 'FRONT WALL OF HOUSE' and 'FOUNDATION PLAN NO SCALE'.

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESARA PERALES, SECRETARY OF STATE

General Notes- Foundation Plans

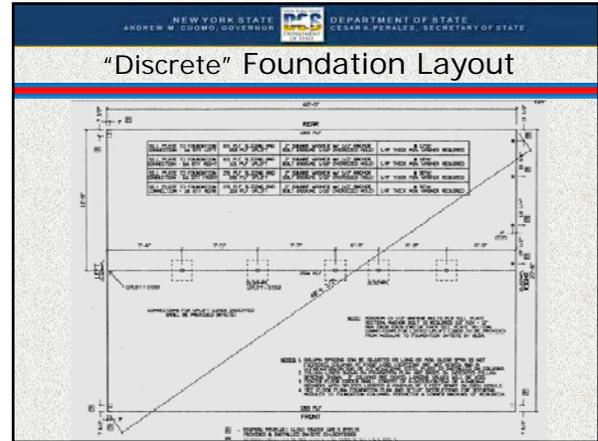
XXXX MODULAR HOMES, **SHALL NOT BE RESPONSIBLE** FOR THE DESIGN OR CONSTRUCTION OF FOOTINGS, FOUNDATION WALLS, GROUND SLABS, SITE DRAINAGE AND OTHER SITE FEATURES. THE FEATURES NOTED SHALL BE **DESIGNED BY OTHERS** TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL CODES AND/OR REQUIREMENTS. XXXX MODULAR HOMES, HAS DEPICTED TYPICAL FOUNDATION DETAILS FOR GENERAL INFORMATION PURPOSES ONLY. ANY VARIATION, JOB CONDITIONS OR DISCREPANCIES SHOULD BE DISCUSSED WITH EITHER A LICENSED PROFESSIONAL ENGINEER OR YOUR LOCAL BUILDING OFFICIAL **PRIOR TO PROCEEDING.**



NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESARA PERALES, SECRETARY OF STATE

General Notes – Foundation Plan

- Must be designed by a Registered Professional Engineer
- Foundation drawing shows acceptable means of support and spacing of main girder columns
- Supports (piers or columns) shall be located at marriage wall per spacing as shown

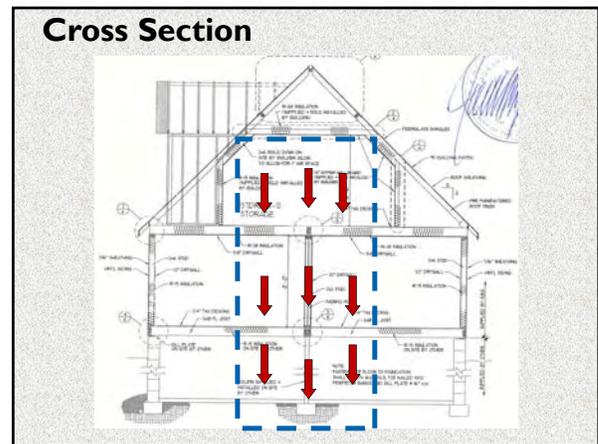


NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESARA PERALES, SECRETARY OF STATE

Foundation Layout

Notes:

1. THIS FOUNDATION DRAWING AND NOTES ARE FOR REVIEW ONLY. ACTUAL FOUNDATION DESIGN TO BE APPROVED BY A PROFESSIONAL ENGINEER, OR REGISTERED ARCHITECT.
2. THIS DRAWING TO BE USED FOR DIMENSIONS ONLY.
3. SEE FLOOR PLAN FOR DIMENSIONS OF UNITS & STAIR LOCATION.
4. SEE MASTER SECTIONS (MS), SHT. NO. 36 & 46, FOR NOTES AND DETAILS.
5. MARK CENTER FLOOR GIRDER SUPPORT COLUMN SPACING 7'-7"
6. 1/2" dia ANCHOR BOLTS SHALL BE PROVIDED WITHIN 12" OF THE ENDS OF EACH SILL PLATE SECTION, BUT NO CLOSER THAN 4" FROM THE ENDS. MINIMUM 2 BOLTS PER SILL SECTION.



NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Construction Documents

- Construction documents *shall not* be accepted unless:
 - Meet State Education requirements
 - Sufficient detail and clarity
 - Substantiate the work is code compliant
 - Site plan
 - Existing buildings, wells, septic tanks, location of work, distances




This is what you must have!!!

FOUNDATION PLAN

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Foundation Plans Must Address:

- Soil Load Bearing Value
- Concrete Strength
- Footings
- Frost Depth
- Slopes
- Foundation Walls
- Backfill
- Drainage
- Under-floor Space
- Concrete Floors

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Modular Homes

- The Approval Process
- Building Permit
- Plans and Construction Documents
- Foundation Plan Review
- Inspection of Foundation Installation
- Installation Instructions
- Inspection of Installation
- Accessories
- Resolving Complaints

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Foundation Requirements

- R401.2
 - Must carry all loads
 - Transmit loads
 - Be supported by proper soils
 - fill sections must be designed, installed and tested per accepted engineering practice

TABLE R401.1
PROPERTIES OF SOILS CLASSIFIED ACCORDING TO THE UNIFIED SOIL CLASSIFICATION SYSTEM

SOIL GROUP	UNIFIED SOIL CLASSIFICATION SYSTEM SYMBOL	SOIL DESCRIPTION	DRAINAGE CHARACTERISTICS ^a	FROST HEAVE POTENTIAL	VOLUME CHANGE POTENTIAL EXPANSION ^b
Group I	GW	Well-graded gravels, gravel-sand mixtures, little or no fines	Good	Low	Low
	GP	Poorly graded gravels or gravel-sand mixtures, little or no fines	Good	Low	Low
	SW	Well-graded sands, gravelly sands, little or no fines	Good	Low	Low
	SP	Poorly graded sands or gravelly sands, little or no fines	Good	Low	Low
	GM	Silty gravels, gravel-sand-silt mixtures	Good	Medium	Low
Group II	SM	Silty sand, sand-silt mixtures	Good	Medium	Low
	GC	Clayey gravels, gravel-sand-clay mixtures	Medium	Medium	Low
	SC	Clayey sands, sand-clay mixture	Medium	Medium	Low
Group III	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	Medium	High	Low
	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	Medium	Medium	Medium to Low
Group IV	CH	Inorganic clays of high plasticity, fat clays	Poor	Medium	High
	MH	Inorganic silts, micaceous or discontinuous fine sandy or silty silts, elastic silts	Poor	High	High
Group V	OL	Organic silts and organic silty clays of low plasticity	Poor	Medium	Medium
	OH	Organic clays of medium to high plasticity, organic silts	Unsatisfactory	Medium	High
	Pt	Peat and other highly organic soils	Unsatisfactory	Medium	High

For SI: 1 inch = 25.4 mm.
^a The percolation rate for good drainage is over 4 inches per hour, medium drainage is 2 inches to 4 inches per hour, and poor is less than 2 inches per hour.
^b Soils with a low potential expansion typically have a plasticity index (PI) of 0 to 15, soils with a medium potential expansion have a PI of 10 to 25 and soils with a high potential expansion have a PI greater than 25.

Presumptive Values

In lieu of a full geotechnical evaluation the load bearing values in table R401.4.1 shall be assumed

CLASS OF MATERIAL	LOAD-BEARING PRESSURE (pounds per square foot)
Crystalline bedrock	12,000
Sedimentary and foliated rock	4,000
Sandy gravel and/or gravel (GW and GP)	3,000
Sand, silty sand, clayey sand, silty gravel and clayey gravel (SW, SP, SM, SC, GM and GC)	2,000
Clay, sandy clay, silty clay, clayey silt, silt and sandy silt (CL, ML, MH and CH)	1,500 ^b

For SI: 1 pound per square foot = 0.0479 kN/m².
 a. When soil tests are required by Section R401.4, the allowable bearing capacities of the soil shall be part of the recommendations.
 b. Where in-place soils with an allowable bearing capacity of less than 1,500 psf are likely to be present at the site, the allowable bearing capacity shall be determined by a soils investigation.

Table R402.2

MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE

TYPE OR LOCATION OF CONCRETE CONSTRUCTION	MINIMUM SPECIFIED COMPRESSIVE STRENGTH (f _c)		
	Weathering Potential ^a		
	Negligible	Moderate	Severe
Basement walls, foundations and other concrete not exposed to the weather	2,500	2,500	2,500 ^c
Basement slabs and interior slabs on grade, except garage floor slabs	2,500	2,500	2,500 ^c
Basement walls, foundation walls, exterior walls and other vertical concrete work exposed to the weather	2,500	3,000 ^d	3,000 ^d
Porches, carport slabs and steps exposed to the weather, and garage floor slabs	2,500	3,000 ^{d, e, f}	3,500 ^{d, e, f}

Table R402.2 footnotes

- For SI: 1 pound per square inch = 6.895 kPa.
 - a. Strength at 28 days psi.
 - b. See Table R301.2(1) for weathering potential.
 - c. Concrete in these locations that may be subject to freezing and thawing during construction shall be air-entrained concrete in accordance with Footnote d.
 - d. Concrete shall be air-entrained. Total air content (percent by volume of concrete) shall be not less than 5 percent or more than 7 percent.
 - e. See Section R402.2 for maximum cementitious materials content.
 - f. For garage floors with a steel troweled finish, reduction of the total air content (percent by volume of concrete) to not less than 3 percent is permitted if the specified compressive strength of the concrete is increased to not less than 4,000 psi.

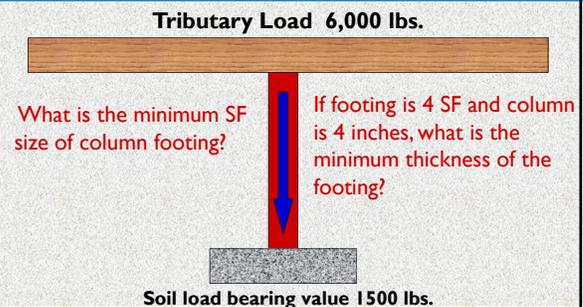
R403.1 Wall Support

- All exterior walls shall be supported by continuous footings
- Footing must be sized to support all loads based on the soil characteristics
- Footings must be on undisturbed natural soil or engineered fill

Pier and Column Requirements

- Sizes based on tributary load and allowable soil pressure
- Tributary load
 - The load that the column supports
- Soil load-bearing value
- Tributary load ÷ soil load bearing value = minimum SF size of column footing

$$\text{Tributary load} \div \text{soil load bearing value} = \text{minimum SF size of column footing}$$



NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Setting the Forms

- Forms must be set on undisturbed soil
- Must be sized as shown on prints
- Footings must be set at the proper elevation
- Footing top surface must be level
- Bottom of footing must have square edges
- Bottom of footings must be within 10 degrees of level or stepped footings will be required

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

R403.1.4.1 Depth Below Frost

- Placed below frost line
 - Prevents frost heave and settlement
 - Exceptions:
 - Frost-protected footings
 - Footings/foundations on solid rock
 - Free-standing buildings
 - Meeting all 3 conditions
- Never placed on frozen ground

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

R403.1.5 Slope

- Top surface **MUST** be level
- Bottom surface allowed 10% slope
- Stepped where elevation changes on...
 - Top of footing
 - Ground

Gone Dec. 29, 2010

Design Required???

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

R404.1 Foundation Walls

- Concrete and masonry foundation walls shall be selected and constructed in accordance with:
 - Section R404, ACI 318, ACI 332...or other approved structural standards

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Prescriptive Tables in Codes

- Should not be used if any of the following conditions exist:
 - Soils which are unidentified
 - Fill sections that were not engineered or properly compacted
 - Soils which are subject to settlement
 - Expansive soils, (these are soils that shrink and swell with change in moisture content)
 - Highly compressive clays
 - Unconfined sands and silts

Table R404.1.1(1) Plain Masonry Foundation Walls

MAXIMUM WALL HEIGHT (feet)	MAXIMUM UNBALANCED BACKFILL HEIGHT ^a (feet)	PLAIN MASONRY ^b MINIMUM NOMINAL WALL THICKNESS (inches)		
		Soil classes ^b		
		GW, GP, SW and SP	GM, GC, SM, SC and ML	SC, MH, ML-CL and Inorganic CL
5	4	6 solid ^d or 8	6 solid ^d or 8	6 solid ^d or 8
	5	6 solid ^d or 8	8	10
6	4	6 solid ^d or 8	6 solid ^d or 8	6 solid ^d or 8
	5	6 solid ^d or 8	8	10
	6	8	10	12
7	4	6 solid ^d or 8	8	8
	5	6 solid ^d or 8	10	10
	6	10	12	10 solid ^d
8	4	6 solid ^d or 8	6 solid ^d or 8	8
	5	6 solid ^d or 8	10	12
	6	10	12 solid ^d	Footnote e
	7	12 solid ^d	12 solid ^d	Footnote e
9	4	6 solid ^d or 8	6 solid ^d or 8	8
	5	8	10	12
	6	10	12	12 solid ^d
	7	12	12 solid ^d	Footnote e
	8	12 solid ^d	Footnote e	Footnote e
	9	Footnote e	Footnote e	Footnote e

TABLE R404.1.1(5) CONCRETE FOUNDATION WALLS^{h, i, j, k}

MAXI WALL HEIGHT (feet)	MAXIMUM UNBALANCED BACKFILL HEIGHT ^g (feet)	Minimum Vertical Reinforcement Size and Spacing ^{5, 4, 6, 1, 1}								
		Soil classes ² and design lateral soil load ³ per foot of depth								
		GW, GP, SW and SP 39			GM, GC, SM, SM-SC and ML 45			SC, ML-CL and Inorganic CL 60		
		Minimum wall thickness (inches)								
		7.5	9.5	11.5	7.5	9.5	11.5	7.5	9.5	11.5
4		PC	PC	PC	PC	PC	PC	PC	PC	PC
5		PC	PC	PC	PC ³	PC	PC	PC	PC	PC
6		PC ²	PC	PC	PC	PC	PC	#5@43"	PC ³	PC
7		PC	PC	PC	#5@41"	PC	PC	#6@43"	PC	PC
8		#5@47"	PC ³	PC	#6@43"	PC	PC	#6@32"	#6@44"	PC

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR | DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Footnotes

- d. Vertical reinforcement, when required, shall be placed nearest the inside face of the wall...
Concrete cover for reinforcement... shall not be less than 1 1/2 inches for No. 5 bars and smaller, and not less than 2 inches for larger bars.
- l. Where vertical reinforcement is required, horizontal reinforcement shall be provided in accordance with the requirements of Section R404.4.6.2 for ICF foundation walls.

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR | DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

404.4.6.2 Horizontal Reinforcement

- When vertical reinforcement is required, ... foundation walls up to 8 feet in height shall have a minimum of one continuous No. 4 horizontal reinforcing bar placed at 48 inches on center with one bar located within 12 inches of the top of the wall story. Foundation walls greater than 8 feet in height shall have a minimum of one continuous No. 4 horizontal reinforcing bar placed at 36 inches on center with one bar located within 12 inches of the top of the wall story.

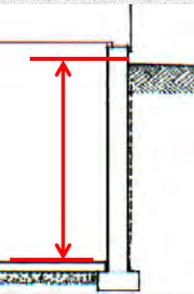
NEW YORK STATE ANDREW W. CUOMO, GOVERNOR | DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Backfill Requirements

- R404.1.3 Engineered design required when:
 - Hydrostatic pressure from ground water
 - Unbalanced backfill against unsupported walls
- R404.1.7 Backfill shall be placed against walls when:
 - The wall has achieved proper strength and has been anchored to the floor above
 - Has been braced to prevent damage

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR | DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

"Unbalanced Backfill"



- The difference in height of the exterior and interior finish ground levels.
- Where an interior concrete slab is provided, height is measured from the exterior finish ground level to the top of the interior concrete slab.

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR | DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Foundation Drainage

- R405.1 Concrete or masonry foundations
 - Drains shall be provided around all concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade.



NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

R406 WATER & DAMP PROOFING

- Foundation waterproofing
 - In areas with high water table
- Foundation damp proofing
 - top of footings to the finished grade
- Masonry walls
 - $\frac{3}{8}$ inch (9.5 mm) portland cement parging

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

R506 CONCRETE FLOORS

- R506.1 General – 3.5 inches min.
- R506.2 Site preparation – remove foreign material
 - R506.2.1 Fill - compacted
 - R506.2.2 Base – 4 inches if below grade
 - R506.2.3 Vapor retarder – 6 mil poly
 - Exceptions
 - R506.2.4 Reinforcement support - not to be disturbed during concrete placement

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

R403.1.6 Sill Plates

What are the requirements?

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Modular Homes

- The Approval Process
- Building Permit
- Plans and Construction Documents
- Foundation Plan Review
- Inspection of Foundation Installation
- Installation Instructions
- Inspection of Installation
- Accessories
- Resolving Complaints

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

CEO Inspection Responsibility

- Prior to Arrival
- Arrival and Setting of the Unit
- The UNIT itself
- Site Assembly and Connections
- Final Inspection for C.O.

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Required Inspections

- 1203.3(b)(1) work done under a permit shall remain exposed until inspected
- Permit holder shall notify CEO when work is ready to be inspected
- 1203.3(b)(2) required inspections:

Forming Strip Requirements

Blockfill Height	Forming Strip Spacing
7'-0" - 9'	24" OC
9' - 7'-6"	48" OC

(6) - 10d Nails Through Plywood into Solid Blocking or Apply Construction Adhesive to Top Surface of Blocking for Finished Modular Form.

10 1/4"

Fastening Schedule

Blockfill Height	Sill Flats Spacing	Brace & Block Spacing	Number of Solid Blocks Required	Minimum Distance of Blocking
7'-0" - 9'-6"	24" OC	48" CL	1 for Joists over 10" High	1'-0"
7'-6" - 9'-6"	24" OC	48" OC	2 for Joists under 10" High	4'-0"
9' - 7'-6"	48" OC	48" OC	1	2'-0"

- Modular Connection

- Super-Structure Connection

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Modular Homes Lesson 4

- The Approval Process
- Building Permit
- Plans and Construction Documents
- Foundation Plan Review
- Inspection of Foundation Installation
- Installation Instructions
- Inspection of Installation
- Accessories
- Resolving Complaints

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

CEO Inspection Responsibility

- Prior to Arrival
- Arrival and Setting of the Unit
- The UNIT itself
- Site Assembly and Connections
- Final Inspection for C.O.

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Site Preparation

Roll On Method

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Site Preparation

Crane On Method

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Arrival At The Site

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Unit Delivery and the Set Crew

- Acceptability of the Site
- Acceptance of the Unit
- The SET PLAN
- Documentation

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

SI-1 of 11

BUILDING COMPONENTS & FASTENING SPECIFICATIONS

1. CROSS TIE AT 4" O.C.
2. GUSSET PLATE FASTENED TO BOTH SIDES WITH POLY VINYL ACETATE GLUE & 12 - 16 COMMON NAILS PER MEMBER / SIDE.
3. LAG EVERY OTHER RAFTER TO RETAINING BAND WITH 5/16" DIA. X 4 1/2" LAG BOLTS.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
10. BOLT CLEAR SPAN BEAMS WITH 1/2" DIA. X 1 1/4" THRU-BOLTS AT 2 EVERY 14" O.C. SUBM CONTROL JOINT SPACE WITH 1/2" X 4" X 8" PLYWOOD STRIPS.
11. STEEL MENDING PLATES SHALL BE INSTALLED @ MATING WALL OPENINGS, JOINING JAMB STUDS FROM EACH MODULE FASTEN WITH MINIMUM OF 4 @ 1" U.C. ROOFING NAILS PER STUD, PER PLATE.
12. THE 1/2" CONTROL JOINT BETWEEN MODULES MUST BE MAINTAINED BEFORE FASTENING MODULES TOGETHER. (SEE INDIVIDUAL MEMBER FASTENING SPECIFICATIONS FOR MENDING PLATE CONTROL JOINTS)

IMPORTANT NOTE

IT SHALL BE THE RESPONSIBILITY OF THE INSTALLATION CREW TO ADHERE TO THESE INSTRUCTIONS AT THE TIME OF INSTALLATION. ANY DISCREPANCY BETWEEN THE INSTALLATION AND THESE INSTRUCTIONS MAY NULLIFY AND VOID CERTAIN WARRANTIES.

MAINTAIN 1/2" CONTROL JOINT BETWEEN MATING BOTTOM PLATES.

IT SHALL BE THE RESPONSIBILITY OF THE INSTALLATION CREW TO ADHERE TO THESE INSTRUCTIONS AT THE TIME OF INSTALLATION. ANY DISCREPANCY BETWEEN THE INSTALLATION AND THESE INSTRUCTIONS MAY NULLIFY AND VOID CERTAIN WARRANTIES.

SI-1 of 11

BUILDING COMPONENTS & FASTENING SPECIFICATIONS

1. CROSS TIE AT 4" O.C.
2. GUSSET PLATE FASTENED TO BOTH SIDES WITH POLY VINYL ACETATE GLUE & 12 - 16 COMMON NAILS PER MEMBER / SIDE.
3. LAG EVERY OTHER RAFTER TO RETAINING BAND WITH 5/16" DIA. X 4 1/2" LAG BOLTS.
4. LAG THE EAVE RUF @ 14" O.C. USING 5/16" DIA. X 4 1/2" LAG BOLT, OR NAIL WITH 2 @ 12 @ 14" O.C.
5. FASTEN MATING BANDS OF 1ST FLOOR TOGETHER WITH 1/2" DIA. X 10" THREADED RODS (WITH WASHERS & NUTS) AT 4" O.C. DIM CONTROL JOINT SPACE WITH 1/2" PLYWOOD X 4" X 8" STRIPS.
6. 1/2" LONG UNIFORMITY BLOCKING AT 4" O.C. TO ALLOW ROOF VENTILATION. WIDTH OR BLOCK TO BE DETERMINED IN FIELD. VENTILATION SPACE MUST BE MINIMUM 1" WIDE UNLESS NOTED OTHERWISE.
7. KING WALL WITH 2 X 4 STUDS AT 4" O.C. POSITION WITH 1/2" CONTROL JOINT BETWEEN BOTTOM PLATES. FASTEN TOP & BOTTOM WITH 1 - 16 COMMON NAILS AT 14" O.C.
8. 1/2" PLYWOOD GUESSING TO SPAN MATING CONTROL JOINT. 2" WIDE FOR HALLS, DOORWAYS & ROOM CROSSING MATING LINE, AND 4" WIDE FOR 1ST FLOOR OF CASE STUDY HOUSES. LENGTH SHALL BE CUT TO FIT. FASTEN WITH 16 COMMON NAILS @ O.C. AT EDGES, 18" O.C. ALONG JOISTS IN FIELD OF PLYWOOD.
9. APPLY 1/2" X 8" X 12" PLYWOOD PLATES TO KING WALL BOTTOM PLATES AT 4" O.C. FASTEN WITH 16 COMMON NAILS PER SIDE. MAINTAIN 1/2" CONTROL JOINT BETWEEN KING WALL BOTTOM PLATES.
10. BOLT CLEAR SPAN BEAMS WITH 1/2" DIA. X 1 1/4" THRU-BOLTS AT 2 EVERY 14" O.C. SUBM CONTROL JOINT SPACE WITH 1/2" X 4" X 8" PLYWOOD STRIPS.
11. STEEL MENDING PLATES SHALL BE INSTALLED @ MATING WALL OPENINGS, JOINING JAMB STUDS FROM EACH MODULE FASTEN WITH MINIMUM OF 4 @ 1" U.C. ROOFING NAILS PER STUD, PER PLATE.
12. THE 1/2" CONTROL JOINT BETWEEN MODULES MUST BE MAINTAINED BEFORE FASTENING MODULES TOGETHER. (SEE INDIVIDUAL MEMBER FASTENING SPECIFICATIONS TO MAINTAIN THE CONTROL JOINT WILL AFFECT THE ROOF ASSEMBLY AND VENTING.)
13. SUPPORT OF MATING BANDS MUST CONFORM TO SCHEDULE STIPULATED ON FOUNDATION DIAGRAM, UNLESS SUPERSEDED BY THESE INSTALLATION INSTRUCTIONS.
14. MATING BANDS MUST BEAR UPON PLATES HAVING MINIMUM DIMENSIONS OF 4" X 4" X 1/2" THICK. EACH PLATE SHALL BE LAGGED TO BOTTOM EDGE OF MATING RANITE WITH A MINIMUM OF 4 @ 5/16" DIA. X 3 1/2" LAGS.
15. NO CONNECTION OF MODULE TO MODULE SHALL BE BY LAGS UNLESS SPECIFICALLY ALLOWED IN THESE INSTALLATION INSTRUCTIONS. ALL CONNECTIONS ARE REQUIRED TO BE THRU-BOLTS OR THREADED RODS WITH WASHER AND NUTS.
16. WHERE SEPARATE NOTES ON THESE INSTRUCTIONS CONFLICT, THE MORE STRINGENT REQUIREMENT SHALL APPLY.

IMPORTANT NOTE

IT SHALL BE THE RESPONSIBILITY OF THE INSTALLATION CREW TO ADHERE TO THESE INSTRUCTIONS AT THE TIME OF INSTALLATION. ANY DISCREPANCY BETWEEN THE INSTALLATION AND THESE INSTRUCTIONS MAY NULLIFY AND VOID CERTAIN WARRANTIES.

CEO Inspection Responsibility

- Prior to Arrival
- Arrival and Setting of the Unit
- The UNIT itself
- Site Assembly and Connections
- Final Inspection for C.O.

NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR PERALES, SECRETARY OF STATE

The Set Plan

- Attachment to the Foundation
- Marriage Wall
- Support
- Alignment
- Additional Pieces
- Utility Connections

The CEO is the final check

NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR PERALES, SECRETARY OF STATE

Box A In Place



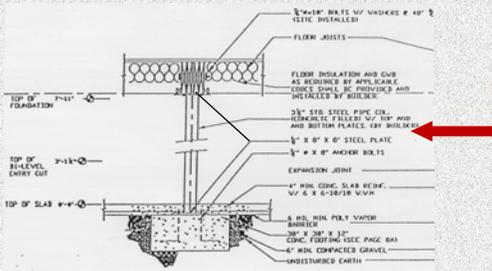
NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR PERALES, SECRETARY OF STATE

Foundation Anchorage

- Section R403.1.6
 - Anchor bolt spacing
 - Size, depth
 - Other fasteners
- Sills and sole plates protected from
 - Decay
 - Termites

NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR PERALES, SECRETARY OF STATE

Mate/Column Detail



NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE

Set Instructions

14. MATING BANDS MUST BEAR UPON PLATES HAVING MINIMUM DIMENSIONS OF 8" X 8" X 1/2" THICK. EACH PLATE SHALL BE LAGGED TO BOTTOM EDGE OF MATING BANDS WITH A MINIMUM OF 4 @ 5/16 DIA. X 2 1/2" LAGS.

INSTALLING COMPONENTS & FASTENING SPECIFICATIONS

1. CHECK TO AT 1/4" O.C.
2. CHECK PLATE FASTENED TO BOTH SIDES WITH POLY NYLON ANCHETS
3. LAG EVERY OTHER BAND TO RETAINING BAND WITH 5/16" DIA. X 2 1/2" LAGS.

IF STEEL ANCHORS PLATES SHALL BE INSTALLED IN MATING WALL JOINTS. JOINTS SHALL BE PROTECTED FROM DAMAGE WITH MINIMUM OF 4" X 1/2" POLYURETHANE SEAL FOR PLATE.

GENERAL FASTENING SPECIFICATIONS: USE APPROVED NUMBER AND TYPE FASTENERS. FOLLOW ALL MANUFACTURER'S INSTRUCTIONS. FASTENERS SHALL BE INSTALLED TO MAINTAIN THE CONTROL JOINT WALL FASTENERS FROM CONTACT WITH OTHERS.

INDEPENDENT NOTE: IT SHALL BE THE RESPONSIBILITY OF THE INSTALLATION CREW TO ADHERE TO THESE INSTRUCTIONS AT THE TIME OF INSTALLATION AND TO FOLLOW ALL MANUFACTURER'S INSTRUCTIONS AND THESE INSTRUCTIONS SHALL BE A PART OF THE CONTRACT DOCUMENTS.

SET INSTRUCTIONS FOR: 3251
NOT TO SCALE 01-06-97 P. VALTER

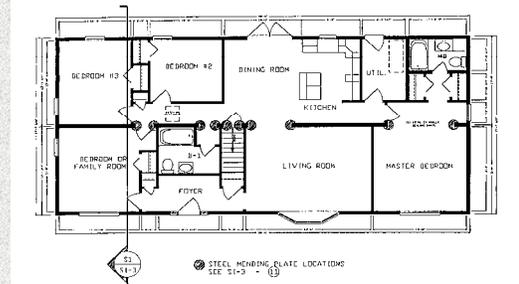
NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE

Column Support At Fitch Beam



NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE

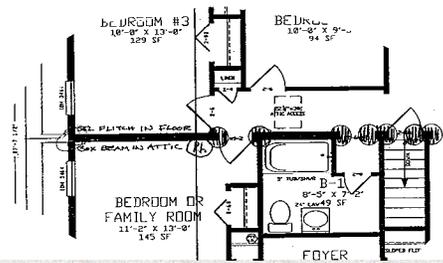
Floor Plan



NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE

Floor Plan Revision

Fitch and Box Beams

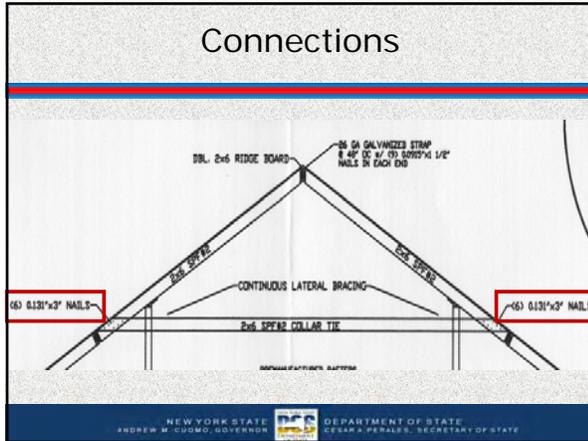
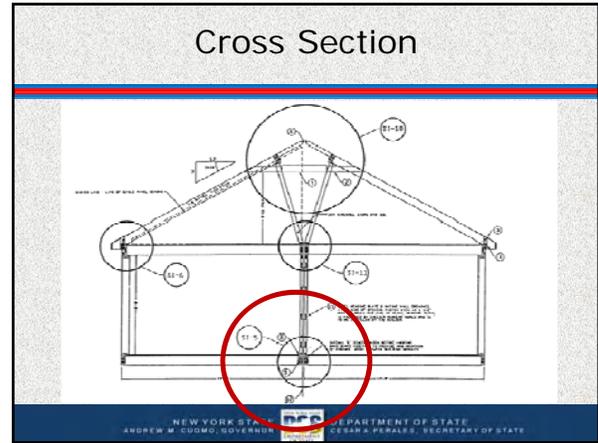
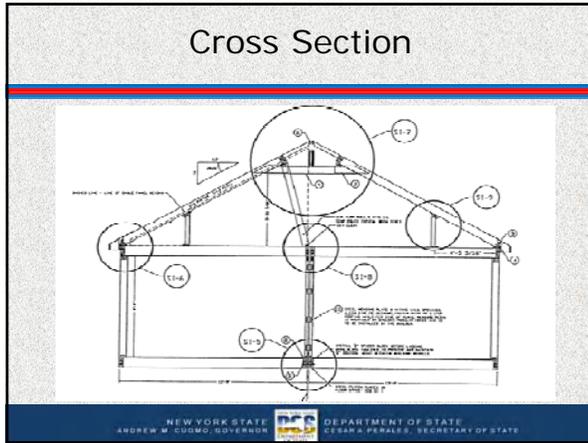


NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE

Fitch Plates Over Column



NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE



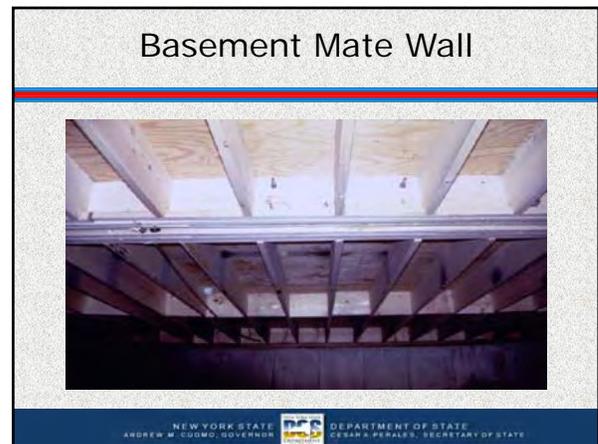
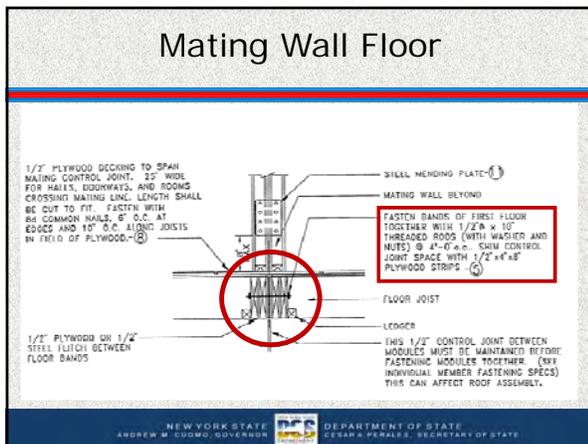
What's a 0.131" x 3" Nail?

Nail Specifications (Units in inches)

Box	Length	Diam.	Common	Length	Diam.	Cooler	Length	Diam.	Gypboard	Length	Diam.
2d	1	0.067	2d			2d	1	0.062	2d		
3d	1.25	0.076	3d			3d	1.125	0.067	3.25d	1.1875	0.080
4d	1.5	0.080	4d			4d	1.375	0.080	4d	1.375	0.080
5d	1.75	0.080	5d			5d	1.625	0.086	5d	1.625	0.086
6d	2	0.099	6d	2	0.113	6d	1.875	0.092	6d	1.875	0.091
7d	2.25	0.099	7d			7d	2.125	0.099	7d	2.125	0.099
8d	2.5	0.113	8d	2.5	0.131	8d	2.375	0.113	8d	2.375	0.113
9d	2.75	0.113	9d			9d	2.625	0.113	9d		
10d	3	0.128	10d	3	0.148	10d	2.875	0.120	10d		
12d	3.25	0.128	12d	3.25	0.148	12d			12d		
16d	3.5	0.135	16d	3.5	0.162	16d			16d		
20d	4	0.148	20d	4	0.192	20d			20d		

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESARA PERALDO, SECRETARY OF STATE



Mating Wall Floor

1/2" PLYWOOD DECKING TO SPAN MATING CONTROL JOINT. 22" WIDE FOR HALLS, DOORWAYS, AND ROOMS CROSSING MATING LINE. LENGTH SHALL BE CUT TO FIT. FASTEN WITH 6d COMMON NAILS @ 12" O.C. AT EDGES AND 12" O.C. ALONG JOISTS IN FIELD OF PLYWOOD.

STILL MENDING PLATE
 MATING WALL BEYOND
 FASTEN BANDS OF FIRST FLOOR TOGETHER WITH 1/2" x 10" THREADED RODS (WITH WASHER AND NUTS) @ 4'-0" o.c. SEW CONTROL JOINT SPACE WITH 1/2" x 4" x 8" PLYWOOD STRIPS
 FLOOR JOIST
 LEDGER
 1/2" PLYWOOD OR 1/2" STEEL FLITCH BETWEEN FLOOR BANDS

THIS 1/2" CONTROL JOINT BETWEEN MODULES MUST BE MAINTAINED BEFORE FASTENING MODULES TOGETHER. (SEE INDIVIDUAL MEMBER FASTENING SPECS) THIS CAN AFFECT ROOF ASSEMBLY.

NEW YORK STATE DEPARTMENT OF STATE
 ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE



Mating Wall Floor

1/2" PLYWOOD DECKING TO SPAN MATING CONTROL JOINT. 22" WIDE FOR HALLS, DOORWAYS, AND ROOMS CROSSING MATING LINE. LENGTH SHALL BE CUT TO FIT. FASTEN WITH 6d COMMON NAILS @ 12" O.C. AT EDGES AND 12" O.C. ALONG JOISTS IN FIELD OF PLYWOOD.

STEEL MENDING PLATE
 MATING WALL BEYOND
 FASTEN BANDS OF FIRST FLOOR TOGETHER WITH 1/2" x 10" THREADED RODS (WITH WASHER AND NUTS) @ 4'-0" o.c. SEW CONTROL JOINT SPACE WITH 1/2" x 4" x 8" PLYWOOD STRIPS
 FLOOR JOIST
 LEDGER
 1/2" PLYWOOD OR 1/2" STEEL FLITCH BETWEEN FLOOR BANDS

THIS 1/2" CONTROL JOINT BETWEEN MODULES MUST BE MAINTAINED BEFORE FASTENING MODULES TOGETHER. (SEE INDIVIDUAL MEMBER FASTENING SPECS) THIS CAN AFFECT ROOF ASSEMBLY.

NEW YORK STATE DEPARTMENT OF STATE
 ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE



Set Instructions

INSTALLING FOUNDATIONS & FASTENING SPECIFICATIONS

- CROSS TIE AT 4'-0" O.C.
- GRADING PLATE FASTENED TO BOTH SIDES WITH POLY NYLON ANCHORS OR CUES A 12-66 GRADATION NAILS PER MEMBER/ SIDE
- LAG EVERY OTHER RAFTER TO RETAINING BAND WITH 5/16" DIA. X 4" LAG BOLTS
- STEEL MENDING PLATES SHALL BE INSTALLED @ MATING WALL OPENINGS, JOINING JAMB STUDS FROM EACH MODULE. FASTEN WITH MINIMUM OF 4 @ 1 1/2" ROOFING NAILS PER STUD, PER PLATE.
- JOIN WALL WITH 1 X 4 STUDS AT 4'-0" O.C. POSITION WITH 1/2" CONTROL JOINT BETWEEN BOTTOM PLATE FASTEN TOP & BOTTOM WITH 1/2" THROUGH BOLTS
- 1/2" PLYWOOD DECKING TO SPAN MATING CONTROL JOINT. 22" WIDE FOR HALLS, DOORWAYS, AND ROOMS CROSSING MATING LINE. LENGTH SHALL BE CUT TO FIT. FASTEN WITH 6d COMMON NAILS @ 12" O.C. AT EDGES AND 12" O.C. ALONG JOISTS IN FIELD OF PLYWOOD.
- APPLY 1/2" x 4" x 8" PLYWOOD PLATES TO END WALL BOTTOM PLATES AT 1'-0" O.C. FASTEN WITH 16d COMMON NAILS PER SIDE. MOUNTED BY CONTROL JOINT. SEE TRUSS END WALL JOINT PLATES.
- INSTALL TRUSS BRACE BEHIND WITH 1/2" DIA. X 10' TRUSS BOLTS @ 12' EVERY 2'-0" O.C. BRACE CONTROL JOINT SPACE WITH 1/2" x 4" x 8" PLYWOOD STRIPS
- STEEL MENDING PLATES SHALL BE INSTALLED @ MATING WALL OPENINGS, JOINING JAMB STUDS FROM EACH MODULE. FASTEN WITH MINIMUM OF 4 @ 1 1/2" ROOFING NAILS PER STUD, PER PLATE.
- THIS 1/2" CONTROL JOINT BETWEEN MODULES MUST BE MAINTAINED BEFORE FASTENING MODULES TOGETHER. (SEE INDIVIDUAL MEMBER FASTENING SPECS) FAILURE TO MAINTAIN THE CONTROL JOINT WILL AFFECT THE ROOF ASSEMBLY & AIR VENTING.
- WHERE SEPARATE NOTES OR THIS INSTRUCTIONS CONFLICT, THE MORE STRINGENT REQUIREMENT SHALL APPLY.

IMPORTANT NOTE:
 IT SHALL BE THE RESPONSIBILITY OF THE INSTALLATION CREW TO ACCRUE TO THESE INSTRUCTIONS AT THE TIME OF RAFTER LAYOUT AND DETERMINE ANY DISCREPANCY BETWEEN THE LAYOUT AND THESE INSTRUCTIONS MAY RESULT IN AND VOID CERTAIN WARRANTIES.

NEW YORK STATE DEPARTMENT OF STATE
 ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE

Eave Detail

INFILL MISSING ROWS OF SHINGLES AT HANG POINT
 FASTEN ROOF SHEATHING TO RAFTERS WITH 6d COMMON NAILS @ 8" o.c.
 FLIPPED EAVE OVERHANG ASSEMBLY
 FASTEN WITH 12d COMMON NAILS @ 8" o.c.
 ASSURE UNOBSTRUCTED VENT PATH
 10 1/4"
 3/4" PLYWOOD BEARING PLATE
 EXTERIOR WALL

LAG EVERY OTHER RAFTER TO RETAINING BAND WITH 5/16" x 4" LAG BOLTS.

NEW YORK STATE DEPARTMENT OF STATE
 ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE

Roof At Flipped Eave

NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE

Ridge Section

NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE

Ridge Beam And Collar Tie

NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE

Mating Wall Ceiling

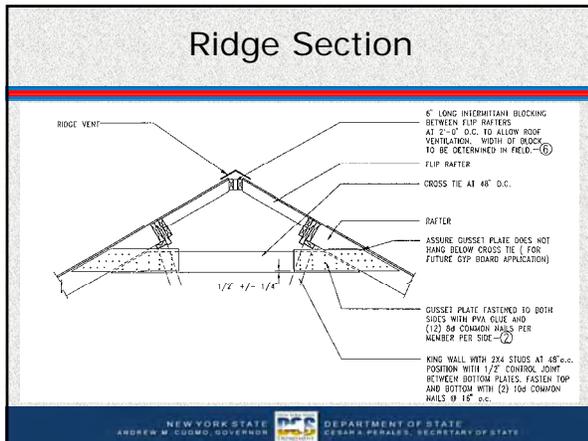
NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE

Knee Wall Section

NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE

Knee Wall

NEW YORK STATE DEPARTMENT OF STATE
ANDREW M. CUOMO, GOVERNOR CESAR A. PERALES, SECRETARY OF STATE



- ### Modular Homes
- The Approval Process
 - Building Permit
 - Plans and Construction Documents
 - Foundation Plan Review
 - Inspection of Foundation Installation
 - Installation Instructions
 - Inspection of Installation
 - Accessories
 - Resolving Complaints
- NEW YORK STATE ANDREW M. CUOMO, GOVERNOR | DEPARTMENT OF STATE CESARA PERALES, SECRETARY OF STATE

- ### Installation Problems
- Field installations lacking required roof truss or folding roof connections
 - Excessive space between modules
 - "Crowned" foundations
- NEW YORK STATE ANDREW M. CUOMO, GOVERNOR | DEPARTMENT OF STATE CESARA PERALES, SECRETARY OF STATE

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Modular Homes Lesson 5

- The Approval Process
- Building Permit
- Plans and Construction Documents
- Foundation Plan Review
- Inspection of Foundation Installation
- Installation Instructions
- Inspection of Installation
- Accessories
- Resolving Complaints

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Table R301.5 Minimum Requirements

USE	LIVE LOAD
Attics with limited storage ^{g,h}	20
Attics without storage ^b	10
Decks ^e	40
Exterior balconies	60
Fire escapes	40
Guardrails and handrails ^d	200 ⁱ
Guardrails in-fill components ^f	50 ⁱ

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

R502.2.2 Decks

- Where supported by the structure must be positively anchored
- Designed for vertical and lateral loads
- Attachment shall not be accomplished by use of toe-nails or nails subject to withdrawal
- Cantilevers must be designed for uplift forces

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

How do we regulate residential decks?

- Permit
- Stamped /Sealed Plans per NYSED Law
 - Structural/Public Safety
- Construction Documentation
 - RCNY Chapters 3,4,5,6

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Some Details Shown Are Based On:

Fairfax County, Virginia
Typical Deck Details
Based on the 2009 International Residential Code



The details are meant to be informative and are not part of The NYS Residential Code or a Referenced Standard

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

The Publication Is Available At:

- www.fairfaxcounty.gov/decks
- **REMEMBER:**
 The details are meant to be informative and are not part of The NYS Residential Code or a Referenced Standard

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Decks and Stairs

- Building Permits issued for Decks and Stairs **MUST** be based on:
 - Competent Design
 - Accurate Fabrication and
 - Inspection

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Design Criteria

- R301.1 Application
- *Buildings and structures, and all parts thereof, **shall** be constructed to safely support all loads, including dead loads, live loads, roof loads, flood loads, snow loads, wind loads and seismic loads as prescribed by this code.*

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Structural Considerations

- Live Loads
 - Table R301.5
- Dead loads
 - R301.4
- Environmental Loads
 - R301.2

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Minimum Requirements

- Single level residential wood decks
 - Minimum 40 psf live load
- Lumber identified by grade mark
- Nails, Screws, Bolts and Lags
 - meet requirements
- Corrosion resistant fasteners

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Minimum Requirements (Continued)

- Hot tubs – beyond this scope
- Environmental loads – must be considered
 - Snow, snow drifts, sliding snow, wind & seismic
- Flashing
 - Corrosion resistant or approved non-metallic
- Final inspection and approval
- Alternative methods and materials
 - Documentation and approval

NEW YORK STATE
ANDREW M. CUOMO, GOVERNOR

DEPARTMENT OF STATE
CESAR A. PERALES, SECRETARY OF STATE

Protection From Decay

- R319.1
 - **Protection from decay** shall be provided in the following locations by the use of naturally durable wood or wood that is preservative treated in accordance with AWPA UI for the species, product, preservative and end use. Preservatives shall be listed in Section 4 of AWPA UI.

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Columns

- Transfer loads to the footings
 - Sized based on length (column) and tributary loads
- Provide resistance to "uplift"
 - Footing to column connections

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Beam

- R502.9 Fastening
 - Positive connections to ensure against uplift and lateral displacement

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Do Sonotubes Require Footings?

...The size of footings supporting piers and columns shall be based on the tributary load and allowable soil pressure in accordance with Table R401.4.1.

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

What is the Tributary Load?

10' x 12' Deck

Weight on each column?

Does the weight of the concrete column have to be considered?

What's the Soil Load Bearing Value?

Table R401.1

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

How much does the concrete weigh?

Sonotube® Round Concrete Forms Size Chart

Forms are available in lengths up to 60' with diameters ranging from 6" to 60"

Concrete Requirements (Expressed in cubic yards for columns of various heights)

Diameter (in.)	Height of Column					
	3ft.	6ft.	8ft.	10ft.	12ft.	16ft.
6	.022	.044	.056	.073	.088	.117
8	.039	.077	.103	.129	.155	.206
10	.061	.121	.162	.202	.242	.323
12	.087	.176	.233	.291	.349	.466

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Footings

TABLE 3: FOOTING SIZE

Beam Span	Joist Span	Size of Square	Size of Round	Minimum Thickness ¹
≤ 8'	≤ 10'	15"	17"	6"
	>10' - 14'	18"	20"	8"
	>14' - 18'	21"	23"	9"
> 8' - 12'	≤ 10'	19"	21"	8"
	>10' - 14'	22"	24"	10"
	>14' - 18'	26"	28"	11"
>12' - 17'	≤ 10'	23"	25"	10"
	>10' - 14'	28"	30"	12"

¹The cast-in-place post base may require a footing thickness greater than the value in the table above. In such cases, the manufacturer's specified minimum footing thickness shall govern.

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR | DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Chapter 5 Floors

- **R502.2 Design and construction**
 - Floors shall be designed and constructed in accordance with the provisions of this chapter, Figure R502.2 and Sections R319 and R320 or in accordance with AF&PA/INDS

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR | DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

R502.2.2 Decks

- Where supported by the structure must be positively anchored
- Designed for vertical and lateral loads
- Attachment shall not be accomplished by use of toe-nails or nails subject to withdrawal
- Cantilevers must be designed for uplift forces

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR | DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Lag Screws

lag screws must be hot-dipped galvanized or stainless steel only

screw must penetrate beyond band board a minimum of 1/2"

length must extend through existing band board

1 1/2" shank (no threads)

3/4" dia.

- Lag screws installed with washers
- Drill pilot holes 1/2" in ledger and 5/16" in solid rim joist
- **Do not drive with hammer**
- Use soap or suitable lubricant
- Snug Lag, but do not over tighten

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR | DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Joist Hangers

joist hanger with inside flanges

Hanger must be designed for the number of plies that it's holding and installed per manufacturers specifications!

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR | DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

If Attachment Cannot Be Verified

FIGURE 17: FLOOR TRUSSES FIGURE 18: BRICK VENEER FIGURE 19: HOUSE OVERHANG

Require Free Standing Decks

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR | DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Decks

- Where supported by attachment to an exterior wall...
 - Designed for vertical and lateral loads
 - Longer columns are subject to more stress from lateral loads

KNEE BRACING U-BRACING

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Cantilevered Decks

- Designed and constructed to resist uplift
- Full live load acting on cantilevered portion

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Joist To Beam

FIGURE 8: JOIST-TO-BEAM DETAIL

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

R312.1 Guards

Porches, balconies, ramps or raised floor surfaces

- 30" above floor or grade
 - Guards not less than 36"
- Stairs with a total rise more than 30"
 - Guards 34" (measured vertically from nosing)
- Screened decks and porches
 - Walking surface 30" above

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Typical Guard Detail

FIGURE 9: TYPICAL GUARD DETAIL

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Guard Posts

FIGURE 29: NOTCHING AT GUARD POSTS

FIGURE 30: GUARD POST ATTACHMENT DETAIL

NEW YORK STATE ANDREW W. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Post To Outside Joist

FIGURE 31: GUARD POST-TO-OUTSIDE JOIST DETAIL

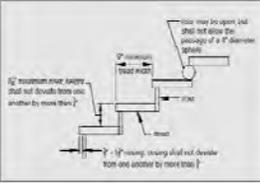
Stairways

- Width
 - Not less than 36" above hand rails
 - Handrail projection no greater than 4.5"
 - Clear width between rails and below:
 - 1 rail not less than 31.5"
 - 2 rails not less than 27"

Stairways

R311.5.3 Treads and risers

- Riser height 8 1/4" max.
 - Height variation 3/8" max.
- Tread depth 9" max.
 - Depth variation 3/8" max.
- Winder treads
 - Details



Stairways

R311.5.3 Treads and risers

- Profile
 - Nosing 3/4" min. 1 1/4" max.
 - Nosing variation 3/8" max. Within any flight including landings and floors
- Exceptions
 - No nosing 11" tread or greater
 - Opening not limited for 30" rise or less

311.5.6 Handrails

- At least 1 side with 4 risers or more
- Height
 - 34"-38" vertical from plane of nosing
- Continuity
 - Continuous, Ends returned, 1 1/2" space to wall
- Exceptions
 - Newel Post at turns
 - Lowest tread may use newel post or turnout

Stair Stringer

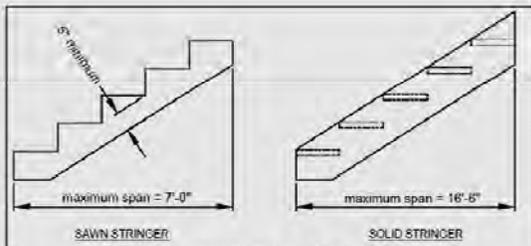


FIGURE 34: STAIR STRINGER REQUIREMENTS

Stringer Attachment

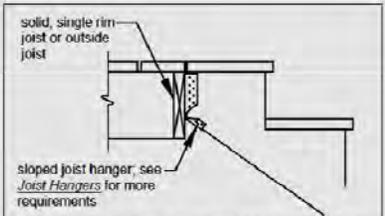


FIGURE 35: STAIR STRINGER ATTACHMENT DETAIL

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Tread Connection

attach tread material with (2) #8 screws or (2) 8d nails per board at each stringer or ledger

stringer

18" 18"

CUT STRINGER

36" maximum

tread

stringer

2x4 ledger, each side, full length of tread, attach with (4) 10d nails or (4) #8 screws

SOLID STRINGER

FIGURE 36: TREAD CONNECTION REQUIREMENTS

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Interior Stairs

- Landings
 - Width not less than width of stairs
 - At least 36" in direction of travel
- Stair and handrail requirements
 - Same as exterior
- Information available at:
 - www.stairways.org

2006 STAIR BUILDING CODE

Presented by the Department of State in cooperation with the
2006 International Residential Code, International Code Council, Falls Church, Virginia
Reproduced with permission. All rights reserved.

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Modular Homes

- The Approval Process
- Building Permit
- Plans and Construction Documents
- Foundation Plan Review
- Inspection of Foundation Installation
- Installation Instructions
- Inspection of Installation
- Accessories
- Resolving Complaints

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Resolving Complaints

- Type of, and Responsibility
- Complaint to CEO
- Non-Compliance with Residential Code of New York State
 - NYS DOS Codes Division*
 - (518) 474-4073*

STATE OF NEW YORK
DEPARTMENT OF STATE

ANDREW M. CUOMO, Governor CESAR A. PERALES, Secretary of State

Month 01, yyyy
Factory Manufactured Home Complaint

Dear Mr. _____:

We have received your request for assistance, based on our www.dos.ny.gov phone consultation, that you are experiencing difficulties with your factory-manufactured home. The following will outline the procedure to follow which will allow us to assist you. If another agency is assisting you, please advise us in writing, however, allow time to continue. If you feel you need additional assistance, please return the enclosed consumer complaint form. There is no charge to the homeowner for the service.

Before returning the consumer's complaint form, the following procedures should be followed:

1. If you have not yet done so, write to the dealer with a comprehensive list of the problems you are having with your home.
2. If you were not satisfied with the dealer's response, the manufacturer should also be notified in writing.
3. After completing steps 1 and 2, or if you are confident that the dealer and manufacturer have been informed and you did not receive a satisfactory response, fill out the enclosed complaint form.
 - A. Fill in all the blanks, being as concise as possible in describing the problems.
 - B. If more space is needed, use a blank sheet of paper showing the corresponding numbers, include any supporting information you feel will be helpful for our review.
 - C. Send your request to:

NY State Dept. of State
Factory Manufactured Home Unit
Attention: Complaints Unit/Consumer
One Commerce Plaza
30 Washington Avenue
Albany, NY 12211
4. When the complaint is received, it will be reviewed for non-compliance with New York State Statute. We will not be able to enforce non-color and materials type laws.
 - A. A copy of your complaint form will be sent to the manufacturer, installer or retailer depending on who may be responsible.
 - B. After 30 days the Division will accompany your request form requiring the manufacturer, installer, or retailer to respond.

One Commerce Plaza, Albany, NY 12211 • Phone: 518-474-4073 • FAX: 518-474-4073
www.dos.ny.gov • Email: nydos@dos.ny.gov

NEW YORK STATE ANDREW M. CUOMO, GOVERNOR DEPARTMENT OF STATE CESAR A. PERALES, SECRETARY OF STATE

Assign Responsibility

- Manufacturer
 - Unit Design and Construction
- Set Crew
 - Instructions
- Builder
 - Site Work and Foundation
- CEO
 - Compliance with Plans


STATE OF NEW YORK
DEPARTMENT OF STATE

ANDREW M. CUOMO
 Governor

CESAR A. PERALES
 Secretary of State

Factory Manufactured Home Complaint

In order to process your complaint, we require the following information:

- Name, address and phone number of Homeowner _____

 Phone Number _____
- Name of manufacturer and address of factory: _____

- NYTS Inspector of Approval Serial No. _____
- Model Name _____
- Manufacturer Serial No. _____
- Date of construction _____/_____/_____
- Specific details of the complaint. (Attach additional 8 1/2" x 11" sheets in red-inked sheets each sheet with one name and address.) (See CD with photographs of applicable.)

Your prompt reply to this request is appreciated.

Sincerely,

The Governmental Printing Board, Albany, NY 12247-0001 • 518-474-6000
 www.dos.state.ny.us • Fax: 518-474-6000

NEW YORK STATE
 ANDREW M. CUOMO, GOVERNOR


 DEPARTMENT OF STATE
 CESAR A. PERALES, SECRETARY OF STATE

DOS

- Will notify manufacturer
 - Complaint form by owner


STATE OF NEW YORK
DEPARTMENT OF STATE

ANDREW M. CUOMO
 Governor

CESAR A. PERALES
 Secretary of State

March 05, YYYY

Modular Manufacturer
Address _____

Re: Homeowner vs. Manufacturer

Dear Mr.
Service Manager:

We have received the enclosed consumer complaint from the above referenced consumer who purchased a home manufactured by your company. The complaint may indicate the possible existence of non-compliance with the New York State Uniform Fire Prevention and Building Code.

You are requested to:

- Investigate the complaint and, determine your responsibility;
- Send a copy of the result of such an investigation to my office within 20 days of the receipt of this letter.

This determination shall be documented in the consumer complaint file at your plant. The file should include who made the determination, whether the problems are a non-conformance situation at the manufacturing of the home or whether the problems stem from the installation of the home.

Sincerely,

Enc.
no

The Governmental Printing Board, Albany, NY 12247-0001 • 518-474-6000
 www.dos.state.ny.us • Fax: 518-474-6000

NEW YORK STATE
 ANDREW M. CUOMO, GOVERNOR


 DEPARTMENT OF STATE
 CESAR A. PERALES, SECRETARY OF STATE

Other Code Issues

- Energy Code Compliance
- Carbon Monoxide Detectors


REScheck Software Version 4.4.1
Compliance Certificate

Project Title: WTP-BAPALEE

Energy Code: 2010 New York Energy Conservation
 Construction Code: 2010 New York Building Code
 Construction Type: Residential 1 to 3 Family
 Heating System: LHV
 Cooling System: LHV
 Insulation Code: LHV

Construction Date: _____
 Owner/Client: _____
 Registered Professional: _____

EVS
E

SR

Compliance Summary (See Table 1)

Assembly	Area (sq ft)	R Value	U Value	U Value (if not listed)	U Value (if not listed)
Roofing 1: Composite Ceiling (R=10)	1114	10.0	0.1		10
Floor over Wood Frame, 1st fl.	360	21.0	0.0	0.000	16
Wall: 1: Vinyl Frame Double Pane with Low-E	60			0.300	3.3
Wall 2: Glass	60			0.300	3.3
Wall over Wood Frame, 1st fl.	140	21.0	0.0	0.000	16
Roofing 2: 1/2" Plywood over Insulation	140			0.000	4
Wall 2: Glass	20			0.200	5
Floor over Wood Frame, 1st fl.	400	21.0	0.0	0.000	16
Wall: 1: Vinyl Frame Double Pane with Low-E	10			0.300	3.3
Wall 2: Glass	10			0.300	3.3
Wall: 1: Vinyl Frame Double Pane with Low-E	10			0.300	3.3
Wall 2: Glass	10			0.300	3.3
Floor 1: 4" Insulation over 2" Concrete Slab	1000	30.0	0.0		30

Compliance Summary: The proposed building design described herein is consistent with the building code, specifications, and other requirements contained in the permit application. The proposed building has been designed to meet the 2010 New York Energy Conservation Code requirements in REScheck report 4.4.1 and is compliant with the regulatory requirements listed in the REScheck report. (Checklist)

Name: Title Signature Date

Page: _____
 Date: _____
 Print: 03/15/11
 Page 1 of 4

NEW YORK STATE
 ANDREW M. CUOMO, GOVERNOR


 DEPARTMENT OF STATE
 CESAR A. PERALES, SECRETARY OF STATE

Covered In This Program

- The Approval Process
- Building Permit
- Plans and Construction Documents
- Foundation Plan Review
- Inspection of Foundation Installation
- Installation Instructions
- Inspection of Installation
- Accessories
- Resolving Complaints