

Flammable and Combustible Liquids in Basements

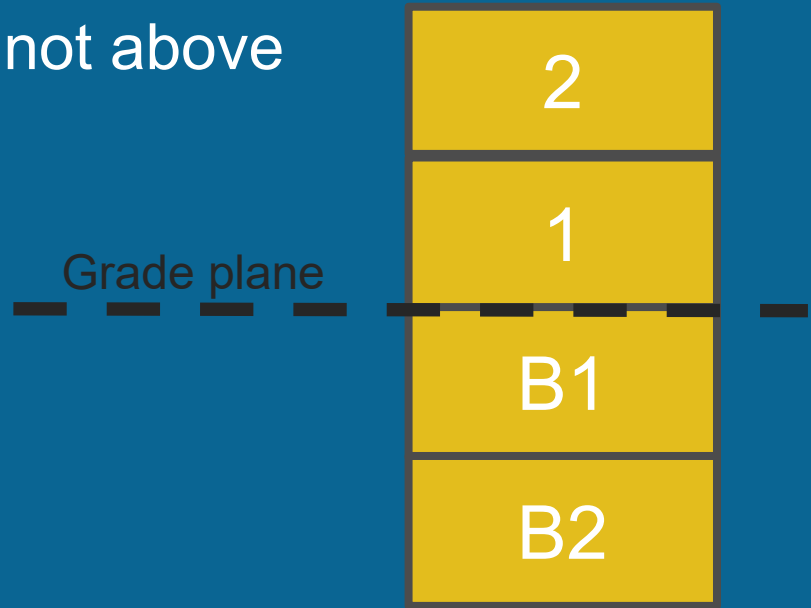
California Fire Code limits:

- Code year
- Sprinkler coverage
- Flammable liquids (Class I)
 - **Open use** MAQ limit
- Combustible liquids (Class II or IIIA)
- Basement MAQ reductions



Flammable and Combustible Liquids in Basements

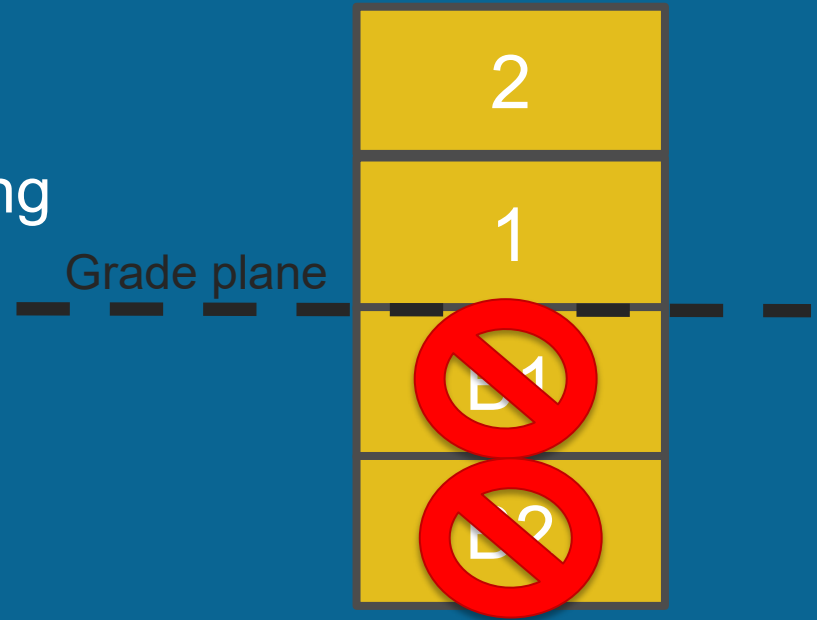
Basement: A story that is not above grade plane.



Flammable and Combustible Liquids in Basements

California Fire Code

2001 and earlier: flammable liquids are prohibited from being stored in basements

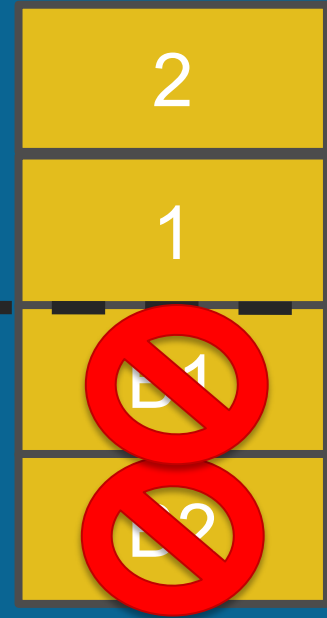


Flammable and Combustible Liquids in Basements

California Fire Code

2007 – current: flammable and combustible liquids (I, II, IIIA) are prohibited from being stored in basements unless there is automatic fire sprinkler coverage

Grade plane



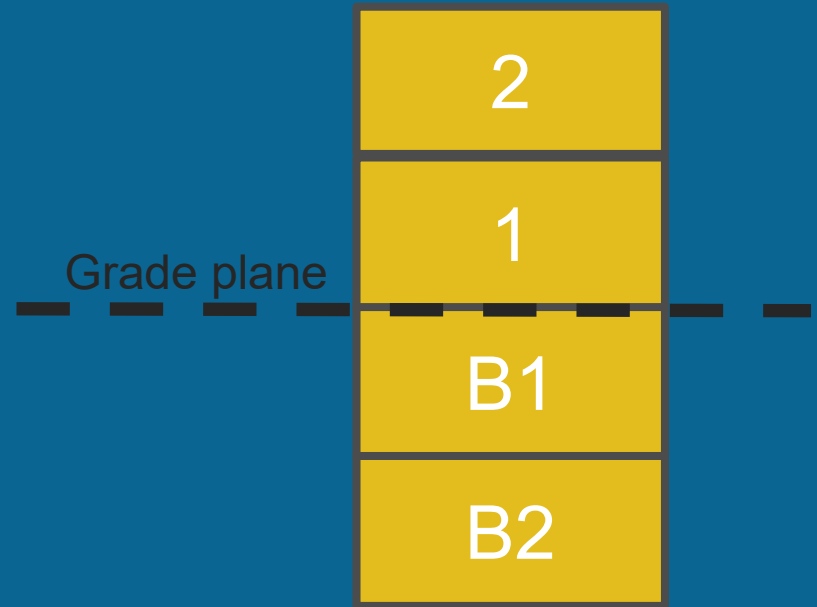
Flammable and Combustible Liquids in Basements

Fire sprinklers? Yes

2007 – current:

- Class I liquids – limited to *open use* MAQs
- Class II and IIIA liquids allowed

2022 CFC 5704.3.5.1



Flammable Liquids in Basements

TABLE 5003.1.1(1)—MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD^{a, c, i, l, m, o}

MATERIAL	CLASS	GROUP WHEN THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED	STORAGE ^b			USE-CLOSED SYSTEMS ^b			USE-OPEN SYSTEMS ^b	
			Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas (cubic feet at NTP)	Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas (cubic feet at NTP)	Solid pounds (cubic feet)	Liquid gallons (pounds)
Flammable liquid ⁿ	IA IB and IC	H-2 or H-3	NA	30 ^{d, e}	NA	NA	30 ^d	NA	NA	10 ^d
				120 ^{d, e}			120 ^d			30 ^d
Flammable liquid, combination (IA, IB, IC) ⁿ	NA	H-2 or H-3	NA	120 ^{d, e, h}	NA	NA	120 ^{d, h}	NA	NA	30 ^{d, h}

Flammable Liquids (Class I) in Basements

		2001 CFC	2022 CFC sprinklers-N	2022 CFC Sprinklers-Y
		MAQ Limit <i>B-occupancy</i>	MAQ Limit <i>B-occupancy</i>	MAQ Limit <i>B-occupancy</i>
Grade plane	2	120 gal	90 gal	180 gal
	1	120 gal	120 gal	240 gal
	B1	0 gal	0 gal	45 gal
	B2	0 gal	0 gal	30 gal

Combustible (Class II) Liquids in Basements

		2001 CFC	2022 CFC sprinklers-N	2022 CFC sprinklers-Y
		MAQ Limit <i>B-occupancy</i>	MAQ Limit <i>B-occupancy</i>	MAQ Limit <i>B-occupancy</i>
Grade plane	2	120 gal	90 gal	180 gal
	1	120 gal	120 gal	240 gal
	B1	120 gal	0 gal	180 gal
	B2	120 gal	0 gal	120 gal