



CWS ARCHITECTS
ARCHITECTURE | INTERIOR DESIGN
264 U.S. ROUTE ONE
BOX 6, SUITE 100-2A
SCARBOROUGH, MAINE 04074
F: 207-774-4441
WWW.CWSARCH.COM

OWNER
EARL W. NOYES & SONS
C/O PAUL URENECK

PROJECT
191 MARGINAL WAY
RETAIL CENTER

DRAWING
LIFE SAFETY CODE
STUDY

REVISIONS

REVISE REFERENCE TO OCCUPANCY SEPARATION	05/04/2017
REVISE CONSTRUCTION TYPE TO 5B	05/16/2017

DRAWING NUMBER
LS0.01
SCALE: AS NOTED
DATE: 03/15/2017

191 Marginal Way Retail Center - 16,898 SF BUILDING SHELL ONLY
Portland, ME

Permitting Set: January 16, 2017, Revised May 16, 2017

Code Analysis	Reference	IBC 2015 Code Requirements	Reference	NFPA 101 - 2009 Code Requirements	Proposed BUILDING SHELL ONLY
Use Group	304.1	B - Business Group - M - Mercantile	38.1.1.1	New Business Occupancy	Business Use
Building Construction	Table 601	Type V(B) - Protected by approved automatic sprinkler system in accordance with Section 803.3.1.1 NEW STRUCTURE - Frame - steel joists & beams bearing on steel columns EXISTING, Renovated Structural Frame - steel joists and beams bearing on CMU walls Foundation - Concrete frost wall and slab NR Bearing OHR CMU, non-rated Non-Bearing OHR Exterior walls - 6" metal stud with GWB interior finish. Metal siding and cementitious panel cladding exterior finish Interior walls - Metal stud with GWB surfacing Floor & Secondary Members OHR Floors - Concrete slab on grade Roof Roof - Metal trusses and steel deck with membrane roofing (finished ceilings to be designed for tenant fit-ups)	NFPA 220	Construction Type 5 (000) - Protected	Construction Type 5 (000) - Protected
Height & Area Allowances	Table 506.2 504.3 & 504.4	Business - Mercantile - 36,000 SF per floor (S1) Business - 3 Stories / 60', Mercantile - 2 Stories - 60'			Sprinklered - NFPA13 16,898 SF Agl 1 story / 31'6" height from lowest grade to highest roof
Fire ratings	Table 602 Table 602	Loadbearing Ext walls >30' = 0 hr Nonloadbearing Ext walls >30' = 0 hr			0 hour 0 hour
Fire ratings - cont.	Table 1018.1 1022.1 708.2.7 708.4 Table 508.2.5 Table 508.4 Table 601 Table 601 Table 601	Exit access corridors - 0 hour (with sprinkler system) Fire Enclosure of 3 story max Vertical Exit Enclosures - 1 hour Shaft enclosures - 0 hr 2 story Shafts & Elevator Hoistways - 1 hr Boiler Rooms over 10 HP - 1 hour or automatic fire extinguishing Separation of Occupancies: Business / Mercantile - 0 HR Int. nonloadbearing walls - 0 hour Floor Construction - 0 hour Roof construction - 0 hour	38.3.6.1 38.3.1.1 > 8.6.5 30.3.1.1.4 38.3.2.1 > 8.7 38.3.2.1 > 8.7 38.3.7 8.1.14.3	1 hour or sprinklered Exits: 1 Hour (Sprinklered) Shafts: 1 Hour (Sprinklered) and 1-hour doors Boiler Rooms - 1 Hour or sprinkler Storage rooms - 1 hour OR sprinklers with smoke partitions Subdivision of building spaces - no requirements Mixed Occupancies: Business / Mercantile - 0 HR	NA NA NA Sprinkler with Smoke partitions 0 Hour - Non-separated Use, provided as part of tenant fitups under separate permit 0 Hour 0 hour 0 hour
Opening Protectives	Table 715.4	1/2 Hour Rated corridor partitions - 20 min. 1 hour Barriers - 45 min. 1 hour Shafts & Eats - 60 min.			NA NA NA
Fire Window Assembly Fire Protection Ratings	Table 715.5	1/2 Hour Rated corridor partitions - 20 min. 1 Hour Barriers - 45 min.			NA NA
Fire Damper Rating	Table 716.3.2.1	Less than 3 hour rated assembly - 1-1/2 hour.			As required
Ducts and Air Transfer Openings	7.16.5.2 7.16.5.3 7.16.5.4	Per exception 3, penetrations at 1-hour fire barriers need not have fire dampers when properly constructed. Ducts penetrating shafts shall be equipped with fire and smoke dampers. Ducts penetrating fire partitions shall be equipped with fire dampers.			
Interior Flame Spread Index	Table 803.9	Required vertical exits and passageways - C permitted in buildings less than three stories above grade. Corridors providing exit access - A Rooms or enclosed spaces - C	38.3.3.2.1 38.3.3.2.1 38.3.3.2.2 38.3.3.2	In exits - Class A or B Lobbies and corridors - Class A or B Other Spaces - Class A, B or C Exit enclosures and corridor floors - Class I or II	As required As required As required
Occupant Load	1104.1.1	Business Group Occupancy = 1/100 GSF Mercantile Group Occupancy Accessory storage areas, mechanical equipment rooms = 1/500 GSF Assembly, Concentrated (Chairs only) = 1/7 NSF Assembly, Non-concentrated use (Tables & chairs) = 1/15 NSF	77.3.1.2	New Business occupant load = 1/100 SF New Mercantile on street level occupant load = 1/60SF Storage areas, mechanical equipment rooms = 1/500 GSF Assembly, Concentrated (Chairs only) = 1/7 NSF Assembly, Non-concentrated use (Tables & chairs) = 1/15 NSF	9199 SF @ 100 SF/occupant = 92 occupants 11,539 SF @ 60 SF/occupant = 192 occupants (all tenants to be applied for in the future) 1 occupant NA NA
Means of Egress	11005.1 11005.1 1008.1.1 11018.1 1018.4 1014.3 1018.2 11021.1	Egress width per occupant @ stairways = 0.3' per occupant Egress width capacity per occupant @ doors and corridors = 2' per occupant Minimum door opening width = 32" Length of travel < 300' (sprinklered) Dead ends = 50' Common path of travel < 100' Minimum corridor width = 44" Number of exits < 500 occupants = 2	77.3.3.1 77.3.3.1 7.2.1.2.4 38.2.6.2 38.2.5.2.1 38.2.5.3.2 7.3.4.1 38.2.4	Egress width per occupant @ stairways = 0.3' per occupant Egress width capacity per occupant @ doors and corridors = 2' per occupant Minimum door opening width = 32" 36" Max travel to exit = 300' NA until individual flup permits applied for NA until individual flup permits applied for Common path of travel = 100' max. (sprinklered) Minimum corridor width = 36" Minimum number of exits = 2	NA until individual flup permits applied for NA until individual flup permits applied for NA until individual flup permits applied for NA until individual flup permits applied for NA until individual flup permits applied for NA until individual flup permits applied for 2 min
Emergency Lighting	1006.1 1011.1 (exc. #2)	Emergency lighting is required Exit Signs are required except at main exterior exit doors	38.2.9 7.10.1.2	Emergency lighting is required Exit Signs are required except at main exterior exit doors	NA until individual flup permits applied for NA until individual flup permits applied for
Fire Suppression Systems	903.2.8	Fire suppression system not required	38.3.5	Not required	Sprinklers & fire extinguishers provided
Standpipes	905.3	Not required	38.3.4	Not required	Not Provided
Fire Alarm Systems	907.2.2	Not required (sprinklered)	38.3.4.1 38.3.4.2	Required Fire Alarm Initiation shall be either manual or automatic	Provided Automatic Provided
Smoke Detectors	907.2.2	Not required	38.3.4	Not required	NA until individual flup permits applied for
Extinguishment Requirements	908	Portable fire extinguishers shall be installed as per NFPA 10 (IFC 2009)	38.3.5	Not Required	NA until individual flup permits applied for

