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## Summary compilation of Industry discussions regarding code sections pertaining to balconies, enclosures, handrails, and guards.

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**1.0 Disclaimer:** The information in this document is a summary and overview and is not intended to substitute for any law, rule, or regulation. The information contained in this document is current only as of the date of this document. This is not an endorsement of an alternative to a code item.

**2.0 Purpose:** This document serves as a summary for FISP, Cycle 7 reports per NYC Building Code §28-302 and 1RCNY §103-04 for handrail and guard statements by referring to historic code provisions for technical and administrative laws as to how they may apply to existing buildings. These guidelines will remain in effect for Cycle 8 reports; Guard statement shall be included within body of Cycle 8 report. There are no new issues, definitions, interpretations, or specifications included in this summary.

**2.1** For vertical and horizontal measurements of field variances for handrails and guards, a total of one inch (0'-1")\* or less tolerance is concurrent with what the industry, professionals, and contractors construe as "reasonable" construction tolerance deviation from code specifications in heights and openings for construction or installation.

**2.2** Handrails and guards originally constructed pre-1968 and not substantially altered, may elect to use a later code section in part to prove code compliancy. For example, if a new roof assembly includes significant insulation thus decreasing parapet height, a guard rail may be installed using 2008 building code allowing 8" maximum dimension from 34" to 42" (2'-10" to 3'-6") above finished roof. However, when handrails and guards are to be replaced or substantially repaired, they shall be brought up to current code compliance at the time of replacement.

**2.3** For parapet and railing assemblies at roof alteration/s with insulation added to comply with NYC Energy Conservation Code (NYCECC), see DOB Buildings Bulletin 2011-015. This bulletin clarifies conditions under which a

repair to building envelope may not require compliance to NYCECC. Generally, roof insulation installed to comply with NYCECC will require parapet and/or railing assembly to be increased in height to comply with current codes.

**2.4** In FISP report, balcony enclosures, greenhouses, and related items are appurtenances and require permits per terms of the building code, building bulletins, and memos. If permits cannot be documented, the QEWI shall note such in report and notify the building owner of DOB requirement for filing compliance. Regardless of permit documentation, all balcony enclosures shall be inspected for structural stability and per requirements of ownership. This includes “sunrooms” as defined in Section 201 of the NYCECC.

**2.5** After handrails/ guards, and balconies/enclosures have been inspected, if a change of status is required, i.e. from Safe to SWARMP, a subsequent report is required to be submitted per 1 RCNY§103-04 (b) (5). However, an entire new FISP report need not be created. The QEWI who files the Subsequent report may submit the following: New TR6 marked “Subsequent”, signed/sealed balcony statement, summary of why the FISP status is changing, and a copy of the accepted initial FISP report. Note that unsafe status of guards requires a submission of a FISP3 form. Subsequent reports have a \$100 filing fee.

\*Note: For clarification all dimensions are written in feet and inches with the first dimension as it appears in the applicable code. Various codes have dimensions written in either inches, or feet, or both.

NYC BUILDING CODES FOR FALL PROTECTION			
Year	Code Heading	Citation No.	Summary
<b>NYC Building Code related to Handrails and guards</b>			
1899 code	Parapet walls	§ 43.	3'-0"
1915 code	Parapet walls	§259	3'-0" min
1938 code	Parapet Walls (railings)	§C26-444.0	≥42" (3'-6") Prevent children from crawling through or over, residence 2'-0", <40'= 0'- 8"
	Guard/Rails in special Occupancy	§C26-742.0	4'-0" (theatres)
1968 code	Parapets on exterior walls	§27-333(b)	Parapet 2'-0" min. for class II
	Protective guards	§27-334	"prevent children from crawling", parapet ≥ 42" (3'-6"), roof recreation=10' wire fence
	Fire divisions	§ 27-340	36" (3'-0") at roof fire division
	Exterior corridors.	§27-369(f)	5" ball at balcony
	Interior stairs	§27-375	between 30" and 34" (2'-6" and 2'-10")
2008 code	Live loads, Railings & parapets	§27-558(b)	40# lateral, 50# vertical for top rail. 40# horiz., 50# vert. for mid & bottom rail 300# for railings in parking areas
	Parapet construction	704.11.1	Parapet ≥30" (2'-6")
	Height...guards	1012.2	42" (3'-6")
	Opening limitations	1012.3	4"φ sphere, mid-rails. 8"φ from 34" to 42" (2'-10" to 3'-6") 6"φ from riser to bottom rail. 21"φ, areas not open to public
	Protective guards	1509.8	≥42" (3'-6") for parapet, railing
	Loads on handrails, guards...	1607.7	50 plf in any direction at top. 200# concentrated load in any direction. 50# per 1 sq ft.
	Handrails, height	1009.11.1	between 34" and 38" (2'-10" and 3'-2") for handrails
	Definitions	1602.1	Balcony term defined.
	Building Bulletin	BB2011-017	Loading for balcony railings, upward force 50# at most critical position. Separate wind #.
	LL11/98, Amended	1 RCNY 103-04 (G)	Amended May 2013. Separate balcony enclosure statements requires for Cycle 7.
	Balcony Enclosures	1 RCNY 101-14	In Table 3, Item IX (6) (7), solid enclosures require permit. Screens installed on or after 10/2/2011 requires permit if 40 feet or more above grade. Screens installed prior to 10/2/2011 need not have permit provided that June 17, 1976 memo is followed.
	Enclosed Balconies Memo	June 17, 1976	Solid enclosure requires permit. All enclosures shall resist wind load and live load and lateral load per Section C -26-902.3(b).
	Optional use of prior code	§28-101.4.3	Each code has provision for alterations complying to prior code.
	Permits required	§28-105	When permits are required.
	<b>NYC Building Code related to fire escapes</b>		
1915 code	Fire escapes	162	100 per sq ft, platform loading
1938 code	Construction of fire escape	§C26-298.0	100 per sq ft, platform loading
1968 code	Fire escapes. rails	§27-380(d)	32" (2'-8") above tread, 36" (3'-0") at landing, 5" ball
	Rules/Reg, Fire-Escapes...	§15-10	42" (3'-6") rail near skylight at egress from fire escape
2008 code	Live loads	Table 1607.1	100 psf uniform platform load
<b>NYS Multiple Dwelling Law</b>			
1929	Parapets, guard railings and wires	§62.	>42" (3'-6")
	Fire escape, platform loading	§53.	80 psf