A-3.1.2. Use Classification. The purpose of classification is to determine which requirements apply. This Code requires classification in accordance with every major occupancy for which the building is used or intended to be used. Where necessary, an application clause has been inserted in this Part to explain how to choose between the alternative requirements which multiple occupancy classification may present.

A-3.1.2.1.(1) Major Occupancy Classification. The following are examples of the major occupancy classifications described in Table 3.1.2.1.:

Group A, Division 1
- Motion picture theatres
- Opera houses
- Television studios admitting a viewing audience
- Theatres, including experimental theatres

Group A, Division 2
- Art galleries
- Auditoria
- Bowling alleys
- Churches and similar places of worship
- Clubs, nonresidential
- Community halls
- Courtrooms
- Dance halls
- Exhibition halls (other than classified in Group E)
- Gymnasia
- Lecture halls
- Libraries
- Licensed beverage establishments
- Museums
- Passenger stations and depots
- Recreational piers
- Restaurants
- Schools and colleges, nonresidential
- Undertaking premises

Group A, Division 3
- Arenas
- Indoor swimming pools, with or without spectator seating
- Rinks

Group A, Division 4
- Amusement park structures (not elsewhere classified)
- Bleachers
- Grandstands
- Reviewing stands
- Stadia

Group B, Division 1
- Jails
- Penitentiaries
- Police stations with detention quarters
- Prisons
- Psychiatric hospitals with detention quarters
- Reformatories with detention quarters

Group B, Division 2
- Children's custodial homes
- Convalescent homes
- Hospitals
- Infirmaries
- Nursing homes
- Orphanages

Psychiatric hospitals without detention quarters
Reformatories without detention quarters
Sanitoria without detention quarters

Group C

Apartments
Boarding houses
Clubs, residential
Colleges, residential
Convents
Dormitories
Hotels
Houses
Lodging houses
Monasteries
Motels
Schools, residential

Group D

Banks
Barber and hairdressing shops
Beauty parlours
Dental offices
Dry cleaning establishments, self-service, not using flammable or explosive solvents or cleaners
Laundries, self-service
Medical offices
Offices
Police stations without detention quarters
Radio stations
Small tool and appliance rental and service establishments

Group E

Department stores
Exhibition halls
Markets
Shops
Stores
Supermarkets

Group F, Division 1

Bulk plants for flammable liquids
Bulk storage warehouses for hazardous substances
Cereal mills
Chemical manufacturing or processing plants
Distilleries
Dry cleaning plants
Feed mills
Flour mills
Grain elevators
Lacquer factories
Mattress factories
Paint, varnish and pyroxylin product factories
Rubber processing plants
Spray painting operations
Waste paper processing plants

Group F, Division 2

Aircraft hangars
Box factories
Candy plants
Cold storage plants
Dry cleaning establishments not using flammable or explosive solvents or cleaners
Electrical substations
Factories

Freight depots
Helicopter landing areas on roofs
Laboratories
Laundries, except self-service
Mattress factories
Planing mills
Printing plants
Repair garages
Salesrooms
Service stations
Storage rooms
Television studios not admitting a viewing audience
Warehouses
Wholesale rooms
Woodworking factories
Workshops

Group F, Division 3
Creameries
Factories
Laboratories
Power plants
Salesrooms
Sample display rooms
Storage garages, including open air parking garages
Storage rooms
Warehouses
Workshops

A-3.1.2.3.(1) Arena Regulation. The use of an arena is regulated in the NFC.

A-3.1.4.2.(1)(c) Thermal Barrier in Combustible Construction. Any thermal barrier that is accepted under the requirements of Sentence 3.1.5.12.(2) for noncombustible construction is also acceptable for combustible construction.

A-3.1.4.3.(1)(b)(i) Raceway Definition. The term raceway is defined in CSA C22.1, "Canadian Electrical Code, Part I," and includes both rigid and flexible conduit.

A-3.1.4.3.(1) Wire and Cable Equivalence. Electrical wires and cables that conform to the requirements of Sentence 3.1.5.18.(1) are deemed to satisfy the requirements of Sentence 3.1.4.3.(1).

A-3.1.5.4.(1) Skylight Spacing. The minimum spacing dimensions for skylight assemblies are based on the distance that flame must travel along a flat ceiling surface. If ceilings have projecting beams or other features that would increase the distance the flame would have to travel along the surface, the distances specified may be measured accordingly.

A-3.1.5.5.(1) Combustible Cladding. These requirements allow for exterior wall assemblies incorporating combustible cladding elements on buildings of noncombustible construction. Since the tested assemblies must be representative of actual construction, the performance of the entire assembly is assessed with regard to its ability to resist flame propagation up the outside of a building. The thermal barrier protection limits the impact of an interior fire on the wall assembly.

These requirements, in combination, thus allow for wall assemblies containing both combustible cladding elements and non-loadbearing combustible framing members. These wall assemblies can be used as infill or panel type walls between structural elements, or attached directly to a loadbearing noncombustible structural system. These requirements, however, do not waive others specifically intended for the protection of combustible insulation in buildings of noncombustible construction.

These requirements are predicated upon the assumption that the manufacturing process and field installation procedure are both carried out under an independent quality assurance program designed to confirm that the product and its application are consistent with the system as tested.

A-3.1.5.5.(2) Flame-Spread Distance. The maximum flame-spread distance refers to the distance between the top of the opening and the highest observable instance of flaming along the wall assembly and thus allows intermittent flaming to a height of 5 m above the opening.

A-3.1.5.5.(3) Heat Flux Measurement. The heat flux to the assembly referred to in Sentence 3.1.5.5.(3) is the maximum one-minute averaged heat flux measured by transducers located 3.5 m above the top of the opening. The intent of this criterion is to limit the spread of fire on the wall assembly to a height of 3.5 m above the opening. Since the exact location of flaming on the exterior surface of a wall assembly can be influenced by the presence of furring strips, cavities, etc., in the assembly, which could channel the flame away from a heat flux transducer, sufficient transducers should be located at any given height to intercept any flaming that could occur along the assembly. The exact position of the transducers will depend on the location of cavities, joints, studs or furring strips in the assembly.

A-3.1.5.12.(2)(e) Foamed Plastic Insulation Protection. The standard fire exposure temperature in CAN/ULC-S101, "Fire Endurance Tests of Building Construction and Materials," is the same as in CAN4-S124-M, "Test for the Evaluation of Protective Coverings for Foamed Plastic." A thermal barrier that, when tested in conformance with CAN/ULC-S101, "Fire Endurance Tests of Building Construction and Materials," will not exceed an average temperature rise of 140°C on its unexposed face after a period of 10 min satisfies this requirement.

A-3.1.5.18.(1) Wire and Cable Flammability. In regulating the flammability characteristics of electrical wires and cables installed in a building, it is intended that the requirements of this Sentence and of other similar Sentences in the Code apply to wires and cables that are essentially a part of the distribution systems for power or communications. These distribution systems will normally include branch circuits that terminate at an outlet box in the space to be served and at that location cable terminators or plugs for individual items of equipment will be plugged in.

A-3.1.6. Tents and Air-Supported Structures. The requirements in this Subsection are intended to be limited to certain types of structure. For instance, the word "tent" as used in the Code is intended to refer to a temporary shelter which is used at an open air event such as a fair or an exhibition. A tent will normally be constructed of a fabric held up by poles and attached to the ground by ties. The requirements for tents, however, are not intended to be applied to fabric structures located on buildings.

The term "air-supported structure," as used in the Code, refers to an envelope which is held up by air pressure alone and which is erected on the ground or above a basement. The structure will usually require ballast or a positive ground anchorage system around the entire perimeter to secure it to the ground or basement. To reinforce this intent, the Code prohibits the location of an air-supported structure above the first storey of any building.

The requirements of Subsection 3.1.6. are not intended to apply to air-supported roof assemblies on buildings, such as domed stadia, or to other types of air-supported structures, such as those over swimming pools situated on the roofs of buildings, which would not be anchored at or near ground level. These assemblies or structures are normally designed and evaluated on the basis of equivalents as permitted by Article 1.2.1.1. of Division A.

A-3.1.8.1.(1)(b) Barrier to Control Smoke Spread. Although a fire separation is not always required to have a fire-resistance rating, the fire separation should act as a barrier to the spread of smoke and fire until some response is initiated. If the fire-resistance rating of a fire separation is waived on the basis of the presence of an automatic sprinkler system, it is intended that the fire separation will be constructed so that it will remain in place and act as a barrier against the spread of smoke for a period of time until the sprinklers have actuated and controlled the fire.

A-3.1.8.1.(2) Installation of Closures. Although there is no explicit performance statement in the NBC that means of egress should be free of smoke, it is the intent that during the period when occupants are using a means of egress to evacuate from a floor area, the smoke contamination should not reach levels that would inhibit movement to the exit. This is particularly critical for persons with disabilities, who may not move at the same rate as other persons and who could be more susceptible to the effects of smoke contamination. NFPA 80, "Fire Doors and Fire Windows," requires that a fire door protecting a means of egress be designed to minimize the possibility of smoke passing through the opening.

Although self-closing devices are not required for all doors in a fire separation (see Article 3.1.8.11.), it is assumed that in a fire situation every door in a fire separation is closed. Article 3.3.3.5. prohibits grilles and similar openings for certain doors in hospitals and nursing homes.