



## Building Inspections

# Daycare – Conversion from Residential to Assembly Occupation

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Following is a guide to the building code requirements for conversion from Residential to Assembly occupancy for daycare use. This guideline should not be used as a substitute for existing building codes and other regulations but is provided as a general guide. References are to the B.C. Building Code 2006 edition.

### **Assembly occupancy (A-2) requirements in residential zones apply to daycares where the number of children in care is more than 8 to a maximum of 16.**

A2 occupancies must be designed and construction supervised by registered professionals (Architect, Mechanical and Structural engineers). Schedules A and B will be required from the appropriate professionals.

#### **Fire separation within building**

Fire resistance ratings between the daycare area of the house and the residential portion must not be less than 1 hour.

1. Includes new walls and existing walls and/or ceilings. Additional gypsum board and 45 minute rated doors with auto closers may be required.
2. Attached garages must be separated from the remainder of the building by a 1 hour fire separation.
3. Non-combustible plumbing (i.e. not plastic) or an approved fire stop system is required where plumbing penetrates the fire rated wall and/or ceiling.
4. Fire dampers are required where furnace ducts penetrate the 1 hr fire resistance rated assembly. A Mechanical Engineer must submit a design and Schedule B for field review.
5. The heating systems must be completely separate.
6. Common rooms or rooms on the same floor as the daycare that serves the residential portion of the building (laundry, storage etc.) must be separated and be accessed without passing through the other occupancy.
7. Any room containing a fuel-fired appliance (gas/oil furnace or water tank) must be separated from the remainder of the building.

#### **Washrooms:**

1. 1 female washroom, plus 1 male washroom and 1 universal (handicap) washroom or:
2. 1 female universal and 1 male universal washroom

#### **Access for persons with disabilities:**

Ramps are required to conform to Section 3.8 of the B.C. Building Code to one entrance with a minimum 34 inch wide door.

## **Spatial separation (prevention of fire spread to other buildings)**

To meet spatial separation requirements windows may have to be removed, non-combustible cladding installed and gypsum board added to the exterior walls. In some cases, wood construction may not be permitted.

Combustible projections (sundecks, stairs, and eaves) are not permitted within 4 feet of property line or within 8 feet of a combustible building on the same property (sheds, garages, playhouses).

## **Protecting openings from exits**

Unenclosed exit stairs, ramps and decks leading to them, within:

- 10ft horizontally,
- 29ft below,
- 16ft above openings (doors, windows)

must be protected from fire within the building by changing windows to *fixed* wired glass or glass block and adding auto closers to doors. This could create egress problems from bedrooms as operable windows are required under the BC Building Code.

## **Exits**

Maximum area and travel distance for egress within a suite with a single exit door:

- In an unsprinklered building the maximum allowable area is 150m<sup>2</sup>. The maximum travel distance is 15m.
- If exceeded, 2 exits are required (exit doors must swing out).

Emergency lighting is required to illuminate the path of travel from every area of building to the exit door.

## **Stairs & Guards**

- Guards 42" at landings and 36" at stairs, with 4" maximum openings
- Stair rise between 5" & 7", stair run minimum 11"
- Minimum tread depth is 12" if a 1" nosing is installed.

## **Miscellaneous:**

- Where renovation costs exceed 50% of assessed value of building, fire sprinklers are required.
- Where an A2 occupancy exceeds 10% of the area of the storey it occupies, the classification of the entire building changes to A2 and triggers the requirement for structural upgrade to meet current seismic restraint requirements. A Structural engineer must evaluate the existing situation and design methods to increase the buildings seismic stability according to the NRC Guidelines for Seismic Evaluation of Existing buildings. Any component unable to withstand 60% of the current building code seismic loading criteria is targeted for upgrade.

**Contact the City of Nanaimo Planning Division directly for Zoning requirements, the City of Nanaimo Fire Department directly for Fire Code requirements and the Vancouver Island Health Authority for their daycare requirements.**