



Transylvania County
North Carolina

Building Permitting and Enforcement
www.transylvaniacounty.org/building-and-permitting
Phone: (828) 884-3209

Large Commercial Projects Plan Requirements For Projects Exceeding \$300,000 and/or 3000 sq. ft.

Note: Additional information may be required depending upon the project.

General Requirements

- Appendix B
- Fire marshal approval
- Health Department approval (food related, pools, lodging, camps, care facilities, etc.), if applicable

Special Inspection

- Statement of special inspections must be reproduced on plans

Site Plan

- Type of occupancy
- Vicinity map
- North arrow and map scale
- Property and street right of way lines with dimensions
- Existing and proposed driveway connections
- Show all easements and right of ways
- Locations of all existing and proposed structures with dimensions for property lines
- Locations of all other existing and proposed site improvements
- Parking plan, including accessible parking with calculations (ICC A117.1-2009)
- Accessible curb cuts
- Site lighting plan
- Location, type and size of public/private water lines, meters and backflows
- Location of sewer lines
- Person responsible for plan (name, address, contact information)

Structural

- Soil reports of load capacity for footings
- Design loads
- Footing details foundation plan
- Foundation slab details
- Provide basement percentage below grade calculations

- Floor, wall and roof plan
- Elevations of building with dimensions (building height, floor to floor, height to ridge and eave)
- Identify names and uses of each room
- All penetration details for fire-rated construction including approved agency system information
- Partition layout, fire ratings with UL#
- Seating layout, furniture plans
- Calculations for means of egress widths for occupancy loads
- Show toilet room layouts at sufficient scale for dimensions and details to verify for accessibility compliance (ICC A117.1-2009)
- NCBC Chapter 34, Section 3411.7 compliance shown on plans if applicable
- Rehab Code expenditure log information shown on plans if applicable
- Ramp details
- Stair details (risers, treads, handrails)
- Firestopping, draftstopping
- Interior finish schedule, type material
- Door schedule including hardware
- Sections through building (detailed wall sections)
- Wall bracing details
- Glass type, safety glass as required
- Chimney, fireplace details
- Gross and net floor area
- Hazardous material storage or use
- High piled storage
- 1 – 2 occupancy color coded life safety drawings from NC (DHSR)
- Attic ventilation details including overall ventilation calculations
- Fixed extinguishing systems (halon, foam)
- Window schedule
- Pre-engineered metal building details
- Details for fabric awnings and canopies including fire resistance information

Electrical

- Number of services and equipment physical locations
- Riser diagram
- Grounding electrode conductor
- Service overcurrent protection – identify service mains, ratings and characteristics
- Panel, feeder, transformer overcurrent protection
- Panel schedules with NEC 2017 load summary for all new and/or affected panels and services
- Conductors (types and sizes, all circuits)

- Ground fault protection
- Separately derived systems ground
- Fixed electric heat
- Motors HP and disconnects
- Hazardous areas – show classification of hazardous areas and define all boundaries
- Signs
- Emergency systems/lights
- Exit lights
- Conduit/raceway fill
- Smoke detectors
- Lighting fixtures, outlet layout
- Upfits of multi-tenant buildings
- Require electrical shell drawing of building
- Fire alarm devices, riser diagram and sequence of operations

Mechanical

- Equipment (types, sizes and locations)
- Fuel (vent or chimney size and locations)
- Combustion, ventilation, air, size and location with calculations
- Ductwork (sizing, locations and insulation)
- Supply and return air outlet, inlet locations and exhaust terminations
- Type of duct materials
- Show all fire-rated and smoke-rated walls (both existing and new) with ratings on the mechanical plans
- Exhaust fans (CFM's)
- Smoke detection for return air
- Fire dampers with application type noted: static or dynamic
- Kitchen hood
- HVAC condensation drain and termination, discharge location
- Gas piping detail material, size, loads (existing and new) and total equivalent pipe length
- Roof top equipment detail
- Structural support detail for RTU's > or equal to 500 lbs.
- Accessibility of equipment
- BTU's, CFM's, and tons of equipment

Plumbing

- Fixture location
- Drainage, waste and vent system pipe diagram sizes (isometric and floor plans) and materials
- Traps, separators

- Cleanouts
- Water distribution diagram, piping materials
- Pressure reducing valves
- Backflow preventers (fixtures and appliances)
- Equipment accessibility
- Leaders and storm drains with storm sizing calculations and design criteria
- Connectors to city water, sewer
- Connection to private well, septic tank
- Water heater details and location
- Interceptors, sizing and calculations
- Minimum facilities with calculations

Accessibility / NCBC Ch. 11 & ICC A117.1-2009

- Accessible route
- Accessible entrances
- Parking & Passenger loading facilities
- Dwelling units & sleeping units (Type A & Type B)
- Special occupancies
- Other features & facilities
- Signage

Energy

- Energy Code Compliance
- Ceiling, wall, floor
- U-factor and SHGC of glass
- Slab insulation
- Insulation/Energy Form, Comcheck information must be included on plan sheets if used
- Plastic skylights
- Mechanical Systems to comply with NC Energy Conservation Code, section 503 and 506
- Electrical Systems to comply with NC Energy Conservation Code, section 505