

ENGINE TYPES:

Minimum Standards by Type

Requirements	Engine Type							
	Structure		Wildland					
	1	2	3	4	5	6	7	9*
Tank minimum capacity (gal)	300	300	500	750	400	150	50	50
Pump minimum flow (gpm)	1000	500	150	50	50	50	10	6
@ rated pressure (psi)	150	150	250	100	100	100	100	100
Hose 2½"	1200	1000	-	-	-	-	-	-
1½"	500	500	1000	300	300	300	-	100
1"	-	-	500	300	300	300	200	½"
Ladders per NFPA1901****	Yes	Yes	-	-	-	-	-	-
Master stream 500 gpm min.	Yes	-	-	-	-	-	-	-
Pump and roll	-	-	Yes	Yes	Yes	Yes	Yes	Yes
Maximum GVWR (lbs)	-	-	-	-	26,000	19,500	14,000	
Personnel (min)	4**	3	3***	3***	3***	3***	3***	3

*- State standard not NWCG requirement

** - In-State standard is 4 personnel (Out-of-State requires 4 personnel)

*** - In-State standard is 3 personnel (Out-of-State requires 3 personnel)

**** - In-State standard is 20 feet of ladder (Out-of-State requires 48 feet)

Common additional needs. Requested as needed.

- All wheel drive
- High pressure pump (250 psi @ ½ flow of Type)
- Foam Proportioner
- Compressed air foam system (CAFS) with minimum 40 cfm compressor
- Additional personnel

WATER TENDER TYPES:

Minimum Standards by Type

Requirements	Water Tender Type						
	Support			Tactical		State Standard	
	S1	S2	S3	T1	T2	4*	5*
Tank capacity (gal)	4000	2500	1000	2000	1000	400+	400+
Pump minimum flow(gpm)	300	200	200	250	250	80+	---
@ rated pressure (psi)	50	50	50	150	150	---	---
Max. refill time (minutes)	30	20	15	---	---	---	---
Pump and roll	---	---	---	Yes	Yes		
Personnel (min)	1	1	1	2	2	1	1

* - State standard not NWCG requirements

- All types shall meet federal, state and agency requirements for motor vehicle safety standards, including all gross vehicle weight ratings when fully loaded.
- Type 3 engines and tactical water tenders shall be equipped with a foam proportioner system.

- All water tenders and engine types 3 through 6 shall be able to prime and pump water from a 10 foot lift.
- Personnel shall meet the qualification requirements of NWCG *Wildland Fire Qualification System Guide*, PMS 310-1.
 - Water tenders must carry appropriate hose, clamps, adapters, and tools to be able to fill engines and or portable tanks. Tenders must also carry a minimum of one shovel and pulaski. Tenders participating in out of state dispatches must meet minimum federal guidelines for equipment and accessories.
- General specification for Engines and Tenders:
 - Larger diameter hose may be substituted for smaller hose to achieve total needed length.
 - Hose size is hose coupler size.
 - Engines must carry fittings to connect all hose on the apparatus.
- Ordered Structural Fire Engines - Any engine specifically ordered for the purpose of providing structural fire protection should have the basic gear and safety equipment required by structural fire fighting standards. Each engine must have, at a minimum, the following items for personnel:
 - NFPA approved protective clothing for structural fire fighting.
 - NFPA approved protective hoods.
 - NFPA approved gloves for structural fire fighting.
 - NFPA approved helmets for structural fire fighting.
 - NFPA approved SCBA's; for structural fire fighting.
 - NFPA approved footwear for structural fire fighting.
 - 400 ft of 1 ½ “ single jacket wildland hose.
 - 200 ft of 1” single jacket wildland hose.
 - 2 – Shovels: 1 – Mc Leod, 1 – Pulaski
 - The following appliances: 2 – 1 ½ “ to 1” Forestry “T’s”, 2 – Reducers
 - NST – 1 ½ “ to 1”.
 - 2 – 1 ½ “ – 40 GPM nozzles.
 - 2 – 1” – 20 GPM nozzles.
 - 2 – Forestry clamps for single jacket wildland hose.
 - Fire shelters for all engine crew members.
 - Wildland fire personal protective equipment for all engine crew members.