



WINDSOR FIRE PROTECTION DISTRICT

PLAN SUBMITTAL CHECKLIST



GENERAL INFORMATION

- Scaled Site Plan**—Property lines, existing/proposed structures, slopes/grades, road widths, turnarounds, and hydrant locations
- 8½” by 11” additional site plan**—Detailed site plan provided for Fire Department
- Building Construction Analysis**—Construction type/occupancy class/allowable area calculations based on side yards, construction type, floors, building height, sprinklers
- Building Occupancy Class**—Description of use. Description of materials stored and used.
- Distance to Property Lines**—Distance to property lines indicated and side yards identified, if utilized, in area allowance calculations.
- Knox Box**—Required in all commercial buildings and on residential properties with access gates.
- Knox Cap**—Required on all fire department connections (FDC)
- Storage Areas/Occupancies**—Details of commodity and storage, method and height. Storage in excess of 12 feet may result in high-piled storage (HPS) requirements, such as smoke vents, draft curtains, access doors, etc.
- Fire Sprinklers**—Occupancy and/or allowable area requirements.
- Fire Alarms**—Where required by UFC
- Stand Pipes**—Where required by CBC
- Building Addressing**—Illuminated address requirements noted on plan: building, 12 inches; suite, 6 inches; two sides; contrasting background; plainly visible and legible from the road.
- Site Addressing**—Thirty feet from street. Multi-building addresses posted at driveway entrances. Visible in both directions. Noted on plan.
- Trash Enclosures**—Trash enclosures greater than 1.5 cubic yards not located within 10 feet of combustible walls, openings, or roof eave-lines.

FIRE DEPARTMENT ACCESS

- Fire Department Access**—Access road provided to within 150 feet of exterior portions of all buildings, as measured by an approved route around the exterior of the building.
- Fire Lanes**—Fire apparatus access roads noted as “fire lane”.
- Surface**—Access road construction noted. All-weather surface, 8" class II; grades >5-10%, plus sealed surface; 10-15%, plus 2" asphalt concrete.
- Width**—Minimum 20 feet of unobstructed width
- Turning Radius**—Minimum 25 feet inside and 50 feet outside turning radius
- Vertical Clearance**—Unobstructed vertical clearance of 15 feet
- Grade**—Maximum grade of 15%
- Turnarounds**—Approved turnaround provided where dead-end road exceeds 150 feet in length



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- Obstruction**—Access roads not obstructed by parking, dumpsters, building materials, or other items.
- Roadway and Driveway Structures (Bridges)**—Load capacity: HS20. Structure capability, weight/vertical clearance signs. Vertical clearance: 15 feet minimum.
- Turnouts**—One-way driveway in excess of 500 feet, turnout provided at midpoint of road.
- Secondary Access**—Required when one access is unsafe due to vehicle congestion, condition of terrain, climatic conditions, or high fire-severity zones.
- Gates**—Manual open, Knox key lock; power open, Knox access override system. Open inward; entrance 2 feet wider than lane serving gate. Located 30 feet from roadway to allow a fire response vehicle to stop without obstructing traffic.

FIRE PROTECTION

- Water Supply**—Public water system: Fire flows calculations from CFC Appendix III-A. Private water system: Storage and fire flow calculations from NFPA 1231, "Standard on Water Systems for Suburban and Rural Firefighting," *CFC 903.2*
- Fire Hydrants**—Fire hydrants provided along roadways using CFC Appendix IIIB. Along both sides of divided streets. Reflectorized blue marker.
- Fuel Modification**—Fuel modification plan required as specified in SSS for buildings constructed in an urban/wildland interface location.

OCCUPANCY/AREA SEPARATIONS

- Locations**—Required occupancy separations
- Fire Resistive Rating Construction Detail**
- Penetrations and opening** (windows and door protection)

EXITING

- Occupant Loads**—Provide occupant loads of each area.
- Number of Required Exits**—Provide exit analysis indicating the occupant loads and number exiting from each exit. Two exits are required for 1,500 sf retail; 750 sf conference; 3,000 sf offices; 15,000 sf warehouses.
- Exit Sign Illumination**—Required when 2 exits are specified. Office, 30 occupants; assembly, 50 occupants; retail, 50 occupants. Required to have back-up power supply or continuously (self-luminous) illuminated when power is disconnected.
- Emergency Lighting**—Required when occupant load exceeds 100.
- Exit Door Swing**—Opens in direction of travel when occupant load exceeds 50 or from hazardous areas.
- Exit Locking Hardware**—"No knowledge" single-action lever or "panic" bar on all doors. The main entrance door may have "key locking" hardware on the door. Additional deadbolt locks not allowed unless connected to the lever. Panic hardware required in assembly rooms/buildings where occupant load exceeds 50.



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- Distance to Exit**—Not to exceed 200' unsprinklered, 250' sprinklered; additional 100' in rated corridor.
- Exit Route**—Exits may not lead through hazardous rooms; exits must terminate at a public way (i.e., a paved surface).
- Exit Spacing**—Exits shall be placed apart at least ½ the diagonal measurement of the room
- Specific Occupancy Exit Requirements**

CORRIDORS

- Dead-end corridors** are not to exceed 20 feet.
- Intervening Rooms**—Corridors not interrupted by intervening rooms. Check exceptions.
- Rated Corridors**—Required when occupant load exiting into corridor exceeds 30. Check exceptions.
- Construction Details**
- Penetrations** are not provided, or are protected when allowed.
- Fire-Resistive Rating** for doors and windows
- HVAC Penetrations**—Require smoke dampers

FLOOR & ROOF PLAN

- Roofing Surface Material**—Proper class.
- Roof & Floor Framing**—Composite wood joists in sprinklered building. Maximum 16" in depth or one of the following: 1) provide 5/8" type-x drywall on underside of joists; 2) sprinkler within joists; 3) fill spaces between joists with noncombustible insulation. Open joists require fire-stopping channels into 300 sf areas. Closed joists (ceiling on underside of joist) require fire-stopping channels into 160 cu ft areas. Fire sprinkler support calcs for sprinklered building.
- Draft Stops**—Maximum distance not exceeded: attic, 3000 sf and 60'; sprinklered attic, 900 sf and 100'; floor/ceiling, 1000 sf and 60'; sprinklered floor/ceiling, 3000 sf and 100'.
- Smoke Vents**—Can be opened from exterior, proper size 8x4, required number within each area formed by draft curtains, 20 feet from property line.
- Draft Curtains**—Proper construction, no penetrations unless sealed, proper depth, required location and number.
- Roof Access**—Proper size and location.

MECHANICAL PLAN

- Dampers**—Required locations through rated walls. Automatic closing via heat or smoke, when required.
- Smoke Detection Shut Down**—Required for units exceeding 2000 cfm.



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- Mechanical Ventilation for Areas Handling Hazardous *Materials***—Equal 1 cfm per square foot where materials are stored or used.
- Elevators**—Complies with fire requirement for recall.

ELECTRICAL PLAN

- Illuminated Exit Signs
- Emergency Lighting
- Duct Smoke Detectors

MISCELLANEOUS

- Special Hazards**—High-piled stock (HPS), LPG tanks, above-ground fuel tanks, spray booths, industrial ovens, dust collection systems

PLAN REVIEW/INSPECTION FEES

At least two set of drawings are required. Submit plans to the Windsor Fire Protection District at 8200 Old Redwood Highway, Windsor. Payment of \$110 must accompany each plan submitted. A single submission that encompasses multiple projects or multiple improvements or other multiple items requires \$110 for each component.

Based on project size, the Fire Marshal may require a higher minimum amount at submission, based on projection of fire department plan review and inspection processes. In instances when the initial payment is found to be insufficient to cover costs, an invoice shall be issued for the balance. In the event there is an overpayment of fees, the Fire District will promptly refund the balance.

Either the Fire Marshal or a contracted expert will review plans and comment in writing. Plans that do not comply with Windsor Fire and/or code requirements must be corrected and resubmitted. Each resubmission will require payment of an additional one-hour minimum fee of \$110.00.

Additional fees, at the rate of \$110 minimum, may be required for follow-up inspections made necessary by malfunction, code non-compliance, and/or vendors who are not prepared or who are not there at scheduled inspection.