

FIRE RATING REQUIREMENT FOR STEEL CONSTRUCTION

- As per Accord standard part 3, article 3.3.6 page 6- All RMG factories will be considered as occupancy G2. (See BNBC 2006 Part 3 Section 2.1.7, page 10348)
- All RMG factories must be of type 1 or type 2 construction (See BNBC 2006 Part 3 Section 3.2.4, page 10356)
- For type 2 construction, the maximum permissible height of the building shall be 4 storeys or 14 meters. (See BNBC 2006 Part 3, Table 3.1.9, page 10319)
- Interior bearing walls, bearing partitions, girders, trusses & framings must have minimum fire resistance rating: 2 hr. in type 2 construction & 4 hr. in type 1 construction. (See BNBC 2006 Part 3, Table 3.3.1, row number 3 (a) page 10383)
- Floor construction including beams must have a minimum 1.5 hr. fire resistance rating in type 2 & 3 hr. fire resistance rating in type 1. (See BNBC 2006 Part 3, Table 3.3.1, row number 3 (b) page 10383)

1.5 hr.
2 hr.
2 hr.
2 hr.

Type 2 construction

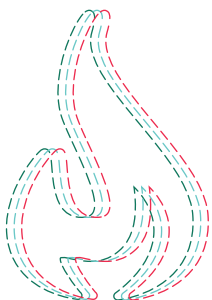
3 hr.
4 hr.
4 hr.
4 hr.
4 hr.

Type 1 construction

- Depending on the distance from the building to the property line the fire resistance rating of the exterior wall must meet table 3.2.2 page 10355 BNBC 2006
- If the floor assembly is also a separation between occupancies then table 3.2.1 must also be considered (page 10352, BNBC 2006)
- Accord Standard 3.5.3.1: Existing buildings greater than 2 stories with non-rated construction shall not exceed 2000 m² (22,000 sq. ft.) per floor unless automatic sprinkler protection is provided throughout. (“Existing” means the building was occupied prior to Dec. 30, 2013)

Area less than 2000 m ²
Area less than 2000 m ²
Area less than 2000 m ²
Area less than 2000 m ²

Less than 2000 m² per floor sprinkler system is not required; standpipe system shall be required if the highest occupiable floor is greater than 10 m height from road level, and a sprinkler system is required in all buildings where the highest occupiable floor is greater than 23 m.





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Area greater than 2000 m ²

Area greater than 2000 m ²

Area greater than 2000 m ²

Greater than 2000 m² per floor (3 storey or more than 3 storeys) sprinkler system is required.

Area greater than 2000 m ²

Area greater than 2000 m ²

Greater than 2000 m² per floor (2 storeys or less) sprinkler system is not required

- For Fire Resistance Requirements on separating walls and Floor/Ceiling Assemblies between Mixed Occupancies please check table 3.2.1 in BNBC 2006 Part 3, page 10352.

