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| 20 | 2-3 | 1993 | FI 80-8 | 1980 | 7/82 |
| 20 | 2-9.4, 4-1.1, 5-2.1 | 1993 | FI 83-11 | 1983 | 3/84 |
| 20 | 2-9.7 | 1993 | FI 83-13 | 1983 | 8/84 |
| 20 | 2-9.9 | 1993 | FI N/A | 1974 | 7/75 |
| 20 | 2-9.9 | 1993 | FI 80-10 | 1980 | 10/82 |
| 20 | 2-10.4, A-2-10.4 | 1993 | FI 83-6A | 1983 | 3/84 |
| 20 | 2-13.1 | 1993 | FI 93-1 | 1993 | 3/95 |
| 20 | 2-19 | 1993 | FI 83-14 | 1983 | 3/85 |
| 20 | 3-4.1, 8-2.3.1 | 1993 | FI 83-6 | 1983 | 10/83 |
| 20 | 5-4.2.2, 6-7 | 1993 | FI 83-2 | 1983 | 1/83 |
| 20 | 6-3.1.1 | 1993 | FI 83-9 | 1983 | 3/84 |
| 20 | 6-3.2.1, 6-3.2.2 | 1993 | FI 87-4 | 1987 | 9/89 |
| 20 | 6-3.3 | 1993 | FI N/A | 1974 | 4/76 |
| 20 | 6-3.4, 7-4.3, 7-4.4 | 1993 | FI 83-1 | 1983 | 1/83 |
| 20 | 6-5.2 | 1993 | FI N/A | 1974 | 4/75 |
| 20 | 7-4.7, 7-4.8 (Reissued 4/88) | 1993 | FI 87-1 | 1987 | 8/87 |
| 20 | Chapter 8 | 1993 | FI 83-10 | 1983 | 3/84 |
| 20 | 8-2.7.2 | 1993 | FI N/A | 1974 | 2/75 |
| 20 | 9-4.1.3 | 1993 | FI 87-3 | 1987 | 11/88 |
| 20 | 9-4.1.3, 9-5.3.1 | 1993 | FI 87-2 | 1987 | 6/88 |
| 20 | 11-2.6.4 | 1993 | FI 80-3 | 1980 | 8/81 |
| 20 | A-8-3 | 1993 | FI 83-4 | 1983 | 4/83 |
| 24 | 8-6.1 | 1995 | FI 81-4 | 1981 | 1/83 |
| 24 | 9-2.3.1 | 1995 | FI 81-3 | 1981 | 12/81 |
| 24 | 9-2.3.2 | 1995 | FI 81-2 | 1981 | 7/81 |
| 30 | 1-1 Scope and Application | 1993 | FI 84-4 | 1984 | 4/87 |
| 30 | 1-1.1, 1-1.3, 5-4.1.1 | 1993 | FI 93-1 | 1993 | 3/95 |
| 30 | 1-2 | 1993 | FI 81-1 | 1981 | 4/81 |
| 30 | 2-5 | 1993 | FI 90-1 | 1990 | 1/91 |
| 30 | 2-6.1, 2-6.2, 2-6.3 | 1993 | FI 87-1 | 1987 | 12/87 |
| 30 | 3-7 (Reissued 1/94) | 1993 | FI N/A | 1976 | 1/78 |
| 30 | 4-2 | 1993 | FI 90-2 | 1990 | 1/91 |
| 30 | 4-2.3.1 | 1993 | FI 81-2 | 1981 | 12/82 |
| 30 | Table 4-4.4(b)(Reissued 8/95) | 1993 | FI 84-3 | 1984 | 4/87 |
| 30A | 2-4.5(f) | 1993 | FI 93-1 | 1993 | 3/95 |
| 30A | 9-3.5 | 1993 | FI 90-1 | 1990 | 5/92 |
| 30B | 4-6.8 | 1994 | FI 90-1 | 1994 | 8/93 |
| 32 | 1-2, 1-4 | 1990 | FI 90-1 | 1990 | 1/91 |
| 33 | Chapters 2 through 6, Chapter 8 | 1995 | FI 85-3 | 1985 | 9/87 |
| 33 | 3-3.2 Exception No. 1 | 1995 | FI N/A | 1973 | 12/75 |
| 33 | 3-5 | 1995 | FI N/A | 1973 | 12/75 |
| 33 | 3-5 | 1995 | FI 77-1 | 1977 | 6/79 |
| 33 | Figures 4-3.2(a) and (b), etc. | 1995 | FI N/A | 1973 | 12/75 |
| 33 | 4-3.3 | 1995 | FI N/A | 1973 | 12/75 |
| 33 | 4-3.4 | 1995 | FI N/A | 1973 | 12/75 |
| 33 | 4-3.4 | 1995 | FI N/A | 1973 | 12/75 |
| 33 | 4-6 | 1995 | FI 85-4 | 1985 | 9/87 |



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|---|---|---|---|---|---|
| 33 | 7-1, 7-3, Appendix A-7through A-7-6 | 1995 | FI 85-2 | 1985 | 5/87 |
| 33 | 9-3.6(c), 9-4.1 | 1995 | FI 85-1 | 1985 | 12/84 |
| 33 | 11-1, 11-2 | 1995 | FI 89-1 | 1989 | 4/95 |
| 37 | 2-1.1.2 | 1994 | FI 84-1 | 1984 | 9/84 |
| 45 | General | 1991 | FI 91-1 | 1991 | 12/91 |
| 45 | 6-6.7 | 1991 | FI 75-1 | 1975 | 3/80 |
| 58 | 2-4.4(c)(2) | 1995 | FI 92-1 | 1992 | 1/93 |
| 58 | 3-2.3.3 | 1995 | FI 95-1 | 1995 | 4/95 |
| 58 | 3-2.8.1 | 1995 | FI 95-2 | 1995 | 12/95 |
| 58 | 3-2.8.10(a) | 1995 | FI 79-1 | 1979 | 11/79 |
| 58 | 3-2.8.10(a) | 1995 | FI 79-2 | 1979 | 12/80 |
| 58 | 3-4.5(Reissued 9/95) | 1995 | FI 79-3 | 1979 | 8/82 |
| 58 | 3-4.6 | 1995 | FI 89-2 | 1989 | 5/90 |
| 58 | 3-4.8.1 | 1995 | FI 89-3 | 1989 | 3/91 |
| 58 | 8-2.6(h) | 1995 | FI 89-1 | 1989 | 5/90 |
| 59 | 2-5.2.5 | 1995 | FI 84-1 | 1984 | 9/85 |
| 59A | 5-4.1 | 1996 | FI 79-1 | 1979 | 8/82 |
| 59A | 6-2.4 | 1996 | FI N/A | 1972 | 1/74 |
| 61 | 11-1 | 1995 | FI 80-1 | 1980 | 7/81 |
| 65 | 2-1.5, 2-3.1, 2-4 | 1993 | FI 87-1 | 1987 | 10/91 |
| 70 | 250-81 | 1996 | FI 78-4 | 1978 | 3/80 |
| 70 | 331-1 | 1996 | FI 87-2 | 1987 | 11/87 |
| 70 | 410, Part M | 1996 | FI 81-6 | 1981 | 10/82 |
| 70 | 680-6(c) | 1996 | FI 87-4 | 1987 | 7/88 |
| 72 | 1-4, 2-4.2.1 | 1993 | FI 89-1 | 1989 | 1/90 |
| 72 | 1-5.2.3 Exception No. 1 | 1993 | FI 85-13 | 1985 | 11/86 |
| 72 | 1-5.4.7 | 1993 | FI N/A | 1972 | 6/74 |
| 72 | 1-5.4.7, 3-8.7.3, 3-8.7.5 | 1993 | FI 85-9 | 1985 | 10/85 |
| 72 | 1-5.4.8 | 1993 | FI 87-3 | 1987 | 4/90 |
| 72 | 1-5.4.9, 3-8.7.3, 3-8.7.5 | 1993 | FI 85-3 | 1985 | 6/85 |
| 72 | 1-5.8.1 | 1993 | FI 75-5 | 1975 | 8/77 |
| 72 | 1-7.2.3.11 | 1993 | FI 89-3 | 1989 | 3/93 |
| 72 | 1-7.2.3.1.2, 4-3.2.3 | 1993 | FI 89-1 | 1989 | 6/92 |
| 72 | 2-3.2.1 (Reissued 1/86) | 1993 | FI 78-2 | 1978 | 1/80 |
| 72 | 2-3.3.1, 2-3.3.1(a) (Reissued 1/86) | 1993 | FI 78-1 | 1978 | 11/78 |
| 72 | 3-5, 3-6 | 1993 | FI 79-8 | 1979 | 6/85 |
| 72 | 3-5.1, 3-6.1 Tables | 1993 | FI 86-3 | 1986 | 11/86 |
| 72 | 3-5.1, 3-6.1 Tables (Reissued 1/89) | 1993 | FI 87-1 | 1987 | 6/87 |
| 72 | 3-6.1 Table (Reissued 8/86) | 1993 | FI 86-1 | 1986 | 8/86 |
| 72 | 3-8.2 | 1993 | FI 85-2 | 1985 | 6/85 |
| 72 | 5-1.3.4 | 1993 | FI 78-2 | 1978 | 9/80 |
| 72 | 5-1.3.4 | 1993 | FI 78-3 | 1978 | 9/80 |
| 72 | 5-2.7.1 | 1993 | FI N/A | 1974 | 2/76 |
| 72 | 5-11.7.4.1.4 | 1993 | FI 78-1 | 1978 | 2/79 |
| 72 | 7-1.6 | 1993 | FI 93-1 | 1993 | 9/93 |
| 72 | 7-2.2 | 1993 | FI 87-1 | 1987 | 7/89 |
| 80 | Entire Document | 1995 | FI 90-2 | 1990 | 7/91 |
| 80 | General | 1995 | FI 90-1 | 1990 | 4/91 |
| 80 | 1-7 and General | 1995 | FI 90-3 | 1990 | 7/91 |
| 80 | 1-7.5, 13-2.3 | 1995 | FI 90-4 | 1990 | 11/91 |
| 80 | 2-9.1 | 1995 | FI 80-4 | 1983 | 4/85 |
| 82 | 2-2.11.2 | 1994 | FI 90-1 | 1990 | 8/92 |
| 86 | 3-3 | 1995 | FI 90-1 | 1990 | 10/91 |
| 88B | 2-2.1, 4-1(b) | 1991 | FI 79-2 | 1979 | 1/84 |
| 90A | Entire Standard | 1993 | FI 78-1 | 1978 | 6/79 |
| 90A | Entire Document | 1993 | FI 81-5 | 1981 | 3/84 |
| 90A | 1-2 | 1993 | FI N/A | 1975 | 10 11/76 |
| 90A | 2-3.1 | 1993 | FI N/A | 1975 | 10-11/76 |
| 90A | 2-3.1.2(b) | 1993 | FI 81-4 | 1981 | 3/84 |
| 90A | 2-3.11.1 | 1993 | FI 81-6 | 1981 | 3/84 |
| 90A | 3-3.4 | 1993 | FI N/A | 1976 | 6 7/77 |
| 90A | 3-3.4.1, 3-3.4.4 | 1993 | FI N/A | 1975 | 10-11/76 |
| 90A | 3-3.4.2 | 1993 | FI 89-1 | 1989 | 1/90 |
| 90A | 3-3.4.4, Exception No. 2 | 1993 | FI N/A | 1976 | 6-7/77 |
| 90B | 2-1.4(a) | 1993 | FI 80-3 | 1980 | 3/84 |
| 90B | 2-3.1.1, Exception | 1993 | FI 84-3 | 1984 | 6/84 |



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| 90B | 3-1.4.4 | 1993 | FI 80-1 | 1980 | 6/81 |
| 90B | 3-1.4.4 | 1993 | FI 84-1 | 1984 | 6/84 |
| 90B | 4-1 | 1993 | FI 84-2 | 1984 | 6/84 |
| 96 | 1-1 | 1994 | FI N/A | 1976 | 4/77 |
| 96 | 1-1 | 1994 | FI 76-10 | 1976 | 9/78 |
| 96 | 1-1 | 1994 | FI 78-3 | 1978 | 6/79 |
| 96 | 1-1 | 1994 | FI 87-2 | 1987 | 6/89 |
| 96 | 3-1.3 | 1994 | FI 76-9 | 1976 | 9/78 |
| 96 | 4-2.3, 4-2.4 | 1994 | FI N/A | 1973 | 6/76 |
| 96 | 6-2.1, 6-2.2 | 1994 | FI 78-6 | 1978 | 6/80 |
| 96 | 7-1.1 | 1991 | FI 91-3 | 1991 | 12/93 |
| 96 | 8-3.1 | 1994 | FI 94-1 | 1994 | 8/95 |
| 96 | 9-1.2.2 | 1994 | FI 78-8 | 1978 | 6/80 |
| 99 | 3-4.1.1.2 | 1996 | FI 84-2 | 1984 | 3/86 |
| 99 | 3-4.2.1.4(i) | 1996 | FI 77-1 | 1977 | 9/78 |
| 99 | 3-4.2.2.1 | 1996 | FI 77-2 | 1977 | 7/79 |
| 99 | 3-5.2.2.1 | 1996 | FI 78-1 | 1978 | 3/80 |
| 99 | 4-3.1.2.3(a) | 1996 | FI 90-1 | 1990 | 9/91 |
| 99 | 5-4.2.3 | 1996 | FI 73-1 | 1973 | 3/80 |
| 99 | 12-4.1.2.6(d) | 1996 | FI N/A | 1973 | 12/77 |
| 99 | Annex 2, 2-6.3.2 | 1996 | FI N/A | 1973 | 7/76 |
| 99 | Annex 2, 2-6.3.8(d) 2 | 1996 | FI N/A | 1973 | 7/76 |
| 99 | Annex 2, 2-6.3.8(f) 3 | 1996 | FI N/A | 1973 | 7/76 |
| 99 | Annex 2, 2-6.3.8(f) 3(a) | 1996 | FI N/A | 1973 | 1/78 |
| 99 | Annex 2, 2-6.3.8(f) 3(b) | 1996 | FI N/A | 1973 | 1/78 |
| 99 | Annex 2, 2-6.3.8(i) | 1996 | FI N/A | 1973 | 7/76 |
| 99 | 16-3.3.2, 17-3.3.2 | 1996 | FI 87-1 | 1987 | 5/88 |
| 101 | 5-10.1.3 | 1994 | FI 94-4 | 1994 | 3/95 |
| 101 | 6-3.5.1 | 1994 | FI 91-6 | 1991 | 5/93 |
| 101 | 6-5.2.4 | 1994 | FI 94-6 | 1994 | 10/95 |
| 101 | 12-3.5.2 Exceptions 1 &2, etc. | 1994 | FI 94-2 | 1994 | 3/95 |
| 101 | 12-3.7.7, 13-3.7.5 Exception | 1994 | FI 94-5 | 1994 | 5/95 |
| 101 | 16-3.5.3 Exception | 1994 | FI 94-3 | 1994 | 3/95 |
| 101 | Chapters 20 and 21 | 1994 | FI 94-8 | 1994 | 10/95 |
| 101 | 22-2.3.5.1 Exceptions 2 & 3, etc. | 1994 | FI 94-1 | 1994 | 3/95 |
| 101 | 24-4.4.3.4 and 25-4.4.3.4 | 1994 | FI 94-7 | 1994 | 9/95 |
| 102 | 4-6.2 | 1995 | FI 78-2 | 1978 | 9/85 |
| 110 | 5-2.1 | 1996 | FI 93-1 | 1993 | 9/93 |
| 110 | 5-2.1 | 1996 | FI 93-2 | 1995 | 7/95 |
| 130 | 2-5 | 1995 | FI 88-1 | 1988 | 8/88 |
| 211 | 2-1.2 | 1992 | FI 84-2 | 1984 | 11/84 |
| 211 | 8-4.6 | 1992 | FI 84-1 | 1984 | 9/84 |
| 220 | Chapter 3 | 1995 | FI 75-11 | 1975 | 4/78 |
| 231 | 1-1 | 1995 | FI 95-1 | 1995 | 10/95 |
| 231 | 5-1.6 | 1995 | FI 95-2 | 1995 | 10/95 |
| 231 | 2-1.5 | 1995 | FI 85-1 | 1985 | 4/86 |
| 231C | 1-1 | 1995 | FI 95-1 | 1995 | 10/95 |
| 231C | 3-2.3(b) (Reissued 1/89) | 1995 | FI 75-4 | 1975 | 11/79 |
| 231C | 5-2.2 | 1995 | FI 95-2 | 1995 | 10/95 |
| 231C | 6-4.2(Reissued 8/95) | 1995 | FI 86-1 | 1986 | 10/87 |
| 231C | 6-7 | 1995 | FI 80-6 | 1980 | 11/84 |
| 231C | Tables 6-11.1, 7-10.1 | 1995 | FI 75-5 | 1975 | 11/79 |
| 231D | 3-1.1 | 1994 | FI 89-1 | 1989 | 10/90 |
| 306 | 2-2.2 | 1993 | FI 80-2 | 1980 | 8/83 |
| 306 | 2-3.4(d) | 1993 | FI 80-1 | 1980 | 10/82 |
| 318 | 5-2.7 | 1995 | FI 92-1 | 1992 | 8/92 |
| 423 | 5-6.3 | 1994 | FI 89-1 | 1989 | 5/94 |
| 481 | 5-3 | 1995 | FI 87-1 | 1987 | 7/91 |
| 496 | 3-3.1 | 1993 | FI N/A | 1974 | 12/77 |
| 654 | 2-1.1 | 1994 | FI 82-1 | 1982 | 8/82 |
| 664 | 8-4, 8-4.1, 8-4.2 | 1993 | FI 87-1 | 1987 | 12/92 |
| 780 | 3-12.13 | 1995 | FI 86-1 | 1986 | 3/88 |
| 780 | Appendix Item I-2 | 1995 | FI 92-1 | 1992 | 8/93 |
| 780 | Appendix Item I-2 | 1995 | FI 92-2 | 1992 | 8/93 |
| 820 | Tables 2, 3, and 4 | 1995 | FI 92-1 | 1992 | 5/92 |
| 1123 | Table A-2-3.6.3 | 1995 | FI 90-1 | 1990 | 10/91 |
| 1123 | 2-2.4, 2-3.3.6*, 3-1.3.4, 3-3.2 | 1995 | FI 90-2 | 1990 | 12/93 |
| 1124 | Table 2-6.1, Note 2 | 1995 | FI 88-1 | 1988 | 10/93 |
| 1500 | 1-5 | 1992 | FI 87-2 | 1987 | 7/89 |



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| 1500 | 4-2.2 | 1992 | FI 87-4 | 1987 | 7/89 |
| 1500 | 5-9.2 | 1992 | FI 87-6 | 1987 | 7/89 |
| 1500 | 6-4.1.1 | 1992 | FI 92-1 | 1992 | 4/94 |
| 1500 | 8-3.1, 8-3.2 | 1992 | FI 87-7 | 1987 | 7/89 |
| 1501 | 3-3.1 | 1987 | FI 87-1 | 1987 | 11/90 |
| 1901 | 3-3.1.3 | 1991 | FI 91-7 | 1991 | 7/93 |
| 1901 | Sections 4-4 and 4-7 | 1991 | FI 91-5 | 1991 | 10/91 |
| 1901 | 4-4.4 | 1991 | FI 91-1 | 1991 | 10/91 |
| 1901 | 4-4.4, 4-7.5 | 1991 | FI 91-8 | 1991 | 6/93 |
| 1901 | 4-5.3 | 1991 | FI 91-2 | 1991 | 2/92 |
| 1901 | 6-1.4 | 1991 | FI 91-4 | 1991 | 4/92 |
| 1901 | 8-4.2 | 1991 | FI 91-6 | 1991 | 3/93 |
| 1901 | 9-8.5 | 1991 | FI 91-3 | 1991 | 2/92 |
| 1902 | 3-3.1.3 | 1991 | FI 91-6 | 1991 | 6/93 |
| 1902 | Sections 4-4 and 4-7 | 1991 | FI 91-4 | 1991 | 10/91 |
| 1902 | 4-4.4 | 1991 | FI 91-1 | 1991 | 10/91 |
| 1902 | 4-4.4, 4-7.5 | 1991 | FI 91-7 | 1991 | 6/93 |
| 1902 | 4-5.3 | 1991 | FI 91-2 | 1991 | 2/92 |
| 1902 | 6-1.4 | 1991 | FI 91-3 | 1991 | 4/92 |
| 1902 | 8-4.2 | 1991 | FI 91-5 | 1991 | 3/93 |
| 1903 | 3-3.1.3 | 1991 | FI 91-6 | 1991 | 6/93 |
| 1903 | 5-1.4 (Reprinted 1/93) | 1991 | FI 91-3 | 1991 | 4/92 |
| 1903 | 7-4, 7-7, 8-4, 8-7, 9-4, and 9-6 | 1991 | FI 91-4 | 1991 | 6/92 |
| 1903 | 7-4.4, 7-7.5, 8-4.4, 8-7.5, 9-4.4, and 9-6.5 | 1991 | FI 91-5 | 1991 | 6/93 |
| 1903 | 7-4.4, 8-4.4, and 9-4.4 | 1991 | FI 91-1 | 1991 | 10/91 |
| 1903 | 7-5.3 and 8-5.3 | 1991 | FI 91-2 | 1991 | 2/92 |
| 1904 | 3-3.1.3 | 1991 | FI 91-9 | 1991 | 6/93 |
| 1904 | 4-2.13 | 1991 | FI 91-10 | 1991 | 6/93 |
| 1904 | 5-1.4 | 1991 | FI 91-5 | 1991 | 4/92 |
| 1904 | 7-4, 7-7, 8-4, and 8-7 | 1991 | FI 91-6 | 1991 | 6/92 |
| 1904 | 7-4.4, 7-7.5, 8-4.4, 8-7.5 | 1991 | FI 91-8 | 1991 | 6/93 |
| 1904 | 7-4.4 and 8-4.4 | 1991 | FI 91-1 | 1991 | 10/91 |
| 1904 | 7-5.3 and 8-5.3 | 1991 | FI 91-2 | 1991 | 2/92 |
| 1904 | 7-7.1 | 1991 | FI 91-4 | 1991 | 2/92 |
| 1904 | 10-4.2 | 1991 | FI 91-7 | 1991 | 3/93 |
| 1904 | 11-1.4.2 | 1991 | FI 91-3 | 1991 | 2/92 |
| 1971 | 3-1.12 | 1991 | FI 86-1 | 1986 | 8/88 |
| 1971 | 3-3.2 | 1991 | FI 86-2 | 1986 | 9/89 |
| 1974 | 3-2.1 | 1992 | FI 87-1 | 1987 | 8/88 |
| 1981 | 4-11.20 | 1992 | FI 92-1 | 1992 | 10/95 |
| 8502 | Chapter 7 | 1995 | FI 89-2 | 1989 | 7/90 |
| 8502 | 7-5.4.5 | 1995 | FI 89-1 | 1989 | 11/89 |
| 8502 | 7-8 | 1995 | FI N/A | 1974 | 4/76 |
| 8503 | 2-6 | 1992 | FI 78-1 | 1978 | 1/82 |
| 8503 | 2-6.1, 2-6.2 | 1992 | FI 82-3 | 1982 | 1/85 |



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Formal Interpretation

# NFPA 14

## Standpipe and Hose Systems

**1996 Edition**

**Reference: 1-4**
**F.I. 78-2**

**Question 1:** If a building is equipped with one fire protection water supply which splits off inside the building, and two sets of risers are installed (one set serving fire hose valves and one set serving the automatic fire sprinkler system) is this fire protection system considered to be a "combined system" as defined in Section 1-4 of NFPA 14?

**Answer:** No. Section 1-4 defines a combined system as one where the water piping, not the water supply, serves both 2 1/2 inch outlets for fire department use and outlets for automatic sprinklers.

**Question 2:** If a building is equipped with one fire protection water supply and each riser within the building supplies both the fire department valves and the automatic fire sprinkler system (common risers), is this fire protection system considered to be a "combined system" as defined in Section 1-4 of NFPA 14?

**Answer:** Yes.

**Issue Edition: 1978**
**Reference: 1-8.1**
**Date: January 1979**

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# NFPA 14

## Standpipe and Hose Systems

**1996 Edition**

**Reference: 5-3.2**
**F.I. 78-1**

**Question:** Is it permissible to have two hose outlets at each floor connected to a single standpipe? Each hose outlet is located in a stairwell separated from the other by a fire wall. What is the minimum water supply required? See Figure 1.

**Answer:** It is permissible to have two hose outlets at each floor connected to a single standpipe as shown in Figure 1. The minimum water supply should be as specified in Section 5-3.

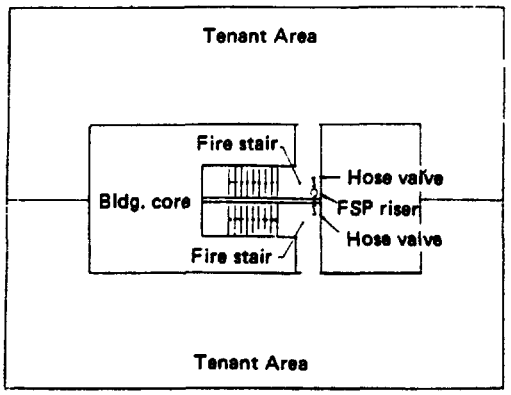


**Figure 1**

**Issue Edition: 1978**
**Reference: 3-2.1**
**Date: August 1978**

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Formal Interpretation

# NFPA 14

## Standpipe and Hose Systems

**1996 Edition**

**Reference: 5-3.2**
**F.I. 86-7**

**Background:** An existing building is protected by a standpipe system. Modifications to the configuration of the occupiable floors are made during a renovation.

**Question:** Is it the intent of NFPA 14 to require an increase in the water supply requirements when additional hose stations are supplied from existing standpipe risers to comply with the provisions of 5-3.2, providing the occupancy hazard and the total floor area to be protected have not changed?

**Answer:** No.

**Issue Edition: 1986**
**Reference: 2-1, 3-2.1**
**Date: December 1988**

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# NFPA 14

## Standpipe and Hose Systems

**1996 Edition**

**Reference: 5-3.2 through 5-3.4**
**FI 93-1 (NFPA 14)**

**Background:** NFPA *101®*, *Life Safety Code®*, mandatorily references the use of NFPA 14, *Standard for the Installation of Standpipe and Hose Systems*, in 7-7.4.2, which states: "Where required by the provisions of another section of this *Code*, standpipe and hose systems shall be provided in accordance with NFPA 14 . . . " The current *Life Safety Code* requires standpipes on stages of assembly occupancies; in detention and correction occupancies; and as part of the high-rise building protection package applicable to new construction in nearly all occupancies.

The Committees on Safety to Life regard the *Life Safety Code* as one of many documents that can require a standpipe system to be provided via the installation requirements of NFPA 14. In other words, given that a code or ordinance requires standpipes, NFPA 14 then details the installation of that required standpipe. NFPA 14 paragraph 5-3.2(d) has been interpreted by some as requiring standpipe hose connections in mercantile covered mall buildings even when there is no code in effect that would mandate a standpipe system.

**Question:** Is it the intent of NFPA 14, subsections 5-3.2 through 5-3.4, to require standpipe systems to be provided in any of the areas detailed if standpipes are not otherwise required by other NFPA documents or other codes and ordinances that reference NFPA 14?

**Answer:** No.

**Issue Edition: 1993**
**Reference: 5-3.2 through 5-3.4**
**Issue Date: August 19, 1993**
**Effective Date: September 8, 1993**

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# NFPA 14

## Standpipe and Hose Systems

**1996 Edition**

**Reference: 5-6.2**
**F.I. 83-1**

**Question 1:** Was it the intent of the committee that the direct supply pipe sizes be based on the total required flow for all of the standpipes in that zone calculated through one of the supply pipes only?

**Answer:** Yes.

**Question 2:** Can the total required flow be split and calculated through both parallel supply pipes to determine the pipe size?

**Answer:** No.

**Issue Edition: 1983**
**Reference: 2-1.5**
**Date: April 1983**

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# NFPA 14

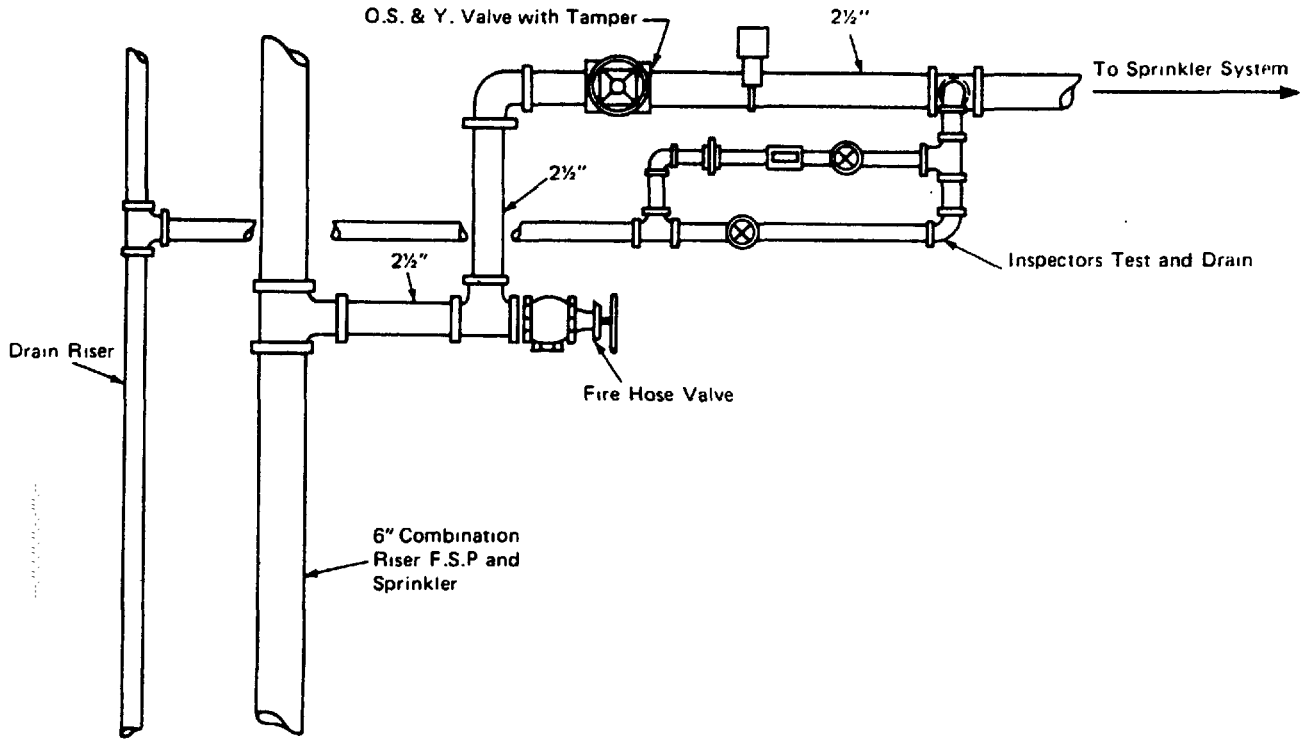
## Standpipe and Hose Systems

**1996 Edition**

**Reference: 5-9.1.3.1***
**F.I. 86-8**

**Question:** Does the following sketch represent an acceptable method of installing the sprinkler system and hose valve provided that all the hydraulic calculations prove sufficient to supply the hose valve and the sprinkler system?

**Answer:** Yes.




**Issue Edition: 1986**
**Reference: Chapter 6**
**Issue Date: March 15, 1989**
**Effective Date: April 25, 1989**

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Formal Interpretation

# NFPA 14

## Standpipe and Hose Systems

**1996 Edition**

**Reference: 7-1.1**
**F.I. 80-2**

**Question 1:** Is it the intent of 7-1.1 to allow the use of an approved automatic fire pump taking water supply from a swimming pool storing 60,000 gallons of water?

**Question 2:** If the answer is no, would the swimming pool be an acceptable source of water supply for a dry standpipe system?

**Question 3:** Given circumstances identical to those mentioned in 1 and 2 above, would a natural or man-made reservoir such as a pond, lake or river (salt or fresh water) constitute an acceptable source of water supply?

**Answer (1, 2 & 3):** A swimming pool, a man-made or natural reservoir, a pond, a lake, or a river (salt or fresh water) would be an acceptable water supply if it is available at all times and the automatic fire pump is installed in accordance with NFPA 20.

**Issue Edition: 1980**
**Reference: 5-2**
**Date: October 1982**

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# NFPA 24

## Private Fire Service Mains and Their Appurtenances

**1995 Edition**

**Reference: 8-6.1**
**F.I. 81-4**

**Question:** Is it the intent of 8-6.1 that all tees, plugs, caps, bends, and hydrant branches on pipe installed underground shall be restrained against movement regardless of type of joint?

**Answer:** No. Gasketed push-on and mechanical joints without special locking devices have limited ability to resist separation due to movement of the pipe. Therefore, all tees, plugs, caps, bends, and hydrant branches having such joints shall be restrained against movement. For the case of welded joints and approved special restrained joints, such as provided by approved mechanical joint retainer glands, locked mechanical and push-on joints, or locking threaded rings, no additional restraint against movement is required.

**Issue Edition: 1981**
**Reference: 8-6.1**
**Date: January 1983**

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# NFPA 24

## Private Fire Service Mains and Their Appurtenances

**1995 Edition**

**Reference: 9-2.3.1**
**F.I. 81-3**

**Question:** With a pump shutoff pressure of 195 psi, what should the hydrostatic test system pressure be?

**Answer:** 245 psi.

**Issue Edition: 1981**
**Reference: 8-9.3.1**
**Date: December 1981**

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# NFPA 24

## Private Fire Service Mains and Their Appurtenances

**1995 Edition**

**Reference: 9-2.3.2**
**F.I. 81-2**

**Question:** Would the following method of measuring leakage conform to the intent of 9-2.3.2?

(a) Record gage reading and pressure drop that occurred during the test period.
(b) Repressure the system to the starting pressure.
(c) Bleed off the water through an equal pressure drop into the measuring container.

For new pipe, the amount of leakage at the joints would be less than 2 quarts per hour per 100 gaskets irrespective of pipe diameter.

**Answer:** Yes, providing the test pressure at the end of the test is at least the amount specified in 9-2.3.1.

**Issue Edition: 1981**
**Reference: 8-9.3.2**
**Date: July 1981**

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# NFPA 33

## Spray Application Using Flammable and Combustible Materials

**1995 Edition**

**Reference: Chapters 2 through 6, Chapter 8**
**F.I. 85-3**

**Question 1:** Chapters 2 and 3 of NFPA 33 provide requirements for the design, location and construction of spray booths and spray rooms.

a) Will compliance with these requirements assure that a spray booth or spray room will provide adequate protection against health hazards from toxic materials?

**Answer:** No.

b) Will compliance with these requirements assure that a spray booth or spray room will meet the Clean Air Act standards for exhaust emissions?

**Answer:** No.

**Question 2:** In Chapter 4 of NFPA 33, certain areas within or adjacent to spray finishing areas are designated as hazardous locations, i.e., Class I or II, Division 1 or 2. Does this designation indicate the extent to which worker health hazards from toxic material may be present?

**Answer:** No.

**Question 3:** In Chapter 5 of NFPA 33, the concentration of flammable materials in a spray booth or room ventilation exhaust stream is required to be maintained below 25 percent of the LFL. Average velocity for spray area ventilation is also prescribed.

a) Will compliance with these sections also assure that concentrations of toxic material will be kept at a safe level, i.e., below the Threshold Limit Values?

**Answer:** No.

b) Will the Standard allow for the concentration to be raised above 25 percent of the LFL in order to meet environmental compliance requirements limiting the amount of material that may be discharged from an exhaust stack?

**Answer:** No.

*(Continued)*

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**Question 4:** Chapter 6 of NFPA 33 provides requirements for the storage and handling of flammable and combustible liquids necessary to prevent fire and explosion.

Will compliance with the Standard also assure that worker exposure to toxic materials will be kept at a safe level, i.e. - below the Threshold Limit Values?

**Answer:** No.

**Question 5:** Chapter 8 of NFPA 33 provides requirements for maintenance in a spray area. These requirements include disposal techniques for overspray collectors; residue scrapings and rags or waste material; storage of contaminated clothing; and the prompt removal of contaminated materials and residues.

a) Will compliance with these requirements assure that all necessary steps have been taken to prevent worker exposure to harmful concentrations of toxic materials?

**Answer:** No.

b) Do the requirements include those steps needed to assure compliance with RCRA rules for hazardous waste disposal?

**Answer:** No.

**Issue Edition: 1985**
**Reference: Chapters 2 through 6, Chapter 8**
**Date: September 1987**

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# NFPA 33

## Spray Application Using Flammable and Combustible Materials

**1995 Edition**

**Reference: 3-3.2, Exception No. 1**
**F.I.**

**Question:** Can a spray booth be installed tight up to masonry or fireproof walls, without the clear space of not less than three feet indicated in 3-3.2, Exception No. 1?

**Answer:** Yes, if all surfaces on which paint residue may collect are readily accessible for cleaning.

**Issue Edition: 1973**
**Reference: 3-10**
**Date: December 1975**

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# NFPA 33

## Spray Application Using Flammable and Combustible Materials

**1995 Edition**

**Reference: 3-5**
**F.I.**

**Question:** Can an open face fluorescent lighting fixture be mounted on a nonhazardous location on the outside of a spray booth wall or ceiling if, after mounting, the open fixture face is totally enclosed by a suitably sealed wired glass panel in the wall or ceiling of the booth, in accordance with Section 3-5?

**Answer:** Yes, provided the fixture will not overheat and is otherwise acceptable when totally enclosed.

**Issue Edition: 1973**
**Reference: 3-11**
**Date: December 1975**

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# NFPA 33

## Spray Application Using Flammable and Combustible Materials

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**Reference: 3-5**
**F.I. 77-1**

**Question 1:** Can an illumination fixture with self-contained or attached glass panel comply with Section 3-5?

**Answer:** Yes, provided that the glass panel accomplishes what is specified in Section 3-5.

**Question 2:** Can an illumination fixture with self-contained or attached glass panel be installed in the field or be used to replace an existing fixture?

**Answer:** Yes, provided that the fixture meets the following requirements:
(a) the glass panel meets the requirements of Section 3-5;
(b) the fixture meets the requirements of Section 4-3 if applicable;
(c) the installation is done in a safe manner.

**Issue Edition: 1977**
**Reference: 3-9**
**Date: June 1979**

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# NFPA 33

## Spray Application Using Flammable and Combustible Materials

**1995 Edition**

**Reference: Figure 4-3.2(a) and (b), and Figure 4-3.4**
**F.I.**

**Background:** The plan views of Figures 4-3.2(a), 4-3.2(b), and 4-3.4 do not clearly indicate a Division 2 hazardous area extending across the top of the booth.

**Question:** Is the space over the booth, extending 5 feet horizontally back and over the top of the booth from the open front, and 3 feet vertically above the booth, a Class I, Division 2 location?

**Answer:** Yes.

**Issue Edition: 1973**
**Reference: 4-7.2**
**Date: December 1975**

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## Spray Application Using Flammable and Combustible Materials

**1995 Edition**

**Reference: 4-3.3**
**F.I.**

**Question:** Does 4-3.3 require that the Division 2 space up to 5 feet above an open top spray booth extend horizontally beyond the edges of the booth top, or down the sides of the booth, if there are no openings in the booth wall?

**Answer:** No.

**Issue Edition: 1973**
**Reference: 4-7.3**
**Date: December 1975**

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## Spray Application Using Flammable and Combustible Materials

**1995 Edition**

**Reference: 4-3.4**
**F.I.**

**Question:** Is the outside space around filter doors and personnel doors always classified nonhazardous in accordance with 4-3.4?

**Answer:** No. Such doors are considered openings unless interlocked so that spraying operations are stopped when such doors are open.

**Issue Edition: 1973**
**Reference: 4-7.4**
**Date: December 1975**

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## Spray Application Using Flammable and Combustible Materials

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**Reference: 4-3.4**
**F.I.**

**Background:** There is an opening for a conveyor on each of the two side walls of a booth, extending to the booth ceiling.

**Question:** Does the Division 2 space extending three feet from the opening in accordance with 4-3.4 include a space three feet from the top edge of the opening extending horizontally over the closed top of the booth?

**Answer:** Yes.

**Issue Edition: 1973**
**Reference: 4-7.4**
**Date: December 1975**

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## Spray Application Using Flammable and Combustible Materials

**1995 Edition**

**Reference: 4-6**
**F.I. 85-4**

**Question 1:** Is it the intent of Section 4-6 to preclude the use of flexible power cables in any spray area where deposits of combustible residue may readily accumulate?

**Answer:** No.

**Question 2:** Would the use of flexible power cable, that is specifically listed for locations containing deposits of dangerous quantities of flammable or combustible vapors, mists, residues, dust or deposits (as applicable) and is used on electrical equipment in a spray area where deposits of combustible residue may readily accumulate, be in accordance with Section 4-6?

**Answer:** Yes.

**Issue Edition: 1985**
**Reference: 4-5**
**Date: September 1987**

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## Spray Application Using Flammable and Combustible Materials

**1995 Edition**

**Reference: 7-1, 7-3, Appendix A-7 through A-7-6**
**F.I. 85-2**

**Question 1:** Do Sections 7-1 and 7-3 of NFPA 33 mean that paint spray rooms or booths are required to be sprinklered or be equipped with another type fire extinguisher system where sprinkler protection is not available?

**Answer:** Yes.

**Question 2:** In Appendix A-7 through A-7-6 of NFPA 33, does the use of the word instead of the word imply that fire extinguishing systems are not required in all paint spray rooms and booths?

**Answer:** No.

**Question 3:** Are manufactured, pre-fab(ricated) and portable paint spray booths, which are not equipped with built-in fire extinguishing systems, yet advertised as meeting UL, BOCA, NFPA, and OSHA standards, exempt from the requirements for sprinkler protection or an approved fire extinguishing system, as required by Sections 7-1 and 7-3 of NFPA 33?

**Answer:** No.

**Question 4:** Do the requirements of NFPA 33, specifically (those of) sprinkler protection or an approved fire extinguishing system, apply to a paint spray room or booth that has been constructed outside and separated from the main body shop premises?

**Answer:** Yes.

**Issue Edition: 1985**
**Reference: Chapter 7, Appendix A-7-2 through A-7-8**
**Date: May 1987**

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# NFPA 33

## Spray Application Using Flammable and Combustible Materials

**1995 Edition**

**Reference: 9-3.6(c), 9-4.1**
**F.I. 85-1**

**Question:** Is it the intent of Chapter 9, Fixed Electrostatic Apparatus, to include in its scope apparatus which is not capable of causing an arc of sufficient intensity to ignite the most hazardous of those vapor-air mixtures or powder-air mixtures, likely to be encountered, upon coming in contact with a grounded object under all normal operating conditions?

**Answer:** Yes.

**Question:** Would the requirements stated in 9-3.6(c) or 9-4.1 be necessary if fixed electrostatic apparatus were not capable of causing an arc of sufficient intensity to ignite the most hazardous of those vapor-air mixture or powder-air mixtures, likely to be encountered, upon coming in contact with a grounded object under all normal operating conditions?

**Answer:** No.

**Issue Edition: 1985**
**Reference: 9-7, 9-9(c)**
**Date: December 1984**

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# NFPA 33

## Spray Application Using Flammable and Combustible Materials

**1995 Edition**

**Reference: 11-1, 11-2**
**F.I. 89-1 (NFPA 33)**

**Question:** Does Section 11-2 require that spray booths, spray rooms, and similar enclosures, that are used alternately for spray application of flammable and combustible materials and for drying, curing, or fusion of the applied materials, also comply with Section 11-1 and thereby with all applicable requirements of NFPA 86, *Standard for Ovens and Furnaces*, when actually being used for drying, curing, or fusion?

**Answer:** Yes.

**Issue Edition: 1989**
**Reference: 11-1, 11-4**
**Issue Date: April 7, 1995**
**Effective Date: April 27, 1995**

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# NFPA 59A

## Liquefied Natural Gas (LNG)

**1996 Edition**

**Reference: 5-4.1**
**F.I. 79-1**

**Question:** An open panel LNG vaporizer has the following characteristics:

1. LNG is supplied to the vaporizer by LNG supply pumps and a means is provided to shut off the flow of LNG to the panels.

2. Seawater is supplied by pumps, and the vaporizer is provided with a means to shut off the flow of sea water to the panels as required by NFPA 59A for heated vaporizers.

3. The maximum allowable working pressure of the LNG system exceeds the maximum LNG pump discharge pressure.

4. The equipment is selected such that the LNG flow to the vaporizer at the maximum allowable working pressure is zero.

Is it the intent of NFPA 59A, 5-4.1 that a safety relief valve(s) for such an LNG vaporizer be sized in accordance with 5-4.1.1 and 5300, respectively.

**Answer:** Yes. The vaporizer described is considered to be a remote heated vaporizer.

**Issue Edition: 1979**
**Reference: 5-4.1**
**Date: August 1982**

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# NFPA 59A

## Liquefied Natural Gas (LNG)

**1996 Edition**

**Reference: 6-2.4**
**F.I.**

**Question:** Can a fuel control valve having a body of cast iron be classified for service in the fuel burning system on an LNG vaporizer in the case where the fuel control valve is not the safety shutoff valve nor is it used for safety shutdown?

**Answer:** Paragraph 6-2.4 of NFPA 59A specifies provisions for valves. Under the referenced standard, ANSI-B31.3, Section 300.1.4(a), valves within the following design condition ranges are not subject to the specified rules and the responsibility for safety is the designer's and the owner's.

| Press. (psig) | Temp. (°F) |
|---|---|
| 0-15 | -20°F to +360°F |

Further, because of fire hazard, it is the opinion of the Chapter 6 Subcommittee that the safety shutoff valve upstream of the fuel control valve shall be steel or cast steel.

**Issue Edition: 1972**
**Reference: 613**
**Date: January 1974**

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# NFPA 61

## Fires and Dust Explosions in Agricultural and Food Product Facilities

**1995 Edition**

**Reference: Section 11-1**
**F.I. 80-1**

**Background:** A cylindrical corrugated steel bin has a raised perforated floor with a plenum below. An exterior heating unit supplies heated air to the plenum; the heated air rises through the stored commodity (an agricultural commodity) and exits through vents in the roof of the bin. To provide uniform drying, the bin is provided with several vertical augers mounted on a horizontal beam that is electrically driven circumferentially around the bin while the augers mix the contents.

**Question 1:** Does (the interior of) the bin constitute a hazardous (classified) location as defined by Articles 500 and 502 of the *National Electrical Code*, NFPA 70, or as intended by Section 11-1 of NFPA 61?

**Answer:** Yes. Dust would be in suspension during filling of the bin and, possibly, during drying.

**Question 2:** Must the wiring and electrical equipment within the bin comply with and be installed according to Article 502 of the *National Electrical Code*, NFPA 70, and Section 11-1 of NFPA 61?

**Answer:** Yes.

**Issue Edition: 1980 of NFPA 61B**
**Reference: Section 11-1**
**Date: July 1981**

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Formal Interpretation

# NFPA 80

## Fire Doors and Fire Windows

**1995 Edition**

**Reference: Entire Document**
**F.I. 90-2**

**Background:** Paragraph 16-2.10.2 of NFPA *101*-1988, *Life Safety Code*, requires:

"An approved luminescent or self-luminous exit sign shall be placed on each door to an exit stair from an interior corridor."

The details of such exit sign's size, construction, and illumination are contained in Section 5-10 of NFPA 101.

**Question 1:** May an exit sign as described in the background above be affixed to rated fire doors without violating any limit?

**Answer:** Yes.

**Question 2:** May an exit sign as described in the background above be affixed to rated fire doors without violating any limitations of NFPA 80?

**Answer:** Yes, provided it is surface-applied on the lower 16 inches of the door.

**Issue Edition: 1990**
**Reference: Entire Document**
**Issue Date: July 9, 1991**
**Effective Date: July 29, 1991**

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Formal Interpretation

# NFPA 80

## Fire Doors and Fire Windows

**1995 Edition**

**Reference: General**
**F.I. 90-1**

**Question:** If a glazing material is fabricated as a wall and the wall assembly is successfully tested per NFPA 251, *Standard Methods of Fire Tests of Building Construction and Materials*, for some given fire resistance rating, is it regulated by NFPA 80, *Standard for Fire Doors and Windows*?

**Answer:** No.

**Issue Edition: 1990**
**Reference: General**
**Issue Date: April 2, 1991**
**Effective Date: April 22, 1991**

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# NFPA 80

## Fire Doors and Fire Windows

**1995 Edition**

**Reference: 1-7 and General**
**F.I. 90-3**

**Background:** NFPA 252, *Standard Methods of Fire Tests of Door Assemblies*, qualifies door assemblies for use as fire doors designed to protect door openings in fire resistive walls when required by the authority having jurisdiction. Part of the conditions of acceptance requires that the door assembly shall withstand both the fire endurance test and the hose stream test without developing any openings through the assembly except for dislodging of small portions of glass light during the hose stream test. This exception is based on the installation of wired glass in the glass light. New glazing materials (other than wired glass) have been developed that remain entirely in place without developing any openings through the assembly during both the fire endurance test and the hose stream test. However, those new glazing materials fall under the definition for glazing material in Section 1-4 of NFPA 80, *Standard for Fire Doors and Windows*, and are thus regulated by Section 1-7 of that Standard.

**Question:** If a fire doors assembly containing glazing material is successfully tested per NFPA 252, *Standard Methods of Fire Test of Door Assemblies*, and the glazing material is not dislodged so as to develop openings through the assembly as described in that standard, thus qualifying the glazing material as part of the door and not as a glass light permitted to have small portions of glass dislodged during the hose stream test, is it intended to limit the size and area of the glazing material in accordance with 1-7.3 of NFPA 80, *Standard for Fire Doors and Windows*?

**Answer:** No.

**Issue Edition: 1990**
**Reference: 1-7 and General**
**Issue Date: July 9, 1991**
**Effective Date: July 29, 1991**

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# NFPA 80

## Fire Doors and Fire Windows

**1995 Edition**

**Reference: 1-7.5, 13-2.3**
**F.I. 90-4**

**Question:** Given the requirements for permanent marking of individual glazing units found in 1-7.5 and 13-2.3, would acid etched or sand blasted labels applied under a third party factory follow-up program meet the committee's intent for permanent marking?

**Answer:** Yes.

**Issue Edition: 1990**
**Reference: 1-7.4, 13-2.3**
**Issue Date: November 6, 1991**
**Effective Date: November 26, 1991**

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# NFPA 80

## Fire Doors and Fire Windows

**1995 Edition**

**Reference: 2-9.1**
**F.I. 80-4**

**Question:** Is it the intent of 2-9.1 to allow for the use of three-hour fire protection rated door assemblies without an astragal?

**Answer:** No, it is the intent that pairs of doors with a fire protection rating of more than one and a half hours have an overlapping astragal.

**Issue Edition: 1983**
**Reference: 2-7**
**Date: April 1985**

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# NFPA 82

## Incinerators, Waste, and Linen Handling Systems and Equipment

**1994 Edition**

**Reference: 2-2.11.2**
**F.I. 90-1**

**Background:** Paragraph 2-2.11.2 requires that chimneys on incinerators designed for certain operating temperatures shall extend 20 feet higher than any portion of any building within 50 feet.

**Question:** Does "any building" include the building in which the incinerator is located?

**Answer:** Yes.

**Issue Edition: 1990**
**Reference: 2-2.11.2**
**Issue Date: August 24, 1992**
**Effective Date: September 14, 1992**

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# NFPA 86

## Ovens and Furnaces

**1995 Edition**

**Reference: 3-3**
**F.I. 90-1**

**Background:** Consider gas fired batch ovens that are representative of those used in the automotive refinishing industry. These ovens typically contain flammable and combustible liquids and flammable vapors, are without recirculation of air (all of the supply air is exhausted), and have relatively low operating temperatures [maximum operating temperatures limited to approximately 80°C (176°F)].

**Question 1:** For an indirect fired burner, are explosion vents required?

**Answer:** Yes.

**Question 2:** For a direct fired burner, are explosion vents required?

**Answer:** Yes.

**Question 3:** If explosion vents are required, is the preferred ratio 1:15?

**Answer:** Yes.

**Issue Edition: 1990**
**Reference: 2-2.3**
**Issue Date: October 25, 1991**
**Effective Date: November 14, 1991**

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# NFPA 99

## Health Care Facilities

**1996 Edition**

**Reference: 3-4.1.1.2**
**F.I. 84-2**

**Question:** Is it the intent of 3-4.1.1.2 to allow a group of adjacent hospitals, which have a contractual agreement relative to the acquisition of electric power, to use the same generating units for their normal electric power source, and an external utility service as the alternate power source?

**Answer:** Yes.

Note: Each hospital otherwise meets the requirements for an essential electrical system as outlined in Chapter 3 of NFPA 99.

**Issue Edition: 1984**
**Reference: 8-2.1.1.2, Exception 1**
**Date: March 1986**

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Formal Interpretation

# NFPA 99

## Health Care Facilities

**1996 Edition**

**Reference: 3-4.2.1.4(i)**
**F.I. 77-1**

**Question:** Is it the intent of 3-4.2.1.4(i) to recommend (i.e., not make mandatory) that the manual operation of an automatic transfer switch be effected externally (i.e., without opening the switch's enclosure) as is recommended for the manual operation of nonautomatic switches (see 3-4.2.1.6(a))?

**Answer:** Yes.

**Issue Edition: 1977 of NFPA 76A**
**Reference: 8-2.2.4.9**
**Date: September 1978**

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# NFPA 99

## Health Care Facilities

**1996 Edition**

**Reference: 3-4.2.2.1**
**F.I. 77-2**

**Question:** Is it the intent of the Committee that 3-4.2.2.1 permit one feeder, protected by an overcurrent device at the generator, to serve a distribution board where the power is distributed through the necessary transfer switch or switches and branches or systems?

**Answer:** Yes.

**Issue Edition: 1977 of NFPA 76A**
**Reference: 4-1**
**Date: July 1979**

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Formal Interpretation

# NFPA 99

## Health Care Facilities

**1996 Edition**

**Reference: 3-5.2.2.1**
**F.I. 78-1**

**Question:** Is the measurement technique as outlined in Appendix A-3-3.3.2.3 acceptable for use in 3-5.2.2.1?

**Answer:** Yes.

**Comment:** The text in 3-5.2.2.1 is a determination of the integrity of the isolation from ground of the two power conductors. The test in 3-3.3.2.3 is a determination of the integrity of the grounding system. As noted in the text, the test in 3-5.2.2.1 is not to be conducted unless the connection between the line isolation monitor and reference grounding point is open at the time of the test.

**Issue Edition: 1978 of NFPA 56A**
**Reference: 3-3.3.1**
**Date: March 1980**

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# NFPA 99

## Health Care Facilities

**1996 Edition**

**Reference: 4-3.1.2.3(a)**
**F.I. 90-1**

**Background:** Paragraph 4-3.1.2.2(e) permits in-line shutoff valves for maintenance and future expansion provided that such valves are in a secure area or are locked open. Paragraph 4-3.1.2.3(a) requires anesthetizing locations and other life support areas to be supplied directly from risers without intervening valves except for readily accessible valves outside each area.

**Question:** Does 4-3.1.2.3(a) supersede 4-3.1.2.2(e)?

**Answer:** No.

**Issue Edition: 1990**
**Reference: 4-4.1.3.1**
**Issue Date: September 4, 1991**
**Effective Date: September 24, 1991**

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# NFPA 99

## Health Care Facilities

**1996 Edition**

**Reference: 5-4.2.3**
**F.I. 73-1**

**Question:** Was it the intent of the Committee that the term "roof" in 5-4.2.3 have that meaning as defined in Webster's Third International Dictionary (since the term was not defined in Chapter 2): The outside cover of a building or structure including the roofing and all the materials and construction necessary to maintain the cover upon its walls or other support?

**Answer:** Yes.

**Issue Edition: 1973 of NFPA 56C**
**Reference: 3-3.4.6**
**Date: March 1980**

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# NFPA 99

## Health Care Facilities

**1996 Edition**

**Reference: 12-4.1.2.6(d)**
**F.I.**

**Background:** Paragraph 12-4.1.2.6(d) states that an isolation transformer in the isolated power system shall not serve more than one room (except for a special system intended to serve such things as portable X-ray units). This mandatory requirement was adopted in May 1971 after having been presented as a nonmandatory recommendation in the 1954 through 1970 editions of the document. An Official Interpretation published in the NFPA *Fire News* in 1958 confirmed that separate transformers for each room were recommended but not required at that time. Since 12-4.1.2.6(d) does not exempt isolated power systems installed prior to May 1971, one could imply that all such systems shall now have one or more separate isolation transformers for each room.

**Question:** Is it the intent of 12-4.1.2.6(d) to require one or more separate isolation transformers for each room of an anesthetizing location regardless of the date of installation?

**Answer:** No, provided the isolated power system and its associated isolation transformers meet the requirements of the edition of the standard in effect at the date of installation.

**Issue Edition: 1973 of NFPA 56A**
**Reference: 3324**
**Date: December 1977**

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Formal Interpretation

# NFPA 99

## Health Care Facilities

**1996 Edition**

**Reference: Annex 2, 2-6.3.2**
**F.I.**

**Background:** Annex 2, 2-6.3.2 requires the use of an isolated power system in flammable anesthetizing locations. In neither case is any specific mention made of isolated power systems being required in any facility constructed prior to the first mention of such systems (1941).

**Question:** Is it the intent of the Technical Committee on Gas Delivery Equipment that the requirements of 2-6.3 of Annex 2, such as 2-6.3.2, be applied retroactively?

**Answer:** No. Paragraph 2-6.3 of Annex 2 may be enforced only upon adoption by the authority having jurisdiction over the hospital in question. Only this authority has the right to demand retroactivity. Since the Committee accepts the possibility that such a demand may be made, it has provided for such an eventuality in several places, such as in 2-6.3.2(a). But such alternatives do not imply that the Committee wishes to see its standard applied retroactively. It must emphatically state that such a determination must be made only by the authority having jurisdiction.

**Issue Edition: 1973 of NFPA 56A**
**Reference: 1215, 3311**
**Date: July 1976**

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Formal Interpretation

# NFPA 99

## Health Care Facilities

**1996 Edition**

**Reference: Annex 2, 2-6.3.8(d)2**
**F.I.**

**Background:** Annex 2, 2-6.3.8(d)2 describes the requirements for conductive tubing used on suctioning apparatus operating from a vacuum outlet.

**Question:** Is it the intent of Annex 2, 2-6.3.8(d)2 to permit the use of transparent tubing having a conductive strip in lieu of a tube that is everywhere conductive throughout its body but perhaps not transparent, provided such transparent tubing is not used elsewhere (such as on an anesthesia machine)?

**Answer:** Yes.

**Issue Edition: 1973 of NFPA 56A**
**Reference: 4642**
**Date: July 1976**

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# NFPA 99

## Health Care Facilities

**1996 Edition**

**Reference: Annex 2, 2-6.3.8(f)3**
**F.I.**

**Background:** Annex 2, 2-6.3.8(f)3 lists two test methods for determining the antistatic properties of sheeting, film and textiles used in flammable anesthetizing locations.

**Question:** Is it the intent of Annex 2, 2-6.3.8(f)3 to require antistatic sheeting, film and textiles to meet the requirements of *either* (but not necessarily both) of the tests described in Annex 2, 2-6.3.8(f)3(a) and Annex 2, 2-6.3.8(f)3(b)?

**Answer:** Yes.

**Issue Edition: 1973 of NFPA 56A**
**Reference: 4663**
**Date: July 1976**

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# NFPA 99

## Health Care Facilities

**1996 Edition**

**Reference: Annex 2, 2-6.3.8(f)3(a)**
**F.I.**

**Background:** Annex 2, 2-6.3.8(f)3(a) describes one of the two test procedures for determining the antistatic properties of sheeting, film and textiles used in flammable anesthetizing locations. The procedure (Method 4046 of Federal Test Method Standard 101B) requires the specimen under test be charged to 5 kilovolts with respect to ground and the rate at which this charge decays be measured. Occasionally a test specimen will stably change only to a voltage less than 5 kilovolts. An alternative test method (measurement of resistance) is given in Annex 2, 2-6.3.8(f)3(b). In a previous Formal Interpretation it was ruled that a material under test must meet the requirements of *either* Annex 2, 2-6.3.8(f)3(a) or Annex 2, 2-6.3.8(f)3(b), but was not required to meet both.

**Question:** Does a test specimen which cannot be charged to a full 5 kilovolts, but whose charge does otherwise decay in the fashion prescribed in Annex 2, 2-6.3.8(f)3(a) meet the intent of Annex 2, 2-6.3.8(f)3?

**Answer:** Yes.

**Issue Edition: 1973 of NFPA 56A**
**Reference: 4663(a)**
**Date: January 1978**

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# NFPA 99

## Health Care Facilities

**1996 Edition**

**Reference: Annex 2, 2-6.3.8(f)3(b)**
**F.I.**

**Background:** Annex 2, 2-6.3.8(f)3(b) describes one of the two test procedures for determining the antistatic properties of sheeting, film and textiles used in flammable anesthetizing locations. The test (American Association of Textile Chemists and Colorists Method 76-1972) requires the resistivity of the material to be less than $10^{11}$ ohms per unit square of the material and requires that for textiles the measurement be made in several different directions parallel to the textile's yarn or thread. It also notes that it may be necessary to differentiate between the two sides of the material.

**Question:** Assuming that measurements are made in the directions specified, is it the intent of Annex 2, 2-6.3.8(f)3(b) that all measurements made on textiles in accordance with AATCC Method 76-1972 be less than $10^{11}$ ohms regardless of direction or side?

**Answer:** Yes.

**Issue Edition: 1973 of NFPA 56A**
**Reference: 4663(b)**
**Date: January 1978**

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# NFPA 99

## Health Care Facilities

**1993 Edition**

**Reference: 12-4.1.3.8(f)(3)(i)**
**F.I.**

**Background:** Paragraph 12-4.1.3.8(f)(3)(i) describes one of the two test procedures for determining the antistatic properties of sheeting, film and textiles used in flammable anesthetizing locations. The procedure (Method 4046 of Federal Test Method Standard 101B) requires the specimen under test be charged to 5 kilovolts with respect to ground and the rate at which this charge decays be measured. Occasionally a test specimen will stably change only to a voltage less than 5 kilovolts. An alternative test method (measurement of resistance) is given in 12-4.1.3.8(f)(3)(ii). In a previous Formal Interpretation it was ruled that a material under test must meet the requirements of *either* 12-4.1.3.8(f)(3)(i) or 12-4.1.3.8(f)(3)(ii), but was not required to meet both.

**Question:** Does a test specimen which cannot be charged to a full 5 kilovolts, but whose charge does otherwise decay in the fashion prescribed in 12-4.1.3.8(f)(3)(i) meet the intent of 12-4.1.3.8(f)(3)?

**Answer:** Yes.

**Issue Edition: 1973 of NFPA 56A**
**Reference: 4663(a)**
**Date: January 1978**

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## Health Care Facilities

**1993 Edition**

**Reference: 12-4.1.3.8(f)(3)(ii)**
**F.I.**

**Background:** Paragraph 12-4.1.3.8(f)(3)(ii) describes one of the two test procedures for determining the antistatic properties of sheeting, film and textiles used in flammable anesthetizing locations. The test (American Association of Textile Chemists and Colorists Method 76-1972) requires the resistivity of the material to be less than $10^{11}$ ohms per unit square of the material and requires that for textiles the measurement be made in several different directions parallel to the textile's yarn or thread. It also notes that it may be necessary to differentiate between the two sides of the material.

**Question:** Assuming that measurements are made in the directions specified, is it the intent of 12-4.1.3.8(f)(3)(ii) that all measurements made on textiles in accordance with AATCC Method 76-1972 be less than $10^{11}$ ohms regardless of direction or side?

**Answer:** Yes.

**Issue Edition: 1973 of NFPA 56A**
**Reference: 4663(b)**
**Date: January 1978**

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## Health Care Facilities

**1996 Edition**

**Reference: Annex 2, 2-6.3.8(i)**
**F.I.**

**Background:** Annex 2 2-6.3.8(i) describes the requirements for furniture used in a flammable anesthetizing location.

**Question: 1.** Does Annex 2, 2-6.3.8(i) rule out the use of insulating or nonconductive materials in furniture used in flammable anesthetizing locations provided it has a conductive frame that meets the requirements of Annex 2, 2-6.3.8(i)(1) through (3), and

**2.** Does a vertical surface bulletin board constitute a surface on which movable objects may be placed such that Annex 2, 2-6.3.8(i)(3) applies?

**Answer:** No to both parts of the question. However, the Committee emphasizes that this interpretation should not be construed to allow nonconductive seats or cushions on stools and chairs in flammable anesthetizing locations.

**Issue Edition: 1973 of NFPA 56A**
**Reference: 469**
**Date: July 1976**

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# NFPA 99

## Health Care Facilities

**1996 Edition**

**Reference: 16-3.3.2, 17-3.3.2**
**F.I. 87-1**

**Question:** Is it the intent of 16-3.3.2 and 17-3.3.2 to allow the use of a generator set for supplying electric power for required lighting and alarms?

**Answer:** Yes.

**Comment:** The generator set must meet the applicable requirements for generator sets in Chapter 3.

**Issue Edition: 1987**
**Reference: 16-3.3.2, 17-3.3.2**
**Date: May 1988**

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# NFPA 102

## Assembly Seating, Tents and Membrane Structures

**1995 Edition**

**Reference: 4-6.2**
**F.I. 78-2**

**Question:** With respect to the one-hour fire resistance rated separations between maximum size grandstand units, as required by 4-6.2, is it the Committee's intent that in a wood grandstand:

1) with a canopy, that the one-hour fire resistance rated separation be continuous from ground level to the underside of the canopy, and

2) without a canopy, that the one-hour fire resistance rated separation continue to a height approximately equal to that of a guardrail?

**Answer:** Yes.

**Issue Edition: 1978**
**Reference: 8-7.2**
**Date: September 1985**

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# NFPA 110

## Emergency and Standby Power Systems

**1996 Edition**

**Reference: 5-2.1**
**F.I. 93-1 (NFPA 110)**

**Background:** NFPA 110 restricts what can be placed in the same room with a Level 1 emergency power supply system.

**Question:** In 5-2.1 does "other equipment" include a water pipe, such as a water sprinkler main?

**Answer:** No.

**Issue Edition: 1993**
**Reference: 5-2.1**
**Issue Date: August 30, 1993**
**Effective Date: September 19, 1993**

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# NFPA 110

## Emergency and Standby Power Systems

**1996 Edition**

**Reference: 5-2.1**
**F.I. 93-2 (NFPA 110)**

**Background:** Some authorities having jurisdiction are interpreting 5-2.1 and the sketches in Appendix B to mean that a two-hour rated separation is required between the EPS and the EPSS. This is not the committee's intent. Many manufacturers package automatic transfer switch(s), which are a part of the EPSS, with the generator control, which is part of the EPS. There have been no reports of hazards associated with this configuration. If a two-hour rated separation were required, this type of installation would require unnecessary system reconfiguration, or it would require additional space that may not be feasible.

**Question:** Is it the intent of 5-2.1 of NFPA 110 to require a two-hour rated separation between the Emergency Power Supply (EPS) and the Emergency Power Supply System (EPSS)?

**Answer:** No.

**Issue Edition: 1993**
**Reference: 5-2.1**
**Issue Date: June 23, 1995**
**Effective Date: July 13, 1995**

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# NFPA 220

## Types of Building Construction

**1995 Edition**

**Reference: Chapter 3**
**F.I. 75-11**

**Question:** Is it the intent of NFPA 220, with respect to secondary roof elements, to prohibit the installation of skylights in secondary roof construction, regardless of the size of the skylight?

**Answer:** No. Regulation or control of skylights is outside the scope of NFPA 220. NFPA 220 is concerned with the structural integrity of building construction assemblies, including roofs, in order to define types of building construction; it is not, therefore, the intent of NFPA 220 to prohibit skylights of any size, provided said integrity is maintained. Other codes or standards may, however, place restrictions on the use and protection of skylights.

**Issue Edition: 1975**
**Reference: 3-1**
**Date: April 1978**

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# NFPA 423

## Construction and Protection of Aircraft Engine Test Facilities

**1994 Edition**

**Reference: 5-6.3**
**F.I. 89-1 (NFPA 423)**

**Question 1:** For automatic sprinkler system protection for an engine test cell, is the "protected area" the entire floor area?

**Answer:** Yes.

**Question 2:** For water deluge system protection for an engine test cell, is the "protected area" the entire floor area?

**Answer:** Yes.

**Issue Edition: 1989**
**Reference: 5-6.3**
**Issue Date: April 18, 1994**
**Effective Date: May 8, 1994**

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# NFPA 481

## Titanium

**1995 Edition**

**Reference: Section 5-3**
**F.I. 87-1**

**Question:** Is it the intent of the Committee that the requirements of Chapter 5, Machining & Fabrication; notably Section 5-3, Titanium Dust Collection; be applied to commercially pure titanium as well as the titanium alloys enumerated in Appendix B, Section B-2, Properties?

**Answer:** Yes.

**Issue Edition: 1987**
**Reference: Section 5-6**
**Issue Date: July 17, 1991**
**Effective Date: August 6, 1991**

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# NFPA 820

## Fire Protection in Wastewater Treatment and Collection Facilities

**1995 Edition**

**Reference: Tables 2, 3, and 4**
**F.I. 92-1**

**Background:** In Tables 2, 3, and 4, footnote code A is defined as "Ventilated at less than 12 air changes per hour."

**Question 1:** Does this definition include mechanically ventilated at any rate less than 12 air changes per hour (including 1 air change per hour or less)?

**Answer:** Yes.

**Question 2:** Does this definition include ventilated with a static vent (without mechanical ventilation)?

**Answer:** Yes.

**Issue Edition: 1992**
**Reference: Tables 2, 3, 4, and 5**
**Issue Date: May 11, 1992**
**Effective Date: June 1, 1992**

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# NFPA 1123

## Fireworks Display

**1995 Edition**

**Reference: Table A-2-3.6.3**
**F.I. 90-1**

**Question:** Are mortars for 3-in. finale racks acceptable with 14 in. inside length to fire single break shells (i.e., Chinese Star Shells and Domestic Salutes) to achieve an acceptable altitude of those shells?

**Answer:** Yes.

**Issue Edition: 1990**
**Reference: Entire Document**
**Issue Date: October 1, 1991**
**Effective Date: October 21, 1991**

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# NFPA 1123

## Fireworks Display

**1995 Edition**

**Reference: 2-2.4, 2-3.3.6*, 3-1.3.4, 3-3.2**
**FI 90-2 (NFPA 1123)**

**Question 1a:** Is the mortar line required to be twice the distance from the bulk storage area?

**Answer:** Yes.

**Question 1b:** Is the display site required to be twice the distance from the spectators?

**Answer:** No.

**Question 1c:** Are the spectators required to be twice the distance from the bulk storage area?

**Answer:** No.

**Question 2a:** Does NFPA 1123 prohibit the reloading of paper mortars during the same display?

**Answer:** No.

**Question 2b:** Does NFPA 1123 specify one type of mortar over another for the purposes of reloading during the same display?

**Answer:** No.

**Question 2c:** Does NFPA 1123 in addressing the three most common type of mortars being used today, do so without prejudice?

**Answer:** Yes.

**Question 3:** Are mortars permitted to be located in the fallout area?

**Answer:** Yes.

**Issue Edition: 1990**
**Reference: 2-2.4, 2-3.3.7*, 3-1.3.2, 3-3.2**
**Issue Date: December 1, 1993**
**Effective Date: December 21, 1993**

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# NFPA 1501

## Fire Department Safety Officer

**1987 Edition**

**Reference: 3-3.1**
**F.I. 87-1**

**Question:** Is it the intent of 3-3.1 of NFPA 1501, *Standard for Fire Department Safety Officer,* 1987 Edition, that the safety officer is responsible for and not necessarily required to personally develop, review, and revise rules, regulations, and standard operating procedures pertaining to the fire department occupational safety and health program for implementation by the fire chief?

**Answer:** Yes.

**Issue Edition: 1987**
**Reference: 3-3.1**
**Issue Date: November 15, 1990**
**Effective Date: December 5, 1990**

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Formal Interpretation

# NFPA 1902

## Initial Attack Fire Apparatus

**1991 Edition**

**Reference: 3-3.1.3**
**FI 91-6**

**Question 1:** Is it the intent of this section to provide a unique means of identifying a wire/circuit to prevent confusing it with another wire/circuit, if electrical system repairs become necessary?

**Answer:** Yes.

**Question 2:** If it is decided to use a color coding scheme instead of imprinting on the wire its function, does this section prevent the use of a wire of the same color and size for other unrelated circuits?

**Answer:** Yes.

**Question 3:** Is it the intent of this section to require a means of identifying all wires, including shielded cables (commonly used for communication purposes) and type S.O. wiring (commonly used to wire 110- and 220-volt devices such as receptacles and lights)?

**Answer:** No.

**Issue Edition: 1991**
**Reference: 3-3.1.3**
**Issue Date: June 17, 1993**
**Effective Date: July 7, 1993**

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Formal Interpretation

# NFPA 1902

## Initial Attack Fire Apparatus

**1991 Edition**

**Reference: Sections 4-4 and 4-7**
**F.I. 91-4**

**Background:** The standard refers to the sizes of intake and discharge connections without indicating whether the size is determined by the nominal size of the fire hose thread on the connection or the actual opening (bore) size.

**Question:** Is the size of a pump intake connection or a pump discharge outlet determined by the nominal size of the first fire hose thread from the pump available to the operator?

**Answer:** Yes.

**Issue Edition: 1991**
**Reference: Sections 4-4 and 4-7**
**Issue Date: June 19, 1992**
**Effective Date: July 9, 1992**

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# NFPA 1902

## Initial Attack Fire Apparatus

**1991 Edition**

**Reference: 4-4.4**
**F.I. 91-1**

**Question:** Are butterfly valves attached by hose thread to 4-in. to 6-in. suction intakes considered part of this standard and require 3/4-in. bleeder valves?

**Answer:** Yes.

**Issue Edition: 1991**
**Reference: 4-4.4**
**Issue Date: October 4, 1991**
**Effective Date: October 24, 1991**

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Formal Interpretation

# NFPA 1902

## Initial Attack Fire Apparatus

**1991 Edition**

**Reference: 4-4.4, 4-7.5**
**FI 91-7**

**Question:** Does the 3/4-inch bleeder valve require a full 3/4-inch inside diameter opening?

**Answer:** No.

**Issue Edition: 1991**
**Reference: 4-4.4, 4-7.5**
**Issue Date: June 17, 1993**
**Effective Date: July 7, 1993**

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Formal Interpretation

# NFPA 1902

## Initial Attack Fire Apparatus

**1991 Edition**

**Reference: 4-5.3**
**F.I. 91-2**

**Background:** The question deals with the intent of the wording "visible to the pump operator" and whether the pump operator needs to see the actual fitting or know that water is being discharged. It is very difficult if not impossible to have an operator at a top-mounted control panel see the threaded connection, whereas the flow of water could be directed so that it is visible to the operator.

**Question:** Does the male fitting itself need to be seen by the operator?

**Answer:** No.

**Issue Edition: 1991**
**Reference: 4-5.3**
**Issue Date: February 12, 1992**
**Effective Date: March 3, 1992**

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# NFPA 1902

## Initial Attack Fire Apparatus

**1991 Edition**

**Reference: 6-1.4**
**F.I. 91-3**

**Question:** Are the driving and crew compartments considered working and storage areas and subject to the provisions of 6-1.4?

**Answer:** Yes.

**Issue Edition: 1991**
**Reference: 6-1.4**
**Issue Date: April 10, 1992**
**Effective Date: April 30, 1992**

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Formal Interpretation

# NFPA 1902

## Initial Attack Fire Apparatus

**1991 Edition**

**Reference: 8-4.2**
**FI 91-5**

**Question:** Can a 1-inch valve be used in 1½-inch lines for third-stage high-pressure booster pumps to hose reels?

**Answer:** Yes.

**Issue Edition: 1991**
**Reference: 8-4.2**
**Issue Date: March 2, 1993**
**Effective Date: March 22, 1993**

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Formal Interpretation

# NFPA 1903

## Mobile Water Supply Fire Apparatus

**1991 Edition**

**Reference: 3-3.1.3**
**FI 91-6**

**Question 1:** Is it the intent of this section to provide a unique means of identifying a wire/circuit to prevent confusing it with another wire/circuit, if electrical system repairs become necessary?

**Answer:** Yes.

**Question 2:** If it is decided to use a color coding scheme instead of imprinting on the wire its function, does this section prevent the use of a wire of the same color and size for other unrelated circuits?

**Answer:** Yes.

**Question 3:** Is it the intent of this section to require a means of identifying all wires, including shielded cables (commonly used for communication purposes) and type S.O. wiring (commonly used to wire 110- and 220-volt devices such as receptacles and lights)?

**Answer:** No.

**Issue Edition: 1991**
**Reference: 3-3.1.3**
**Issue Date: June 17, 1993**
**Effective Date: July 7, 1993**

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Formal Interpretation

# NFPA 1903

## Mobile Water Supply Fire Apparatus

**1991 Edition**

**Reference: 5-1.4**
**F.I. 91-3**

**Question:** Are the driving and crew compartments considered working and storage areas and subject to the provisions of 5-1.4?

**Answer:** Yes.

**Issue Edition: 1991**
**Reference: 5-1.4**
**Issue Date: April 10, 1992**
**Effective Date: April 30, 1992**
**Correction Issued: Jan, 1993**

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Formal Interpretation

# NFPA 1903

## Mobile Water Supply Fire Apparatus

**1991 Edition**

**Reference: 7-4, 7-7, 8-4, 8-7, 9-4, and 9-6**
**F.I. 91-4**

**Background:** The standard refers to the sizes of intake and discharge connections without indicating whether the size is determined by the nominal size of the fire hose thread on the connection or the actual opening (bore) size.

**Question:** Is the size of a pump intake connection or a pump discharge outlet determined by the nominal size of the first fire hose thread from the pump available to the operator?

**Answer:** Yes.

**Issue Edition: 1991**
**Reference: 7-4, 7-7, 8-4, 8-7, 9-4, and 9-6**
**Issue Date: June 19, 1992**
**Effective Date: July 9, 1992**

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## Mobile Water Supply Fire Apparatus

**1991 Edition**

**Reference: 7-4.4, 7-7.5, 8-4.4, 8-7.5, 9-4.4, 9-6.5**
**FI 91-5**

**Question:** Does the 3/4-inch bleeder valve require a full 3/4-inch inside diameter opening?

**Answer:** No.

**Issue Edition: 1991**
**Reference: 7-4.4, 7-7.5, 8-4.4, 8-7.5, 9-4.4, 9-6.5**
**Issue Date: June 17, 1993**
**Effective Date: July 7, 1993**

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# NFPA 1903

## Mobile Water Supply Fire Apparatus

**1991 Edition**

**Reference: 7-4.4, 8-4.4, and 9-4.4**
**F.I. 91-1**

**Question:** Are butterfly valves attached by hose thread to 4-in. to 6-in. suction intakes considered part of this standard and require 3/4-in. bleeder valves?

**Answer:** Yes.

**Issue Edition: 1991**
**Reference: 7-4.4, 8-4.4, and 9-4.4**
**Issue Date: October 4, 1991**
**Effective Date: October 24, 1991**

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## Mobile Water Supply Fire Apparatus

**1991 Edition**

**Reference: 7-5.3 and 8-5.3**
**F.I. 91-2**

**Background:** The question deals with the intent of the wording "visible to the pump operator" and whether the pump operator needs to see the actual fitting or know that water is being discharged. It is very difficult if not impossible to have an operator at a top-mounted control panel see the threaded connection, whereas the flow of water could be directed so that it is visible to the operator.

**Question:** Does the male fitting itself need to be seen by the operator?

**Answer:** No.

**Issue Edition: 1991**
**Reference: 7-5.3 and 8-5.3**
**Issue Date: February 12, 1992**
**Effective Date: March 3, 1992**

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Formal Interpretation

# NFPA 1904

## Aerial Ladder and Elevating Platform Fire Apparatus

**1991 Edition**

**Reference: 3-3.1.3**
**FI 91-9**

**Question 1:** Is it the intent of this section to provide a unique means of identifying a wire/circuit to prevent confusing it with another wire/circuit, if electrical system repairs become necessary?

**Answer:** Yes.

**Question 2:** If it is decided to use a color coding scheme instead of imprinting on the wire its function, does this section prevent the use of a wire of the same color and size for other unrelated circuits?

**Answer:** Yes.

**Question 3:** Is it the intent of this section to require a means of identifying all wires, including shielded cables (commonly used for communication purposes) and type S.O. wiring (commonly used to wire 110- and 220-volt devices such as receptacles and lights)?

**Answer:** No.

**Issue Edition: 1991**
**Reference: 3-3.1.3**
**Issue Date: June 17, 1993**
**Effective Date: July 7, 1993**

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Formal Interpretation

# NFPA 1904

## Aerial Ladder and Elevating Platform Fire Apparatus

**1991 Edition**

**Reference: 4-2.13**
**FI 91-10**

**Question:** Can ratings of increments other than 250 lb be used in 4-2.13?

**Answer:** No.

**Issue Edition: 1991**
**Reference: 4-2.13**
**Issue Date: June 17, 1993**
**Effective Date: July 7, 1993**

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Formal Interpretation

# NFPA 1904

## Aerial Ladder and Elevating Platform Fire Apparatus

**1991 Edition**

**Reference: 5-1.4**
**F.I. 91-5**

**Question:** Are the driving and crew compartments considered working and storage areas and subject to the provisions of 5-1.4?

**Answer:** Yes.

**Issue Edition: 1991**
**Reference: 5-1.4**
**Issue Date: April 10, 1992**
**Effective Date: April 30, 1992**

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## Aerial Ladder and Elevating Platform Fire Apparatus

**1991 Edition**

**Reference: 7-4, 7-7, 8-4, and 8-7**
**F.I. 91-6**

**Background:** The standard refers to the sizes of intake and discharge connections without indicating whether the size is determined by the nominal size of the fire hose thread on the connection or the actual opening (bore) size.

**Question:** Is the size of a pump intake connection or a pump discharge outlet determined by the nominal size of the first fire hose thread from the pump available to the operator?

**Answer:** Yes.

**Issue Edition: 1991**
**Reference: 7-4, 7-7, 8-4, and 8-7**
**Issue Date: June 19, 1992**
**Effective Date: July 9, 1992**

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## Aerial Ladder and Elevating Platform Fire Apparatus

**1991 Edition**

**Reference: 7-4.4, 7-7.5, 8-4.4, 8-7.5**
**FI 91-8**

**Question:** Does the 3/4-inch bleeder valve require a full 3/4-inch inside diameter opening?

**Answer:** No.

**Issue Edition: 1991**
**Reference: 7-4.4, 7-7.5, 8-4.4, 8-7.5**
**Issue Date: June 17, 1993**
**Effective Date: July 7, 1993**

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## Aerial Ladder and Elevating Platform Fire Apparatus

**1991 Edition**

**Reference: 7-4.4 and 8-4.4**
**F.I. 91-1**

**Question:** Are butterfly valves attached by hose thread to 4-in. to 6-in. suction intakes considered part of this standard and require 3/4-in. bleeder valves?

**Answer:** Yes.

**Issue Edition: 1991**
**Reference: 7-4.4 and 8-4.4**
**Issue Date: October 4, 1991**
**Effective Date: October 24, 1991**

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## Aerial Ladder and Elevating Platform Fire Apparatus

**1991 Edition**

**Reference: 7-5.3 and 8-5.3**
**F.I. 91-2**

**Background:** The question deals with the intent of the wording "visible to the pump operator" and whether the pump operator needs to see the actual fitting or know that water is being discharged. It is very difficult if not impossible to have an operator at a top-mounted control panel see the threaded connection, whereas the flow of water could be directed so that it is visible to the operator.

**Question:** Does the male fitting itself need to be seen by the operator?

**Answer:** No.

**Issue Edition: 1991**
**Reference: 7-5.3 and 8-5.3**
**Issue Date: February 12, 1992**
**Effective Date: March 3, 1992**

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## Aerial Ladder and Elevating Platform Fire Apparatus

**1991 Edition**

**Reference: 7-7.1**
**F.I. 91-4**

**Question 1:** Can an aerial ladder water delivery system meeting the requirements of 4-5.1 be considered as an outlet when calculating the discharge outlets required in 7-7.1?

**Answer:** Yes.

**Question 2:** Should a flow rate of 1,000 gpm be used for the aerial ladder water delivery system when calculating the requirements of 7-7.1?

**Answer:** Yes.

**Issue Edition: 1991**
**Reference: 7-7.1**
**Issue Date: February 12, 1992**
**Effective Date: March 3, 1992**

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Formal Interpretation

# NFPA 1904

## Aerial Ladder and Elevating Platform Fire Apparatus

**1991 Edition**

**Reference: 10-4.2**
**FI 91-7**

**Question:** Can a 1-inch valve be used in 1½-inch lines for third-stage high-pressure booster pumps to hose reels?

**Answer:** Yes.

**Issue Edition: 1991**
**Reference: 10-4.2**
**Issue Date: March 2, 1993**
**Effective Date: March 22, 1993**

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## Aerial Ladder and Elevating Platform Fire Apparatus

**1991 Edition**

**Reference: 11-1.4.2**
**F.I. 91-3**

**Background:** The question deals with whether each waterway system on an aerial device must be individually tested at full elevation and extension or whether only each standard model needs to be tested at full elevation and extension. The previous paragraph in the standard (9-8.4) deals with testing for friction loss and allows for a single test of each standard model with retesting for deviations from the standard model or redesign of the standard model.

The aerial device is required to undergo the full test defined in NFPA 1914, *Standard for Testing Fire Department Aerial Devices.* This requires that waterways be pressurized to the manufacturer's maximum rated working pressure, which will have to be sufficient to overcome both friction loss and head loss while allowing 100 psi nozzle pressure at the monitor.

NFPA 1914 also requires the flow meter in the waterway to be checked for accuracy. This requires a flow test of the water system that will verify the system is capable of its rated flow.

Finally, NFPA 1901 requires the pump test to be certified by an independent testing organization. Therefore, if the standard model is tested initially with a particular pump and piping arrangement, it is easy enough for the testing organization to determine if subsequent pump and piping arrangements can provide the flow and pressure to supply the water system on an aerial device adequately.

If it is not necessary to test the water system on each aerial device at full elevation and extension, tests can be conducted inside and the water recaptured into a drafting pit. This makes it much safer in cold weather and assists manufacturers who are being pressured to recapture water and not allow test water to flow into streams or other natural watershed areas.

**Question:** Is it acceptable to test a standard model at full elevation and extension and then use that test data and appropriate testing in lieu of a full elevation and extension test to verify that each unit that is a duplicate of the standard model meets this standard?

**Answer:** Yes.

**Issue Edition: 1991**
**Reference: 11-1.4.2**
**Issue Date: February 12, 1992**
**Effective Date: March 3, 1992**

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Formal Interpretation

# NFPA 1974

## Protective Footwear for Structural Fire Fighting

**1992 Edition**

**Reference: 3-2.1**
**F.I. 87-1**

**Question:** Does the standard mean that the boot must be available in all the sizes stated?

**Answer:** Yes.

**Issue Edition: 1987**
**Reference: 2-2.1**
**Date: August 1988**

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Formal Interpretation

# NFPA 8502

## Prevention of Furnace Explosions/Implosions in Multiple Burner Boilers

**1995 Edition**

**Reference: Chapter 7**
**F.I. 89-2**

**Background:** On units for which $NO_x$ control at low loads is important, it is desirable to maintain optimal low load burner air/fuel ratio. On some units, even with idle burner registers open, air flows to the operating burners must be reduced to as low as the purge rate air flow in order to reach the optimal ratio. On these units it is desired to drop the purge rate air flow below 25% of "design maximum air flow," to a proposed value of 25% of "maximum operation air flow."

The maximum operating steam flow on these units (limited by turbine-generator rating) is less than maximum boiler design steam flow. The fuel flow and air flow (as measured volumetrically by airfoil differential in the air to the windbox) at this steam flow are optimized for opacity and $NO_x$ control, resulting in an air flow proportionately below design maximum air flow.

**Question:** Is it the intent of NFPA 8502 to allow purge rate air flow to be 25% of maximum operating air flow as opposed to 25% of design maximum air flow?

**Answer:** No.

**Issue Edition: 1989 of NFPA 85D**
**Reference: Entire Document**
**Issue Date: July 16, 1990**
**Effective Date: August 4, 1990**

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Formal Interpretation

# NFPA 8502

## Prevention of Furnace Explosions/Implosions in Mutiple Burner Boilers

**1995 Edition**

**Reference: 7-5.4.5**
**F.I. 89-1**

**Background:** Consider the Chapter 3 definition:

"Class 3 Special (Direct Electric Igniter). A special Class 3 high energy electrical igniter capable of directly igniting the main burner fuel. This type igniter shall not be used unless supervision of the individual main burner flame is provided."

and consider paragraph 7-5.4.5:

"7-5.4.5 Igniters shall be in service, with ignition established when clearing oil passages into the furnace."

The situation in question occurs when a Class 3 Special Igniter is monitored by a current sensing relay. With at least one other oil gun in and proven by flame scanners, the subject oil gun is stopped (i.e., its oil trip valve closes) either remotely or locally, by an operator. The normal course of action would be to go into an oil gun purge. The igniter would be first placed in service and proven, and then the purge air (or steam) valve opened for a specified time period until the oil passages are cleared of oil. The length of purge would be proven by test to sufficiently clear the oil passages of oil. Assume that good design of the oil system has been practiced and the oil trip valve is located very close to the burner, thus minimizing the length of oil piping to be cleared.

The above excerpts from 85D have been interpreted by some to mean that the main flame scanner must be proven at all times during the oil gun scavenging. This interpretation, in effect, precludes any scavenging of an oil gun which utilizes a Class 3 special igniter. During the scavenging operation the oil gun flame is unstable and will flame off and back on several times before the oil passages are cleared.

**Question:** Can a high energy igniter (Class 3 special) be used when "clearing oil passages into the furnace" without proving main flame on?

**Answer:** Yes.

**Issue Edition: 1989 of NFPA 85D**
**Reference: 5-4.5**
**Issue Date: November 1, 1989**
**Effective Date: November 21, 1989**

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# NFPA 8502

## Prevention of Furnace Explosions/Implosions in Multiple Burners

**1995 Edition**

**Reference: Section 7-8**
**F.I.**

**Question:** In accordance with Section 7-8, does "boiler front control" mean operator start-up from the boiler front with no option for remote control room starting capability?

**Answer:** The requirement stated in 7-8.1.1(b) for the start-up or normal shutdown of any burner to be accomplished by an operator at the burner location, is controlling. A remotely-controlled light-off or normal shutdown, even with an operator standing by as a passive observer, does not conform with the intent of this section.

*It should be noted that this interpretation does not rule out the use of remote burner control systems, but only states that these shall not be considered as conforming to a Boiler Front Control system. Section 7-8, Boiler Front Control, is intended to be applied to smaller boilers with a limited number of burners, and for which an operator performs the burner light-off function at the boiler front, but with interlocks to prevent improper start-up. For larger units, which are remotely operated, such as those cited in this inquiry, it is the intent of the Committee that other portions of the standard shall apply. Provisions of the other portions of the standard permit and even encourage the application of burner management control systems.*

**Issue Edition: 1974 of NFPA 85D**
**Reference: Chapter 8**
**Date: April 1976**

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