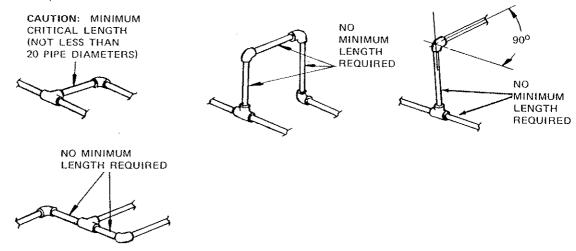
V.	В.		Number of	Branch Lines*						
		Unit Size	Nozzles	Α	В	<u>c</u>	D	E	F	G
		PS-150-B	8	11/2	1	3/4	1/2	*****	WARTON.	
		PS-150-B	16	2	11/2	1	3/4	1/2		
		PS-300-B	8	1½	1	3/4	1/2			
		PS-300-B	16	2	11/2	1	3/4	1/2	-	
		PS-500-B	16	2	1½	1	3/4	1/2	—	was the
		PS-1000	16	2	11/2	1	3/4	1/2	-	
		PS-1000	32	3	2	11/2	1	3/4	1/2	
		PS-2000	32	3	2	1½	1	3/4	1/2	*****
	٠	PS-2000	64	3	21/2	2	11/2	1	3/4	1/2
		PS-2000	64	4	3	2	11/2	1	3/4	1/2

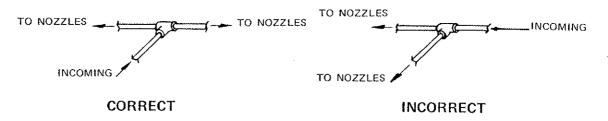
^{*}Branch lines illustrated in example, View B-B, Page 34.

- C. Other piping requirements are as follows:
 - 1. Install distribution piping as indicated. The installation of piping shall parallel good automatic sprinkler practice as indicated in the Standard for the Installation of Sprinkler Systems, NFPA No. 13. Pipe shall be of steel galvanized in accordance with specification A-120-47 of the American Society for Testing Materials and any subsequent revisions thereof. Special corrosion-resistant material shall be used for corrosive atmospheres. Pipe fittings shall be of steel or malleable iron, complying with American Standards for 150 pounds steam, 300 pounds WOG pressure rating (Schedule 40).
 - 2. Install dry chemical nozzles as indicated.
- D. The following rules will ensure a neat and workable piped system:
 - 1. Reducing bushings are not to be used.
 - 2. Use reducing tees furnished by The Ansul Company for all pipe splits. Elbows are not furnished.
 - 3. Nozzles are to be installed in elbows turned vertically down, unless otherwise specified.
 - 4. Dimensions given are from center to center of fittings for nozzle locations.
 - 5. Minimum engagement of pipe in fittings to be five threads.
 - 6. Pipe to be reamed and blown clear after threading.
 - 7. All piping to be rigidly supported by approved hangers.
 - 8. Thread compound should be used sparingly and only on male threads.
 - 9. All dimensions are to be field checked. (If piping shown on drawings interferes with any objects or the number of elbows or pipe lengths increase, you must be notified before modifications are made.)
 - Illustrations on next page show acceptable and non-acceptable method of connecting piping.

V. D. 10.



Illustrations below show acceptable methods of splitting tees.

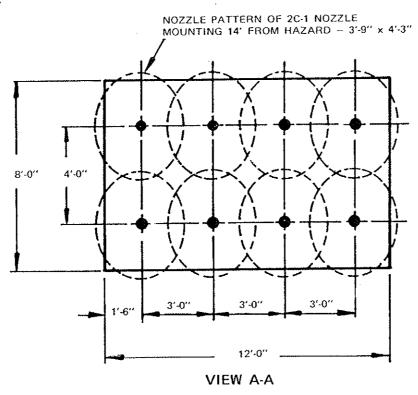


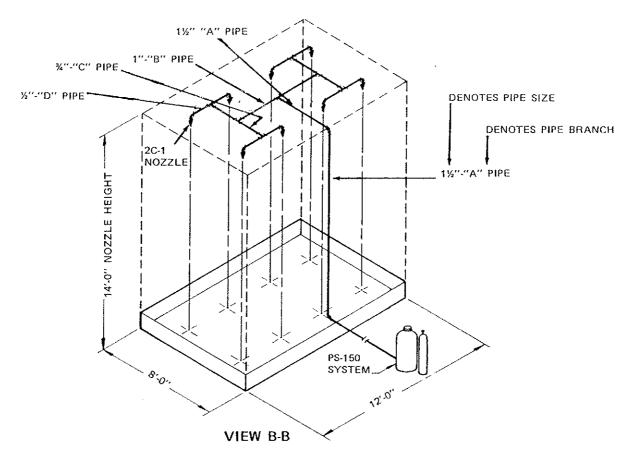
VI. Choose Proper Detection System and Other Equipment Accessories (Refer to Price List)

VII. Example System

- A. Hazard Area: 8'-0" wide x 12'-0" long = 96 square feet
- B. Minimum Pounds Dry Chemical Required: From Chart on Pages 35 and 36.
 105 pounds minimum for indoor application
 115 pounds minimum for outdoor application
- C. Minimum Flow Rate Required: From Chart on Pages 35 and 36.
 9.2 pounds per second for indoor application
 14.25 pounds per second for outdoor application
- D. Minimum Number of Nozzles Required:
 96 square feet ÷ 12.5 = 7.69 nozzles minimum
 Determined by nozzle pattern layout = 8 nozzles minimum
 Nozzle spacing required 4'-0" maximum between nozzles using 2C-1 at 14'-0" from hazard
- E. PS Unit Required:
 PS-150-B with PLUS-FIFTY C dry chemical and eight 2C-1 nozzles based on nozzle layout and minimum design criteria required

VII.





VIII. Verify Piped System Flow Rate and Piping Arrangements by Calculation (Refer to Flow Calculation Method Section)

Local Application — Overhead Minimum Quantity and Flow Rate Required Using PLUS-FIFTY B, PLUS-FIFTY C, and 'Purple-K' Dry Chemical.

		Indoor A	pplication	<u>1</u>	Outdoor Application				
		n Required	Minimum Required (lbs./sec.)		Minimum Required (lbs.)		Minimum Required (lbs./sec.)		
PLUS- FIFTY B Hazard and Area PLUS- (sq. ft.) FIFTY C 'Purple-K'			PLUS- FIFTY B and PLUS- FIFTY C 'Purple-K'		PLUS- FIFTY B and PLUS- FIFTY C 'Purple-K'		PLUS- FIFTY B and PLUS- FIFTY C 'Purple-K'		
10	10	8	1.5	1.25	14	12	2.0	1.5	
20	20	11	2.0	1.75	16	14	3.5	3.0	
30	30	14	3.5	2,25	35	16	5.0	3.5	
40	40	20	4.5	3.0	45	23	6.5	4.75	
50	50	25	5.5	3.5	60	30	8.0	5.25	
60	60	32	6.0	4.0	70	35	9.5	6.25	
70	70	39	7.0	4.5	80	40	11.0	7.0	
80	80	42	8.0	5.0	100	50	12.0	7.75	
90	100	52	8.5	5.75	110	55	13.5	8.25	
100	110	56	9.5	6.0	120	60	15.25	9.0	
120	140	70	11.0	6.75	160	80	17.0	10.5	
140	180	86	12.5	7.75	190	95	18.5	11.75	
160	200	103	14.0	8.5	220	110	21.0	13.0	
180	240	120	15.0	9.5	260	130	23.0	14.25	
200	280	136	16.5	10.0	300	150	25.0	15.0	
220	320	158	18.0	11.0	340	170	26.5	16.5	
240	360	175	19.0	11.75	390	195	28.5	17.5	
260	400	200	20.0	12.5	440	220	30.0	18.75	
280	440	220	21.5	13.25	490	245	32.0	19.75	
300	480	240	22.5	13.75	530	265	34.0	21.0	
320	530	260	24.0	14.5	580	290	35.5	22.0	
340	575	285	25.0	15.25	630	315	37.0	23.0	
360	620	310	26.0	16.0	680	340	39.0	24.0	
380	660	335	27.0	16.5	730	365	41.0	25.0	
400	710	355	28.0	17.25	780	390	42.5	26.0	
420	750	380	29.0	18.0	830	420	44.0	27.0	
440		400	30.5	18.5	890	450	45.5	28.0	
460	850	425	31.5	19.25	940	475	47.0	29.0	
480	900	450	32.5	19.75	1,000	505	48.5	30.0	