

PROJECT INFORMATION:

Project: RPC Bow Unit Redevelopment  
Location: Saskatoon, Saskatchewan  
PWGSC #: R.082215.001

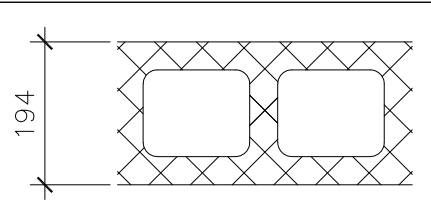
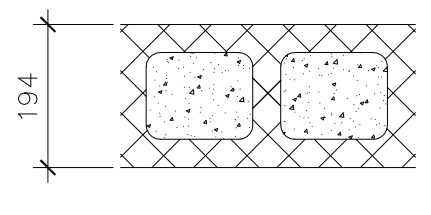
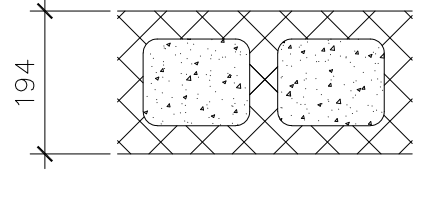
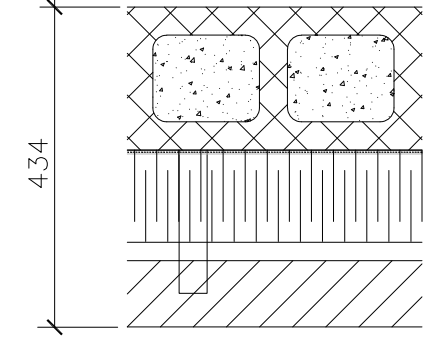
Building Information: Bow Unit  
Building Area unlimited  
Two storey  
Non Combustible Construction  
Sprinklered  
Roof does not have a Fire Resistance Rating  
Major Occupancy: B1 Detention occupancy

- .1 The Building is classified as Group B, Division 1 and will abide by National Building Code 3.2.2.37 Group B, Division 1 up to 3 storeys, sprinklered. 1)c) the building area, if 2 storey , building area not more than 12 000 m2. 2) The Building shall be of, non-combustible construction and a) floor assemblies shall be fire separations with fire-resistance rating not less than 1 hr, b) mezzanines shall have a fire resistance rating not less than 1 hr, and c) loadbearing walls, columns and arches shall have a fire resistance rating not less than that required for the supported assembly.

The Bow NBC Review:

- .1 Service Room: 3.6.2.1 b) a fuel fired appliance shall be located in a service room separated from the remainder of the building by fire separations having a FRR of 1 hr. ( to underside roof deck.)  
.2 3.6.2.3. A Service Room may contain electrical  
.3 3.6.2.6. The door to a Service room may swing in. It may swing out if it opens onto a corridor  
.4 3.3.1.21.1) Janitor Rooms to have a fire separation but no FRR is required if the floor is sprinklered throughout.  
.5 3.2.4.10 Fire Detectors: Fire detectors are not required within floor areas that are sprinklered throughout.  
.6 3.2.4.1 Fire Alarm System shall be installed in a building in which an automatic sprinkler system is installed.  
.7 3.2.4.3 Type of Fire Alarm Systems: The fire alarm system for this building may be a single or 2 stage system  
.8 3.4.2.1 Minimum Number of Exits: 3.4.2.1.2) Every floor Area intended for occupancy shall be served by at least 2 exits.  
.9 3.4.2.5 1)c) Maximum Travel distance to an exit : 45m  
.10 3.3.1.9. Corridors: (1) The minimum width of a public corridor shall be 1100mm, (7) A dead end corridor is permitted provided it is not more than 6m long.  
.11 3.3.1.11. Door Swing: (1) Except as permitted by 3.3.1.12, a door that opens into a corridor or other facility providing access to exit from a room not located within a suite shall swing on a vertical axis. (3) Every door that divides a corridor that is not wholly contained within a suite shall swing on a vertical axis in the direction of travel to the exit. (4) If a pair of doors is installed in a corridor that provides access to exit in both directions, the doors shall swing in opposite directions, with the door on the right hand side swinging in the direction of travel to the exit.  
.12 3.3.1.12. Sliding Doors: (2) In a Group B, Division 1 occupancy, or in an impeded egress zone in other occupancies, sliding doors used in an access to exit need not conform to Sentence 1 and Article 3.1.11  
.13 3.3.1.13 Door and Door Hardware: (6) An egress door in an access to exit serving a contained use area or an impeded egress zone is permitted to be equipped with locking devices that can be released either locally or remotely in conformance with Sentence (7) or (8). (7) Local locking devices permitted by Sentence (6) shall be operable by a key from both sides of the door, (8) Controls for the remote release of door locking devices permitted by Sentence(6) shall be located in an area readily available to security personnel. (9) Locking devices permitted by Sentence (6) that are electronically operated shall be a) designed to operate on emergency power, and b) capable of manual release by security personnel.  
.14 3.3.1.23. Obstructions: 1) No obstruction shall be permitted in any occupancy that would restrict the width of a normal means of egress from any part of a floor area to less than 750mm unless an alternative means of egress is provided adjacent to, accessible from, and plainly visible from the obstructed means of egress  
.15 3.3.3.7 Contained Use Areas: 2) A contained Use Area shall be separated from the remainder of the Building by a fire separation having a fire resistance rating not less than 1 hr. 3) the building is sprinklered throughout, 5) A corridor serving a contained use area shall have no dead-end portion unless the area served by the dead end portion has a second and separate means of egress.

WALL ASSEMBLIES:

IMAGE	TAG	DESCRIPTION (mm)	FIRE RATING ULC DESIGN No	STC RATING	REMARKS
EXISTING WALL TYPES					
	EW1▶	194 CONCRETE BLOCK		STC 50	MEETS SECURE CONSTRUCTION 1 – COMMERCIAL ENHANCED. WALLS CARRIED TO THE UNDERSIDE OF STRUCTURE ABOVE
	EW2▶	194 CONCRETE BLOCK (CONCRETE FILLED)		STC 50	MEETS SECURE CONSTRUCTION 3. ALL CORES CONCRETE FILLED REINFORCED WITH 1–10M BAR VERTICAL & HORIZONTAL @ 400 o/c
	EW3▶	194 CONCRETE BLOCK (CONCRETE FILLED)		STC 50	MEETS SECURE CONSTRUCTION 3. ALL CORES CONCRETE FILLED REINFORCED WITH 1–10M BAR VERTICAL @ 400 o/c
	EW4▶	INSULATED BLOCK WALL WITH BRICK: 194 mm SEALED BLOCK WALL (CONCRETE FILLED) SELF-ADHERING SBS AIR/VAPOUR RAIN BARRIER MEMBRANE AND ADHESIVE 125mm RIGID INSULATION (R18) 25mm AIR SPACE 90mm BRICK VENEER NOTE: PROVIDE BRICK TIES MAX 400 mm VERTICALLY & 800 mm HORIZONTALLY= TYP @ ALL BRICK		STC 50 (MIN)	SECURE CONSTRUCTION 3: ALL HOLLOW CONCRETE BLOCK HAVING ALL HOLLOW CONCRETE FILLED AND VERTICALLY REINFORCED AT 400mm MIN.

\* ALL EXISTING WALLS TO BE CONFIRMED AT DEMOLISHING STAGE

