

Sec. 29-349-340. Sprinklers, hydrants may be waived

The requirements for automatic sprinklers, water supplies and fire hydrants set forth in this Code may be waived by the State Fire Marshal when storage facilities are located in remote areas.

Table of Recommended Separation Distances of Ammonium Nitrate and Blasting Agents from Explosives or Blasting Agents (Notes 1, 6)***

Donor Weight		Minimum Separation Distance of Receptor When Barricaded (Note 2)	(Feet)	Minimum Thickness of Artificial Barricades (Note 5)	(Inches)
Pounds over	Pounds not over	Ammonium Nitrate	Blasting Agent		
	100	3	11		12
100	300	4	14		12
300	600	5	18		12
600	1,000	6	22		12
1,000	1,600	7	25		12
1,600	2,000	8	29		12
2,000	3,000	9	32		15
3,000	4,000	10	36		15
4,000	6,000	11	40		15
6,000	8,000	12	43		20
8,000	10,000	13	47		20
10,000	12,000	14	50		20
12,000	16,000	15	54		25
16,000	20,000	16	58		25
20,000	25,000	18	65		25
25,000	30,000	19	68		30
30,000	35,000	20	72		30
35,000	40,000	21	76		30
40,000	45,000	22	79		35
45,000	50,000	23	83		35
50,000	55,000	24	86		35
55,000	60,000	25	90		35
60,000	70,000	26	94		40
70,000	80,000	28	101		40

Regulations of Connecticut State Agencies

80,000	90,000	30	108	40
90,000	100,000	32	115	40
100,000	120,000	34	122	50
120,000	140,000	37	133	50
140,000	160,000	40	144	50
160,000	180,000	44	158	50
180,000	200,000	48	173	50
200,000	220,000	52	187	60
220,000	250,000	56	202	60
250,000	275,000	60	216	60
275,000	300,000	64	230	60

*** ** This Table appears in Recommended Separation Distances of Ammonium Nitrate and Blasting Agents from Explosives or Blasting Agents, adopted as an NFPA Tentative Standard (No. 492-T) in 1967. For a discussion of the derivation of the Table and examples of how it is applied to actual storage situations, see No. 492-T.*

NFPA 495 46 NOTE A46 New reference replaced reference to tentative recommendations in Information Circular 7988. New is as follows: "Safety Recommendation for Sensitized Ammonium Nitrate Blasting Agents," Bureau of Mines, U.S. Department of Interior, Information Circular 8179, 1963.

NOTES TO TABLE OF RECOMMENDED SEPARATION AMMONIUM NITRATE
AND BLASTING AGENTS FROM EXPLOSIVES OR BLASTING AGENTS

Note 1 — Recommended separation distances to prevent explosion of ammonium nitrate and ammonium nitrate based blasting agents by propagation from nearby stores of high explosive or blasting agents referred to in the Table as the "donor." Ammonium nitrate, by itself, is not considered to be a donor when applying this Table. If stores of ammonium nitrate are located within the sympathetic detonation distance of explosives or blasting agents, one-half the mass of the ammonium nitrate should be included in the mass of the donor. These distances allow for the possibility of high velocity metal fragments from mixers, hoppers, truck bodies, sheet metal structures, metal containers, and the like, which may enclose the "donor." These distances apply to the separation of stores only. The American Table of Distances shall be used in determining separation distances from inhabited buildings, passenger railways, and public highways.

Note 2 — When the ammonium nitrate and/or blasting agent is not barricaded, the distances shown in the Table shall be multiplied by six. Where storage is in bullet-resistant magazines recommended for explosives, or where the storage is protected by a bullet resistant wall, distances and barricade thickness in excess of those prescribed in the American Table of Distances are not required.

Note 3 — The distances in the Table apply to ammonium nitrate that passes the insensitivity test prescribed in the National Plant Food Institute;** and ammonium nitrate failing to pass said test shall be stored at separation distances determined by competent

persons and approved by the State Fire Marshal's Office.

Note 4 — These distances apply to nitro-carbo-nitrates and blasting agents which pass the insensitivity test prescribed in the DOT regulations.

* For construction of bullet-resistant magazines, see Chapter 3, NFPA 1967–68.

** Definition and Test Procedures of Ammonium Nitrate Fertilizer, National Plant Food Institute, November 1964.

Note 5 — Earth or sand dikes or enclosures filled with the prescribed minimum thickness of earth or sand are acceptable artificial barricades. Natural barricades, such as hills or timber of sufficient density that the surroundings exposures which require protection cannot be seen from the “donor” when the trees are bare of leaves, are also acceptable.

Note 6 — When the ammonium nitrate must be counted in determining the distances to be maintained from inhabited buildings, passenger railways and public highways, it may be counted at one-half its actual weight.

(Effective December 24, 1987)