

Commercial Day Care

Mecklenburg County Code Enforcement Department and the North Carolina Department of Health and Human Services Division of Child Development are providing this general guide to assist those interested in starting a commercial child care center.

Commercial child care buildings (new and existing) require architects and engineers to design the facilities. Licensed contractors are there to construct the building by the approved design and to meet all current codes.

STATE CHILD CARE MECHANICAL REQUIREMENTS

- Child care centers that fry foods shall have a listed commercial hood.
- Unvented fuel burning heaters and portable electric space heaters of all types are prohibited.
- Fuel burning floor furnaces which are properly vented, listed, and approved for that installation and are provided with a protective screen attached securely to substantial supports will be allowed. Air conditioning units shall be located so that they are not accessible to children or shall be fitted with a mesh guard to prevent objects from being thrown into them.
- Gas tanks shall be located so they are not accessible to the children or shall be in a protective enclosure or surrounded by a protective guard.

STATE CHILD CARE ELECTRICAL REQUIREMENTS

- Electrical cords shall not be accessible to infants and toddlers. Extension cords, except as approved by the local fire inspectors (local ordinances states cords shall not be used). Frayed or cracked electrical cords shall be replaced.
- Electrical outlets not in use which are located in space used by the children shall be covered with safety plugs unless located behind furniture or equipment that cannot be moved by a child.
- Electric fans shall be securely mounted out of the reach of children or shall be fitted with an appropriate mesh guard to prevent access by children.
- All electrical appliances and equipment shall be used only in accordance with the manufacturer's instructions.

THIS IS A GENERAL CHECKLIST

- FIRST contact Zoning to find out if you can have a Commercial Child Care Center at the site you selected.
- SECOND contact the Department of Health and Human Services Division of Child Development:
 - Pre-licensing consultation to determine what special requirements apply to your facility
 - A representative from the division will make a visit prior to the issuance of the license
- THIRD contact the State Environmental Health Department to determine what special requirements and approvals will be required for this facility.

- FOURTH an architect or engineer is required to recognize the code and state agencies requirements and prepare plans for the building construction to incorporate those needs.
- Evaluation inspections will not be performed by Mecklenburg County inspectors. You will need to have your designer, architect, or engineer evaluate your site.
- All work to be performed must be included in the plans and the permit application.
- Work shall be performed by qualified persons or firms.
- All work shall be inspected during construction. Only the appropriate contractor who performed the work may request the required inspections (i.e. electrical, plumbing, mechanical, or building).
- All child care facilities shall have approvals for all work performed and the work must be finalized prior to being issued the Certificate of Occupancy, which will allow the building to be occupied.
- The owner will receive the Certificate of Occupancy which is issued by Charlotte - Mecklenburg Engineering & Building Standards and it will satisfy the state's written report requirements.
- A copy of the North Carolina Building Code Standards is on file at the Division of Child Development.
- The Division of Child Development shall provide regularly scheduled licensing workshops for new and existing child care centers.
- Child care rooms shall have egress windows installed where required.
- Each room used for child care purposes shall have access to two remotely located outside doors. Access from the room door to the remotely located outside exits shall not have a dead end distance of more than 20 feet measured from the room door used by the children to a point at which two separate means of egress can be provided.
EXCEPTION: Rooms which have an exterior door leading directly to the outside and located no more than 48 inches above finished grade.
- A fence or other protection shall protect the outdoor area if required.
- The spaces to be used shall have one or more windows to provide adequate light and ventilation. NOTE: See Chapter 12 section 1205.1 of the North Carolina State Building Code for a complete description of all requirements concerning light and ventilation.
- All walls and ceilings in rooms used for child care purposes and the exiting path, shall have a surface of noncombustible construction (plaster or gypsum wallboard).
- All children shall be kept on the ground level with an exit at grade.
- Maximum number of children is the square footage of the room divided by 25.

NORTH CAROLINA STATE CHILD CARE BUILDING REQUIREMENTS

- Child care facility, that provided supervisor and personal care in less than a 24 hour basis for more than five children 2 1/2 years of age or less shall be classified as group I-4.
Exception: A child day care facility that provides care for more than five but on more than 100 children 2 1/2 years or less of age, when the rooms where such children are cared for are located on the level of exit discharge and each of these child care rooms has an exit door directly to the exterior, shall be classified as group E.
- When the authorized capacity of the facility is more than 99 children, the structure shall, at the minimum, meet the North Carolina State Building Code requirements for Assembly Occupancy, Educational Occupancy, or Institutional Occupancy Building Code Child Care Requirements shall be met (Educational/Institutional).

- Potentially hazardous items, such as firearms and ammunition, hand and power tools, nails, chemicals, lawn mowers, gasoline or kerosene, archery equipment, propane stoves, whether or not intended for use by children, shall be stored in locked areas or with other appropriate safeguards, or shall be removed from the premises.
- All materials used for starting fires, such as matches and lighters, shall be kept in locked storage or shall be stored out of reach of children.
- To require inspections by and satisfactory written reports from representatives of local or state health agencies and fire inspections agencies and from representatives of the Division of Child Development prior to the issuance of a license to any child care center.
- To require annually, inspections by and satisfactory written reports from representatives of local or state health agencies and fire inspection agencies after a license is issued.

**ICC/ANSI A117.1-2003
SHALL BE USED FOR THE HANDICAP REQUIREMENTS**

- The handicap toilet room size must be minimum of 5 feet by 7 feet with a minimum 5 foot turn around area.
- The handicap toilet room entrance door shall provide a minimum of 32 inch clear opening.
- A separate handicap staff bathroom is required for both male and female.
- The handicap bathroom grab bars height is 33-36 inches.
- The handicap height for water closets is 17 to 19 inches to the top of the seat.
- The handicap lavatory height is 34 inches to the rim.
- The handicap urinals height is a maximum of 17 inches to the rim from the finished floor.
- The height for a single roll toilet paper holder is 19 inches max off the finished floor.
- The height for a jumbo toilet paper roller is a maximum of 48 inches from the finished floor to the paper outlet.
- The height for all other accessories to the operating mechanism is a maximum of 48 inches off the finished floor.
- The water temp shall be set to a maximum of 120 °F wherever the handicap person may touch the hot water piping.
- Water closet (toilet) height from floor to top of the seat options:
 - Ages 3 through 4 is 11 to 12 inches
 - Ages 5 through 8 is 12 to 15 inches
 - Ages 9 through 12 is 15 to 17 inches
 - Ruling from the Accessibility Board in Washington D.C.

**MINIMUM STATE SANITATION CHILD CARE REQUIREMENTS FOR
FOOD SERVICE EQUIPMENT**

- Domestic kitchen equipment may be used for centers licensed for less than 30
- Two-compartment sink w/ 24" drainboards or clear counter space on each end
- Refrigeration equipment
- Dishwasher(for multi-use utensils only)
 - NOTE: A three-compartment sink, w/ 24" drainboards on each end, may used to satisfy this requirement

- Separate handwash sink in food preparation/handling areas. Must be equipped with hot and cold running water. When accessible to children, hot water temperatures shall be between 90-110 °F.
- Adequate preparation and storage areas for food storage and handling
- Infant/toddler food service areas, if designated, shall contain a refrigerator, bottle warming equipment, separate handwash sink equipped with hot and cold running water, and adequate countertop/storage space.
- Diaper stations must have a separate hand wash sink

STATE CHILD CARE ZONING REQUIREMENTS

- To find out your zoning status in the City of Charlotte call (704) 336-7600. If you live in the surrounding towns Cornelius, Davidson, Huntersville, Matthews, Mint Hill or Pineville please call the zoning office for that town.

Cornelius	(704) 892-6031
Davidson	(704) 892-7591
Huntersville	(704) 875-6541
Matthews	(704) 847-4411
Mint Hill	(704) 545-9726
Pineville	(704) 889-2291

- A fence or other protection shall protect the outdoor play area. The height shall be a minimum of four feet and the top of the fence shall be free of protrusions by January 1, 1999. The requirement disallowing protrusions on the tops of fences shall not apply to fences six feet high or above. The fencing shall exclude fixed bodies of water such as ditches, quarries, canals, excavations, and fishponds.

STATE CHILD CARE PLUMBING REQUIREMENTS

- Drinking water must be freely available to children of all ages and offered at frequent intervals.
- Approved drinking fountains or individual drinking utensils shall be provided.
- Cover or insulate hot pipes or radiators, which are accessible to children.

STATE CHILD CARE FIRE REQUIREMENTS

- Childcare centers shall have installed in all interior enclosed exit access corridors approved listed smoke detection devices installed in accordance with NFPA 72. Such smoke detection devices shall be installed on or near the ceiling and in accordance with the listing and the manufacturer's recommendations, but in no case shall smoke detectors be spaced farther apart than 30 feet on centers in corridors or more than 15 feet from any wall.
- They shall be powered from the electrical system via a permanent connection as specified in the North Carolina State Building Code, Volume IV-Electrical.

EXISTING FIRE PROTECTION and EXTINGUISHING SYSTEMS

- They shall be operational as required by NFPA 241 during construction, alterations and demolition operations in conformity with the progress of construction, alterations or demolition. The fire department shall be notified immediately by the person responsible for alterations, construction or demolition of any fire protection equipment taken out of service and when restored to operation. The job site shall provide a list of fire watch personnel and an approved method to call the fire department.
- The diaper changing area shall be located close to a toilet or flush-rimmed sink.
- Hand washing sinks shall be located near all diaper changing areas
- Water Supply
- Minimum of 20 psi water pressure
- No cross-connections with an unapproved water supply shall exist (Example: water from a personal well connected to city water)
- If potential back flow conditions exist, an approved back flow prevention device shall be provided
- Hot water heating equipment shall provide hot water at a minimum temperature of 130 °F at the point of use when hot water is not used for sanitizing
- When hot water is used for sanitizing, a minimum temperature of 140 °F shall be provided at the point of use
- Hot water to those areas accessible to children, including hand washing sinks serving diaper changing areas, shall be no less than 90 °F and shall not exceed 110 °F

FIRE ALARM REQUIREMENTS

BASIC FIRE ALARM REQUIREMENTS FOR COMMERCIAL CHILD CARE CENTERS. THIS IS TO BE USED ONLY AS A GUIDE - FOR DETAILED REQUIREMENTS SEE NFPA 72

CONTENTS:

Fundamentals

Control Panel

Handicap Code Requirements

Manual Fire Alarm Box (Pull Station)

Audible and Visible Devices (Horns and Strobes)

Smoke Detectors

Power Supply:

Primary – Connections to the light and power source shall be on a dedicated branch circuit(s).

Secondary

1. Battery Backup

2. U.L. Listed Generator

All Commercial ChildCare Centers are required to have a Fire Alarm System.

ALARM SYSTEM

The basic function of a complete fire alarm system is primarily intended to provide notification of fire alarm, supervisory, and trouble conditions, alert the occupants, summon appropriate aid and control fire safety functions.

CONTROL PANEL

The primary purpose of fire alarm annunciation is to enable responding personnel to identify the location of a fire quickly and accurately and to indicate the status of emergency equipment or fire safety functions that might affect the safety of occupants in a fire situation.

CONTROL PANEL (Location)

The Control Panel shall be connected to a U.L. listed central station. Control Panel shall be located in any area where the trouble signals can be heard unless system is to be zoned as below. In areas that are not continuously occupied, automatic smoke detection shall be provided at each control unit(s) location to provide notification of fire at that location.

Exception: Where ambient conditions prohibit installations of automatic smoke detection, automatic heat detection shall be permitted.

Where a building smoke detection system is provided, each smoke or duct type detector required for control of re-circulating air system shall also be connected to activate the fire alarm system. Where the wall section over the door is greater than 24 inches 2 ceiling mounted detectors shall be required, one on each side of the door.

FIRE EXTINGUISHING EQUIPMENT:

Duct systems, grease removal devices and exhaust hoods serving food heat-processing equipment producing smoke or grease-laden air shall be protected by both an automatic fire extinguishing system and a portable extinguisher. The extinguisher system must be connected to the fire alarm control panel.

AUTOMATIC SYSTEM:

Automatic system shall be listed specifically for this type service and shall be installed in accordance with the terms of their listing. At least one manual control for activation shall be located a minimum of 10 feet and a maximum of 20 feet from the cooking equipment unless an alternate location is specifically approved by the mechanical official.

POWER SUPPLY PRIMARY:

Connections to the light and power source shall be on a dedicated branch circuit(s). The circuit(s) and connections shall be mechanically protected. Circuit disconnecting means shall have a red marking, shall be accessible only to authorized personnel, and shall be identified as “ FIRE ALARM CIRCUIT CONTROL”. The location of the circuit disconnecting means shall be permanently identified at the fire alarm control unit.

Overcurrent Protective device of suitable current- carrying capacity and capable of interrupting the maximum short- circuit current to which it may be subject shall be provided in each ungrounded conductor. The overcurrent protective device shall be enclosed in a locked or sealed cabinet located immediately adjacent to the point of connection to the light and power conductors.

BUILDING ADDRESS:

Fire Prevention Code Vol. V.

Approved numbers or addresses shall be provided for all new and existing buildings so that the number or address is plainly visible and legible from the street or roadway.

Where the wall section over the door is greater than 24 inches 2 ceiling mounted detectors shall be required, one on each side of the door.

NCSBC MECHANICAL CODE:

Manual controls: Each air distribution system shall be equipped with a manual control to stop supply and return fans in an emergency. The control device shall be mounted in a readily accessible location and identified. Exception: An air handling unit serving a single space with no attached duct system.

Automatic shutdown: Recirculating air systems serving more than one room or compartment shall be automatically shut down on detection of smoke by duct type smoke detector(s) in the return duct ahead of make-up air connection when:

An air handling unit serves a required exit corridor regardless of CFM capacity, or the air handling unit has a rated capacity exceeding 2000 cfm.

An air handling unit serving more than one floor shall be automatically shut down on detection of smoke by a duct type detector in the return duct from each floor level located upstream from the connection to the common return.

Exceptions:

Duct detectors may be omitted and air-handling unit may be shut down by area smoke detector system provided full area coverage is provided per NFPA 72

- Automatic shutdown is not required when an automatic smoke evacuation (smoke control) system, design by a professional engineer is installed.

An air-handling unit exceeding 15000 CFM shall automatically shut down on detection of smoke by a duct type detector located downstream of the filters. This detector is in addition to the detector required in return air of units serving more than one space.

Exception: An air handling unit serving a single space with no attached duct system.

Each floor shall be zoned separately. No one zone may exceed 15,000 sq. ft. Zone indicator panel shall be located at grade level at the normal fire department access or at a constantly attended building security control center (Administration area).

- Trouble signals and their restoration to normal shall be indicated within 200 seconds at the control unit. Trouble signals shall be indicated by visible and audible signals. The audible trouble signal shall be distinctive from alarm signals. Where an intermittent signal is used, it shall sound at least once every 10 seconds, with a minimum duration of ½ second. An audible trouble signal shall be permitted to be common to several supervised circuits. The trouble signal(s) shall be located in an area where it is likely to be heard.

HANDICAP REQUIREMENTS: PER ICC/ANSI A117.1-2003

Mounting heights for pull stations, fire extinguisher or other similar devices shall be no higher than 48 inches above finished floor for forward approach and no higher than 48 inches above finished floor for side approach.

All Fire Exits, Fire Alarms, Fire Extinguishers and other Emergency Signaling Devices, shall be identified by plaque or sign with raised numerals or letters 1/32 inch from background and shall be between 5/8 inch and 2 inches in height.

Mounting height of sign shall be no lower than 54 inches and no higher than 66 inches to top of sign.

LOCATIONS: MANUAL FIRE ALARM BOXES:

Buildings with Sprinkler or other Fire Suppression Systems:

Only one centrally located pull station shall be required if the building is equipped with automatic sprinkler system or automatic fire detection system covering all areas.

Buildings without Sprinkler or other Fire Suppression System:

Manual fire alarm boxes (pull station) to be located not more than 5 feet from entrance to exit. Exits include exterior exit doors, separated exit stairs, exit passageways and horizontal exits.

Corridors are required to have manual fire alarms at each exit on each floor. Additional boxes shall be provided so the travel distance to the nearest fire alarm box is not in excess of 200 feet measured horizontally on the same floor.

If a corridor is rated 1 hour or more and doors are added for direct exit from each classroom these doors may be considered convenience doors and pull stations would only be required as for corridors.

Exception: When a rated corridor is not provided, then each classroom must provide doors leading directly to the outside and pull stations shall be required at each door. NOTE: Children less than 3 years of age shall have direct exit to the outside regardless of corridor protection and pull station shall be required.

AUDIBLE / VISIBLE DEVICES:

Audible devices shall be spaced so the sound level is not less than 75 dba at 10 feet, or more than 120 dba at the minimum hearing distance from the appliance.

The audible devices shall also have a sound level of at 15 dba above the ambient.

Mechanical equipment rooms shall have a minimum sound level of 90 dba.

Wall mounted audible devices shall be set at a height above finish floor of not less than 90 inches to the top of the appliance and below finish ceilings not less than 6 inches.

Visible/ Audible wall mounted appliances shall have their bottoms at heights above finish floor of not less than 80 inches and no greater than 96 inches.

VISIBLE DEVICES:

Spacing in corridors:

Number of Appliances Corridor Length (feet)

0-30
31-130
131-230
231-330
331-430
431-530

Required fire protective signaling system shall include visible alarm indicating appliances in public and common areas.(Conference rooms, Classrooms, Restrooms, etc.)
Visible appliances shall be located no more than 15 feet from end of corridor with a separation no greater than 100 feet between appliances.
Interruption of the concentrated viewing path such as, a fire door, elevation change or any other obstruction shall be considered a separate corridor.

SMOKE DETECTORS:

Doors in smoke barriers, horizontal exits stairway enclosures and other doors opening between rooms and fire rated exit access doors when held open by approved holding devices shall be required smoke detection to release the holding device.

All detection devices used for door hold release service, whether integral or a stand alone, shall be monitored for integrity where connected to the fire alarm system.

Location:

Smoke detector shall be no less than 12 inches measured along and perpendicular to the doorway and no less than the depth of the wall section over the door.

Smoke detector shall be centerline of door.

Shall be no farther than 5 feet measured along and perpendicular to the doorway.

The depth of the wall section above the door is 24 inches or less only one smoke detector shall be required.

Child Care Definition:

A program or arrangement where two or more children less than 13 years old, who do not reside where the care is provided.

- Primary N. C. State Child Care agency:
THE DEPARTMENT OF HEALTH AND HUMAN
SERVICES DIVISION OF CHILD DEVELOPMENT
2201 Mail Service Center
Raleigh, N.C. 27699-2201
1-(800) 859-0829 FAX: (919) 661-4845
- City of Charlotte Zoning Division
700 North Tryon Street
Charlotte, N.C. 28202
(704) 336-7600 FAX: (704) 353-0196
- Mecklenburg County Health Department
700 North Tryon Street
Charlotte, N.C. 28202
(704) 336-5100 FAX: (704) 336-5306

- Mecklenburg County Fire Marshal's Office
700 North Tryon Street
Charlotte, N.C. 28202
(704) 336-2154 FAX: (704) 336-3846
- City of Charlotte's Fire Prevention
441 Beaumont Avenue
Charlotte, N.C. 28202
(704) 336-2101 FAX: (704) 336-5190
- Mecklenburg County Code Enforcement Department
700 North Tryon Street
Charlotte, N.C. 28202
(704) 336-3829 ext. 4 FAX: (704) 336-3839