



COLOCATION INERGEN SYSTEM

NOZZLE PERFORMANCE	NOZZLE PERFORMANCE
NOZZLE SIZE	NOZZLE SIZE
1/2"	3/4"
3/4"	1"
1"	1 1/4"
1 1/4"	1 3/4"
1 3/4"	2"
2"	2 1/2"
2 1/2"	3"
3"	3 1/2"
3 1/2"	4"
4"	4 1/2"
4 1/2"	5"
5"	5 1/2"
5 1/2"	6"
6"	6 1/2"
6 1/2"	7"
7"	7 1/2"
7 1/2"	8"
8"	8 1/2"
8 1/2"	9"
9"	9 1/2"
9 1/2"	10"
10"	10 1/2"
10 1/2"	11"
11"	11 1/2"
11 1/2"	12"
12"	12 1/2"
12 1/2"	13"
13"	13 1/2"
13 1/2"	14"
14"	14 1/2"
14 1/2"	15"
15"	15 1/2"
15 1/2"	16"
16"	16 1/2"
16 1/2"	17"
17"	17 1/2"
17 1/2"	18"
18"	18 1/2"
18 1/2"	19"
19"	19 1/2"
19 1/2"	20"
20"	20 1/2"
20 1/2"	21"
21"	21 1/2"
21 1/2"	22"
22"	22 1/2"
22 1/2"	23"
23"	23 1/2"
23 1/2"	24"
24"	24 1/2"
24 1/2"	25"
25"	25 1/2"
25 1/2"	26"
26"	26 1/2"
26 1/2"	27"
27"	27 1/2"
27 1/2"	28"
28"	28 1/2"
28 1/2"	29"
29"	29 1/2"
29 1/2"	30"
30"	30 1/2"
30 1/2"	31"
31"	31 1/2"
31 1/2"	32"
32"	32 1/2"
32 1/2"	33"
33"	33 1/2"
33 1/2"	34"

ELECTRICAL ROOM INERGEN SYSTEM

NOZZLE PERFORMANCE	NOZZLE PERFORMANCE
NOZZLE SIZE	NOZZLE SIZE
1/2"	3/4"
3/4"	1"
1"	1 1/4"
1 1/4"	1 3/4"
1 3/4"	2"
2"	2 1/2"
2 1/2"	3"
3"	3 1/2"
3 1/2"	4"
4"	4 1/2"
4 1/2"	5"
5"	5 1/2"
5 1/2"	6"
6"	6 1/2"
6 1/2"	7"
7"	7 1/2"
7 1/2"	8"
8"	8 1/2"
8 1/2"	9"
9"	9 1/2"
9 1/2"	10"
10"	10 1/2"
10 1/2"	11"
11"	11 1/2"
11 1/2"	12"
12"	12 1/2"
12 1/2"	13"
13"	13 1/2"
13 1/2"	14"
14"	14 1/2"
14 1/2"	15"
15"	15 1/2"
15 1/2"	16"
16"	16 1/2"
16 1/2"	17"
17"	17 1/2"
17 1/2"	18"
18"	18 1/2"
18 1/2"	19"
19"	19 1/2"
19 1/2"	20"
20"	20 1/2"
20 1/2"	21"
21"	21 1/2"
21 1/2"	22"
22"	22 1/2"
22 1/2"	23"
23"	23 1/2"
23 1/2"	24"
24"	24 1/2"
24 1/2"	25"
25"	25 1/2"
25 1/2"	26"
26"	26 1/2"
26 1/2"	27"
27"	27 1/2"
27 1/2"	28"
28"	28 1/2"
28 1/2"	29"
29"	29 1/2"
29 1/2"	30"
30"	30 1/2"
30 1/2"	31"
31"	31 1/2"
31 1/2"	32"
32"	32 1/2"
32 1/2"	33"
33"	33 1/2"
33 1/2"	34"

MAIN SWITCH ROOM INERGEN SYSTEM

NOZZLE PERFORMANCE	NOZZLE PERFORMANCE
NOZZLE SIZE	NOZZLE SIZE
1/2"	3/4"
3/4"	1"
1"	1 1/4"
1 1/4"	1 3/4"
1 3/4"	2"
2"	2 1/2"
2 1/2"	3"
3"	3 1/2"
3 1/2"	4"
4"	4 1/2"
4 1/2"	5"
5"	5 1/2"
5 1/2"	6"
6"	6 1/2"
6 1/2"	7"
7"	7 1/2"
7 1/2"	8"
8"	8 1/2"
8 1/2"	9"
9"	9 1/2"
9 1/2"	10"
10"	10 1/2"
10 1/2"	11"
11"	11 1/2"
11 1/2"	12"
12"	12 1/2"
12 1/2"	13"
13"	13 1/2"
13 1/2"	14"
14"	14 1/2"
14 1/2"	15"
15"	15 1/2"
15 1/2"	16"
16"	16 1/2"
16 1/2"	17"
17"	17 1/2"
17 1/2"	18"
18"	18 1/2"
18 1/2"	19"
19"	19 1/2"
19 1/2"	20"
20"	20 1/2"
20 1/2"	21"
21"	21 1/2"
21 1/2"	22"
22"	22 1/2"
22 1/2"	23"
23"	23 1/2"
23 1/2"	24"
24"	24 1/2"
24 1/2"	25"
25"	25 1/2"
25 1/2"	26"
26"	26 1/2"
26 1/2"	27"
27"	27 1/2"
27 1/2"	28"
28"	28 1/2"
28 1/2"	29"
29"	29 1/2"
29 1/2"	30"
30"	30 1/2"
30 1/2"	31"
31"	31 1/2"
31 1/2"	32"
32"	32 1/2"
32 1/2"	33"
33"	33 1/2"
33 1/2"	34"

LEGEND - BILL OF MATERIALS

ITEM	QTY	NUMBER	DESCRIPTION
1	3	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
2	30	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
3	24	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
4	2	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
5	4	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
6	2	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
7	1	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
8	3	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
9	3	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
10	10	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
11	2	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
12	1	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
13	2	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
14	7	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
15	8	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
16	2	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
17	1	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
18	4	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
19	2	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
20	1	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
21	4	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
22	1	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
23	3	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
24	2	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
25	4	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
26	1	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
27	1	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
28	1	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE
29	1	148800	1/2" 300 CU. FT. CYLINDER W/ CLOS. VALVE

- INSTALLATION NOTES FOR INERGEN SYSTEM**
- THESE SPECIFICATIONS ARE TO APPLY TO ALL INSTALLATIONS OF INERGEN FIRE SUPPRESSION SYSTEMS.
- NOTE: PIPE SHALL CONFORM TO ASTM SPECIFICATIONS FOR A53 OR A106 PIPE. A120 SHALL NOT BE USED.
- ALL THREADED PIPE BEYOND THE ORIFICE UNION TO BE BLACK OR GALVANIZED STEEL OF THE FOLLOWING PIPE SIZE AND GRADE COMBINATIONS.

ASTM A-106 SEAMLESS, GRADE C	SO-L 40-THRU 6"
ASTM A-106/A-53 SEAMLESS, GRADE B	SO-L 40-THRU 6"
ASTM A-106/A-53 SEAMLESS, GRADE A	SO-L 40-THRU 2.5"
ASTM A-53 ERW, GRADE B	SO-L 40-THRU 5"
ASTM A-53 ERW, GRADE A	SO-L 40-THRU 1.25"
 - ALL THREADED PIPE USED TO CONSTRUCT THE MANFOLD, INCLUDING PIPE BEFORE THE ORIFICE UNION TO BE BLACK OR GALVANIZED STEEL OF THE FOLLOWING PIPE SIZE AND GRADE COMBINATIONS.

ASTM A-106 SEAMLESS, GRADE C	SO-L 80-THRU 2.5"
ASTM A-106/A-53 SEAMLESS, GRADE B	SO-L 80-THRU 1.25"
ASTM A-106/A-53 SEAMLESS, GRADE A	SO-L 80-THRU .75"
ASTM A-53 ERW, GRADE B	SO-L 80-THRU 1.0"
ASTM A-53 ERW, GRADE A	SO-L 80-THRU .5"
 - PIPE GRADES MUST BE SUITABLE FOR THE PRESSURES CALCULATED BY ANSUL'S MERCALC PNEUMATIC CALCULATION PROGRAM. CONSULT THE CHART IN ANSUL'S DESIGN MANUAL OR NFPA 2001, A-2.2.1, FOR MAXIMUM PIPE PRESSURES FOR THE DIFFERENT PIPE GRADES.
 - ALL FITTINGS BEYOND THE ORIFICE UNION TO BE 3000 ANSI B-16.3 BLACK OR GALVANIZED MALLEABLE IRON THREADED FITTINGS THROUGH 3" SIZE. FORGED STEEL FITTINGS TO BE USED FOR LARGER SIZES. FLANGED JOINTS TO BE CLASS 600 LB. CLASS 300 MALLEABLE IRON UNIONS OR STREET ELBOWS SHALL NOT BE USED.
 - ALL FITTINGS USED TO CONSTRUCT THE MANFOLD, INCLUDING FITTINGS BEFORE THE ORIFICE UNION TO BE BLACK OR GALVANIZED FORGED STEEL 2000# OR 3000# ANSI B-16.3.
 - ALL PIPE, FITTINGS AND MANFOLDS TO BE SUPPLIED BY INTERSTATE FIRE PROTECTION.
 - PIPE LENGTHS GIVEN ARE FROM CENTER TO CENTER OF FITTINGS.
 - ALL DIMENSIONS ARE TO BE FIELD CHECKED, ANY DEVIATIONS FROM THE ARRANGEMENT SHOWN WILL REQUIRE COMPLETE REVIEW OF THE NOZZLE AND LINE PRESSURE CALCULATIONS BY THE DESIGNER.
 - REAM AND CLEAN EACH PIPE SECTION INTERNALLY AFTER PREPARATION AND BEFORE ASSEMBLY BY MEANS OF SWABING, UTILIZING A SUITABLE NON-FLAMMABLE CLEANER. THE PIPING NETWORK SHALL BE FREE OF PARTICULATE MATTER AND OIL RESIDUE BEFORE INSTALLATION OF NOZZLES OR DISCHARGE DEVICES.
 - THE USE OF PIPE DOPP OR TEFLON TAPE IS RECOMMENDED. APPLY SPARINGLY TO MALE THREADS ONLY.
 - CYLINDERS AND PIPE TO BE SECURELY BRACKETED-ESPECIALLY AT FITTINGS AND NOZZLES.
 - ALL DEAD END PIPE LINES TO BE PROVIDED WITH A CAPPED NIPPLE 2" LONG.

System Information:
 INERGEN FIRE SUPPRESSION SYSTEM
 COLO. ELECTRIC ROOM AND SWITCH ROOMS

Client:
 LIGHTSHIP TELECOM
 340 CUMBERLAND AVE.
 SECOND FLOOR
 PORTLAND, ME.

Interstate FIRE PROTECTION
 PO BOX 1005
 N. CONWAY, NH 03860
 57 CONY STREET
 AUGUSTA, ME. 04330

LIGHTSHIP TELECOM MECHANICAL LAYOUT

Proj. No.	04/03/01
Rev.	01/24/01
Drawn by	REV. 1
Checked by	
Approved by	
Project Lead	T. MOONEY
Designer	BOHRNER

SHEET :
 M-1