UBC 26-3
ROOM FIRE TEST STANDARD FOR
INTERIOR OF FOAM PLASTIC SYSTEMS

**Contego Latex Fire Barrier Intumescent
Applied on 7/16 inch OSB Panels**

Project No. 16539-112517

November 5, 2002

Prepared for:
Contego International, Inc.
5815 Phoenix, Suite 4
Dallas, Texas 75231

ABSTRACT

This report describes the results obtained when a thin film, water-based latex intumescent paint submitted by Contego International was tested in accordance with UBC 26-3 Room Fire Test Standard For Interior of Foam Plastic Systems. The intumescent paint, identified by the client as "Contego Latex Fire Barrier Intumescent," was sprayed onto 7/16 inch thick OSB panels. The test material covered the OSB panels of an 8 ft. x 8 ft. section of the back and side walls and 8 ft. x 8 ft. section of the roof of the test room. Based on observations during and after the test, the specimen met all criteria as set forth in the UBC 26 –3.

Signed:

Majid Mehrafza   **Date:**
Manager, Research and Special Testing

Reviewed and approved:
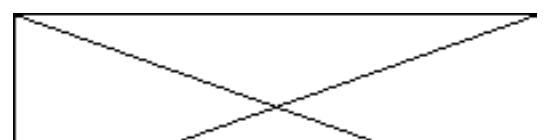
William E. Fitch, P.E.   No. 55296   **Date:**

TABLE OF CONTENTS

INTRODUCTION

This report presents the results of an investigation of a room corner fire test conducted according to UBC 26 - 3 Room Fire Test Standard For Interior of Foam Plastic Systems. This document contains a description of the material evaluated, procedures used, and the test results. Note that the results listed apply only to the specimens tested, in the manner tested, and not to the entire production of this or similar materials, nor to the performance of this material when used in combination with other materials.

PROCEDURE

The standard test facility consists of an 8 ft. wide by 12 ft. long by 8 ft. high room with walls and ceiling and a doorway 2-1/2 ft. wide and 7 ft. high centered in one of the 8 ft. walls. All vertical or horizontal joint details must be representative of those intended for use in field conditions. The remainder of the interior of the room is constructed of 5/8 in. gypsum wallboard screwed to 2 in. x 4 in. metal studs. The test structure is located inside of a building free of excessive drafts.

The fuel source is a wood crib constructed of l.5 in. x l.5 in. sticks of white fir cut to 15-in. lengths. The crib must have a dry wood weight of 30 lbs. and be 15 in. square in plan. One 8d nail is driven at each intersection of two sticks. The crib is assembled in tiers of five sticks each with each tier, oriented 90 degrees to the sticks in the adjacent tiers.

The crib is placed on four brick pieces, one under each corner of the crib, to provide not less than a 3-in. space between the floor and the lower surface of the crib. Ignition of the crib is accomplished by evenly distributing 1 lb. of shredded and fluffed wood excelsior beneath the crib over a 21 in. x 21 in. area and soaking with 4 oz. of ethyl alcohol.

A minimum of eight Type K, Chromel-Alumel thermocouples are utilized for temperature measurement in the test room. The placement of these thermocouples, as well as additional thermocouples are shown in Figures 2 & 3 in Appendix B. Documentation of the test consists of color videotape, thermocouple data and stack smoke release data. Temperature readings on all thermocouples are taken prior to the start of the test and continued at 6-second intervals to the completion of the fire exposure.

TEST SPECIMEN

The test specimen identification is as provided by the client and Omega Point Laboratories, Inc. accepts no responsibility for any inaccuracies therein. Omega Point Laboratories did not select the specimen and has not verified the composition, manufacturing techniques or quality assurance procedures.

The test specimen consisted of six individual 4 ft. wide x 8 ft. long x 7/16 in. thick OSB panels sprayed with the Contego Latex Fire Barrier Intumescent paint. The test panels covered an 8 ft. x 8 ft. area of the back wall, side wall, and ceiling of the test room. The OSB panels were mechanically fastened to the test room. Two coats of the Contego intumescent paint were applied onto the OSB panels. Each coat consisted of wet mil thickness of 11 that dried to a 7-mil thickness. Two application of the paint would then yield a total thickness of 14 mils. The second coat was applied over the first coat when the first coat was dry to touch. For this test, the first coat was allowed to dry for 24 hours.

For a test configuration drawing, thermocouple locations, and mounting diagram see Appendix B - Figures.

TEST CRITERIA

After the test, the test specimen shall not be charred at the extremities. Additionally, the specimen shall not produce excess smoke during the test. Although not specified, flashover is considered to be an extreme type of failure. According to UBC 8-2, flashover shall be judged to have occurred when the heat flux at the floor level exceeds 20 kW/m^2, upper level air temperatures exceed 1100°F or flames project out the room door opening.

TEST RESULTS

The test was started at 9:45 a.m. on October 24, 2002. The ambient temperature was 87 °F with a relative humidity of 54%. The thermocouples were positioned in accordance with the standard, as well as the additional thermocouples shown in Figure 2, and their outputs verified after connection to the data acquisition system. Critical events during the course of the test are described below.

TIME	OBSERVATION
0:00	Ignition of the excelsior.
0:25	Crib flames reaching 5' height.
0:40	Crib flames reaching 7' height.
1:56	Material above the crib started to darken and char.
3:10	Charring of the paint material above the crib. No ignition.
4:30	Steady burn. No change. Light smoke.
6:00	Steady burn. No change. Char thickness approx. 2 inches.
8:00	Steady burn. Char thickness approx. 4 inches.
13:00	No change.
15:00	End test.

Post Test Observations:

After the test, the test room was allowed to cool and the following observations were made:

Char thickness above and around the crib area was approximately 4 to 6 inches. No charring of the panels at the extremities were observed.

CONCLUSIONS

The sample submitted, installed, and tested as described in this report <u>met</u> all criteria of the UBC 26-3 test procedure.

The test specimen identification is as provided by the client and Omega Point Laboratories, Inc. accepts no responsibility for any inaccuracies therein. Omega Point did not select the specimen and has not verified the composition, manufacturing techniques or quality assurance procedures.

APPENDIX A

DATA

Contego International
Project # 112517 UBC 26-3
October 25, 2002
Ignition Source Thermocouple Data
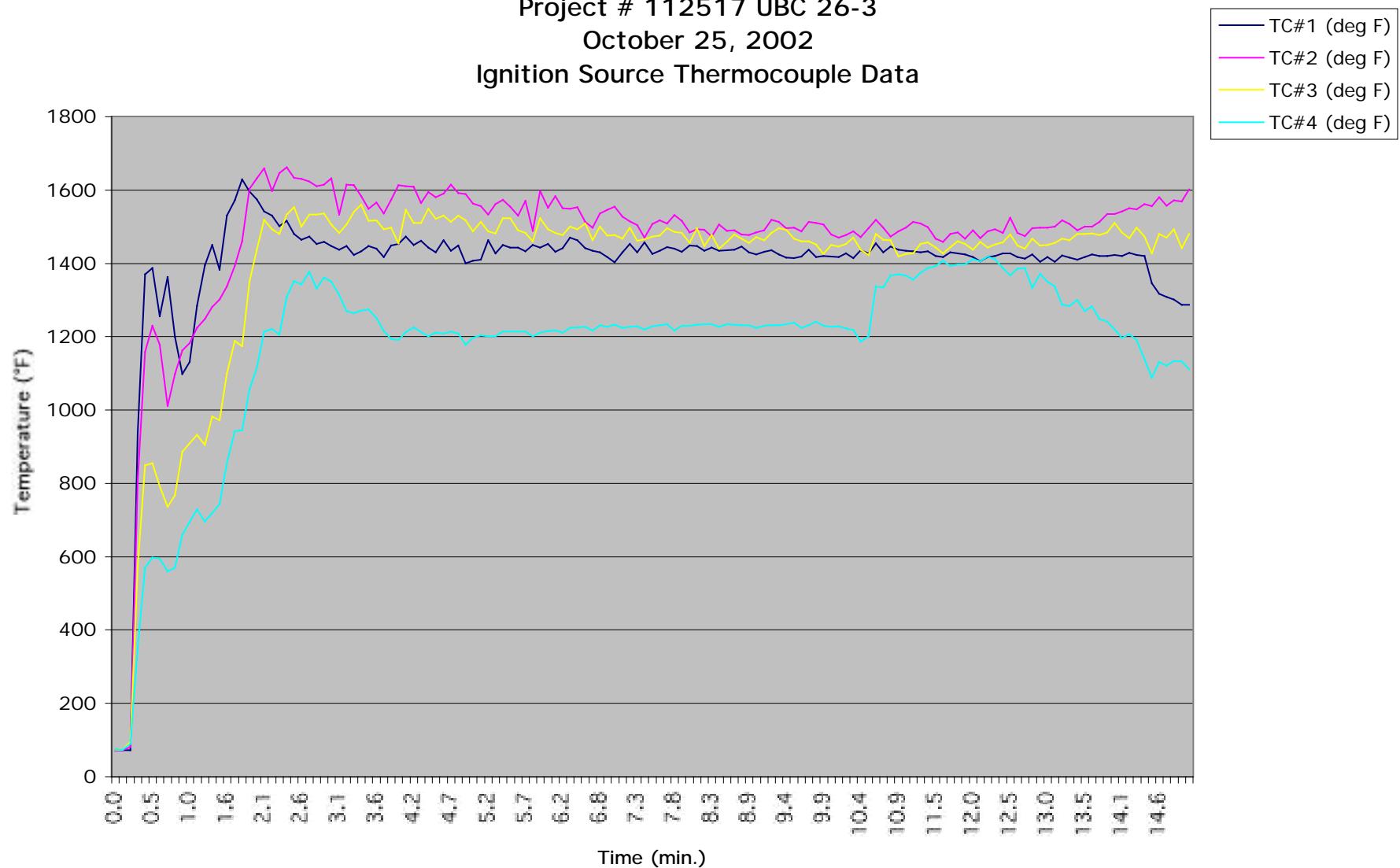
Contego International
Project # 112517 UBC 26-3
October 25, 2002
Extremity and Doorway Thermocouple Data
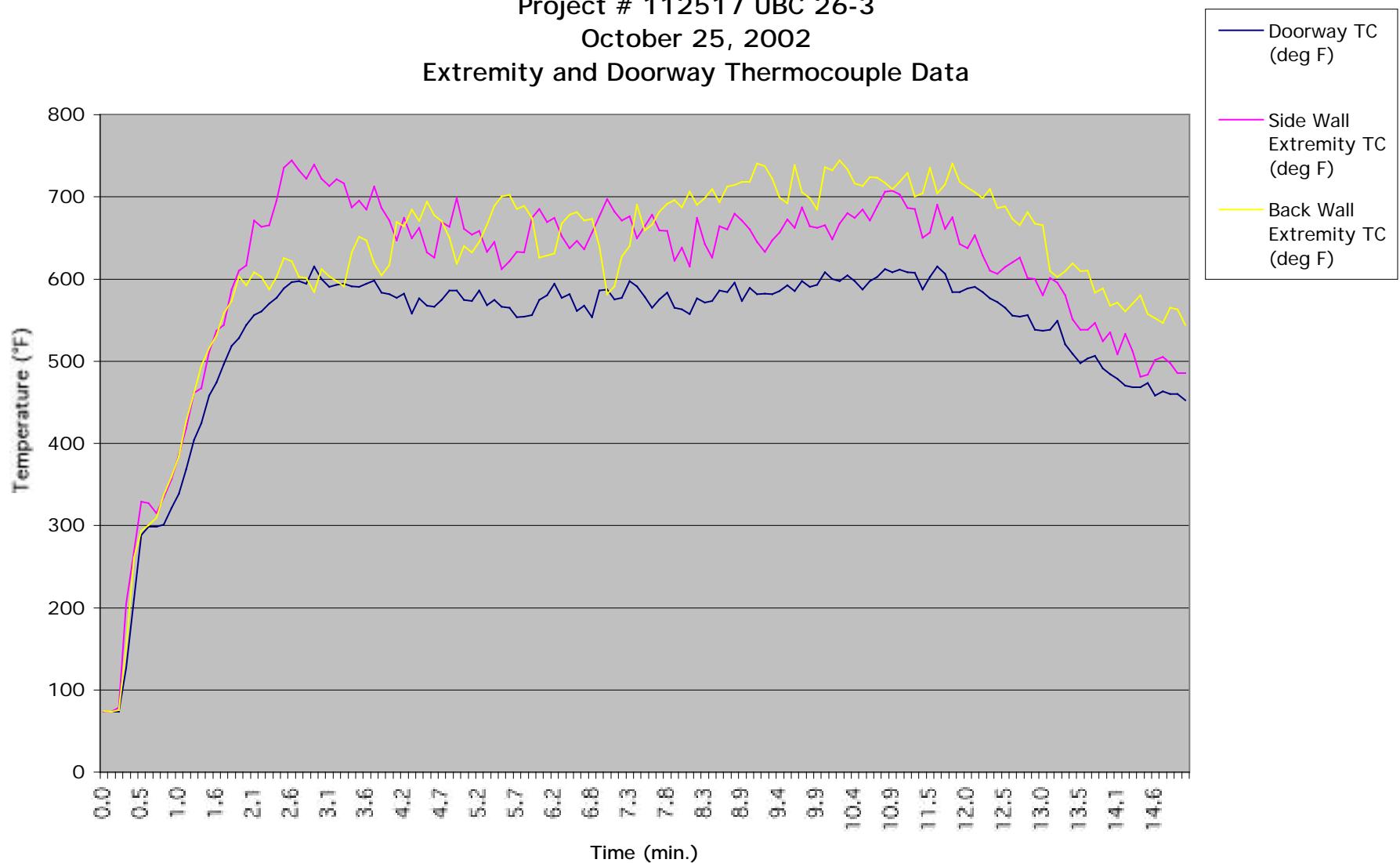
Contego International
Project # 112517 UBC 26-3
October 25, 2002
Heat Release Data

HRR (kW)

Heat Release Rate (kW)

Time (min.)
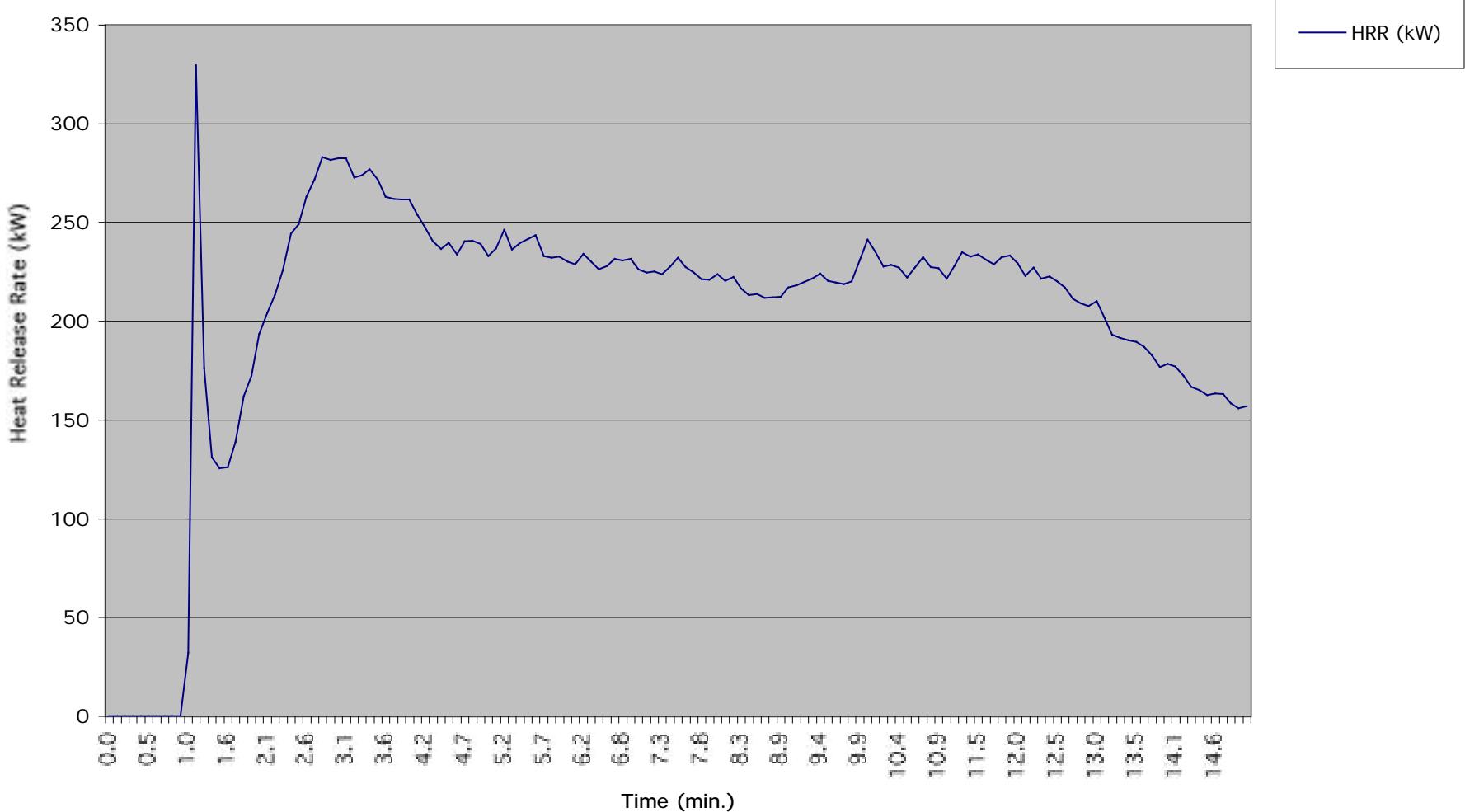
Contego International
Project # 112517 UBC 26-3
October 25, 2002
Totat Heat Release Data
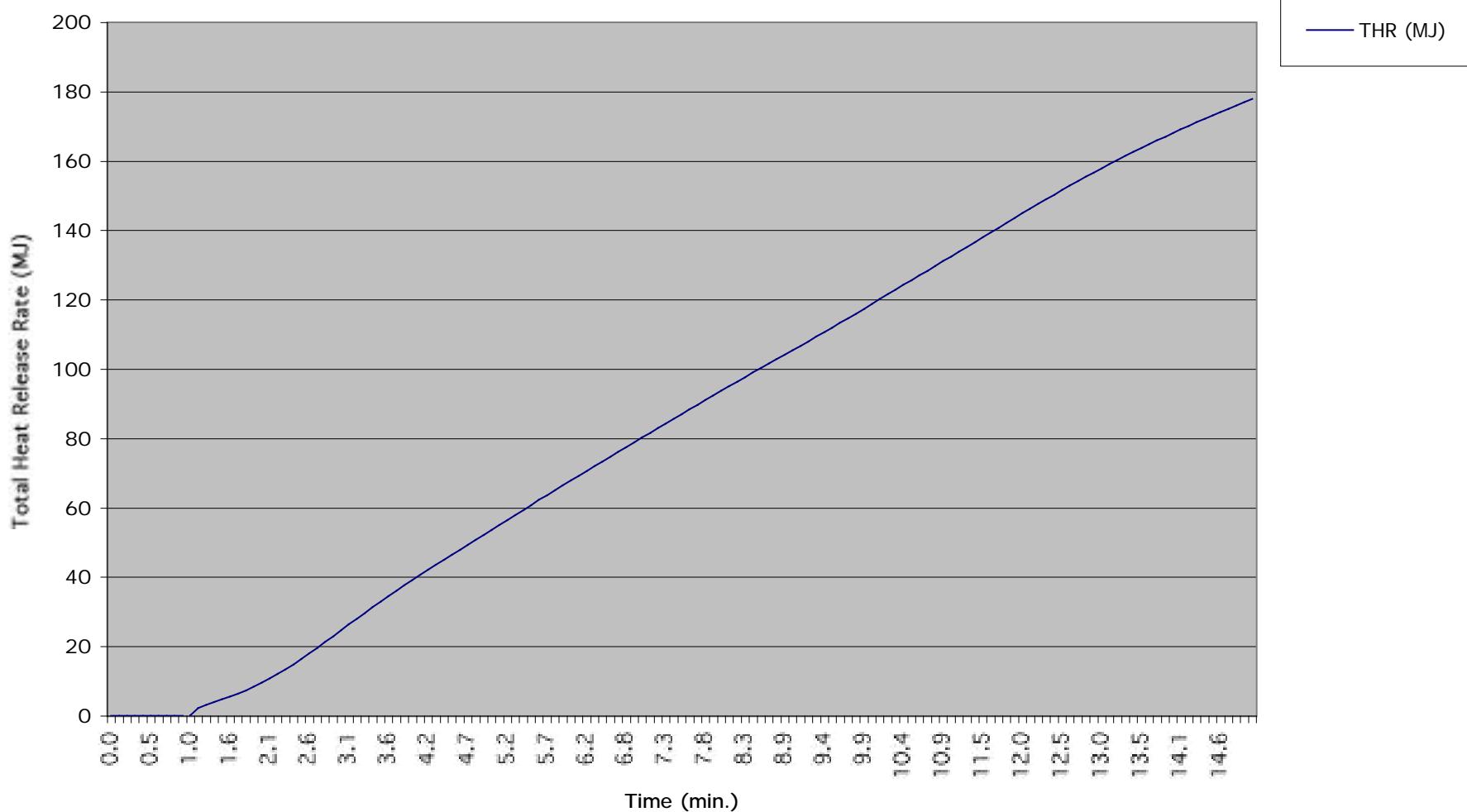
Contego International
Project # 112517 UBC 26-3
October 25, 2002
Smoke Release Data
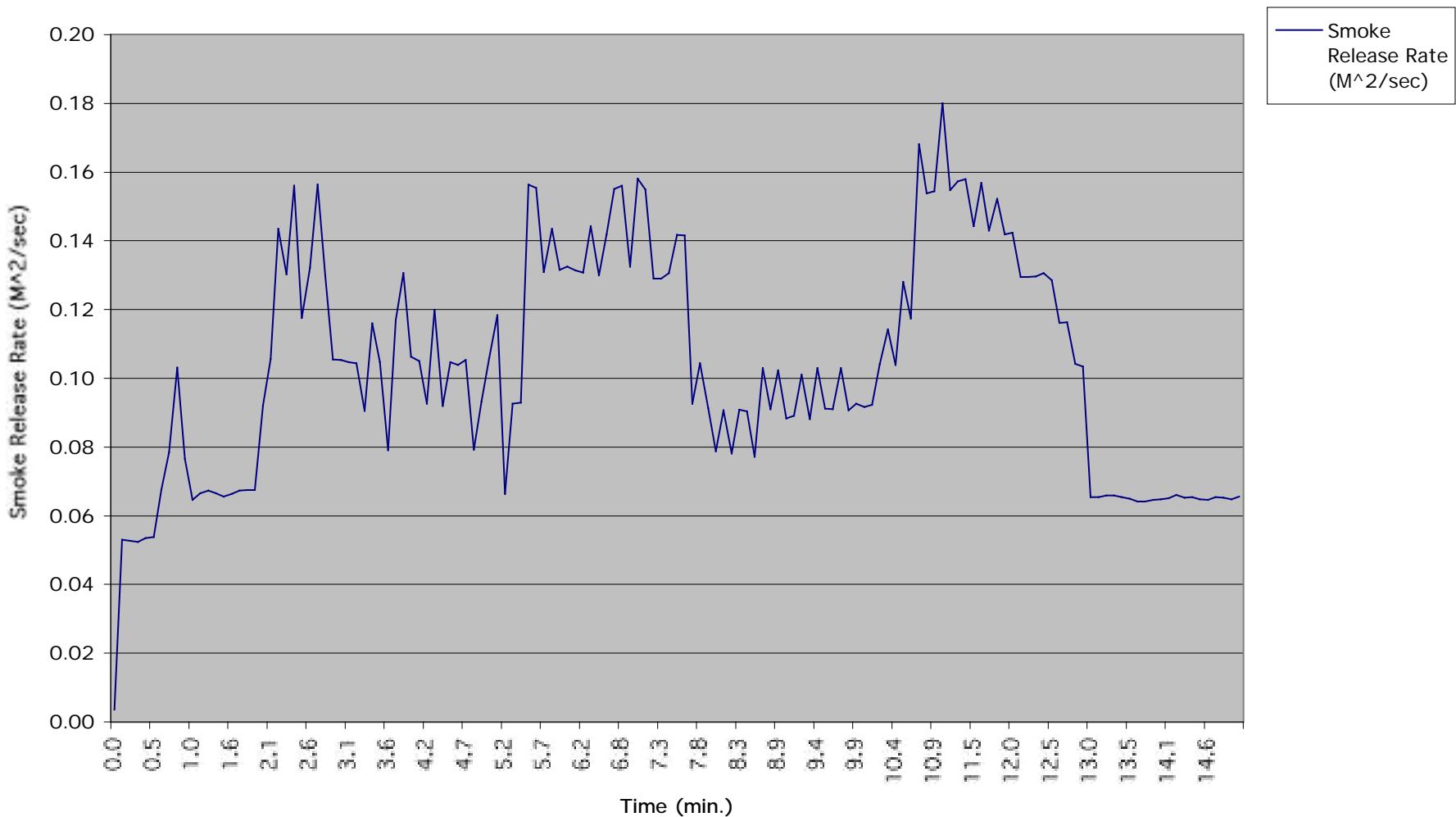
Contego International
Project # 112517 UBC 26-3
October 25, 2002
Total Smoke Release Data
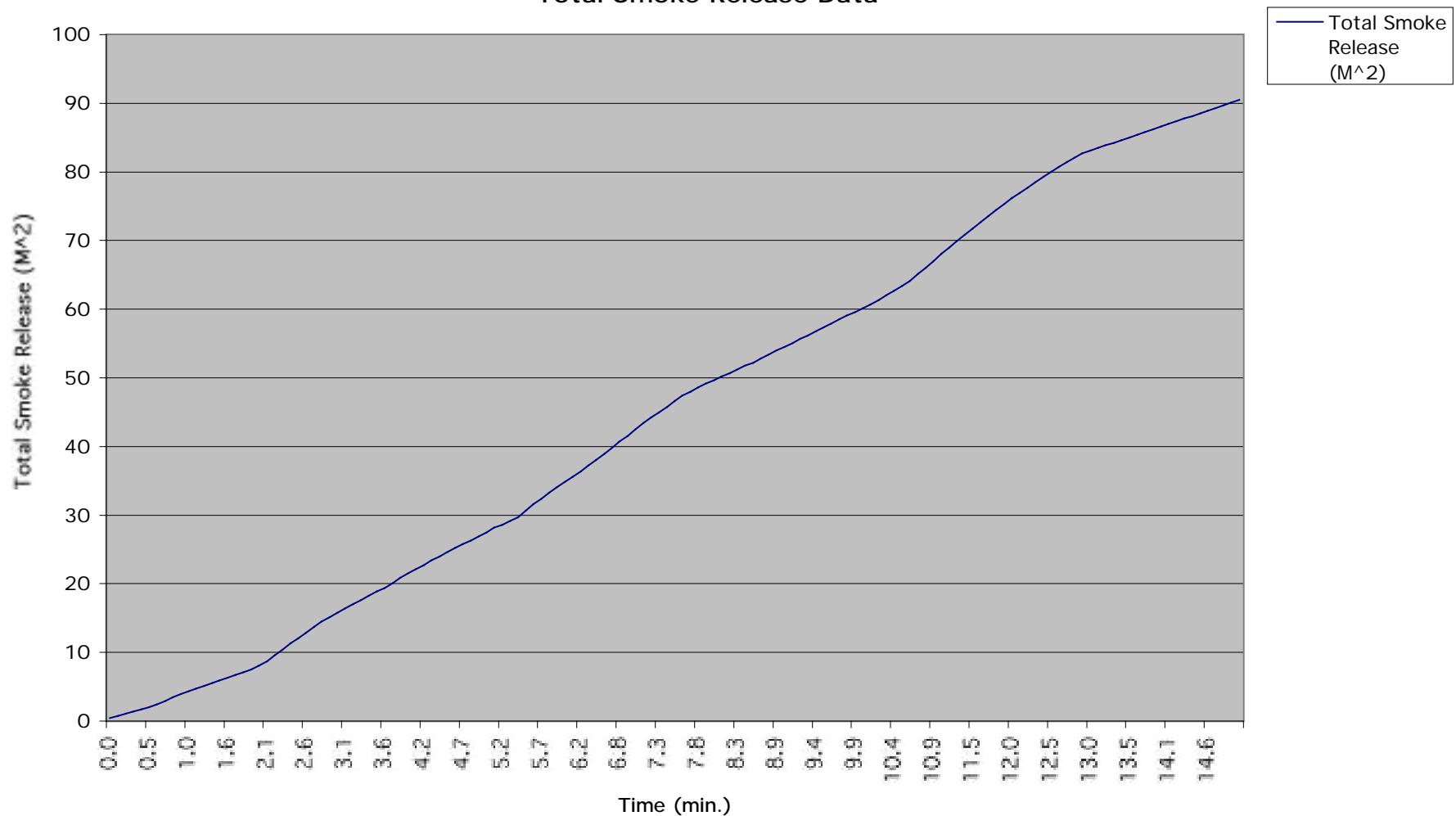
| Time (min)	TC#1 (deg F)	TC#2 (deg F)	TC#3 (deg F)	TC#4 (deg F)	Doorway TC (c	Side Wall Extre
0.0	71	72	73	74	73	73
0.1	72	71	73	73	73	73
0.2	72	80	95	88	73	78
0.3	937	805	574	352	126	204
0.4	1370	1157	849	569	210	268
0.5	1387	1229	854	596	288	329
0.6	1255	1178	791	594	298	327
0.7	1362	1010	735	560	298	315
0.8	1199	1097	767	569	301	334
0.9	1097	1162	886	660	321	356
1.0	1131	1182	909	694	338	386
1.1	1284	1223	931	729	368	418
1.2	1394	1247	904	695	404	461
1.4	1449	1280	981	718	424	467
1.5	1382	1300	971	742	458	511
1.6	1530	1337	1099	855	474	537
1.7	1571	1392	1187	941	496	544
1.8	1629	1459	1173	945	518	587
1.9	1595	1603	1349	1054	528	610
2.0	1574	1631	1436	1115	544	616
2.1	1541	1658	1518	1214	556	671
2.2	1529	1597	1492	1221	560	663
2.3	1501	1646	1480	1205	570	665
2.4	1515	1661	1533	1308	577	695
2.5	1479	1632	1552	1351	588	735
2.6	1464	1630	1500	1342	596	744
2.7	1473	1622	1532	1376	597	732
2.8	1452	1610	1533	1331	594	722
2.9	1458	1614	1535	1361	615	739
3.0	1446	1631	1505	1349	600	722
3.1	1436	1533	1483	1313	590	713
3.2	1446	1614	1505	1269	593	721
3.3	1422	1612	1540	1263	594	716
3.4	1432	1583	1560	1271	591	687
3.5	1447	1548	1515	1274	590	695
3.6	1440	1566	1516	1250	594	684
3.7	1417	1535	1492	1215	598	712
3.9	1448	1573	1497	1193	583	686
4.0	1452	1612	1454	1191	581	671
4.1	1473	1610	1546	1212	577	647
4.2	1449	1608	1509	1225	582	674
4.3	1461	1564	1509	1212	558	649
4.4	1442	1594	1548	1201	576	662
4.5	1429	1580	1521	1211	567	632
4.6	1463	1589	1529	1207	566	626
4.7	1434	1614	1512	1214	574	669
4.8	1448	1591	1530	1207	586	663
4.9	1399	1588	1516	1177	586	698
5.0	1407	1563	1487	1196	574	661

5.1	1410	1556	1513	1204	573	654
5.2	1462	1533	1486	1200	586	658
5.3	1427	1561	1481	1200	568	633
5.4	1450	1572	1522	1214	574	645
5.5	1443	1554	1522	1214	566	612
5.6	1442	1529	1489	1214	565	621
5.7	1432	1570	1483	1213	553	633
5.8	1450	1488	1459	1200	554	632
5.9	1443	1597	1522	1211	556	674
6.0	1452	1551	1492	1215	574	685
6.1	1431	1583	1482	1216	580	669
6.2	1441	1550	1477	1210	594	674
6.4	1469	1548	1500	1224	577	652
6.5	1463	1552	1493	1225	581	637
6.6	1441	1512	1508	1226	561	646
6.7	1434	1496	1462	1216	567	636
6.8	1430	1535	1499	1230	553	656
6.9	1417	1546	1475	1226	586	676
7.0	1402	1554	1476	1232	587	697
7.1	1430	1526	1467	1223	575	682
7.2	1452	1514	1497	1226	577	671
7.3	1429	1504	1461	1227	597	676
7.4	1457	1469	1465	1219	591	649
7.5	1425	1507	1473	1227	578	664
7.6	1434	1517	1475	1231	565	678
7.7	1444	1508	1495	1233	575	659
7.8	1439	1531	1485	1216	583	658
7.9	1431	1515	1482	1229	565	622
8.0	1448	1484	1455	1229	563	638
8.1	1447	1492	1495	1232	557	615
8.2	1434	1491	1447	1234	576	674
8.3	1443	1473	1477	1234	571	642
8.4	1433	1505	1439	1226	573	626
8.5	1435	1488	1458	1233	586	664
8.6	1437	1490	1478	1232	584	660
8.7	1445	1478	1466	1231	595	679
8.9	1429	1476	1455	1230	573	671
9.0	1424	1484	1471	1223	589	660
9.1	1431	1490	1462	1229	581	645
9.2	1435	1518	1482	1230	582	633
9.3	1424	1512	1495	1231	581	647
9.4	1415	1495	1491	1234	585	656
9.5	1414	1497	1466	1237	592	672
9.6	1418	1486	1460	1224	585	662
9.7	1436	1513	1460	1230	597	687
9.8	1416	1510	1451	1241	590	664
9.9	1420	1505	1425	1229	593	662
10.0	1418	1478	1450	1226	608	665
10.1	1416	1469	1445	1228	600	648
10.2	1427	1477	1453	1222	597	667

10.3	1413	1487	1469	1217	604	680
10.4	1435	1471	1437	1186	597	674
10.5	1427	1495	1422	1200	587	684
10.6	1454	1518	1479	1337	597	671
10.7	1429	1496	1464	1334	602	688
10.8	1445	1473	1462	1366	612	706
10.9	1437	1487	1418	1369	608	707
11.0	1434	1496	1425	1367	611	703
11.1	1432	1512	1426	1355	608	686
11.2	1429	1508	1452	1374	607	685
11.4	1432	1498	1457	1387	587	650
11.5	1420	1467	1443	1392	602	656
11.6	1416	1458	1427	1406	615	690
11.7	1429	1480	1444	1392	606	661
11.8	1427	1484	1460	1396	584	675
11.9	1423	1467	1452	1396	584	642
12.0	1417	1490	1437	1411	588	637
12.1	1405	1468	1458	1405	590	653
12.2	1417	1486	1443	1418	584	628
12.3	1419	1492	1451	1411	576	610
12.4	1426	1483	1456	1386	572	606
12.5	1427	1524	1478	1366	565	614
12.6	1416	1482	1448	1385	555	620
12.7	1412	1474	1439	1386	554	626
12.8	1424	1495	1466	1332	556	601
12.9	1404	1496	1448	1371	538	600
13.0	1416	1496	1449	1349	537	580
13.1	1403	1499	1455	1336	538	601
13.2	1421	1517	1466	1287	549	595
13.3	1415	1506	1463	1283	520	580
13.4	1410	1490	1479	1299	509	551
13.5	1416	1500	1479	1269	497	538
13.6	1423	1499	1481	1282	503	538
13.7	1419	1513	1477	1248	506	546
13.9	1419	1534	1484	1240	491	524
14.0	1422	1534	1510	1219	484	535
14.1	1419	1541	1484	1196	478	508
14.2	1428	1550	1468	1206	470	533
14.3	1422	1547	1497	1191	468	512
14.4	1420	1561	1473	1137	468	481
14.5	1345	1556	1427	1088	473	483
14.6	1316	1580	1480	1130	458	501
14.7	1308	1557	1469	1121	463	505
14.8	1300	1571	1492	1133	460	497
14.9	1286	1568	1441	1132	460	485
15.0	1286	1601	1479	1111	452	485

Back Wall Extr	Stack TC#1 (d	Stack TC#2 (d	Stack CO (frac	Stack CO2 (fra	Stack O2 (frac	Stack Pressure
74	66	66	0.000014	0	0.2095	219.660427
73	66	66	0.000015	0	0.2095	218.66498
75	66	66	0.000013	0	0.2095	216.010488
151	66	66	0.000014	0	0.2095	213.687785
261	67	67	0.000015	0	0.2095	221.319492
293	67	68	0.000014	0	0.2095	223.642195
300	68	69	0.000014	0	0.2095	230.610264
309	69	70	0.000026	0.001022	0.2095	217.669553
337	71	71	0.000041	0.00345	0.2095	214.683232
359	73	73	0.000061	0.005966	0.2095	206.719715
384	75	75	0.00008	0.006753	0.209188	208.710589
427	78	79	0.000095	0.007175	0.206312	220.324045
461	81	81	0.000101	0.007494	0.20775	224.637622
494	84	84	0.00008	0.007844	0.208187	218.996809
516	86	86	0.000066	0.008634	0.208219	211.69691
531	88	89	0.000061	0.010284	0.208219	216.010488
558	90	90	0.000055	0.011525	0.208125	222.314939
573	92	92	0.000047	0.012503	0.207906	222.646748
603	92	93	0.000047	0.013038	0.207781	222.646748
592	93	93	0.000049	0.013206	0.207531	215.678659
608	95	95	0.000049	0.013794	0.207437	218.66498
602	95	96	0.000054	0.014634	0.207375	214.019594
587	97	98	0.000061	0.015459	0.20725	212.692338
602	97	98	0.000066	0.015853	0.207063	211.69691
625	99	99	0.000081	0.016584	0.206969	212.692338
621	101	102	0.000094	0.017003	0.206844	218.001362
602	102	103	0.000094	0.017222	0.206719	212.02872
601	104	105	0.000101	0.017153	0.206594	209.706036
584	105	105	0.000101	0.017037	0.206594	214.683232
612	105	106	0.000095	0.016872	0.206594	215.015041
603	105	106	0.000089	0.016853	0.206625	211.69691
597	105	105	0.000081	0.017103	0.206688	210.037845
591	105	106	0.000074	0.016297	0.206656	205.06063
632	106	107	0.000068	0.016081	0.206656	205.392459
651	106	107	0.000066	0.016213	0.206719	211.69691
647	106	107	0.00006	0.016381	0.206781	211.033273
619	106	107	0.00006	0.016284	0.206781	209.042398
604	107	107	0.000054	0.015022	0.20675	212.360529
617	107	108	0.000052	0.014734	0.20675	218.333171
669	107	107	0.000052	0.014534	0.206875	213.024166
664	106	107	0.000052	0.014469	0.206938	214.351423
684	107	108	0.000046	0.014481	0.207	220.324045
670	106	107	0.000047	0.014369	0.207063	212.02872
694	106	107	0.000047	0.014534	0.207063	211.69691
677	106	107	0.000047	0.014434	0.207094	208.046951
670	107	107	0.000047	0.0145	0.207031	214.019594
650	107	107	0.000049	0.014169	0.207063	212.02872
618	107	107	0.000047	0.013962	0.207031	218.333171
640	106	107	0.000047	0.013928	0.207094	216.342297

632	106	107	0.000047	0.013478	0.207031	214.351423
645	106	107	0.000047	0.013391	0.206969	211.69691
666	106	107	0.000049	0.013578	0.207063	215.34685
689	106	107	0.000049	0.013778	0.207063	216.674106
700	105	106	0.000047	0.01345	0.207031	211.69691
702	105	105	0.000047	0.013156	0.207	209.374207
685	105	106	0.000047	0.0132	0.207094	213.355976
689	106	106	0.000041	0.013175	0.207125	212.02872
674	106	107	0.00004	0.013341	0.207125	215.678659
626	106	107	0.000041	0.013409	0.207125	218.996809
628	106	107	0.00004	0.013022	0.207125	214.683232
631	107	107	0.00004	0.012803	0.207094	213.024166
667	107	107	0.00004	0.012784	0.207125	214.683232
678	107	107	0.00004	0.013022	0.207187	210.037845
681	107	107	0.000041	0.013041	0.207187	207.383333
671	107	107	0.000041	0.012791	0.207125	208.37878
673	107	107	0.000041	0.012803	0.207125	211.033273
640	107	108	0.000039	0.012838	0.207125	218.66498
581	107	107	0.00004	0.012803	0.207156	216.010488
591	107	107	0.000041	0.012688	0.207156	207.383333
627	107	108	0.00004	0.012553	0.207156	207.051524
640	107	108	0.000039	0.01275	0.207187	206.719715
690	107	108	0.00004	0.012887	0.207187	212.02872
659	108	108	0.00004	0.012688	0.207125	206.387886
666	108	108	0.00004	0.012634	0.207125	205.724268
682	108	108	0.000041	0.012569	0.207156	214.683232
691	108	109	0.000047	0.012906	0.207187	209.706036
696	109	109	0.000041	0.012853	0.207219	208.710589
687	108	109	0.00004	0.012684	0.207156	209.706036
706	108	109	0.000046	0.012769	0.207187	205.724268
690	108	109	0.000047	0.012584	0.207219	206.387886
698	108	109	0.000041	0.012434	0.20725	206.719715
709	108	109	0.00004	0.012397	0.207281	204.728821
693	108	109	0.00004	0.012466	0.207281	201.078882
712	109	109	0.00004	0.012484	0.207281	204.065203
714	109	110	0.000039	0.012819	0.207281	207.383333
718	109	110	0.000041	0.012756	0.207281	201.410691
718	109	110	0.000041	0.012703	0.207219	195.10624
740	110	111	0.00004	0.012719	0.207187	198.42437
737	110	111	0.000047	0.012847	0.207187	197.097114
722	110	111	0.000041	0.012972	0.207187	194.442622
699	111	111	0.00004	0.012719	0.207125	203.733394
692	111	112	0.000039	0.01265	0.207125	206.719715
738	111	112	0.00004	0.012887	0.207156	206.056077
705	112	113	0.000041	0.013241	0.207156	203.401565
698	112	112	0.000041	0.013713	0.207125	205.06063
684	112	113	0.000041	0.013597	0.207063	213.355976
736	111	112	0.00004	0.013322	0.206969	209.374207
732	111	112	0.000041	0.013259	0.207031	212.692338
744	112	113	0.000041	0.013041	0.207094	207.051524

733	112	113	0.00004	0.012722	0.207094	198.092561
716	112	112	0.00004	0.01285	0.207156	207.383333
713	113	114	0.000041	0.013947	0.207187	202.737947
724	112	113	0.00004	0.013753	0.207156	209.706036
723	113	113	0.00004	0.013103	0.207063	206.387886
717	112	113	0.00004	0.012981	0.207063	202.737947
709	113	114	0.00004	0.013206	0.207125	204.397012
718	113	113	0.000041	0.013478	0.207156	204.397012
729	113	114	0.000041	0.013597	0.207125	205.724268
700	113	114	0.00004	0.013659	0.207031	212.360529
704	112	113	0.000041	0.013159	0.207031	214.019594
735	113	113	0.000041	0.012856	0.207031	212.360529
704	113	113	0.000041	0.013072	0.207063	211.365101
715	113	113	0.00004	0.013022	0.207094	208.37878
740	113	113	0.000035	0.012728	0.207094	198.42437
718	113	114	0.000034	0.012231	0.207094	205.392459
711	113	113	0.00004	0.012566	0.207125	206.719715
705	113	113	0.000034	0.012603	0.207187	206.387886
698	112	113	0.000035	0.01245	0.207125	206.387886
709	113	113	0.000034	0.012534	0.207125	207.383333
686	111	112	0.000034	0.012281	0.207156	210.701464
688	111	112	0.000035	0.011956	0.207187	204.065203
673	111	112	0.000035	0.011794	0.207219	205.06063
665	110	111	0.000035	0.011681	0.207281	205.724268
681	109	109	0.000035	0.011716	0.207312	208.046951
667	109	109	0.000027	0.011562	0.207344	205.392459
665	109	109	0.000025	0.010891	0.207281	203.733394
609	108	108	0.000027	0.010419	0.207375	204.397012
602	108	108	0.000027	0.010553	0.207469	208.046951
609	107	107	0.000027	0.010575	0.2075	207.383333
619	107	107	0.000026	0.010094	0.2075	204.728821
609	106	106	0.000021	0.009631	0.2075	201.410691
610	105	105	0.000021	0.009494	0.207531	197.097114
583	105	105	0.000021	0.009544	0.207594	197.097114
588	104	104	0.000021	0.009478	0.207656	200.083435
567	103	104	0.000026	0.008928	0.207625	201.410691
571	103	103	0.00002	0.0086	0.207625	203.401565
560	102	103	0.00002	0.008441	0.207656	209.706036
570	102	102	0.00002	0.008381	0.207719	204.728821
580	102	102	0.00002	0.008431	0.20775	206.387886
557	101	101	0.000021	0.008419	0.207781	201.7425
552	100	101	0.00002	0.007997	0.207781	201.078882
546	100	100	0.000021	0.007762	0.207813	206.387886
565	100	100	0.000021	0.008069	0.207844	205.724268
563	99	100	0.000021	0.008016	0.207875	202.406138
544	99	99	0.000021	0.007762	0.207844	207.715142

Stack Smoke (	HRR (kW)	THR (MJ)	Smoke Release	Total Smoke R	Stack Velocity (m3/s)
0	0	0	0.003473	0.367528	4.880195
1.418443	0	0	0.05294	0.685167	4.869124
1.418443	0	0	0.052617	1.000871	4.839479
1.418443	0	0	0.052334	1.314874	4.81339
1.418443	0	0	0.053361	1.635038	4.907846
1.418443	0	0	0.053791	1.957787	4.947458
1.773048	0	0	0.067626	2.363543	5.033346
2.127664	0	0	0.078354	2.833665	4.894646
2.836885	0	0	0.103055	3.451996	4.86548
2.127664	0	0	0.0765	3.910993	4.778825
1.773048	32.032523	0.192195	0.064575	4.298441	4.806236
1.773048	329.376008	2.168451	0.066408	4.696891	4.942718
1.773048	176.000705	3.224455	0.067179	5.099966	5.00009
1.773048	131.078747	4.010928	0.066453	5.498681	4.946002
1.773048	125.452483	4.763643	0.065455	5.891414	4.87179
1.773048	125.938299	5.519273	0.06624	6.288853	4.930167
1.773048	138.709198	6.351528	0.067199	6.692049	5.001595
1.773048	161.976237	7.323385	0.067372	7.096281	5.014441
1.773048	172.115723	8.35608	0.067433	7.50088	5.018991
2.482269	193.391119	9.516426	0.091996	8.052858	4.948774
2.836885	204.244073	10.741891	0.105638	8.686685	4.987415
3.900712	213.455996	12.022627	0.143405	9.547114	4.943041
3.546096	225.716668	13.376927	0.130166	10.328112	4.932114
4.255317	244.217591	14.842232	0.15597	11.263931	4.929374
3.19149	249.11669	16.336932	0.117503	11.968949	4.94095
3.546096	262.923102	17.914471	0.132135	12.761759	5.006702
4.255317	271.800565	19.545274	0.156231	13.699147	4.937641
3.546096	282.813849	21.242157	0.129712	14.477419	4.914898
2.836885	281.646697	22.932038	0.105424	15.109962	4.977307
2.836885	282.308091	24.625886	0.105318	15.741867	4.972291
2.836885	282.502221	26.3209	0.104688	16.369995	4.942567
2.836885	272.579968	27.956379	0.104277	16.995656	4.923162
2.482269	273.835143	29.59939	0.09051	17.538714	4.868801
3.19149	276.819401	31.260307	0.115881	18.233999	4.872739
2.836885	271.458414	32.889057	0.104688	18.862127	4.942567
2.127664	262.866174	34.466254	0.078997	19.336106	4.934814
3.19149	261.834109	36.037259	0.116802	20.03692	4.911482
3.546096	261.439763	37.605897	0.13053	20.820103	4.945907
2.836885	261.651208	39.175805	0.106222	21.457433	5.014977
2.836885	253.847032	40.698887	0.104922	22.086966	4.953629
2.482269	247.44254	42.183542	0.092455	22.641697	4.973459
3.19149	240.295072	43.625312	0.119913	23.361173	5.042272
2.482269	236.376806	45.043573	0.091953	23.91289	4.946439
2.836885	239.677807	46.48164	0.104595	24.540459	4.938173
2.836885	233.725739	47.883995	0.103782	25.163148	4.899774
2.836885	240.299398	49.325791	0.105261	25.794712	4.969608
2.127664	240.55404	50.769115	0.079112	26.269386	4.942042
2.482269	238.993915	52.203079	0.093227	26.828748	5.014977
2.836885	232.996482	53.601058	0.105736	27.463165	4.99206

3.19149	236.7392	55.021493	0.118276	28.172822	4.973459
1.773048	246.16411	56.498477	0.066347	28.570906	4.938173
2.482269	236.192066	57.91563	0.092587	29.126429	4.980562
2.482269	239.677807	59.353697	0.092872	29.683662	4.995887
4.255317	241.627561	60.803462	0.156248	30.621151	4.938173
4.255317	243.327313	62.263426	0.155389	31.553484	4.911008
3.546096	232.996482	63.661405	0.130836	32.3385	4.957486
3.900712	231.957772	65.053151	0.143376	33.198754	4.942042
3.546096	232.671491	66.44918	0.131546	33.988032	4.984397
3.546096	229.983631	67.829082	0.132436	34.782649	5.01812
3.546096	228.71848	69.201393	0.131242	35.570103	4.972882
3.546096	233.907695	70.604839	0.130734	36.354509	4.953629
3.900712	230.163796	71.985822	0.14427	37.220132	4.972882
3.546096	226.055034	73.342152	0.129815	37.99902	4.918785
3.900712	227.990332	74.710094	0.141796	38.849798	4.887604
4.255317	231.600092	76.099695	0.155019	39.779912	4.89932
4.255317	230.703458	77.483915	0.156003	40.715931	4.930427
3.546096	231.600092	78.873516	0.132454	41.510654	5.018786
4.255317	226.079293	80.229992	0.157973	42.458489	4.992669
4.255317	224.646126	81.577869	0.154786	43.387204	4.891953
3.546096	225.184636	82.928976	0.128888	44.160535	4.883692
3.546096	223.607344	84.27062	0.1289	44.933933	4.884119
3.546096	227.614651	85.636308	0.130544	45.7172	4.946439
3.900712	232.108386	87.028959	0.141707	46.567444	4.884532
3.900712	227.426118	88.393515	0.141479	47.41632	4.876673
2.482269	224.46634	89.740313	0.092527	47.97148	4.977307
2.836885	221.113516	91.066995	0.104287	48.597203	4.923641
2.482269	220.921253	92.392522	0.091231	49.144586	4.907582
2.127664	223.708399	93.734772	0.078748	49.617072	4.919271
2.482269	220.384749	95.057081	0.090575	50.160525	4.872346
2.127664	222.299872	96.39088	0.078122	50.629259	4.880198
2.482269	216.518161	97.689989	0.090714	51.173541	4.879778
2.482269	213.204882	98.969218	0.090356	51.715677	4.860543
2.127664	213.712718	100.251495	0.077111	52.178343	4.817021
2.836885	211.674072	101.521539	0.102784	52.795045	4.852659
2.482269	212.015203	102.79363	0.09094	53.340685	4.891953
2.836885	212.374371	104.067877	0.102204	53.953906	4.825276
2.482269	217.084914	105.370386	0.088285	54.483619	4.749156
2.482269	218.075849	106.678841	0.088954	55.017343	4.78512
2.836885	219.689257	107.996977	0.101014	55.623424	4.769089
2.482269	221.468144	109.325786	0.088135	56.152235	4.741073
2.836885	223.928363	110.669356	0.102882	56.769529	4.857322
2.482269	220.395856	111.991731	0.091036	57.315745	4.897122
2.482269	219.544853	113.309	0.09089	57.861084	4.889255
2.836885	218.809356	114.621856	0.10289	58.478421	4.85766
2.482269	220.020718	115.94198	0.09067	59.022442	4.877431
2.482269	230.909799	117.327439	0.092486	59.577356	4.975107
2.482269	241.287186	118.775162	0.091619	60.127068	4.928464
2.482269	234.978191	120.185032	0.09226	60.680629	4.962971
2.836885	227.576985	121.550493	0.1039	61.304031	4.905381

3.19149	228.503227	122.921513	0.114105	61.988664	4.798081
2.836885	227.051045	124.283819	0.103892	62.612014	4.904976
3.546096	221.937799	125.615446	0.127992	63.379967	4.849729
3.19149	226.898291	126.976836	0.117403	64.084383	4.936725
4.609933	232.371436	128.371064	0.168036	65.092597	4.901832
4.255317	227.288576	129.734796	0.153721	66.014922	4.858295
4.255317	226.822264	131.095729	0.154349	66.941013	4.878133
4.964538	221.329153	132.423704	0.179987	68.020936	4.873835
4.255317	227.887601	133.79103	0.154712	68.94921	4.889633
4.255317	234.752686	135.199546	0.157188	69.892338	4.967872
4.255317	232.667643	136.595552	0.15794	70.839978	4.991638
3.900712	233.617697	137.997258	0.144252	71.705491	4.972253
4.255317	230.877067	139.38252	0.156819	72.646406	4.956215
3.900712	228.670653	140.754544	0.142894	73.503767	4.925418
4.255317	232.329612	142.148522	0.152077	74.416227	4.806333
3.900712	233.029867	143.546701	0.141741	75.266672	4.885688
3.900712	229.123313	144.921441	0.142324	76.120614	4.905771
3.546096	222.793646	146.258203	0.129367	76.896817	4.901832
3.546096	226.965124	147.619994	0.129367	77.67302	4.901832
3.546096	221.47764	148.948859	0.129565	78.450408	4.90931
3.546096	222.576763	150.28432	0.130597	79.23399	4.948428
3.546096	220.137617	151.605146	0.128524	80.005133	4.869877
3.19149	217.000744	152.90715	0.116095	80.701703	4.88174
3.19149	211.079459	154.173627	0.116283	81.399399	4.889633
2.836885	208.805344	155.426459	0.104058	82.023746	4.912818
2.836885	207.474213	156.671304	0.103392	82.644097	4.881376
1.773048	210.073465	157.931745	0.065319	83.03601	4.861621
1.773048	201.723224	159.142084	0.065367	83.428213	4.865226
1.773048	193.169921	160.301104	0.06589	83.823552	4.904125
1.773048	191.448549	161.449795	0.065785	84.21826	4.896298
1.773048	190.223272	162.591135	0.065362	84.610434	4.86486
1.773048	189.453447	163.727856	0.06483	84.999417	4.825276
1.773048	186.974349	164.849702	0.064076	85.383871	4.769089
1.773048	182.83048	165.946685	0.064019	85.767982	4.76485
1.773048	176.575416	167.006137	0.064502	86.154993	4.800811
1.773048	178.403459	168.076558	0.064715	86.543285	4.816708
1.773048	176.951821	169.138269	0.065034	86.933492	4.840455
1.773048	172.293547	170.17203	0.065976	87.329347	4.910521
1.773048	166.619927	171.17175	0.06513	87.720127	4.847569
1.773048	164.943233	172.161409	0.065393	88.112487	4.867171
1.773048	162.543364	173.136669	0.064711	88.500753	4.816381
1.773048	163.344731	174.116738	0.064547	88.888034	4.804163
1.773048	162.995571	175.094711	0.065335	89.280043	4.862821
1.773048	158.217263	176.044015	0.06523	89.671422	4.854997
1.773048	155.870222	176.979236	0.064644	90.059284	4.811373
1.773048	156.918967	177.92075	0.065486	90.4522	4.874064

APPENDIX B

FIGURES

Ceiling 8' x 8'   Gypsum Wall Board

Contego Latex Fire Barrier Intumescent*
Applied on 7/16 inch OSB Panels
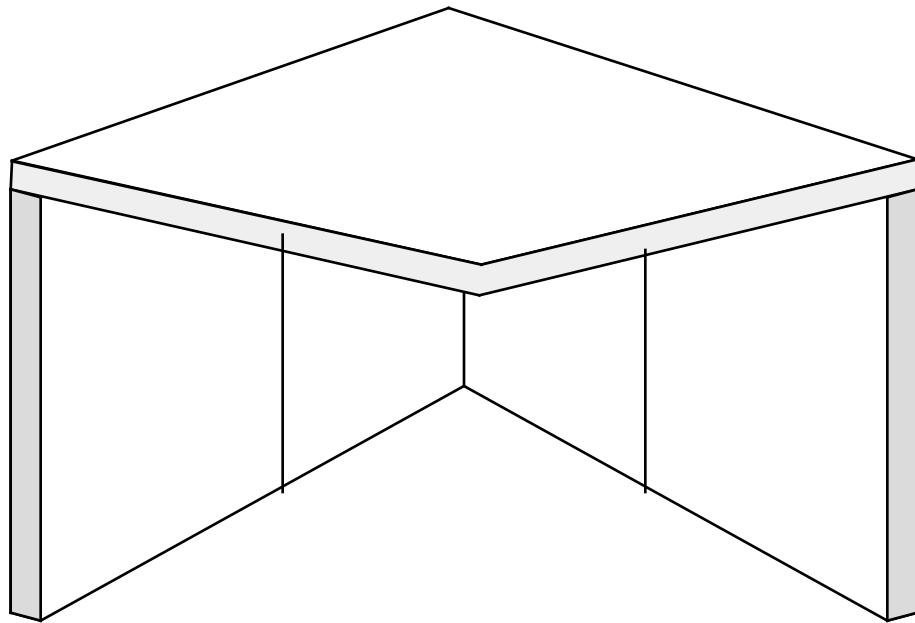
Left Wall 8 ft. x 8 ft.
Contego Latex Fire Barrier Intumescent*
Applied on 7/16 inch OSB Panels

Back Wall 8 ft. x 8 ft.
Contego Latex Fire Barrier Intumescent*
Applied on 7/16 inch OSB Panels

FIGURE 1 Test Corner Assembly

| Omega Point Laboratories |
| --- |
| OPL 16539-112517 |
| Contego International |
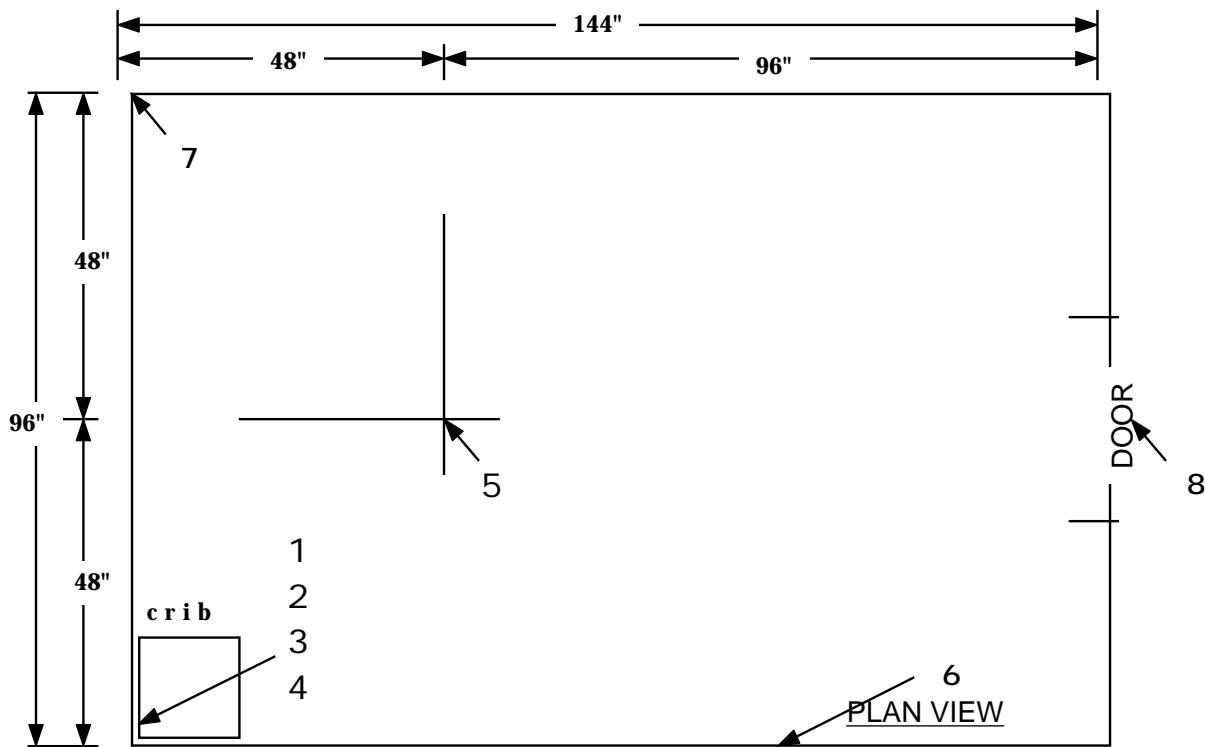
FIGURE 2

= Thermocouple
Location

NOTES:

Thermocouple Nos. 1, 2, 3
& 4 located 3 in. from
adjacent wall surfaces.

Thermocouple No. 5
located 1 in. below ceiling,
4 ft from each of three
walls.

Thermocouples No. 6 & 7 located
at extremity, 1 in. below ceiling, 3 in.
from wall.

Thermocouple No. 8 located in center
of door plane, 4 in. from top of
doorway

| Omega Point Laboratories |
| OPL 16539-112517 |
| Contego International |
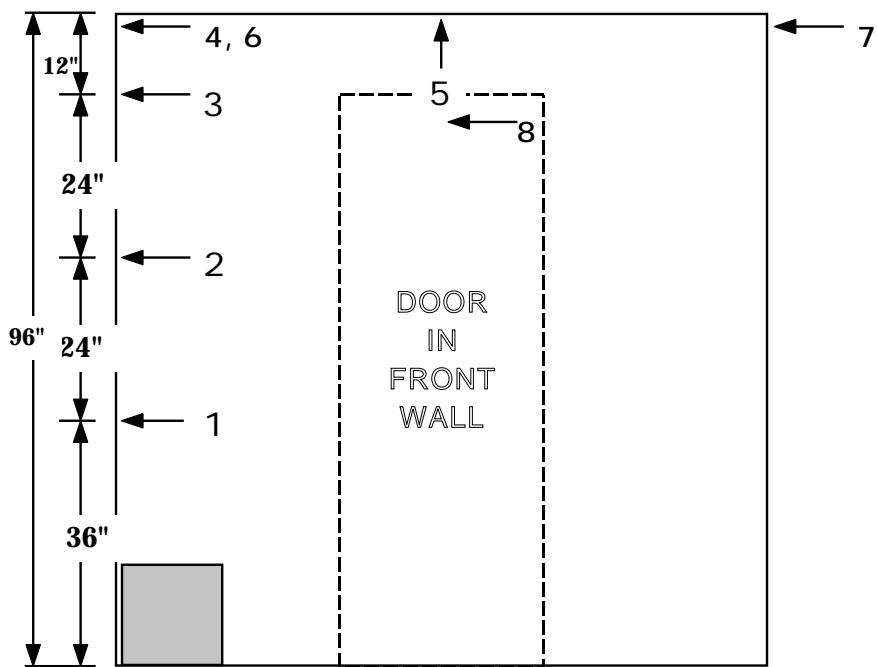
FRONT VIEW

FIGURE 3

⟵ = Thermocouple Location

NOTES:

Thermocouple Nos. 1, 2, 3 & 4 located 3 in. from adjacent wall surfaces.

Thermocouple No. 5 located 1 in. below ceiling, 4 ft from each of three walls.

Thermocouples No. 6 & 7 located at extremity, 1 in. below ceiling, 3 in. from wall.

Thermocouple No. 8 located in center of door plane, 4 in. from top of doorway

| Omega Point Laboratories |
| OPL 16539-112517 |
| Contego International |

APPENDIX C

PHOTOGRAPHS