DISTRICT OF COLUMBIA BUILDING CODE SUPPLEMENT OF 2003 DCMR 12B RESIDENTIAL CODE

CHAPTER 3B BUILDING PLANNING

SECTION R-301 DESIGN CRITERIA

Revise Section R-301.1.2 to read as follows:

R-301.1.2 Engineered Design. When a building of otherwise conventional light-frame construction contains structural elements not conforming to this code, these elements shall be designed in accordance with accepted engineering practice. The extent of such design need only demonstrate compliance of non-conventional elements with other applicable provisions and shall be compatible with the performance of the conventional framed system.

Engineered design in accordance with the International Building Code is permitted for all buildings and structures, and parts thereof, included in the scope of this code.

SECTION R-303 LIGHT, VENTILATION & HEATING

Revise Section R-303.4.1 to read as follows:

R-303.4.1 Light activation. The control for activation of the required interior stairway lighting shall be accessible at the top and bottom of each stairway without traversing any steps. The illumination of exterior stairways shall be controlled from inside the dwelling unit.

Exceptions:

1. Lights that are continuously illuminated or automatically controlled.

2. Interior stairways consisting of less than six steps.

SECTION R-304 MINIMUM ROOM AREAS

Revise Section R-304.2 Exception to read as follows:

R-304.2 Other rooms. Other habitable rooms shall have a floor area of not less than 70 square feet (6.5 m^2).

Exception: Kitchens

SECTION R-305 CEILING HEIGHT

Add new Section R-305.1 Exception 4 to read as follows:

4. Bathrooms shall have a minimum ceiling height of 6 feet 8 inches (2036 mm) over the fixture and at the front clearance area for fixtures as shown in Figure R307.2. A shower or tub equipped with a showerhead shall have a minimum ceiling height of 6 feet 8 inches (2036 mm) above a minimum area of 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.

SECTION R-310 EMERGENCY ESCAPE AND RESCUE OPENINGS

Revise Section R-310.1 to read as follows:

R-310.1 Emergency escape and rescue required. Every sleeping room shall have at least one openable emergency escape and rescue window or exterior door opening for emergency escape and rescue. Where openings are provided as a means of escape and rescue they shall have a sill height of not more than 44 inches (1118 mm) above the adjacent interior standing surface. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclose, the bulkhead enclosure shall comply with Section R-310.3. The net clear opening dimensions required by this section shall be obtained by the normal operation of the window or door opening from the inside. Escape and rescue window openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R-310.2.

SECTION R-312 LANDINGS

Revise Section R-312.1.2 Exception to read as follows:

R-312.1.2 Landings at doors. There shall be a floor or landing on each side of an exterior door.

Exception: Where a stairway of two or fewer risers is located on the exterior side of a door, other than the required exit door, a landing is not required for the exterior side of the door.

SECTION R-314 STAIRWAYS

Revise Section R-314.2 to read as follows:

R-314.2 Treads and risers. The maximum riser height shall be 8 1/4 inches (210 mm) and the minimum tread depth shall be 9 inches (229 mm). The riser height shall be measured vertically between leading edges of the adjacent treads. The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the treads leading edge. The walking surface of treads and landings of a stairway shall be sloped no steeper than one unit vertical in 48 units horizontal (2-percent slope). The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

Revise Section R-314.2.1 Exception 1 to read as follows:

Exceptions:
1. A nosing is not required where the tread is a minimum of 10 inches (254 mm).

Revise Section R-314.6 to read as follows:

R-314.6. Circular stairways. Circular stairways shall have a tread depth at a point not more than 12 inches (305 mm) from the side where the treads are narrower of not less than 10 inches (254 mm) and the minimum depth of any tread shall not be less than 6 inches (152 mm). Tread depth at any walking line, measured a consistent distance from a side of the stairway, shall be uniform as specified in R-314.2

SECTION R-315 HANDRAILS

Delete Section R-315.1 in its entirety and add new paragraph to read as follows (maintain Exceptions to this Section):

R-315.1 Handrails. Handrails shall be provided on at least one side of stairways consisting of three or more risers. Handrails shall have a minimum height of 34 inches (864 mm) and a maximum height of 38 inches (965 mm) measured vertically from the nosing of the treads. All required handrails shall be continuous the full length of the stairs from a point directly above the top riser to a point directly above the lowest riser of the stairway. The ends of the handrail shall be returned into a wall or shall terminate in newel posts or safety terminals. A minimum clear space of 1-1/2 inches (38 mm) shall be provided between the wall and the handrail.

SECTION R-321 DWELLING UNIT SEPARATION

Delete Section R-321.3.2 Exceptions and add the following new Exceptions to read as follows:

R-321.3.2 Membrane penetrations. Membrane penetrations shall comply with Section R-321.3.1. Where walls are required to have a minimum 1-hour fire resistance rating, recessed light fixtures shall be so installed such that the required fire resistance will not be reduced.

Exceptions:
1. Steel electrical boxes that do not exceed 16 square inches ($0.0103m^2$) in area provided the total area of such openings does not exceed 100 square inches ($0.0645\ m^2$) for any 100 square feet ($9.29\ m^2$) of wall area. Outlet boxes on opposite sides of the wall shall be separated as follows:

   1.1 By a horizontal distance of not less than 24 inches (610 mm), or

1.2 By a horizontal distance of not less than the depth of the wall cavity when the wall cavity is filled with cellulose loose-fill or mineral fiber insulation, or

1.3 By solid fire blocking in accordance with Section R602.8.1, or

1.4 By other listed materials and methods.

2. Membrane penetrations for listed electrical outlet boxes of any materials are permitted provided such boxes have been tested for use in fire resistance-rated assemblies and are installed in accordance with the instructions included in the listing.

3. The annular space created by the penetration of a fire sprinkler provided it is covered by a metal escutcheon plate.

Add new Section R-328 to read as follows:

SECTION R-328 SWIMMIG POOLS, SPAS, AND HOT TUBS

R-328.1 General. Provisions of Appendix G, Swimming Pools, Spas, and Hot Tubs, of this Code shall be mandatory.

CHAPTER 5B FLOORS

SECTION R-502 WOOD FLOOR FRAMING

Add new Section R-502.3.3 to read as follows:

R-502.3.3 Floor Cantilevers. Floor cantilever spans shall not exceed the nominal depth of the wood floor joist. Floor cantilevers constructed in accordance with table R-502.3.3 shall be permitted when supporting a light-frame bearing wall and roof only. The ratio of backspan to cantilever span shall be at least 3 to 1. TABLE R-502.3.3

CANTILEVER SPANS FOR FLOOR JOISTS SUPPORTING LIGHT-FRAME EXTERIOR BEARING WALL AND ROOF ONLY [a, b, c, f, g, h]

(Floor Live Load ≤ 40 psf, Roof Live Load ≤ 20 psf)

Member & SPACING	MAXIMUM CANTILEVER SPAN (UPLIFT FORCE AT BACKSPAN SUPPORT IN LBS.) [d,e]											
	GROUND SNOW LOAD											
	≤ 20 psf			30 psf			50 psf			70 psf		
	ROOF WIDTH			ROOF WIDTH			ROOF WIDTH			ROOF WIDTH		
	24 ft.	32 ft.	40 ft.	24 ft.	32 ft.	40 ft.	24 ft.	32 ft.	40 ft.	24 ft.	32 ft.	40 ft.
2X8 @ 12"	20" (177)	15" (227)		18" (209)								
2X10 @ 16"	29" (228)	21" (297)	16" (364)	26" (271)	18" (354)		20" (375)					
2X10 @ 12"	36" (166)	26" (219)	20" (270)	34" (198)	22" (263)	16" (324)	26" (277)			19" (356)		
2X12 @ 16"		32" (287)	25" (356)	36" (263)	29" (345)	21" (428)	29" (367)	20" (484)		23" (471)		
2X12 @ 12"		42" (209)	31" (263)		37" (253)	27" (317)	36" (271)	27" (358)	17" (447)	31" (348)	19" (462)	
2X12 @ 8"		48" (136)	45" (169)		48" (164)	38" (206)		40" (233)	26" (294)	36" (230)	29" (304)	18" (379)

For SI: 1 in. = 25.4 mm, 1 psf = 0.0479 kN/m²

Notes:

a. Tabulated values are for clear-span roof supported solely by exterior bearing walls.
b. Spans are based on No. 2 Grade lumber of douglas-fir larch, hem-fir, southern pine, and spruce-pine-fir for repetitive (3 or more members).
c. Ratio of backspan to cantilever span shall be at least 3:1.
d. Connections capable of resisting the indicated uplift force shall be provided at the backspan support.
e. Uplift force is for a backspan to cantilever span ratio of 3:1. Tabulated uplift values are permitted to be reached by multiplying by a factor equal to 3 divided by the actual backspan ratio provided (3/backspan ratio).
f. See Section R301.2.2.7.1 for additional limitations on cantilevered floor joists for detached one-and two-family dwellings in Seismic Design Categories D1 and D2 and townhouses in Seismic Design Categories C, D1 and D2.
g. A full-depth rim joist shall be provided at the cantilevered end of the joists.
h. Linear interpolation shall be permitted for building widths and ground snow loads other than shown.

CHAPTER 6B WALL CONSTRUCTION

SECTION R-602 WOOD WALL FRAMING

Revise subsection R-602.8(1) to read as follows:

R-602.8 Fireblocking required.

1. In concealed spaces of stud walls and partitions, including furred spaces, at the ceiling and floor levels. Concealed horizontal furred spaces shall also be fireblocked at intervals not exceeding 10 feet (3048 mm). Walls having parallel or staggered studs for sound-transmission control shall be permitted to have fire blocks of batts or blankets of mineral or glass fiber or other approved nonrigid materials.

CHAPTER 30B SANITARY DRAINAGE

SECTION R-P-3005 DRAINAGE SYSTEM

Revise Section R-P-3005.2.7 to read as follows:

R-P-3005.2.7 Building Drain and Building Sewer Junction. There shall be a cleanout near the junction of the building drain and building sewer. This cleanout may be either inside or outside the building wall, provided it is brought up to finish grade or to the lowest floor level. An accessible interior building drain cleanout or test tee within close proximity to the building drain exit point shall fulfill this requirement. There shall be a cleanout at or as near as possible to the front property line if the building is constructed on the property line.

CHAPTER 31B VENTS

SECTION R-P-3111 COMBINATION WASTE AND VENT SYSTEM

Revise Section R-P-3111.2 to read as follows:

R-P-3111.2 Installation. The only vertical pipe of a combination drain and vent system shall be the connection between the fixture drain of the sink, lavatory or standpipe, and the horizontal combination waste and vent pipe. The maximum vertical distance shall be 8 feet (2438 mm).

CHAPTER 33B GENERAL REQUIREMENTS

SECTION R-E-3301 GENERAL

Revise Section R-E-3301.1 to read as follows:

R-E-3301.1 Applicability. The provisions of Chapter 33 through 42 shall establish the general scope of the electrical system and equipment requirements of this code. Chapters 33 through 42 cover those wiring methods and materials most commonly encountered in the construction of one and two-family dwellings and structures regulated by this code. Other wiring methods, materials and subject matter covered in the NFPA 70 are also allowed by this code. The provisions to the 1996 National Electrical Code will also be deemed acceptable.