



CITY OF NORTH MIAMI BEACH BUILDING DEPARTMENT

Commercial Plan Review Guidelines (Structural Review)

Project Address: _____

Instructions for using this form:

1. This form provides a list of code requirements that must be verified by the Building Department before the issuance of a building permit.
2. Code references are to the 2007 Florida Building Code (unless otherwise noted). Suffixes identify the code volume as follows:
Building (BI) - Existing (Ex) - Fuel/Gas (Gs) - Mechanical (Me) - national Electrical Code (NEC) - Plumbing (PI) Residential (Re)
3. Provide the drawing number (Dwg. No.) where compliance with the referenced code section may be verified or check the N.A. box whenever the code provision is not applicable.

Structural Review

General Requirement	Specific Code Requirement	Code Section(s)	Dwg. No.	N.A.	Other Information
Design criteria	Structural design calculations	106.1, 106.1.1, 1612.1. (BI)			
	Design loads on construction documents	1615 (BI)			
	Floor live load	1615.1, Table 1615 (BI), Table 4.1 ASC E-7			
	Roof live load	1616 (BI)			
	Roof drainage	1617 (BI)			
	Concentrated loads	1615.2 (BI)			
	Load combinations	1618.9 (BI)			
	Live load reduction	1619 (131)			
	Basic wind speed	1620.2 (BI)			
	Basic wind speed for fences	1612.2.1 (BI)			
	Wind exposure category	1620.3 (BI)			
	Wind loads on utility sheds	1620.5 (BI)			
	Sway forces in stadiums	1612.2.2 (BI)			
	Volume changes	1614.1 (BI)			
	Below grade structures	1618.2 (BI)			
	Helistops/Heliports	1618.3 (BI)			
	Safeguards and railings	1618.4, 1618.5 (BI)			
	Ornamental projections	1618.7 (BI)			
	Partition loads	1618.8 (BI)			
	Screen enclosures	1622.1.1 (BI)			
	Overturning and uplift	16212 (BI)			
Foundations					
• Termite protection		1816 (BI)			
• Bearing capacity of soils	Identify soil bearing capacity	1818.1 (BI)			
	<ul style="list-style-type: none"> 2000 p.s.f. or less, provide statement by R.A. or P.E. More than 2000 psf soil investigation required. 	1818.2 (131)			2000 p,s,f. or less? Y_____ N_____
	Designs employing lateral bearing	1819.7 (BI)			
	Soil improvement	1834 (BI)			
• Design	Procedure	1624.1 (BI)			
• Footing options	Continuous wall footings	1819.2 (BI)			
	Isolated footing	1819.5 (BI)			
	Concrete slab on fill	1820 (BI)			

If yes, refer to Form CS-1 for required statement
If no, submit soil report

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Foundation	• Special Inspector required	1820.3.1 (BI)		Identify Special Inspector, enclose Form CS-2
• Footing options (cont'd)				
	Monolithic footing	1821 (BI)		
	Pile foundation	1822-1830 (BI)		
	• Special Inspector required	1822.1.2 (BI)		Identify Special Inspector, enclose Form CS-2
	Foundation walls, seawalls and bulkheads	1832-1833 (BI)		
Concrete	Reinforced concrete	1919 (BI), ACI 318		
	Details of reinforcement	1926 (BI)		
	Design method	ACI 318		
	Precast concrete	1927 (BI)		
	• Special Inspector required	1927.12.2 (BI)		Identify Special Inspector, enclose Form CS-2
	Pre-stressed concrete	1928 (BI)		
	Shotcrete	1929 (BI)		
	Lightweight insulating concrete	1917 (BI)		
	• Product approval required	1917.2.1 (BI)		
Aluminum	Design method	2003.1, 2003.6, 2003.7 (BI)		
	Structural aluminum decking and siding	2003.8.2 (BI)		
	Compatible and non compatible materials	2003.8.4 (BI)		
Masonry	Design method	2118 (BI)		
	Unreinforced masonry units, construction details	2121 (BI)		
	Reinforced masonry units	2122 (BI)		
	• Special Inspector required	2122.4 (BI)		Identify Special Inspector, enclose Form CS-2
Steel	Structural steel design	2214-2219 (BI)		
	• Special Inspector required	2218.2 (BI)		Identify Special Inspector, enclose Form CS-2
	Cold-formed steel design/construction/standards	2222 (BI)		
	Open web steel joists design/construction/standards	2221 (BI)		
	Pre-engineered prefabricated metal buildings	2223 (BI)		
	• Product Approval required for all building envelope components	2223.8.1		
	• Special Inspector required	2223.11.1(BI)		Identify Special Inspector, enclose Form CS-2

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Wood	Design method	2314 (BI)			
	Indicate grade/strength	2317.1 (BI)			
	Vertical framing	2318 (BI)			
	Horizontal framing	2319 (BI)			
	Prefabricated wood trusses •Special Inspector required for erection of trusses L >35' or H >6'	2319.17.2.4.2 (BI)			Identify Special Inspector, enclose Form CS-2
	Anchorage	2321 (BI)			
	Sheathing	2322 (BI)			
	Connectors	2324 (Br)			
	Wood supporting masonry	2325 (BI)			
	Decay and termite protection	2326 (BI)			
	Fire retardant treated wood	2327 (Br)			
	Wood fences	2328 (BI)			
	Wood shakes and shingles	2329 (BI)			
	Wood blocking	2330 (BI)			
Glass and Glazing	Exterior wall cladding design criteria	2410.2 (BI)			
	Windows, doors, glass and glazing	2411 (BI)			
	Curtain walls	2414 (BI)			
	Structural glazing system • Special Inspector required	2415 (BI) 2415.7.2 (BI)			Identify Special Inspector, enclose Form CS-2
Threshold Buildings	Criteria	F.S. 553.70(7)			Refer to form CS-3 for criteria
	Submit inspection plan Threshold Inspector required	F.S. 553.79(5)(a)			Threshold building Yes____ No____ If yes: Identify Threshold Inspector, enclose form CS-4

**PRESUMPTIVE SOIL BEARING CAPACITY STATEMENT
FORM CS-1**

Presumed soil bearing capacity of not more than 2000 pounds per square feet may be accepted without a supporting geotechnical investigation and report provided that a soil statement on the construction documents signed and sealed by a professional engineer or registered architect indicates the following:

- Site location
- Description of the soil conditions personally observed by the professional signing the statement (e.g. undisturbed sand)
- Presumed soil bearing capacity (2000 psf or less)



**NOTICE TO THE CITY OF NORTH MIAMI BEACH
BUILDING DEPARTMENT OF EMPLOYMENT
AS SPECIAL INSPECTOR UNDER THE FLORIDA BUILDING CODE**

I, (we) have been retained by: _____ to perform special inspector services under The Florida Building Code at the _____ project on the below listed structures as of (date).

I am a professional engineer licensed in the State of Florida.

Process Number _____ **Master Permit (IF APPLICABLE):**

- Special Inspector for Piling, FBC 1822.1.20
- Special Inspector Soil Compaction, FBC 1820.3.1
- Special Inspector for Precast Units (prior to placement of concrete) FBC 1927.12.1 (By P.E. or R.A.)
- Special Inspector for Reinforced Masonry, FBC 2122.4
- Special Inspector for Steel Bolted & Welded Connections, FBC 2218.2 (By P.E. or R.A.)
- Special Inspector for Trusses over 35 feet long or 6 feet high, FBC 2319.17.2.4.2 (By P.E. or R.A.)
- Special Inspector for _____

NOTE: Only the marked boxes apply.

** The following individual(s) employed by this firm are authorized representatives to perform inspections.

1. _____
2. _____
3. _____
4. _____

- ** a) Authorized Representatives of an Engineer or an engineering performance threshold inspections shall conform to Rule 61g15-30.004 of the F.A.C.
- b) Special inspections performing building department required inspections shall conform to 2007 Florida Building Code Section 109.3.6.6.
- c) Approval of the individuals performing the actual inspections in accordance with Section 109.3.6.6 of the FBC (2007).
- d) A list of all individuals performing actual inspections with their qualifications shall be furnished to the Building Department for approval.

***NOTE: FBC 2007 HVZ sections 1927.12.2, 2319.17.2.4.2 requires either a Registered Professional Engineer or Registered Architect to perform the actual inspections.**

I, (we) will notify the city of North Miami Beach Building Department of any changes regarding authorized personnel performing inspection services.

I, (we) understand that a Special Inspection Log for each building must be displayed in a convenient location on the site for reference by the City of North Miami Beach Building Inspector. All mandatory inspections, as required of the Florida Building Code, Inspection performed by the Special Inspector hired by the Owner are in addition to the mandatory inspections performed by the Building Department. Further, upon completion of the work under each building permit, I will submit to the Building Inspector at the time of final inspection the completed inspection Log form and sealed statement that, to the best of my knowledge, belief and professional judgment those portions outlined above meet the intent of the Florida Building Code and are in subsequent accordance with the approved plans. I hereby certify that the shoring being installed on an emergency basis are in compliance with the provisions of the Florida Building Code and in conformance with engineering standards.

Architect/Engineer Signature: _____

Architect/Engineer Name Printed: _____

Address: _____

Owner/Agent Signature: _____

Owner/Agent Signature Printed: _____

Signed and Sealed

Building Department
Accepted By: _____

Date: _____

THRESHOLD BUILDING CRITERIA FORM CS-3

In accordance with Florida Statutes a Threshold Building means any building which:

a. Is greater than 3 stories **or** 50 ft. in height

or

b. Has an Assembly Occupancy as defined in the Florida Building code which exceeds 5,000 s.f. in area and has an occupant content of more than 500 persons.

**THRESHOLD BUILDING AFFIDAVIT
FORM CS-4**

I, we _____ the owner(s) of

_____ (project)

have retained _____ as special inspector for this project located at

_____ address)

I will notify the City of North Miami Beach of any changes regarding the retention of the special inspector on this project.

I, we _____ the special inspector, duly registered by the State of Florida, Registration Number _____ hereby certify that I am competent to perform structural inspections on threshold buildings and I or my authorized representative will be present to inspect all structural components on this project.

The Threshold (Special) Inspector shall be responsible to the Building Official and shall perform the inspections in accordance with the approved structural inspection plan and the permitted documents. Permitted documents include drawings by the professional or record and by delegated professionals. Failure to comply with the requirements of F.S. 553.79 may result in Threshold Inspector removal from the job by the Building Official. Threshold Inspectors utilizing authorized representatives shall insure the authorized representative is qualified by education or licensure to perform the duties assigned by the Threshold Building Inspector. The qualifications shall include licensure as a professional engineer or architect; graduation from an engineering education program in civil or structural engineering; graduation from an architectural education program; successful completion of the NCEES Fundamentals Examination; or registration as building inspector or general contractor.

Authorized Representatives

Owner

Special Inspector

SWORN TO AND SUBSCRIBED before me, this _____ day of _____, 2001

Notary Public, State of Florida

My Commission Expires: